Technical Report 730

An Evaluation of the Training Requirements of Army National Guard Aviators Phase I: Analysis of Questionnaire Data

Sandra M. Szabo, John W. Ruffner, and Kenneth D. Cross
ANACAPA Sciences, Inc.

Michael G. Sanders
Army Research Institute

ARI Field Unit at Fort Rucker, Alabama
Training Research Laboratory

U. S. Army
Research Institute for the Behavioral and Social Sciences

November 1986

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: ARI Technical Report 730

2. GOVT ACCESSION NO.:

3. RECIPIENT'S CATALOG NUMBER:

4. TITLE (and Subtitle): AN EVALUATION OF THE TRAINING REQUIREMENTS OF ARMY NATIONAL GUARD AVIATORS PHASE I: ANALYSIS OF QUESTIONNAIRE DATA

5. TYPE OF REPORT & PERIOD COVERED: Interim Report May 1983-June 1985

6. PERFORMING ORG. REPORT NUMBER: ASI479-064-85

7. AUTHOR(s): Sandra M. Szabo, John W. Ruffner, and Kenneth D. Cross (ASI); and Michael G. Sanders (ARI)

8. CONTRACT OR GRANT NUMBER(s): MDA903-81-C-0504

9. PERFORMING ORGANIZATION NAME AND ADDRESS: Anacapa Sciences, Inc. P.O. Box 489 Fort Rucker, AL 36362-5000

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 2Q263743A794 4212100

11. CONTROLLING OFFICE NAME AND ADDRESS: U.S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue, Alexandria, VA 22333-5600

12. REPORT DATE: November 1986

13. NUMBER OF PAGES: 278

14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office): --

15. SECURITY CLASS. (of this report): Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE: --

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

--

18. SUPPLEMENTARY NOTES

Charles A. Gainer, Contracting Officer's Representative. Direct comments or questions about the research to: Chief, ARI Aviation Research and Development Activity, ATTN: PERI-IR (Mr. Charles A. Gainer), Fort Rucker, Alabama 36362-5354.

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Aviator training
Army National Guard
Aviation safety
Aviator proficiency
Aviator retention
Job satisfaction
Job commitment
Training effectiveness assessment
Aviator force management
Aviator force characteristics

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Army National Guard (ARNG) aviators must meet the same aviation training requirements as active Army aviators. During the past 10 years, the training requirements have significantly increased; yet, the amount of time allocated for ARNG aviators to meet the requirements has remained relatively constant. To determine if the aviators need additional allocated training time, a survey was conducted. The survey indicates that ARNG aviators perceive the time allocated for meeting their current training requirements to be generally inadequate. The aviators are willing to spend additional (Continued)

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ARI Technical Report 730

20. (Continued)

paid time to meet the requirements and are unwilling to spend additional nonpaid time. The major obstacles to meeting the requirements are an insufficient number of flight hours, unavailability of instructor pilots (IPs), and an insufficient amount of personal time. The data suggest that additional time is needed to meet the training requirements. Information about the amount of time needed will be provided by the Phase II training log survey.

Technical Report 730

An Evaluation of the Training Requirements of Army National Guard Aviators Phase I: Analysis of Questionnaire Data

Sandra M. Szabo, John W. Ruffner, and Kenneth D. Cross
ANACAPA Sciences, Inc.

Michael G. Sanders
Army Research Institute

ARI Field Unit at Fort Rucker, Alabama
Charles A. Gainer, Chief

Training Research Laboratory
Jack H. Hiller, Director

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
Department of the Army

November 1986

Army Project Number
2Q263743A794

Education and Training

U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency under the Jurisdiction of the Deputy Chief of Staff for Personnel

EDGAR M. JOHNSON
Technical Director

WM. DARRYL HENDERSON
COL, IN
Commanding

Research accomplished under contract
for the Department of the Army

Anacapa Sciences, Inc.

Technical review by

William R. Brown
Gabriel P. Itano
Ronald J. Lofaro
Thomas R. Metzler (AVSCOM)
Paul J. Tremont

NOTICES

ARI Research Reports and Technical Reports are intended for sponsors of R&D tasks and for other research and military agencies. Any findings ready for implementation at the time of publication are presented in the last part of the Brief. Upon completion of a major phase of the task, formal recommendations for official action normally are conveyed to appropriate military agencies by briefing or Disposition Form.

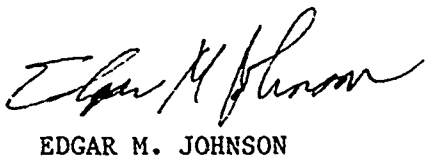
FOREWORD

The Army Research Institute Aviation Research and Development Activity (ARIARDA) located at Fort Rucker, Alabama, has as its primary responsibility the conduct of research and the development of products that serve to increase the effectiveness of Army aviator training. This responsibility encompasses training for both Active Component (AC) and Reserve Component (RC) aviators.

As part of the Army's "total force" concept, RC aviators are expected to meet the same training requirements and to train to the same standards as AC aviators. Due to modernization of the Army's aviation fleet during the past 10 years, the operational requirements of today's aircraft have increased significantly; consequently, avaiators in the current force must acquire and maintain additional and increasingly complex aviation skills. Yet, despite the increase in the number and complexity of the training requirements, the amount of time allocated for RC aviator training has caused a number of observers to question whether RC aviators can meet the training requirements in the time currently allocated.

This document reports the results of a nationwide questionnaire survey of Army National Guard (ARNG) aviators. The survey constitutes the first phase of a research effort designed to determine if aviators in the ARNG need additional time to meet their current aviation training requirements. The questionnaire provides information about the demographic characteristics and career intentions of ARNG aviators, the aviators' perceptions of the adequacy of the training requirements and the training time, the aviators' willingness to spend additional time to meet the training requirements, and the aviators' perceptions of the obstacles to meeting the training requirements.

This document is intended to serve as a handbook of information about ARNG aviation training. It is hoped that policy makers will find this information useful in identifying changes in the allocation of time, support personnel, or support equipment that will result in more effective and efficient training. It is also hoped that the information will prove useful for long-term ARNG aviator force management and planning.



EDGAR M. JOHNSON
Technical Director

(5)

ACKNOWLEDGMENTS

Due to the nature of this project, its completion required the support and cooperation of many persons. Mr. John Stanko, Chief of the Aviation Division of the Army National Guard Bureau (NGB), and members of his staff provided valuable administrative and technical support throughout the term of the project. Special thanks are due Mr. Ron Eaton (who served as the NGB Point of Contact), COL Roger Goodrich, LTC Arthur Ries, and Ms. Sharon Schmidt.

Several researchers at the Army Research Institute (ARI) and Anacapa Sciences, Inc., (ASI) made major contributions to the project. Dr. Jack B. Keenan, ASI, contributed to the design and development of both the Phase I questionnaire and the Phase II training log. Mr. Bill Brown, ARI, provided careful critiques of a draft version of this report.

The authors are grateful to the support personnel at ARI and ASI who contributed to the project. The questionnaire was lengthy and the number of respondents was large. Mr. Larry Murdock, ARI, deserves special commendation for developing an efficient procedure for entering the massive amount of questionnaire data. Ms. Renée Hutto and Ms. Sandra Fisher, ASI, spent many hours entering and checking the data; their dedication and the quality of their work are greatly appreciated. The authors also are grateful to Mr. Daniel Wick and Mr. David Russell for the data analysis support that they provided.

Ms. Nadine McCollim and Ms. Ernestine Fridgen provided valuable support in typing the many drafts and the final version of the questionnaire and this report. Mr. Bill Brighton worked diligently to prepare the graphic materials necessary for the many briefings associated with the project. The completion of the research would have been far more difficult without the competent assistance of these individuals.

A number of videotapes were essential for promoting the project. Assistance from members of the Army National Guard Multimedia Center was required to produce these tapes. The authors wish to thank 2LT Terrell Cowart, WO1 Jules Hobbie, and CW2 Ron Swihart of the ARNG Multimedia Center for their patience with the researchers and their creativity in producing the tapes. Thanks are also due MAJ William Shawn and Ms. Shirley Hughes for their administrative support.

Unfortunately, it is impossible to acknowledge by name the thousands of ARNG aviators who participated in the survey. The authors take this opportunity to thank these aviators and their commanders for dedicating some of their limited training time to the completion of the questionnaires. The units who participated in the pretest of the questionnaire deserve special thanks. Many of the ideas incorporated in the research resulted directly from information and insights gained from detailed discussions with these aviators.

A number of units provided transportation for the research team. The authors thank the Adjutants General of the Alabama, Texas, New York, and Washington, DC, ARNG for making their resources available. The authors are especially grateful to the pilots in the Alabama National Guard who spent many weekends transporting the team members.

AN EVALUATION OF THE TRAINING REQUIREMENTS OF ARMY NATIONAL GUARD AVIATORS
PHASE I: ANALYSIS OF QUESTIONNAIRE DATA

EXECUTIVE SUMMARY

Requirement:

The purpose of this document is to describe the methods and findings of a questionnaire survey of Army National Guard (ARNG) aviators. The survey was conducted by the Army Research Institute (ARI) at the request of the Aviation Division of the National Guard Bureau (NGB). The survey is the first phase of a research effort whose primary objective is to determine if additional time is needed to meet current ARNG aviation training requirements.

Need:

An aviator in the ARNG must meet the same aviation training requirements as an aviator in the active Army. Due to modernization of the Army's aviation fleet during the past 10 years, the operational requirements of the aircraft have significantly increased; consequently, aviators in the current force must acquire and maintain additional and increasingly complex aviation skills.

Despite the increase in the number and complexity of the training requirements, the amount of time allocated for ARNG aviation training has remained relatively constant since the 1970s. Generally speaking, ARNG aviators must meet their current annual training requirements during a combination of 48 Unit Training Assemblies (UTAs), 24 Additional Flight Training Periods (AFTPs), and 15 Annual Training (AT) Days.

Procedure:

Determine need for additional training time. The primary objective of the research is to determine if ARNG aviators need additional time to meet their current aviation training requirements. The Phase I survey meets the objective by providing information about:

- the aviators' perceptions of the adequacy of the training requirements for maintaining a safe level of aviator proficiency,
- The aviators' perceptions of the adequacy of the training time allocated for meeting the requirements,
- the aviators' willingness to spend additional training time to meet the requirements,
- the factors that influence the aviators' ability to utilize the current training time, and

- o the factors that influence the aviators' willingness to spend additional training time.

Identify demographic characteristics and career intentions. A secondary objective of the research is to determine the demographic characteristics and career intentions of ARNG aviators. The information is provided to assist NGB personnel managers in understanding the present force and in projecting future manpower and training resource requirements.

Findings:

Need for additional training time. The results of the Phase I survey indicate that ARNG aviators judge the training time to be inadequate for meeting all the Continuation Training Requirements. The time is particularly inadequate for meeting Night Vision Goggle (NVG), Unaided Night Tactical, and Tactical/Special requirements; furthermore, the aviators judge that these requirements are inadequate for maintaining a safe level of aviator proficiency.

The aviators judge the training time to be marginally adequate for meeting all Additional Military Requirements except Inflight Evaluation/Training, for which the training time is judged to be inadequate. All of the Additional Military Requirements are judged to be only marginally adequate for maintaining a safe level of aviator proficiency.

The aviators are very willing to spend additional paid time to meet all the Continuation Training Requirements and the Additional Military Requirements that are related to career progression and aviation. The aviators are very unwilling to spend additional nonpaid time to meet any of the training requirements.

The major obstacles that ARNG aviators encounter in meeting the Continuation Training Requirements are an insufficient number of flight hours and the unavailability of instructor pilots (IPs). The major obstacle to meeting Additional Military Requirements is an insufficient amount of personal time. The requirement whose accomplishment is impeded most by training obstacles is NVG training; unavailability of equipment is the major obstacle to meeting the requirement. In addition, unavailability of aircraft and unavailability of training support areas are obstacles to meeting specific requirements in specific types of units.

Demographic characteristics and career intentions. The current force of ARNG aviators is a highly professional group of individuals. Fifty-five percent of the aviators have at least a 4-year college degree. The aviators typically have professional/technical civilian jobs and earn a median civilian income of $32,500.

The ARNG aviators have attained a high level of military experience. Eighty percent of the aviators have some type of prior military experience before entering the National Guard. The aviators have a median of 14 years of total military experience; 12 of these years have typically been spent on flight status. During their time in the military, the aviators have logged a median of 2,000 total flight hours.

Approximately 25% of the aviators have completed between 15 and 20 years of service and, consequently, will be eligible for retirement within the next 5 years. However, only 38% of the total force of aviators indicate that they plan to leave the ARNG as soon as they reach 20-year retirement eligibility; 52% indicate that they plan to remain until 30-year retirement.

Utilization of Findings:

The results indicate that the current force of ARNG aviators has a high level of aviation experience; yet the aviators perceive that the allocated training time is inadequate for meeting current aviation training requirements. The inadequacy of the training time will become an even greater problem as the older, more experienced aviators leave the ARNG and are succeeded by a younger, less experienced force.

The data provided by the questionnaire are based on the aviators' perceptions; therefore, conclusions concerning the inadequacy of the allocated training time must be considered preliminary. More objective data will be provided by the aviators' reports of the actual amount of time that they spend meeting the requirements. The reports will be provided by the Phase II Training Log Survey that currently is being conducted.

AN EVALUATION OF THE TRAINING REQUIREMENTS OF ARMY NATIONAL GUARD AVIATORS
PHASE I: ANALYSIS OF QUESTIONNAIRE DATA

CONTENTS

CONTENTS (Continued)

CONTENTS (Continued)

LIST OF TABLES

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

Page

LIST OF FIGURES

CONTENTS (Continued)

CONTENTS (Continued)

CONTENTS (Continued)

INTRODUCTION

This report describes the methods and findings of a questionnaire survey of Army National Guard (ARNG) aviators. The survey constitutes the first phase of a research project conducted by the Army Research Institute (ARI) at the request of the Aviation Division of the National Guard Bureau (NGB). The purpose of the survey is to determine if additional time is needed to meet the current ARNG aviation training requirements. This section of the report describes the conditions that prompted the NGB to request research support and defines the research objectives. Subsequent sections will (a) describe the methodology adopted to conduct the survey, (b) summarize the findings of the survey, and (c) discuss the operational implications of the findings.

STATEMENT OF THE PROBLEM

An aviator in the ARNG must meet the same aviation training requirements as an aviator in the Active Army. The requirements include initial qualification and continuation training for individual aviators and combined arms and collective training for aviation units. The requirements for individual training are outlined in the Aircrew Training Manual (ATM) for each type of aircraft (e.g., attack helicopter, utility helicopter); the requirements for unit training are specified in the Army Training and Evaluation Program (ARTEP) manual for each type of unit (e.g., air cavalry troop, air ambulance company).

Modernization of the Army's aviation fleet during the past ten years has significantly increased the operational requirements of the Army's aircraft. Consequently, the pilots of today's aircraft must acquire and maintain additional and increasingly complex aviator skills. The specific requirements that have been added since aviation modernization began include the following:

- instrument qualification,
- nap-of-the-earth (NOE) qualification,
- unaided night tactical training,
- night vision goggle (NVG) qualification,
- nuclear, biological, chemical (NBC) training, and
- attack helicopter systems qualification.

Each of the additional requirements is now included in flight training courses conducted at the U.S. Army Aviation Center (USAAVNC) at Fort Rucker, Alabama. However, most of the aviators presently in the ARNG received their flight training prior to the time the requirements were added. These aviators must, therefore, complete the training that is necessary to acquire and maintain the skills imposed by the additional training requirements; this must be done in the limited amount of time that is currently allocated for ARNG aviation training.[1]

---

[1]Throughout this report, the term "ARNG aviator" refers to an aviator who is participating in ARNG training only on a part-time basis.

Despite the increase in the number and complexity of the training requirements that aviators must meet, the amount of time allocated for ARNG aviation training has remained relatively constant since the early 1970s. ARNG aviators currently must accomplish their annual training requirements during a combination of the three types of training periods described below.

- Unit Training Assemblies (UTAs). A UTA consists of a 4-hour training period. Forty-eight UTAs are allocated annually to each ARNG aviator. Four UTAs typically are scheduled in succession to constitute a weekend drill period. There are 12 weekend drill periods during the year. The drill periods are referred to as Multiple Unit Training Assemblies (MUTAs). MUTAs are authorized for collective unit training.
- Additional Flight Training Periods (AFTPs). An AFTP consists of a 4-hour period that is authorized for individual aviator training. Twenty-four AFTPs are allocated during the year to each ARNG aviator.
- Annual Training (AT) Periods. AT periods consist of 15 days per calendar year that are authorized for the conduct of collective unit and combined arms training.

In addition to the aforementioned training periods, which are allocated for every aviator in the ARNG, Full Time Training Duty (FTTD) days may be authorized on a case-by-case basis. An FTTD normally consists of an 8-hour day but may be extended, if necessary, to meet the training requirements.

In addition to the problem of limited training time, ARNG aviators experience a number of other factors that may make it difficult to meet the training requirements. Important factors other than limited training time include the following:

- the ARNG aviators' commitments to their civilian job responsibilities,
- the geographical distances between the ARNG aviators' homes or places of work and the aviation facilities where training is conducted, and
- the ARNG aviators' family and civic responsibilities.

These factors may limit the ARNG aviators' capacity to utilize the currently allocated time in an efficient and effective manner.

Difficulty in meeting the training requirements may seriously reduce the aviators' ability to achieve and maintain a safe level of aviator proficiency. An unsafe level of proficiency, in turn, may cause some of the aviators to leave the National Guard. The potential attrition of large numbers of ARNG aviators is especially critical in view of the "aging of the force." NGB records indicate that approximately 55% of the aviators now in the ARNG inventory are between 34 and

39 years of age. In addition, within the next five years, approximately 20% of the current ARNG aviator force will be eligible for retirement with 20 years of military service. Another 10% of the aviators already have completed 20 years of service. When these aviators leave the ARNG, a considerable amount of experience and expertise will be lost. Without the experience and expertise of the older aviators, unit commanders may find that it is more difficult for the younger, less experienced aviators to meet the training requirements.

The NGB recognizes that ARNG aviators may not be able to meet the training requirements in the amount of time that is currently allocated. In an effort to understand existing training time commitments, the NGB requested that the ARI Aviation Research and Development Activity at Fort Rucker, Alabama, provide information about the ARNG aviators' ability to meet the training requirements in the amount of time that is presently allocated. The NGB requested that ARI compile the information on seven types of ARNG aviation units:

- attack helicopter company/troop,
- air cavalry troop,
- combat support aviation company,
- aviation general support company,
- aerial surveillance aviation company,
- air ambulance company/detachment, and
- transportation company.

The information provided by the aviators in these units will be used to determine if additional time is needed to meet ARNG aviation training requirements.

PROJECT OBJECTIVES

The Statement of Work (SOW) provided by the NGB defined the research objective as follows:

> "The objective of this research effort is to fully analyze the viability of an Army National Guard (ARNG) aviator meeting all current training requirements. The research effort should establish an identifiable relationship between the requirements for an ARNG aviator and the maximum time available to accomplish these tasks" (NGB, 1983).

The SOW further directed that the research be accomplished in a series of phases described below:

> "Phase I consists of conducting a survey of the current ARNG aviator population to determine their attitudes and perceptions regarding their motivation, amounts of time, and types of training they are willing to participate in as a voluntary member of the ARNG. Phase II consists of a detailed analysis of the time necessary to accomplish individual and

specified collective training requirements for aviators in seven specified types of aviation units in the ARNG. Phase III consists of a synthesizing of the products of the first two phases into an analysis which establishes the relationship between the ARNG aviators' time available and their total training requirements" (NGB, 1983).

Subsequent discussions with NGB personnel concerning the information contained in the SOW revealed that the NGB's primary concern was to determine if additional time should be allocated for meeting current ARNG aviation training requirements. A secondary concern was to identify factors other than a limited amount of time that might contribute to the ARNG aviators' inability to meet current training requirements. These concerns were translated into the seven specific objectives listed below:

- determine the demographic characteristics of the current ARNG aviator force (e.g., age, years of service, number of flight hours);
- determine if the amount of time that is spent to meet the current ARNG aviation training requirements exceeds the amount of time that is allocated to meet the requirements;
- identify factors that may affect the ARNG aviators' ability to utilize the allocated time to meet the requirements (e.g., training obstacles, demographic characteristics, family influences, time commitments to civilian job);
- specify the ARNG aviators' willingness to spend additional time to meet the training requirements;
- identify factors that may influence the ARNG aviators' willingness to spend additional time to meet the training requirements (e.g., demographic characteristics, attitudes, civilian job requirements, family influences, training obstacles);
- specify the current career intentions of ARNG aviators; and
- identify factors that may influence the career intentions of ARNG aviators (e.g., demographic characteristics, civilian job requirements, satisfaction with ARNG job).

The objectives were met by compiling data for the total ARNG aviator force and each of the seven types of ARNG aviation units specified by the NGB.

METHODOLOGY

The preceding section described the background and objectives of the research; this section describes the major tasks that were performed during Phase I to meet the research objectives. However, prior to describing the Phase I tasks, it is necessary to present an overview of the entire research project.

OVERVIEW

Consistent with the NGB Statement of Work, the research approach that ARI developed to meet the specified objectives consists of three phases. Figure 1 identifies the phases and shows their functional relationships. The succeeding paragraphs describe the manner in which the information provided by each of the phases meets the research objectives.

As previously stated, the primary objective of the research is to determine if additional time is needed to meet current ARNG aviation training requirements. Phase I meets the objective by providing information about the aviators' perceptions of the adequacy of the allocated time for meeting the training requirements in a way that ensures a safe level of aviator proficiency. In addition, Phase I identifies demographic characteristics and training obstacles that limit the aviators' ability to use the amount of training time that is currently allocated. The need for additional time will be indicated if the Phase I data show that:

- the aviators generally perceive the training time to be inadequate for meeting the requirements, and/or
- the aviators report that time-related factors interfere with their ability to meet the requirements.

Finally, Phase I provides information about the aviators' willingness to spend additional time to meet the requirements, if such time were allocated.

Phase II meets the primary research objective by providing information about the actual amount of time that the aviators spend meeting specific categories of aviation and nonaviation training requirements. In addition, Phase II identifies (a) the amount of time spent on the requirements during each of the major types of training periods (e.g., UTA, AFTP, FTTD), and (b) the amount of time spent on a nonpay status. The need for additional time will be indicated if the Phase II results show that:

- the actual time spent on the requirements exceeds the total amount of time allocated for the requirements, and/or
- the aviators spend a significant amount of nonpaid time meeting the requirements.

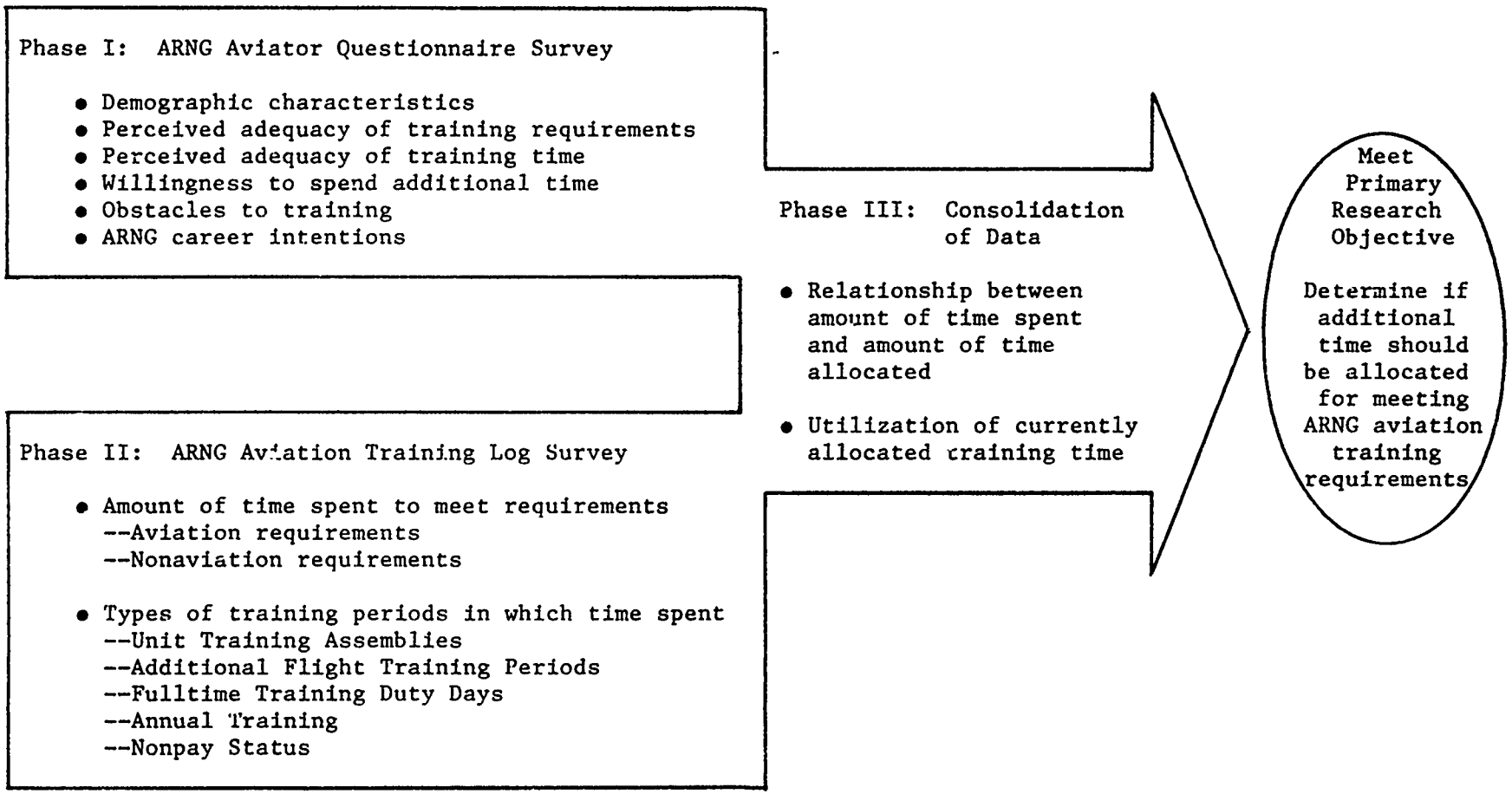


Figure 1. Overview of ARNG aviation training requirements research.

In Phase III of the research, the data from the Phase I questionnaire survey will be consolidated with the data from the Phase II training log survey. The consolidation of the two sources and types of information will permit a definitive analysis of the need for additional training time and the factors that influence the aviators' utilization of the training time.

It is apparent that, compared to the subjective judgments reported in the Phase I questionnaire survey, the actual amount of training time reported in the Phase II training log survey will provide a more factual basis for determining the need for additional training time. However, the principal advantage of the questionnaire data is that such data can be collected in a one-time survey completed early in the research. In contrast, the training log data must be collected each month for a total of 12 months. The questionnaire data thus provide an expedient source of information for making preliminary judgments of the need for additional training time. The remainder of the Methodology section describes the development, content, and administration of the questionnaire.

QUESTIONNAIRE DEVELOPMENT

The first step in developing the Phase I questionnaire was to design items that address each of the major research objectives; the items were compiled to form a preliminary version of the questionnaire. The final version of the questionnaire was developed through an iterative process involving on-site pretests of several preliminary versions. The pretests were conducted at selected ARNG units that are representative of the seven major types of aviation units previously identified by the NGB. The selected units and the dates on which they were visited are shown in Table 1.

The same general procedure was followed at each of the pretest sites. Members of the research team first held an informal briefing with the facility commander, the unit commander, and the company staff officers. The purpose of the briefing was to provide information about the research project and the specific purpose of the pretest. The officers were given copies of (a) a current Fact Sheet for the project and (b) the version of the questionnaire that was to be pretested in the unit.

Once the briefing had been completed, the team members met with a sample of unit aviators who were selected by the company or facility commander. The aviators were assembled into small groups. Each group contained both warrant officers and commissioned officers who, together, represented a wide range of aviation experience levels.

Prior to administering the prototype questionnaire, the team members described the research project and the purpose of the aviators' participation in the pretest. The aviators were then instructed to

Table 1

ARNG Aviation Pretest Units

Unit	Location	Date of Pretest
Company D (Attack) 150th Aviation Battalion	Edgewood, MD	10 July 1983
Company D (Attack) 28th Aviation Battalion Raleigh-Durham, NC	Fort A.P. Hill, VA	12 July 1983
Company B 42nd Aviation Battalion Niagara Falls, NY	Fort Drum, NY	13 July 1983
Company C 42nd Aviation Battalion Frankfort, KY	Fort Drum, NY	13 July 1983
1133rd Medical Company	Montgomery, AL	23 July 1983
1028th Transportation Company 25th Aviation Battalion	Indiantown Gap, PA	6 August 1983
Company A 25th Aviation Battalion	Indiantown Gap, PA	7 August 1983
Troop N (Air) 278th Armored Cavalry Regiment	Knoxville, TN	13 August 1983
Company A (Aerial Surveillance) 159th Military Intelligence Bn	Marietta, GA	13 August 1983
Company D (Attack) 26th Aviation Battalion	Jacksonville, FL	14 August 1983
Troop D (Air) 1/124th Armored Cavalry Squadron	Austin, TX	10 September 1983
Company D (Attack) 38th Aviation Battalion	Warrensburg, MO	11 September 1983
1133rd Medical Company	Montgomery, AL	25 September 1983

complete the prototype questionnaire in the presence of the team members. The aviators were asked specific questions about their interpretations of the questionnaire items and were encouraged to suggest revisions, deletions, and additions of items.

Upon returning from each pretest site, members of the research team met collectively to determine specific revisions of the questionnaire items, instructions, and format. A preliminary version of the questionnaire also was reviewed by members of the Aviation Division of the NGB. Following revisions to incorporate feedback from each pretest and the NGB review, the final version of the questionnaire was produced. A copy of the final version of the questionnaire is presented in Appendix A.

QUESTIONNAIRE CONTENT

The final version of the questionnaire contains items that are designed to answer specific research questions emanating from the project objectives. The research questions are listed below.

Research Question #1: What are the demographic characteristics of the current force of ARNG aviators?

- Do the demographic data have implications for ARNG aviator force management?
- Do the demographic data have implications for the ARNG aviators' ability to meet the training requirements?

Research Question #2: What are the career intentions of the current force of ARNG aviators?

- What percentage of the force plans to stay until retirement?
- What are the projected years of service remaining for the aviators?
- What factors influence the aviators' decisions to remain in or leave the ARNG?

Research Question #3: Are there instances in which the fulfillment of ARNG aviation training requirements does not ensure a safe level of aviator proficiency?

If yes:

- What requirements are inadequate?
- What factors influence the aviators' perceptions of the adequacy of the requirements?

Research Question #4: For the training requirements that are judged to be adequate for safety, is the allocated training time sufficient to meet the requirements?

If no:

- What requirements have an inadequate amount of training time?
- For what types of units and aviators is the training time judged to be inadequate?

Research Question #5: If adding training time is a necessary remedial action, are ARNG aviators willing to spend additional time (paid time and/or nonpaid time) to meet the requirements?

If yes:

- What types of aviators are willing to spend additional time to meet the requirements?
- For what types of training requirements are the aviators willing to spend additional time?

Research Question #6: If the ARNG aviators are unable to meet the training requirements in the amount of time that is currently allocated, are there remedial actions other than the addition of training time that are feasible?

If yes:

- What are the additional remedial actions?

Questionnaire items designed to yield the requisite information for answering the research questions were organized into the three parts listed below:

- Part I: Current Training Requirements,
- Part II: Background Information, and
- Part III: ARNG Career Intentions.

A detailed description of the content and function of the items comprising each part is presented below. Additional information can be obtained by referring to the copy of the questionnaire presented in Appendix A.

Part I: Current Training Requirements

The primary objective of the research project is to determine if additional time is needed to meet current ARNG aviation training requirements. To meet the objective, Part I required the aviators to rate the adequacy of the time currently allocated to meet ARNG aviation training requirements in each of four major categories:

- Initial Qualification,
- Transition Training,
- Continuation Training, and
- Additional Military Requirements.

It was hypothesized that, if the ratings indicated that the aviators judge the training time to be inadequate, the recommendation for additional time may be a necessary remedial action. However, such action should be taken only if (a) the aviators are willing to spend additional time to meet the requirements, and (b) other remedial actions are not feasible. To provide the necessary information for determining the appropriate action, Part I of the questionnaire also was designed to yield information about the following:

- the aviators' willingness to spend additional paid time to meet the requirements,
- the aviators' willingness to spend additional nonpaid time to meet the requirements, and
- the obstacles that the aviators encounter in meeting the requirements.

In developing the strategy for determining the need for additional training time, it became apparent that, although the allocated training time may be adequate for meeting a requirement, the requirement itself may be inadequate for maintaining a safe level of aviator proficiency. Therefore, the first step in assessing the need for additional training time is to identify the requirements that the aviators judge to be inadequate. Accordingly, Part I of the questionnaire provides information about the aviators' judgments of the adequacy of the requirements for maintaining a safe level of aviator proficiency.

Items designed to meet the information requirements defined above were organized into five major sections. The sections are listed below and are described in the succeeding paragraphs.

- Section A: Adequacy of the Training Requirements for Maintaining a Safe Level of Aviator Proficiency,
- Section B: Adequacy of the Time Allocated for Meeting the Requirements,
- Section C: Willingness to Spend Additional Paid Time to Meet the Requirements,
- Section D: Willingness to Spend Additional Nonpaid Time to Meet the Requirements, and
- Section E: Obstacles to Meeting the Training Requirements.

Each section is described in detail below. In addition, the specific requirements that the aviators rated in each section are shown in Table 2.

Table 2

Specific Training Requirements in Each Training Category

I. Initial Qualification Requirements
- Emergency tasks (in aircraft)
- Emergency procedures (orally or in flight simulator)
- Instruments
- Terrain (NOE) flight
- Unaided night tactical (night hawk) flight
- Night vision goggle (NVG) flight
- Nuclear, biological, and chemical (NBC) flight[a]
- Other tasks (specify)

II. Transition Training Requirements
- Cobra aircraft
- National-Guard-specific aircraft (e.g., OH-6, CH-54)
- Alternate/additional aircraft

III. Continuation Training Requirements
- Emergency tasks (in aircraft)
- Emergency procedures (orally or in flight simulator)
- Instrument tasks
- Terrain (NOE) flight tasks
- Unaided night tactical (night hawk) tasks
- Night vision goggle (NVG) flight
- Tactical/special tasks (other than terrain flight)
- Mission tasks
- Additional tasks

IV. Additional Military Requirements[b]
- Inflight evaluation/training of other aviators
- Pre- and post-flying tasks (e.g., pre- and post-flight, weather briefings, flight records)
- Nonflying aviation evaluation requirements (e.g., preparing for, undergoing, and administering annual written examination; aircraft operator's examination; flight physical)
- Military education requirements (e.g., undergoing and administering training in Battalion Training Management System (BTMS) sustainment, common soldier skills)
- Preparation for inspections

[a]Pretest visits indicated that NBC training in most ARNG units consists primarily of initial familiarization with the NBC protective equipment; therefore, a decision was made to evaluate NBC training only as an Initial Qualification Requirement.

[b]Three additional requirements were included in the Additional Military Requirements category for Sections C, D, and E; the requirements are:
- Nontraining flights (e.g., VIP transport, static display);
- Career Development Courses (e.g., advanced and senior courses); and
- Additional Nonflying Duties (e.g., property book, motor pool, security).

Section A: Adequacy of the Training Requirements for Safety

In Section A, the aviators used a 7-point scale to rate the adequacy of each training requirement for maintaining a safe level of aviator proficiency. The instructions that the aviators used to rate the requirements in Section A are as follows:

> A list of current and projected training requirements for ARNG aviators is presented below. Indicate your evaluation of how adequate each of the requirements is for enabling you to maintain a safe level of proficiency as an aviator. In making your evaluation, consider the conditions under which you personally must meet the requirements for your primary aircraft in the National Guard.
>
> Use the scale on the right-hand side of the items to rate the adequacy of each of the requirements. A rating of "1" indicates that the requirement is "Much Less Than Adequate For a Safe Level of Proficiency" and a rating of "7" indicates that the requirement is "Much More Than Adequate For a Safe Level of Proficiency." A rating of "4" indicates that the requirement is "About Right For a Safe Level of Proficiency." Check [✓] the box that best reflects your evaluation of the adequacy of each requirement.

The aviators checked a category labeled "Not Applicable" to indicate that the requirement did not apply.

Section B: Adequacy of the Time Allocated for Meeting the Requirements

In Section B, the aviators used a 7-point scale to rate the adequacy of the time allocated for meeting each training requirement. The instructions that the aviators used to rate the requirements in Section B are as follows:

> Below is a list of the current and projected ARNG training requirements that were presented in Section A. This time, rate the items to indicate your evaluation of how adequate the amount of paid training time is for enabling you to meet the training requirements for your primary aircraft in the National Guard.
>
> Use the scale on the right-hand side of the items to rate the adequacy of the allocated time for meeting each of the requirements. A rating of "1" indicates that "Too Little Time is Allocated to the Task" and a rating of "7" indicates that "Too Much Time is Allocated to the Task." A rating of "4" indicates that the "Time Allocated to the Task is About Right." Check [✓] the box that best reflects your judgment of the adequacy of the allocated training time.

The aviators checked a category labeled "Not applicable" to indicate that the requirement did not apply.

Section C: Willingness to Spend Additional Paid Time

In Section C, the aviators used a 7-point scale to rate their willingness to spend additional paid time to meet each training requirement. The instructions that the aviators used to rate the requirements in Section C are as follows:

> Below is a list of the current and projected ARNG training requirements that were presented in the two previous sections of the questionnaire. This time, rate the items to indicate how willing you are to devote additional paid time to the National Guard in order to meet the training requirements in your primary aircraft. In evaluating your willingness to spend additional paid time, consider the total amount of time--both paid and nonpaid--that you already spend on your National Guard duties. Then indicate your willingness to spend additional paid time to meet the requirements.
>
> Use the scale on the right-hand side of the items to rate your degree of willingness to spend additional paid time to meet your requirements. A rating of "1" indicates that you are "Very Unwilling to Spend Additional Paid Training Time" and a rating of "7" indicates that you are "Very Willing to Spend Additional Paid Training Time." Check [✓] the box that best indicates the degree of your willingness to devote additional paid time to the National Guard in order to meet current or projected training requirements.

A rating of "4" indicated that the aviator was "Neutral" about spending additional paid training time. A category labeled "Not Applicable" was checked to indicate that the requirement did not apply.

Section D: Willingness to Spend Additional Nonpay Status Time

In Section D, the aviators used a 7-point scale to rate their willingness to spend additional nonpaid time to meet each training requirement. The instructions that the aviators used to rate the requirements in Section D are as follows:

> Below is a list of the current and projected ARNG training requirements that were presented in the previous sections of the questionnaire. This time, rate the items to indicate your willingness to devote additional nonpay status time to the National Guard in order to meet the training requirements in your primary aircraft. In evaluating your willingness to spend additional nonpay status time, consider the

total amount of time--both paid and nonpaid--that you now spend on your National Guard duties. Then indicate your willingness to spend additional nonpay status time to meet the requirements.

Use the scale on the right-hand side of the items to rate your degree of willingness to spend additional nonpay status time to meet your requirements. A rating of "1" indicates that you are "Very Unwilling to Spend Additional Nonpay Status Training Time" and a rating of "7" indicates that you are "Very Willing to Spend Additional Nonpay Status Training Time." Check [√] the box that best indicates the degree of your willingness to devote additional nonpay status time to the National Guard in order to meet current or projected training requirements.

A rating of "4" indicated that the aviator was "Neutral" about spending additional nonpaid training time. A category labeled "Not Applicable" was checked to indicate that the requirement did not apply.

Section E: Obstacles to Meeting the Training Requirements

In Section E, the aviators were required to identify specific factors that represent obstacles to meeting each of the training requirements. The aviators reviewed a comprehensive list of obstacles, which were identified during the pretest visits, and checked the ones that they judged to be obstacles to meeting their specific training requirements. The instructions that the aviators used to identify obstacles for each of the requirements are as follows:

This section deals with obstacles to training in the National Guard. An obstacle to training is defined as anything that impedes or interferes with your ability to meet the training requirements in the amount of paid time you are now allocated for National Guard training. The following characteristics of the National Guard training environment are identified as potential obstacles to training.

- IPs = Unavailability of instructor pilots
- PERS = Unavailability of support personnel (e.g., flight engineer, crew chief, technical observer)
- A/C = Unavailability of aircraft
- EQUIP = Unavailability of support equipment (e.g., night vision goggles, ammunition, fuel, vehicles)
- AASF = Unsatisfactory operational hours of the Army Aviation Support Facility
- AREAS = Unavailability of training support areas (e.g., ranges, NOE courses, field sites, flight simulators)
- FH = Insufficient number of flight hours

- NON-AV = Nonaviation obstacles (e.g., preparing for inspections, conducting inventories)
- TIME = Insufficient amount of personal time

Below is a list of the current and projected ARNG training requirements that were presented in the previous sections. For each requirement, check [✓] the box below each characteristic that you consider to be an obstacle to training for you. Check as many obstacles as you experience in meeting a particular training requirement. If you experience none of the obstacles in meeting a particular requirement, do not check any of the boxes.

Example A indicates that the aviator finds unavailability of both support equipment and training support areas to be obstacles to meeting the requirement for ARTEP training.

EXAMPLE A: ARTEP TRAINING

NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
[0]	[ ]	[ ]	[ ]	[✓]	[ ]	[✓]	[ ]	[ ]	[ ]

Example B illustrates that, since no checks were made in any of the columns, none of the items that are listed are obstacles to meeting the requirement for Instructor Pilot Qualification.

EXAMPLE B: INSTRUCTOR PILOT QUALIFICATION

NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

For each requirement listed below, check [✓] the box for each characteristic that interferes with your ability to meet the requirement.

The category labeled "Not Applicable" was checked to indicate that the requirement did not apply.

Part II: Background Information

In developing the questionnaire, it became apparent that characteristics of the aviators, as well as the training environment, might influence the aviators' ability to utilize the allocated training time. Characteristics that affect the utilization of training time may, in turn, influence the aviators' perceptions of the adequacy of the training time and their willingness to spend additional time to meet the requirements.

Part II of the questionnaire contains items designed to provide information about the personal and military demographic characteristics of ARNG aviators. The demographic information was used to identify the types of aviators who perceive the training time as inadequate and the types of aviators who are willing to spend additional time to meet the requirements. Certain types of demographic information (e.g., age, primary aircraft, and career intentions) may also assist the NGB in managing the ARNG aviator force.

The items comprising Part II were grouped into four major sections according to the type of demographic information they provide. The four sections are listed below and are described in detail in the paragraphs that follow.

- Section A: Personal Characteristics,
- Section B: Military Characteristics,
- Section C: Civilian Employment, and
- Section D: Family Factors.

Section A: Personal Characteristics

Section A contains checklist and completion items designed to provide information about the personal characteristics of ARNG aviators. Specifically, items were developed to provide information about:

- age,
- sex,
- ethnic group,
- marital status,
- number of dependent children,
- civilian education level, and
- hours spent each month on community activities.

Section B: Military Characteristics

Section B contains checklist, completion, and 7-point rating scale items designed to provide information about the military characteristics of ARNG aviators. The items in Section B provide information about the following military characteristics:

- primary aircraft in which qualified (e.g., UH-1H, OH-58);
- additional aircraft in which qualified (e.g., T-42, AH-1G);
- number of flight hours (military, civilian, combat);
- aviation qualifications (e.g., pilot, instructor pilot, safety officer);
- type of aviation unit (e.g., attack, air cavalry);
- location of aviation unit;
- distance/time from home and work to aviation training facility;
- number of dual AFTPs;
- availability of training resources for AFTPs (e.g., aircraft, instructor pilots);

- primary duty position (e.g., maintenance technician, company commander);
- additional duty position (e.g., training officer);
- source of entry into ARNG (e.g., active component, other active reserve);
- years of military service;
- years of aviation service;
- years in present ARNG unit;
- military education requirements;
- rank;
- warrant officer Primary Military Occupational Specialty (PMOS);
- previous commissioned officer service (warrant officers only);
- commissioned officer Specialty Skill Identifier (SSI); and
- military branch (commissioned officers only).

Section C: Civilian Employment

Section C contains checklist, completion, and 7-point rating scale items. The items provide information about the ARNG aviators' civilian employment.

The checklist and completion items in Section C provide the following information about each aviator:

- civilian employment status,
- civilian occupation,
- income from civilian occupation,
- total income (all sources except spouse's employment),
- company leave policy for ARNG annual training,
- personal leave policy for ARNG annual training,
- number of civilian work hours, and
- amount of overnight travel for civilian job.

Rating scale items provide information about: (a) the extent to which the aviators' civilian job schedules affect their ability to attend the National Guard training periods (i.e., MUTAs, AFTPs, FTTDs, AT), (b) the aviators' perceptions of their civilian supervisor's attitudes toward the National Guard, and (c) the aviators' degree of satisfaction with specific characteristics (e.g., job security, personal growth, pay and benefits) of their civilian jobs. The job characteristics that were rated were selected from the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1980).

Section D: Family Factors

Section D contains checklist and completion items designed to provide information about (a) the spouse's employment status, (b) the spouse's occupation, and (c) the spouse's civilian income. Section D also contains rating scale items designed to provide information about

(a) family attitudes toward the National Guard and (b) family influences on National Guard career intentions.

Part III: National Guard Career Intentions

As previously stated, the inability to meet the requirements in the time that is currently allocated may influence the aviators' decisions to leave the ARNG. To determine the potential impact that a limited amount of training time may have on the retention of ARNG aviators, Part III of the questionnaire was designed to provide information about the aviators' current intentions about an ARNG career. Items designed to provide the necessary information were grouped into the four sections listed and described below:

- Section A: ARNG Career Intentions,
- Section B: Influences on ARNG Career Intentions,
- Section C: Satisfaction with the ARNG, and
- Section D: Comments about the ARNG.

Section A: ARNG Career Intentions

The first item in Section A is a checklist item that required the aviators to indicate their current intentions about remaining in the ARNG. The aviators were given five alternatives and were instructed to check the one that best reflected their present ARNG career intentions. The alternatives are:

- stay in for 30-year retirement eligibility,
- stay in for 20-year retirement eligibility,
- stay in for at least one more year, but get out prior to 20-year retirement eligibility,
- get out within the next year, and
- other (specify).

The three remaining items in Section A required the aviators to use 7-point rating scales to indicate (a) the frequency with which they think about leaving the National Guard, (b) the probability of seeking a part-time job other than the National Guard, and (c) the probability of finding a part-time civilian job with pay and benefits that are comparable to ARNG pay and benefits.

Section B: Influences on ARNG Career Intentions

Section B contains three checklist items. The items were designed to provide information about (a) the factors that influence the aviators' decisions to join the National Guard, (b) the factors that influence the aviators' decisions to remain in the National Guard, and (c) the factors that influence the aviators' decisions to leave the National Guard.

Section C: Satisfaction With the ARNG

Section C contains a list of specific characteristics of the aviators' ARNG jobs. The characteristics were selected from those listed in the JDS (Hackman & Oldham, 1980) and are the same as those used in rating the aviators' civilian jobs. As before, the aviators used a 7-point rating scale to indicate their degree of satisfaction with each characteristic.

Section D: Comments About the ARNG

Section D provides space in which the aviators could write comments about their ARNG career intentions. The aviators also could identify any additional factors that may influence their decisions to remain in or leave the ARNG.

QUESTIONNAIRE ADMINISTRATION

During the month prior to administration of the questionnaire, a packet of materials was prepared and mailed to each Army Aviation Support Facility (AASF) at which ARNG aviation training is conducted. Each packet contained the following materials:

- a letter identifying the packet enclosures;
- an official message from the NGB Aviation Division to the Army Aviation Officer of each of the 50 states, Puerto Rico, the Virgin Islands, Guam, and the District of Columbia;
- a copy of the letter from the Deputy Director of the ARNG to the Adjutant General of each of the 50 states, Puerto Rico, the Virgin Islands, Guam, and the District of Columbia;
- a set of instructions describing the procedure for administering the questionnaire;
- a videotape describing the background and purpose of the questionnaire;
- a copy of the questionnaire for each ARNG aviator in the units that train at the facility;
- an envelope for sealing each completed questionnaire; and
- address labels for returning the questionnaires to ARI.

The packet of materials was mailed by ARI to the commander of each of the ARNG aviation facilities where flight training is conducted. The facility commander, in turn, appoin[illegible] a training research project officer who was held responsible for (a) distributing the questionnaires to all the aviators at the facility, (b) showing the videotape that describes the background and purpose of the research, (c) providing general instructions about how to complete the questionnaire, (d)

collecting the questionnaires once they had been completed and sealed in an envelope, and (e) returning the completed questionnaires to ARI.

The project officer administered the questionnaire to all ARNG aviators in the units that train at the aviation facility. To ensure a maximum response rate, the project officers were instructed to administer the questionnaire to the aviators as a group during a weekend UTA/MUTA period. Prior to completing the questionnaire, the aviators viewed the videotape prepared by NGB and ARI personnel. The tape presented information about the background and purpose of the questionnaire and described the exact procedure that the aviators were to follow in completing the questionnaire. Each aviator was instructed to seal the completed questionnaire in an attached envelope and to return the sealed envelope to the project officer at the facility. The project officer, in turn, returned the sealed envelopes for all aviators, en masse, to ARI.

RESULTS

This section presents the results of the analyses of the questionnaire data as they pertain to the research questions outlined in the Methodology section of this report. The analyses that were performed to answer the research questions are depicted in the task-flow diagram shown in Figure 2. However, prior to presenting the results of the analyses, it is necessary to provide the reader with an overview of (a) the organization of the data, (b) the statistical treatment of the data, and (c) the composition of the sample of ARNG aviators on which the results are based. The description of the statistical treatment of the data includes the types of measures yielded by the data and the methods used to assess the statistical and operational significance of the data.

OVERVIEW

Organization of the Data

The results of the analyses identified in Figure 2 are presented in six subsections beginning on page 30. The subsections are defined by the research questions, previously stated, and address the following general areas:

- demographic characteristics,
- ARNG career intentions,
- adequacy of the Continuation Training and Additional Military Requirements for maintaining a safe level of aviator proficiency,[2]
- adequacy of the training time allocated for meeting the Continuation Training and Additional Military Requirements,
- willingness to spend additional paid or nonpaid time to meet the Continuation Training and Additional Military Requirements, and
- obstacles that interfere with the aviators' ability to meet the Continuation Training and Additional Military Requirements.

The responses to the majority of the questionnaire items that address the research questions are analyzed for both the aviators in the total sample and the aviators in each of the different types of units. In most instances, the text of the report presents data summarizing the responses of the total sample of aviators. However, for selected items, the text also presents data summarizing the responses of the aviators in each of the different types of units. For the remaining items, data for

[2]Information is provided in the text for Continuation Training and Additional Military Requirements only. Information about Initial Qualification and Transition Training Requirements is presented in the appendices.

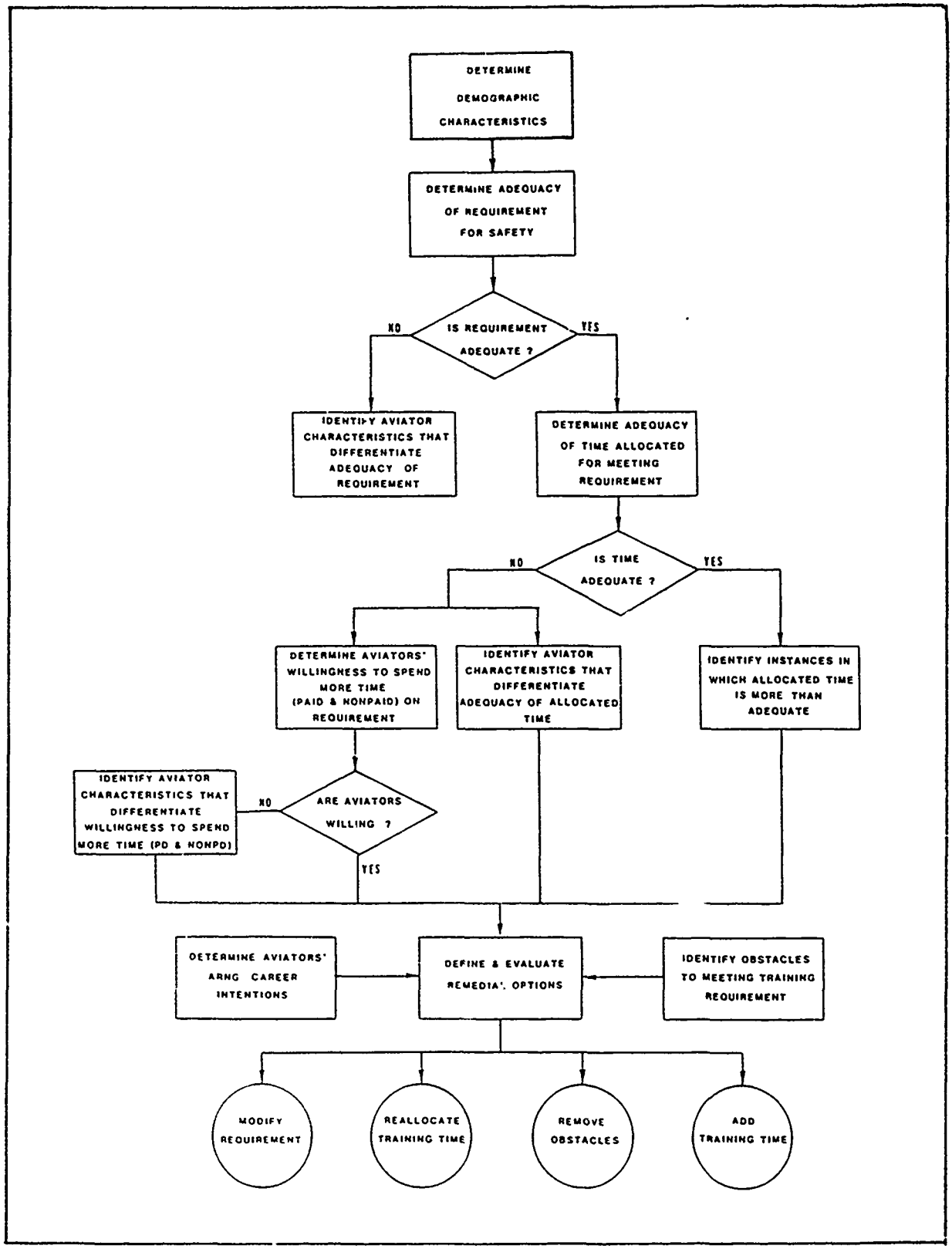


Figure 2. Task-flow diagram for analyses of the ARNG aviator questionnaire data.

the different types of units are presented in Appendix B through Appendix T. Readers having specific questions that are not addressed by the data presented in the text should consult the appropriate appendix.

Statistical Treatment of the Data

Measures

As described in the Methodology section, the questionnaire contains items in three different response formats: rating scale items, completion items, and checklist items. The specific manner in which the aviators' responses are summarized depends on the format of the item. The statistical techniques that were used for each format are briefly described in the succeeding paragraphs.

Descriptive statistics, such as means, medians, proportions, and standard deviations, are used to summarize the responses of the total sample of aviators to all rating scale and completion items. For selected items, these statistics also summarize the responses of the aviators in each of the different types of units. Data from the rating scale and completion items are typically presented in tabular or graphic form; the tables and graphs present the statistics considered to be most appropriate for describing the data. In each case, the sample size upon which the descriptive statistics are based is shown.

For the checklist items, the number of aviators who checked each response category is calculated and converted to a percentage. The percentages are presented in the text in tabular or graphic form. The tables and graphs may show the percentage for the entire sample of aviators, for the aviators in each of the different types of units, or both. When the percentages are presented to permit comparisons of the responses that the total sample of aviators made to different items, the number of aviators responding to each item is presented. Similarly, when the percentages are presented for the purpose of comparing the responses that aviators in the different types of units made to the same item, the number of aviators in each type of unit who responded to the item is shown. If the sample size for an item is not shown, the percentage is based on the total number of aviators in each type of unit who completed the questionnaire (see Table 3 on page 30). For all items, variations in the number of aviators who responded are a consequence of the aviators' either choosing not to respond to the items or deciding that the items did not apply to them.

Statistical Versus Operational Significance

It is common practice in reporting the results of experimental or survey research to determine the statistical significance of a finding. Specifically, statistical analyses typically are conducted to answer the question, "What is the probability that a particular result might be

found by chance?" For example, a significance level of $p < .05$ indicates that the probability of obtaining a result, by chance, is less than one in twenty.

Many of the statistical analyses described in this section of the report were designed to determine the significance of the difference between means or proportions of the aviators' responses to the questionnaire items. One of the data parameters that determines whether a difference is statistically significant is the size of the sample on which each finding is based (i.e., the larger the sample size, the more likely it is that even a small difference between two values will be statistically significant). Comparisons among data points presented in this report typically are based on large sample sizes and, consequently, will likely attain statistical significance. Therefore, the decision was made to apply an additional criterion to assess the practical or operational significance of the findings in this research.

The procedure used in the report interprets the practical significance of a finding in terms of its "effect size" as defined by Cohen (1977). Cohen states that, when a desired effect size is not dictated by previous experience or theory, observed differences or relationships may be evaluated with reference to three levels of effect size: (a) small--accounting for 1-5% of the total variance in the dependent variable; (b) medium--accounting for 6-12% of the variance; and (c) large--accounting for 13% or more of the variance. When the practical significance of a difference or a relationship between variables is necessary to address the objectives of the current research, the effect size will be reported and interpreted according to Cohen's conventions of small, medium, and large effects. It should be noted, however, that the reported effect sizes are intended to serve only as an evaluative aid to the reader; the interpretation of the data must be tempered with the reader's understanding of the operational situation.

Comparison of Means

For selected questionnaire items (e.g., training requirements), mean values were computed for the responses of the aviators in each of the different types of units and in the total sample. Statistical analyses were subsequently performed to determine the significance of (a) the difference between two observed means (e.g., the difference between the mean ratings for two types of units), and (b) the difference between an observed mean and a hypothesized mean (e.g., the difference between the mean rating for a particular type of unit and a hypothesized mean of "4," the midpoint of each rating scale). Because of the extremely large sample size on which each mean was based, it seemed highly probable that the differences between means would be statistically significant in most instances. Therefore, to test the null hypothesis of no difference between the means, a procedure recommended by Cohen was employed. The procedure uses a statistic, called d, to determine how large a difference must be to represent an "effect size"

that is both practically and statistically significant. The value of d for determining the practical significance of the difference between two observed means is computed according to the following procedure:

$$d = \frac{|M_A - M_B|}{s'}$$

where:

M_A, M_B = observed sample means

s' = average within-sample standard deviation[3]

The value of d for determining the practical significance of the difference between an observed sample mean and a hypothesized population mean is computed by a similar procedure, as shown below:

$$d = \frac{|m - c|}{s},$$

where:

m = observed mean of the sample

c = hypothesized mean

s = standard deviation of the sample

Cohen operationally defines the practical significance of the resulting d values and gives their equivalent r^2 values, which denote the amount of variance accounted for by the variable. The values are as follows:

- d = .2 represents the minimum value for a small effect size, equivalent to r^2 = .01;
- d = .5 represents the minimum value for a medium effect size, equivalent to r^2 = .06; and
- d = .8 represents the minimum value for a large effect size, equivalent to r^2 = .14.

In the present analyses, those differences resulting in medium or large effect sizes are interpreted as definitely having practical significance, while those resulting in a small effect size are interpreted as having questionable significance. Because of the large sample sizes for each statistical test, adoption of these criteria for interpreting the findings always resulted in a high level of power (.99 or greater); thus, the probability of detecting a "real" difference between means was at least 99%.

---

[3]The formula used to compute the within-sample standard deviation is $s' = \sqrt{\frac{s^2_A + s^2_B}{2}}$.

Comparison of Proportions

Many of the tables and figures in this report are designed to illustrate the proportion of aviators in the total sample who checked each of the response alternatives for a given item. Because data of this type are mainly descriptive, there is seldom any need to perform statistical tests to determine whether the proportions differ significantly from each other. However, in some cases, the proportions are reported for the responses of the aviators in each of the different types of units; in such instances, the data were often used to make statistical comparisons between the types of units. Thus, tests were conducted to determine the statistical and practical significance of the difference between (a) two observed proportions or (b) an observed and a hypothesized proportion.

Because there are literally hundreds of proportions cited in the report, it is not practical to report the level of statistical and practical significance of each possible comparison of proportions. For those instances that are reported, a procedure recommended by Cohen (1977) was employed. The procedure uses a statistic called h, which Cohen defines as the difference between the arcsine transformed values of the proportions. The value of h determines the practical significance of the difference between the proportions. The operational definitions of small, medium, and large differences (i.e., effect sizes) are stated below:

- h = .2 represents the minimum value for a small effect size, equivalent to $r^2 = .01$;
- h = .5 represents the minimum value for a medium effect size, equivalent to $r^2 = .06$; and
- h = .8 represents the minimum value for a large effect size, equivalent to $r^2 = .14$.

It can be seen that these effect size values correspond to the d values used to interpret previous rating scale results.

A procedure recommended by Guilford (1965) may also be used to determine the significance of the difference between two proportions; the procedure uses a z-ratio to determine the significance of the difference. In both the Cohen and Guilford procedures, the tests are adjusted for unequal sample sizes and for the location of the difference in proportions between the interval 0.0 to 1.0 (e.g., .15-.25 compared to .45-.55).

In addition to the guidelines presented above, the following information is provided to help the reader evaluate the significance of the difference in the proportions of aviators in any two subsamples (e.g., types of units) who responded to the same item:

- A difference in proportions of .10 (e.g., .20-.30; .45-.55) is the minimum value for a small effect size.

- A difference in proportions of .25 (e.g., .20-.45; .50-.75) is the minimum value for a medium effect size.
- A difference in proportions of .40 (e.g., .20-.60; .55-.95) is the minimum value for a large effect size.

For all three effect sizes, the differences between the proportions will be statistically significant ($p < .05$) if the sample size of the smallest subsample is at least 200. If the sample size of the smallest subsample is as low as 45, a difference between proportions of at least .16 is required to reach statistical significance. The reader who requires additional detail or wishes to perform an exact test of significance should consult the previously cited statistical sources (i.e., Guilford [1965] and Cohen [1977]).

Composition of the Sample

A total of 4800[4] questionnaires were mailed during January and February 1984 to 88 AASFs where ARNG aviation training is conducted. A total of 3,640 questionnaires were completed and returned by the 31 July 1984 cutoff date. The sample represents approximately 75% of the total ARNG aviator force. For purposes of analysis, the aviators are categorized into one of the seven types of units targeted for the survey, plus an additional category labeled "Other." Aviators placed in the "Other" category belong to such units as Engineer Groups, Signal Battalions, and State Area Commands.

Table 3 shows the number of aviators in each of the different types of units who completed the questionnaire. Table 3 also shows the percentage of the total sample that is represented by the aviators in each of the units. Comparisons of the percentage values with data provided by the NGB regarding the composition of the ARNG aviator force indicate that the percentages for the sample shown in Table 3 are all within three points of the percentage of the aviator population authorized for the unit types.

Of the 3,640 aviators who completed the questionnaire, 68% are warrant officers and 32% are commissioned officers. These percentages are within three percentage points of the reported commissioned officer and warrant officer composition of the aviator population.

---

[4]According to records maintained by the NGB, there were approximately 4800 aviators assigned to ARNG units during the questionnaire data collection period.

Table 3

Distribution of the Sample by Type of ARNG Aviation Unit

Type of Unit	Number in Sample	% Total Sample
Attack Helicopter Company/Troop	524	14
Air Cavalry Troop	519	14
Combat Support Aviation Company	559	16
Aviation General Support Company	343	10
Aerial Surveillance Aviation Company	46	1
Air Ambulance Company	440	12
Transportation Company	249	7
Other Types of ARNG Aviation Units	960	26
Total Aviators in Sample	3,640	100

ANALYSES OF THE QUESTIONNAIRE DATA

The questionnaire data were subjected to statistical analyses designed to answer each of the six research questions stated in the Methodology section. The subsections that follow summarize the results of the data analyses in six general areas corresponding to the research questions:

- demographic characteristics (Research Question #1),
- career intentions (Research Question #2),
- adequacy of the training requirements (Research Question #3),
- adequacy of the allocated training time (Research Question #4),
- willingness to spend additional training time (Research Question #5), and
- obstacles to training (Research Question #6).

Demographic Characteristics (Research Question #1)

Data yielded by the aviators' responses to the items in Part II of the questionnaire were analyzed to provide information in three general demographic categories:

- personal and family characteristics (e.g., age, educational level, marital status);
- civilian employment (e.g., number of hours spent on civilian job, annual civilian income); and
- military characteristics (e.g., primary aircraft, number of flight hours).

The results of the analyses of selected characteristics in each of the demographic categories are summarized in the paragraphs that follow. The characteristics that are described were selected because of (a) their potential impact on the ARNG aviators' ability to meet the training requirements in the amount of time that is currently allocated, or (b) their potential significance for ARNG aviator force management and planning.

Personal and Family Characteristics

The succeeding paragraphs summarize the personal and family demographic characteristics of the aviators who participated in the survey. The characteristics are discussed under the following seven specific content areas:

- sex and ethnic group,
- age,
- education,
- marital status,
- spouse's employment,
- children, and
- involvement in community activities.

Sex and Ethnic Group

Ninety-eight percent of the aviators in the sample are male. Ninety-six percent of the aviators are Caucasian; the remaining four percent are approximately equally distributed among American Indian, Asian, Black, and Hispanic ethnic groups.

Age

Figure 3 shows the centiles of the age distributions for the total sample and for the different types of units. The ages of the aviators in the total sample range from 20 to 60 years, with a median (MDN) of 36.7 years. Half of the aviators are between 34 (the 25th centile) and 39 (the 75th centile) years of age; less than 10% are below 30 (the 10th centile) years or above 43 (the 90th centile) years of age.

There is little variation in the median ages of the aviators in the different types of units. The difference between the highest and lowest median ages is only 2.4 years. Aviators in Aerial Surveillance units have the highest median age, 38.5 years, while aviators in Air Cavalry units have the lowest median age, 36.1 years.

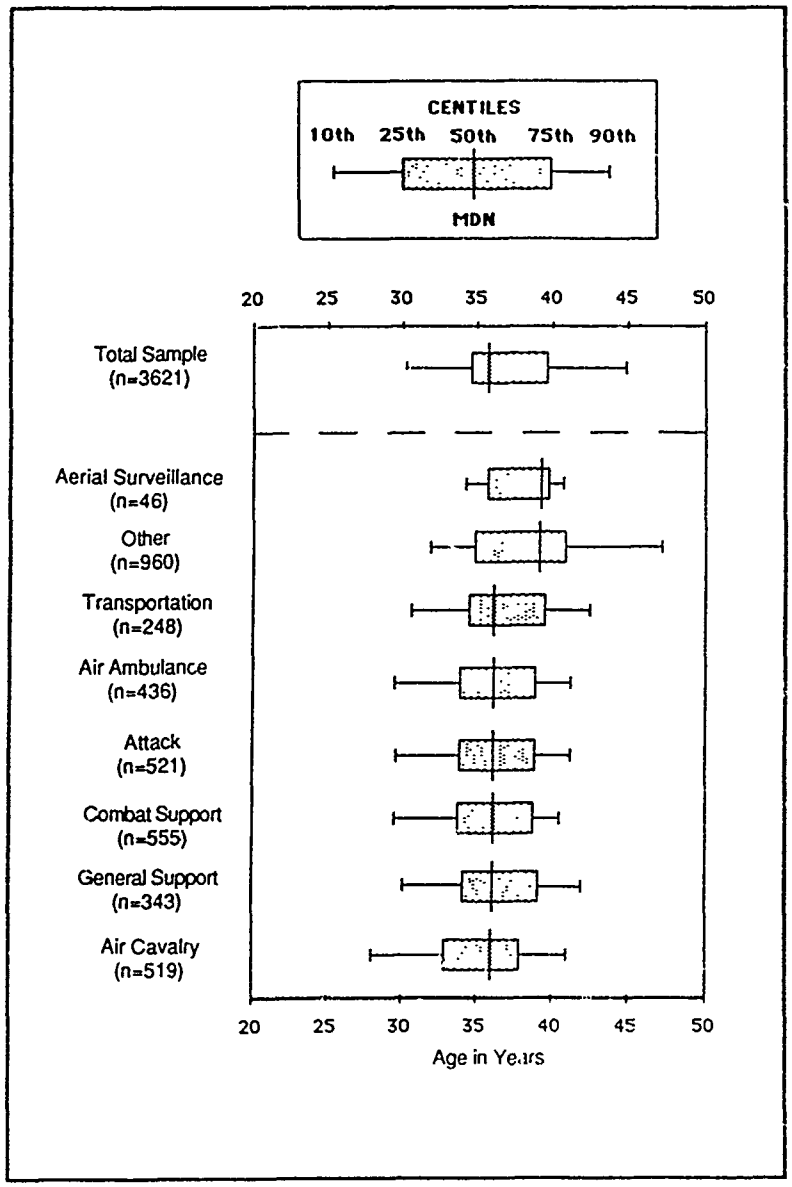


Figure 3. Age.

Education

Data on the highest civilian educational level attained by the aviators are summarized in Figure 4. In general, the educational level of the aviators is very high. Ninety-four percent of the aviators reported education beyond the high school or trade school level. Fifty-five percent have a bachelor degree or higher; an additional 10% have an associate degree.

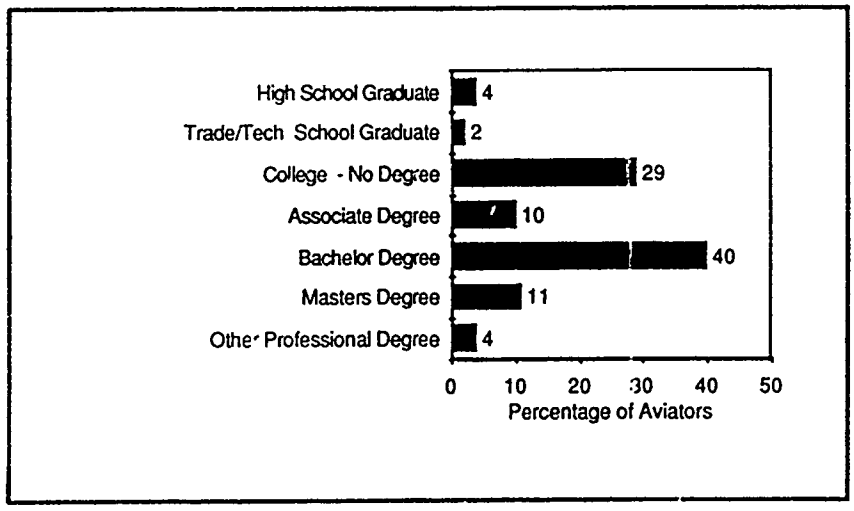


Figure 4. Educational level (n = 3,618).

Marital Status

Data on the marital status of the aviators are summarized in Figure 5; the data show that 84% are presently married and 8% are presently divorced. These percentages are within two points of the percentages reported by the U.S. Bureau of the Census for 35-44 year-old males (U.S. Department of Commerce, 1985). Thus, the data provide no support for the often cited contention that the ARNG may have a significant negative impact on marital status. In addition, approximately two-thirds (65%) of the aviators are presently married and have never been divorced.

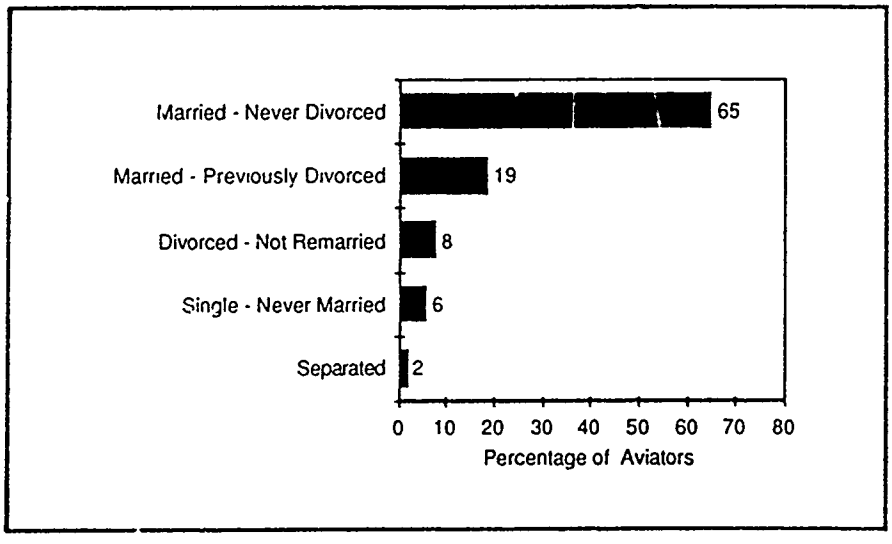


Figure 5. Marital status (n = 3,640).

Fifty-eight percent of the aviators who are married reported that their spouse's attitude toward the ARNG is positive; these aviators assigned a rating of "5" or greater on a 7-point scale ranging from "1" (indicating a "Very Negative" attitude toward the ARNG) to "7" (indicating a "Very Positive" attitude). In contrast, only 23% reported that their spouse's attitude about the ARNG is negative; these aviators assigned a rating of "3" or less.

Spouse's Employment

Forty percent of the aviators who are married have spouses who are employed full time; an additional 22% of the married aviators have spouses who work part-time. Sixty-four percent of the working spouses earn $10,000 or more annually from their full-time or part-time job. A detailed breakdown of the income of the aviators' spouses is shown in Appendix B.

Children

Seventy-four percent of the aviators have children who are presently living at home; of these, the median number of children living at home is two. Fifty-five percent of the aviators with children living at home indicate that their children's attitude toward the ARNG is positive (indicated by a rating of "5" or greater on a 7-point scale), while only 13% indicate that their children's attitude is negative (indicated by a rating of "3" or less).

Involvement in Community Activities

In addition to their family commitments, ARNG aviators appear to be moderately active in community activities. Fifty percent of the aviators report devoting 10 hours or more per month to community activities such as church attendance and civic groups.

Civilian Employment

The succeeding paragraphs summarize various characteristics of the aviators' civilian employment. The characteristics are discussed under the following six specific content areas:

- employment status,
- work hours,
- income,
- commuting requirements,
- impact of civilian job on ARNG training, and
- satisfaction with civilian job.

Employment Status

Ninety-two percent of the aviators are employed full time; an additional 4% are employed part time. Approximately 12% are self-employed. The majority of the aviators reported civilian occupational titles that belong to the professional, technical, or managerial occupational categories (Department of Labor, 1977).

Work Hours

The centiles for the distribution of the number of hours spent on the civilian job in a typical work week are shown in Figure 6. The total time reported here includes both the hours spent at the place of work and additional hours spent on work-related activities, such as business entertainment, at-home paperwork, and commuting time. The median number of hours spent on the civilian job is 50 hours. Only 5% reported that they spend less than 40 hours a week on their job; 27% reported that they spend 60 hours or more a week.

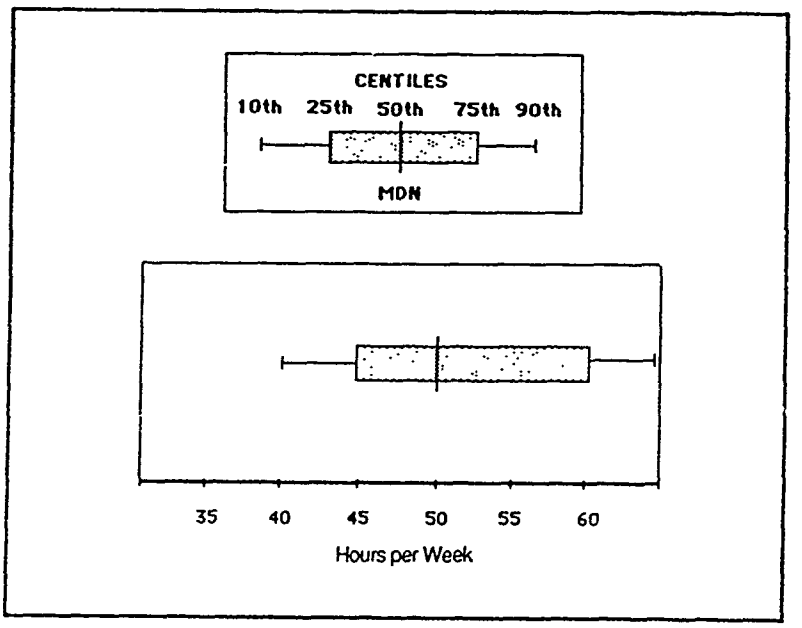


Figure 6. Hours per week spent on civilian job.

Income

The distribution of ARNG aviators by income levels is shown in Figure 7. The educational and occupational levels of the aviators are reflected in their reported salary levels. Specifically, fifty-five percent of the aviators earn $30,000 or more from their civilian job alone; in comparison, the median personal income from the job for

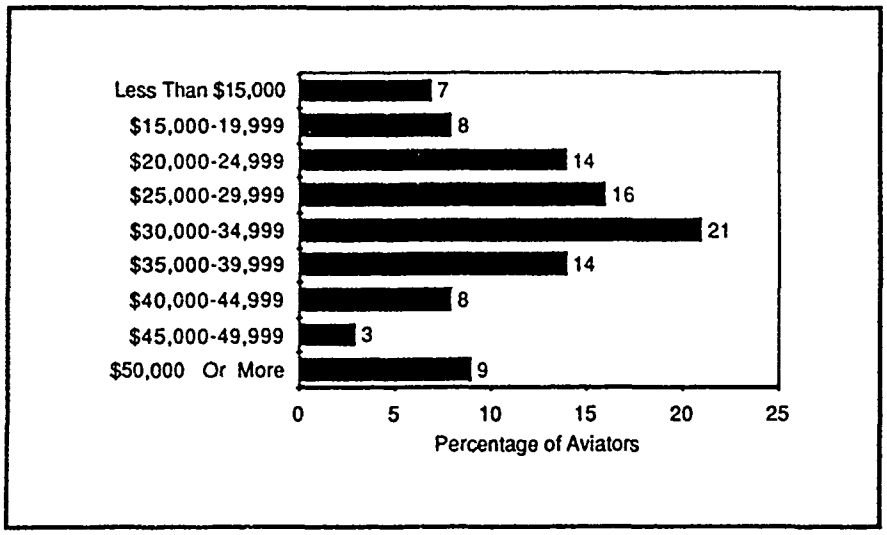


Figure 7. Annual civilian income (n = 3,399).

professional/technical workers in the general population is approximately $23,000 (U.S. Department of Commerce, 1985). Twenty-one percent of the aviators earn $30,000-$34,999 annually in their civilian jobs. Nine percent of the aviators earn $50,000 or more from their civilian jobs. More than one-half (56%) of the aviators reported that the projected annual income they receive from their ARNG duty position is between $5,000 and $8,000.

Sixty percent of the aviators have a total personal income (including all income sources except spouse's income) in excess of $35,000; 18% have a total personal income of $50,000 or more. A detailed breakdown of the aviators' total income and ARNG income is shown in Appendix C.

Commuting Requirements

The centiles of the distributions for the commuting distances and commuting times to the UTA/MUTA site from the aviators' places of work and home are shown in Figure 8. The commuting distances and times are for one-way trips. The median distance that the aviators travel from work to the facility at which they conduct their UTA/MUTAs is 47.9 miles; the median commuting time is 60.0 minutes. The median distance that the aviators travel from home to the UTA/MUTA site is 38.2 miles; the median commuting time from home is 50.0 minutes. Five percent of the aviators report that the facility at which their AFTPs are conducted is different from the facility at which their UTA/MUTAs are conducted. For these aviators, the median distance traveled from work to the AFTP site is 50.5 miles; the median commuting time from work is 66.5 minutes. The median distance that the aviators travel from home to the AFTP site is 34.7 miles; the median commuting time is 44.0 minutes.

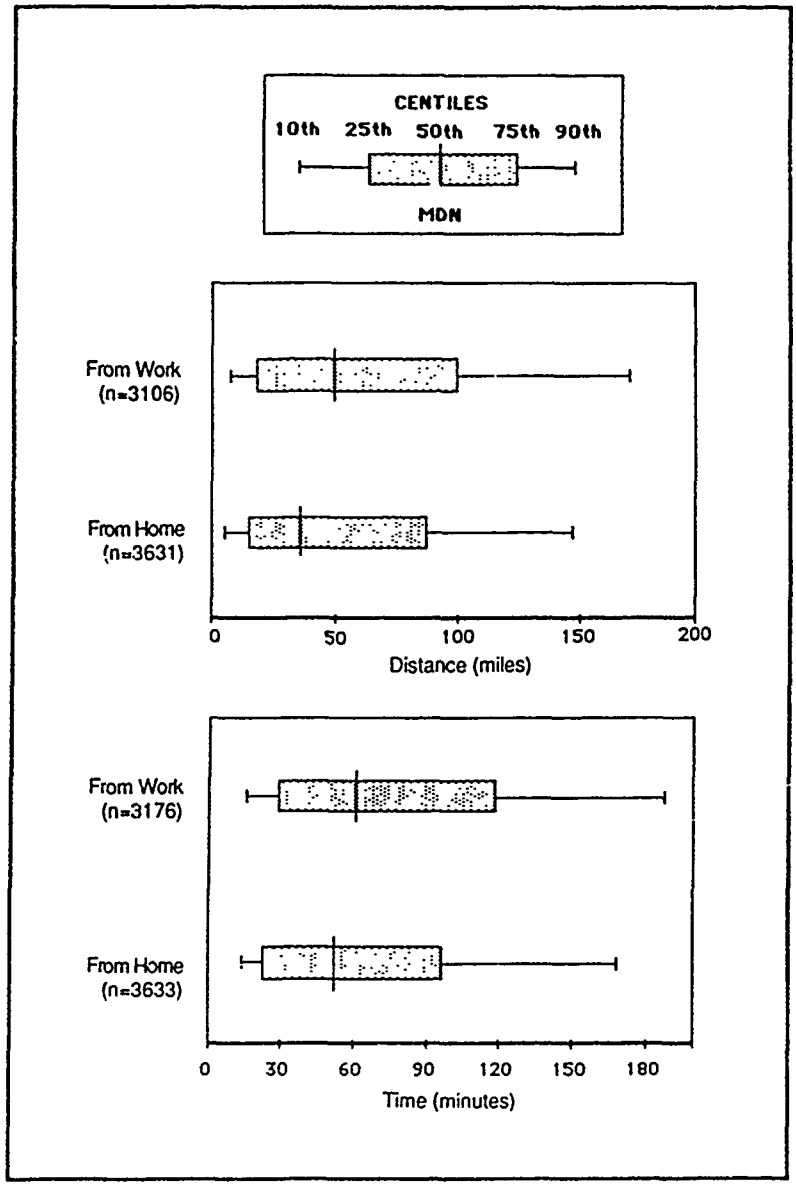


Figure 8. Commuting (one-way) distance and time from workplace and home to UTA/MUTA training site.

Approximately one-half (54%) of the aviators have civilian jobs requiring them to travel overnight. The median number of nights that these aviators are required to be away from home is 3.5 per month.

Impact of Civilian Job on ARNG Training

Four items address the issue of the impact that the civilian job has on the aviators' ability to participate in ARNG training. The

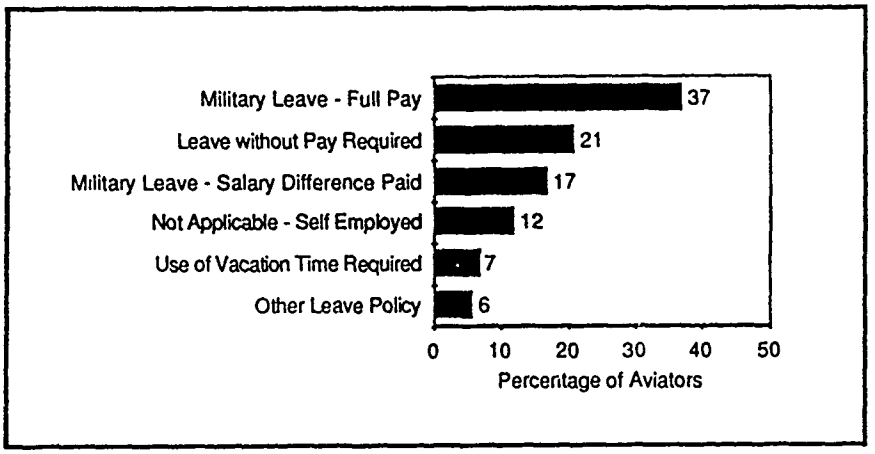


Figure 10. Company leave policy (n = 3,640).

Satisfaction With the Civilian Job

As described in the Methodology section, the aviators rated their satisfaction with five characteristics of their civilian jobs by responding to 15 items from the JDS (Hackman & Oldham, 1980). Two of the items measure satisfaction with job security; two measure satisfaction with pay; four measure satisfaction with the social aspects of the job; and three measure satisfaction with the immediate supervisor. An additional item measures satisfaction with the job in general.

The aviators rated their satisfaction with the five characteristics and with the job in general by using a 7-point rating scale. A rating of "1" indicates that the aviator is "Extremely Dissatisfied" with a characteristic of the civilian job and a rating of "7" indicates that the aviator is "Extremely Satisfied." For each of the five job characteristics, the ratings assigned to the appropriate questionnaire items were averaged to yield a summary score for that characteristic. The aviators' responses to the job satisfaction items are summarized in Table 4 and are compared to means and standard deviations for a national normative sample of professional/technical occupations (Hackman & Oldham, 1980).

Cohen's d statistic, previously described, was used to determine the practical and statistical significance of the mean ratings shown in Table 4 for each job characteristic and the job in general. The results indicate that ARNG aviators are generally satisfied with all characteristics of their civilian job. Specifically, the difference between a hypothesized rating of "4," which indicates "neutral," and the observed mean rating for each characteristic was great enough to result in at least a medium effect size. The mean ratings show that the aviators are most satisfied with the social aspects of the job (mean rating = 5.4) and least satisfied with pay (mean rating = 4.7). The means for these two job characteristics are significantly different from each other; the difference represents a medium effect size (d = .53).

Table 4

Descriptive Data Summary Table: Satisfaction With Characteristics of the Civilian Job

Civilian Job Characteristic	n	M	SD
Security	3,446	5.1 (5.0)[a]	1.6 (1.2)[a]
Pay	3,449	4.7 (4.4)	1.5 (1.5)
Personal Growth	3,445	5.3 (5.1)	1.4 (1.1)
Social Aspects	3,430	5.4 (5.5)	1.1 (0.9)
Supervisor	3,029	4.8 (4.9)	1.5 (1.3)
Job in General	3,356	5.2 (4.9)	1.6 (1.0)

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation.

[a]Means and standard deviations for the professional/ technical normative group.

The data presented in Table 4 show that the ARNG aviators' ratings of satisfaction with their civilian jobs are similar to those of the individuals in the normative sample. Specifically, except for pay and general satisfaction, the mean ratings for the characteristics of the aviators' civilian jobs are not significantly different from the mean ratings for the normative sample. Pay and general satisfaction mean ratings are slightly higher for the aviators' civilian jobs than for the normative sample. In each comparison, the difference represents a small effect size (d = .20 and .23, respectively).

Military Characteristics

The succeeding paragraphs summarize the military demographic characteristics of the aviators who participated in the survey. The characteristics are discussed under the following seven specific content areas:

- rank,
- source of entry,
- time in military service,
- flight experience,
- aircraft qualification,
- additional military qualifications, and
- duty positions.

Rank

As previously indicated, 68% of the aviators completing the questionnaire are warrant officers, while 32% are commissioned officers. The percentage of warrant and commissioned officers in the total sample and in each of the different types of units is summarized in Figure 11. It can be seen that the percentages for warrant and commissioned officers are uniform across most of the different types of units; however, noticeable deviations from the norm occur for both Aerial Surveillance and "Other" types of units. In Aerial Surveillance units, 46% of the aviators are warrant officers and 54% are commissioned officers; in the "Other" units, 55% of the aviators are warrant officers and 45% are commissioned officers.

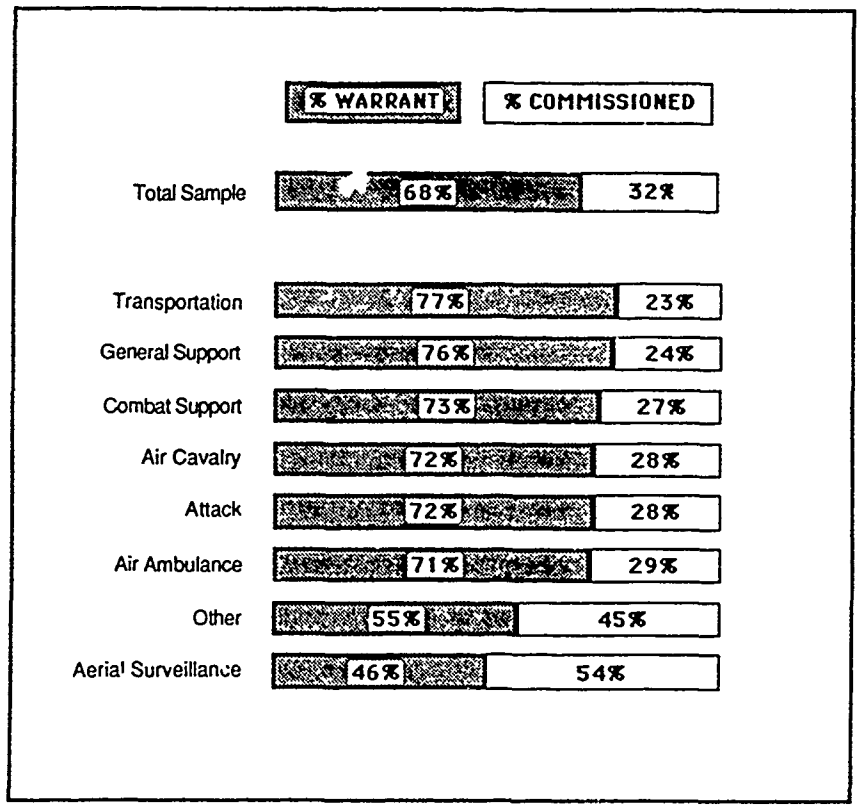


Figure 11. Percentage of warrant officers and commissioned officers by type of unit.

Figure 12 shows a breakdown of the rank of the warrant officers in the total sample. The warrant officer ranks with the highest percentages of aviators are CW2 (40%) and CW3 (36%). A breakdown of the ranks of the warrant officers in each of the different types of units is presented in Appendix E.

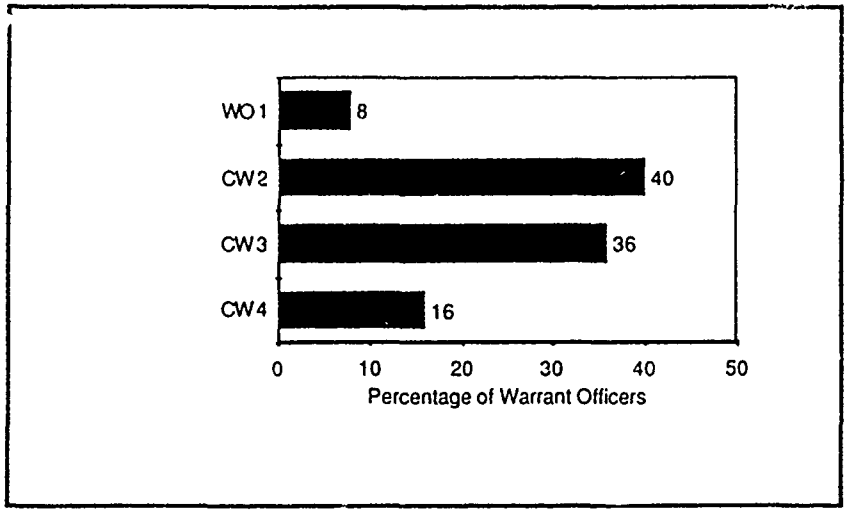


Figure 12. Warrant officer ranks (n = 2,458).

The distribution of warrant officers in the total sample by Primary Military Occupational Speciality (PMOS) is shown in Figure 13. The majority of the warrant officers (71%) are in the PMOS 100B--Utility/Observation Helicopter Pilot. The category includes aviators whose primary aircraft is the UH-1C/M, UH-1H, or UH-1V model.

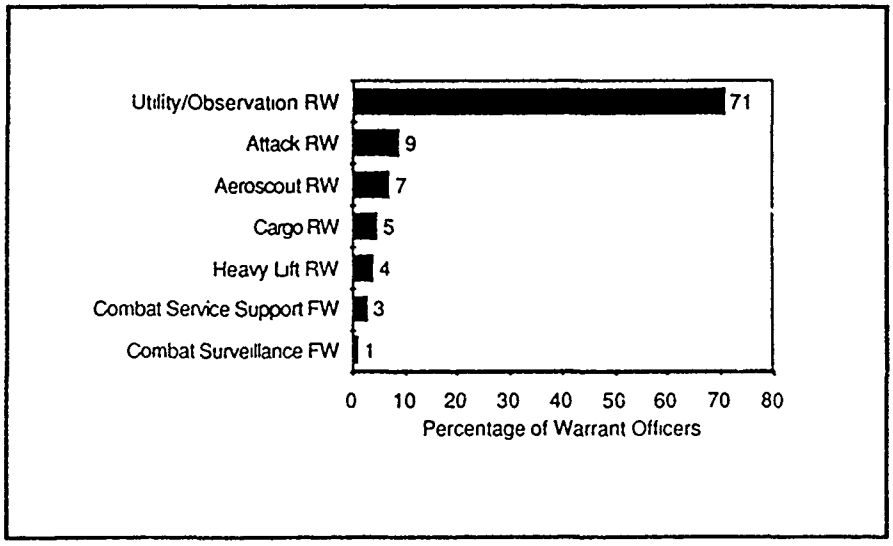


Figure 13. Warrant officer aviators' Primary Military Occupational Specialties (PMOSs) (n = 2,446).

A breakdown of the ranks of commissioned officers in the total sample is shown in Figure 14. The commissioned officer ranks with the highest percentages of aviators are Captain (46%) and Major (29%). A breakdown of the ranks of commissioned officers in each type of unit is presented in Appendix F.

The percentage of ARNG commissioned officers serving in each branch (e.g., Armor, Infantry) appears in Figure 15. The largest percentage (27%) of the aviators serve in the Armor Branch. The commissioned officers also have a number of different Specialty Skill Identifiers (SSIs); the SSIs are summarized in Figure 16. The most commonly occurring SSI is 15B--Combat Aviation (36%).

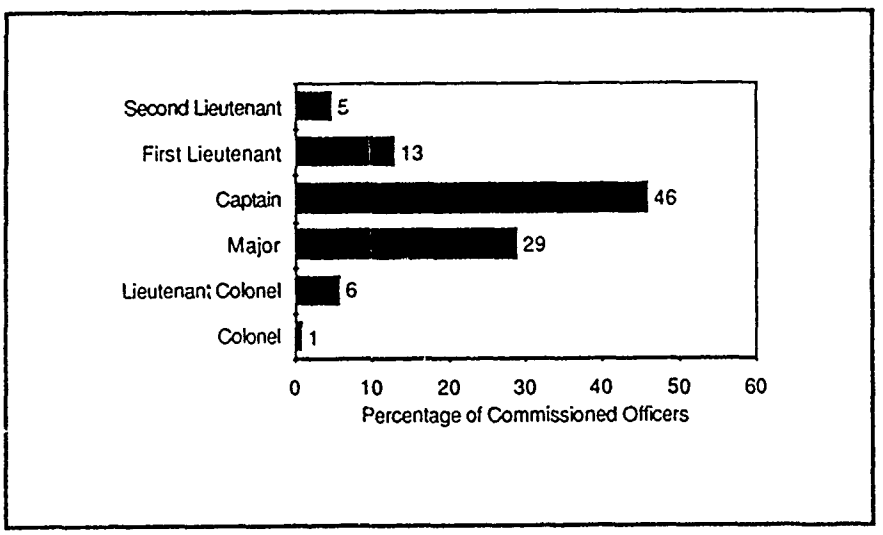


Figure 14. Commissioned officer ranks (n = 1,157).

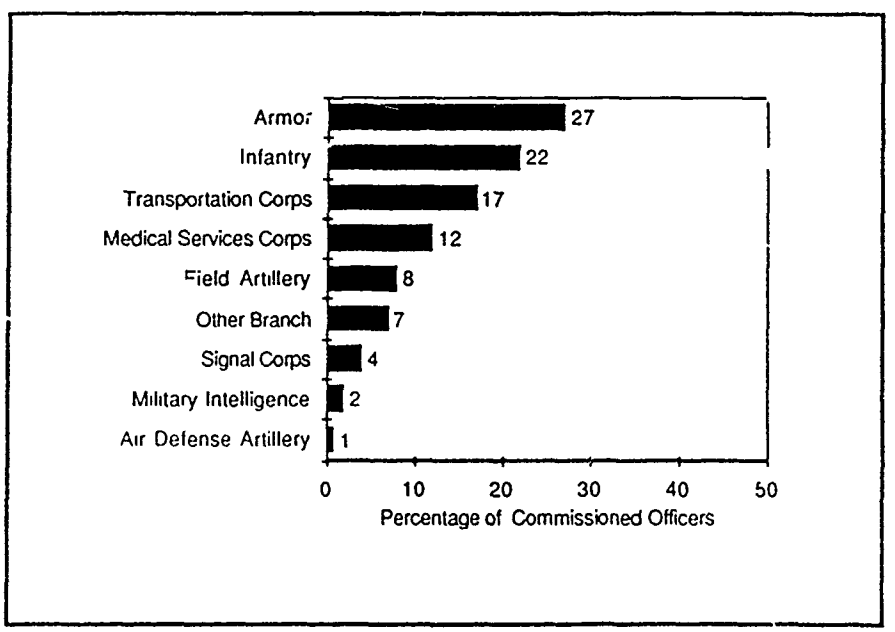


Figure 15. Branch of commissioned officer aviators (n = 1,152).

Note: The data represent the percentage of aviators who were serving in each branch, excluding the Aviation Branch, at the time the survey was conducted.

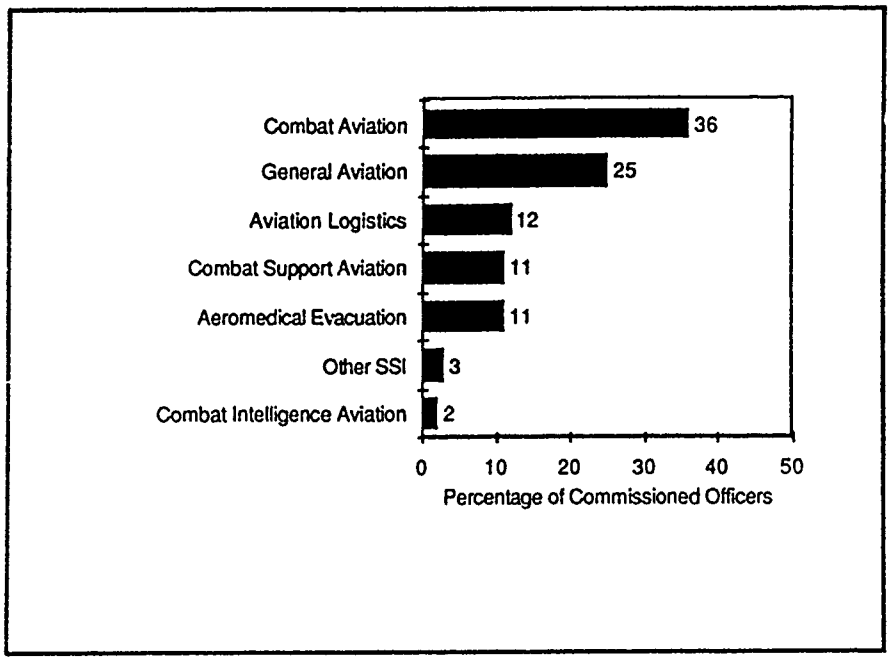


Figure 16. Commissioned officer aviators' Specialty Skill Identifiers (SSIs) (n = 1,146).

Source of Entry

The sources from which the aviators entered the ARNG are depicted in Figure 17. The figure shows that at least 80% of the aviators had some type of prior military service upon joining the ARNG. Forty-four percent of the aviators entered the ARNG with prior military experience, but with more than a six-month break in service; 27% entered the ARNG directly from active duty in the Army (24%) or another branch of military service (3%), with less than a six-month break in service.[5] An additional 9% of the aviators entered the ARNG from active reserve status. Sixteen percent of the aviators entered the ARNG directly from civilian status, with no prior military service. The remaining four percent entered the ARNG from a source other than civilian, active duty, or active reserve status (e.g., inactive Army Reserve, Individual Ready Reserve [IRR], Reserve Officer Training Corps [ROTC]). The source of entry for the aviators in each of the major types of units is shown in Appendix G.

[5]During the pretest, it was determined that six months was often required for aviators to make the transition directly from active duty into the ARNG unit.

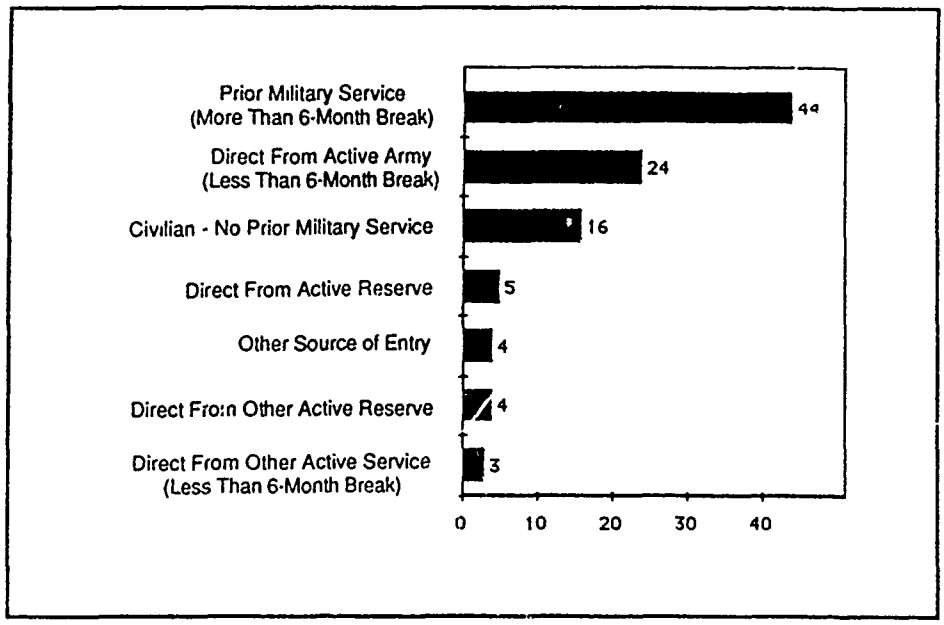


Figure 17. Source of entry into the ARNG (n = 3,632).

Time in Military Service

Figure 18 shows the centiles of the distribution of ARNG aviators' total years of military service; an aviator's total years of service was calculated by summing the years of service on active duty, in the active reserve, and in the ARNG. The data indicate that the aviators have a median of 14.0 years of total military service; the data further indicate that approximately 25% of the aviators have completed between 15 and 20 years of service and, consequently, will be eligible for retirement in the next five years.

Figure 18 also shows the centiles for the distributions of the aviators' years of service in each of the following categories: on active duty, in the ARNG, in the active reserve, on flight orders, and in the present unit. The distributions show that ARNG aviators have spent a median of 4.2 years on active duty, 8.0 years in the ARNG, and 3.0 years in another type of active reserve. The aviators have spent a median of 12.0 years on flight orders and 4.2 years in their present ARNG unit.

The median total number of years of military service for the aviators in each type of unit is shown in Figure 19. The median total number of years is subdivided into median years on active duty and median years in the active reserve and ARNG. The data in Figure 19 indicate that aviators in Aerial Surveillance and "Other" units have spent a median of 16.6 years and 16.0 years, respectively, in military service. Aviators in Transportation units have spent a median of 14.0 years. Aviators in the remaining types of units have spent a median of

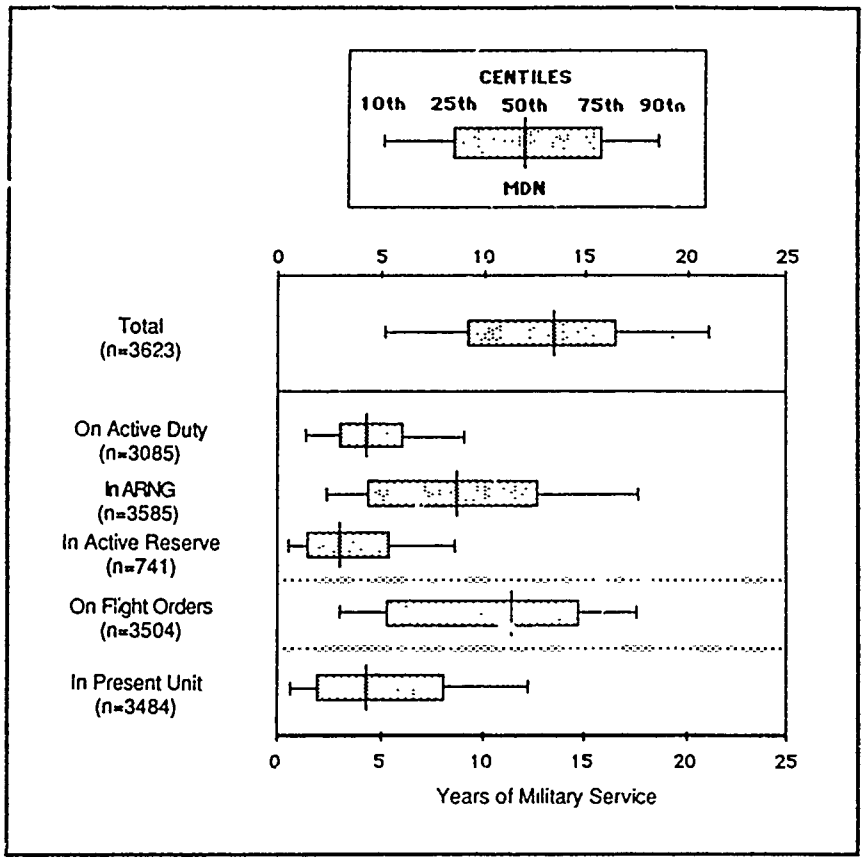


Figure 18. Years of military service.

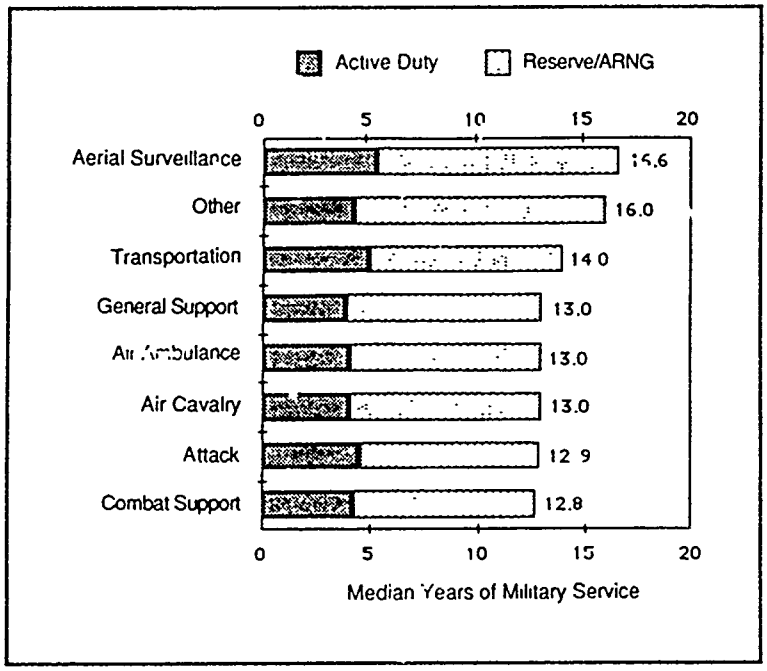


Figure 19. Median number of total years of service for aviators in the different types of units.

approximately 13.0 years. Additional information about the length of service for aviators in each of the major types of units is presented in Appendix H.

Flight Experience

Figure 20 shows the centiles of the distribution of flight hours for the total sample of aviators. The figure summarizes the distributions of military, combat, and civilian flight hours. Descriptive summary data for total military, combat, and civilian flight hours are provided in Appendix I for aviators in each of the different types of units.

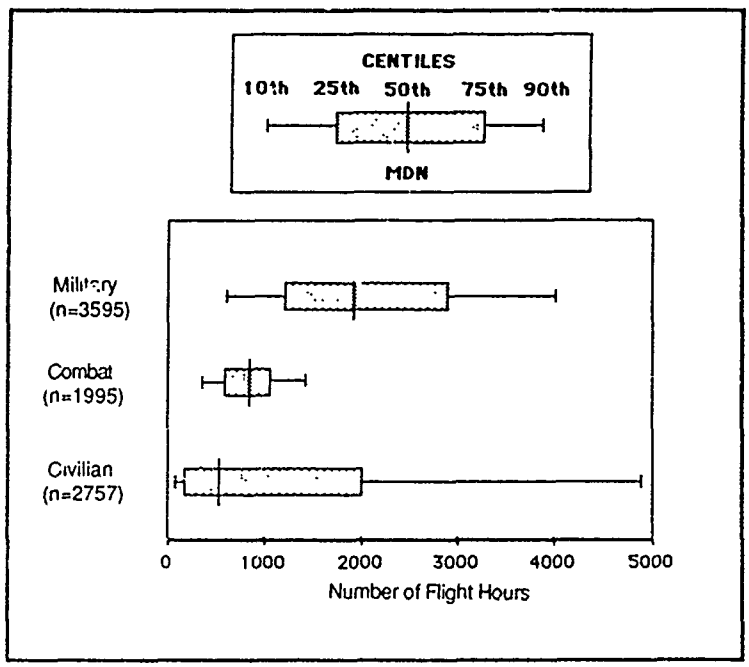


Figure 20. Military, combat, and civilian flight hours.

The median number of total military flight hours for the total sample is 2,000. As would be expected, the number of military flight hours is moderately correlated with age (r = .48) and with the total years of military service (r = .34). Only 19% of the aviators have logged less than 1,000 military flight hours, while approximately 30% have logged between 1,000 and 2,000 hours. In general, these data show that the overall experience level of the current force of ARNG aviators is quite high; however, the data also reveal that because there are relatively few aviators in the lower experience levels, the experience level of the total force may decrease sharply as the older, more experienced aviators reach retirement eligibility.

The centiles of the distribution of total military flight hours for each of the different types of units is shown in Figure 21. It can be seen that the aviators in Aerial Surveillance units have the most total flight hours (median = 2,506 hours), while aviators in Combat Support units have the fewest total flight hours (median = 1,700).

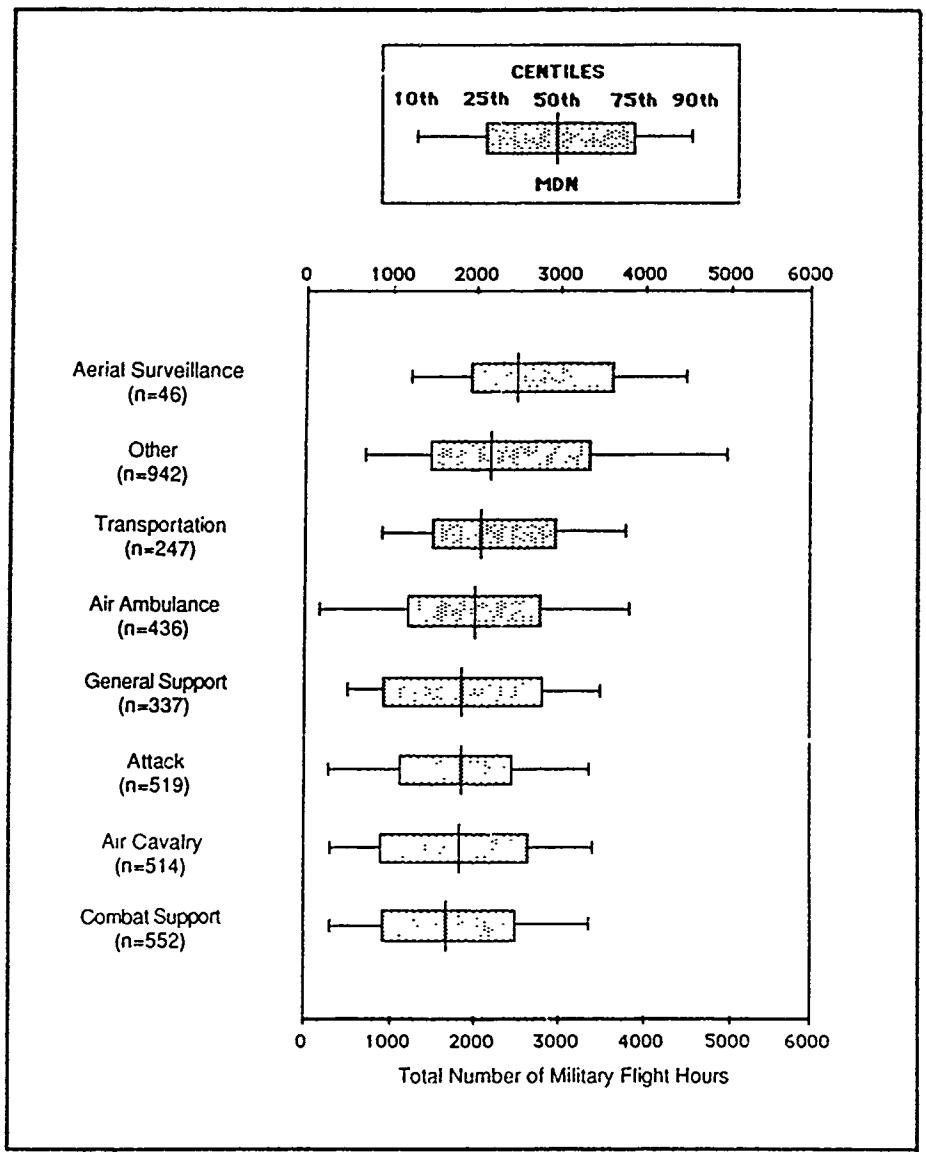


Figure 21. Military flight hours by type of unit.

Fifty-five percent of the aviators in the total sample report some combat flight hours; the median number of combat flight hours for these aviators is 870. Approximately 75% of the aviators report some civilian flight hours; the median number of civilian flight hours for these aviators is approximately 500 (see Figure 20).

Aircraft Qualifications

Figures 22 and 23 show the number of aviators in the total sample who listed rotary wing and fixed wing aircraft, respectively, as their primary aircraft. The figures also present the centiles of the distributions of flight hours logged in each primary aircraft. Ninety-five percent of the total sample of aviators have a rotary wing aircraft as their primary aircraft. Over half (57%) of the ARNG aviators report that their primary aircraft is a utility helicopter (i.e., UH-1H or

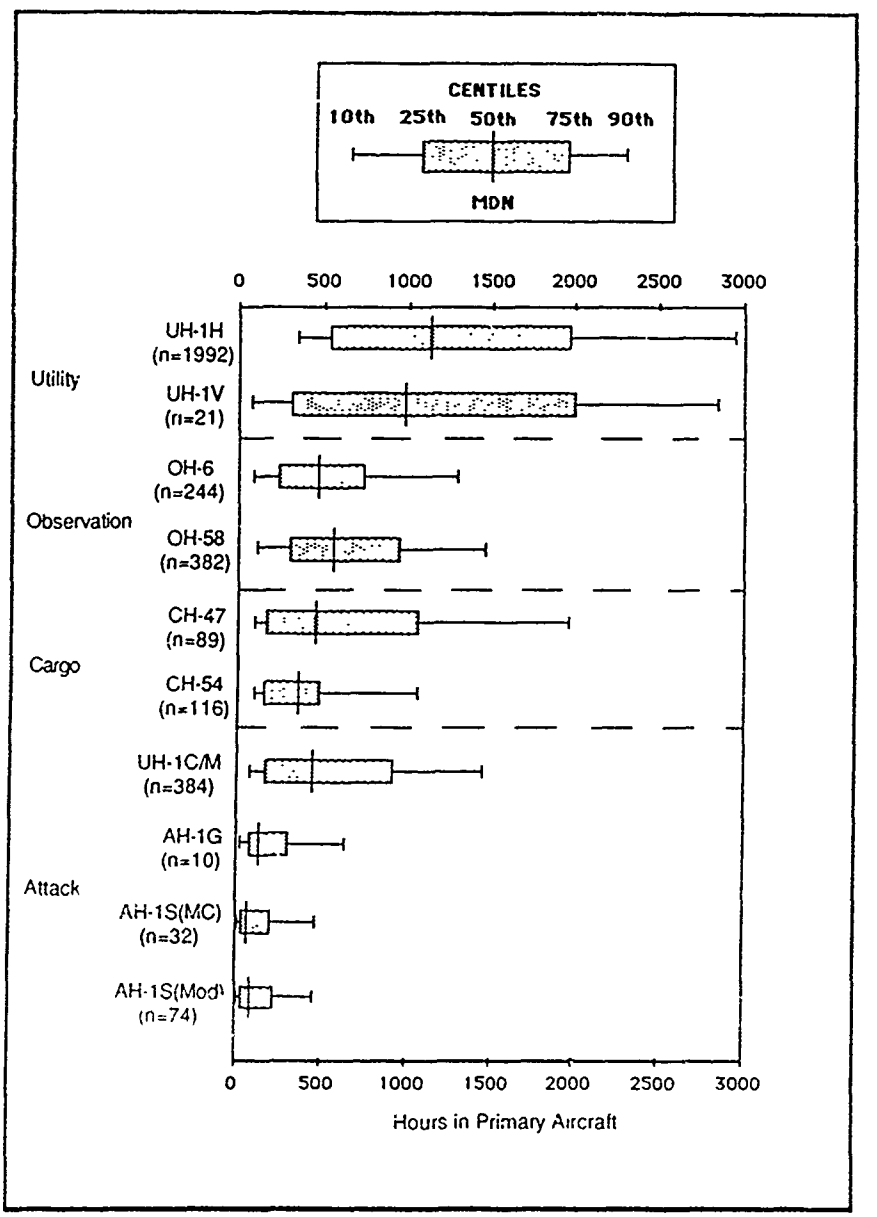


Figure 22. Flight hours logged in primary aircraft (rotary wing).

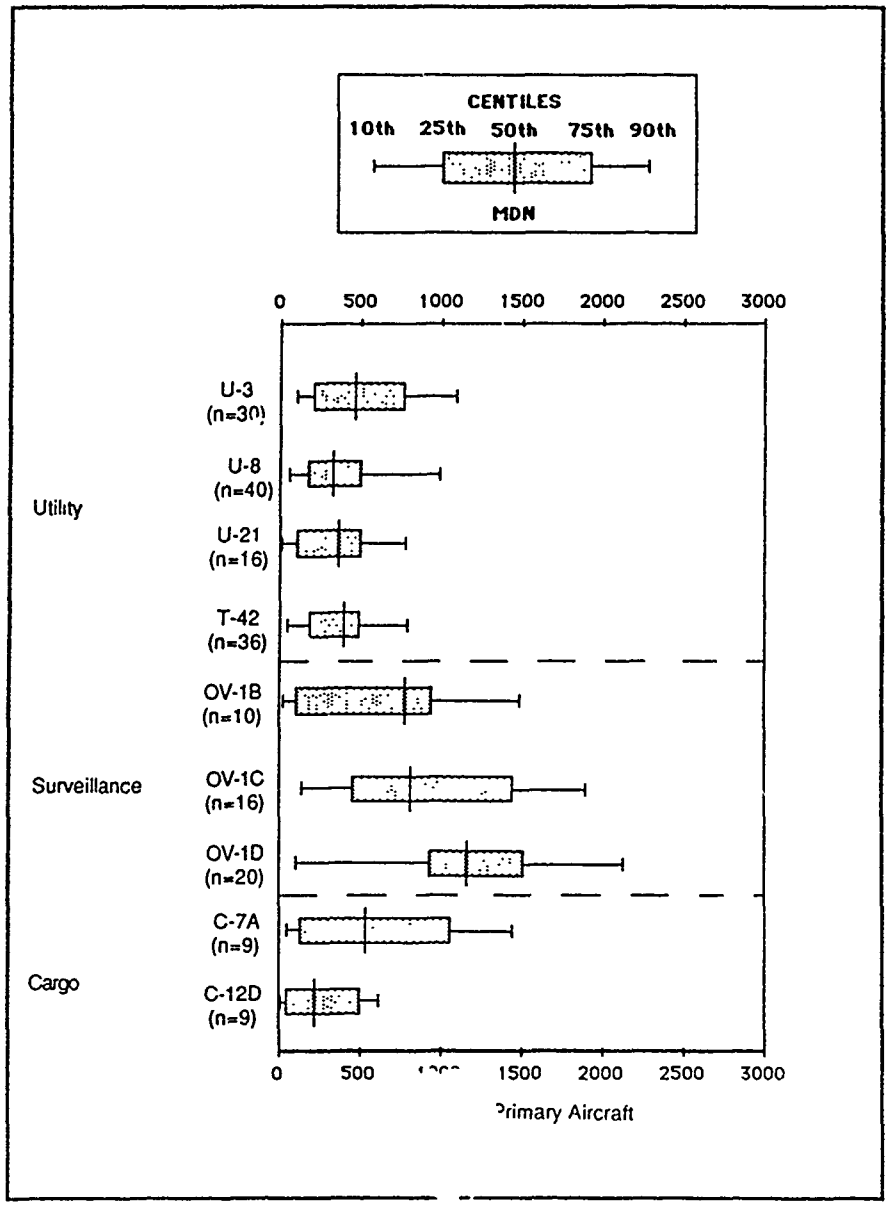


Figure 23. Flight hours logged in primary aircraft (fixed wing).

UH-1V). Fourteen percent of the aviators report that their primary aircraft is an attack helicopter (i.e., UH-1C/M, AH-1G, AH-1S[MC], or AH-1S[MOD]). An additional 18% report that their primary aircraft is an observation helicopter (i.e., OH-6 or OH-58), while 6% report that their primary aircraft is a cargo helicopter (i.e., CH-47 or CH-54). The remaining five percent of the aviators report that their primary aircraft is a fixed wing airplane (e.g., U-21, C-12D).

Overall, the median number of flight hours logged in the aviators' primary aircraft is approximately 1,200; however, as can be seen in Figures 22 and 23, the median number of flight hours varies considerably for the different types of rotary wing and fixed wing aircraft.

Appendix J presents a breakdown of (a) the primary aircraft of the aviators by type of unit, and (b) the highest qualifications held by the aviators in their primary aircraft. The qualifications include pilot (P), unit trainer (UT), instructor pilot (IP), and standardization instructor pilot (SIP).

Figure 24 shows the percentage of aviators in the total sample and in the different types of units who report that they are current in a military aircraft other than their primary aircraft. Thirty-four percent of the total sample of aviators are current in at least one other military aircraft. Relative to the other types of units, Aerial Surveillance units have a significantly higher percentage (72%) of aviators who are current in another aircraft; Air Ambulance (25%) and Combat Support (23%) units each have a significantly lower percentage of aviators who are current in another aircraft.

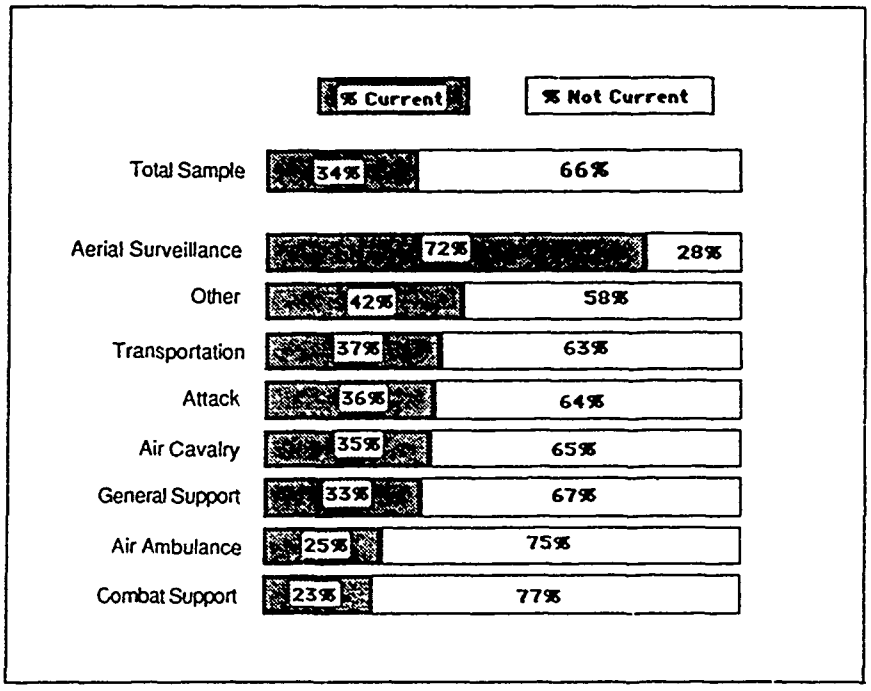
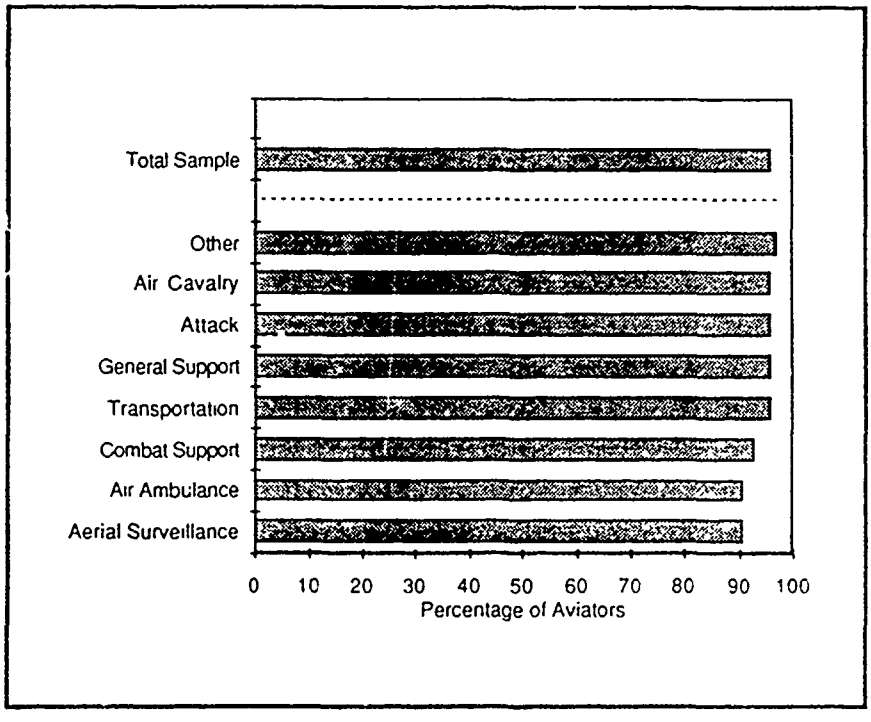


Figure 24. Percentage of aviators current in aircraft other than primary aircraft.

Additional Military Qualifications

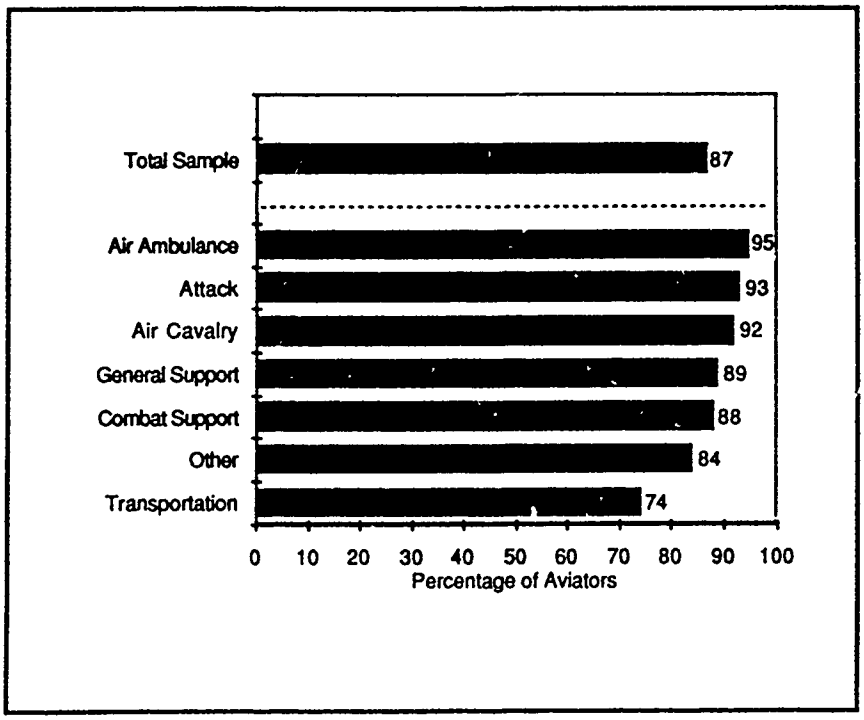
The percentages of aviators who are qualified in instrument flight, terrain flight (NOE), unaided night tactical flight, and NVG flight are shown in Figure 25. Data are presented for the total sample and for each type of unit. The data indicate that at least 90% of the aviators in each type of unit hold an instrument qualification. For the remaining qualifications shown in Figure 25, the percentage of aviators holding a particular aviation qualification varies considerably across the types of units. Attack and Air Cavalry units have a higher percentage of aviators who have qualified in unaided night tactical flight and NVG flight; Transportation units have a lower percentage of aviators who are qualified in terrain flight and in unaided night tactical flight. In addition, a higher percentage of aviators in Attack units (53%) than in Air Cavalry units (32%) are qualified in gunnery tasks. Generally speaking, these differences are consistent with the various mission requirements and training priorities established for the specific types of units.

Seven percent of the total sample are qualified as rotary wing instrument flight examiners (IFEs) and three percent are qualified as fixed wing IFEs. Nine percent are qualified as safety officers and ten percent are qualified as maintenance officers. A breakdown of the additional qualifications of the aviators in each type of unit can be found in Appendix K.

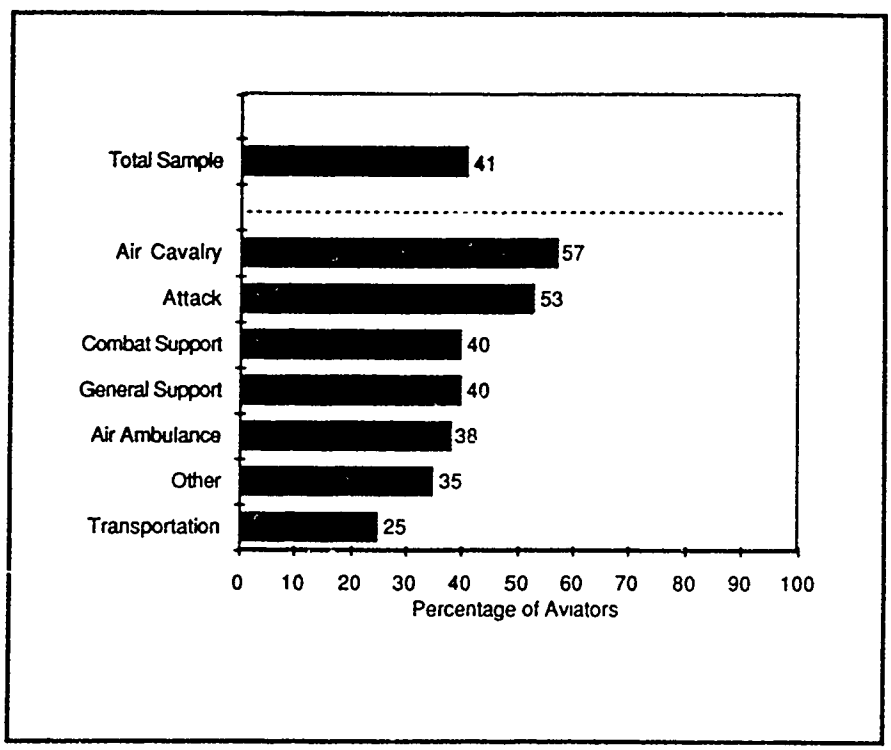


a. Instrument flight.

Figure 25a. Percentage of aviators qualified in instrument flight.

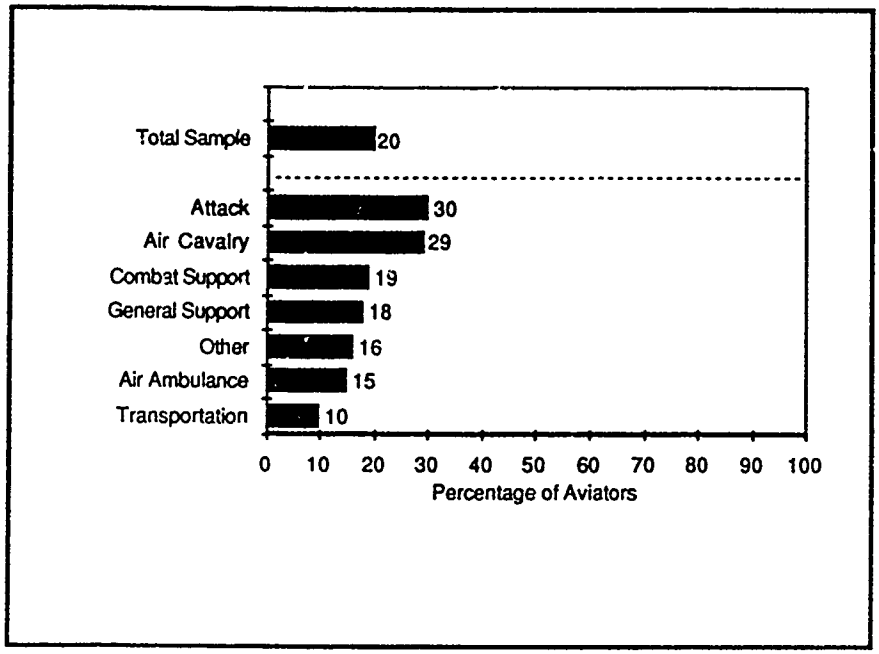


b. Terrain flight (NOE).



c. Unaided night tactical flight.

Figure 25b/c. Percentage of aviators qualified in terrain flight (NOE) and unaided night tactical flight.



d. Night vision goggle (NVG) flight.

Figure 25d. Percentage of aviators qualified in night vision goggle (NVG) flight.

Duty Positions

A breakdown of the TOE, MTOE, and TDA duty positions held by the aviators in the total sample is shown in Table 5. The duty positions are organized under the general categories of: (a) command, (b) instructor pilot, (c) pilot, and (d) other. The distribution of duty positions within each type of unit is shown in Appendix L.

Career Intentions (Research Question #2)

Information about the aviators' career intentions, together with the previously presented information about the demographic characteristics of the current force, provides a basis for long-term ARNG aviator force management and planning. Data yielded by the aviators' responses to the items in Part III of the questionnaire were analyzed to provide the following types of information:

- stated ARNG career intentions,
- implications of career intentions for ARNG aviator force management,
- factors that influence ARNG career intentions,
- satisfaction with the ARNG part-time job,
- reasons for joining and remaining in the ARNG, and
- reasons for possibly leaving the ARNG.

Table 5

TOE, MTOE, or TDA Duty Position

Category	Duty Position	% Aviators (n = 3,640)
Command	Company/Troop Commander	3
	Executive Officer	3
	Operations Officer	2
	Flight Operations Officer	1
	Platoon Leader/Commander	6
	Section Leader/Commander	8
Instructor Pilot	Rotary Wing/Fixed Wing Instrument Flight Examiner	3
	Instructor Pilot	7
Pilot	Attack Helicopter Pilot (AH-1G, AH-1S[MC], AH-1S[MOD], UH-1C/M)	9
	Observation Helicopter Pilot (OH-6, OH-58)	10
	Utility Helicopter Pilot (UH-1H, UH-1V, UH-60)	27
	Cargo Helicopter Pilot (CH-47, CH-54)	4
	Utility Airplane Pilot (OV-1B, OV-1C, OV-1D)	2
	Surveillance Airplane Pilot	1
Other	Flight Safety Technician	3
	Aircraft Maintenance Technician	3
	Other Position	8
Total		100

Summary of Career Intentions

As described in the Methodology section, Part III of the questionnaire required the aviators to check one of five statements that best indicated their ARNG career intentions: (a) stay for 30-year retirement, (b) stay for 20-year retirement, (c) stay for more than one year but leave before 20-year retirement eligibility, (d) leave within the next year, and (e) other intention.

In evaluating the intentions data, it should be noted that previous research consistently has shown that stated intentions to stay in or leave an organization have a moderately high relationship (average correlation equal to .50) with actual turnover behavior (Steel & Ovalle, 1984). Previous research has also shown that, as would be expected, the reliability of stated intentions is inversely related to the length of the interval between the statement of the intention and the occurrence of the actual behavior.

The career intentions of the total sample are summarized in Table 6. In addition to showing the proportion of aviators who selected each statement, Table 6 shows the median age and median years of service for aviators in each career intention category. It is noteworthy that 90% of the total sample of aviators report that they plan to remain in the ARNG until retirement. Fifty-two percent indicate that they intend to remain in the ARNG until they reach 30-year retirement eligibility; an additional 38% indicate that they plan to remain until they reach 20-

Table 6

Median Age and Years of Service for Career Intention Categories

Career Intention	%	Median Age	Median Years of Total Service
Stay Until 30-Year Retirement	52	36.9	15.0
Stay Until 20-Year Retirement	38	36.5	12.3
Stay More Than 1 Year but Leave Before 20-Year Retirement	3	35.6	8.0
Leave Within the Next Year (Before Retirement)	1	36.7	14.2
Other	6	39.1	17.3

year retirement eligibility. Three percent stated that they intend to stay more than one year but less than the time required to reach 20-year retirement eligibility, and 1% of the aviators stated that they plan to leave the ARNG within the next year. The remaining 6% of the aviators expressed career intentions other than those specified in the questionnaire (e.g., "until age 60," "between 20 and 30 years," "as long as I can").

Figure 26 shows responses to the career intentions item by type of unit. The data show that the total percentage of aviators who intend to stay in the ARNG until they reach retirement eligibility is generally uniform across types of units (i.e., 90%); however, the relative proportion of aviators who intend to remain for 20- or 30-year retirement varies substantially among the units. For most of the unit types, 50% of the aviators intend to stay in until they reach 30-year retirement eligibility and 40% intend to stay until they reach 20-year retirement eligibility. The two major exceptions to this trend are "Other" and Aerial Surveillance units. For "Other" units, approximately 60% of the aviators intend to stay until 30-year retirement eligibility and approximately 30% until 20-year retirement eligibility. In contrast, for Aerial Surveillance units, approximately 30% of the aviators intend to stay until 30-year retirement eligibility and 60% until 20-year

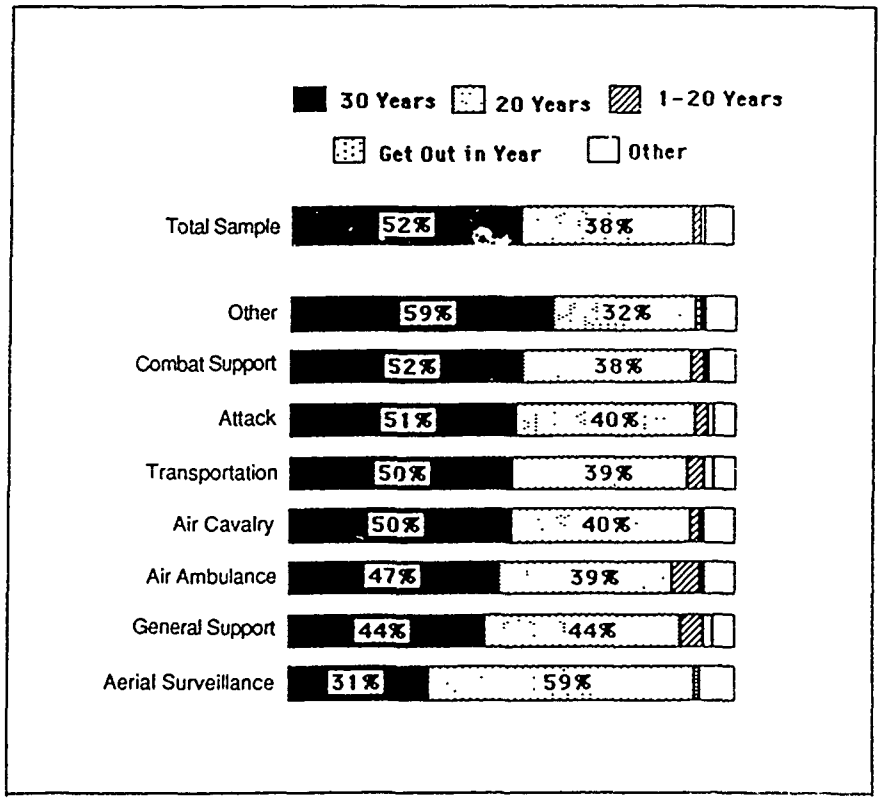


Figure 26. Career intentions by type of unit.

retirement eligibility. The finding that a large percentage of aviators in Aerial Surveillance units plan to leave the ARNG upon reaching 20-year retirement eligibility is particularly significant in view of the previously reported finding that the median years of military service for these aviators is 16.6 years. Stated differently, half the aviators in these units will be eligible for 20-year retirement in less than 3.4 years. Taken together, the career intentions data and the years of service data suggest that, within the next 3.5 years, Aerial Surveillance units are likely to experience a greater loss of aviators, due to retirement, than the rest of the ARNG force.

Career Intentions and Force Management

The data on the aviators' career intentions are useful in addressing two force management questions.

- Do ARNG aviators' career intentions tend to change as they approach the 20-year retirement eligibility point?
- What percentage of the present force of aviators will still be in the ARNG at a specific point in the future?

These questions are particularly important in view of previously presented data indicating that 25% of the aviators presently in the ARNG force will have reached or exceeded the 20-year retirement eligibility point within the next five years.

Estimating Length of Service

To address the first question, the stated career intentions (20- or 30-year retirement) of the aviators were examined as a function of the aviators' total years of military service. This relationship is shown graphically in Figure 27. The figure shows that there is a positive relationship between total years of service and the intention to remain in the ARNG beyond 20 years. That is, the greater the number of years of service an aviator has accumulated, the greater the likelihood that the aviator will express an intention to remain in the ARNG beyond the earliest retirement opportunity.

Although the data presented in Figure 27 are based on a cross-sectional analysis of career intentions, it seems altogether reasonable to assume that the trend line is the direct result of a systematic change in career intentions as a function of years of service. This interpretation is supported by recent literature, which has shown that the investment of one's time in an organization is one of the factors that tends to increase the level of commitment to the organization (Mowday, Porter, Steers, 1982). Furthermore, it has been shown that a high level of commitment generally results in a decrease in the likelihood that an employee will leave the organization (Farrell & Rusbult, 1981).

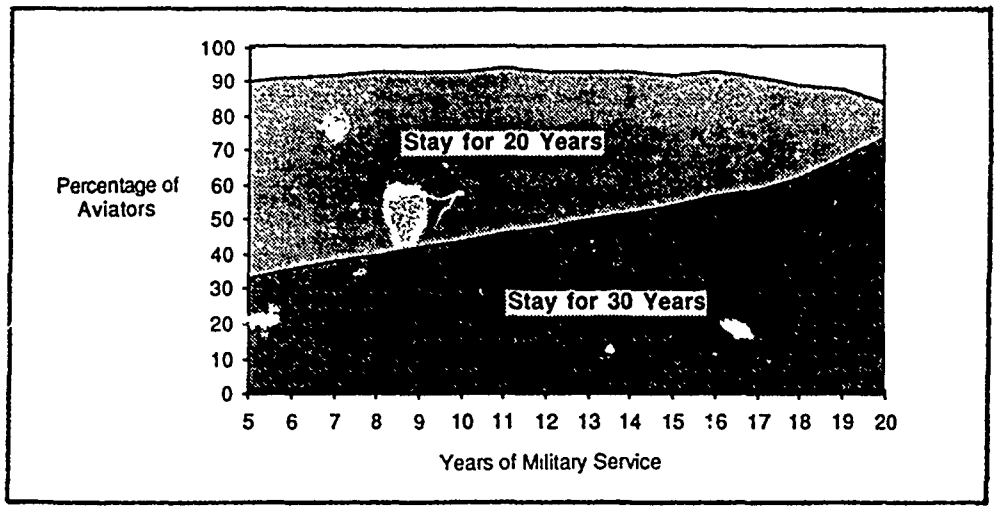


Figure 27. Retirement intentions across total years of service.

Projection of Force Strength

The second question to be addressed is, "What percentage of the present force of aviators will still be in the ARNG at a specific point in time?" As a first step in addressing this question, a projection of the years to retirement was calculated for two hypothetical situations: (a) all aviators leave the ARNG as soon as they complete 20 years of service, and (b) all aviators remain in the ARNG for the length of time specified by their stated career intentions. The projected years to retirement were calculated by subtracting the aviators' present years of service from 20 or 30 years, as appropriate.

The next step in the analysis was to compute, for each year between 1985 and 2005, the percentage of the present force still present after deleting all individuals who have reached the projected retirement point. The results are shown graphically in Figure 28. The dashed line shows, by year, the percentage of aviators who will still be present in the force assuming that all aviators leave at the 20-year point; the solid line shows the percentage of aviators who will still be present assuming that all aviators leave at the time specified by their career intention (i.e., 20 or 30 years).

Inspection of Figure 28 reveals that the projected percentage of the present force that will be retained in the ARNG over the next 20 years varies greatly for the two hypothetical situations. For example, it is projected that in the year 1995, only 30% of the current force of ARNG aviators will still be present if all aviators leave at the 20-year point. In contrast, for the same year, approximately 61% of the aviators will still be members of the force if they remain as long as their career intentions indicate. While it is not possible to determine

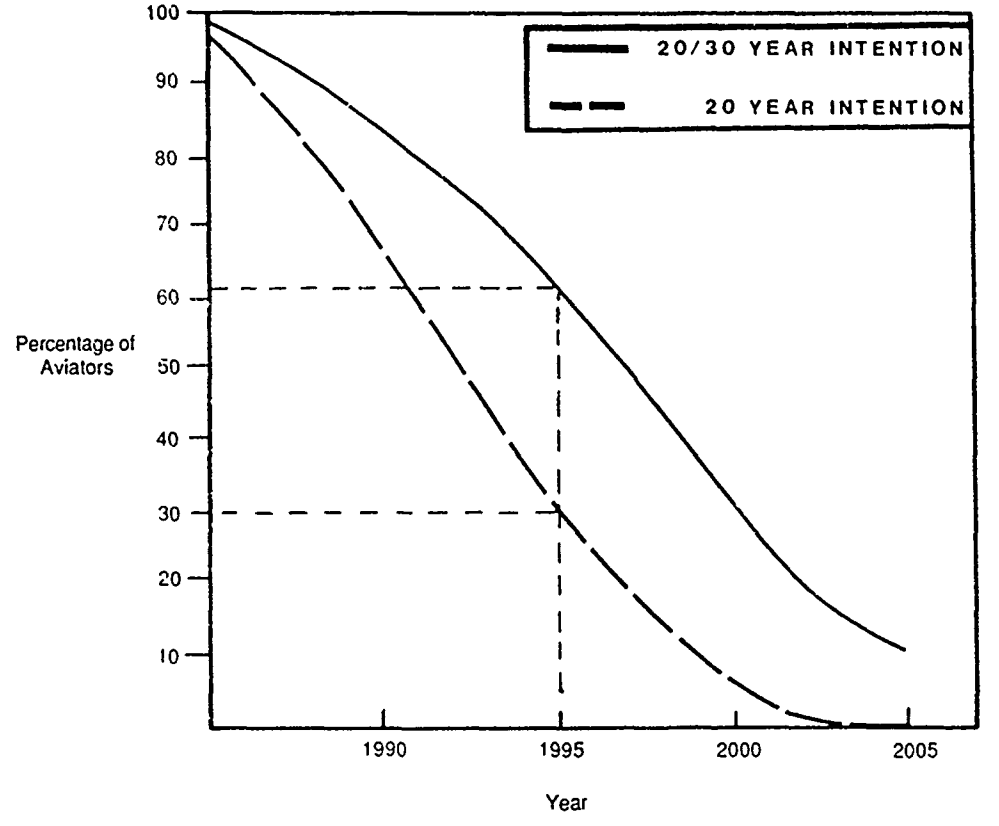


Figure 28. Estimated percentage of avi ors remaining in the ARNG during the next 20 years.

which curve is most correct, it is likely that the actual percentage of the present force of aviators that will still be present in the ARNG during each of the next 20 years would be best represented by a curve lying somewhere between the two curves presented in Figure 28.

Factors Influencing Career Intentions

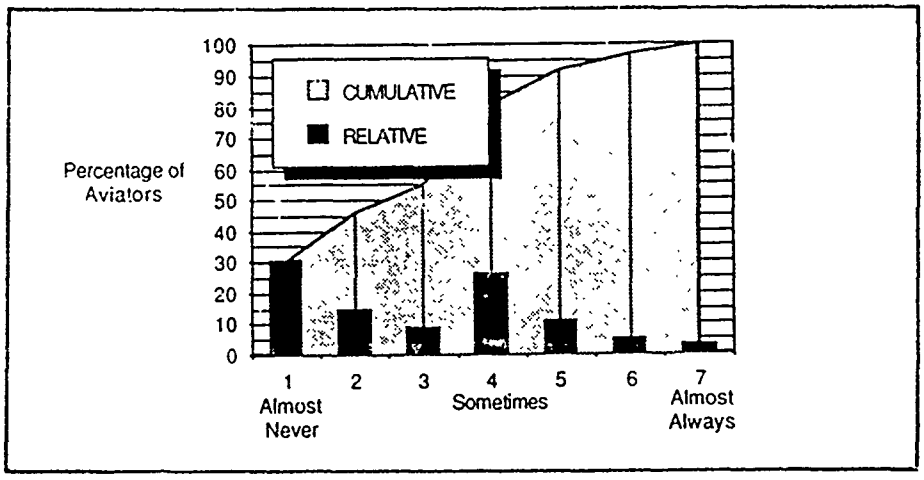
In addition to identifying the current career intentions of ARNG aviators, the second research question requires an examination of the factors that may influence the aviators' career decisions. Specifically, the question asks whether certain key variables are consistently related to an aviator's decision to (a) retire after 30 years of service, (b) retire after 20 years of service, (c) stay in the ARNG past the present year but leave before 20-year retirement eligibility, or (d) leave the ARNG within the next year.

Before describing the analyses that were performed to determine if a variable or group of variables was related to the aviators' stated career intentions, it is necessary to describe two sets of items used in the questionnaire that the research literature has shown to be related to intentions to remain in or leave a job. These items measure the aviators' thoughts about leaving the ARNG and their satisfaction with their part-time ARNG job.

Thoughts About Leaving the ARNG

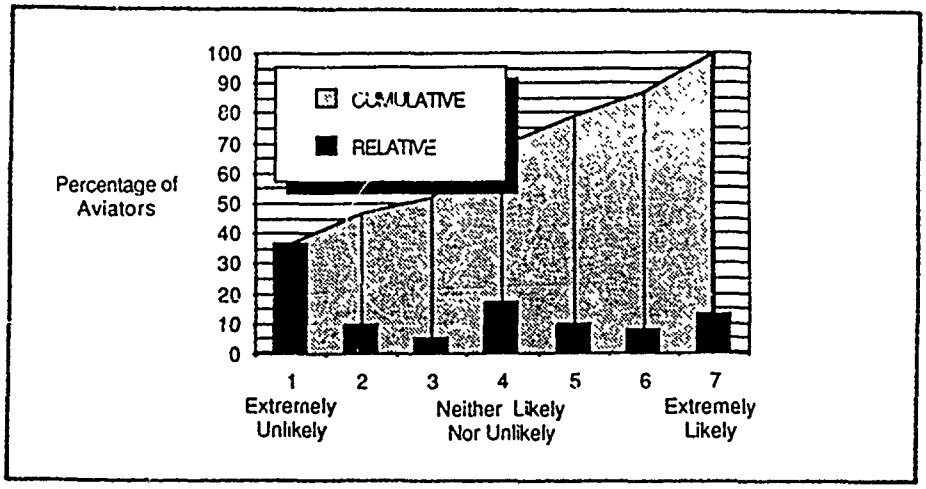
Three items included in the questionnaire were designed to assess the aviators' thoughts about remaining in or leaving the ARNG. The items were included because thoughts about leaving have consistently been shown to have a moderate relationship with an employee's decision to remain in or to leave an organization (Mobley, Griffith, Hand, & Meglino, 1979). To provide information about their thoughts about leaving the ARNG, the aviators used a 7-point rating scale to indicate: (a) how often they think about leaving the ARNG, (b) the likelihood that they would seek a part-time job if they were not in the ARNG, and (c) their perceived chances of obtaining a part-time civilian job with pay and benefits similar to those received in the ARNG.

The distributions of the aviators' ratings on these items are shown in Figure 29. The data show that, in general, the aviators (a) do not often think about leaving the ARNG, (b) are not very likely to seek a part-time job if they were not in the ARNG, and (c) are neutral about their chances of obtaining a part-time job with pay and benefits comparable to the ARNG. Appendix M summarizes thoughts about leaving the ARNG for the aviators in each of the different types of units.

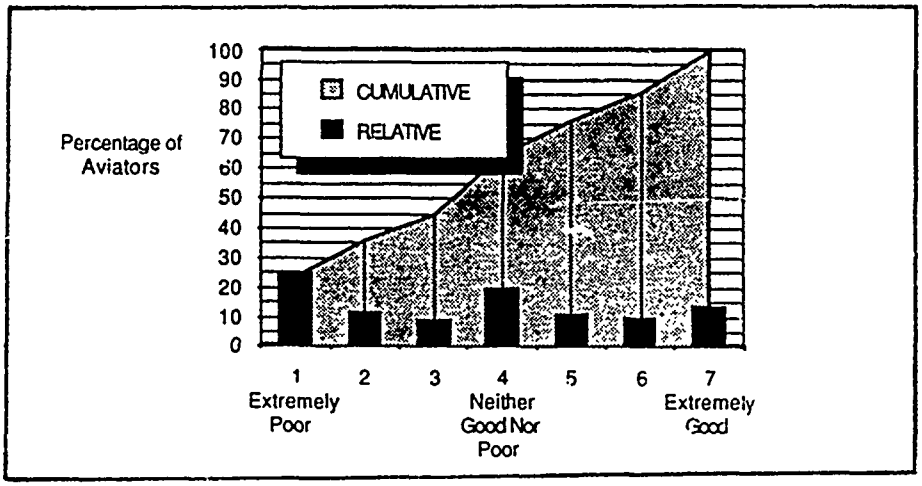


a. Frequency of thinking about leaving the ARNG (n = 3612).

Figure 29a. Thoughts about leaving the ARNG.



b. Likelihood of seeking an alternate part-time job (n = 3542).



c. Perceived chances of obtaining a comparable job (n = 3512).

Figure 29b/c. Thoughts about leaving the ARNG.

Satisfaction With ARNG Job

As mentioned above, another variable that has been shown to relate to intentions to remain in or leave an organization is the individual's satisfaction with the job. The aviators responded to questionnaire items that were designed to assess their satisfaction with five characteristics of their part-time ARNG job. The characteristics and the items developed to measure them were the same as those used to evaluate the aviators' satisfaction with their civilian jobs. As with th civilian jobs, the aviators also rated their general satisfaction with the ARNG job.

Responses to the ARNG job satisfaction items are summarized in Table 7 for the total sample and are compared to those of the professional/technical normative group described previously (Hackman & Oldham, 1980). The data suggest that the aviators are generally satisfied with their ARNG job. Statistical comparisons of the observed mean ratings and a hypothesized mean of "4," indicating neutral, yielded differences that were large enough to represent medium effect sizes for all characteristics except pay (Cohen, 1977). Specifically, the mean rating for all job characteristics except pay were significantly larger (more positive) than the neutral rating of "4." For the job characteristic "pay," the difference between the mean rating and "4" was statistically significant but not large enough to be practically significant. Further comparisons of the ratings indicate that the aviators are most satisfied with the social aspects of their ARNG job (mean rating = 5.4) and are least satisfied with pay (mean rating = 4.2). The difference between the mean ratings for these two characteristics is significant and represents a medium effect size ($\underline{d}$ = .53).

Table 7

Satisfaction With Characteristics of the Part-time ARNG Job

ARNG Job Characteristic	n	M	SD
Security	3,605	4.8 (5.0)[a]	1.3 (1.2)[a]
Pay	3,606	4.2 (4.4)	1.5 (1.5)
Personal Growth	3,603	4.9 (5.1)	1.2 (1.1)
Social Aspects	3,603	5.4 (5.5)	0.9 (0.9)
Supervisor	3,603	4.9 (4.9)	1.3 (1.3)
Job in General	3,513	5.1 (4.9)	1.3 (1.0)

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation.

[a]Means and standard deviations for the professional/technical normative group.

Figure 30 compares the aviators' ratings of satisfaction with their ARNG job to (a) ratings of satisfaction with their civilian jobs (see Table 4 on page 40) and (b) ratings assigned by the professional/technical group. The ARNG aviators' ratings of satisfaction with their ARNG jobs are not significantly different from the professional/technical norms. However, the mean ratings for satisfaction with pay and opportunity for growth are significantly lower for the aviators' ARNG jobs than for their civilian jobs. Descriptive statistics for the satisfaction data for each type of unit can be found in Appendix N.

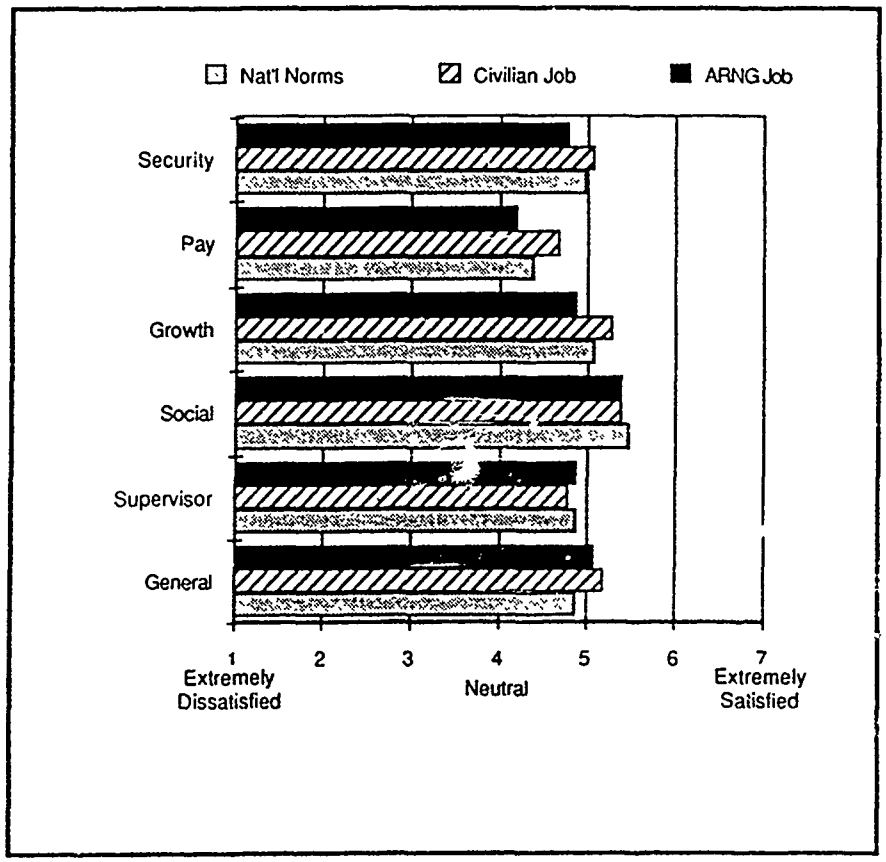


Figure 30. Summary of ARNG job satisfaction ratings (see Tables 4 and 7 for sample sizes).

Predictors of Career Intentions

As previously shown, 90% of the aviators in the sample indicated that they plan to stay in the ARNG until they reach retirement eligibility; 38% intend to stay until 20-year retirement eligibility and 52% intend to stay until 30-year retirement eligibility. The responses of the remaining 10% of the aviators were distributed across the remaining categories of career intentions.

The large differences among the subsample sizes resulting from the distribution of the aviators' responses across the career intentions categories precluded the use of a four-group multiple discriminant analysis, as originally planned. Instead, a multiple regression analytic approach was adopted in which the dependent variable (i.e., career intentions) was dichotomized . two categories--30-year retirement and 20-year retirement. . addition to thoughts about leaving the ARNG and satisfaction with the ARNG job, the following variables were examined as potential predictors of the two career intentions categories:

- age,
- marital status,
- primary aircraft,
- total military flight hours,
- time spent commuting from home to the ARNG facility,
- years of military service,
- years on active duty,
- years in the ARNG,
- years on flight orders,
- years in current ARNG unit,
- rank,
- civilian income,
- supervisor's attitude toward the ARNG,
- satisfaction with the civilian job in general,
- effect of the civilian work schedule on ability to attend ARNG training periods, and
- spouse's attitude and influence.

The first step in the regression analysis was to examine the simple correlations between each of the predictor variables and the criterion variable (i.e., 20- or 30-year retirement). The examination indicated that a natural break in the correlations occurred below a correlation of .23. The five variables with predictor-criterion correlations of .23 or greater are shown in Table 8. The interrelationships among the variables are shown in Table 9.

A standard multiple regression analysis (Tabachnick and Fidell, 1983) was performed using career intention as the criterion variable and the five predictor variables listed in Table 8 as predictors. The results of the regression analysis indicate that 25% of the variance in career intention ($\underline{R}^2$ = .25) can be explained by knowledge of all five predictor variables. However, once the variables of Thinking of Leaving the ARNG, Years of Military Service, and Spouse's Influence have entered the equation, the addition of the remaining two variables increases the variance accounted for by less than 1%. In other words, once the

Table 8

Correlations Between Predictor Variables and Career Intentions

Predictor Variables	n	Career Intentions
1. Thinking of Leaving ARNG	3258	-.36
2. Years of Military Service	3228	.27
3. Years in the ARNG	3242	.27
4. General Satisfaction With ARNG	3137	.25
5. Influence of Spouse	2727	.23

Table 9

Correlations Among Predictor Variables

	Predictor Variables	1	2	3	4	5
1.	Thinking of Leaving ARNG	1.00	.10	.07	-.50	-.34
2.	Years of Military Service	.10	1.00	.77	.01	.01
3.	Years in ARNG	.07	.77	1.00	.04	.02
4.	General Satisfaction With ARNG Job	-.50	.01	.04	1.00	.29
5.	Influence of Spouse	-.34	.01	.02	.29	1.00

Note: Sample sizes for the correlations in this table range from 2727 to 3258.

information in these three variables has been considered, the addition of the two remaining variables does not contribute a meaningful amount of additional information for predicting career intention. This result is consistent with the finding that General Satisfaction With the ARNG Job is highly correlated (r = -.50) with Thinking of Leaving the ARNG, and Years in the ARNG is highly correlated (r = .77) with Years of Military Service.

Reasons for Joining and Remaining in the ARNG

Tables 10 and 11 summarize, for the total sample and by type of unit, the aviators' responses to questions about the three most important reasons for joining and remaining in the ARNG, respectively. The percentage of the total sample who chose each reason for joining the ARNG is presented graphically in Figure 31. Four of the nine alternatives listed as reasons for joining the ARNG were selected by the same percentage or by a greater percentage of aviators in the total sample than would be expected strictly by chance (38%). The reasons are: Opportunity to Fly (76%), Pay (57%), Time Toward Military Retirement (43%), and Patriotism/National Pride (38%). Association with Other Aviators, and Opportunity to Improve Flying Skills were chosen by 31% and 21% of the aviators, respectively. Less than 10% of the aviators indicated that they joined the ARNG: (a) to satisfy a military obligation, (b) because they were required to do so as an ARNG fulltime technician, or (c) for a reason other than the ones listed in the item.

The percentage of the total sample who chose each reason for remaining in the ARNG is shown graphically in Figure 32. Three of the nine reasons for remaining in the ARNG were selected by the same percentage or by a greater percentage of aviators in the total sample

Table 10

Percentage[a] of Aviators Identifying Reasons for Joining the ARNG

Reasons for Joining the ARNG	Type of ARNG Aviation Unit								
	Atk (N=524)	Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N=46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
*Opportunity to Fly	83	79	76	79	85	80	72	70	76
*Pay	62	55	57	54	46	62	60	54	57
*Time Toward Military Retirement	44	42	44	39	35	40	54	44	43
*Patriotism/ National Pride	42	38	38	32	30	34	32	41	38
Association With Other Aviators (Camaraderie)	36	31	28	32	46	34	31	28	31
Opportunity to Improve Flying Skills	24	22	25	24	13	22	21	17	21
Satisfy Military Obligation (Alternate to Draft)	4	6	5	6	9	5	7	9	6
Job Requirement-- I am a Full-Time ARNG Technician	3	2	5	4	15	3	4	9	5
Other	1	2	4	4	0	3	2	4	3

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

*Percentage of the total sample that selected this item is equal to or greater than would be expected by chance (38%).

[a]Each aviator was instructed to check as many as three reasons for joining the ARNG; consequently, the sum of the percentages shown for each type of unit may be greater than 100.

Table 11

Percentage[a] of Aviators Identifying Reasons for Remaining in the ARNG

Reasons for Remaining in the ARNG	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
*Opportunity to Fly	74	73	72	70	72	69	65	66	70
*Pay	72	68	66	66	39	72	67	65	67
*Retirement Benefits	59	60	60	60	63	57	68	64	61
Association With Other Aviators (Camaraderie)	33	36	24	30	41	32	30	26	30
Patriotism/ National Pride	26	29	29	24	17	24	24	25	26
Maintain Flying Proficiency	23	23	21	21	11	20	15	17	20
Change of Pace From Civilian Job	21	17	18	20	20	22	18	14	18
Job Requirement-- I am a Full-Time ARNG Technician	4	5	7	7	15	7	10	21	10
Other	2	2	2	2	0	2	1	2	2

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

*Percentage of the total sample that selected this item is equal to or greater than would be expected by chance (38%).

[a]Each aviator was instructed to check as many as three reasons for remaining in the ARNG; consequently, the sum of the percentages shown for each type of unit may be greater than 100.

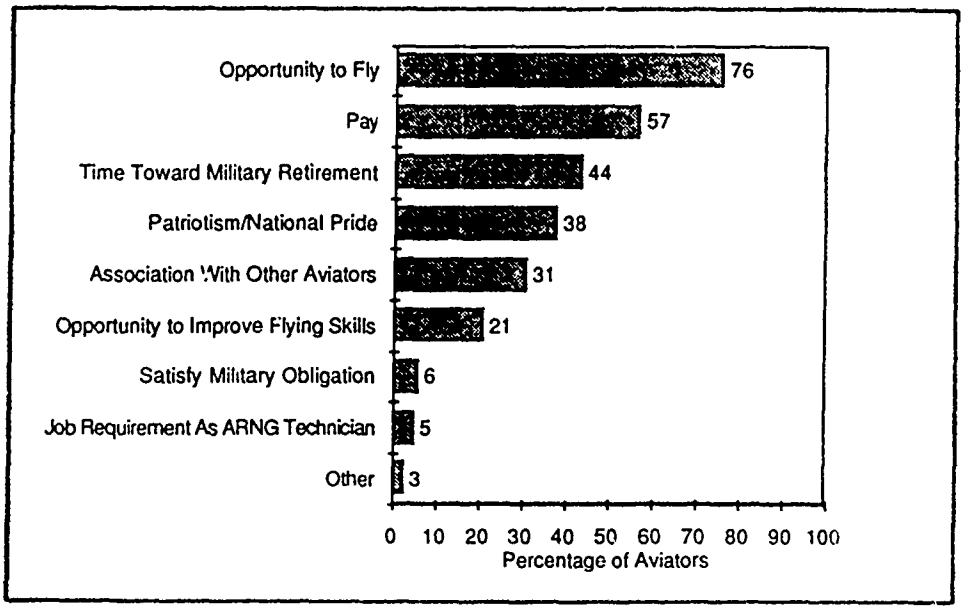


Figure 31. Percentage of aviators choosing reasons for joining the ARNG.

Note: The aviators were instructed to check as many as three reasons for joining the ARNG; consequently, the sum of the percentages is greater than 100.

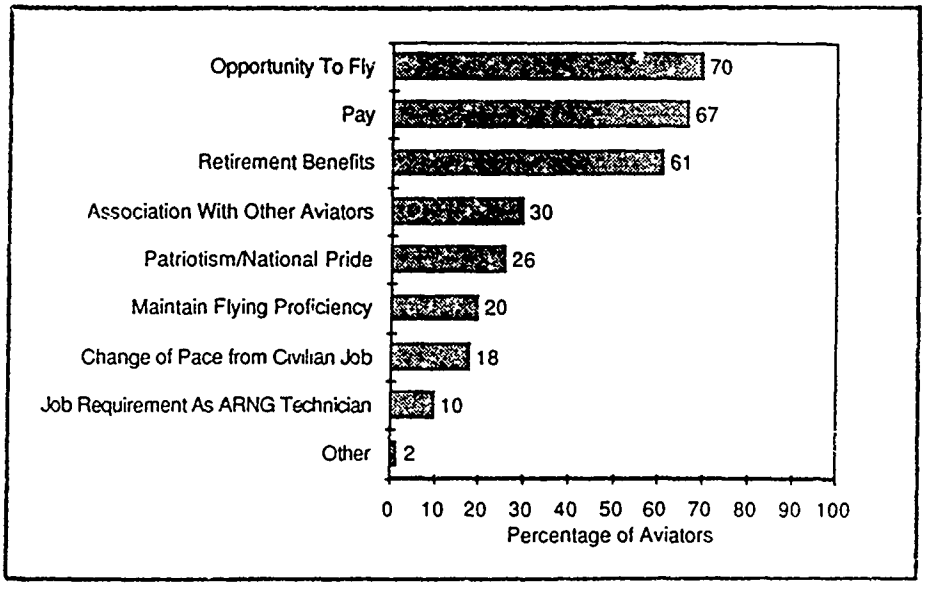


Figure 32. Percentage of aviators choosing reasons for remaining in the ARNG.

Note: The aviators were instructed to check as many as three reasons for remaining in the ARNG; consequently, the sum of the percentages is greater than 100.

than would be expected strictly by chance (38%). The reasons are: Opportunity to Fly (70%), Pay (67%), and Retirement Benefits (61%). Association with Other Aviators, Patriotism/National Pride, Maintaining Flying Proficiency, and Change of Pace from the Civilian Job were chosen by 30%, 26%, 20%, and 18%, respectively. Ten percent or less of the aviators indicated that they are remaining in the ARNG because they are required to do so as fulltime ARNG technicians or for a reason other than the ones listed as a response alternative.

The data presented in Tables 10 and 11 indicate that Opportunity to Fly, Pay, and Retirement Benefits, are the three most frequently cited reasons for both joining and remaining in the ARNG. The percentage of aviators in the total sample who selected these factors as reasons for joining and remaining is shown in Figure 33. The data presented in the figure suggest that, while these factors influence the aviators both to join and remain in the ARNG, Pay and Retirement Benefits are more important reasons for remaining in the ARNG than they were for originally joining the ARNG. In contrast, Opportunity to Fly appears to be a more important reason for joining than remaining in the ARNG.

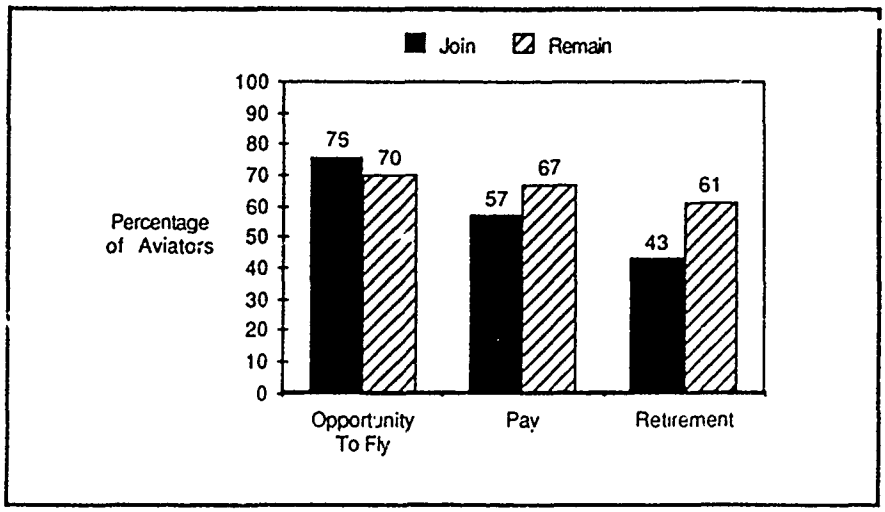


Figure 33. Comparison of three most frequently chosen reasons for joining and remaining in the ARNG (n = 3,640).

Note: The aviators were instructed to check as many as three reasons for joining and remaining in the ARNG; consequently, the sum of the percentages is greater than 100.

In general, as shown in Tables 10 and 11, the percentage of aviators choosing an item as a reason for joining or remaining is uniform across the different types of units. Exceptions to the general

trend are found in Aerial Surveillance units. Compared to the aviators in other types of units, aviators in Aerial Surveillance units cite Association with Other Aviators as a more important reason for joining the ARNG. Aviators in Aerial Surveillance units also cite Pay as a less important reason for remaining in the ARNG than aviators in other types of units.

Reasons for Possibly Leaving the ARNG

Table 12 summarizes, for the total sample and by type of unit, the aviators' responses to the question about the factors that have influenced or might influence their decisions to leave the ARNG. Since less

Table 12

Percentage[a] of Aviators Identifying Reasons for Possibly Leaving the ARNG

Reasons for Leaving the ARNG	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
*Loss of Flight Status	55	56	58	52	41	58	51	54	55
*Unrealistic Training Goals for Time/ Resources Available	55	54	50	51	57	55	49	46	51
*Administrative Details/Politics	49	46	51	49	83	54	54	48	50
*Unequal Flight Pay (ARNG vs Active Component)	40	45	42	42	17	50	49	39	42
*Insufficient Time Allocated to Maintain Safe Level of Proficiency	41	42	38	37	17	40	29	33	37
Conflict With Civilian Job	39	40	35	38	33	36	37	29	35
Decreasing Opportunity to Fly	37	31	31	31	35	37	29	28	32

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

*Percentage of the total sample that selected this item is equal to or greater than would be expected by chance (37%).

[a]The aviators were instructed to check as many as six reasons for leaving the ARNG; consequently, the sum of the percentages shown for each type of unit may be greater than 100.

Table 12 (Continued)

Percentage[a] of Aviators Identifying Reasons for Possibly Leaving the ARNG

Reasons for Leaving the ARNG	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Conflict With Family Interests	29	29	29	36	44	30	28	31	31
Excessive Additional Nonflying Duties	30	31	27	34	37	36	35	27	31
Increase in Training Requirements	27	22	20	24	4	23	23	21	22
Lack of Opportunity to Schedule Dual AFTPs	21	16	26	23	7	23	24	17	20
Lack of Competence in Aviation Matters by Chain of Command	17	22	18	18	41	19	24	21	20
Lack of Concern and/or Respect for the Individual	17	16	15	20	39	17	17	15	16
Lack of Promotion Opportunity	14	13	14	9	30	13	12	18	14
Policies Concerning Retirement Points for AFTPs	14	12	14	16	13	14	17	15	14
Travel Time and Cost Incurred to Attend NG Training	11	15	13	13	13	19	17	13	14
Lack of Adequate Support Personnel/ Equipment	15	12	11	10	11	8	18	12	12
Other	5	4	6	7	15	5	9	7	6
Requirement to Mobilize	5	4	3	7	11	5	4	5	5

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

*Percentage of the total sample that selected this item is equal to or greater than would be expected by chance (37%).

[a]The aviators were instructed to check as many as six reasons for leaving the ARNG; consequently, the sum of the percentages shown for each type of unit may be greater than 100.

than 10% of the aviators in the total sample intend to leave the ARNG prior to retirement eligibility, the data should be interpreted as indicating factors that might influence the aviators to leave the ARNG in the future. Thus, in the discussion that follows, the factors are reported as reasons for possibly leaving the ARNG.

The percentage of the total sample of aviators who chose each reason for possibly leaving the ARNG is graphically depicted in Figure 34. The figure shows that five factors were selected by the same

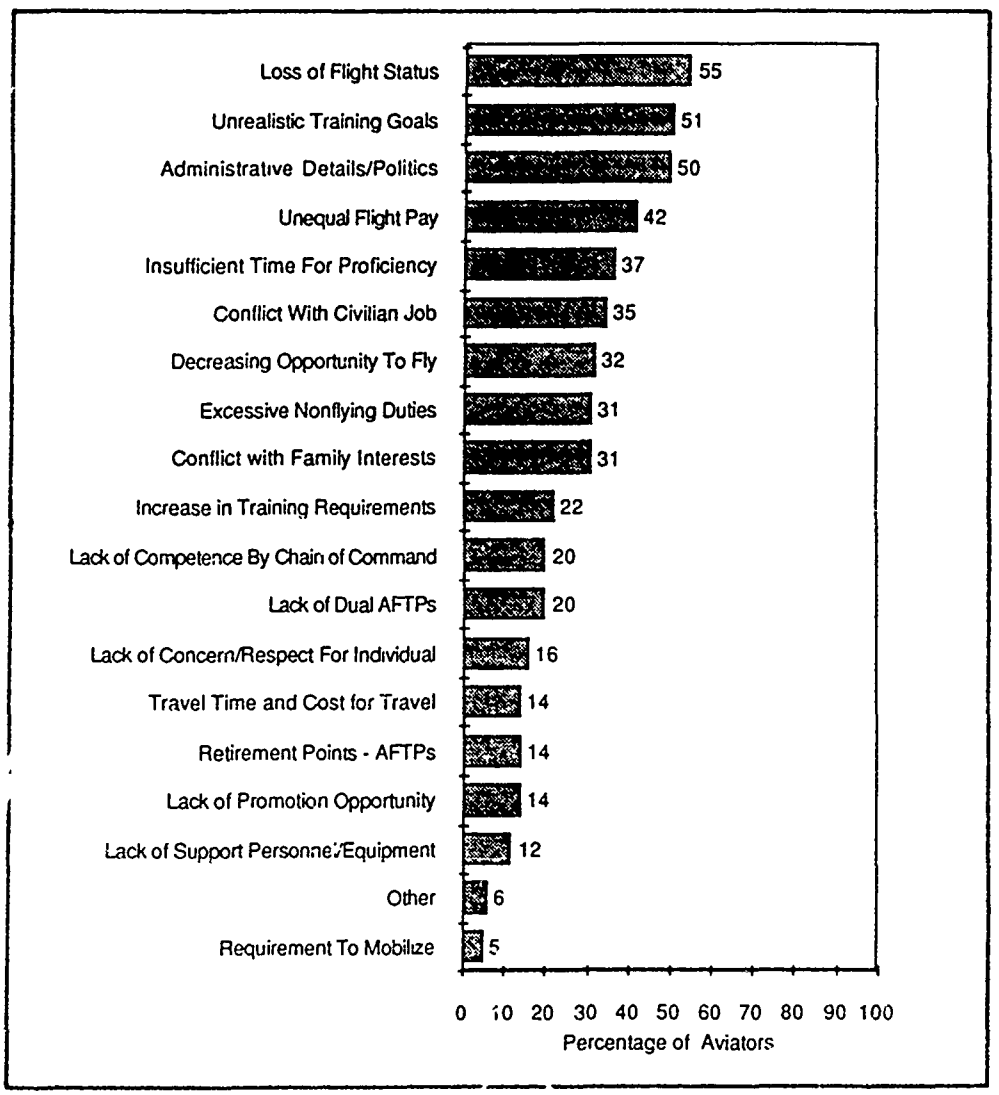


Figure 34. Factors influencing decisions to leave the ARNG (n = 3,640).

Note: The aviators were instructed to check as many as six reasons for leaving the ARNG; consequently, the sum of the percentages is greater than 100.

percentage or by a greater percentage of the total sample than would be expected strictly by chance (37%). Loss of Flight Status is the factor most often cited by aviators as a reason for possibly leaving the ARNG; the factor was selected by 55% of the total sample of aviators. Two additional factors were cited by approximately one-half of the aviators as reasons for possibly leaving: Unrealistic Training Goals for the Time/Resources Available (51%), and Administrative Details/Politics (50%). Unequal Flight Pay between the ARNG aviator and his or her active duty counterpart and Insufficient Time Allocated to Maintain a Safe Level of Proficiency were cited by 42% and 37%, respectively, of the total sample of aviators. In addition to these factors, Conflict with the Civilian Job, Decreasing Opportunity to Fly, Conflict with Family Interests, and Excessive Additional Nonflying Duties were selected as reasons for possibly leaving by 35%, 32%, 31%, and 31%, respectively. The remaining factors were chosen by 22% or less of the aviators.

In general, the percentages of aviators indicating that the various factors were reasons for possibly leaving the ARNG are uniform across all the different types of units except Aerial Surveillance. Compared to aviators in other types of units, a lower percentage of the aviators in this type of unit cite Unequal Flight Pay as a reason for possibly leaving the ARNG. In contrast, a much higher percentage of the aviators cite the following factors as reasons for possibly leaving the ARNG: Administrative Details/Politics, Lack of Competence in Aviation Matters by the Chain of Command, and Lack of Concern and/or Respect for the Individual.

Adequacy of Training Requirements (Research Question #3)

As described in the Methodology section, the aviators used a 7-point scale to rate the adequacy of specific training requirements in each of four major categories: Initial Qualification Training, Transition Training, Continuation Training, and Additional Military Requirements. The specific requirements in each category were listed earlier in Table 2. The analytic tasks that were performed to assess the adequacy of these requirements are outlined in the task-flow diagram shown in Figure 35. The succeeding paragraphs describe the results of the analyses.

Assessment of the Rating Distributions

The first step in analyzing the ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency was to examine the rating distributions for each requirement. Separate examinations were conducted for the ratings assigned by the aviators in each of the different types of units and in the total sample. The purpose of the examinations was to determine whether biases existed in the distributions that might influence the interpretation of statistical tests performed on the ratings. If the distributions were found to

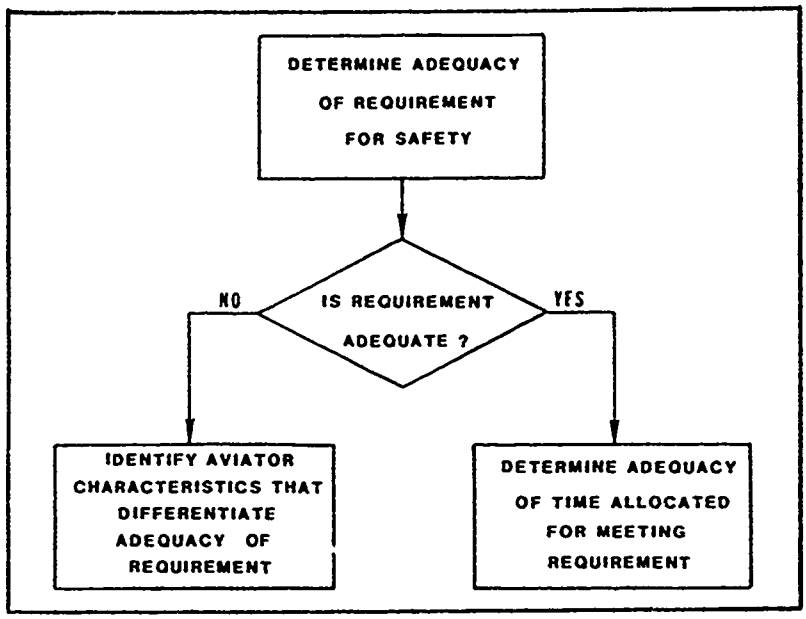


Figure 35. Task-flow diagram of analyses of the adequacy of the requirements for maintaining a safe level of aviator proficiency.

differ significantly from a normal distribution, it would be necessary to either transform the rating scores prior to conducting parametric statistical analyses or use nonparametric analyses that do not require normal distributions of data. A number of descriptive statistics were examined to determine if the ratings assigned to the requirements were normally distributed. The statistics include the following:

- the number of aviators responding to the item,
- the mean rating of adequacy of the requirement,
- the median rating of adequacy of the requirement,
- the modal rating of adequacy of the requirement,
- the standard deviation of the ratings,
- the range of the ratings,
- the skewness of the distribution of ratings,
- the kurtosis of the distribution of ratings,
- the frequency of ratings per rating category, and
- the proportion of ratings per rating category.

Statistical tests for skewness and homogeneity of variance were used to test the normality of each of the rating distributions. In most instances, the tests yielded statistically significant values; however, in interpreting these results, it must be recognized that even small deviations from normality will prove statistically significant when the sample sizes are as large as the ones in this study. Further examination of the descriptive statistics revealed that (a) none of the skewness values were extreme, (b) the ratings were distributed across all the rating categories, (c) the overall variability of the ratings

was generally low ($1.0 \leq \underline{SD} \leq 1.5$ in most instances), and (d) the distribution of ratings for a given requirement was generally symmetrical. Based on these findings, a decision was made to use parametric statistical procedures to test specific hypotheses about the adequacy of the requirements for maintaining a safe level of aviator proficiency. Relative to nonparametric alternatives, parametric tests possess greater power for detecting statistical differences. In addition, because of the robustness of the parametric procedures that were used, it was concluded that the deviations from normality observed in the data will not have a significant effect on the outcome of the analyses.

To facilitate the reader's comprehension of the statistical procedures that were used, the frequency distributions for two of the requirements are presented in Figures 36 and 37. Figure 36 presents the distribution of ratings for Emergency Tasks; the distribution for Emergency Tasks was selected because it is representative of the ratings assigned to most of the Continuation Training and Additional Military Requirements. For purposes of comparison, Figure 37 presents the distribution of ratings for NVG requirements; the distribution of ratings for this requirement shows the greatest deviation from normality. In both Figures 36 and 37, the shaded area depicts the cumulative distribution of the ratings and the vertical bars depict the relative distribution (i.e., the percentage of responses for each rating scale category).

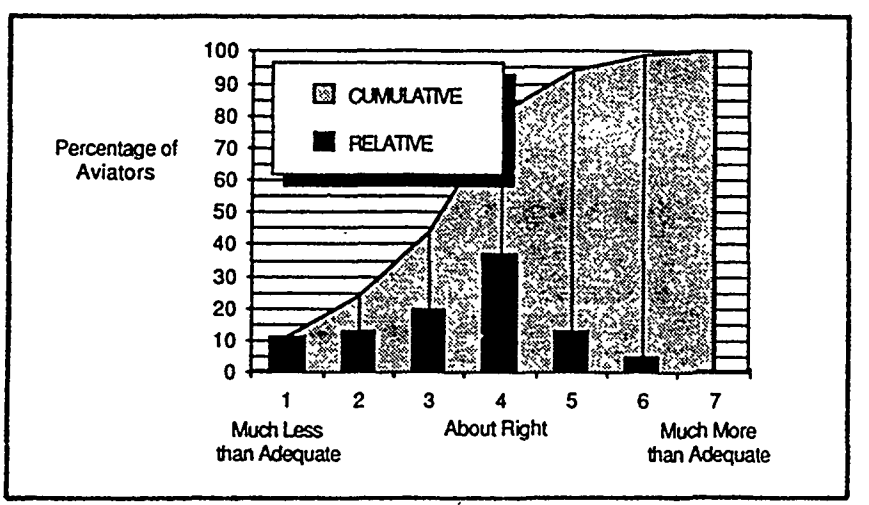


Figure 36. Frequency distribution for the ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency: Emergency Tasks.

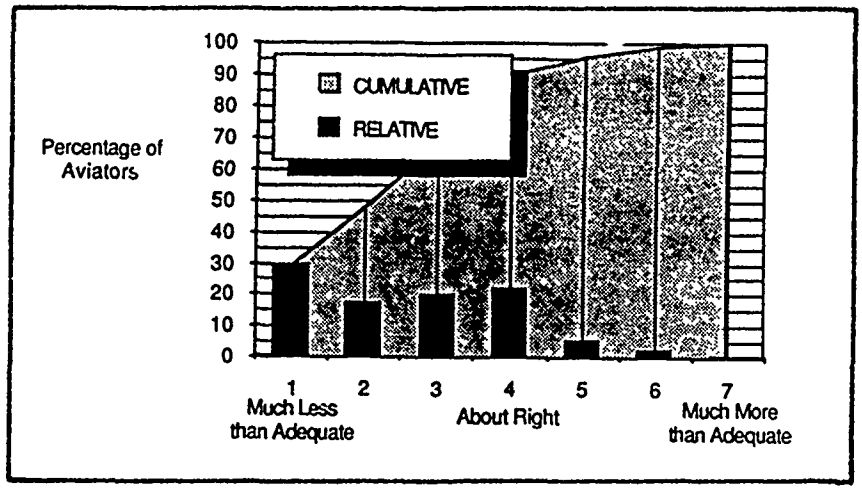


Figure 37. Frequency distribution for the ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency: NVG.

Descriptive Statistics

Table 13 presents a summary of statistics describing the ratings assigned to the Continuation Training and Additional Military Requirements;[6] Appendix O presents a summary of statistics describing the ratings assigned to Initial Qualification and Transition Training Requirements. In each instance, statistics are presented for the ratings assigned by the aviators in each of the different types of units and in the total sample. The statistics include the percentage of aviators who assigned a numerical rating less than "4" to each requirement; a rating of "4" indicates that the requirement is judged to be "About Right" for maintaining a safe level of aviator proficiency. Examination of the data presented in the table reveals that the mean ratings vary somewhat across the requirements; however, for a given requirement, the mean rating is approximately the same for each type of unit. The mean ratings assigned by the total sample of aviators to specific Continuation Training and Additional Military Requirements are graphically depicted in Figures 38 and 39, respectively.

Differences Among Units and Requirements

To determine whether the observed differences in the mean ratings assigned to the requirements are statistically significant, two Repeated

[6]The reader is reminded that Continuation Training and Additional Military Requirements are emphasized in the text of the report because these requirements involve most of the aviators and require most of the training time.

Table 13

Descriptive Data Summary Table: Adequacy of Continuation Training and Additional Military Requirements for Maintaining a Safe Level of Aviator Proficiency

a. Continuation Training

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	510	505	535	334	46	427	243	939	3539
	M	3.47	3.47	3.37	3.49	3.96	3.22	3.78	3.68	3.51
	SD	1.34	1.41	1.39	1.34	1.10	1.46	1.29	1.34	1.38
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	46.9	46.9	46.5	41.6	28.3	53.4	35.8	35.7	43.2
Emergency Procedures	n	510	502	534	332	46	425	243	936	3528
	M	3.84	3.91	3.71	3.91	3.98	3.66	3.91	3.90	3.84
	SD	1.51	1.18	1.21	1.14	0.93	1.15	1.16	1.10	1.15
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	34.5	30.1	36.9	29.5	23.9	42.8	31.3	31.6	33.7
Instruments	n	512	499	529	329	45	428	238	930	3510
	M	3.49	3.76	3.67	3.70	4.20	3.80	3.77	3.88	3.74
	SD	1.24	1.33	1.25	1.21	0.94	1.19	1.17	1.20	1.23
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	48.0	36.5	42.2	41.0	15.6	38.1	37.8	33.9	38.8
Terrain Flight (NOE)	n	491	481	497	304	N/A	411	187	801	3172
	M	3.74	3.56	3.22	3.74	N/A	3.64	3.10	3.29	3.46
	SD	1.21	1.37	1.26	1.16	N/A	1.23	1.26	1.31	1.29
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	38.5	41.6	56.7	36.8	N/A	41.1	58.8	53.2	47.0
Unaided Night Tactical	n	278	290	232	140	N/A	166	62	331	1499
	M	3.14	3.27	3.02	3.22	N/A	2.95	2.79	3.17	3.13
	SD	1.15	1.30	1.30	1.21	N/A	1.27	1.30	1.30	1.27
	MO	4.00	4.00	3.00	3.00	N/A	4.00	3.00	4.00	4.00
	%	58.6	51.7	64.7	57.9	N/A	63.3	69.4	53.4	58.0
Night Vision Goggles (NVG)	n	154	146	99	55	N/A	55	22	144	675
	M	2.83	2.97	2.17	2.80	N/A	2.35	1.96	2.85	2.70
	SD	1.36	1.35	1.32	1.54	N/A	1.40	1.25	1.64	1.46
	MO	3.00	4.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	67.5	58.2	84.8	63.6	N/A	70.9	86.4	63.2	67.7
Tactical/Special	n	446	428	431	259	39	364	178	635	2780
	M	3.41	3.36	3.15	3.30	3.26	3.27	3.26	3.17	3.27
	SD	1.21	1.28	1.23	1.23	1.45	1.26	1.31	1.26	1.25
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	50.4	49.1	57.5	50.6	53.8	52.5	54.5	55.6	53.1
Mission	n	497	494	517	322	44	426	238	897	3435
	M	3.56	3.58	3.67	3.74	3.68	3.71	3.76	3.79	3.69
	SD	1.17	1.23	1.15	1.14	1.25	1.13	1.36	1.18	1.19
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	46.9	41.3	38.5	34.2	38.6	38.7	35.3	33.0	38.1

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

Table 13 (Continued)

Descriptive Data Summary Table: Adequacy of Continuation Training and Additional Military Requirements for Maintaining a Safe Level of Aviator Proficiency

a. Continuation Training (Continued)

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Additional	n	432	448	470	295	38	381	220	800	3084
	M	3.57	3.60	3.56	3.71	3.68	3.67	3.69	3.67	3.63
	SD	1.12	1.21	1.16	1.05	1.23	1.15	1.19	1.12	1.14
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	42.8	39.5	41.3	32.5	34.2	39.4	38.2	36.4	38.6

b. Additional Military Requirements

Training Requirement		Type of ARNG Aviation unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training	n	302	292	314	181	29	242	141	593	2094
	M	3.99	3.99	3.72	4.11	4.14	3.87	3.94	4.12	3.98
	SD	0.96	1.03	1.14	1.04	0.74	1.14	1.25	1.00	1.07
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	25.2	24.3	31.2	19.3	13.8	28.1	29.1	18.4	24.0
Pre- and Post-flight	n	517	503	537	336	45	435	244	942	3559
	M	4.16	4.17	4.15	4.30	4.56	4.20	4.28	4.28	4.22
	SD	1.04	1.09	1.01	1.04	1.06	1.16	1.16	1.03	1.06
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	19.5	19.1	20.1	13.7	4.40	18.4	18.4	14.9	17.4
Nonflying Aviation Evaluation	n	511	496	524	329	45	431	242	924	3502
	M	3.94	3.90	3.92	4.05	4.38	3.93	3.91	4.01	3.96
	SD	1.18	1.30	1.23	1.21	1.23	1.23	1.32	1.29	1.25
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	29.0	31.3	29.2	25.5	15.6	28.8	30.6	27.2	28.5
Military Education	n	490	467	502	320	45	405	235	875	3339
	M	3.73	3.67	3.68	3.84	4.84	3.76	3.76	3.76	3.75
	SD	1.52	1.46	1.39	1.55	1.64	1.51	1.74	1.46	1.50
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	46.3	42.0	44.0	41.3	22.2	40.7	44.7	41.8	42.6
Inspections	n	482	475	486	316	44	407	229	882	3321
	M	3.92	4.03	3.91	4.08	4.82	3.94	4.00	3.93	3.97
	SD	1.48	1.55	1.44	1.54	1.53	1.61	1.79	1.49	1.54
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	36.5	31.4	32.7	30.1	20.5	36.9	37.6	36.1	34.4

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

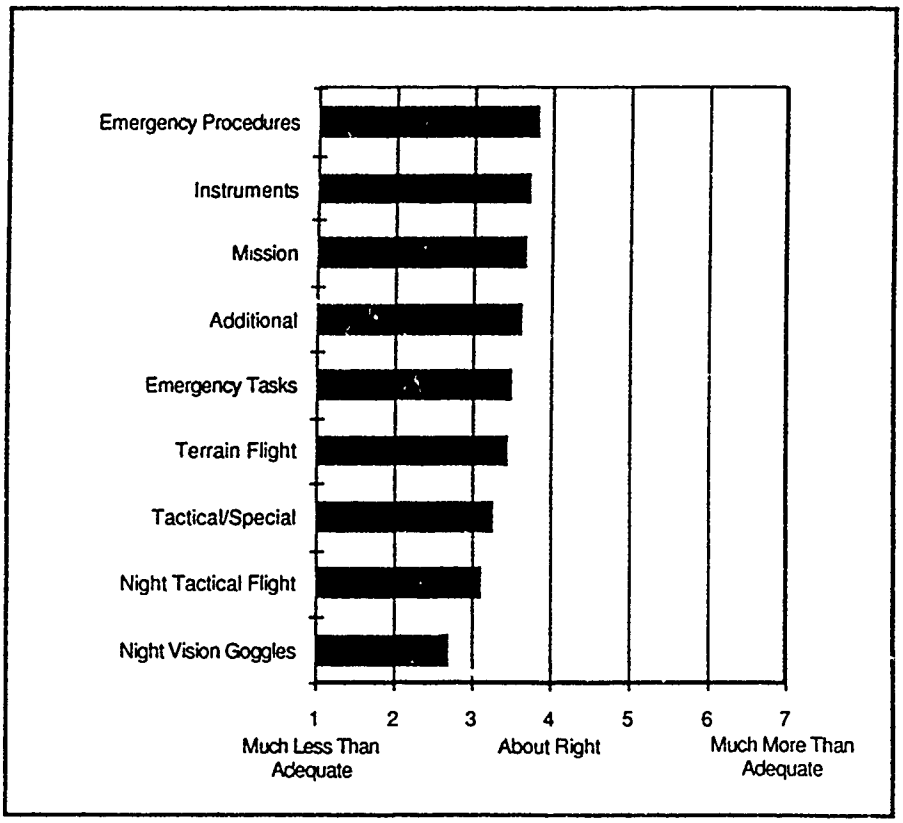


Figure 38. Mean ratings of the adequacy of Continuation Training Requirements for maintaining a safe level of aviator proficiency (see Table 13a for sample size).

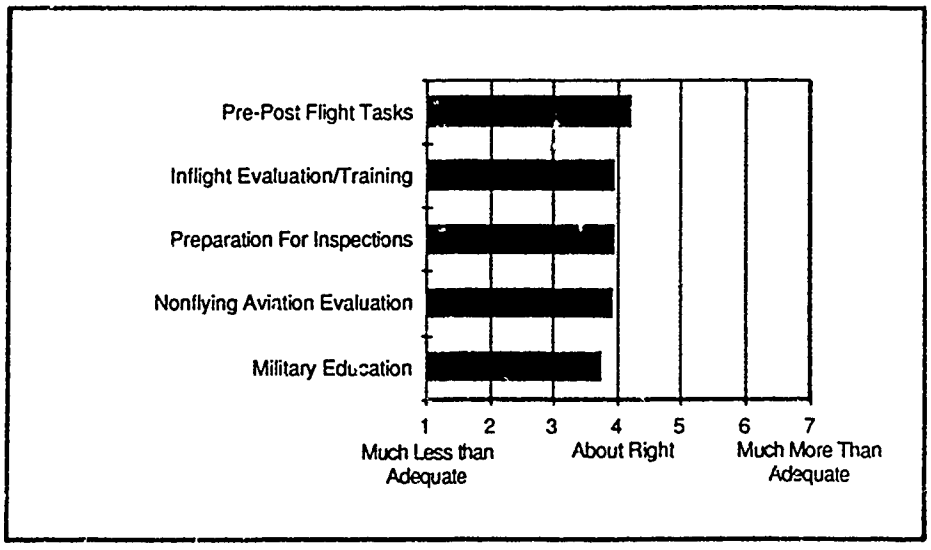


Figure 39. Mean ratings of the adequacy of Additional Military Requirements for maintaining a safe level of aviator proficiency (see Table 13b for sample size).

Measures Analyses of Variance (ANOVAs) were performed. The principal function of the ANOVAs was to identify variables that could be collapsed across units to simplify further analyses of the data. Separate ANOVAs were conducted for Continuation Training Requirements and Additional Military Requirements. In each ANOVA, the dependent measure was the rating, 1-7, assigned to the requirements by the aviators. The between-subjects variable was the type of unit, and the within-subjects variable was the type of requirement.

Certain categories of each major variable were excluded from the ANOVAs. In each instance, a specific requirement or unit type was excluded because the number of respondents for that category was grossly disproportionate to the number of respondents for the remaining categories of the variable (Tabachnick & Fidell, 1983). Specifically, Aerial Surveillance and "Other" units were excluded from the between-subjects variable in the analyses of both Continuation Training and Additional Military Requirements. NVG training and Unaided Night Tactical training were excluded from the within-subjects variable in the analysis of Continuation Training Requirements; Inflight Evaluation/ Training was excluded in the analysis of Additional Military Requirements.

Continuation Training Requirements

Table 14 presents a summary of the results of the Repeated Measures ANOVA for Continuation Training Requirements. Examination of the F values reveals that the Type of Unit main effect is not statistically significant (F = 1.67; df = 5, 2373; p >.05). The Requirement main effect is statistically significant (F = 96.28; df = 6, 14238; p <.001), as is the Unit x Requirement interaction (F = 10.55; df = 30, 14238; p <.001); however, since the interaction accounts for a negligible proportion of the variance (η^2 < .05), no post-hoc comparisons of the mean ratings assigned to the requirements by the different types of units were conducted.

Additional Military Requirements

Table 15 presents a summary of the ANOVA for Additional Military Requirements. Examination of the table indicates that, in the analysis of Additional Military Requirements, neither the main effect for Type of Unit nor the Unit x Requirement interaction is statistically significant (F = 1.06; df = 5, 2503; p >.05 and F = .79, df = 15, 7509; p >.05, respectively). As before, the Requirement main effect is significant (F = 112.38; df = 3, 7509; p <.01) but accounts for a small proportion of variance (η^2 < .05).

Table 14

Summary of Repeated Measures ANOVA of Adequacy of Continuation Training Requirements

Source	df	SS	MS	F	p<	η^2
Between Subjects						
Type of Unit (U)	5	45.73	9.15	1.67	NS	.004
Subjects/Units (S/U)	2373	12965.67	5.46	--	--	--
Within Subjects						
Requirement (R)	6	400.17	66.70	96.28	.001	.038
U x R	30	219.24	7.31	10.55	.001	.022
R x S/U	14238	9862.67	0.69	--	--	--

Table 15

Summary of Repeated Measures ANOVA of Adequacy of Additional Military Requirements

Source	df	SS	MS	F	p<	η^2
Between Subjects						
Type of Unit (U)	5	22.90	4.58	1.06	NS	.002
Subjects/Units (S/U)	2503	10765.50	4.30	--	--	--
Within Subjects						
Requirement (R)	3	277.23	92.41	112.38	.01	.043
U x R	15	9.79	0.65	0.79	NS	.002
R x S/U	7509	6174.90	0.82	--	--	--

Differences From Hypothetical Mean

In view of the absence of a meaningful difference in the mean ratings assigned to a given requirement by the aviators in each of the different types of units, subsequent analyses of the data used the mean ratings assigned to each requirement by the total sample of aviators. Although Aerial Surveillance and "Other" types of units were excluded from the Repeated Measures ANOVAs, these units were included in analyses using the total sample. The following information suggests that the inclusion of the additional unit types does not bias the overall mean ratings assigned to each requirement.

- Although the Aerial Surveillance aviators are a demographically unique group, they represent only a small percentage (1%) of the total sample of aviators.
- Although the "Other" type of unit represents both a unique group and a large percentage (26%) of the total sample, none of the variables on which the group differs (e.g., years of service, total number of military flight hours) were found to be related to the ratings assigned to the requirements by the remaining types of units.
- For each requirement, a one-way ANOVA was performed in which the dependent variable was the rating assigned to the requirement by the aviators in each type of unit (including Aerial Surveillance and "Other"). The analyses revealed that there are no instances in which the type of unit accounts for more than 4% of the variance in the ratings.

The primary purpose of subsequent analyses of the ratings is to test the null hypothesis that, for a given requirement, the mean rating does not differ significantly from "4." As stated earlier, a rating of "4" indicates that the requirement is "About Right" for maintaining a safe level of aviator proficiency. The alternative hypothesis is that the mean rating assigned to the requirement differs significantly from "4," either significantly greater than "4" (indicating that the requirement is more than adequate) or significantly less than "4" (indicating that the requirement is less than adequate). Although a two-tailed test of significance was performed for each requirement, the requirements for which the mean ratings were less than "4" were of primary interest.

Because of the extremely large sample sizes for each requirement ($675 \leq \underline{n} \leq 3559$), it seemed highly probable that the difference between the observed and hypothesized means would be statistically significant in most instances. Of greater interest to the goals of the research is the practical significance of the obtained differences. Therefore, in testing the null hypothesis, a procedure recommended by Cohen (1977) was employed to identify how large the difference must be to represent an effect size that is practically, as well as statistically significant. Cohen's procedure for testing the practical significance of the difference between an observed sample mean and a hypothesized population mean employs the statistic $\underline{d}$. The procedure for computing and interpreting the value of $\underline{d}$ was described in detail in the introduction to the Results section.

Continuation Training Requirements

A summary of the effect size analyses of the Continuation Training Requirements is presented in Table 16. The results reveal that the mean of the ratings assigned to all the requirements except one are sufficiently below "4" to represent at least a small effect size, as defined by Cohen. Specifically, differences between the hypothesized mean of

Table 16

Summary of Analyses of Effect Size for Adequacy of Continuation Training Requirements

Training Requirement	n	M	SD	d[a]
Emergency Tasks	3539	3.51	1.38	.36*
Emergency Procedures	3528	3.84	1.15	.14
Instruments	3510	3.74	1.23	.21*
Terrain Flight (NOE)	3172	3.46	1.29	.42*
Unaided Night Tactical	1499	3.13	1.27	.69**
Night Vision Goggles (NVG)	675	2.70	1.46	.89***
Tactical/Special	2780	3.27	1.25	.59**
Mission	3435	3.69	1.19	.26*
Additional	3084	3.63	1.14	.32*

Note: α = .02 for each requirement.
*Small effect size. **Medium effect size. ***Large effect size.
[a] d is a statistic recommended by Cohen (1977) to test the practical significance of the difference between two means.

"4" and the observed means for Emergency Tasks (d = .36), Instruments (d = .21), Terrain Flight (d = .42), Mission (d = .26), and Additional (d = .32) requirements represent small effect sizes. The differences between "4" and the means for Unaided Night Tactical (d = .69) and Tactical/ Special (d = .59) requirements represent medium effect sizes, while the difference between "4" and the mean for NVG requirements (d = .89) represents a large effect size.

Additional Military Requirements

A summary of the effect size analyses of the Additional Military Requirements is shown in Table 17. The results indicate that none of the mean ratings for the requirements are sufficiently below the hypothesized mean of "4" to be considered practically meaningful differences; however, the mean for Pre- and Post-Flight requirements is sufficiently below "4" to represent a small effect size (d = .21).

Factors Influencing the Ratings

Once the aviators' ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency had been determined, the next phase of the analyses was to identify specific variables that

Table 17

Summary of Analyses of Effect Size for Adequacy of Additional Military Requirements

Training Requirement	n	M	SD	d[a]
Inflight Evaluation/ Training	2094	3.98	1.07	.02
Pre- and Post-flight	3559	4.22	1.06	.21*
Nonflying Aviation Evaluation	3502	3.96	1.25	.03
Military Education	3339	3.75	1.50	.17
Preparation for Inspections	3321	3.97	1.54	.02

Note: α = .02 for each requirement.
*Small effect size.

[a] d is a statistic recommended by Cohen (1977) to test the practical significance of the difference between two means.

may be consistently related to the aviators' judgments of adequacy. To achieve this objective, a series of multiple regression analyses was performed. In each analysis, the criterion variable was the aviators' ratings of the adequacy of the Continuation Training and Additional Military Requirements. The variables that were selected as potential predictors of the ratings are listed below:

- age;
- primary aircraft type (e.g., utility, attack, observation, cargo);
- total number of military flight hours;
- highest qualification (e.g., pilot, IP); and
- rank (e.g., warrant officer, commissioned officer).

The results of the regression analyses indicate that none of the predictor variables have correlations greater than .20 with the criterion variable. When all the variables are combined in a regression equation to predict the rating for each requirement, the highest R^2 is .10. Thus, there is no evidence that any variable or combination of variables that were examined is consistently related to the aviators' judgments of the adequacy of the requirements for maintaining a safe level of aviator proficiency.

Adequacy of Time for Training Requirements (Research Question #4)

As described in the Methodology section, the aviators also used a 7-point scale to rate the adequacy of the time allocated to meet specific training requirements. The requirements that were rated are

the same as those previously rated by the aviators to reflect their judgments of the adequacy of the requirements for maintaining a safe level of aviator proficiency (see Table 2).

The analytic tasks that were performed to determine the aviators' perceptions of the adequacy of the allocated training time are outlined in the task-flow diagram shown in Figure 40. It can be seen that the procedure used to evaluate the adequacy of the training time is generally the same as that previously described for analyzing the ratings of the adequacy of the requirements themselves.

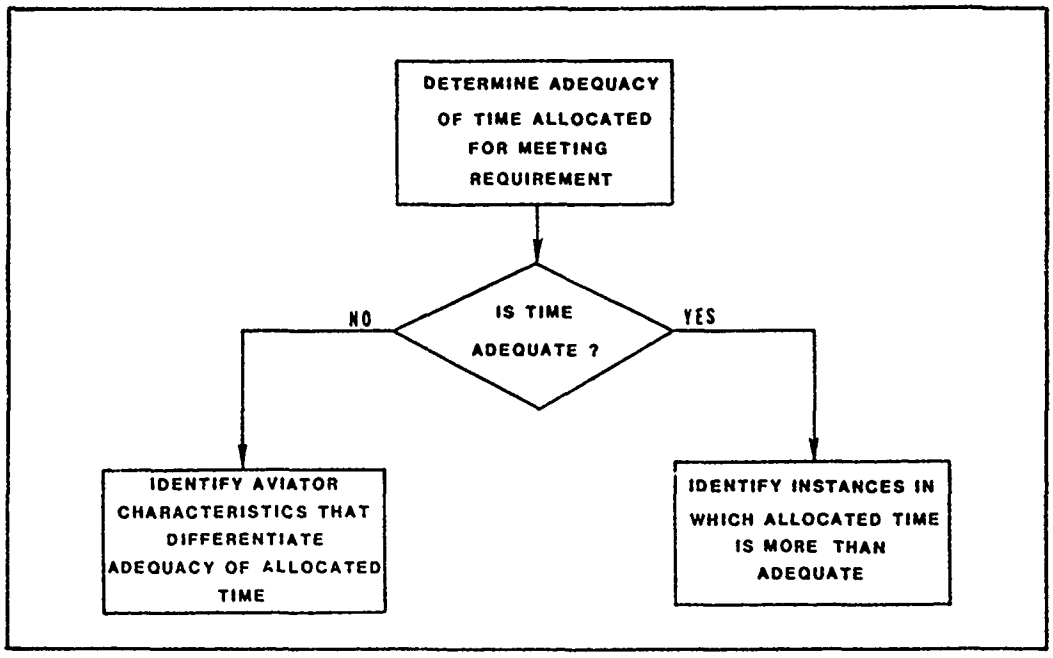


Figure 40. Task-flow diagram of the analyses of the adequacy of the time allocated to meet the requirements.

Assessment of the Rating Distributions

As before, the first step in the analyses of the rating scale data was to examine the distribution of ratings to determine if biases existed that might influence the interpretation of statistical results. To permit the necessary evaluations of the distributions, the following descriptive statistics were generated for the ratings assigned to the requirements by the aviators in each of the different types of units and in the total sample:

- the number of aviators responding to the item,
- the mean rating of the adequacy of time for the requirement,
- the median rating of the adequacy of time for the requirement,
- the modal rating of the adequacy of time for the requirement,
- the standard deviation of the ratings,

- the range of the ratings,
- the skewness of the distribution of ratings,
- the kurtosis of the distribution of ratings,
- the frequency of the ratings per rating category, and
- the proportion of the ratings per rating category.

Statistical tests of skewness and homogeneity of variance were subsequently used to determine if the distributions differed significantly from normality. For most of the requirements, the tests yielded statistically significant results. However, further examination of the data indicated that, in most instances, the actual deviations from normality were quite small, thus suggesting that the statistical significance was attributable to the large sample sizes for the requirements. Based upon these findings, a decision was made to use parametric statistical procedures for subsequent data analyses. For the few instances in which the deviations were large, the robustness of the parametric tests makes it unlikely that the deviations have a significant effect on the outcome of the analyses.

Prior to presenting the results of the additional analyses, frequency distributions for two of the requirements are depicted in Figures 41 and 42. Figure 41 depicts the distribution of ratings for Emergency Tasks; the distribution for Emergency Tasks was selected because it is representative of the ratings assigned to most of the training requirements. For comparison, Figure 42 depicts the distribution of ratings for NVG training; the distribution for this requirement shows the greatest deviation from normality and is the least representative of the ratings for the remaining requirements.

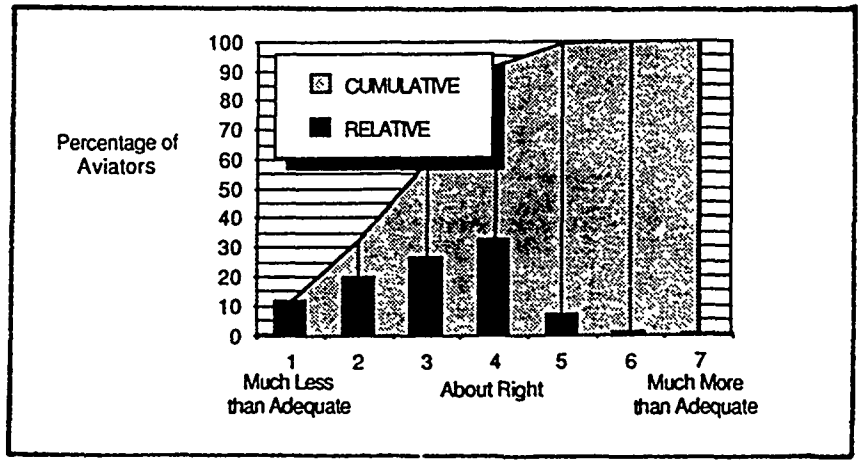


Figure 41. Frequency distribution for the ratings of the adequacy of time allocated to meet Emergency Task requirements.

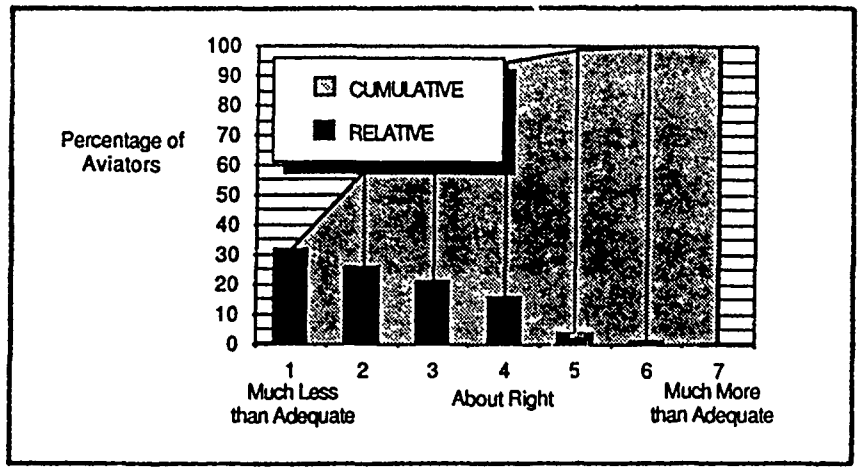


Figure 42. Frequency distribution for the ratings of the adequacy of time allocated to meet NVG requirements.

Descriptive Statistics

Table 18 presents a summary of selected statistics that describe the aviators' perceptions of the adequacy of the training time for meeting each Continuation Training and Additional Military Requirement. Appendix P presents a summary of statistics that describe the ratings of the adequacy of the time allocated for meeting Initial Qualification and Transition Training Requirements. In each instance, statistics are presented for the ratings assigned by the aviators in each of the different types of units and in the total sample. The statistics include the percentage of aviators who assigned a rating less than "4" to the requirement; a rating of "4" indicates that the allocated training time is "About Right" for meeting the requirement.

Examination of the data in Table 18 reveals that the mean ratings vary somewhat across requirements; however, for a given requirement, the mean rating is approximately the same for the different types of units. The mean ratings for each of the Continuation Training and Additional Military Requirements are graphically depicted in Figures 43 and 44, respectively. For purposes of comparison, the mean ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency, previously presented, are also shown.

Differences Among Units and Requirements

Statistical tests were performed to determine whether the mean ratings of the adequacy of the time allocated for meeting the requirements were significantly different. The means were evaluated through the performance of two Repeated Measures ANOVAs: one for Continuation Training Requirements and one for Additional Military Requirements. In both analyses, the dependent measure was the numerical rating, 1-7,

Table 18

Descriptive Data Summary Table: Adequacy of the Time Allocated for Meeting Continuation Training and Additional Military Requirements

a. Continuation Training

Training Requirement		Type of ARNG Aviation Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	509	502	530	335	44	431	243	938	3532
	M	3.00	3.05	3.03	3.16	3.61	2.81	3.13	3.17	3.06
	SD	1.15	1.19	1.17	1.27	0.78	1.23	1.20	1.18	1.19
	MO	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	65.2	59.4	61.3	56.1	38.6	66.1	56.0	53.8	59.1
Emergency Procedures	n	509	498	529	333	44	429	244	936	3522
	M	3.33	3.32	3.28	3.46	3.68	3.16	3.36	3.34	3.32
	SD	1.07	1.10	1.12	1.16	0.74	1.10	1.14	1.04	1.09
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	53.0	52.0	54.6	46.8	38.6	58.3	49.2	49.7	51.9
Instruments	n	505	496	521	329	42	428	240	930	3491
	M	3.09	3.29	3.21	3.30	3.93	3.26	3.22	3.38	3.27
	SD	1.22	1.23	1.15	1.21	0.64	1.17	1.25	1.10	1.17
	MO	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	63.2	52.4	56.0	53.2	19.0	54.2	56.3	50.5	54.3
Terrain Flight (NOE)	n	486	478	491	306	N/A	420	185	803	3169
	M	3.21	3.12	2.82	3.31	N/A	3.14	2.87	2.91	3.04
	SD	1.20	1.27	1.16	1.24	N/A	1.10	1.22	1.22	1.21
	MO	4.00	4.00	3.00	4.00	N/A	4.00	3.00	4.00	4.00
	%	58.6	55.9	69.2	51.6	N/A	58.6	68.1	65.7	61.6
Unaided Night Tactical	n	278	297	225	136	N/A	165	63	338	1502
	M	2.87	2.93	2.71	2.93	N/A	2.73	2.65	2.82	2.83
	SD	1.08	1.27	1.13	1.27	N/A	1.29	1.30	1.17	1.20
	MO	3.00	3.00	3.00	3.00	N/A	2.00	2.00	4.00	3.00
	%	71.6	65.0	74.7	68.4	N/A	68.5	74.6	66.6	69.1
Night Vision Goggles (NVG)	n	159	150	104	62	N/A	64	25	156	720
	M	2.31	2.62	2.00	2.47	N/A	2.16	1.84	2.50	2.35
	SD	1.14	1.16	1.20	1.46	N/A	1.22	0.94	1.33	1.24
	MO	2.00	3.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	85.5	75.3	87.5	72.6	N/A	79.7	92.0	74.2	79.9
Tactical/Special	n	424	449	427	259	35	364	177	627	2762
	M	3.04	3.02	2.83	2.99	2.97	3.02	2.89	2.85	2.94
	SD	1.13	1.16	1.14	1.23	1.32	1.11	1.21	1.23	1.18
	MO	3.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00
	%	64.4	60.8	68.6	65.6	60.0	62.9	65.0	65.7	64.7
Mission	n	489	488	505	317	45	416	238	883	3381
	M	3.13	3.18	3.24	3.38	3.31	3.23	3.12	3.31	3.24
	SD	1.12	1.16	1.12	1.16	1.26	1.09	1.26	1.11	1.14
	MO	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	62.0	58.0	54.1	48.3	51.1	55.8	55.9	50.2	54.6

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

Table 18 (Continued)

Descriptive Data Summary Table: Adequacy of the Time Allocated for Meeting Continuation Training and Additional Military Requirements

a. Continuation Training (Continued)

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Additional	n	427	452	466	289	39	382	215	783	3053
	M	3.20	3.18	3.17	3.37	3.82	3.26	3.27	3.28	3.25
	SD	1.15	1.14	1.16	1.24	1.19	1.22	1.21	1.13	1.17
	MO	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	59.5	56.4	55.2	49.8	30.8	56.8	50.2	52.0	54.2

b. Additional Military Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training	n	303	290	310	184	31	244	140	576	2078
	M	3.38	3.38	3.36	3.49	3.61	3.37	3.30	3.48	3.41
	SD	0.99	1.03	1.09	1.03	1.12	1.01	1.10	1.03	1.04
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	48.8	47.2	46.8	40.8	32.3	48.0	51.4	40.2	45.0
Pre- and Post-flight	n	510	496	532	332	46	433	244	935	3528
	M	3.79	3.75	3.67	3.83	4.00	3.65	3.78	3.76	3.75
	SD	1.09	1.03	0.98	1.06	1.17	1.14	1.12	1.05	1.06
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	32.9	30.8	35.0	25.9	19.6	35.1	32.8	31.2	32.0
Nonflying Aviation Evaluation	n	509	497	521	329	45	430	241	929	3501
	M	3.58	3.48	3.52	3.60	3.80	3.42	3.39	3.41	3.48
	SD	1.23	1.32	1.24	1.31	1.36	1.25	1.49	1.31	1.30
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	42.6	44.7	42.8	39.5	28.9	43.5	47.3	45.7	43.8
Military Education	n	492	467	507	322	45	411	235	893	3372
	M	3.50	3.53	3.46	3.54	4.80	3.42	3.58	3.36	3.48
	SD	1.60	1.62	1.56	1.66	2.00	1.63	1.95	1.60	1.64
	MO	4.00	4.00	4.00	4.00	7.00	4.00	4.00	4.00	4.00
	%	54.3	50.5	52.1	47.2	28.9	53.3	51.5	55.6	52.5
Inspections	n	476	465	484	316	42	402	227	886	3298
	M	3.77	3.88	3.78	3.86	4.74	3.77	3.97	3.69	3.80
	SD	1.60	1.65	1.63	1.64	1.91	1.67	1.96	1.66	1.68
	MO	4.00	4.00	4.00	4.00	7.00	4.00	4.00	4.00	4.00
	%	43.5	38.7	41.5	36.7	26.2	42.3	39.2	44.3	41.5

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

assigned to the requirements. The within-subjects variable in each analysis was the type of requirement, and the between-subjects variable was the type of unit. Consistent with previous analyses of the adequacy of the requirements for maintaining a safe level of proficiency, certain categories of the variables were excluded from the ANOVAs. Specifically, because of the requirement for approximately equal cell sizes, the NVG, Unaided Night Tactical, and Inflight Evaluation/Training requirements were excluded from the within-subjects variable; Aerial Surveillance and "Other" types of units were excluded from the between-subjects variable.

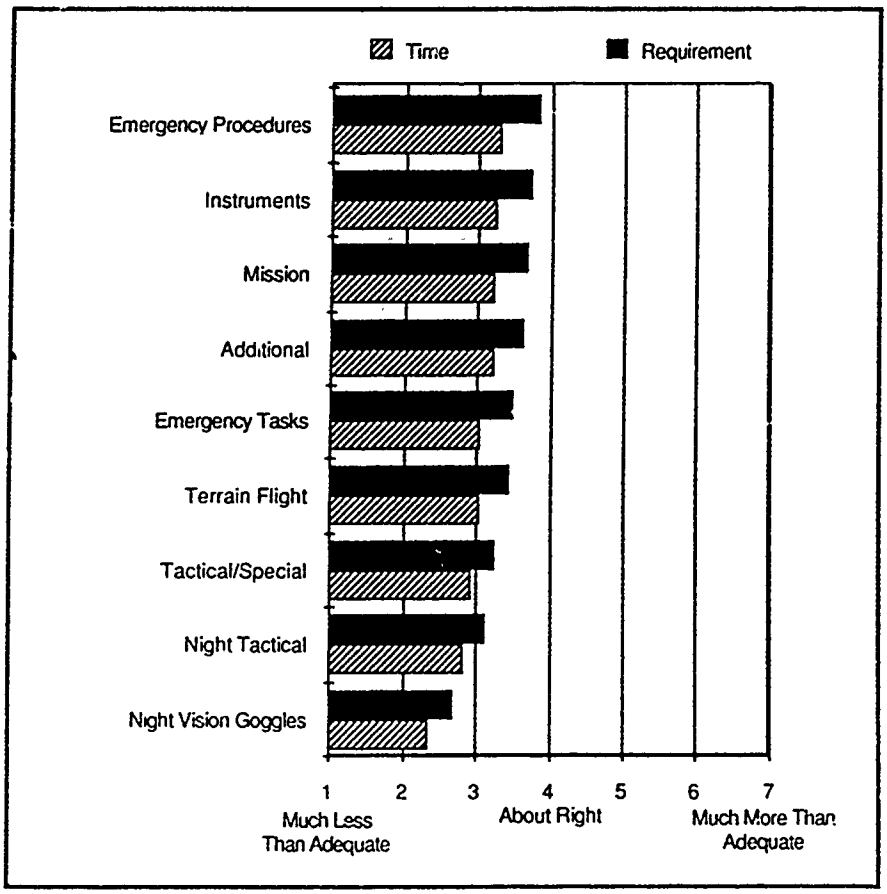


Figure 43. Mean ratings of the adequacy of the requirements and time: Continuation Training Requirements (see Table 13a and Table 18a for sample sizes).

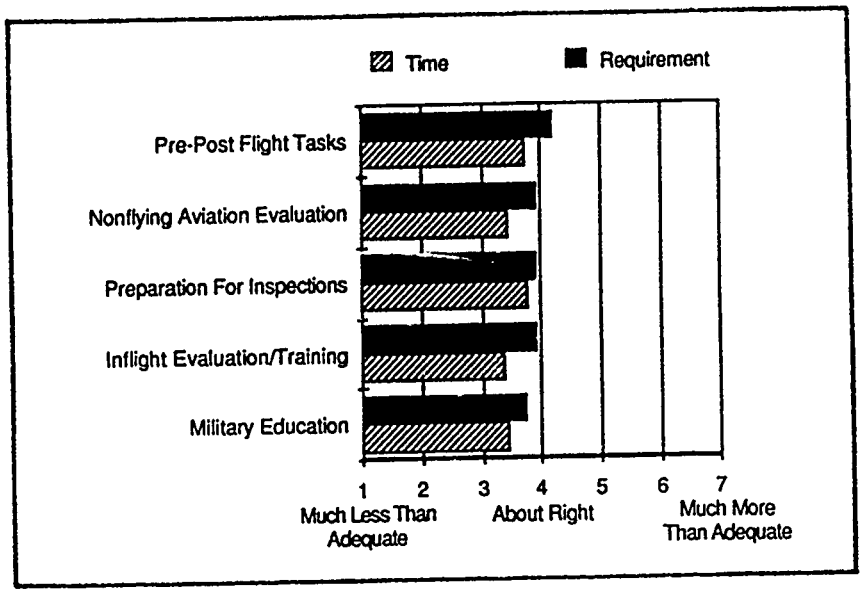


Figure 44. Mean ratings of the adequacy of the requirements and time: Additional Military Requirements (see Table 13b and Table 18b for sample sizes).

Continuation Training Requirements

Table 19 presents a summary of the results of the ANOVA for Continuation Training Requirements. Examination of the F values reveals that the main effects and the interaction are statistically significant, but account for only a small proportion of the total variance. The main effect of Requirement ($F = 60.36$; $df = 6, 14496$; $p < .001$) accounts for two percent of the variance ($\eta^2 = .02$); the main effect for Type of Unit ($F = 2.76$; $df = 5, 2416$; $p < .05$) accounts for less than one percent of the total variance ($\eta^2 = .006$). The Unit x Requirement interaction, although statistically significant ($F = 5.32$; $df = 30, 14496$; $p < .001$), accounts for slightly more than one percent of the variance ($\eta^2 = .011$). Because the Type of Unit main effect and the Unit x Requirement interaction account for a negligible proportion of the total variance ($\eta^2 < .02$), the effects are not considered to be practically significant.

Additional Military Requirements

Table 20 presents a summary of the results of the ANOVA for Additional Military Requirements. Examination of the table reveals that the only statistically significant effect is the main effect for Requirement ($F = 59.54$; $df = 3, 7131$; $p < .001$). Neither the Type of Unit main effect ($F = .62$; $df = 5, 2377$; $p > .05$) nor the Unit x Requirement interaction ($F = .81$; $df = 15, 7131$; $p > .05$) is statistically significant.

Table 19

Summary of Repeated Measures ANOVA of Adequacy of Time for Meeting Continuation Training Requirements

Source	df	SS	MS	F	p<	η^2
Between Subjects						
Type of Unit (U)	5	71.05	14.21	2.76	.05	.006
Subjects/Units (S/U)	2416	12417.14	5.14	--	--	--
Within Subjects						
Requirement (R)	6	253.48	42.25	60.36	.001	.024
U x R	30	111.69	3.72	5.32	.001	.011
R x S/U	14496	10145.54	0.70	--	--	--

Table 20

Summary of Repeated Measures ANOVA of Adequacy of Time for Meeting Additional Military Requirements

Source	df	SS	MS	F	p<	η^2
Between Subjects						
Type of Unit (U)	5	15.25	3.05	0.62	NS	.001
Subjects/Units (S/U)	2377	11786.94	4.96	--	--	--
Within Subjects						
Requirement (R)	3	145.91	48.64	59.54	.001	.024
U x R	15	9.95	0.66	0.81	NS	.002
R x S/U	7131	5825.19	0.82	--	--	--

Differences From Hypothetical Mean

The data just presented indicate that the overall pattern of results for the analyses of the ratings of the adequacy of training time is generally the same as that for the ratings of the adequacy of the requirements for maintaining a safe level of aviator proficiency. Therefore, for consistency in comparing the ratings of the adequacy of the training time with the ratings of the adequacy of the training requirements, all subsequent analyses were conducted on the ratings assigned to each requirement by the aviators in the total sample. For

the reasons already cited, the aviators in both Aerial Surveillance and "Other" units were included in the analyses.

The primary purpose of the analyses of the ratings of the adequacy of the training time is to test the null hypothesis that the mean rating for each requirement does not differ significantly from "4"; a value of "4" on the scale indicates that the training time for a given requirement is "About Right" for meeting the requirement. The alternative hypothesis is that the mean rating is significantly greater than "4" (indicating that the allocated training time is more than adequate), or less than "4" (indicating that the allocated training time is less than adequate). For each requirement, a test was conducted to determine the significance of the difference between the obtained mean and the hypothesized value of "4." It was predicted that, because of the typically large sample sizes ($720 \leq \underline{n} \leq 3{,}532$) for each requirement, even small differences between the observed and hypothesized means would be likely to yield statistically significant results. Consequently, the significance of the differences was assessed by using Cohen's (1977) procedure for identifying effect sizes that are large enough to be practically as well as statistically significant. A summary of the effect size analyses for the Continuation Training Requirements is presented in Table 21; a summary of the analyses for the Additional Military Requirements is presented in Table 22. As before, a difference that is large enough to represent a medium or large effect size is considered to be practically meaningful.

The results shown in Table 21 reveal that the mean ratings for three of the Continuation Training Requirements are sufficiently below "4" to represent large effect sizes; the requirements are NVG ($\underline{d} = 1.33$), Unaided Night Tactical ($\underline{d} = .98$), and Tactical/Special ($\underline{d} = .90$) tasks. The means for the remaining requirements are sufficiently below "4" to represent medium effect sizes; however, the means for NOE training and Emergency Tasks are only slightly below the cutoff for a large effect size ($\underline{d} = .79$ and $\underline{d} = .78$, respectively). Based on these data it can be concluded that the aviators view the training time as less than adequate for all Continuation Training Requirements, especially NVG, Unaided Night Tactical, and Tactical/Special tasks.

The results shown in Table 22 reveal that the mean ratings assigned to all the Additional Military Requirements except Preparation for Inspections deviate enough from "4" to result in at least a small effect size. The differences between the hypothesized mean of "4" and the observed mean ratings for Pre- and Post-flight ($\underline{d} = .24$), Nonflying Aviation Evaluation ($\underline{d} = .40$), and Military Education ($\underline{d} = .32$) requirements represent small effect sizes; the difference between "4" and the mean rating for Inflight Evaluation/Training ($\underline{d} = .57$) represents a medium effect size. Thus, the data suggest that the training time allocated to meet Additional Military Requirements may be somewhat inadequate. Even so, training time appears to be a less serious problem for Additional Military Requirements than for Continuation Training Requirements.

Table 21

Summary of Analyses of Effect Size for Adequacy of Time for Meeting Continuation Training Requirements

Training Requirement	n	M	SD	d[a]
Emergency Tasks	3532	3.06	1.19	.78**
Emergency Procedures	3522	3.32	1.09	.62**
Instruments	3491	3.27	1.17	.62**
Terrain Flight (NOE)	3169	3.04	1.21	.79**
Unaided Night Tactical	1502	2.83	1.20	.98***
Night Vision Goggles (NVG)	720	2.35	1.24	1.33***
Tactical/Special	2762	2.94	1.18	.90***
Mission	3381	3.24	1.14	.67**
Additional	3053	3.25	1.17	.64**

Note: α = .02 for each requirement.
**Medium effect size. ***Large effect size.

[a] d is a statistic recommended by Cohen (1977) to test the practical significance of the difference between two means.

Table 22

Summary of Analyses of Effect Size for Adequacy of Time for Meeting Additional Military Requirements

Training Requirement	n	M	SD	d[a]
Inflight Evaluation/ Training	2078	3.41	1.04	.57**
Pre- and Post-flight	3528	3.75	1.06	.24*
Nonflying Aviation Evaluation	3501	3.48	1.30	.40*
Military Education	3372	3.48	1.64	.32*
Preparation for Inspections	3298	3.80	1.68	.12

Note: α = .02 for each requirement.
*Small effect size. **Medium effect size.

[a] d is a statistic recommended by Cohen (1977) to test the practical significance of the difference between two means.

Differences Between Types of Ratings

As previously stated, Figures 43 and 44 present the mean ratings of both the adequacy of the training requirements for maintaining a safe level of aviator proficiency and the adequacy of the training time allocated for meeting the requirements. Figure 43 presents the means for Continuation Training requirements; Figure 44 presents the means for Additional Military Requirements. It can be seen that, in each instance, the mean rating of the adequacy of the requirement is higher than the mean rating of the adequacy of the time allocated for meeting the requirement. The significance of the difference between each pair of means was assessed by using Cohen's procedure for determining the practical significance of the difference between two observed means. The results of the analyses for the Continuation Training Requirements indicate that the difference between the means for each requirement represents a small effect size ($.20 \leq d < .50$). The analyses for Additional Military Requirements indicate that the difference between the means for Inflight Evaluation/Training represents a medium effect size ($\underline{d} = .54$); the difference between the means for Pre- and Post-Flight ($\underline{d} = .44$) and Nonflying Aviation Evaluation tasks ($\underline{d} = .38$) each represents a small effect size. The differences between the two means for each of the remaining Additional Military Requirements are not large enough to represent even a small effect size.

Factors Influencing the Ratings

Once the aviators' ratings of the adequacy of the training time allocated for meeting the requirements had been examined, the next step in the analyses was to identify specific characteristics of the aviators that influence their judgments of the adequacy of training time. To achieve this objective, a series of multiple regression analyses was performed. In each analysis the criterion variable was the aviators' ratings, 1-7, of the adequacy of the time allocated for meeting the requirement. The variables that were included as potential predictors of the ratings are listed below:

- age;
- primary aircraft type (e.g., utility, attack, observation, cargo);
- total number of military flight hours;
- highest qualification (e.g., pilot or IP);
- rank (i.e., warrant officer or commissioned officer);
- distance from home to the aviation facility;
- distance from work to the aviation facility;
- number of dual AFTPs performed during the year;
- hours spent on the civilian job;
- effect of the civilian work schedule on ability to attend ARNG training; and
- civilian income.

The results of the regression analyses indicate that none of the predictor variables have correlations greater than .20 with the ratings. When all the variables are combined to predict the ratings for each requirement, the highest R^2 is .11. Thus, there is no evidence that any one or combination of the variables examined in the regression analyses is consistently related to the aviators' judgments of the adequacy of the time allocated to meet ARNG training requirements.

Willingness to Spend Additional Time (Research Question #5)

As described in the Methodology section, the aviators used two different scales to rate their willingness to spend additional time to meet specific requirements in each of the four training categories (see Table 2). On the first scale, the aviators indicated their willingness to spend additional paid time to meet the requirements; on the second scale, the aviators indicated their willingness to spend additional nonpaid time.

The analytic tasks that were performed on the aviators' ratings of their willingness to spend additional time to meet the requirements are outlined in the task-flow diagram shown in Figure 45. Since the same procedure was used to assess the aviators' willingness to spend both paid and nonpaid time, the analyses of the ratings on both scales, though assessed with separate items, will be discussed concurrently in the sections that follow.

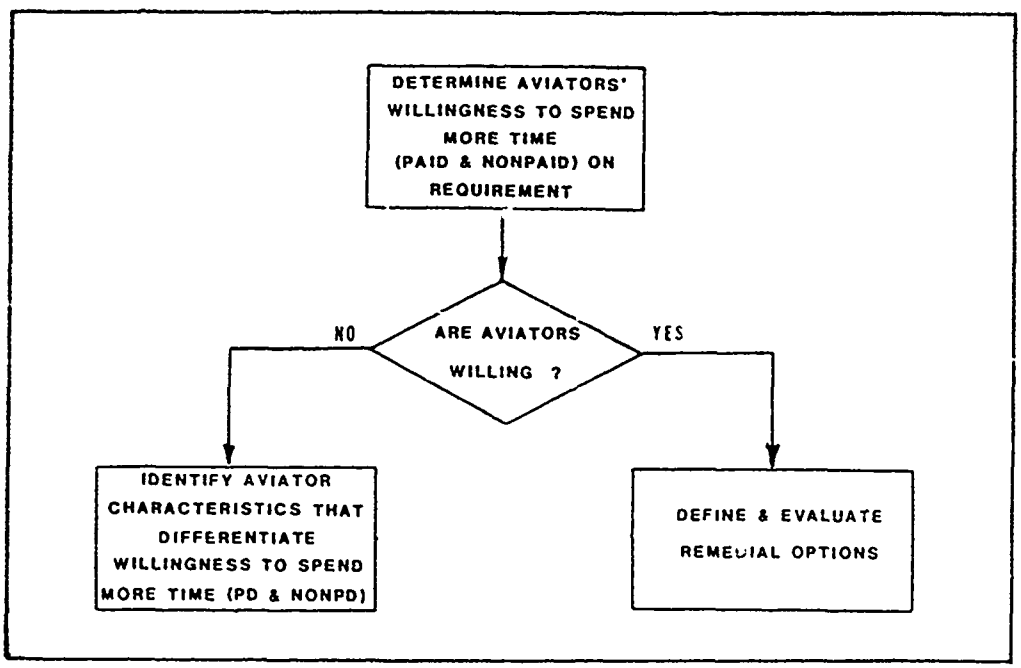


Figure 45. Task-flow diagram of analyses of willingness to spend additional time to meet the requirements.

Assessment of the Rating Distributions

The first step in the analysis of the aviators' willingness to spend additional time to meet the requirements was the generation of descriptive statistics to summarize the results and permit an assessment of the extent to which the ratings conform to a normal distribution. Tables 23 and 24 present summaries of selected statistics that describe the aviators' willingness to spend additional time to meet Continuation Training and Additional Military Requirements. Table 23 presents statistics that describe the aviators' willingness to spend additional paid time; Table 24 presents statistics that describe the aviators' willingness to spend additional nonpaid time. Appendices Q and R present summaries of statistics that describe the aviators' willingness to spend additional time to meet Initial Qualification and Transition Training Requirements. Appendix Q summarizes the ratings of the aviators' willingness to spend additional paid time; Appendix R summarizes the ratings of the aviators' willingness to spend additional nonpaid time. In each summary table, statistics are presented that describe the ratings assigned by the aviators in each of the different types of units and in the total sample. The statistics include the percentage of aviators who assigned a rating greater than "4" to the requirements; a rating of "4" indicates that the aviators are "neutral" about spending additional time to meet the requirements. A rating greater than "4" indicates that the aviators are willing to spend additional time to meet the requirements, and a rating less than "4" indicates that the aviators are unwilling to spend additional time.

As in previous presentations of rating scale data, frequency distributions are graphically depicted for (a) the requirement whose rating distribution is most representative of the distributions for all requirements, and (b) the requirement whose rating distribution is the most deviant from the distributions for other requirements. The distributions for the ratings of willingness to spend additional paid and nonpaid time on Emergency Tasks are shown in Figure 46; the distributions for Emergency Tasks were selected because they are representative of the distribution of ratings assigned to all of the Continuation Training Requirements and most of the Additional Military Requirements. It can be seen that the distribution of the ratings of willingness to spend additional paid time to meet Emergency Task training requirements is extremely negatively skewed (Figure 46a), indicating that the majority of the aviators are extremely willing to spend additional paid time to meet the requirement. In contrast, the distribution of the ratings to spend additional nonpaid time is extremely positively skewed (Figure 46b), indicating that the majority of the aviators are unwilling to spend additional nonpaid time to meet the requirement.

The rating distributions for willingness to spend additional time to meet the requirements for Preparation for Inspections and Additional Nonflying Duties are shown in Figures 47 and 48, respectively. Figures 47a and 48a depict the ratings of willingness to spend additional paid time to meet these requirements; the distributions indicate that the

Table 23

Descriptive Data Summary Table: Willingness to Spend Additional Paid Time to Meet Continuation Training and Additional Military Requirements

a. Continuation Training

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	516	512	543	338	46	426	246	935	3562
	M	5.83	5.75	5.90	5.55	5.50	5.83	5.36	5.63	5.71
	SD	1.34	1.49	1.42	1.56	1.36	1.50	1.74	1.54	1.51
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	84.5	80.5	84.2	78.1	71.7	83.3	73.6	80.0	81.0
Emergency Procedures	n	515	511	544	337	46	429	247	937	3566
	M	5.69	5.62	5.71	5.42	5.28	5.68	5.22	5.55	5.58
	SD	1.39	1.58	1.51	1.59	1.39	1.57	1.82	1.57	1.56
	MO	7.00	7.00	7.00	7.00	4.00	7.00	7.00	7.00	7.00
	%	80.4	77.1	79.6	73.3	65.2	79.7	68.0	77.3	77.1
Instruments	n	514	507	541	337	44	429	245	931	3548
	M	5.81	5.70	5.89	5.60	5.66	5.80	5.42	5.64	5.71
	SD	1.43	1.61	1.43	1.55	1.20	1.52	1.80	1.56	1.54
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	83.5	79.9	83.9	77.4	77.3	82.1	75.9	79.3	80.6
Terrain Flight (NOE)	n	497	496	520	319	N/A	425	218	847	3322
	M	5.72	5.78	5.76	5.51	N/A	5.61	5.11	5.56	5.62
	SD	1.47	1.51	1.50	1.60	N/A	1.61	1.94	1.61	1.59
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	82.1	80.4	81.0	75.9	N/A	77.4	67.0	78.1	78.4
Unaided Night Tactical	n	390	380	348	222	N/A	273	132	554	2299
	M	5.72	5.75	5.59	5.46	N/A	5.78	5.11	5.52	5.60
	SD	1.55	1.60	1.69	1.71	N/A	1.60	1.96	1.74	1.68
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	80.8	80.5	75.9	75.7	N/A	80.6	65.9	76.0	77.4
Night Vision Goggles (NVG)	n	324	301	275	182	N/A	214	114	454	1864
	M	5.67	5.97	5.42	5.45	N/A	5.79	5.03	5.52	5.60
	SD	1.69	1.46	1.89	1.78	N/A	1.67	2.08	1.77	1.75
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	80.2	85.0	73.5	75.8	N/A	81.3	62.3	76.5	77.6
Tactical/Special	n	475	483	483	300	39	389	211	775	3155
	M	5.74	5.67	5.71	5.43	5.62	5.64	5.14	5.53	5.59
	SD	1.44	1.60	1.53	1.63	1.35	1.65	1.90	1.65	1.61
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	82.9	76.8	78.1	74.0	76.9	78.1	65.4	75.5	76.7

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to specific type of unit.

Note: In most instances, the modal rating is "7."

Table 23 (Continued)

Descriptive Data Summary Table: Willingness to Spend Additional Paid Time to Meet Continuation Training and Additional Military Requirements

a. Continuation Training (Continued)

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Mission	n	498	502	530	330	46	422	244	908	3480
	M	5.77	5.63	5.69	5.30	5.65	5.71	5.56	5.52	5.60
	SD	1.41	1.62	1.52	1.65	1.32	1.59	1.69	1.62	1.58
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	82.1	76.7	77.5	70.0	73.9	78.7	78.3	74.6	76.7
Additional	n	484	490	514	322	43	405	236	866	3360
	M	5.59	5.52	5.52	5.16	4.98	5.42	5.15	5.43	5.43
	SD	1.55	1.73	1.69	1.76	1.82	1.76	1.88	1.68	1.71
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	75.8	74.7	73.9	64.3	53.5	70.4	66.1	72.8	71.8

b. Additional Military Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training	n	338	334	350	209	32	263	157	635	2318
	M	5.58	5.53	5.59	5.35	5.19	5.52	5.15	5.34	5.44
	SD	1.50	1.63	1.61	1.64	1.55	1.73	1.83	1.70	1.66
	MO	7.00	7.00	7.00	7.00	4.00	7.00	7.00	7.00	7.00
	%	76.6	74.3	73.1	69.9	59.4	73.0	65.6	69.8	71.8
Pre- and Post-flight	n	515	507	540	336	46	426	246	938	3554
	M	5.11	5.13	5.24	4.79	4.35	5.10	4.67	5.02	5.03
	SD	1.62	1.79	1.71	1.72	2.02	1.80	1.84	1.76	1.75
	MO	7.00	7.00	7.00	4.00	4.00	7.00	4.00	7.00	7.00
	%	63.3	62.3	66.3	53.0	39.1	60.8	51.6	60.4	60.4
Nonflying Aviation Evaluation	n	517	506	534	335	45	426	246	929	3538
	M	5.02	5.20	5.16	4.74	4.29	5.11	4.71	5.06	5.03
	SD	1.73	1.85	1.82	1.85	2.13	1.82	2.12	1.83	1.85
	MO	7.00	7.00	7.00	4.00	4.00	7.00	7.00	7.00	7.00
	%	61.1	67.2	66.3	53.1	44.4	63.8	58.1	62.3	62.5

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to specific type of unit.

Note: In most instances, the modal rating is "7."

Table 23 (Continued)

Descriptive Data Summary Table: Willingness to Spend Additional Paid Time to Meet Continuation Training and Additional Military Requirements

b. Additional Military Requirements (Continued)

Training Requirement		TYPE OF ARNG AVIATION UNIT								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Military Education	n	510	496	529	333	46	417	240	915	3486
	M	4.76	4.73	4.65	4.25	3.52	4.56	4.02	4.63	4.56
	SD	1.90	2.07	2.05	2.05	2.31	2.10	2.27	2.03	2.06
	MO	7.00	7.00	7.00	4.00	1.00	7.00	1.00	7.00	7.00
	%	55.9	58.5	53.7	45.3	32.6	51.8	42.9	54.5	52.8
Inspections	n	498	491	514	331	43	415	240	922	3454
	M	4.04	4.10	4.02	3.76	3.28	4.11	3.42	4.11	3.99
	SD	2.13	2.25	2.18	2.15	2.23	2.24	2.23	2.19	2.20
	MO	4.00	7.00	4.00	1.00	1.00	7.00	1.00	7.00	1.00
	%	40.2	43.0	39.5	35.3	20.9	42.4	28.3	32.2	39.9
Career Development Courses	n	504	499	529	335	45	424	244	921	3501
	M	5.25	5.24	5.18	4.83	4.58	5.26	5.00	5.15	5.15
	SD	1.76	1.91	1.91	1.97	1.97	1.91	2.08	1.89	1.91
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	71.2	70.1	66.9	59.7	51.1	70.8	66.0	65.7	67.1
Additional Nonflying Duties	n	508	495	521	330	45	421	243	904	3467
	M	4.20	4.18	4.00	3.81	3.40	4.15	3.56	3.98	4.01
	SD	2.15	2.30	2.26	2.20	2.27	2.29	2.32	2.24	2.25
	MO	7.00	7.00	7.00	1.00	1.00	7.00	1.00	1.00	1.00
	%	44.9	47.7	42.0	38.2	28.9	44.7	35.8	42.3	42.7

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to specific type of unit.

Note: In most instances, the modal rating is "7."

Table 24

Descriptive Data Summary Table: Willingness to Sepnd Additional Nonpaid Time to Meet Continuation Training and Additional Military Requirements

a. Continuation Training

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	516	510	546	336	45	427	245	932	3557
	M	2.55	2.41	2.54	2.34	2.44	2.15	1.94	2.37	2.37
	SD	1.72	1.74	1.82	1.76	1.60	1.73	1.43	1.67	1.72
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	15.5	14.9	16.8	14.6	8.90	11.7	7.30	13.4	13.9
Emergency Procedures	n	514	509	543	336	44	428	245	935	3554
	M	2.42	2.27	2.44	2.21	2.25	2.06	1.91	2.29	2.27
	SD	1.63	1.61	1.77	1.67	1.37	1.64	1.42	1.60	1.64
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	13.0	11.4	14.9	11.9	4.50	9.60	7.30	11.6	11.7
Instruments	n	509	508	538	334	44	431	242	931	3537
	M	2.43	2.35	2.49	2.27	2.43	2.12	1.87	2.35	2.32
	SD	1.67	1.71	1.79	1.73	1.65	1.70	1.39	1.66	1.69
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	13.9	14.2	15.8	12.9	9.10	12.1	6.60	13.4	13.3
Terrain Flight (NOE)	n	498	494	518	321	N/A	429	217	848	3325
	M	2.25	2.28	2.32	2.20	N/A	1.95	1.72	2.15	2.17
	SD	1.55	1.68	1.67	1.67	N/A	1.59	1.28	1.57	1.60
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	10.2	13.4	12.5	11.8	N/A	9.10	5.10	10.1	10.7
Unaided Night Tactical	n	386	385	343	212	N/A	272	129	542	2269
	M	2.18	2.23	2.23	2.14	N/A	1.89	1.77	2.17	2.14
	SD	1.57	1.71	1.68	1.67	N/A	1.51	1.39	1.62	1.62
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	11.4	13.0	12.5	11.3	N/A	8.50	7.80	10.7	11.2
Night Vision Goggles (NVG)	n	318	304	267	174	N/A	212	110	446	1831
	M	2.14	2.37	2.18	2.09	N/A	1.85	1.88	2.19	2.14
	SD	1.57	1.80	1.71	1.68	N/A	1.56	1.50	1.65	1.66
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	10.7	15.5	12.4	11.5	N/A	9.40	10.0	11.4	11.8
Tactical/Special	n	478	486	485	302	36	400	213	769	3169
	M	2.19	2.21	2.15	2.10	2.28	1.87	1.78	2.12	2.09
	SD	1.55	1.66	1.57	1.60	1.60	1.55	1.32	1.53	1.56
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	10.3	11.7	9.70	9.90	11.1	8.20	6.10	8.70	9.50

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to a specific type of unit.

Note: In most instances, the modal rating is "1."

Table 24 (Continued)

Descriptive Data Summary Table: Willingness to Spend Additional Nonpaid Time to Meet Continuation Training and Additional Military Requirements

a. Continuation Training (Continued)

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Mission	n	492	505	529	330	42	426	240	895	3459
	M	2.20	2.18	2.18	2.06	2.45	1.89	1.80	2.18	2.11
	SD	1.54	1.63	1.59	1.55	1.77	1.54	1.37	1.54	1.56
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	10.4	10.9	10.0	9.40	14.3	7.70	6.70	9.00	9.40
Additional	n	482	498	512	322	41	410	235	861	3361
	M	2.08	2.11	2.15	1.97	2.00	1.78	1.70	2.08	2.02
	SD	1.50	1.62	1.59	1.51	1.40	1.47	1.28	1.50	1.52
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	8.70	10.8	9.80	8.40	7.30	6.60	5.10	8.30	8.50

b. Additional Military Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training	n	367	348	349	224	34	281	172	658	2433
	M	2.24	2.18	2.19	2.15	2.35	1.87	1.88	2.20	2.14
	SD	1.57	1.61	1.64	1.68	1.65	1.50	1.43	1.62	1.60
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	10.1	11.2	9.50	11.6	11.8	8.90	8.10	10.0	10.0
Pre- and Post-flight	n	516	506	536	337	44	432	244	932	3547
	M	2.25	2.02	2.12	1.99	1.89	1.84	1.73	2.12	2.03
	SD	1.50	1.48	1.58	1.50	1.30	1.44	1.30	1.52	1.49
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	7.60	7.30	9.90	8.00	2.30	7.20	4.90	8.00	7.70
Nonflying Aviation Evaluation	n	518	509	535	335	44	432	243	930	3546
	M	2.02	2.04	2.05	1.85	1.98	1.82	1.65	2.08	1.97
	SD	1.44	1.51	1.50	1.35	1.47	1.42	1.21	1.50	1.45
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	6.60	8.10	8.00	5.70	4.50	6.50	4.50	7.70	7.00

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to a specific type of unit.

Note: In most instances, the modal rating is "1."

Table 24 (Continued)

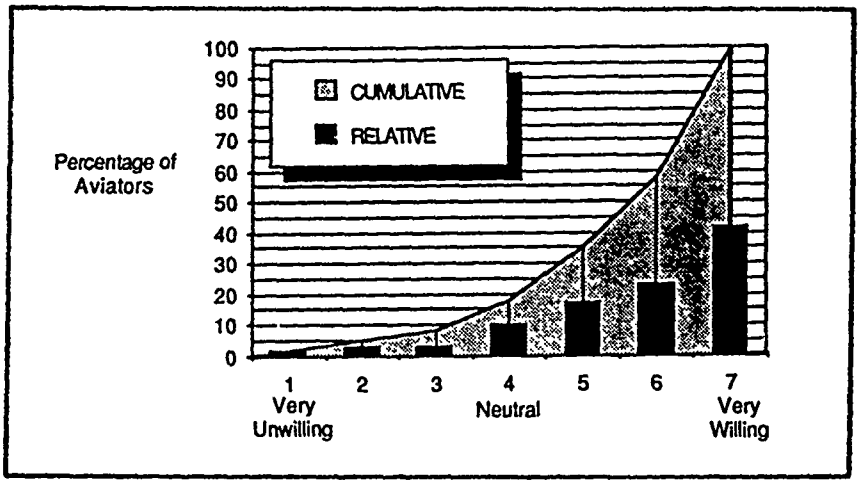
Descriptive Data Summary Table: Willingness to Sepnd Additional Nonpaid Time to Meet Continuation Training and Additional Military Requirements

b. Additional Military Requirements (Continued)

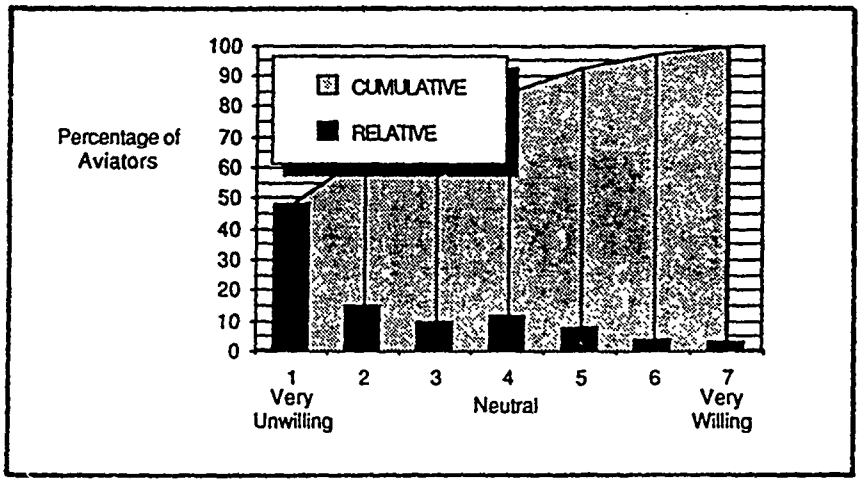
Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Military Education	n	513	490	525	336	44	424	241	919	3492
	M	1.95	1.93	1.93	1.78	1.82	1.71	1.56	1.94	1.87
	SD	1.43	1.44	1.51	1.36	1.33	1.34	1.17	1.44	1.41
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	7.40	6.90	7.80	5.70	2.30	5.70	3.30	6.60	6.50
Inspections	n	494	496	515	331	45	419	240	916	3456
	M	1.79	1.76	1.74	1.71	1.71	1.56	1.44	1.90	1.75
	SD	1.30	1.37	1.38	1.33	1.33	1.29	1.02	1.39	1.32
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	3.80	6.20	5.80	4.80	2.20	4.30	1.20	5.40	4.80
Career Development Courses	n	509	495	523	333	44	429	242	920	3495
	M	2.39	2.32	2.40	2.17	2.48	2.12	1.99	2.33	2.29
	SD	1.74	1.74	1.81	1.57	1.68	1.63	1.54	1.70	1.70
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	13.4	12.7	14.5	8.40	9.10	9.30	7.90	11.9	11.6
Additional Nonflying Duties	n	509	494	519	331	45	423	242	914	3477
	M	1.79	1.73	1.70	1.71	1.78	1.52	1.41	1.75	1.69
	SD	1.33	1.29	1.34	1.34	1.35	1.20	1.02	1.32	1.29
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	5.10	4.90	5.40	4.80	4.40	4.30	2.50	4.80	4.70

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to a specific type of unit.

Note: In most instances, the modal rating is "1."

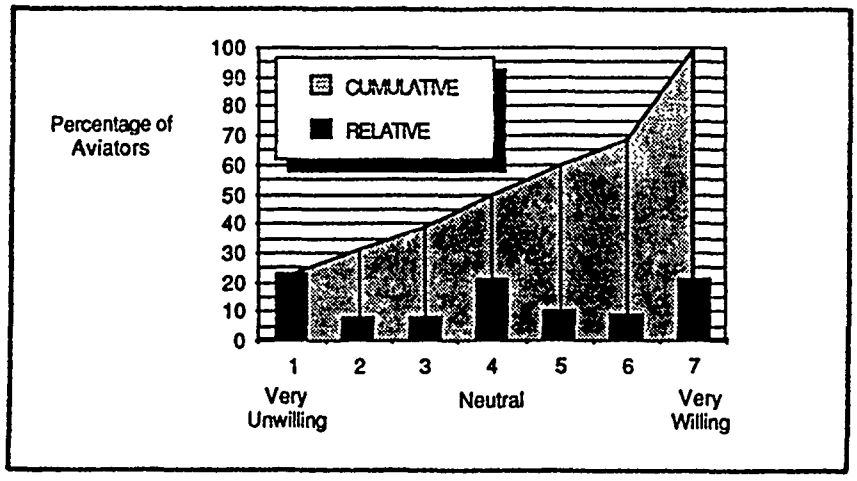


a. Willingness to spend additional paid time.

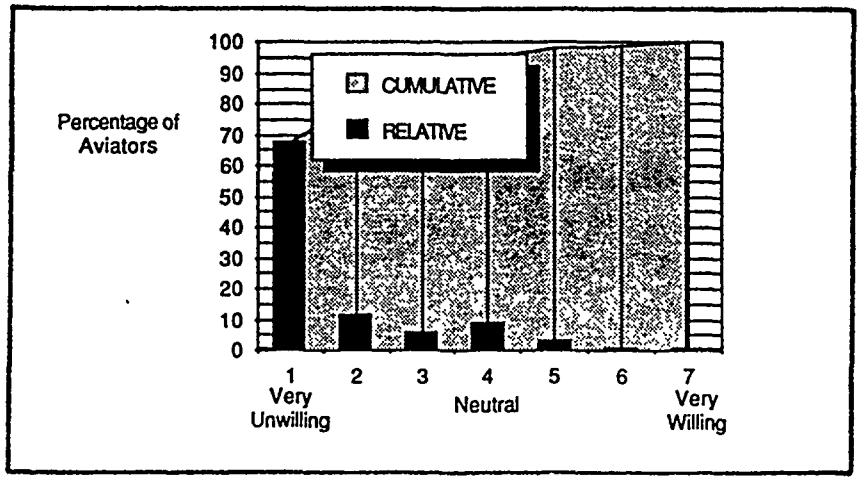


b. Willingness to spend additional nonpaid time.

Figure 46. Frequency distributions for the ratings of willingness to spend additional time to meet Emergency Task requirements.

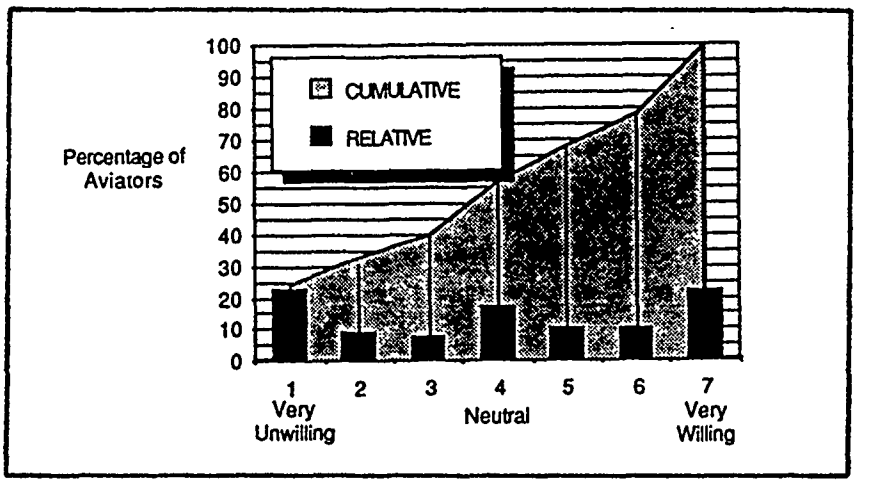


a. Willingness to spend additional paid time.

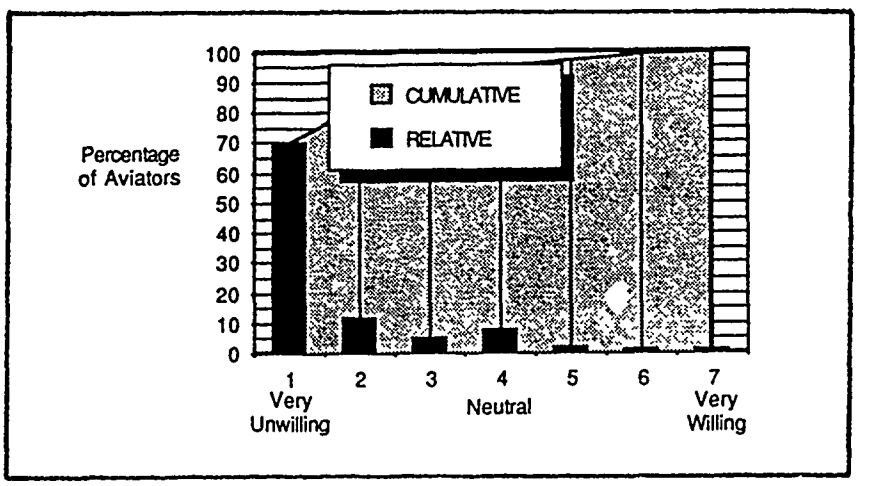


b. Willingness to spend additional nonpaid time.

Figure 47. Frequency distributions for the ratings of willingness to spend additional time to meet Preparation for Inspection requirements.



a. Willingness to spend additional paid time.



b. Willingness to spend additional nonpaid time.

Figure 48. Frequency distributions for ratings of willingness to spend additional time to meet Additional Nonflying Duties requirements.

aviators tended to assign one of three ratings to the requirements: "1," "4," or "7." Further analyses comparing the rating distributions for warrant and commissioned officers suggest that warrant officers are more likely to assign a rating of "1," indicating that they are extremely unwilling to spend additional paid time to meet these requirements, while commissioned officers are more likely to assign a rating of "7," indicating that they are extremely willing to spend additional paid time.

Figures 47b and 48b show the ratings of willingness to spend additional nonpaid time to meet the requirements for Preparation for Inspections and Additional Nonflying Duties. The figures show that the distributions for the ratings of willingness to spend additional nonpaid time to meet these requirements are extremely positively skewed and thus are similar to the distributions for each of the remaining Additional Military Requirements, as well as the Continuation Training Requirements. Considered as a whole, the distributions indicate that most of the aviators are unwilling to spend additional nonpaid time to meet any of their current training requirements.

The information presented in Figures 47 and 48 indicates that the ratings of both willingness to spend additional paid time and willingness to spend additional nonpaid time deviate significantly from a normal distribution. Therefore, instead of showing the mean ratings assigned to each requirement, Figures 49 and 50 depict the percentages of aviators who selected a rating value of "5" or higher, indicating that they are willing to spend additional time to meet the requirements. The solid bars in Figures 49 and 50 show the percentage values for paid time; the cross-hatched bars show the percentage values for nonpaid time. Figure 49 shows the percentages for Continuation Training Requirements; Figure 50 shows the percentages for Additional Military Requirements. For each requirement, the percentages are based on the number of aviators in the total sample who indicated that the requirement applied to them. The sample sizes on which the percentages for willingness to spend additional paid time are based can be found in Tables 23a and 23b; the sample sizes on which the percentages for willingness to spend additional nonpaid time are based can be found in Tables 24a and 24b.

Differences Between Proportions

Differences Among Units and Requirements

Since the distributions for the ratings of willingness to spend additional time to meet the training requirements show a significant deviation from normality, parametric tests were not used to make inferences about differences in the ratings assigned to the different requirements or the ratings assigned to a given requirement by aviators in the different types of units. Instead, inferences were based on both visual inspection of the rating distributions and tests of the differences between proportions. It is clear from even a casual examination

of the tabular data (see Tables 23 and 24) that, for a given requirement, there are no practically significant differences among the units. In fact, there is a remarkable degree of uniformity among the mean ratings for units and the proportions of aviators in each unit who are willing to spend additional time to meet the requirements. Because of the uniformity of the results across the different types of units, subsequent analyses were based on the responses of the aviators in the total sample.

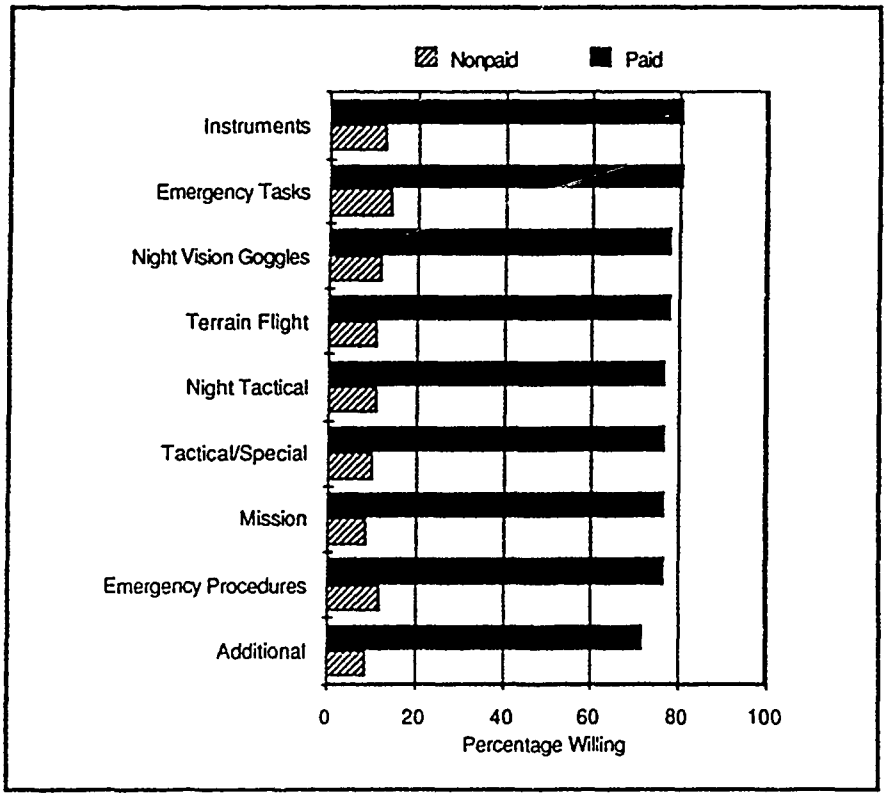


Figure 49. Percentage of aviators willing to spend additional time to meet Continuation Training Requirements (see Table 23a and Table 24a for sample sizes).

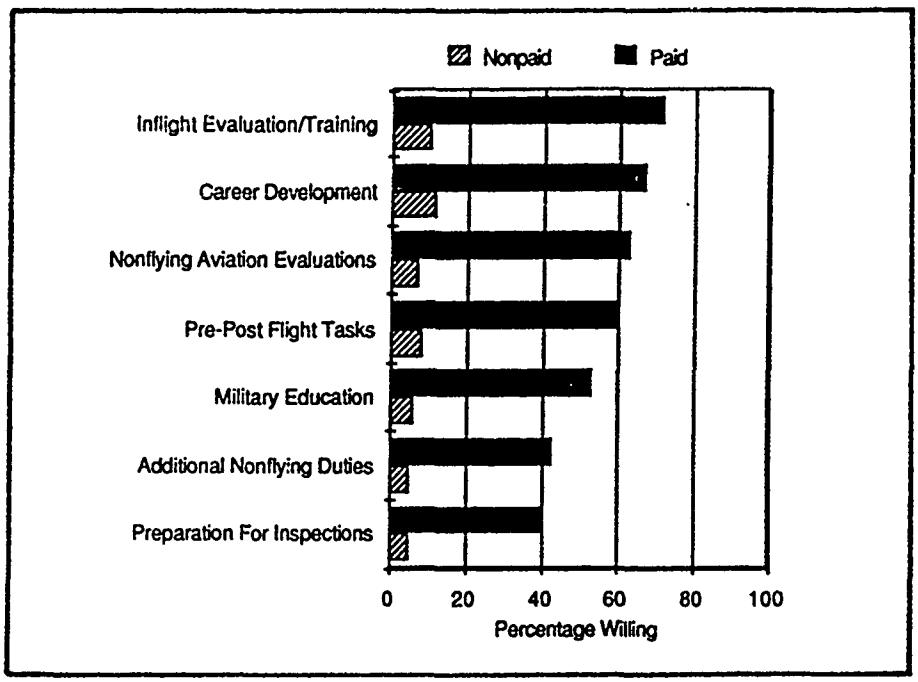


Figure 50. Percentage of aviators willing to spend additional time to meet Additional Military Requirements (see Table 23b and Table 24b for sample sizes).

In general, the data indicate that a large proportion of the aviators in each type of unit are willing to spend additional paid time to meet the requirements, but are unwilling to spend additional nonpaid time. The statistical analyses of the differences between proportions were based on the proportion of aviators who indicated that they are willing to spend additional time (paid and nonpaid) to meet the requirements. The proportions were based on the total number of aviators who selected rating categories "5," "6," or "7." Examination of the proportions of aviators who are willing to spend additional time to meet the requirements indicates that practically meaningful differences exist only among the proportions of aviators who are willing to spend additional paid time to meet specific Additional Military Requirements. Analyses were conducted to determine whether the proportion of aviators who are willing to spend additional paid time to meet a given Additional Military Requirement differs meaningfully from the proportion for each remaining requirement. The statistical tests were based on a procedure recommended by Cohen (1977) in which a statistic called h is computed.[7] Cohen defines h as the difference between the arcsine transformed values of two proportions. The value of h is interpreted to indicate whether

[7]A more general version of this procedure was described in the overview to the Results section.

the differences between proportions represent small, medium, or large effect sizes.

Table 25 shows the proportion (p) of aviators who are willing to spend additional paid time to meet each of the Additional Military Requirements. The proportions indicate that over half the aviators are willing to spend additional paid time to meet (a) aviation related requirements (i.e., Inflight Evaluation/Training [p = .72], Nonflying Aviation Evaluations [p = .63], and Pre- and Post-flight [p = .60]), and (b) career related requirements (i.e., Career Development [p = .67] and Military Education [p = .53]). In contrast, less than half of the aviators are willing to spend additional paid time to meet requirements that are unrelated to career progression or aviation (i.e., Additional Nonflying Duties [p = .43] and Preparation for Inspections [p = .40]).

Table 25

Proportion of Aviators Willing to Spend Additional Paid Time to Meet Additional Military Requirements

Requirement	p
Inflight Evaluation	.72
Career Development	.67
Nonflying Evaluation	.63
Pre- Post-Flight	.60
Military Education	.53
Nonflying Duties	.43
Preparation for Inspections	.40

Note: p = observed proportions in response categories 5-7.

Table 26 shows the h value for each comparison of the proportions for the Additional Military Requirements. The h values indicate that the differences between the proportions for certain requirements are both statistically and practically significant. It is noteworthy that, compared to all other Additional Military Requirements, a significantly lower proportion of aviators are willing to spend additional paid time to meet Preparation for Inspection (p = .40) requirements and Additional Nonflying Duties (p = .43). The differences between the proportions for these requirements and the proportions for Inflight Evaluation/Training and Career Development requirements represent medium effect sizes. The differences between the proportions for these requirements and those for Nonflying Aviation Evaluation, Pre- and Post-flight, and Military Education requirements represent small effect sizes.

Table 26

Effect Sizes for Comparison of Proportions of Total Sample Willing to Spend Additional Paid Time to Meet Additional Military Requirements

		Effect Size (h) of Differences Between Proportions						
		1	2	3	4	5	6	7
1	Inflight Evaluation	---	.11	.19	.25*	.40*	.60**	.68**
2	Career Development	.11	---	.08	.15	.29*	.50**	.55**
3	Nonflying Evaluation	.19	.08	---	.06	.20*	.40*	.47*
4	Pre- Post-Flight	.25*	.15	.06	---	.14	.34*	.40*
5	Military Education	.40*	.29*	.20*	.14	---	.20*	.26*
6	Nonflying Duties	.60**	.50**	.40*	.34*	.20*	---	.06
7	Preparation for Inspections	.68**	.55**	.47*	.40*	.26*	.06	---

*Small effect size = .20. **Medium effect size = .50.

Differences From a Hypothetical Proportion

Null and alternative hypotheses were generated about the aviators' willingness to spend additional paid and nonpaid time to meet the training requirements. The null hypothesis in each instance is that the proportion of ratings assigned to categories 5-7, indicating willingness to spend additional time, does not differ significantly from the proportion that is expected by chance (.34) (Winkler, 1972). Hereafter, the proportion expected by chance (.34) is referred to as the "expected proportion." Cohen's procedure was used to compute h values that were interpreted to yield the statistical and practical significance of the differences between the observed and expected proportions for these categories.

Willingness to spend additional paid time. Results of the effect size analyses of the aviators' willingness to spend additional paid time to meet Continuation Training and Additional Military Requirements are summarized in Tables 27 and 28, respectively. The results shown in Table 27 indicate that the effect size for the difference between the observed proportion and the expected proportion is large for each of the Continuation Training Requirements except Additional tasks; the h value (.76) for Additional tasks is only slightly less than the cutoff for a

Table 27

Summary of Analyses of Effect Size for Willingness To Spend Additional Paid Time to Meet Continuation Training Requirements

Training Requirement	n	p	h
Emergency Tasks	3562	.81	.98***
Emergency Procedures	3566	.77	.88***
Instruments	3548	.81	.98***
Terrain Flight (NOE)	3322	.78	.93***
Unaided Night Tactical	2299	.77	.88***
Night Vision Goggles (NVG)	1864	.78	.90***
Tactical/Special	3155	.77	.88***
Mission	3480	.77	.88***
Additional	3360	.72	.76**

Note: α = .02 for each requirement.
p = observed proportion in response categories 5-7.
h = effect size of difference between observed and expected proportions.
**Medium effect size. ***Large effect size.

Table 28

Summary of Analyses of Effect Size for Willingness to Spend Additional Paid Time to Meet Additional Military Requirements

Training Requirement	n	p	h
Inflight Evaluation/ Training	2318	.72	.76**
Pre- and Post-flight	3554	.60	.51**
Nonflying Aviation Evaluation	3538	.63	.57**
Military Education	3486	.53	.37*
Inspections	3454	.40	.10
Career Development Courses	3501	.67	.65**
Additional Nonflying Duties	3467	.43	.16

Note: α = .02 for each requirement.
p = observed proportion in response categories 5-7.
h = effect size of difference between observed and expected proportions.
*Small effect size. **Medium effect size.

large effect size. In contrast, the data in Table 28 reveal that no large effect size was found for the differences between observed and expected proportions for the tasks in the Additional Military Requirements category. Differences between observed and hypothesized proportions for four of the requirements represent medium effect sizes: Inflight Evaluation/Training (h = .76), Career Development Courses (h = .65), Nonflying Aviation Evaluation (h = .57), and Pre- and Post-flight (h = .51). The difference in proportions for Military Education (h = .37) represents a small effect size.

Willingness to spend additional nonpaid time. Results of the analyses of the aviators' willingness to spend additional nonpaid time to meet the two categories of requirements are presented in Tables 29 and 30. The results presented in Table 29 show that the difference between observed and expected proportions was large enough to achieve a medium effect size for each of the Continuation Training Requirements. The results presented in Table 30 show that the difference between observed and expected proportions was large enough to achieve a large effect size for two requirements: Preparation for Inspections (h = .82) and Additional Nonflying Duties (h = .82). A medium effect size ($.50 \leq h < .80$) was found for the remaining Additional Military Requirements.

It can be concluded from these data that the proportion of aviators who checked categories 5-7 was sufficiently below the expected proportion to represent a statistically and practically significant deviation for each requirement. Furthermore, the direction of the

Table 29

Summary of Analyses of Effect Size for Willingness to Spend Additional Nonpaid Time to Meet Continuation Training Requirements

Training Requirement	n	p	h
Emergency Tasks	3557	.14	.50**
Emergency Procedures	3554	.12	.56**
Instruments	3537	.13	.53**
Terrain Flight (NOE)	3325	.11	.59**
Unaided Night Tactical	2269	.11	.59**
Night Vision Goggles (NVG)	1831	.12	.56**
Tactical/Special	3169	.10	.62**
Mission	3459	.09	.66**
Additional	3361	.09	.66**

Note: α = .02 for each requirement.
**Medium effect size.

Table 30

Summary of Analyses of Effect Size for Willingness to Spend Additional Nonpaid Time to Meet Additional Military Requirements

Training Requirement	n	p	h
Inflight Evaluation/ Training	2433	.10	.62**
Pre- and Post-flight	3547	.08	.69**
Nonflying Aviation Evaluation	3546	.07	.73**
Military Education	3492	.07	.73**
Inspections	3456	.05	.82***
Career Development Courses	3495	.12	.56**
Additional Nonflying Duties	3477	.05	.82***

Note: α = .02 for each requirement.
**Medium effect size. ***Large effect size.

difference indicates that the aviators are unwilling to spend additional nonpaid time to meet any of the training requirements. The large effect sizes for Preparation for Inspections and Additional Nonflying Duties indicate that the aviators are least willing to spend additional nonpaid time to meet these requirements.

Factors Influencing the Ratings

Statistical tests were conducted to identify specific variables that may predict the aviators' ratings of willingness to spend additional time to meet the training requirements. To achieve this objective, a series of multiple regression analyses was performed on the aviators' ratings to spend additional time, both paid and nonpaid, to meet each of the Continuation Training and Additional Military Requirements. The variables that were entered as potential predictors of the ratings are listed below:

- adequacy of the requirement for maintaining a safe level of proficiency;
- adequacy of the time allocated to meet the requirement;
- primary aircraft type (e.g., utility, attack, observation, cargo);
- total military flight hours;
- years of military service;
- highest aviator qualification (e.g., pilot, IP);
- years in the ARNG;

- rank (e.g., warrant officer, commissioned officer);
- age;
- marital status (e.g., married, single);
- spouse's attitude toward the ARNG;
- distance from home to the facility;
- commuting time from home to the facility;
- civilian income;
- hours spent on civilian job;
- supervisor's attitude;
- effect of work schedule on ability to attend ARNG training;
- career intentions; and
- general satisfaction with the ARNG job.

The results from the regression analyses indicate that, for most of the requirements, the willingness ratings have correlations of .23 or less with the predictor variables. The two exceptions are the ratings of willingness to spend additional paid time to meet the requirements for Military Education and Preparation for Inspections. For each of these requirements, the correlation between the ratings of the adequacy of time to meet the requirement and the willingness to spend additional paid time to meet the requirement is -.33. In other words, aviators who judge that the amount of time for meeting Military Education and Preparation for Inspection requirements is inadequate are more likely to be willing to spend additional paid time to meet these requirements than aviators who judge the time to be adequate or more than adequate. When all the predictor variables are combined in a regression equation to predict the aviators' willingness ratings, the highest R^2 is .15.

Obstacles to Training (Research Question #6)

As described in the Methodology section, the aviators reviewed a comprehensive list of potential obstacles to training, which had been identified during the pretest, and checked each one judged to interfere with their ability to meet specific training requirements (see Table 2). For the reader's convenience, the list of potential obstacles is repeated below:

- Unavailability of IPs,
- Unavailability of Support Personnel,
- Unavailability of Aircraft,
- Unavailability of Support Equipment,
- Unsatisfactory Operational Hours of the AASF,
- Unavailability of Training Support Areas,
- Insufficient Number of Flight Hours,
- Nonaviation Obstacles, and
- Insufficient Amount of Personal Time.

The aviators' responses to the obstacles were evaluated by computing the percentage of aviators who checked each obstacle for each training requirement; the percentages were based on the number of aviators in each type of unit and in the total sample who indicated that

the requirement applied to them. Percentages that equal or exceed 25% of the aviators were defined as operationally significant[8] and are highlighted with an asterisk in tabular summaries of the data. Summaries of the percentages of aviators who identified specific obstacles to meeting Initial Qualification and Transition Training Requirements are presented in Appendices S and T, respectively; summaries of the percentages for Continuation Training and Additional Military Requirements are presented and discussed in the succeeding text.

Obstacles to Meeting Continuation Training Requirements

Table 31 summarizes the percentage of aviators in the total sample who identified specific obstacles to meeting Continuation Training Requirements. The percentages indicate that five factors pose significant obstacles for the total ARNG aviator force. The obstacles are:

- Unavailability of Support Equipment,
- Unavailability of Training Support Areas,
- Unavailability of IPs,
- An Insufficient Number of Flight Hours, and
- An Insufficient Amount of Personal Time.

While these factors are obstacles to meeting the requirements for ARNG aviators, in general, it is possible that other obstacles are encountered by aviators in specific types of units. Furthermore, it is possible that the five general obstacles are more serious problems for certain types of units than others. To provide additional information about the obstacles encountered by ARNG aviators, Tables 32a through 32i show the percentages of aviators in the different types of units who identified each of the factors as obstacles to meeting specific Continuation Training Requirements. The tables show that, in addition to the five obstacles identified by the total sample of aviators, the two additional obstacles listed below are encountered by the aviators in specific types of units:

- Unavailability of Aircraft, and
- Nonaviation Factors.

Considered as a whole, the data suggest that the obstacles encountered by ARNG aviators represent two areas of concern:

- Unavailability of Training Resources, and
- Insufficient Time.

The obstacles in each of these categories are described in detail in the succeeding paragraphs.

---

[8]The criterion for "operational significance" was decided upon after consultation with NGB personnel. No statistical criterion, per se, was used to evaluate the data.

Table 31

Percentage of Aviators Identifying Obstacles to Meeting Continuation Training Requirements

	Obstacle								
Continuation Training Requirement	Instructor Pilot	Support Personnel	Aircraft	Equipment	AASF Hours	Training Areas	Flight Hours	Non-Aviation	Personal Time
Emergency Tasks (n=3376)	36*	04	19	08	16	09	32*	23	25*
Emergency Procedures (n=3344)	25*	03	08	12	11	11	16	19	26*
Instrument Tasks (n=3374)	27*	03	23	16	13	06	30*	20	24
Terrain Flight (n=3143)	21	05	14	08	11	40*	30*	20	22
Unaided Night Tactical (n=1737)	23	05	16	16	15	27*	31*	16	24
Night Vission Goggle (n=1190)	28*	06	19	44*	12	28*	29*	15	24
Tactical/Special (n=2785)	17	07	15	16	12	26*	31*	22	23
Mission (n=3238)	13	07	15	14	12	19	30*	24	23
Additional (n=3038)	11	05	12	10	10	12	26*	22	25*

Key: n = total number of aviators responding to each item.

Note: Obstacles considered by 25% or more of the aviators are identified by an asterisk (*).

Table 32

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

a. Percentage of Aviators Identifying Unavailability of Instructor Pilots as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	47* (n=489)	35* (n=470)	37* (n=497)	29* (n=318)	24 (n= 45)	36* (n=421)	42* (n=233)	32* (n=903)	36* (n=3376)
Emergency Procedures (orally or in SFTS)	32* (n=481)	26* (n=465)	26* (n=495)	20 (n=315)	18 (n= 44)	25* (n=418)	29* (n=229)	23 (n=897)	25* (n=3344)
Instrument Tasks	35* (n=484)	29* (n=477)	30* (n=490)	22 (n=320)	15 (n= 46)	27* (n=423)	28* (n=232)	24 (n=902)	27* (n=3374)
Terrain Flight (NOE)	25* (n=470)	23 (n=466)	22 (n=472)	16 (n=307)	N/A	18 (n=423)	22 (n=195)	19 (n=810)	21 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	28* (n=284)	23 (n=319)	20 (n=248)	18 (n=167)	N/A	25* (n=211)	31* (n= 86)	21 (n=422)	23 (n=1737)
Night Vission Goggle (NVG)	31* (n=200)	32* (n=214)	25* (n=171)	20 (n=112)	N/A	30* (n=138)	37* (n= 60)	25* (n=295)	28* (n=1190)
Tactical/Special Tasks	22 (n=420)	19 (n=426)	18 (n=415)	13 (n=272)	09 (n= 33)	17 (n=366)	17 (n=179)	15 (n=674)	17 (n=2785)
Mission Tasks	17 (n=460)	14 (n=458)	14 (n=478)	09 (n=314)	07 (n= 42)	14 (n=409)	15 (n=227)	11 (n=850)	13 (n=3238)
Additional Tasks	14 (n=428)	14 (n=433)	12 (n=445)	08 (n=300)	03 (n= 39)	09 (n=383)	12 (n=212)	10 (n=798)	11 (n=3038)

Key: N_T= total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

b. Percentage of Aviators Identifying Unavailability of Support Personnel as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	05 (n=489)	05 (n=470)	03 (n=497)	02 (n=318)	04 (n= 45)	02 (n=421)	10 (n=233)	04 (n=903)	04 (n=3376)
Emergency Procedures (orally or in SFTS)	03 (n=481)	03 (n=465)	01 (n=495)	02 (n=315)	00 (n= 44)	02 (n=418)	04 (n=229)	03 (n=897)	03 (n=3344)
Instrument Tasks	04 (n=484)	04 (n=477)	02 (n=490)	03 (n=320)	02 (n= 46)	01 (n=423)	07 (n=232)	04 (n=902)	03 (n=3374)
Terrain Flight (NOE)	06 (n=470)	05 (n=466)	05 (n=472)	03 (n=307)	N/A	05 (n=423)	08 (n=195)	06 (n=810)	05 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	07 (n=284)	03 (n=319)	04 (n=248)	04 (n=167)	N/A	06 (n=211)	07 (n= 86)	04 (n=422)	05 (n=1737)
Night Vission Goggle (NVG)	07 (n=200)	07 (n=214)	05 (n=171)	01 (n=112)	N/A	05 (n=138)	08 (n= 60)	06 (n=295)	06 (n=1190)
Tactical/Special Tasks	09 (n=420)	06 (n=426)	04 (n=415)	04 (n=272)	09 (n= 33)	07 (n=366)	09 (n=179)	07 (n=674)	07 (n=2785)
Mission Tasks	07 (n=460)	06 (n=458)	04 (n=478)	04 (n=314)	14 (n= 42)	09 (n=409)	15 (n=227)	05 (n=850)	07 (n=3238)
Additional Tasks	06 (n=428)	05 (n=433)	04 (n=445)	02 (n=300)	13 (n= 39)	03 (n=383)	10 (n=212)	05 (n=798)	05 (n=3038)

Key: N_T= total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

c. Percentage of Aviators Identifying Unavailability of Aircraft as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	32* (n=489)	16 (n=470)	10 (n=497)	23 (n=318)	11 (n= 45)	[illegible] (n=421)	31* (n=233)	17 (n=903)	19 (n=3376)
Emergency Procedures (orally or in SFTS)	14 (n=481)	07 (n=465)	03 (n=495)	09 (n=315)	02 (n= 44)	05 (n=418)	13 (n=229)	09 (n=897)	08 (n=3344)
Instrument Tasks	33* (n=484)	21 (n=477)	15 (n=490)	27* (n=320)	09 (n= 46)	18 (n=423)	37* (n=232)	20 (n=902)	23 (n=3374)
Terrain Flight (NOE)	23 (n=470)	15 (n=466)	09 (n=472)	15 (n=307)	N/A	11 (n=423)	24 (n=195)	10 (n=810)	14 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	27* (n=284)	14 (n=319)	08 (n=248)	20 (n=167)	N/A	12 (n=211)	27* (n= 86)	13 (n=422)	16 (n=1737)
Night Vission Goggle (NVG)	29* (n=200)	21 (n=214)	12 (n=171)	16 (n=112)	N/A	14 (n=138)	30* (n= 60)	16 (n=295)	19 (n=1190)
Tactical/Special Tasks	26* (n=420)	12 (n=426)	09 (n=415)	14 (n=272)	15 (n= 33)	13 (n=366)	20 (n=179)	12 (n=674)	15 (n=2785)
Mission Tasks	26* (n=460)	12 (n=[illegible]8)	10 (n=478)	15 (n=314)	12 (n= 42)	12 (n=409)	28* (n=227)	13 (n=850)	15 (n=3238)
Additional Tasks	20 (n=428)	10 (n=433)	07 (n=445)	11 (n=300)	10 (n= 39)	08 (n=383)	21 (n=212)	11 (n=798)	12 (n=3038)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

d. Percentage of Aviators Identifying Unavailability of Support Equipment as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	11 (n=489)	07 (n=470)	09 (n=497)	09 (n=318)	07 (n= 45)	10 (n=421)	11 (n=233)	06 (n=903)	08 (n=3376)
Emergency Procedures (orally or in SFTS)	13 (n=481)	12 (n=465)	11 (n=495)	13 (n=315)	07 (n= 44)	11 (n=418)	09 (n=229)	11 (n=897)	12 (n=3344)
Instrument Tasks	18 (n=484)	16 (n=477)	18 (n=490)	22 (n=320)	11 (n= 46)	16 (n=423)	18 (n=232)	12 (n=902)	16 (n=3374)
Terrain Flight (NOE)	10 (n=470)	06 (n=466)	08 (n=472)	08 (n=307)	N/A	07 (n=423)	08 (n=195)	07 (n=810)	08 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	16 (n=284)	09 (n=319)	19 (n=248)	16 (n=167)	N/A	20 (n=211)	27* (n= 86)	14 (n=422)	16 (n=1737)
Night Vission Goggle (NVG)	43* (n=200)	30* (n=214)	58* (n=171)	37* (n=112)	N/A	51* (n=138)	57* (n= 60)	44* (n=295)	44* (n=1190)
Tactical/Special Tasks	22 (n=420)	13 (n=426)	17 (n=415)	17 (n=272)	15 (n= 33)	16 (n=366)	13 (n=179)	14 (n=674)	16 (n=2785)
Mission Tasks	20 (n=460)	13 (n=458)	14 (n=478)	11 (n=314)	12 (n= 42)	18 (n=409)	17 (n=227)	09 (n=850)	14 (n=3238)
Additional Tasks	12 (n=428)	08 (n=433)	10 (n=445)	10 (n=300)	13 (n= 39)	10 (n=383)	12 (n=212)	08 (n=798)	10 (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

e. Percentage of Aviators Identifying Unsatisfactory Operational Hours of the AASF as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	18 (n=489)	15 (n=470)	19 (n=497)	15 (n=318)	27* (n= 45)	14 (n=421)	18 (n=233)	16 (n=903)	16 (n=3376)
Emergency Procedures (orally or in SFTS)	11 (n=481)	11 (n=465)	13 (n=495)	08 (n=315)	21 (n= 44)	11 (n=418)	12 (n=229)	11 (n=897)	11 (n=3344)
Instrument Tasks	13 (n=484)	11 (n=477)	16 (n=490)	11 (n=320)	24 (n= 46)	13 (n=423)	13 (n=232)	13 (n=902)	13 (n=3374)
Terrain Flight (NOE)	12 (n=470)	11 (n=466)	14 (n=472)	06 (n=307)	N/A	13 (n=423)	12 (n=195)	11 (n=810)	11 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	16 (n=284)	13 (n=319)	18 (n=248)	07 (n=167)	N/A	15 (n=211)	21 (n= 86)	15 (n=422)	15 (n=1737)
Night Vission Goggle (NVG)	13 (n=200)	15 (n=214)	15 (n=171)	05 (n=112)	N/A	10 (n=138)	13 (n= 60)	12 (n=295)	12 (n=1190)
Tactical/Special Tasks	11 (n=420)	12 (n=426)	15 (n=415)	07 (n=272)	27* (n= 33)	11 (n=366)	13 (n=179)	12 (n=674)	12 (n=2785)
Mission Tasks	11 (n=460)	11 (n=458)	13 (n=478)	08 (n=314)	21 (n= 42)	10 (n=409)	19 (n=227)	12 (n=850)	12 (n=3238)
Additional Tasks	10 (n=428)	08 (n=433)	12 (n=445)	06 (n=300)	18 (n= 39)	09 (n=383)	13 (n=212)	10 (n=798)	10 (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

f. Percentage of Aviators Identifying Unavailability of Training Support Areas as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	10 (n=489)	10 (n=470)	10 (n=497)	08 (n=318)	07 (n= 45)	07 (n=421)	14 (n=233)	07 (n=903)	09 (n=3376)
Emergency Procedures (orally or in SFTS)	13 (n=481)	10 (n=465)	12 (n=495)	09 (n=315)	09 (n= 44)	13 (n=418)	14 (n=229)	10 (n=897)	11 (n=3344)
Instrument Tasks	10 (n=484)	06 (n=477)	06 (n=490)	05 (n=320)	04 (n= 46)	06 (n=423)	07 (n=232)	05 (n=902)	06 (n=3374)
Terrain Flight (NOE)	41* (n=470)	42* (n=466)	50* (n=472)	31* (n=307)	N/A	34* (n=423)	35* (n=195)	40* (n=810)	40* (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	24 (n=284)	31* (n=319)	33* (n=248)	21 (n=167)	N/A	18 (n=211)	31* (n= 86)	27*5 (n=422)	27* (n=1737)
Night Vission Goggle (NVG)	27* (n=200)	32* (n=214)	32* (n=171)	21 (n=112)	N/A	21 (n=138)	40* (n= 60)	28* (n=295)	28* (n=1190)
Tactical/Special Tasks	29* (n=420)	32* (n=426)	31* (n=415)	18 (n=272)	12 (n= 33)	19 (n=366)	22 (n=179)	25* (n=674)	26* (n=2785)
Mission Tasks	29* (n=460)	30* (n=458)	22 (n=478)	13 (n=314)	07 (n= 42)	12 (n=409)	19 (n=227)	12 (n=850)	19 (n=3238)
Additional Tasks	15 (n=428)	19 (n=433)	14 (n=445)	07 (n=300)	08 (n= 39)	07 (n=383)	11 (n=212)	10 (n=798)	12 (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

g. Percentage of Aviators Identifying an Insufficient Number of Flight Hours as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=958)	Total Sample (N_T=3638)
Emergency Tasks	37* (n=489)	30* (n=470)	34* (n=497)	30* (n=318)	13 (n= 45)	40* (n=421)	24 (n=233)	28* (n=903)	32* (n=3376)
Emergency Procedures (orally or in SFTS)	18 (n=481)	15 (n=465)	18 (n=495)	16 (n=315)	7 (n= 44)	21 (n=418)	11 (n=229)	15 (n=897)	16 (n=3344)
Instrument Tasks	36* (n=484)	30* (n=477)	32* (n=490)	30* (n=320)	17 (n= 46)	39* (n=423)	23 (n=232)	25* (n=902)	30* (n=3374)
Terrain Flight (NOE)	33* (n=470)	29* (n=466)	31* (n=472)	28* (n=307)	N/A	38* (n=423)	25* (n=195)	26* (n=810)	30* (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	37* (n=284)	32* (n=319)	28* (n=248)	28* (n=167)	N/A	38* (n=211)	26* (n= 86)	26* (n=422)	31* (n=1737)
Night Vission Goggle (NVG)	37* (n=200)	32* (n=214)	28* (n=171)	23 (n=112)	N/A	28* (n=138)	22 (n= 60)	25* (n=295)	29* (n=1190)
Tactical/Special Tasks	37* (n=420)	31* (n=426)	29* (n=415)	30* (n=272)	12 (n= 33)	40* (n=366)	18 (n=179)	28* (n=674)	31* (n=2785)
Mission Tasks	35* (n=460)	31* (n=458)	30* (n=478)	27* (n=314)	19 (n= 42)	38* (n=409)	24 (n=227)	26* (n=850)	30* (n=3238)
Additional Tasks	29* (n=428)	29* (n=433)	25* (n=445)	24 (n=300)	10 (n= 39)	34* (n=383)	17 (n=212)	25* (n=798)	26* (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

h. Percentage of Aviators Identifying Nonaviation Factors as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=958)	Total Ssample (N_T=3638)
Emergency Tasks	21 (n=489)	21 (n=470)	20 (n=497)	20 (n=318)	40* (n= 45)	29* (n=421)	25* (n=233)	23 (n=903)	23 (n=3376)
Emergency Procedures (orally or in SFTS)	19 (n=481)	16 (n=465)	17 (n=495)	16 (n=315)	43* (n= 44)	25* (n=418)	21 (n=229)	20 (n=897)	19 (n=3344)
Instrument Tasks	16 (n=484)	19 (n=477)	20 (n=490)	17 (n=320)	37* (n= 46)	27* (n=423)	22 (n=232)	20 (n=902)	20 (n=3374)
Terrain Flight (NOE)	16 (n=470)	18 (n=466)	17 (n=472)	20 (n=307)	N/A	27* (n=423)	26* (n=195)	20 (n=810)	20 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	16 (n=284)	11 (n=319)	11 (n=248)	17 (n=167)	N/A	23 (n=211)	21 (n= 86)	15 (n=422)	16 (n=1737)
Night Vission Goggle (NVG)	13 (n=200)	14 (n=214)	11 (n=171)	13 (n=112)	N/A	23 (n=138)	25* (n= 60)	15 (n=295)	15 (n=1190)
Tactical/Special Tasks	20 (n=420)	20 (n=426)	20 (n=415)	19 (n=272)	46* (n= 33)	28* (n=366)	22 (n=179)	22 (n=674)	22 (n=2785)
Mission Tasks	25* (n=460)	21 (n=458)	22 (n=478)	21 (n=314)	41* (n= 42)	30* (n=409)	27* (n=227)	22 (n=850)	24 (n=3238)
Additional Tasks	21 (n=428)	19 (n=433)	20 (n=445)	20 (n=300)	41* (n= 39)	29* (n=383)	23 (n=212)	22 (n=798)	22 (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 32 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Continuation Training Requirements

i. Percentage of Aviators Identifying an Insufficient Amount of Personal Time as an Obstacle

Continuation Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=958)	Total Sample (N_T=3638)
Emergency Tasks	23 (n=489)	23 (n=470)	27* (n=497)	27* (n=318)	24 (n= 45)	24 (n=421)	22 (n=233)	26* (n=903)	25* (n=3376)
Emergency Procedures (orally or in SFTS)	24 (n=481)	24 (n=465)	28* (n=495)	29* (n=315)	18 (n= 44)	26* (n=418)	23 (n=229)	26* (n=897)	26* (n=3344)
Instrument Tasks	21 (n=484)	23 (n=477)	26* (n=490)	28* (n=320)	22 (n= 46)	24 (n=423)	22 (n=232)	26* (n=902)	24 (n=3374)
Terrain Flight (NOE)	17 (n=470)	20 (n=466)	21 (n=472)	24 (n=307)	N/A	22 (n=423)	20 (n=195)	24 (n=810)	22 (n=3143)
Unaided Night Tactical Tasks (Night Hawk)	20 (n=284)	24 (n=319)	21 (n=248)	35* (n=167)	N/A	17 (n=211)	24 (n= 86)	26* (n=422)	24 (n=1737)
Night Vission Goggle (NVG)	23 (n=200)	23 (n=214)	16 (n=171)	30* (n=112)	N/A	18 (n=138)	28* (n= 60)	30* (n=295)	24 (n=1190)
Tactical/Special Tasks	19 (n=420)	22 (n=426)	25* (n=415)	25* (n=272)	15 (n= 33)	23 (n=366)	21 (n=179)	25* (n=674)	23 (n=2785)
Mission Tasks	20 (n=460)	20 (n=458)	24 (n=478)	27* (n=314)	24 (n= 42)	24 (n=409)	22 (n=227)	25* (n=850)	23 (n=3238)
Additional Tasks	23 (n=428)	22 (n=433)	26* (n=445)	28* (n=300)	28* (n= 39)	25* (n=383)	23 (n=212)	27* (n=798)	25* (n=3038)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Unavailability of Training Resources

Unavailability of Support Equipment is one of the major obstacles encountered by the total sample of ARNG aviators. Examination of the data presented in Table 31 reveals that the factor is primarily an obstacle for meeting NVG continuation training requirements. Specifically, the data indicate that 44% of all the aviators for whom NVG continuation training is applicable cite Unavailability of Support Equipment as an obstacle to meeting the requirement. Figure 51 depicts the percentage of aviators in each type of unit who cite the factor as an obstacle to meeting NVG continuation training. The percentages indicate that Unavailability of Support Equipment is a major obstacle for the aviators in each type of unit that must meet the NVG requirement.

The data presented in Table 31 indicate that Unavailability of the Aircraft, itself, is not a problem for ARNG aviators as a whole; however, the data presented in Table 32c indicate that the factor represents a substantial problem for the performance of Continuation Training Requirements in Attack and Transportation units. The data presented in Appendix S (Obstacles to Meeting Transition Training Requirements) further suggest that an insufficient number of AH-1 airframes are available for the performance of required Transition Training in Attack units. Feedback provided by the aviators in Transportation units indicates that, while the airframes used by these units are generally available, they often are not fully mission capable because of problems encountered in maintenance.

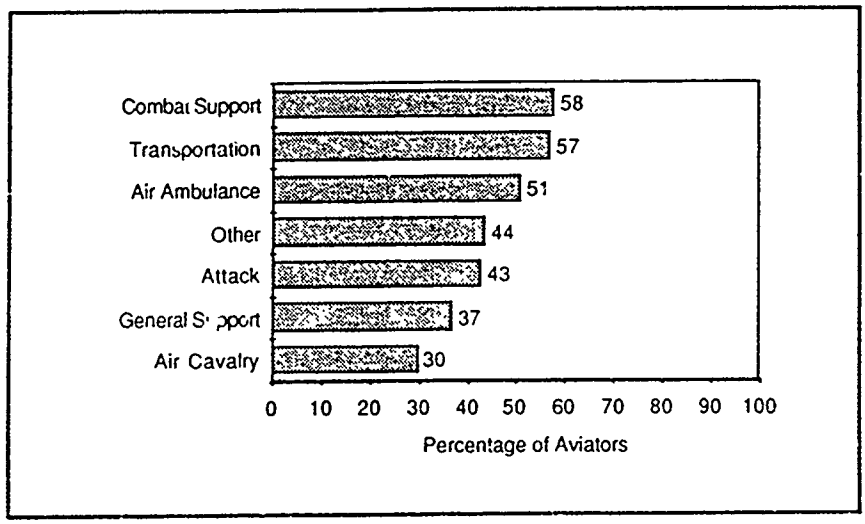


Figure 51. Percentage of aviators in each type of unit who cite Unavailability of Equipment as an obstacle to NVG continuation training.

Note: NVG training does not apply to Aerial Surveillance units.

Examination of the data presented in Tables 31 and 32f reveals that, in general, Unavailability of Training Support Areas is a major obstacle for night and day tactical tasks; these tasks typically require the availability of approved areas for the performance of training. The tactical task that is most seriously affected by unavailability of approved training areas is NOE training. Forty percent of the aviators in the total sample, who stated that NOE continuation training is applicable, cite training areas as an obstacle to meeting the requirement. Figure 52 depicts the percentage of aviators in each type of unit who cite Unavailability of Training Support Areas as an obstacle to meeting NOE continuation training (see Table 32f). The data indicate that Unavailability of Training Support Areas represents a significant obstacle for aviators in all the different types of units, although the extent of the problem varies among the units.

Unavailability of Training Support Areas also poses a significant problem for tactical requirements other than NOE training. The additional tactical requirements include NVG training, Unaided Night Tactical training, and Tactical/Special training. The percentages shown in Table 32f further suggest that Unavailability of Training Support Areas is a major problem for meeting these requirements in each of the following types of units: Attack, Air Cavalry, Combat Support, Transportation, and "Other".

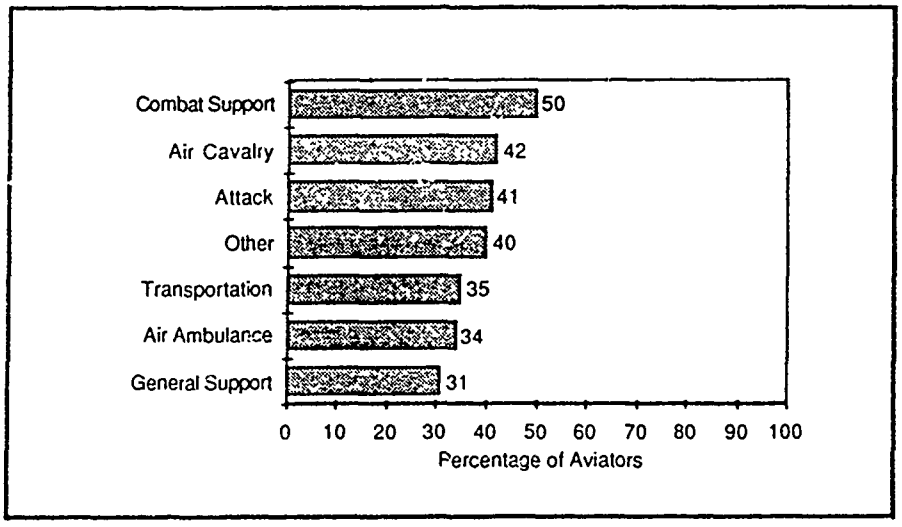


Figure 52. Percentage of aviators in each type of unit who cite Unavailability of Training Support Areas as an obstacle to NOE continuation training.

Note: NOE training does not apply to Aerial Surveillance units.

Inspection of the data in Table 31 reveals that Unavailability of IPs poses a general problem for the requirements that depend upon the presence of an IP. The requirements include the following: Emergency Tasks, Emergency Procedures, Instruments, and NVG tasks. Figure 53 graphically depicts the percentage of aviators in the total sample who cited Unavailability of IPs as an obstacle to meeting each of the Continuation Training Requirements. The data in Table 32a further indicate that a sizable percentage of the aviators in all the major types of units, except Aerial Surveillance, report that Unavailability of IPs is an obstacle to meeting the requirements. In a separate questionnaire item, IPs were also identified as the major resource problem encountered by the aviators during evening or weekend AFTP training.

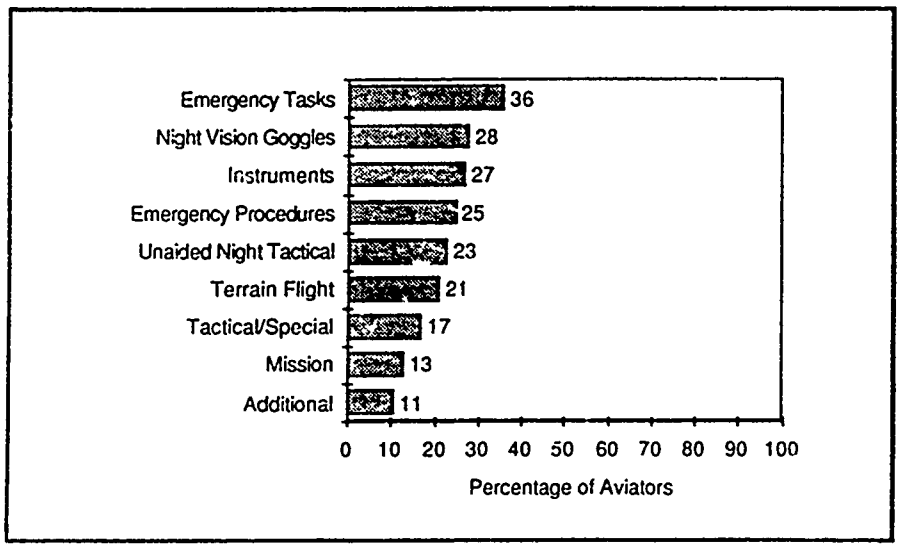


Figure 53. Percentage of aviators identifying Unavailability of Instructor Pilots as an obstacle to meeting Continuation Training Requirements.

Insufficient Time

The percentages shown in Table 31 indicate that an Insufficient Number of Flight Hours is a problem for all Continuation Training Requirements that are performed in the aircraft. However, the data shown in Table 32g indicate that the factor generally is not a major obstacle for aviators in Aerial Surveillance and Transportation units. The demographic data, previously presented, indicate that the aviators in these types of units are typically older and more experienced; consequently, a limited number of flight hours is less likely to have a serious effect on their ability to maintain a safe level of aviator proficiency.

It is noteworthy that an Insufficient Number of Flight Hours poses a significant problem for all the continuation training requirements performed by Attack, Air Cavalry, and Combat Support units. These units are divisional level units and represent approximately 45% of the total ARNG aviator inventory; therefore, the lack of sufficient flight hours for these units has significant implications for the combat readiness level of the ARNG as a whole. Figure 54 shows the percentage of aviators in each of these types of units who cite an Insufficient Number of Flight Hours as an obstacle to meeting Continuation Training Requirements.

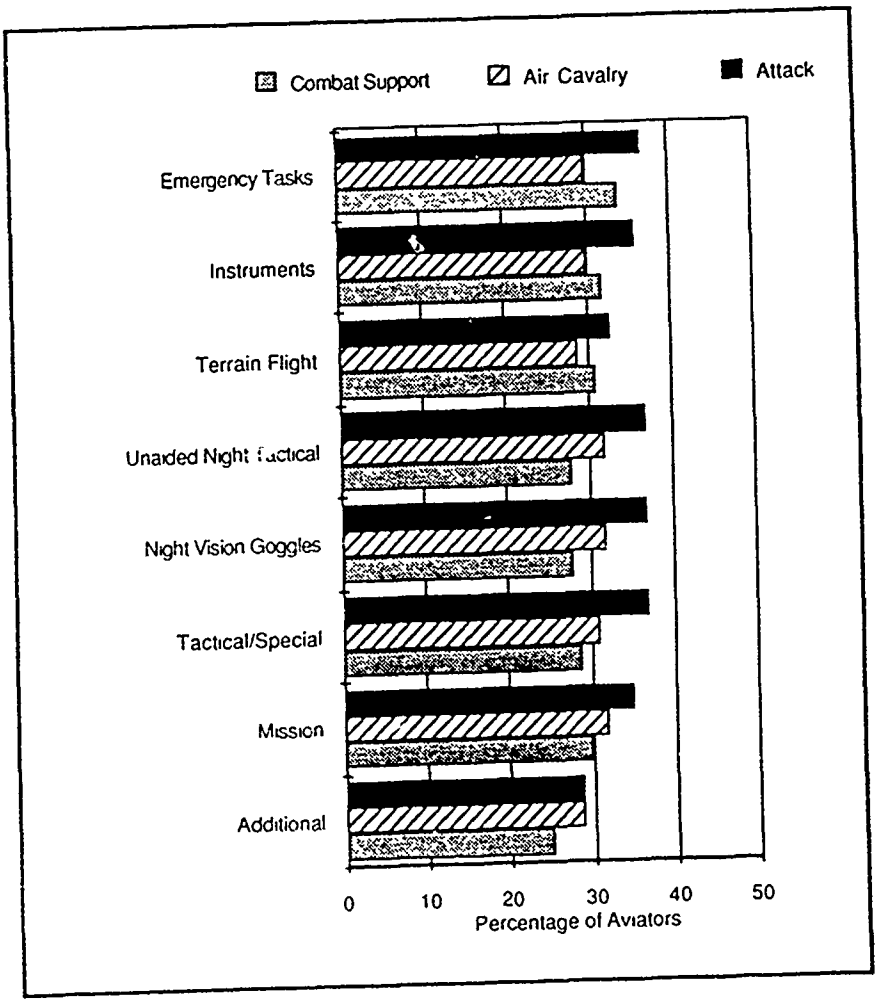


Figure 54. Percentage of aviators in Attack, Air Cavalry, and Combat Support units who cite an Insufficient Number of Flight Hours as an obstacle to Continuation Training Requirements.

Note: Emergency procedures not included.

A second time-related factor identified by the aviators as an obstacle to meeting Continuation Training Requirements is an Insufficient Amount of Personal Time. The percentages shown in Table 31 indicate that approximately 25% of the aviators in the total sample cite personal time as an obstacle to meeting the requirements for (a) tasks that are directly related to safety and (b) additional tasks that are specific to the unit's mission. The finding that the aviators perceive that they have an insufficient amount of personal (i.e., nonpaid) time to meet certain Continuation Training Requirements confirms the aviators' perceptions that the amount of time currently allocated for meeting the requirements is inadequate. The finding also is consistent with the aviators' perceptions that they have an insufficient number of flight hours to meet all Continuation Training Requirements. The data reported in Table 32i indicate that use of personal time poses a problem primarily for the aviators in General Support and "Other" units.

A third time-related obstacle is Nonaviation Factors. Nonaviation Factors include a myriad of activities that consume time that might otherwise be available for flight training (e.g., preparing for inspections, conducting inventories). The data in Table 31 reveal that Nonaviation Factors are not a problem for ARNG aviators, in general; however, as the data in Table 32h show, a large percentage of the aviators in Aerial Surveillance, Air Ambulance, and Transportation units view Nonaviation Factors as obstacles to meeting most of the Continuation Training Requirements. It is possible that, compared to other types of units, the missions performed by these units require the performance of more nonaviation related tasks.

Obstacles to Meeting Additional Military Requirements

Table 33 presents a summary of the percentages of aviators in the total sample who identified each of the factors as an obstacle to meeting Additional Military Requirements; Tables 34a through 34i present the percentages for each of the different types of units. As before, the percentages that equal or exceed 25% of the aviators who indicate that the requirement is applicable to them are defined as operationally significant. In the tables, these values are highlighted with an asterisk.

Insufficient Amount of Personal Time

Inspection of Table 33 reveals that, for the total sample of aviators, an Insufficient Amount of Personal Time is the primary obstacle encountered in meeting Additional Military Requirements. Figure 55 graphically depicts the percentage of aviators who cite Personal Time as an obstacle to meeting each of the requirements. The percentages indicate that the requirements most affected by an Insufficient Amount of Personal Time include (a) activities that are necessary for career progression and (b) activities that are not related to flight

Table 33

Percentage of Aviators Identifying Obstacles to Meeting Additional Military Requirements

	Obstacle								
Additional Military Requirement	Instructor Pilot	Support Personnel	Aircraft	Equipment	AASF Hours	Training Areas	Flight Hours	Non-Aviation	Personal Time
Inflight Evaluation Training (n=2065)	22	04	14	08	11	09	24	19	22
Nontraining Flights (n=3121)	01	05	10	05	06	01	23	13	26*
Pre- and Post-Flight (n=3245)	04	06	01	04	07	01	04	16	21
Nonflying Aviation Evaluation (n=3280)	06	08	01	04	09	03	03	19	35*
Military Education (n=3198)	01	08	01	06	03	04	02	19	44*
Career Development Courses (n=3183)	00	04	00	03	02	02	01	17	50*
Additional Nonflying Duties (n=3051)	00	05	00	03	02	02	02	18	46*
Inspections (n=3116)	01	05	00	03	03	01	02	17	43*

Key: n = total number of aviators responding to each item.

Note: Obstacles considered by 25% or more of the aviators are identified by an asterisk (*).

Table 34

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

a. Percentage of Aviators Identifying Unavailability of Instructor Pilots as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	27* (n=305)	25* (n=290)	24 (n=298)	21 (n=177)	14 (n= 29)	17 (n=254)	25* (n=137)	19 (n=575)	22 (n=2065)
Non-Training Flights	01 (n=428)	02 (n=432)	00 (n=450)	01 (n=298)	00 (n= 39)	01 (n=401)	02 (n=208)	01 (n=865)	01 (n=3121)
Pre- and Post-Flight Tasks	05 (n=465)	04 (n=450)	05 (n=474)	03 (n=308)	03 (n= 40)	04 (n=409)	03 (n=223)	04 (n=876)	04 (n=3245)
Nonflying Aviation Evaluation	10 (n=467)	06 (n=466)	06 (n=473)	07 (n=306)	03 (n= 40)	07 (n=417)	06 (n=227)	05 (n=884)	06 (n=3280)
Military Education	02 (n=458)	01 (n=448)	02 (n=458)	01 (n=304)	00 (n= 43)	01 (n=410)	01 (n=214)	01 (n=863)	01 (n=3198)
Career Development Courses	01 (n=459)	01 (n=445)	00 (n=443)	00 (n=308)	00 (n= 41)	00 (n=410)	01 (n=221)	00 (n=856)	00 (n=3183)
Additional Nonflying Duties	01 (n=439)	00 (n=422)	00 (n=417)	00 (n=292)	00 (n= 43)	00 (n=393)	00 (n=212)	01 (n=833)	00 (n=3051)
Preparation for Inspections	01 (n=445)	01 (n=435)	00 (n=427)	01 (n=307)	00 (n= 43)	01 (n=403)	00 (n=211)	01 (n=845)	01 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

b. Percentage of Aviators Identifying Unavailability of Support Personnel as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	04 (n=305)	02 (n=290)	04 (n=298)	03 (n=177)	03 (n= 29)	02 (n=254)	09 (n=137)	05 (n=575)	04 (n=2065)
Non-Training Flights	05 (n=428)	05 (n=432)	04 (n=450)	05 (n=298)	05 (n= 39)	04 (n=401)	05 (n=208)	06 (n=865)	05 (n=3121)
Pre- and Post-Flight Tasks	07 (n=465)	07 (n=450)	07 (n=474)	06 (n=308)	03 (n= 40)	05 (n=409)	06 (n=223)	06 (n=876)	06 (n=3245)
Nonflying Aviation Evaluation	10 (n=467)	10 (n=466)	08 (n=473)	08 (n=306)	05 (n= 40)	04 (n=417)	07 (n=227)	07 (n=884)	08 (n=3280)
Military Education	12 (n=478)	10 (n=448)	08 (n=458)	06 (n=304)	07 (n= 43)	07 (n=410)	08 (n=214)	07 (n=863)	08 (n=3198)
Career Development Courses	06 (n=459)	06 (n=445)	05 (n=443)	03 (n=308)	05 (n= 41)	03 (n=410)	03 (n=221)	04 (n=856)	04 (n=3183)
Additional Nonflying Duties	08 (n=439)	05 (n=422)	04 (n=417)	05 (n=292)	05 (n= 43)	06 (n=393)	02 (n=212)	05 (n=833)	05 (n=3051)
Preparation for Inspections	06 (n=445)	06 (n=435)	03 (n=427)	06 (n=307)	05 (n= 43)	05 (n=403)	05 (n=211)	06 (n=845)	05 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

c. Percentage of Aviators Identifying Unavailability of Aircraft as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	22 (n=305)	13 (n=290)	09 (n=298)	15 (n=177)	10 (n= 29)	10 (n=254)	23 (n=137)	13 (n=575)	14 (n=2065)
Non-Training Flights	15 (n=428)	08 (n=[illegible])	06 (n=450)	14 (n=298)	08 (n= 39)	05 (n=401)	16 (n=208)	10 (n=865)	10 (n=3121)
Pre- and Post-Flight Tasks	02 (n=465)	[illegible] (n=450)	01 (n=474)	02 (n=308)	00 (n= 40)	02 (n=409)	04 (n=223)	03 (n=876)	02 (n=3245)
Nonflying Aviation Evaluation	00 (n=467)	01 (n=466)	00 (n=473)	01 (n=306)	00 (n= 40)	01 (n=417)	01 (n=227)	01 (n=884)	01 (n=3280)
Military Education	01 (n=458)	00 (n=448)	00 (n=458)	01 (n=304)	00 (n= 43)	00 (n=410)	01 (n=214)	01 (n=863)	01 (n=3198)
Career Development Courses	00 (n=459)	00 (n=445)	00 (n=443)	01 (n=308)	02 (n= 41)	00 (n=410)	00 (n=221)	00 (n=856)	00 (n=3183)
Additional Nonflying Duties	01 (n=439)	00 (n=422)	00 (n=417)	00 (n=292)	02 (n= 43)	00 (n=393)	00 (n=212)	01 (n=833)	00 (n=3051)
Preparation for Inspections	00 (n=445)	00 (n=435)	00 (n=427)	01 (n=307)	02 (n= 43)	01 (n=403)	00 (n=211)	01 (n=845)	00 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

d. Percentage of Aviators Identifying Unavailability of Support Equipment as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	T[illegible] (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	09 (n=305)	07 (n=290)	09 (n=298)	11 (n=177)	00 (n= 29)	06 (n=254)	12 (n=137)	06 (n=575)	08 (n=2065)
Non-Training Flights	06 (n=428)	05 (n=432)	05 (n=450)	05 (n=298)	08 (n= 39)	04 (n=401)	07 (n=208)	05 (n=865)	05 (n=3121)
Pre- and Post-Flight Tasks	04 (n=465)	03 (n=450)	05 (n=474)	04 (n=308)	05 (n= 40)	02 (n=409)	04 (n=223)	04 (n=876)	04 (n=3245)
Nonflying Aviation Evaluation	04 (n=467)	03 (n=466)	04 (n=473)	05 (n=306)	00 (n= 40)	04 (n=417)	03 (n=227)	04 (n=884)	04 (n=3280)
Military Education	07 (n=458)	06 (n=448)	06 (n=458)	05 (n=304)	02 (n= 43)	05 (n=410)	05 (n=214)	05 (n=863)	06 (n=3198)
Career Development Courses	03 (n=459)	03 (n=445)	02 (n=443)	01 (n=308)	02 (n= 41)	02 (n=410)	03 (n=221)	02 (n=856)	03 (n=3183)
Additional Nonflying Duties	04 (n=439)	02 (n=422)	02 (n=417)	02 (n=292)	05 (n= 43)	03 (n=393)	01 (n=212)	03 (n=833)	03 (n=3051)
Preparation for Inspections	04 (n=445)	03 (n=435)	01 (n=427)	03 (n=307)	05 (n= 43)	04 (n=403)	03 (n=211)	03 (n=845)	03 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

e. Percentage of Aviators Identifying Unsatisfactory Operational Hours of the AASF as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	13 (n=305)	10 (n=290)	14 (n=298)	10 (n=177)	21 (n= 29)	10 (n=254)	16 (n=137)	09 (n=575)	11 (n=2065)
Non-Training Flights	07 (n=428)	06 (n=432)	05 (n=450)	04 (n=298)	26* (n= 39)	06 (n=401)	08 (n=208)	07 (n=865)	06 (n=3121)
Pre- and Post-Flight Tasks	09 (n=465)	07 (n=450)	05 (n=474)	06 (n=308)	10 (n= 40)	08 (n=409)	08 (n=223)	07 (n=876)	07 (n=3245)
Nonflying Aviation Evaluation	10 (n=467)	09 (n=466)	09 (n=473)	07 (n=306)	08 (n= 40)	08 (n=417)	09 (n=227)	09 (n=884)	09 (n=3280)
Military Education	03 (n=458)	03 (n=448)	03 (n=458)	02 (n=304)	02 (n= 43)	04 (n=410)	02 (n=214)	03 (n=863)	03 (n=3198)
Career Development Courses	03 (n=459)	02 (n=445)	02 (n=443)	02 (n=308)	07 (n= 41)	03 (n=410)	01 (n=221)	02 (n=856)	02 (n=3183)
Additional Nonflying Duties	03 (n=439)	01 (n=422)	02 (n=417)	01 (n=292)	05 (n= 43)	04 (n=393)	01 (n=212)	02 (n=833)	02 (n=3051)
Preparation for Inspections	03 (n=445)	03 (n=435)	01 (n=427)	02 (n=307)	07 (n= 43)	04 (n=403)	01 (n=211)	03 (n=845)	03 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

f. Percentage of Aviators Identifying Unavailability of Training Support Areas as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	13 (n=305)	08 (n=290)	11 (n=298)	07 (n=177)	03 (n= 29)	07 (n=254)	15 (n=137)	08 (n=575)	09 (n=2065)
Non-Training Flights	01 (n=428)	01 (n=432)	01 (n=450)	00 (n=298)	03 (n= 39)	01 (n=401)	02 (n=208)	02 (n=865)	01 (n=3121)
Pre- and Post-Flight Tasks	02 (n=465)	00 (n=450)	01 (n=474)	01 (n=308)	02 (n= 40)	02 (n=409)	01 (n=223)	02 (n=876)	01 (n=3245)
Nonflying Aviation Evaluation	02 (n=467)	03 (n=466)	02 (n=473)	03 (n=306)	00 (n= 40)	02 (n=417)	04 (n=227)	03 (n=884)	03 (n=3280)
Military Education	05 (n=458)	05 (n=448)	03 (n=458)	04 (n=304)	00 (n= 43)	02 (n=410)	04 (n=214)	04 (n=863)	04 (n=3198)
Career Development Courses	04 (n=459)	02 (n=445)	03 (n=443)	02 (n=308)	02 (n= 41)	02 (n=410)	02 (n=221)	02 (n=856)	02 (n=3183)
Additional Nonflying Duties	03 (n=439)	01 (n=422)	01 (n 417)	01 (n=292)	02 (n= 43)	02 (n=393)	01 (n=212)	02 (n=833)	02 (n=3051)
Preparation for Inspections	02 (n=445)	01 (n=435)	01 (n=427)	01 (n=307)	05 (n= 43)	01 (n=403)	01 (n=211)	01 (n=845)	01 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

g. Percentage of Aviators Identifying an Insufficient Number of Flight Hours as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	32* (n=305)	23 (n=290)	25* (n=298)	17 (n=177)	03 (n= 29)	28* (n=254)	18 (n=137)	22 (n=575)	24 (n=2065)
Non-Training Flights	26* (n=428)	22 (n=432)	16 (n=450)	24 (n=298)	23 (n= 39)	32* (n=401)	18 (n=208)	21 (n=865)	23 (n=3121)
Pre- and Post-Flight Tasks	07 (n=465)	03 (n=450)	06 (n=474)	03 (n=308)	00 (n= 40)	05 (n=409)	05 (n=223)	03 (n=876)	04 (n=3245)
Nonflying Aviation Evaluation	02 (n=467)	02 (n=466)	02 (n=473)	02 (n=306)	00 (n= 40)	03 (n=417)	04 (n=227)	03 (n=884)	03 (n=3280)
Military Education	02 (n=458)	02 (n=448)	02 (n=458)	02 (n=304)	00 (n= 43)	02 (n=410)	02 (n=214)	02 (n=863)	02 (n=3198)
Career Development Courses	02 (n=459)	01 (n=445)	01 (n=443)	02 (n=308)	00 (n= 41)	02 (n=410)	01 (n=221)	01 (n=856)	01 (n=3183)
Additional Nonflying Duties	02 (n=439)	02 (n=422)	01 (n=417)	02 (n=292)	00 (n= 43)	02 (n=393)	01 (n=212)	02 (n=833)	02 (n=3051)
Preparation for Inspections	02 (n=445)	02 (n=435)	01 (n=427)	01 (n=307)	00 (n= 43)	02 (n=403)	01 (n=211)	02 (n=845)	02 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

h. Percentage of Aviators Identifying Nonaviation Factors as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	19 (n=305)	15 (n=290)	17 (n=298)	16 (n=177)	38* (n= 29)	28* (n=254)	20 (n=137)	19 (n=575)	19 (n=2065)
Non-Training Flights	12 (n=428)	10 (n=432)	11 (n=450)	11 (n=298)	26* (n= 39)	17 (n=401)	17 (n=208)	14 (n=865)	13 (n=3121)
Pre- and Post-Flight Tasks	16 (n=465)	16 (n=450)	15 (n=474)	12 (n=308)	33* (n= 40)	19 (n=409)	16 (n=223)	15 (n=876)	16 (n=3245)
Nonflying Aviation Evaluation	17 (n=467)	18 (n=466)	19 (n=473)	17 (n=306)	35* (n= 40)	23 (n=417)	20 (n=227)	20 (n=884)	19 (n=3280)
Military Education	18 (n=458)	18 (n=448)	18 (n=458)	17 (n=304)	33* (n= 43)	22 (n=410)	22 (n=214)	20 (n=863)	19 (n=3198)
Career Development Courses	16 (n=459)	16 (n=445)	16 (n=443)	14 (n=308)	22 (n= 41)	19 (n=410)	22 (n=221)	17 (n=856)	17 (n=3183)
Additional Nonflying Duties	17 (n=439)	16 (n=422)	18 (n=417)	13 (n=292)	26* (n= 43)	22 (n=393)	20 (n=212)	19 (n=833)	18 (n=3051)
Preparation for Inspections	16 (n=445)	16 (n=435)	18 (n=427)	11 (n=307)	26* (n= 43)	19 (n=403)	19 (n=211)	17 (n=845)	17 (n=3116)

Key: N_T= Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

Table 34 (Continued)

Percentage of Aviators in Specific Types of Units Identifying Obstacles to Meeting Additional Military Requirements

1. Percentage of Aviators Identifying an Insufficient Amount of Personal Time as an Obstacle

Additional Military Training Requirement	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Inflight Evaluation/ Training of Other Aviators	23 (n=305)	20 (n=290)	21 (n=298)	24 (n=177)	17 (n= 29)	20 (n=254)	22 (n=137)	25* (n=575)	22 (n=2065)
Non-Training Flights	26* (n=428)	22 (n=432)	24 (n=450)	27* (n=298)	26* (n= 39)	29* (n=401)	24 (n=208)	28* (n=865)	26* (n=3121)
Pre- and Post-Flight Tasks	21 (n=465)	21 (n=450)	20 (n=474)	19 (n=308)	15 (n= 40)	22 (n=409)	20 (n=223)	22 (n=876)	21 (n=3245)
Nonflying Aviation Evaluation	31* (n=467)	36* (n=466)	36* (n=473)	35* (n=306)	28* (n= 40)	38* (n=417)	36* (n=227)	37* (n=884)	35* (n=3280)
Military Education	41* (n=458)	41* (n=448)	41* (n=458)	48* (n=304)	42* (n= 43)	44* (n=410)	47* (n=214)	46* (n=863)	44* (n=3198)
Career Development Courses	51* (n=459)	49* (n=445)	47* (n=443)	56* (n=308)	39* (n= 41)	51* (n=410)	47* (n=221)	51* (n=856)	50* (n=3183)
Additional Nonflying Duties	47* (n=439)	45* (n=422)	42* (n=417)	47* (n=292)	40* (n= 43)	45* (n=393)	47* (n=212)	49* (n=833)	46* (n=3051)
Preparation for Inspections	42* (n=445)	41* (n=435)	41* (n=427)	45* (n=307)	37* (n= 43)	42* (n=403)	40* (n=211)	45* (n=845)	43* (n=3116)

Key: N_T = Total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of the aviators in a type of unit are identified by an asterisk (*).

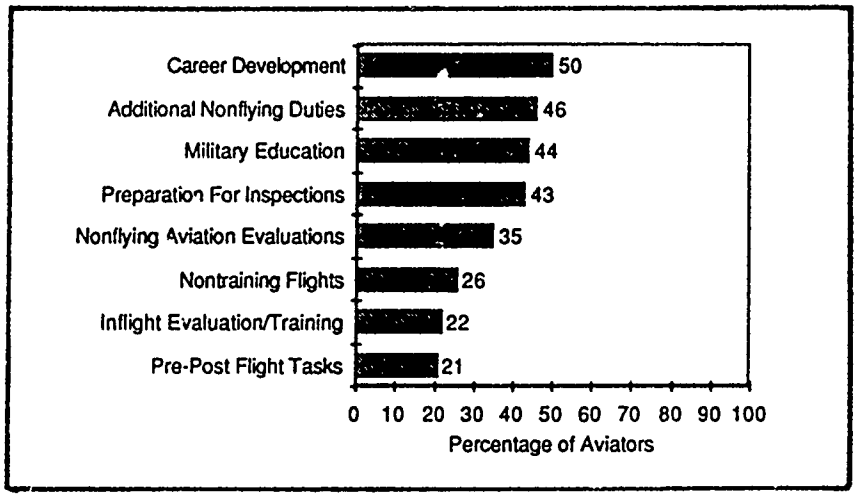


Figure 55. Percentage of aviators identifying an Insufficient Amount of Personal Time as an obstacle to meeting Additional Military Requirements.

training. The data presented in Table 34i further indicate that an Insufficient Amount of Personal Time is a problem for meeting these requirements in all the different types of units.

Obstacles Other Than Personal Time

The data presented in Table 34 reveal that obstacles other than an Insufficient Amount of Personal Time interfere with the ability of aviators in specific types of units to perform Additional Military Requirements. The obstacles include Unavailability of IPs, an Insufficient Number of Flight Hours, and Nonaviation Factors. Unavailability of IPs is a major obstacle to meeting the requirements for Inflight Evaluation/Training in Attack, Air Cavalry, and Transportation units (see Table 34a). An Insufficient Number of Flight Hours is an obstacle to meeting these same requirements in Attack, General Support, and Air Ambulance units; in addition, an Insufficient Number of Flight Hours poses a significant problem for meeting Nontraining Flight requirements in Attack and Air Ambulance units (see Table 34g). Finally, a significant percentage of the aviators in Aerial Surveillance units report that Nonaviation Factors are a major obstacle for meeting all of the Additional Military Requirements (see Table 34h). As previously stated, differences in the missions performed by these units may require the performance of tasks that consume the time needed to meet essential flying and nonflying training requirements.

OVERVIEW AND DISCUSSION

The primary objective of the questionnaire survey is to determine whether ARNG aviators need additional time to meet their current aviation training requirements. A secondary objective is to identify the demographic characteristics of the current force of ARNG aviators. The survey meets the objectives by providing information about:

- the aviators' perceptions of the adequacy of the training time for maintaining a safe level of aviator proficiency,
- the aviators' perceptions of the adequacy of the time allocated for meeting the training requirements,
- the aviators' willingness to spend additional time to meet the requirements,
- the training obstacles encountered by the aviators, and
- the demographic characteristics of the aviators.

The preceding section provided a detailed description of the results of the analyses of each of the above categories of information. This section summarizes the findings and discusses their operational implications for the ARNG aviator force. The section also describes the major limitations of the survey data for meeting the research objectives.

SUMMARY OF RESULTS

Training Requirements

The principal finding of the survey is that ARNG aviators judge that an insufficient amount of time is currently allocated for meeting all Continuation Training Requirements. The time is especially inadequate for meeting NVG tasks, Unaided Night Tactical tasks, and Tactical/Special tasks; furthermore, the aviators perceive that the training requirements for these tasks are inadequate for ensuring a safe level of aviator proficiency. The only Additional Military Requirement for which the aviators judge the training time to be inadequate is Inflight Evaluation/Training; the time allocated for meeting the remaining requirements is viewed as marginally adequate. All of the Additional Military Requirements are perceived as only marginally adequate for maintaining a safe level of aviator proficiency.

There are no practically significant differences among the eight major types of units in either the mean ratings of the adequacy of the requirements or the mean ratings of the adequacy of the time allocated for meeting the requirements. None of the demographic characteristics that were examined as potential predictors of the ratings were consistently related to the aviators' perceptions of the adequacy of the requirements or time.

Willingness to Spend Additional Time

A second major finding of the survey is that the aviators are very willing to spend additional paid time to meet all the Continuation Training Requirements and the Additional Military Requirements that are related to career progression or aviation. The aviators are very unwilling to spend additional nonpaid time to meet any of the Continuation Training or Additional Military Requirements. There are no practically significant differences among the eight major types of units in the mean ratings of willingness to spend additional paid or nonpaid time to meet a given requirement.

Obstacles to Training

ARNG aviators as a whole encounter two major obstacles in meeting Continuation Training Requirements; the obstacles are an Insufficient Number of Flight Hours and the Unavailability of IPs. The major obstacle that the aviators encounter in meeting Additional Military Requirements is an Insufficient Amount of Personal Time. The training requirement whose accomplishment is most impeded by training obstacles is NVG continuation training; Unavailability of Support Equipment (i.e., night vision goggles and cockpit lighting configurations) is the major obstacle encountered by the aviators in each type of unit that must meet the requirement.

While the above obstacles are encountered by ARNG aviators in general, three additional obstacles are encountered in the performance of Continuation Training Requirements in specific types of units. Specifically, Unavailability of Aircraft is a major obstacle for aviators in Attack and Transportation units, and Nonaviation Factors are obstacles for aviators in Aerial Surveillance, Air Ambulance, and Transportation units. In addition, Unavailability of Training Support Areas is an obstacle to meeting night and day tactical tasks primarily in Attack, Air Cavalry, and Combat Support units.

Demographic Characteristics

The questionnaire survey provided information about a number of the demographic characteristics of ARNG aviators. The demographic data were examined to identify characteristics of the aviators that are related to (a) their perceptions of the adequacy of the training requirements and training time, and (b) their willingness to spend additional time to meet the requirements. The demographic data were also used to develop a comprehensive summary of the personal and military characteristics of the aviators. The summary information will assist NGB personnel in understanding the composition and characteristics of the present ARNG aviator force and in projecting future manpower and resource requirements. The characteristics of the aviators are summarized in the succeeding paragraphs.

Personal Characteristics

ARNG aviators have a median age of 36.7 years. Eighty-four percent of the aviators are currently married and 67% have never been divorced. Fifty-five percent of the aviators have a four-year college degree or higher. The aviators typically hold professional/technical managerial positions in their civilian jobs; consequently, compared to the general population, the aviators spend more time on their civilian jobs and earn more money. Specifically, the aviators spend a median of 50 hours per week on their civilian jobs and earn a median annual civilian income of $32,500.

Military Experience

Eighty percent of the current force of ARNG aviators had prior military experience upon entering the ARNG; the median length of total military service for the aviators is 14.0 years. Typically, the aviators have spent 4.2 years on active duty and 8.0 years in the ARNG. Approximately 25% of the aviators have completed between 15 and 20 years of service and, consequently, will be eligible to retire in the next five years.

Flight Experience

ARNG aviators have spent a median of 12.0 years on flight orders. During that time, the aviators have logged a median of 2,000 total military flight hours; 1,200 of these hours have typically been logged in the aviator's primary aircraft. Fifty-five percent of the aviators have some combat flight experience; the median number of combat flight hours for these aviators is 870. In addition, 76% of the aviators have civilian flight experience; the median number of civilian flight hours for these aviators is 500.

Career Intentions

Ninety percent of the ARNG aviators state that they intend to remain in the National Guard until retirement. Thirty-eight percent intend to remain until they reach 20-year retirement eligibility; the median age of these aviators is 36.5 years and the median number of years to 20-year retirement is 7.7. An additional 52% of the aviators intend to remain until they reach 30-year retirement eligibility; the median age of these aviators is 36.9 years and the median number of years to 30-year retirement is 15.0 years. The percentage of aviators who intend to remain in the ARNG until 30-year retirement eligibility increases as a function of the aviators' total years of military service.

Reasons for Joining, Remaining In, and Possibly Leaving the ARNG

The three most important reasons for both joining and staying in the ARNG are Opportunity to Fly, Pay, and Retirement Benefits; Pay and Retirement Benefits are more important reasons for remaining in the ARNG than they are for initially joining the ARNG.

Loss of Flight Status is the single most important reason that might influence the aviators to leave the ARNG. Four of the five remaining most frequently cited reasons for possibly leaving the ARNG reflect a concern about insufficient time for meeting the training requirements. The reasons are: Unrealistic Training Goals for Time/ Resources Available, Administrative Details/ Politics, Insufficient Time to Maintain Proficiency, and Conflict with Civilian Job.

OPERATIONAL IMPLICATIONS

Definition of Remedial Actions

Prior to conducting the survey, the researchers identified a number of remedial actions that might be taken to facilitate the ARNG aviators' ability to meet their current aviation training requirements. The remedial actions that were identified are shown in Figure 56. It can be seen that the actions include options other than the addition of training time.

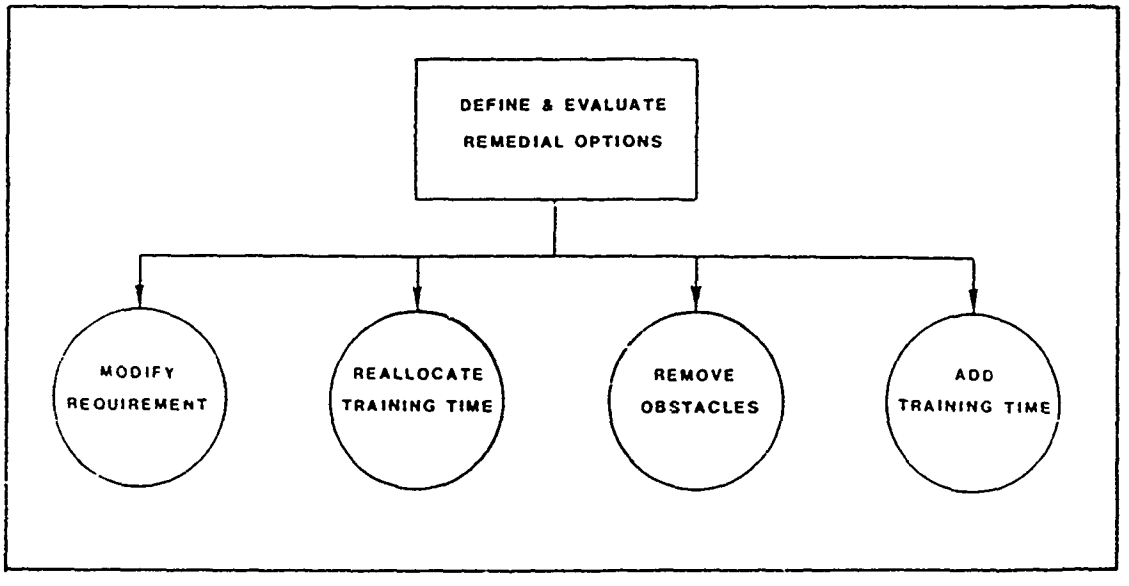


Figure 56. Diagram of the remedial actions for facilitating ARNG aviators' ability to meet current aviation training requirements.

Evaluation of the Remedial Actions

The results of the questionnaire data analyses were used to evaluate the feasibility of each of the remedial actions that were considered. The results support the conclusion that modification of the training requirements and reallocation of the current training time are not feasible solutions to the problem of insufficient time for meeting ARNG aviation training requirements. Modification of the requirements is not feasible since the aviators judge the requirements to be either clearly inadequate or only marginally adequate for maintaining a safe level of aviator proficiency. Similarly, reallocation of the present amount of training time cannot be recommended because the aviators perceive that the training time is inadequate for meeting Continuation Training Requirements and only marginally adequate for meeting Additional Military Requirements. In addition, there are no requirements for which the training time is judged to be more than adequate.

The results of the questionnaire data analyses support the need for two of the remedial actions. The actions include (a) an increase in the total amount of allocated training time, and (b) the removal of obstacles to training. The evidence supporting the need for each of these actions is presented in the succeeding paragraphs.

Increase in the Training Time

A number of the research findings support the conclusion that additional time is necessary to enable ARNG aviators to meet their current aviation training requirements. The most compelling support is provided by the aviators' perceptions of the adequacy of the training time. Specifically, the aviators perceive that the currently allocated training time is clearly inadequate for meeting all of the Continuation Training Requirements. The time is especially inadequate for meeting NVG, Unaided Night Tactical, and Tactical/Special requirements; each of these requirements has been added as a result of aviation force modernization. The aviators also perceive that the time allocated for meeting the Additional Military Requirements is only marginally adequate.

It is noteworthy that the reported perceptions are those of highly educated, highly motivated, and highly experienced aviators. As previously reported, 55% of the current force of ARNG aviators have a four-year college degree or higher, thus suggesting that the aviators are intelligent individuals who are easily trained. The majority of the aviators hold professional/technical managerial positions in their civilian jobs and spend 50 hours or more each week on their jobs. Even so, the aviators enjoy flying and are willing to spend additional paid time to meet their aviation training requirements. Finally, the median total number of flight hours for the aviators is 2,000 hours; 55% of the aviators have accumulated some of these hours in a combat environment. It can be assumed that, if the current amount of allocated training time

is insufficient for the present force, it will surely be inadequate for the younger, less experienced aviators currently entering the ARNG. The problem will be compounded by the addition of still more training requirements (e.g., air-to-air combat training, AH-64 transition training) in future years.

A second finding that supports the need for additional training time is that the aviators perceive time-related factors to be the major obstacles to training. The aviators report that (a) an Insufficient Number of Flight Hours is the major obstacle to meeting Continuation Training Requirements, and (b) an Insufficient Amount of Personal Time is an obstacle to meeting Additional Military Requirements. The identification of these obstacles suggests that the aviators are unable to meet all of their training requirements in the amount of time that is currently allocated; therefore, the aviators are required to spend personal (i.e., nonpaid) time to meet many of the training requirements, especially the nonflying requirements.

Removal of Training Obstacles

In addition to the aforementioned obstacles, which are directly time-related, a number of additional obstacles exist that influence the efficient utilization of the training time. The additional obstacles include the unavailability of human and training resources that are necessary for the conduct of training. The primary human resource problem is Unavailability of IPs; the major training resource problems are (a) Unavailability of Equipment, (b) Unavailability of Aircraft, and (c) Unavailability of Training Support Areas. The absence of these essential resources has a major impact on the aviators' ability to accomplish the training requirements, even when sufficient time is allocated. Thus, in addition to increasing the total amount of training time for ARNG aviators, NGB administrative personnel should initiate actions designed to eliminate the obstacles other than insufficient time. Specifically, steps should be taken to:

- increase the availability of IPs who must supervise the conduct of certain training requirements (e.g., Emergency Tasks),
- increase the availability of equipment that is necessary for the conduct of certain training requirements (e.g., NVG tasks),
- increase the availability of aircraft for the conduct of training in certain types of units (e.g., Cobra aircraft for Attack units), and
- increase the availability of training support areas for the conduct of certain training requirements (e.g., NOE flight, Unaided Night Tactical tasks).

Such actions will enable the aviators to use the allocated training time more effectively and efficiently.

As a final note, it should be added that Opportunity to Fly is the single most important motive for the aviators' decisions to be a part of the ARNG; furthermore, Loss of Flight Status is the most important reason for possibly leaving the ARNG. Thus, despite the fact that the aviators' stated career intentions indicate that they are strongly committed to the ARNG, any factor that prevents the aviators from flying becomes a potentially critical issue for long-term retention.

LIMITATIONS OF THE SURVEY DATA

While the survey data support the conclusion that the amount of time currently allocated for meeting ARNG aviation training requirements is clearly inadequate, the conclusion is based on the aviators' perceptions of the adequacy of the training time. The survey data provide no objective basis for determining how much time is actually required to meet the requirements. Such information is essential for determining the amount of additional time that should be allocated for meeting the current requirements.

To provide the necessary information, a training log designed specifically for ARNG aviators has been developed. During Phase II of the research project, the aviators will complete the training log each month for 12 consecutive months. The log is designed to permit the aviators to report the actual amount of time that they spend meeting both flying and nonflying training requirements. The flying requirements include the following:

- flight and simulator hours logged against the aviators' ATM minimum iteration requirements and checkrides not as part of ARTEP training (combined arms/collective);
- flight and simulator hours logged against the aviators' ATM minimum iteration requirements during ARTEP training (combined arms/collective);
- flight and simulator hours spent in ARTEP training (combined arms/collective) not logged against the aviators' ATM minimum iteration requirements;
- flight and simulator hours spent on training and/or evaluation of other aviators (e.g., as UT, IP, SIP, or IFE) not logged against the aviators' own ATM minimum iteration requirements, and
- other flight and simulator hours logged by the aviators.

The nonflying requirements include the following:

- required additional nonflying duties (e.g., supply officer, motor officer, administrative duties);
- undergoing and administering training in military education, common soldier skills, and career development (e.g., correspondence courses);

- pre-post flight tasks (e.g., pre-post flight, planning, weather/mission briefs, flight records);
- preparing for, undergoing, and administering oral and written nonflying aviation evaluations (e.g., annual written examination, aircraft operator's examination, flight physicals, checkrides); and
- miscellaneous activities (e.g., crew rest, dead time, inspections, meals, formations).

The training log also is designed to permit the aviators to report the amount of time they spend on the requirements in each of the major types of training periods: UTA/MUTA, AFTP, AT, and FTTD. In addition, the log will enable the aviators to report the amount of nonpaid time they spend meeting the training requirements.

Information provided by the training log will be analyzed to provide summaries of the actual amount of time that the aviators spend meeting their current training requirements. Additional time will be indicated if the training log results show that (a) the total amount of time spent by the aviators exceeds the amount of time that is allocated and/or (b) the aviators spend a significant amount of nonpaid time meeting the requirements. Information about the amount of time that is spent meeting the requirements will assist NGB personnel in determining how much additional time is needed by the aviators.

REFERENCES

Cohen, J. (1977). Statistical power analysis for the behavioral sciences (rev. ed.). New York: Academic Press.

Farrell, D., & Rusbult, C. E. (1981). Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments. Organizational Behavior and Human Performance, 28, 78-95.

Guilford, J. P. (1965). Fundamental statistics in psychology and education. New York: McGraw Hill.

Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of military recruit training attrition. Journal of Applied Psychology, 64, 10-18.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). Employee organization linkages: The psychology of commitment, absenteeism, and turnover. New York: Academic Press.

National Guard Bureau, Aviation Division. (1983, May). Statement of Work (untitled).

Steel, R. P., & Ovalle, N. K. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. Journal of Applied Psychology, 69, 673-686.

U.S. Department of Commerce. (1985). Statistical abstract of the United States (105th ed.). Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor. (1977). Dictionary of occupational titles (4th ed.). Washington, DC: U.S. Government Printing Office.

Winkler, R. L. (1972). An introduction to Bayesian inference and decision. New York: Holt, Rinehart, and Winston.

A P P E N D I X A

ARMY NATIONAL GUARD AVIATOR QUESTIONNAIRE

ARMY NATIONAL GUARD AVIATOR QUESTIONNAIRE

Background and Purpose

The Reserve Component (RC) aviator must meet the same annual aviation requirements (Aircrew Training Manual and Army Training and Evaluation Program) as the active component aviator. Due largely to modernization of the aircraft fleet during the past ten years, the training requirements for all aviators have increased significantly. And yet, the RC aviator's allocated training time has remained relatively constant.

In recognition of the RC aviator's potential limitations in meeting the increasing requirements, the National Guard Bureau (NGB) has requested that the Army Research Institute (ARI) Field Unit at Fort Rucker, Alabama, provide research support to investigate the training requirements of Army National Guard (ARNG) aviators. In response to the request, ARI has developed a questionnaire that will be administered to all ARNG aviators. The questionnaire will be used to gather information that will help the NGB to make specific recommendations about the training requirements for ARNG aviators and about the training resources needed to meet the requirements.

Instructions

The questionnaire has three parts. The first part asks you to (a) evaluate the adequacy of the training requirements and the time allocated for meeting the training requirements, (b) indicate your willingness to spend additional time to meet the training requirements, and (c) identify the obstacles to meeting the training requirements. The second part asks questions about your personal and military characteristics, your civilian employment, and your family. The third part asks you about your ARNG career intentions and the factors that may influence your intentions.

When you have completed the questionnaire, seal it in the attached envelope and give the envelope to the individual in your unit who has been assigned the responsibility for collecting the completed survey forms. The sealed questionnaires will be mailed directly to ARI. Your responses will be confidential and will be used for research purposes only. Since your responses will not be traced to you or to your supervisor, you can feel free to be completely candid in answering the questions.

Thank you for your cooperation.

DATA REQUIRED BY THE PRIVACY ACT OF 1974

(5 U.S.C. 552a)

TITLE OF FORM	PRESCRIBING DIRECTIVE
Army National Guard Aviator Questionnaire	

1. AUTHORITY

2. PRINCIPAL PURPOSE(S)

The data collected with the attached questionnaire are to be used for research purposes only.

3. ROUTINE USES

The purpose of the research is to determine if the current training requirements for ARNG aviators can be completed in the time available for training. The research will provide information about (a) factors (e.g., demographic characteristics, civilian employment) that may affect the ARNG aviators' ability to utilize the allocated training time, and (b) the ARNG aviators' willingness to spend additional time to meet the training requirements.

When an identifier (e.g., Social Security Number) is required, it is to be used for administrative and statistical control purposes within the confines of the subject research. Full confidentiality of the responses will be maintained.

4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION

Your participation in the research is strictly voluntary. You are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on you for not providing all, or any part of, the information.

You may detach this notice from the questionnaire if you desire to do so.

FORM - Privacy Act Statement - 26 Sep 75

PT CONTROL NUMBER: 5546

WHAT IS YOUR SOCIAL SECURITY NUMBER?

_____ - _____ - _____

PART I

TRAINING REQUIREMENTS

GENERAL DIRECTIONS: PART I HAS FIVE SECTIONS. EACH SECTION LISTS CURRENT OR PROJECTED TRAINING REQUIREMENTS THAT YOU MAY HAVE TO MEET AS AN ARNG AVIATOR. THE REQUIREMENTS ARE GROUPED INTO THE FOLLOWING CATEGORIES: INITIAL QUALIFICATION REQUIREMENTS, TRANSITION TRAINING, CONTINUATION TRAINING, AND ADDITIONAL MILITARY REQUIREMENTS.

USE YOUR EXPERIENCE AS AN ARNG AVIATOR TO PROVIDE THE REQUIRED INFORMATION ABOUT THE ITEMS IN EACH SECTION. THE SECTIONS ARE DESCRIBED BELOW.

- SECTION A: ADEQUACY OF THE TRAINING REQUIREMENTS FOR MAINTAINING A SAFE LEVEL OF PROFICIENCY

  In Section A you are asked to rate the adequacy of the current training requirements for ensuring your personal safety as an ARNG aviator.

- SECTION B: ADEQUACY OF THE TIME ALLOCATED FOR MEETING THE TRAINING REQUIREMENTS

  In Section B you are asked to rate the adequacy of the allocated training time for ensuring that you meet the current training requirements.

- SECTION C: WILLINGNESS TO SPEND ADDITIONAL PAID TIME TO MEET THE TRAINING REQUIREMENTS

  In Section C you are asked to rate your willingness to devote additional paid time to the ARNG in order to meet your training requirements.

- SECTION D: WILLINGNESS TO SPEND ADDITIONAL NONPAY STATUS TIME TO MEET THE TRAINING REQUIREMENTS

  In Section D you are asked to rate your willingness to devote additional nonpay status time to the ARNG in order to meet your training requirements.

- SECTION E: OBSTACLES TO MEETING THE TRAINING REQUIREMENTS

  In Section E, you are asked to identify the characteristics of the training environment that impede or interfere with your ability to meet the training requirements during paid training time.

SECTION A: ADEQUACY OF THE TRAINING REQUIREMENTS FOR MAINTAINING A SAFE LEVEL OF PROFICIENCY

A list of current and projected training requirements for ARNG aviators is presented below. Indicate your evaluation of how adequate each of the requirements is for enabling you to maintain a safe level of proficiency as an aviator. In making your evaluation, consider the conditions under which you personally must meet the requirements for your primary aircraft in the National Guard.

Use the scale on the right-hand side of the items to rate the adequacy of each of the requirements. A rating of "1" indicates that the requirement is "Much Less Than Adequate For a Safe Level of Proficiency" and a rating of "7" indicates that the requirement is "Much More Than Adequate For a Safe Level of Proficiency." A rating of "4" indicates that the requirement is "About Right For a Safe Level of Proficiency." Check [✓] the box that best reflects your evaluation of the adequacy of each requirement.

Before you rate a category of requirements, be sure to read the note for that category.

INITIAL QUALIFICATION REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	MUCH LESS THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY		ABOUT RIGHT FOR A SAFE LEVEL OF PROFICIENCY			MUCH MORE THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY	
INITIAL QUALIFICATION IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN INSTRUMENTS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN TERRAIN (NOE) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NIGHT VISION GOGGLES (NVG)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

TRANSITION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	MUCH LESS THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY		ABOUT RIGHT FOR A SAFE LEVEL OF PROFICIENCY			MUCH MORE THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY	
COBRA TRANSITION TRAINING	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR NATIONAL-GUARD SPECIFIC AIRCRAFT (E.G., OH-6, CH-54)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR ALTERNATE/ ADDITIONAL AIRCRAFT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

ADEQUACY OF THE TRAINING REQUIREMENTS FOR
MAINTAINING A SAFE LEVEL OF PROFICIENCY (Continued)

CONTINUATION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	MUCH LESS THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY		ABOUT RIGHT FOR A SAFE LEVEL OF PROFICIENCY			MUCH MORE THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY	
CONTINUATION TRAINING IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN INSTRUMENT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TERRAIN (NOE) FLIGHT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN NIGHT VISION GOGGLE (NVG) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TACTICAL/SPECIAL TASKS (OTHER THAN TERRAIN FLIGHT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN MISSION TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN ADDITIONAL TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

ADDITIONAL MILITARY REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT THAT YOU HAVE NOT YET MET.

	NOT APPLICABLE	MUCH LESS THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY		ABOUT RIGHT FOR A SAFE LEVEL OF PROFICIENCY			MUCH MORE THAN ADEQUATE FOR A SAFE LEVEL OF PROFICIENCY	
INFLIGHT EVALUATION/TRAINING OF OTHER AVIATORS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PRE- AND POST-FLYING TASKS--E.G., PRE- AND POST-FLIGHT, WEATHER BRIEFINGS, FLIGHT RECORDS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
NONFLYING AVIATION EVALUATION REQUIREMENTS--E.G., PREPARING FOR, UNDERGOING, AND ADMINISTERING ANNUAL WRIT, -10 EXAM, FLIGHT PHYSICAL, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
MILITARY EDUCATION REQUIREMENTS--E.G., UNDERGOING AND ADMINISTERING TRAINING IN BTMS SUSTAINMENT, COMMON SOLDIER SKILLS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PREPARATION FOR INSPECTIONS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

SECTION B: ADEQUACY OF THE TIME ALLOCATED FOR MEETING THE TRAINING REQUIREMENTS

Below is a list of the current and projected ARNG training requirements that were presented in Section A. This time, rate the items to indicate your evaluation of how adequate the amount of paid training time is for enabling you to meet the training requirements for your primary aircraft in the National Guard.

Use the scale on the right-hand side of the items to rate the adequacy of the allocated time for meeting each of the requirements. A rating of "1" indicates that "Too Little Time is Allocated to the Task" and a rating of "7" indicates that "Too Much Time is Allocated to the Task." A rating of "4" indicates that the "Time Allocated to the Task is About Right." Check [✓] the box that best reflects your judgment of the adequacy of the allocated training time.

Before you rate a category of requirements, be sure to read the note for that category.

INITIAL QUALIFICATION REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	TOO LITTLE TIME IS ALLOCATED TO THE TASK		TIME ALLOCATED TO THE TASK IS ABOUT RIGHT			TOO MUCH TIME IS ALLOCATED TO THE TASK	
INITIAL QUALIFICATION IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN INSTRUMENTS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN TERRAIN (NOE) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NIGHT VISION GOGGLES (NVG)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

TRANSITION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	TOO LITTLE TIME IS ALLOCATED TO THE TASK		TIME ALLOCATED TO THE TASK IS ABOUT RIGHT			TOO MUCH TIME IS ALLOCATED TO THE TASK	
COBRA TRANSITION TRAINING	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR NATIONAL-GUARD SPECIFIC AIRCRAFT (E.G., OH-6, CH-54)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR ALTERNATE/ ADDITIONAL AIRCRAFT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

CONTINUATION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	TOO LITTLE TIME IS ALLOCATED TO THE TASK		TIME ALLOCATED TO THE TASK IS ABOUT RIGHT			TOO MUCH TIME IS ALLOCATED TO THE TASK	
CONTINUATION TRAINING IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN INSTRUMENT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TERRAIN (NOE) FLIGHT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN NIGHT VISION GOGGLE (NVG) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TACTICAL/SPECIAL TASKS (OTHER THAN TERRAIN FLIGHT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN MISSION TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN ADDITIONAL TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

ADDITIONAL MILITARY REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT THAT YOU HAVE NOT YET MET.

	NOT APPLICABLE	TOO LITTLE TIME IS ALLOCATED TO THE TASK		TIME ALLOCATED TO THE TASK IS ABOUT RIGHT			TOO MUCH TIME IS ALLOCATED TO THE TASK	
INFLIGHT EVALUATION/TRAINING OF OTHER AVIATORS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PRE- AND POST-FLYING TASKS--E.G., PRE- AND POST-FLIGHT, WEATHER BRIEFINGS, FLIGHT RECORDS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
NONFLYING AVIATION EVALUATION REQUIREMENTS--E.G., PREPARING FOR, UNDERGOING, AND ADMINISTERING ANNUAL WRIT, -10 EXAM, FLIGHT PHYSICAL, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
MILITARY EDUCATION REQUIREMENTS--E.G., UNDERGOING AND ADMINISTERING TRAINING IN BTMS SUSTAINMENT, COMMON SOLDIER SKILLS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PREPARATION FOR INSPECTIONS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

SECTION C: WILLINGNESS TO SPEND ADDITIONAL PAID TIME TO MEET THE TRAINING REQUIREMENTS

Below is a list of the current and projected ARNG training requirements that were presented in the two previous sections of the questionnaire. This time, rate the items to indicate how willing you are to devote additional paid time to the National Guard in order to meet the training requirements in your primary aircraft. In evaluating your willingness to spend additional paid time, consider the total amount of time--both paid and nonpaid--that you already spend on your National Guard duties. Then indicate your willingness to spend additional paid time to meet the requirements.

Use the scale on the right-hand side of the items to rate your degree of willingness to spend additional paid time to meet your requirements. A rating of "1" indicates that you are "Very Unwilling to Spend Additional Paid Training Time" and a rating of "7" indicates that you are "Very Willing to Spend Additional Paid Training Time." Check [✓] the box that best indicates the degree of your willingness to devote additional paid time to the National Guard in order to meet current or projected training requirements.

Before you rate a category of requirements, be sure to read the note for that category.

INITIAL QUALIFICATION REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL PAID TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL PAID TRAINING TIME
INITIAL QUALIFICATION IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN INSTRUMENTS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN TERRAIN (NOE) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NIGHT VISION GOGGLES (NVG)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

TRANSITION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL PAID TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL PAID TRAINING TIME
COBRA TRANSITION TRAINING	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR NATIONAL-GUARD SPECIFIC AIRCRAFT (E.G., OH-6, CH-54)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR ALTERNATE/ ADDITIONAL AIRCRAFT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

WILLINGNESS TO SPEND ADDITIONAL PAID TIME TO MEET THE TRAINING REQUIREMENTS (Continued)

CONTINUATION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL PAID TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL PAID TRAINING TIME
CONTINUATION TRAINING IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN INSTRUMENT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TERRAIN (NOE) FLIGHT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN NIGHT VISION GOGGLE (NVG) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TACTICAL/SPECIAL TASKS (OTHER THAN TERRAIN FLIGHT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN MISSION TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN ADDITIONAL TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

ADDITIONAL MILITARY REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT THAT YOU HAVE NOT YET MET.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL PAID TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL PAID TRAINING TIME
INFLIGHT EVALUATION/TRAINING OF OTHER AVIATORS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PRE- AND POST-FLYING TASKS--E.G., PRE- AND POST-FLIGHT, WEATHER BRIEFINGS, FLIGHT RECORDS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
NONFLYING AVIATION EVALUATION REQUIREMENTS--E.G., PREPARING FOR, UNDERGOING, AND ADMINISTERING ANNUAL WRIT, -10 EXAM, FLIGHT PHYSICAL, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
MILITARY EDUCATION REQUIREMENTS--E.G., UNDERGOING AND ADMINISTERING TRAINING IN BTMs SUSTAINMENT, COMMON SOLDIER SKILLS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CAREER DEVELOPMENT COURSES--E.G., ADVANCED AND SENIOR COURSES, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
ADDITIONAL NONFLYING DUTIES--E.G., PROPERTY BOOK, MOTOR POOL, SECURITY, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PREPARATION FOR INSPECTIONS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

SECTION D: WILLINGNESS TO SPEND ADDITIONAL NONPAY STATUS TIME TO MEET THE TRAINING REQUIREMENTS

Below is a list of the current and projected ARNG training requirements that were presented in the previous sections of the questionnaire. This time, rate the items to indicate your willingness to devote additional nonpay status time to the National Guard in order to meet the training requirements in your primary aircraft. In evaluating your willingness to spend additional nonpay status time, consider the total amount of time--both paid and nonpaid--that you now spend on your National Guard duties. Then indicate your willingness to spend additional nonpay status time to meet the requirements.

Use the scale on the right-hand side of the items to rate your degree of willingness to spend additional nonpay status time to meet your requirements. A rating of "1" indicates that you are "Very Unwilling to Spend Additional Nonpay Status Training Time" and a rating of "7" indicates that you are "Very Willing to Spend Additional Nonpay Status Training Time." Check [√] the box that best indicates the degree of your willingness to devote additional nonpay status time to the National Guard in order to meet current or projected training requirements.

Before you rate a category of requirements, be sure to read the note for that category.

INITIAL QUALIFICATION REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME
INITIAL QUALIFICATION IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN INSTRUMENTS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN TERRAIN (NOE) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NIGHT VISION GOGGLES (NVG)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) FLIGHT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
INITIAL QUALIFICATION IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

TRANSITION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME
COBRA TRANSITION TRAINING	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR NATIONAL-GUARD SPECIFIC AIRCRAFT (E.G., OH-6, CH-54)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
TRANSITION TRAINING FOR ALTERNATE/ ADDITIONAL AIRCRAFT	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

WILLINGNESS TO SPEND ADDITIONAL NONPAY STATUS TIME TO MEET THE TRAINING REQUIREMENTS (Continued)

CONTINUATION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME
CONTINUATION TRAINING IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN INSTRUMENT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TERRAIN (NOE) FLIGHT TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN NIGHT VISION GOGGLE (NVG) TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN TACTICAL/SPECIAL TASKS (OTHER THAN TERRAIN FLIGHT)	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN MISSION TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN ADDITIONAL TASKS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CONTINUATION TRAINING IN OTHER TASKS • (SPECIFY)_____	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

ADDITIONAL MILITARY REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT THAT YOU HAVE NOT YET MET.

	NOT APPLICABLE	VERY UNWILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME			NEUTRAL			VERY WILLING TO SPEND ADDITIONAL NONPAY STATUS TRAINING TIME
INFLIGHT EVALUATION/TRAINING OF OTHER AVIATORS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PRE- AND POST-FLYING TASKS--E.G., PRE- AND POST-FLIGHT, WEATHER BRIEFINGS, FLIGHT RECORDS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
NONFLYING AVIATION EVALUATION REQUIREMENTS--E.G., PREPARING FOR, UNDERGOING, AND ADMINISTERING ANNUAL WRIT, -10 EXAM, FLIGHT PHYSICAL, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
MILITARY EDUCATION REQUIREMENTS--E.G., UNDERGOING AND ADMINISTERING TRAINING IN BTMS SUSTAINMENT, COMMON SOLDIER SKILLS, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
CAREER DEVELOPMENT COURSES--E.G., ADVANCED AND SENIOR COURSES, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
ADDITIONAL NONFLYING DUTIES--E.G., PROPERTY BOOK, MOTOR POOL, SECURITY, ETC.	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]
PREPARATION FOR INSPECTIONS	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]

SECTION E: OBSTACLES TO MEETING THE TRAINING REQUIREMENTS

This section deals with obstacles to training in the National Guard. An obstacle to training is defined as anything that impedes or interferes with your ability to meet the training requirements in the amount of paid time you are now allocated for National Guard training. The following characteristics of the National Guard training environment are identified as potential obstacles to training.

- IPs = Unavailability of instructor pilots
- PERS = Unavailability of support personnel (e.g., flight engineer, crew chief, technical observer, etc.)
- A/C = Unavailability of aircraft
- EQUIP = Unavailability of support equipment (e.g., night vision goggles, ammunition, fuel, vehicles, etc.)
- AASF = Unsatisfactory operational hours of the Army Aviation Support Facility
- AREAS = Unavailability of training support areas (e.g., ranges, NOE courses, field sites, SFTS, etc.)
- FH = Insufficient number of flight hours
- NON-AV = Non-aviation obstacles (e.g., preparing for inspections, conducting inventories, etc.)
- TIME = Insufficient amount of personal time

Below is a list of the current and projected ARNG training requirements that were presented in the previous sections. For each requirement, check [✓] the box below each characteristic that you consider to be an obstacle to training for you. Check as many obstacles as you experience in meeting a particular training requirement. If you experience none of the obstacles in meeting a particular requirement, do not check any of the boxes.

Example A indicates that the aviator finds unavailability of both training support areas and support equipment to be obstacles to meeting the requirement for ARTEP training.

EXAMPLE A	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
ARTEP TRAINING	[0]	[ ]	[ ]	[ ]	[✓]	[ ]	[✓]	[ ]	[ ]	[ ]

Example B illustrates that, since no checks were made in any of the columns, none of the items that are listed are obstacles to meeting the requirement for Instructor Pilot Qualification.

EXAMPLE B	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
INSTRUCTOR PILOT QUALIFICATION	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

For each requirement listed below, check [✓] the box for each characteristic that interferes with your ability to meet the requirement. Before you begin checking a category of requirements, be sure to read the note for that category.

INITIAL QUALIFICATION REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
INITIAL QUALIFICATION IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN INSTRUMENTS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN TERRAIN (NOE) FLIGHT	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) FLIGHT	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN NIGHT VISION GOGGLES (NVG)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) FLIGHT	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
INITIAL QUALIFICATION IN OTHER TASKS • (SPECIFY)_____	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

OBSTACLES TO MEETING THE TRAINING REQUIREMENTS (Continued)

- IPs = Unavailability of instructor pilots
- PERS = Unavailability of support personnel (e.g., flight engineer, crew chief, technical observer, etc.)
- A/C = Unavailability of aircraft
- EQUIP = Unavailability of support equipment (e.g., night vision goggles, ammunition, fuel, vehicles, etc.)
- AASF = Unsatisfactory operational hours of the Army Aviation Support Facility
- AREAS = Unavailability of training support areas (e.g., ranges, NOE courses, field sites, SFTS, etc.)
- FH = Insufficient number of flight hours
- NON-AV = Non-aviation obstacles (e.g., preparing for inspections, conducting inventories, etc.)
- TIME = Insufficient amount of personal time

TRANSITION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU WERE INITIALLY QUALIFIED PRIOR TO JOINING THE NATIONAL GUARD OR IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
COBRA TRANSITION TRAINING	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
TRANSITION TRAINING FOR NATIONAL-GUARD SPECIFIC AIRCRAFT (E.G., OH-6, CH-54)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
TRANSITION TRAINING FOR ALTERNATE/ ADDITIONAL AIRCRAFT	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

CONTINUATION TRAINING

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT IN WHICH YOU HAVE NOT YET BEEN INITIALLY QUALIFIED.

	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
CONTINUATION TRAINING IN EMERGENCY TASKS (IN AIRCRAFT)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN EMERGENCY PROCEDURES (ORALLY OR IN SFTS)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN INSTRUMENT TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN TERRAIN (NOE) FLIGHT TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN UNAIDED NIGHT TACTICAL (NIGHT HAWK) TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN NIGHT VISION GOGGLE (NVG) TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN TACTICAL/SPECIAL TASKS (OTHER THAN TERRAIN FLIGHT)	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN MISSION TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN ADDITIONAL TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CONTINUATION TRAINING IN OTHER TASKS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

- (SPECIFY)_____

OBSTACLES TO MEETING THE TRAINING REQUIREMENTS (Continued)

- IPs = Unavailability of instructor pilots
- PERS = Unavailability of support personnel (e.g., flight engineer, crew chief, technical observer, etc.)
- A/C = Unavailability of aircraft
- EQUIP = Unavailability of support equipment (e.g., night vision goggles, ammunition, fuel, vehicles, etc.)
- AASF = Unsatisfactory operational hours of the Army Aviation Support Facility
- AREAS = Unavailability of training support areas (e.g., ranges, NOE courses, field sites, SFTS, etc.)
- FH = Insufficient number of flight hours
- NON-AV = Non-aviation obstacles (e.g., preparing for inspections, conducting inventories, etc.)
- TIME = Insufficient amount of personal time

ADDITIONAL MILITARY REQUIREMENTS

NOTE: CHECK "0" FOR NOT APPLICABLE FOR EACH REQUIREMENT THAT YOU HAVE NOT YET MET.

	NOT APPLICABLE	IPs	PERS	A/C	EQUIP	AASF	AREAS	FH	NON-AV	TIME
INFLIGHT EVALUATION/TRAINING OF OTHER AVIATORS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
NON-TRAINING FLIGHTS--E.G., VIP TRANSPORT, STATIC DISPLAY, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
PRE- AND POST-FLYING TASKS--E.G., PRE- AND POST-FLIGHT, WEATHER BRIEFINGS, FLIGHT RECORDS, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
NONFLYING AVIATION EVALUATION REQUIREMENTS--E.G., PREPARING FOR, UNDERGOING, AND ADMINISTERING ANNUAL WRIT, -10 EXAM, FLIGHT PHYSICAL, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
MILITARY EDUCATION REQUIREMENTS--E.G., UNDERGOING AND ADMINISTERING TRAINING IN BTMS SUSTAINMENT, COMMON SOLDIER SKILLS, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CAREER DEVELOPMENT COURSES--E.G., ADVANCED AND SENIOR COURSES, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
ADDITIONAL NON-FLYING DUTIES--E.G., PROPERTY BOOK, MOTOR POOL, SECURITY, ETC.	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
PREPARATION FOR INSPECTIONS	[0]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

PART II

BACKGROUND INFORMATION

GENERAL DIRECTIONS: PART II CONSISTS OF QUESTIONS THAT ARE DESIGNED TO PROVIDE BACKGROUND INFORMATION ABOUT YOU AS AN ARNG AVIATOR. THE QUESTIONS ARE GROUPED INTO FOUR SECTIONS ACCORDING TO THE TYPE OF INFORMATION THAT THEY PROVIDE. THE FOUR SECTIONS ARE AS FOLLOWS:

- SECTION A: PERSONAL CHARACTERISTICS
- SECTION B: MILITARY CHARACTERISTICS
- SECTION C: CIVILIAN EMPLOYMENT
- SECTION D: FAMILY FACTORS

ANSWER EACH ITEM BY CHECKING [✓] THE APPROPRIATE BLOCK OR BY WRITING THE REQUIRED INFORMATION IN THE APPROPRIATE SPACE.

SECTION A: PERSONAL CHARACTERISTICS

1. What is your age?

   _____ Years

2. What is your sex? (check one)

   [ ] Female
   [ ] Male

3. What is your ethnic group? (check one)

   [ ] American Indian
   [ ] Asian
   [ ] Black
   [ ] Caucasian
   [ ] Hispanic
   [ ] Other (specify)_____

4. What is your present marital status? (check one)

   [ ] Single--never been married
   [ ] Married--never been divorced
   [ ] Married--previously divorced
   [ ] Divorced and not remarried
   [ ] Separated
   [ ] Widow/widower

5. How many children do you presently have at home?

   _____ Children

6. What is your highest civilian education level? (check one)

   [ ] Some high school (did not graduate)
   [ ] High school graduate or GED equivalent (no college)
   [ ] Trade or technical school diploma (no college)
   [ ] Some college (no degree)
   [ ] Associate degree
   [ ] Bachelors degree
   [ ] Masters degree
   [ ] Ph.D.
   [ ] Other professional degree (e.g., M.D., D.D.M., D.V.M., J.D., etc.)

7. How many hours per month do you spend in community activities (e.g., Lion's Club, church, PTA, Little League coach, etc.)? (if none, write 0)

   _____ Hours Per Month

SECTION B: MILITARY CHARACTERISTICS

8. Check [✓] the type of aircraft that is your primary aircraft in your current TOE, MTOE, or TDA duty position. Indicate the total number of military flight hours that you have in this aircraft. (check only one)

Rotary Wing	Primary	Hours
UH-1H	[ ]	_____
UH-1C/M	[ ]	_____
UH-1V	[ ]	_____
UH-60	[ ]	_____
OH-6	[ ]	_____
OH-58	[ ]	_____
CH-47	[ ]	_____
CH-54	[ ]	_____
AH-1G	[ ]	_____
AH-1S (Mod)	[ ]	_____
AH-1S (MC)	[ ]	_____
Other	[ ]	_____

• (specify type of aircraft)_____

Fixed Wing	Primary	Hours
T-42	[ ]	_____
U-3	[ ]	_____
U-8	[ ]	_____
U-21	[ ]	_____
UV-18	[ ]	_____
OV-1B	[ ]	_____
OV-1C	[ ]	_____
OV-1D	[ ]	_____
C-7A	[ ]	_____
C-12D	[ ]	_____
RV-1	[ ]	_____
Other	[ ]	_____

• (specify type of aircraft)_____

9. Are you current in any other types of aircraft? (check one)

[ ] Yes
[ ] No

• If yes, specify the other type(s) of aircraft in which you are current.

Other Aircraft:_____

10. Indicate the total number of flight hours that you have accumulated in each of the categories defined below. (round to nearest 5x hours)

• Military Flight Hours: Total number of hours that you have accumulated in a military aircraft while on military status.

Total Military Flight Hours:_____

• Civilian Flight Hours: Total number of hours that you have accumulated as a civilian in military or civilian aircraft.

Total Civilian Flight Hours:_____

• Combat Flight Hours: Total number of hours that you have accumulated as a military pilot/copilot in a combat environment.

Total Combat Flight Hours:_____

11. Indicate the highest qualification you hold in each of the aircraft in which you are current. (check one for each aircraft in which current)

UT = Unit Trainer
IP = Instructor Pilot
SIP = Standardization Instructor Pilot

Rotary Wing

UH-1H	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
UH-1C/M	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
UH-1V	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
UH-60	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
OH-6	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
OH-58	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
CH-47	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
CH-54	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
AH-1G	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
AH-1S (Mod)	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
AH-1S (MC)	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
Other	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP

• (specify type of aircraft)_____

Fixed Wing

T-42	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
U-3	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
U-8	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
U-21	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
UV-18	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
OV-1B	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
OV-1C	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
OV-1D	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
C-7A	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
C-12D	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
RV-1	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP
Other	[ ] Pilot	[ ] UT	[ ] IP	[ ] SIP

• (specify type of aircraft)_____

12. What additional aviation qualifications do you currently hold? (check as many as you are current in)

[ ] Rotary Wing Instrument Flight Examiner
[ ] Fixed Wing Instrument Flight Examiner
[ ] Safety Officer
[ ] Maint[illegible]e Officer
[ ] Maint[illegible]ce Test Pilot
[ ] Instrument Ticket
[ ] Terrain Flight (NOE)
[ ] Unaided Night Tactical (Night Hawk)
[ ] Night Vision Goggles
[ ] Gunnery
[ ] Other (specify)_____

13. Indicate the type of aviation unit to which you are presently assigned. (check one)

[ ] Attack helicopter company/troop
[ ] Air cavalry troop
[ ] Combat support aviation company
[ ] Aviation general support company
[ ] Aerial surveillance company
[ ] Air ambulance detachment/company
[ ] Transportation company (heavy helicopter)
[ ] Other (specify)_____

14. Indicate the location of the support facility, flight activity facility, or operating activity at which your Unit Training Assemblies (UTAs/MUTAs) are conducted.

Location:_____

- How far away from this facility/activity do you live and work?

Distance From Home _____ Miles

Distance From Work _____ Miles

- How long does it take you to commute (one-way) to the facility/activity from your home and your place of work?

Time From Home _____ Hours and _____ Minutes

Time From Work _____ Hours and _____ Minutes

15. Is the facility at which your Additional Flight Training Periods (AFTPs) are conducted different from the facility at which your UTAs/MUTAs are conducted? (check one)

[ ] Yes
[ ] No

- If yes, how far away from the location at which your AFTPs are conducted do you live and work?

Distance From Home _____ Miles

Distance From Work _____ Miles

- If yes, how long does it take you to commute (one-way) to the location at which your AFTPs are conducted?

Time From Home _____ Hours and _____ Minutes

Time From Work _____ Hours and _____ Minutes

16. During the last fiscal year, how many dual AFTPs were you able to participate in?

Number Of Dual AFTPs_____

17. Rate your agreement with the following statement about dual AFTPs:

The number of dual AFTPs that I received during the last fiscal year was sufficient for me to maintain a satisfactory level of safety and proficiency. (check one)

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Very Strongly Disagree			Neutral			Very Strongly Agree

18. Are resources available during evening or weekend AFTPs to meet mandatory individual aircrew training requirements, e.g., AAPART evaluations, emergency procedures training, currency rides, etc.? (check one)

[ ] Yes
[ ] No

- If no, indicate which resource(s) is(are) normally not available. (check all that apply)

[ ] Instructor Pilot
[ ] Aircraft
[ ] Support Personnel

19. How many of your evening or weekend AFTPs during the last year were conducted with an IP for evaluation or training?

Number Of AFTPs With IP _____

20. What is your TOE, MTOE, or TDA duty position in the National Guard? (check one)

[ ] Company/Troop Commander
[ ] Flight Safety Technician
[ ] Executive Officer
[ ] Operations Officer
[ ] Flight Operations Officer
[ ] Instrument Examiner (FW and RW)
[ ] Platoon Leader
[ ] Section Leader
[ ] Attack Helicopter Pilot (AH and UH-1C/M)
[ ] Instructor Pilot
[ ] Observation Helicopter Pilot (OH-58 and OH-6)
[ ] Team Leader
[ ] Utility Helicopter Pilot
[ ] Cargo Helicopter Pilot (CH-47 and CH-54)
[ ] Utility Airplane Pilot
[ ] Surveillance Airplane Pilot
[ ] Platoon Commander
[ ] Section Commander
[ ] Aircraft Maintenance Technician
[ ] Other (specify)_____

21. What is your primary additional duty position in the National Guard? (if no additional duty position, write N/A)

Additional Duty Position:_____

22. What is your source of entry into the National Guard? (check one)

[ ] Civilian--no prior military service
[ ] Civilian--prior military service (more than six months break in service)
[ ] Direct from active Army (less than six months break in service)
[ ] Direct from active duty--other military service (less than six months break in service)
[ ] Direct from active Army Reserve
[ ] Direct from active reserve--other military service
[ ] Other (specify)_____

23. Did you receive your Initial Entry Rotary Wing (IERW) flight training at Fort Rucker after you joined the National Guard? (check one)

[ ] Yes
[ ] No

24. How many years of military service do you have in each of the categories defined below?

- Active Component Service: Total years of service in active Army or other military branch.

  Active Component Service: _____ Years and _____ Months

- Army National Guard Service: Total years of service in the Army National Guard.

  Army National Guard Service: _____ Years and _____ Months

- Other Active Reserve Service: Total years of service in an active military reserve component other than the Army National Guard.

  Other Active Reserve Service: _____ Years and _____ Months

25. In total, how many years on flight orders do you have?

_____ Years and _____ Months

26. How long have you been in your current National Guard aviation unit, regardless of changes in the unit's designation?

_____ Years and _____ Months

27. Are you currently taking a military correspondence course? (check one)

[ ] Yes
[ ] No

28. Do you expect to attend a military course that requires you to take time off from your civilian job within the next year? (check one)

[ ] Yes
[ ] No

NOTE: If you are an aviation warrant officer, answer items 29 - 31; then proceed to Section C. If you are a commissioned officer, answer items 32 - 34; then proceed to Section C.

ITEMS FOR AVIATION WARRANT OFFICERS ONLY

29. What is your current grade? (check one)

[ ] WO1
[ ] CW2
[ ] CW3
[ ] CW4

30. What is your Primary Military Occupational Specialty (PMOS)? (check one)

[ ] 100A--Multiengine Utility Helicopter Pilot
[ ] 100BH--Aeroscout Pilot
[ ] 100B--Utility/Observation Helicopter Pilot (includes UH-1C/M models)
[ ] 100C--Cargo Helicopter Pilot
[ ] 100D--Heavy Lift Helicopter Pilot
[ ] 100E--Attack Helicopter Pilot
[ ] 100K--Multiengine Attack Helicopter Pilot
[ ] 100Q--Combat Service/Support Fixed Wing Pilot
[ ] 100R--Combat Surveillance Fixed Wing Pilot

31. Were you previously a commissioned officer aviator either on active duty or in the Army National Guard? (check both, if appropriate)

Active Duty	Army National Guard
[ ] Yes	[ ] Yes
[ ] No	[ ] No

ITEMS FOR COMMISSIONED OFFICERS ONLY

32. What is your current grade? (check one)

[ ] 01 Second Lieutenant
[ ] 02 First Lieutenant
[ ] 03 Captain
[ ] 04 Major
[ ] 05 Lieutenant Colonel
[ ] 06 Colonel

33. What branch are you currently serving in, excluding the aviation branch? (check one)

[ ] Infantry
[ ] Armor
[ ] Field Artillery
[ ] Air Defense Artillery
[ ] Signal Corps
[ ] Military Intelligence
[ ] Transportation Corps
[ ] Medical Service Corps
[ ] Other (specify)_____

34. What is your specialty skill identifier (SSI)? (check one)

[ ] 15A--General Aviation
[ ] 15B--Combat Aviation
[ ] 15C--Combat Support Aviation
[ ] 15M--Combat Intelligence Aviation
[ ] 15S--Combat Communications Aviation
[ ] 71A--Aviation Logistics
[ ] 67J--Aeromedical Evacuation
[ ] Other (specify)_____

SECTION C: CIVILIAN EMPLOYMENT

35. What is your present employment status? (check one)

[ ] Employed full time
[ ] Employed part time
[ ] Unemployed

NOTE: If you indicated in item 35 that you are presently employed--either full time or part time--answer items 36 - 63. If you indicated in item 35 that you are presently unemployed, skip items 36 - 63 and proceed directly to Section D on Page 19.

36. What is your civilian occupation (include full time or part time civilian employment and full time employment as a technician in the ARNG)?

Civilian Occupation:_____

37. What is your current projected annual income from your civilian occupation? (check one)

[ ] Less than $ 5,000
[ ] $ 5,000 - $ 9,999
[ ] $10,000 - $14,999
[ ] $15,000 - $19,999
[ ] $20,000 - $24,999
[ ] $25,000 - $29,999
[ ] $30,000 - $34,999
[ ] $35,000 - $39,999
[ ] $40,000 - $44,999
[ ] $45,000 - $49,999
[ ] $50,000 or more

38. What is your current projected annual income from your position as a National Guard aviator? (do not include income from your job as a full time National Guard technician) (check one)

[ ] Less than $ 1,000
[ ] $ 1,000 - $ 1,999
[ ] $ 2,000 - $ 2,999
[ ] $ 3,000 - $ 3,999
[ ] $ 4,000 - $ 4,999
[ ] $ 5,000 - $ 5,999
[ ] $ 6,000 - $ 6,999
[ ] $ 7,000 - $ 7,999
[ ] $ 8,000 - $ 8,999
[ ] $ 9,000 - $ 9,999
[ ] $10,000 - $10,999
[ ] $11,000 - $11,999
[ ] $12,000 - $12,999
[ ] $13,000 - $13,999
[ ] $14,000 - $14,999
[ ] $15,000 or more

39. What is your total annual income from all sources, not including spouse's income? (check one)

[ ] Less than $ 5,000
[ ] $ 5,000 - $ 9,999
[ ] $10,000 - $14,999
[ ] $15,000 - $19,999
[ ] $20,000 - $24,999
[ ] $25,000 - $29,999
[ ] $30,000 - $34,999
[ ] $35,000 - $39,999
[ ] $40,000 - $44,999
[ ] $45,000 - $49,999
[ ] $50,000 or more

40. What is your company's official leave policy regarding your two weeks of National Guard annual training? (check one)

[ ] Employer gives two weeks military leave with full pay
[ ] Employer gives two weeks military leave and pays the difference between salary and National Guard pay
[ ] Employer requires use of vacation time
[ ] Employer gives two weeks leave without pay (does not include vacation time)
[ ] Not applicable--I am self-employed
[ ] Other (specify)_____

41. What arrangement do you typically make with your employer so that you can attend two weeks of National Guard annual training? (check one)

[ ] Take two weeks military leave with full pay
[ ] Take two weeks military leave and employer pays difference between salary and National Guard pay
[ ] Take two weeks paid vacation time
[ ] Take two weeks leave without pay (does not include vacation time)
[ ] Not applicable--I am self-employed
[ ] Other (specify)_____

42. Rate your immediate supervisor's attitude toward your National Guard career. (check one)

[0] Not applicable I am self-employed	[1] Very Negative	[2]	[3]	[4] Neutral	[5]	[6]	[7] Very Positive

43. How many hours do you spend on your civilian job in a typical work week? Include the hours that you spend at your place of work and any additional hours that you spend on work-related activities (e.g., business entertainment, at-home paperwork, commuting time, etc.).

_____ Hours Per Week

44. Does your civilian job require overnight travel?

[ ] Yes
[ ] No

- If yes, indicate the average number of nights away from home that your job requires per month.

_____ Nights Per Month

Items 45 - 48 list specific types of ARNG training periods. Use the 7-point rating scale on the right-hand side of each item to indicate the extent to which the work schedule on your civilian job affects your ability to get time off to attend each of the training periods. Check [✓] the block that indicates your rating.

	TRAINING PERIOD	EFFECT OF CIVILIAN JOB SCHEDULE						
45.	Weekend UTAs/MUTAs	[1] Very Easy to Get Time Off	[2]	[3]	[4] Neutral	[5]	[6]	[7] Very Hard to Get Time Off
46.	AFTPs	[1] Very Easy to Get Time Off	[2]	[3]	[4] Neutral	[5]	[6]	[7] Very Hard to Get Time Off
47.	FTTDs	[1] Very Easy to Get Time Off	[2]	[3]	[4] Neutral	[5]	[6]	[7] Very Hard to Get Time Off
48.	Annual Training	[1] Very Easy to Get Time Off	[2]	[3]	[4] Neutral	[5]	[6]	[7] Very Hard to Get Time Off

Items 49 - 62 describe specific characteristics of your civilian job. Use the scale on the right-hand side of the items to indicate your degree of satisfaction with each characteristic. Rate the items on a scale ranging from "1" to "7." A rating of "1" indicates that you are "Extremely Dissatisfied" with the characteristic; a rating of "7" indicates that you are "Extremely Satisfied" with the characteristic. Check [✓] the box that best indicates your degree of satisfaction with each characteristic.

		Extremely Dissatisfied			Neutral			Extremely Satisfied
49.	The amount of job security you have in your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
50.	The amount of pay and fringe benefits you receive in your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
51.	The amount of personal growth and development you get in doing your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
52.	The people you talk to and work with on your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
53.	The degree of respect and fair treatment you receive from your immediate supervisor on your civilian job. ([ ] check here if self-employed)	[1]	[2]	[3]	[4]	[5]	[6]	[7]
54.	The feeling of worthwhile accomplishment you get from doing your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
55.	The chance to get to know other people while on your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
56.	The amount of support and guidance you receive from your immediate supervisor on your civilian job. ([ ] check here if self-employed)	[1]	[2]	[3]	[4]	[5]	[6]	[7]
57.	The degree to which you are fairly paid for what you contribute to your civilian work organization.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
58.	The amount of independent thought and action you can exercise in your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
59.	How secure things look for you in the future in your civilian work organization.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
60.	The chance to help other people while at your civilian work.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
61.	The amount of challenge in your civilian job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
62.	The overall quality of the supervision you receive in your civilian work. ([ ] check here if self-employed)	[1]	[2]	[3]	[4]	[5]	[6]	[7]

63. In general, how satisfied are you with your civilian job? (check one)

[1] Extremely Dissatisfied [2] [3] [4] Neutral [5] [6] [7] Extremely Satisfied

SECTION D: FAMILY

NOTE: If you are married and/or have children at home, answer items 64 - 68; then proceed to Part III of the questionnaire on page 20. If you are not married and/or do not have children, proceed immediately to Part III.

64. Is your spouse employed? (check one)

[ ] Yes--full time
[ ] Yes--part time
[ ] No
[ ] Not applicable--I am not married

65. What is your spouse's occupation (if applicable)?

Spouse's Occupation:_____

66. What is your spouse's annual income (check one if applicable)?

[ ] Less than $ 5,000
[ ] $ 5,000 - $ 9,999
[ ] $10,000 - $14,999
[ ] $15,000 - $19,999
[ ] $20,000 - $24,999
[ ] $25,000 - $29,999
[ ] $30,000 - $34,999
[ ] $35,000 - $39,999
[ ] $40,000 - $44,999
[ ] $45,000 - $49,999
[ ] $50,000 or more

67. Which of the following describes your spouse's and/or your children's attitudes toward the National Guard?

SPOUSE'S ATTITUDE (check one if applicable)

[1] Very Negative [2] [3] [4] Neutral [5] [6] [7] Very Positive

CHILDREN'S ATTITUDE (check one if applicable)

[1] Very Negative [2] [3] [4] Neutral [5] [6] [7] Very Positive

68. Which of the following describes the influence that your spouse and/or children have on your National Guard career intentions?

SPOUSE'S INFLUENCE (check one if applicable)

[1] Great Influence to Leave [2] [3] [4] No Influence [5] [6] [7] Great Influence to Stay

CHILDREN'S INFLUENCE (check one if applicable)

[1] Great Influence to Leave [2] [3] [4] No Influence [5] [6] [7] Great Influence to Stay

PART III

NATIONAL GUARD CAREER INTENTIONS

PART III ASKS YOU TO PROVIDE INFORMATION ABOUT THE FOLLOWING AREAS:

- SECTION A: ARNG career intentions
- SECTION B: Influences on your ARNG career intentions
- SECTION C: Satisfaction with the ARNG
- SECTION D: Comments about the ARNG

SECTION A: ARNG CAREER INTENTIONS

1. Which of the following best reflects your present ARNG career intentions, assuming you remain on flight status? (check one)

   [ ] Stay for 30-year retirement eligibility
   [ ] Stay for 20-year retirement eligibility
   [ ] Stay in for at least one more year, but get out prior to 20-year retirement eligibility
   [ ] Get out within the next year
   [ ] Other (specify)_____

2. How often do you think about leaving the National Guard? (check one)

   [1] Almost Never | [2] | [3] | [4] Sometimes | [5] | [6] | [7] Almost Always

3. How likely is it that you would seek a part time job if you were not in the National Guard? (check one)

   [1] Extremely Unlikely | [2] | [3] | [4] Neither Likely Nor Unlikely | [5] | [6] | [7] Extremely Likely

4. What are your chances of obtaining a part time civilian job with similar pay and benefits as you receive in the National Guard? (check one)

   [1] Chances Extremely Poor | [2] | [3] | [4] Chances Neither Good Nor Poor | [5] | [6] | [7] Chances Extremely Good

SECTION B: INFLUENCES ON ARNG CAREER INTENTIONS

5. What are the primary reasons that you originally joined the National Guard? (check up to three)

   [ ] Opportunity to fly
   [ ] Pay
   [ ] Time invested toward military retirement
   [ ] Opportunity to improve flying skills
   [ ] Association with other aviators--i.e., camaraderie
   [ ] Patriotism/national pride
   [ ] Satisfy military obligation--i.e., alternative to draft
   [ ] Job requirement--I am a full time ARNG technician
   [ ] Other (specify)_____

6. What are the most important factors that have influenced or might influence you to remain in the National Guard? (check up to three)

   [ ] Opportunity to fly
   [ ] Pay
   [ ] Retirement benefits
   [ ] Association with other aviators--i.e., camaraderie
   [ ] Patriotism/national pride
   [ ] Maintain flying proficiency
   [ ] Change of pace from civilian job
   [ ] Job requirement--I am a full time ARNG technician
   [ ] Other (specify)_____

7. What are the most important factors that have influenced or might influence you to leave the National Guard? (check up to six)

   [ ] Administrative details/politics
   [ ] Unrealistic training goals for time/resources available
   [ ] Lack of competence in aviation matters by chain of command
   [ ] Lack of adequate support personnel/equipment
   [ ] Conflict with civilian job
   [ ] Conflict with family interests
   [ ] Lack of concern and/or respect for the individual
   [ ] Loss of flight status
   [ ] Requirement to mobilize
   [ ] Decreasing opportunity to fly
   [ ] Policies concerning retirement points for AFTPs
   [ ] Lack of opportunity to schedule dual AFTPs
   [ ] Excessive additional nonflying duties
   [ ] Lack of promotion opportunity
   [ ] Travel time and cost incurred to attend NG training
   [ ] Unequal flight pay (NG aviator flight pay versus active component aviator flight pay)
   [ ] Increase in training requirements (e.g., NVG, unaided night)
   [ ] Insufficient time allocated to maintain a safe level of proficiency
   [ ] Other (specify)_____

SECTION C: SATISFACTION WITH THE ARNG

Items 8 - 21 describe specific characteristics of your job as an ARNG aviator (does not include your job as a full time National Guard technician). Use the scale on the right-hand side of the items to indicate your degree of satisfaction with each characteristic. Rate the items on a scale ranging from "1" to "7." A rating of "1" indicates that you are "Extremely Dissatisfied" with the characteristic and a rating of "7" indicates that you are "Extremely Satisfied" with the characteristic. Check [✓] the box that best indicates your degree of satisfaction with each characteristic.

	Extremely Dissatisfied			Neutral			Extremely Satisfied
8. The amount of job security you have in your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
9. The amount of pay and fringe benefits you receive in your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
10. The amount of personal growth and development you get in doing your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
11. The people you talk to and work with on your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
12. The degree of respect and fair treatment you receive from your immediate supervisor on your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
13. The feeling of worthwhile accomplishment you get from doing your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
14. The chance to get to know other people while on your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
15. The amount of support and guidance you receive from your immediate supervisor on your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
16. The degree to which you are fairly paid for what you contribute to the National Guard.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
17. The amount of independent thought and action you can exercise in your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
18. How secure things look for you in the future in the National Guard.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
19. The chance to help other people while at work in the National Guard.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
20. The amount of challenge in your National Guard job.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
21. The overall quality of the supervision you receive in your National Guard work.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
22. In general, how satisfied are you with your job as a National Guard aviator (does not include your job as a full time National Guard technician)? (check one)	[1] Extremely Dissatisfied	[2]	[3]	[4] Neutral	[5]	[6]	[7] Extremely Satisfied

SECTION D: COMMENTS ABOUT THE ARNG

23. If you have additional comments about your National Guard career intentions and/or the factors that influence your intentions, please make them in the space below.

COMMENTS:

A P P E N D I X B

INCOME OF AVIATORS' SPOUSES

Table B-1

Income of Aviators' Spouses

Less than $ 5,000	16.4
$ 5,000 - $ 9,999	19.4
$10,000 - $14,999	21.2
$15,000 - $19,999	19.7
$20,000 - $24,999	11.5
$25,000 - $29,999	5.3
$30,000 - $34,999	3.0
$35,000 - $39,999	1.7
$40,000 - $44,999	0.6
$45,000 - $49,999	0.3
$50,000 or more	0.9

A P P E N D I X C

AVIATORS' PROJECTED TOTAL CIVILIAN AND ARNG INCOME

Table C-1

Aviators' Projected Total Annual Income

Income Level	Percent of ARNG Aviators
Less Than $ 5,000	0.2
$ 5,000 - $ 9,999	0.7
$10,000 - $14,999	1.8
$15,000 - $19,999	3.4
$20,000 - $24,999	6.7
$25,000 - $29,999	11.3
$30,000 - $34,999	16.0
$35,000 - $39,999	16.8
$40,000 - $44,999	16.3
$45,000 - $49,999	8.8
$50,000 or More	18.0

Note: Does not include income from spouse.

Table C-2

Projected Income From Position
As M-Day ARNG Aviator

Income Level	Percent of ARNG Aviators
Less Than $ 1,000	0.8
$ 1,000 - $ 1,999	0.3
$ 2,000 - $ 2,999	1.6
$ 3,000 - $ 3,999	4.2
$ 4,000 - $ 4,999	10.5
$ 5,000 - $ 5,999	18.7
$ 6,000 - $ 6,999	21.6
$ 7,000 - $ 7,999	15.4
$ 8,000 - $ 8,999	11.2
$ 9,000 - $ 9,999	6.6
$10,000 - $10,999	4.6
$11,000 - $11,999	1.8
$12,000 - $12,999	1.4
$13,000 - $13,999	0.3
$14,000 - $14,999	0.3
$15,000 or More	0.7

A P P E N D I X D

DESCRIPTIVE DATA SUMMARY TABLE:

EFFECT OF CIVILIAN JOB WORK SCHEDULE ON AVIATORS' ABILITY TO ATTEND ARNG TRAINING PERIODS

Table D-1

Descriptive Data Summary Table:
Effect of Civilian Job Work Schedule on Aviators' Ability to Attend UTA/MUTA

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	476	463	506	319	46	400	232	875	3317
M	3.04	3.10	3.06	3.06	3.46	2.97	2.99	2.76	2.97
SD	1.88	1.89	1.85	1.79	2.01	1.83	1.80	1.87	1.86
MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
%	24.0	24.0	23.0	18.0	30.0	22.0	22.0	19.0	21.0

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4."

Table D-2

Descriptive Data Summary Table:
Effect of Civilian Job Work Schedule on Aviators' Ability to Attend AFTP

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	477	462	503	318	46	398	231	869	3304
M	3.72	3.58	3.71	3.86	4.17	3.75	3.49	3.40	3.62
SD	1.90	1.87	1.92	1.86	2.10	1.89	1.86	1.92	1.90
MO	4.00	1.00	4.00	4.00	6.00	4.00	4.00	1.00	4.00
%	34.0	35.0	36.0	37.0	41.0	35.0	27.0	30.0	34.0

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4."

Table D-3

Descriptive Data Summary Table:
Effect of Civilian Job Work Schedule on Aviators' Ability to Attend FTTD

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	473	458	504	316	46	399	230	864	3290
M	4.49	4.47	4.37	4.59	4.59	4.29	4.24	4.00	4.31
SD	1.85	1.96	1.91	1.91	2.11	1.91	1.98	2.06	1.97
MO	5.00	4.00	4.00	4.00	7.00	4.00	4.00	1.00	4.00
%	54.0	53.0	49.0	53.0	54.0	48.0	50.0	44.0	49.0

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4."

Table D-4

Descriptive Data Summary Table:
Effect of Civilian Job Work Schedule on Aviators' Ability to Attend Annual Training (AT)

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	474	457	505	317	46	400	231	868	3298
M	3.35	3.38	3.22	3.48	3.39	3.28	3.40	2.99	3.25
SD	1.83	1.99	1.91	1.86	1.88	1.86	1.91	1.89	1.90
MO	1.00	1.00	1.00	4.00	4.00	1.00	1.00	1.00	1.00
%	30.0	32.0	27.0	28.0	26.0	27.0	31.0	22.0	27.0

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4."

A P P E N D I X E

WARRANT OFFICER RANKS BY TYPE OF UNIT

Table E-1

Warrant Officer Ranks by Type of Unit

Warrant Officer Grade	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
WO1	6.9	9.4	10.8	13.2	0.0	9.0	0.5	5.6	8.0
CW2	40.8	43.0	46.4	33.5	28.6	34.4	42.6	37.0	39.7
CW3	36.9	31.9	33.2	35.8	38.1	40.8	40.0	34.9	35.8
CW4	15.4	15.7	9.6	17.5	33.3	15.8	16.9	22.5	16.5

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

Note: Entries in the table indicate the percentage of warrant officers in a specific type of unit.

A P P E N D I X F

COMMISSIONED OFFICER RANKS BY TYPE OF UNIT

Table F-1

Commissioned Officer Ranks by Type of Unit

Commissioned Officer Grade	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
2nd Lieutenant	5.5	7.5	5.4	6.0	0.0	11.9	5.3	0.9	4.7
1st Lieutenant	14.5	24.0	14.1	25.3	11.1	15.1	14.0	4.9	12.8
Captain	69.0	49.3	54.4	49.4	55.6	50.8	54.4	30.8	46.0
Major	11.0	19.2	24.1	19.3	33.3	21.4	26.3	45.4	29.4
Lieutenant Colonel	0.0	0.0	1.3	0.0	0.0	0.8	0.0	15.0	5.9
Colonel	0.0	0.0	0.7	0.0	0.0	0.0	0.0	3.0	1.2

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

Note: Entries in the table indicate the percentage of aviators in a specific type of unit.

A P P E N D I X G

SOURCE OF ENTRY INTO ARNG BY TYPE OF UNIT

Table G-1

Source of Entry Into ARNG by Type of Unit

Source of Entry	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Civilian--No Prior Military Service	10.3	14.7	12.3	18.1	17.9	15.5	12.5	21.3	15.8
Prior Military (More Than 6-Month Break in Service)	46.6	45.8	48.1	49.5	38.5	46.5	44.8	37.6	44.4
Direct From Active Army (Less Than 6-Month Break in Service)	24.2	21.7	24.3	18.4	30.8	23.2	27.0	26.4	24.1
Direct From Other Active Service (Less Than 6-Month Break in Service)	3.4	2.5	2.0	2.9	2.6	2.7	2.0	3.9	2.9
Direct From Active Army Reserve	5.3	6.4	5.6	4.1	5.1	4.8	7.3	4.1	5.1
Direct From Other Active Reserve	5.0	3.5	5.2	3.8	5.1	3.9	4.4	3.5	4.1
Other Source of Entry	5.2	5.4	2.5	3.2	0.0	3.4	2.0	3.2	3.6

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

Note: Entries in the table indicate the percentage of aviators in a specific type of unit.

A P P E N D I X H

LENGTH OF MILITARY SERVICE BY TYPE OF UNIT

Table H-1

Descriptive Data Summary Table: Total Number of Months on Active Duty by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	469	435	487	290	41	375	221	765	3083
M	60.03	60.24	60.01	56.47	70.54	58.80	68.61	62.78	60.90
SD	31.49	37.04	31.83	36.62	37.85	32.33	36.07	34.94	34.33
MD	53.78	48.46	50.69	47.79	63.00	48.45	59.69	50.79	50.20

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table H-2

Descriptive Data Summary Table: Total Number of Months of Service in the ARNG by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	517	510	549	342	46	437	248	936	3585
M	93.81	99.63	93.28	103.69	129.41	100.53	101.39	142.27	110.07
SD	64.07	64.56	71.45	76.09	51.80	70.96	75.22	90.26	78.08
MD	83.61	89.64	83.64	84.75	137.83	89.60	84.17	132.00	96.28

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table H-3

Descriptive Data Summary Table:
Total Number of Months of Service in the Active Reserves by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	109	111	119	67	4	92	56	183	741
M	53.07	45.97	55.92	45.02	44.25	40.63	45.00	45.02	47.53
SD	53.88	41.74	51.30	46.73	26.51	36.69	32.91	43.85	45.19
MD	35.69	35.56	42.25	35.56	37.00	29.17	36.25	28.25	35.64

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table H-4

Descriptive Data Summary Table:
Total Number of Months of Military Service by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	521	517	556	343	46	437	248	955	3623
M	158.23	158.84	156.64	159.92	196.13	159.55	172.69	200.94	171.08
SD	68.08	70.98	73.41	77.25	49.86	69.55	70.56	82.96	76.71
MD	154.25	155.57	153.00	156.00	199.00	155.92	168.50	192.11	167.74

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table H-5

Descriptive Data Summary Table: Total Number of Months on Flight Orders by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	507	500	533	335	45	426	242	916	3504
M	123.85	120.24	115.21	119.22	163.62	127.31	142.07	157.08	132.30
SD	67.54	66.06	70.06	77.50	48.19	68.10	61.19	71.88	71.24
MD	126.25	127.50	116.00	120.75	179.67	134.50	150.50	167.20	143.69

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table H-6
Descriptive Data Summary Table: Total Number of Months in ARNG Unit by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Ssample (N_T=3640)
n	506	500	527	337	44	424	243	903	3484
M	70.05	69.42	64.03	68.11	85.80	67.26	57.95	68.95	67.60
SD	55.65	53.27	58.06	58.25	51.86	52.84	51.38	61.20	56.84
MD	55.50	54.38	44.88	48.74	98.50	53.25	40.33	49.30	49.82

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

A P P E N D I X I

DESCRIPTIVE DATA SUMMARY TABLE: NUMBER OF FLIGHT HOURS BY TYPE OF UNIT

Table I-1

Descriptive Data Summary Table: Total Number of Military Flight Hours by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	519	514	552	337	46	436	247	944	3595
M	1940.96	1954.00	1894.23	1914.82	2895.22	2059.22	2317.92	2586.63	2152.69
SD	1170.66	1497.18	1254.78	1286.09	1317.41	1247.81	1274.00	1672.12	1434.48
MD	1899.75	1850.00	1700.50	1899.67	2506.67	1999.86	2100.00	2200.09	1999.84

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table I-2

Descriptive Data Summary Table: Total Number of Civilian Flight Hours by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	384	376	414	255	42	334	202	750	2757
M	1547.90	1704.32	1449.14	1466.23	2680.71	1306.61	1716.50	1545.42	1544.31
SD	2304.98	2498.47	2273.47	2026.36	2834.89	1897.52	2235.41	2435.27	2303.17
MD	450.50	499.65	325.50	599.92	2000.00	499.64	599.83	400.13	499.56

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table I-3

Descriptive Data Summary Table: Total Number of Combat Flight Hours by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	310	274	277	174	33	253	163	511	1995
M	855.64	875.25	864.01	915.95	897.27	929.59	875.07	852.90	875.34
SD	387.72	479.24	520.10	448.98	369.28	439.33	395.75	516.26	467.34
MD	850.13	849.60	849.38	900.17	1000.00	949.00	900.00	849.93	870.38

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

A P P E N D I X J

DESCRIPTIVE DATA SUMMARY TABLE:

HOURS IN PRIMARY AIRCRAFT AND HIGHEST QUALIFICATION OF AVIATORS

Table J-1a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators in Attack Units

	Primary Aircraft						
	UH-1H	UH-1C/M	OH-6	OH-58	AH-1G	AH-1S (MOD)	AH-1S(MC)
n	70	227	36	64	8	69	32
M	1050.67	552.33	711.28	675.02	271.25	259.01	221.34
SD	808.29	573.14	623.33	441.76	385.84	453.69	177.84
MD	800.50	350.11	500.00	699.50	105.00	149.17	198.75

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-1b

Highest Aircraft Qualification Held by Aviators in Attack Units

	Aircraft						
Highest Qualification	UH-1H	UH-1C/M	OH-6	OH-58	AH-1G	AH-1S (MOD)	AH-1S (MC)
Pilot	24.0	39.9	6.3	10.5	3.4	12.6	7.6
Unit Trainer	1.7	5.0	0.4	1.9	0.4	1.9	0.2
Instructor Pilot	4.2	6.1	1.3	2.1	0.4	1.7	1.0
Standardization Instructor Pilot	3.4	3.2	0.8	2.1	2.1	2.1	1.5

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-2a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
In Air Cavalry Units

	Primary Aircraft			
	UH-1H	UH-1C/M	OH-6	OH-58
n	220	157	41	84
M	1310.24	722.12	603.78	659.21
SD	1642.73	640.40	569.85	548.44
MD	1000.03	500.00	406.67	502.50

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-2b

Highest Aircraft Qualification Held by Aviators in Air Cavalry Units

	Aircraft			
Highest Qualification	UH-1H	UH-1C/M	OH-6	OH-58
Pilot	40.8	23.9	7.5	14.6
Unit Trainer	2.3	4.0	0.4	2.7
Instructor Pilot	6.0	3.1	1.0	2.3
Standardization Instructor Pilot	6.0	4.2	1.2	1.5

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-3a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators in Combat Support Units

	Primary Aircraft	
	UH-1H	OH-6
n	516	19
M	1322.22	676.84
SD	995.35	683.01
MD	1171.00	493.33

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-3b

Highest Aircraft Qualification Held by Aviators in Combat Support Units

	Aircraft	
Highest Qualification	UH-1H	OH-6
Pilot	67.4	5.5
Unit Trainer	8.2	0.0
Instructor Pilot	9.1	0.5
Standardization Instructor Pilot	6.6	0.9

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-4a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in General Support Units

	Primary Aircraft		
	UH-1H	OH-6	OH-58
n	193	56	80
M	1345.07	621.71	804.36
SD	1029.36	515.41	638.28
MD	1000.46	455.00	751.00

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-4b

Highest Aircraft Qualification Held by Aviators
in General Support Units

	Aircraft		
Highest Qualification	UH-1H	OH-6	OH-58
Pilot	43.4	16.3	22.7
Unit Trainer	6.7	1.2	3.2
Instructor Pilot	8.7	1.5	4.4
Standardization Instructor Pilot	6.4	1.5	3.2

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-5a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in Aerial Surveillance Units

	Primary Aircraft		
	OV-1B	OV-1C	OV-1D
n	9	16	20
M	816.67	1189.06	1392.50
SD	745.82	951.53	1153.06
MD	787.50	812.50	1200.00

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-5b

Highest Aircraft Qualification Held by Aviators
in Aerial Surveillance Units

	Aircraft		
Highest Qualification	OV-1B	OV-1C	OV-1D
Pilot	37.0	39.1	43.5
Unit Trainer	8.7	10.9	0.0
Instructor Pilot	2.2	2.2	4.3
Standardization Instructor Pilot	8.7	8.7	6.5

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-6a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in Air Ambulance Units

	Primary Aircraft	
	UH-1H	UH-1V
n	407	21
M	1467.82	1357.43
SD	994.33	1187.58
MD	1399.27	1100.00

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-6b

Highest Aircraft Qualification Held by Aviators
in Air Ambulance Units

	Aircraft	
Highest Qualification	UH-1H	UH-1V
Pilot	67.3	6.8
Unit Trainer	10.9	1.1
Instructor Pilot	12.7	1.1
Standardization Instructor Pilot	5.5	1.6

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-7a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in Transportation Units

	Primary Aircraft		
	UH-1H	CH-47	CH-54
n	33	84	116
M	1213.33	786.01	500.44
SD	1182.67	707.85	506.70
MD	996.00	402.50	321.00

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-7b

Highest Aircraft Qualification Held by Aviators
in Transportation Units

	Aircraft		
Highest Qualification	UH-1H	CH-47	CH-54
Pilot	23.7	26.9	35.3
Unit Trainer	2.8	1.6	1.2
Instructor Pilot	6.0	2.0	4.8
Standardization Instructor Pilot	5.2	4.0	3.6

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-8a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in Other Types of Units:
Rotary Wing Aircraft

	Primary Aircraft		
	UH-1H	OH-6	OH-58
n	551	92	152
M	1584.69	598.41	740.74
SD	1173.66	575.06	503.62
MD	1499.02	498.61	602.05

Key: n = total number of aviators responding to each item; M = mean; SD = standard deviation; MD = median.

Table J-8b

Highest Aircraft Qualification Held by Aviators
in Other Types of Units:
Rotary Wing Aircraft

	Aircraft		
Highest Qualification	UH-1H	OH-6	OH-58
Pilot	46.6	11.0	18.9
Unit Trainer	3.7	0.8	1.0
Instructor Pilot	11.3	1.7	3.8
Standardization Instructor Pilot	11.5	2.4	4.2

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

Table J-9a

Descriptive Data Summary Table:
Hours in Primary Aircraft for Aviators
in Other Types of Units: Fixed Wing Aircraft

	Primary Aircraft					
	T-42	U-3	U-8	U-21	C-7A	C-12D
n	29	28	39	12	9	9
M	440.86	567.57	487.87	482.92	716.67	301.67
SD	338.81	414.27	473.95	557.85	521.42	310.76
MD	400.00	499.17	302.00	350.00	550.00	200.00

Key: n = total number of aviators responding to each item;
M = mean; SD = standard deviation; MD = median.

Table J-9b

Highest Aircraft Qualification Held by Aviators
in Other Types of Units: Fixed Wing Aircraft

	Aircraft				
Highest Qualification	T-42	U-3	U-8	U-21	C-12D
Pilot	7.0	2.8	5.5	2.3	1.1
Unit Trainer	0.0	0.4	0.3	0.0	0.0
Instructor Pilot	0.5	0.5	0.7	0.4	0.0
Standardization Instructor Pilot	1.0	1.2	1.5	0.3	0.2

Note: Entries are percentages of aviators indicating that their highest qualification in a specific aircraft, in which they are current, is pilot, unit trainer, instructor pilot, or standardization instructor pilot.

A P P E N D I X K

ADDITIONAL AVIATION QUALIFICATIONS HELD BY AVIATORS

Table K-1

Additional Aviation Qualifications Held by Aviators

Aviation Qualification	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Rotary Wing IFE	4.0	4.4	4.8	5.8	4.3	5.2	9.2	11.9	7.0
Fixed Wing IFE	0.4	0.2	1.6	3.2	8.7	1.6	0.8	6.5	2.7
Safety Officer	6.9	6.4	5.0	6.7	15.2	6.8	8.8	16.2	9.2
Maintenance Officer	5.3	7.1	7.7	6.4	21.7	8.6	12.4	17.0	10.2
Instrument Ticket	81.3	81.3	75.5	76.1	63.0	79.3	70.7	73.8	76.8
Terrain Flight (NOE)	77.5	79.6	70.1	69.4	N/A	74.3	57.8	65.9	70.3
Unaided Night Tactical (Night Hawk)	46.0	51.4	29.0	27.7	N/A	24.8	16.9	24.4	31.6
Night Vision Goggles	24.8	24.1	12.3	11.7	N/A	10.5	6.8	11.6	14.8
Gunnery	52.9	32.8	N/A	N/A	N/A	N/A	N/A	N/A	42.8*

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey.

Note: Entries in the table indicate the percent of aviators in each type of unit who responded to the survey who currently hold a particular aviation qualification.

*Includes only attack and air cavalry unit types.

A P P E N D I X L

TOE, MTOE, OR TDA DUTY POSITION BY TYPE OF UNIT

Table L-1

TOE, MTOE, or TDA Duty Position by Type of Unit

Duty Position	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Company/Troop Commander	1.7	2.7	2.3	2.6	4.3	3.2	3.7	3.8	2.9
Executive Officer	1.9	2.5	2.3	1.8	4.3	2.5	1.6	3.3	2.5
Operations Officer	0.8	1.2	2.5	2.4	2.2	2.3	1.6	3.6	2.3
Flight Operations Officer	1.5	0.6	0.9	0.6	4.3	1.6	0.4	1.1	1.1
Platoon Leader	8.6	6.6	5.6	3.8	10.9	5.0	6.9	2.6	5.3
Platoon Commander	1.0	2.9	0.4	0.9	0.0	0.2	4.1	1.3	1.3
Section Leader	12.3	6.2	8.3	7.6	6.5	13.1	0.4	3.3	7.2
Section Commander	0.0	1.7	0.4	0.6	4.3	0.0	0.4	1.7	0.9
Team Leader	0.8	3.3	0.2	0.0	0.0	0.0	0.0	0.0	0.6
Rotary Wing/ Fixed Wing Instrument Examiner	1.2	1.5	2.5	3.5	0.0	4.1	4.1	2.5	2.5
Instructor Pilot	7.1	6.2	7.0	10.6	6.5	6.4	7.7	6.7	7.1
Attack Helicopter Pilot (AH-1G, AH-1S[MC] AH-1S[MOD], UH-1C/M)	3.4	20.5	0.4	0.0	0.0	0.0	0.0	0.1	9.3
Observation Helicopter Pilot (OH-6, OH-58)	12.5	13.9	2.2	28.8	0.0	0.0	0.8	12.4	10.2

Key: N = total number of aviators in each type of unit responding to the survey.

Table L-1 (Continued)

TOE, MTOE, or TDA Duty Position by Type of Unit

Duty Position	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Utility Helicopter Pilot (UH-1H)	2.5	23.4	57.7	26.5	0.0	49.1	8.1	20.5	27.0
Cargo Helicopter Pilot (CH-47, CH-54)	0.0	0.0	0.0	0.0	0.0	0.0	52.8	0.6	3.8
Utility Airplane Pilot	0.0	0.2	1.1	0.6	0.0	1.4	0.0	4.4	1.6
Surveillance Airplane Pilot	0.0	0.0	0.0	0.0	23.9	0.0	0.0	0.1	0.3
Flight Safety Technician	1.3	2.3	1.3	2.6	6.5	3.2	3.7	4.9	3.0
Aircraft Maintenance Technician	1.3	4.3	1.8	1.8	8.7	2.1	2.4	4.0	2.8
Other Position	2.1	0.0	3.1	5.3	17.4	5.7	1.2	23.0	8.3

Key: N = total number of aviators in each type of unit responding to the survey.

A P P E N D I X M

DESCRIPTIVE DATA SUMMARY TABLE:
THOUGHTS ABOUT LEAVING THE ARNG BY TYPE OF UNIT

Table M-1

Descriptive Data Summary Table: Frequency of Thinking About Leaving the ARNG by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	522	515	556	338	46	436	247	952	3612
M	2.81	2.79	2.87	3.16	3.94	3.14	3.32	2.94	2.97
SD	1.62	1.66	1.74	1.79	1.67	1.73	1.80	1.73	1.73
MO	1.00	1.00	1.00	1.00	4.00	1.00	4.00	1.00	1.00

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode.

Table M-2

Descriptive Data Summary Table: Likelihood of Seeking an Alternate Part-time Job by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	509	507	548	337	45	427	238	931	3542
M	3.25	3.34	3.24	3.51	3.38	3.21	3.26	3.32	3.30
SD	2.20	2.22	2.20	2.23	2.57	2.21	2.21	2.21	2.21
MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode.

Table M-3

Descriptive Data Summary Table: Chances of Obtaining an Alternate Part-time Job by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	505	503	545	334	44	423	234	924	3512
M	3.75	3.70	3.75	3.82	4.41	3.63	3.80	3.46	3.67
SD	2.08	2.14	2.16	2.03	2.07	2.04	2.15	2.10	2.10
MO	1.00	1.00	1.00	4.00	4.00	1.00	1.00	1.00	1.00

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode.

A P P E N D I X N

DESCRIPTIVE DATA SUMMARY TABLE:
SATISFACTION WITH ARNG JOB BY TYPE OF UNIT

Table N-1

Descriptive Data Summary Table: Satisfaction With ARNG Job Security by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	521	515	553	341	39	436	248	952	3605
M	4.77	4.91	4.77	4.83	4.23	4.81	4.65	4.81	4.80
SD	1.25	1.26	1.36	1.30	1.36	1.26	1.32	1.36	1.31

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

Table N-2

Descriptive Data Summary Table: Satisfaction With ARNG Pay by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	522	515	552	341	39	436	248	953	3606
M	4.17	4.19	4.20	4.24	4.37	3.93	4.01	4.46	4.22
SD	1.45	1.48	1.51	1.52	1.41	1.47	1.57	1.56	1.51

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

Table N-3

Descriptive Data Summary Table: Satisfaction With Potential for Personal Growth in ARNG Job by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	522	515	551	341	39	436	248	951	3603
M	4.83	4.91	4.92	4.74	4.10	4.86	4.58	5.02	4.88
SD	1.08	1.11	1.13	1.23	1.16	1.15	1.27	1.15	1.16

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

Table N-4

Descriptive Data Summary Table: Satisfaction With Social Aspects of ARNG Job by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	522	515	551	341	39	436	248	951	3603
M	5.29	5.45	5.38	5.23	5.17	5.39	5.23	5.45	5.37
SD	.92	.91	.98	1.01	.88	.96	.96	.94	.95

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

Table N-5

Descriptive Data Summary Table: Satisfaction With ARNG Supervisor by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	522	515	551	341	39	436	248	951	3603
M	4.90	5.02	5.00	4.79	4.36	4.88	4.72	5.00	4.93
SD	1.22	1.25	1.31	1.30	1.12	1.31	1.31	1.36	1.30

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

Table N-6

Descriptive Data Summary Table: Satisfaction With ARNG Job in General by Type of Unit

	Type of ARNG Aviation Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
n	507	503	542	339	37	427	241	917	3513
M	5.09	5.14	5.15	5.04	4.49	4.96	4.81	5.15	5.07
SD	1.21	1.23	1.28	1.38	1.33	1.31	1.26	1.27	1.28

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation.

A P P E N D I X O

DESCRIPTIVE DATA SUMMARY TABLE:

ADEQUACY OF INITIAL QUALIFICATION AND TRANSITION TRAINING REQUIREMENTS FOR MAINTAINING A SAFE LEVEL OF AVIATOR PROFICIENCY

Table O-1

Adequacy of Initial Qualification Training Requirements for Maintaining a Safe Level of Aviator Proficiency

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	319	315	296	218	30	193	179	571	2121
	M	4.28	4.17	4.15	4.24	4.38	3.89	4.56	4.26	4.23
	SD	1.02	1.09	1.06	0.97	1.25	1.06	1.12	1.01	1.05
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	17.2	20.3	18.2	15.1	13.3	26.9	7.30	12.0	16.2
Emergency Procedures	n	318	321	298	219	29	202	181	583	2151
	M	4.27	4.21	4.12	4.26	4.41	3.91	4.45	4.22	4.21
	SD	1.06	1.08	1.11	0.97	1.18	1.05	1.20	1.03	1.07
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	18.6	17.4	19.8	14.2	10.3	26.7	14.4	14.2	17.2
Instruments	n	325	364	342	236	26	262	167	626	2348
	M	4.08	4.32	4.13	4.11	4.27	4.12	4.05	4.21	4.17
	SD	1.25	1.18	1.27	1.19	1.22	1.22	1.21	1.17	1.21
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	27.1	17.3	25.4	25.0	19.2	24.8	24.6	20.5	22.8
Terrain Flight (NOE)	n	401	421	414	259	N/A	335	161	700	2691
	M	4.27	4.19	4.01	4.15	N/A	4.20	4.05	4.18	4.16
	SD	1.14	1.14	1.23	1.11	N/A	1.12	1.21	1.15	1.16
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	18.2	17.8	27.8	23.6	N/A	19.1	21.7	20.4	21.1
Unaided Night Tactical	n	256	269	182	124	N/A	126	55	298	1330
	M	4.06	4.16	3.71	4.02	N/A	3.69	3.40	3.94	3.94
	SD	1.19	1.22	1.43	1.35	N/A	1.38	1.45	1.23	1.30
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	25.0	23.5	35.2	31.5	N/A	35.7	49.1	27.3	29.1
Night Vision Goggles (NVG)	n	156	154	106	60	N/A	58	21	148	703
	M	4.05	3.95	3.24	3.90	N/A	3.45	3.14	3.97	3.80
	SD	1.34	1.40	1.62	1.60	N/A	1.55	1.80	1.44	1.50
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	30.1	31.8	50.0	38.3	N/A	44.8	52.4	32.7	36.7
Nuclear, Biological Chemical (NBC)	n	261	295	293	205	19	283	121	384	1861
	M	2.77	2.98	2.94	3.19	2.79	3.10	3.20	2.99	3.00
	SD	1.40	1.39	1.42	1.39	1.48	1.37	1.45	1.40	1.40
	MO	2.00	4.00	4.00	4.00	1.00	4.00	4.00	4.00	4.00
	%	70.9	58.3	63.1	53.2	63.2	57.2	52.1	60.1	60.1

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

Table O-2

Adequacy of Transition Training Requirements for Maintaining a Safe Level of Aviator Proficiency

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra	n	148	23	N/A	N/A	N/A	N/A	N/A	N/A	171
	M	4.41	4.09	N/A	N/A	N/A	N/A	N/A	N/A	4.39
	SD	1.32	1.88	N/A	N/A	N/A	N/A	N/A	N/A	1.43
	MO	4.00	4.00	N/A	N/A	N/A	N/A	N/A	N/A	4.00
	%	18.9	21.7	N/A	N/A	N/A	N/A	N/A	N/A	18.3
National-Guard-Specific Aircraft	n	251	244	132	139	20	90	157	425	1458
	M	4.42	4.41	4.25	4.37	4.55	4.21	4.71	4.50	4.44
	SD	1.00	1.12	1.19	1.08	1.15	1.21	1.26	1.04	1.11
	MO	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00
	%	9.20	12.3	18.2	10.8	15.0	20.0	9.60	9.60	11.6
Alternate/Additional Aircraft	n	201	171	102	107	23	89	71	439	1203
	M	4.28	4.37	4.17	4.29	4.09	4.28	4.47	4.38	4.33
	SD	1.19	1.17	1.31	1.05	0.85	1.14	1.16	1.07	1.13
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	19.4	11.1	23.5	11.2	21.7	16.9	11.3	11.0	14.1

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

A P P E N D I X P

DESCRIPTIVE DATA SUMMARY TABLE:

ADEQUACY OF THE TIME ALLOCATED FOR MEETING INITIAL QUALIFICATION AND TRANSITION TRAINING REQUIREMENTS

Table P-1

Adequacy of the Time Allocated for Meeting Initial Qualification Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	326	326	304	218	31	198	184	518	2105
	M	3.73	3.72	3.62	3.91	3.94	3.56	3.92	3.76	3.75
	SD	1.07	1.07	1.10	0.93	0.73	1.09	1.05	0.99	1.04
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	32.8	26.7	34.9	22.5	22.6	35.4	24.5	26.0	28.7
Emergency Procedures	n	327	325	309	221	31	207	188	585	2193
	M	3.71	3.73	3.60	3.86	4.00	3.55	3.92	3.74	3.73
	SD	1.07	1.04	1.10	1.03	0.58	1.05	1.04	0.96	1.03
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	35.2	32.0	39.2	25.8	16.1	37.7	23.9	27.8	31.4
Instruments	n	340	368	353	233	28	273	173	644	2412
	M	3.59	3.78	3.67	3.74	3.93	3.59	3.62	3.70	3.68
	SD	1.17	1.09	1.25	1.11	0.90	1.09	1.15	1.07	1.13
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	37.4	33.2	37.1	33.5	17.9	38.5	40.5	33.2	35.4
Terrain Flight (NOE)	n	409	417	413	258	N/A	341	158	693	2689
	M	3.77	3.75	3.49	3.83	N/A	3.64	3.56	3.61	3.66
	SD	1.04	1.10	1.16	1.11	N/A	1.02	1.09	1.14	1.11
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	33.7	31.4	42.1	30.6	N/A	37.2	39.9	35.4	35.6
Unaided Night Tactical	n	253	281	177	120	N/A	133	52	300	1316
	M	3.62	3.65	3.30	3.62	N/A	3.15	2.77	3.37	3.45
	SD	1.09	1.17	1.32	1.36	N/A	1.22	1.22	1.20	1.19
	MO	4.00	4.00	4.00	4.00	N/A	4.00	4.00	4.00	4.00
	%	39.5	36.7	49.2	43.3	N/A	54.9	69.2	46.4	44.7
Night Vision Goggles (NVG)	n	152	146	93	56	N/A	56	16	156	675
	M	3.63	3.50	2.95	3.23	N/A	2.68	2.50	3.09	3.24
	SD	1.17	1.29	1.23	1.49	N/A	1.36	1.41	1.40	1.34
	MO	4.00	4.00	4.00	4.00	N/A	1.00	1.00	4.00	4.00
	%	38.2	41.8	36.6	57.1	N/A	64.3	75.0	57.1	50.9
Nuclear, Biological Chemical (NBC)	n	251	287	286	198	18	280	116	387	1823
	M	2.69	2.95	2.86	3.17	3.11	3.02	3.05	2.81	2.91
	SD	1.31	1.34	1.29	1.42	1.71	1.34	1.32	1.31	1.34
	MO	2.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00	4.00
	%	71.7	60.3	65.7	56.1	55.6	58.6	61.2	66.8	63.4

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

Table P-2

Adequacy of the Time Allocated for Meeting Transition Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra	n	151	16	N/A	N/A	N/A	N/A	N/A	N/A	167
	M	3.87	3.63	N/A	N/A	N/A	N/A	N/A	N/A	3.87
	SD	1.29	1.54	N/A	N/A	N/A	N/A	N/A	N/A	1.33
	MD	3.93	3.88	N/A	N/A	N/A	N/A	N/A	N/A	3.95
	MO	4.00	4.00	N/A	N/A	N/A	N/A	N/A	N/A	4.00
	%	32.5	31.3	N/A	N/A	N/A	N/A	N/A	N/A	30.4
National-Guard-Specific Aircraft	n	259	234	126	133	19	88	160	435	1454
	M	3.89	3.79	3.80	3.95	3.95	3.76	3.98	3.86	3.87
	SD	0.93	0.92	1.06	1.00	0.85	1.02	1.22	0.98	1.00
	MD	3.96	3.89	3.91	3.99	4.00	3.92	3.96	3.94	3.94
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	21.6	26.5	27.8	23.3	26.3	27.3	27.5	24.0	24.8
Alternate/Additional Aircraft	n	196	173	106	104	23	88	75	430	1195
	M	3.69	3.68	3.60	3.92	3.78	3.68	3.88	3.81	3.76
	SD	1.13	1.09	1.20	1.08	1.00	1.14	1.13	1.01	1.09
	MD	3.84	3.85	3.83	3.98	3.89	3.90	3.95	3.91	3.89
	MO	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	%	32.1	30.1	33.0	22.1	34.8	28.4	26.7	27.1	28.6

Key: N = Total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage less than "4," N/A = training requirement is not applicable to a specific type of unit.

A P P E N D I X Q

DESCRIPTIVE DATA SUMMARY TABLE:

WILLINGNESS TO SPEND ADDITIONAL PAID TIME TO MEET INITIAL QUALIFICATION AND TRANSITION TRAINING REQUIREMENTS

Table Q-1

Willingness to Spend Additional Paid Time to Meet Initial Qualification Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	319	327	300	203	32	191	183	564	2119
	M	5.77	5.73	5.80	5.57	5.19	5.94	5.38	5.48	5.64
	SD	1.40	1.50	1.45	1.35	1.55	1.25	1.74	1.57	1.49
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	81.2	80.7	80.3	73.4	59.4	83.8	72.7	72.7	77.1
Emergency Procedures	n	326	332	308	207	32	205	187	580	2177
	M	5.72	5.68	5.73	5.39	5.13	5.78	5.24	5.45	5.57
	SD	1.40	1.48	1.45	1.48	1.43	1.36	1.80	1.57	1.51
	MO	7.00	7.00	7.00	7.00	4.00	7.00	7.00	7.00	7.00
	%	80.4	78.9	80.2	68.1	56.2	79.5	67.4	72.1	75.1
Instruments	n	330	358	345	224	29	258	169	621	2334
	M	5.83	5.71	5.84	5.51	5.41	5.86	5.31	5.59	5.68
	SD	1.35	1.54	1.41	1.46	1.48	1.29	1.78	1.58	1.50
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	82.4	78.5	82.0	72.3	65.5	84.1	70.4	75.0	77.9
Terrain Flight (NOE)	n	412	422	420	261	N/A	322	191	735	2763
	M	5.65	5.65	5.73	5.49	N/A	5.63	5.05	5.46	5.55
	SD	1.40	1.57	1.43	1.54	N/A	1.45	1.85	1.61	1.55
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	78.2	78.0	79.8	73.9	N/A	75.5	61.8	72.8	75.0
Unaided Night Tactical	n	416	406	386	245	N/A	301	159	672	2585
	M	5.64	5.68	5.68	5.31	N/A	5.62	5.14	5.44	5.53
	SD	1.55	1.63	1.57	1.74	N/A	1.65	1.97	1.72	1.68
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	79.1	78.8	79.3	69.4	N/A	79.7	66.0	73.7	75.9
Night Vision Goggles (NVG)	n	396	386	376	228	N/A	282	153	645	2466
	M	5.71	5.81	5.72	5.37	N/A	5.60	5.14	5.49	5.59
	SD	1.63	1.63	1.64	1.77	N/A	1.74	2.04	1.75	1.72
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	80.6	82.6	80.9	71.9	N/A	78.7	63.4	74.6	77.2
Nuclear, Biological Chemical (NBC)	n	420	422	408	270	28	345	192	707	2792
	M	5.16	5.18	5.15	4.98	4.50	5.07	4.49	5.19	5.09
	SD	1.85	1.92	1.86	1.77	2.25	1.85	2.12	1.84	1.88
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	67.1	64.9	63.0	59.6	53.6	62.3	48.4	67.0	63.4

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to specific type of unit.

Note: In most instances, the modal rating is "7."

Table Q-2

Willingness to Spend Additional Paid Time to Meet Transition Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra	n	348	246	237	118	N/A	147	68	384	1548
	M	5.81	6.00	5.59	5.31	N/A	4.84	4.53	5.25	5.48
	SD	1.67	1.77	1.93	2.07	N/A	2.34	2.42	2.07	2.00
	MO	7.00	7.00	7.00	7.00	N/A	7.00	7.00	7.00	7.00
	%	80.7	85.4	75.9	70.3	N/A	61.2	55.9	66.4	73.3
National-Guard-Specific Aircraft	n	375	363	331	212	24	228	186	653	2372
	M	5.86	5.96	6.03	5.76	5.46	5.83	5.58	5.73	5.82
	SD	1.43	1.46	1.[illegible]	1.43	1.64	1.65	1.70	1.55	1.51
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	82.1	85.4	87.3	78.8	66.7	79.8	75.3	77.7	80.9
Alternate/Additional Aircraft	n	384	367	347	224	28	253	153	703	2459
	M	5.84	5.92	6.10	5.74	5.50	5.90	5.52	5.75	5.84
	SD	1.52	1.64	1.38	1.53	1.43	1.55	1.81	1.59	1.57
	MO	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	%	82.3	82.3	88.8	79.0	71.4	82.6	78.4	79.1	81.7

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to specific type of unit.

Note: In most instances, the modal rating is "7."

A P P E N D I X R

DESCRIPTIVE DATA SUMMARY TABLE:

WILLINGNESS TO SPEND ADDITIONAL NONPAID TIME TO MEET INITIAL QUALIFICATION AND TRANSITION TRAINING REQUIREMENTS

Table R-1

Willingness to Spend Additional Nonpaid Time to Meet Initial Qualification Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	n	321	325	296	205	29	193	176	564	2109
	M	2.58	2.59	2.72	2.28	2.35	2.23	1.90	2.50	2.46
	SD	1.76	1.82	1.87	1.67	1.68	1.73	1.40	1.68	1.74
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	16.2	18.8	18.2	11.2	6.90	10.9	5.70	14.1	14.4
Emergency Procedures	n	326	329	307	210	29	204	182	581	2168
	M	2.56	2.50	2.66	2.19	2.24	2.13	1.87	2.40	2.38
	SD	1.71	1.77	1.87	1.62	1.53	1.67	1.36	1.67	1.70
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	14.1	17.0	18.6	10.5	6.90	9.80	5.50	12.2	13.1
Instruments	n	345	377	352	225	26	270	172	638	2405
	M	2.47	2.48	2.60	2.34	2.31	2.13	1.97	2.43	2.39
	SD	1.71	1.85	1.90	1.74	1.76	1.69	1.43	1.68	1.74
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	14.5	16.2	19.9	12.0	7.70	11.1	6.40	13.6	14.1
Terrain Flight (NOE)	n	410	425	424	258	N/A	341	197	743	2798
	M	2.30	2.32	2.34	2.19	N/A	2.02	1.77	2.22	2.20
	SD	1.59	1.77	1.69	1.61	N/A	1.56	1.32	1.60	1.62
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	10.7	14.6	12.7	9.30	N/A	8.80	4.10	11.8	11.1
Unaided Night Tactical	n	406	414	377	241	N/A	311	168	664	2581
	M	2.22	2.21	2.19	2.06	N/A	1.86	1.69	2.13	2.10
	SD	1.64	1.74	1.63	1.57	N/A	1.40	1.23	1.58	1.59
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	11.6	14.0	10.9	9.50	N/A	7.40	4.80	10.9	10.5
Night Vision Goggles (NVG)	n	398	377	364	231	N/A	287	160	642	2459
	M	2.17	2.27	2.08	2.04	N/A	1.78	1.69	2.12	2.07
	SD	1.65	1.79	1.61	1.62	N/A	1.41	1.32	1.60	1.61
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	10.8	14.9	11.3	9.50	N/A	7.30	5.00	11.5	10.7
Nuclear, Biological Chemical (NBC)	n	414	426	401	274	22	351	196	717	2801
	M	2.08	2.05	2.05	1.99	1.73	1.73	1.62	2.07	1.98
	SD	1.57	1.59	1.58	1.46	1.03	1.32	1.12	1.49	1.49
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	9.40	9.90	9.70	6.90	0.0	4.60	2.00	8.80	7.90

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to a specific type of unit.

Note: In most instances, the modal rating is "1."

Table R-2

Willingness to Spend Additional Nonpaid Time to Meet Transition Training Requirements

Training Requirement		Type of ARNG Aviation Unit								
		Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra	n	352	274	268	148	N/A	174	92	439	1747
	M	2.45	2.73	2.71	2.51	N/A	2.01	1.55	2.31	2.41
	SD	1.85	2.13	2.11	2.08	N/A	1.81	1.36	1.87	1.96
	MO	1.00	1.00	1.00	1.00	N/A	1.00	1.00	1.00	1.00
	%	15.6	25.5	22.0	20.9	N/A	12.1	6.50	15.5	17.7
National-Guard-Specific Aircraft	n	388	379	353	226	23	239	197	684	2489
	M	2.45	2.55	2.82	2.44	2.65	2.22	1.75	2.50	2.46
	SD	1.79	2.00	2.07	1.94	1.87	1.92	1.40	1.85	1.90
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	14.4	[illegible]	22.4	17.7	17.4	14.2	8.10	16.5	16.9
Alternate/Additional Aircraft	n	389	[illegible]	360	235	27	262	160	719	2534
	M	2.51	2.57	2.96	2.56	2.89	2.29	1.89	2.61	2.56
	SD	1.84	2.03	2.15	2.01	1.97	1.95	1.55	1.96	1.98
	MO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	%	15.7	20.9	25.8	20.4	22.2	15.6	8.10	20.0	19.2

Key: N = total number of aviators in each type of unit responding to the survey; N_T = total number of aviators responding to the survey; n = total number of aviators responding to each item; M = mean; SD = standard deviation; MO = mode; % = percentage greater than "4," N/A = training requirement is not applicable to a specific type of unit.

Note: In most instances, the modal rating is "1."

A P P E N D I X S

PERCENTAGE OF AVIATORS IDENTIFYING OBSTACLES TO MEETING INITIAL QUALIFICATION REQUIREMENTS

Table S-1

Percentage of Total Sample of Aviators Identifying Obstacles to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Obstacle								
	Instructor Pilot	Support Personnel	Aircraft	Equipment	AASF Hours	Training Areas	Flight Hours	Non-Aviation	Personal Time
Emergency Tasks (n=1754)	23	03	14	06	11	08	22	14	17
Emergency Procedures (orally or in SFTS) (n=1789)	19	02	06	09	09	08	14	13	17
Instrument Tasks (n=2073)	21	02	15	12	09	05	22	12	20
Terrain Flight (NOE) (n=2483)	16	04	09	06	08	31*	21	12	17
Unaided Night Tactical Tasks (Night Hawk) (n=1574)	21	06	12	16	11	22	21	12	22
Night Vission Goggle (NVG) (n=1240)	24	05	14	40*	09	23	20	12	23
Nuclear, Biological Chemical (NBC) Tasks (n=1884)	14	09	06	35*	06	09	18	17	18
Other Tasks (n=1930)	06	04	05	08	03	07	07	07	06

Key: n = total number of aviators responding to each item.

Note: Obstacles considered by 25% or more of the aviators are identified by an asterisk (*).

Table S-2

Percentage of Aviators Identifying Unavailability of Instructor Pilots as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	32* (n=262)	25* (n=272)	24 (n=225)	19 (n=176)	09 (n= 23)	20 (n=163)	17 (n=154)	21 (n=479)	23 (n=1754)
Emergency Procedures (orally or in SFTS)	27* (n=264)	20 (n=272)	19 (n=231)	17 (n=181)	04 (n= 24)	15 (n=179)	16 (n=155)	17 (n=492)	19 (n=1789)
Instrument Tasks	32* (n=284)	21 (n=328)	21 (n=287)	16 (n=204)	06 (n= 18)	20 (n=245)	17 (n=142)	19 (n=565)	21 (n=2073)
Terrain Flight (NOE)	24 (n=365)	18 (n=387)	19 (n=363)	15 (n=238)	N/A	12 (n=320)	17 (n=150)	14 (n=660)	16 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	25* (n=266)	17 (n=302)	18 (n=192)	17 (n=145)	N/A	23 (n=182)	34* (n= 80)	20 (n=407)	21 (n=1574)
Night Vission Goggle (NVG)	24 (n=215)	26* (n=224)	22 (n=158)	14 (n=113)	N/A	25* (n=131)	31* (n= 68)	23 (n=331)	24 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	19 (n=268)	13 (n=284)	10 (n=264)	11 (n=190)	21 (n= 14)	11 (n=274)	15 (n=134)	15 (n=456)	14 (n=1884)
Other Tasks	09 (n=283)	06 (n=282)	04 (n=267)	05 (n=184)	05 (n= 20)	06 (n=264)	04 (n=141)	04 (n=489)	06 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-3

Percentage of Aviators Identifying Unavailability of Support Personnel as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	05 (n=262)	02 (n=272)	03 (n=225)	03 (n=176)	04 (n= 23)	01 (n=163)	08 (n=154)	02 (n=479)	03 (n=1754)
Emergency Procedures (orally or in SFTS)	03 (n=264)	02 (n=272)	01 (n=231)	02 (n=181)	00 (n= 24)	01 (n=170)	04 (n=155)	02 (n=492)	02 (n=1789)
Instrument Tasks	03 (n=284)	02 (n=328)	02 (n=287)	02 (n=204)	06 (n= 18)	02 (n=245)	04 (n=142)	03 (n=565)	02 (n=2073)
Terrain Flight (NOE)	04 (n=365)	03 (n=387)	05 (n=363)	02 (n=238)	N/A	05 (n=320)	06 (n=150)	04 (n=660)	04 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	08 (n=266)	06 (n=302)	05 (n=192)	03 (n=145)	N/A	06 (n=182)	08 (n= 80)	05 (n=407)	06 (n=1574)
Night Vission Goggle (NVG)	06 (n=215)	04 (n=234)	08 (n=158)	01 (n=113)	N/A	05 (n=131)	07 (n= 68)	06 (n=331)	05 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	12 (n=268)	06 (n=284)	08 (n=264)	08 (n=190)	00 (n= 14)	09 (n=274)	12 (n=134)	09 (n=456)	09 (n=1884)
Other Tasks	06 (n=283)	04 (n=282)	02 (n=267)	01 (n=184)	05 (n= 20)	06 (n=264)	06 (n=141)	03 (n=489)	04 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-4

Percentage of Aviators Identifying Unavailability of Aircraft as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	22 (n=262)	13 (n=272)	04 (n=225)	15 (n=176)	17 (n= 23)	11 (n=163)	21 (n=154)	13 (n=479)	14 (n=1754)
Emergency Procedures (orally or in SFTS)	10 (n=264)	06 (n=272)	02 (n=231)	09 (n=181)	04 (n= 24)	04 (n=170)	07 (n=155)	06 (n=492)	06 (n=1789)
Instrument Tasks	25* (n=284)	17 (n=328)	06 (n=287)	22 (n=204)	22 (n= 18)	13 (n=245)	14 (n=142)	13 (n=565)	15 (n=2073)
Terrain Flight (NOE)	14 (n=365)	10 (n=387)	04 (n=363)	12 (n=238)	N/A	09 (n=320)	12 (n=150)	06 (n=660)	09 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	15 (n=266)	11 (n=302)	07 (n=192)	15 (n=145)	N/A	10 (n=182)	21 (n= 80)	11 (n=407)	12 (n=1574)
Night Vision Goggle (NVG)	14 (n=215)	17 (n=224)	09 (n=158)	13 (n=113)	N/A	12 (n=131)	22 (n= 68)	15 (n=331)	14 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	10 (n=268)	04 (n=284)	03 (n=264)	05 (n=190)	00 (n= 14)	04 (n=274)	08 (n=134)	06 (n=456)	06 (n=1884)
Other Tasks	10 (n=283)	06 (n=282)	00 (n=267)	03 (n=184)	00 (n= 20)	06 (n=264)	07 (n=141)	04 (n=489)	05 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-5

Percentage of Aviators Identifying Unavailability of Support Equipment as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	09 (n=282)	04 (n=272)	04 (n=225)	02 (n=176)	00 (n= 23)	10 (n=163)	10 (n=154)	06 (n=479)	06 (n=1754)
Emergency Procedures (orally or in SFTS)	10 (n=264)	05 (n=272)	08 (n=231)	11 (n=181)	13 (n= 24)	09 (n=170)	08 (n=155)	09 (n=492)	09 (n=1789)
Instrument Tasks	14 (n=284)	11 (n=328)	09 (n=287)	17 (n=204)	06 (n= 18)	13 (n=245)	09 (n=142)	11 (n=565)	12 (n=2073)
Terrain Flight (NOE)	09 (n=365)	06 (n=387)	03 (n=363)	05 (n=238)	N/A	07 (n=320)	05 (n=150)	05 (n=660)	06 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	14 (n=266)	13 (n=302)	18 (n=192)	10 (n=145)	N/A	20 (n=182)	35* (n= 80)	15 (n=407)	16 (n=1574)
Night Vission Goggle (NVG)	34* (n=215)	33* (n=224)	44* (n=158)	32* (n=113)	N/A	46* (n=131)	59* (n= 68)	41* (n=331)	40* (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	41* (n=268)	34* (n=284)	38* (n=264)	30* (n=190)	43* (n= 14)	31* (n=274)	33* (n=134)	36* (n=456)	35* (n=1884)
Other Tasks	17 (n=283)	11 (n=282)	03 (n=267)	05 (n=184)	00 (n= 20)	05 (n=264)	04 (n=141)	03 (n=489)	08 (n=1930)

Key: N_T= total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-6

Percentage of Aviators Identifying Unsatisfactory Operational Hours of the AASF as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	12 (n=262)	14 (n=272)	08 (n=225)	10 (n=176)	13 (n= 23)	07 (n=163)	16 (n=154)	09 (n=479)	11 (n=1754)
Emergency Procedures (orally or in SFTS)	09 (n=264)	11 (n=272)	06 (n=231)	07 (n=181)	13 (n= 24)	07 (n=170)	12 (n=155)	08 (n=492)	09 (n=1789)
Instrument Tasks	11 (n=284)	09 (n=328)	09 (n=287)	08 (n=204)	11 (n= 18)	09 (n=245)	12 (n=142)	07 (n=565)	09 (n=2073)
Terrain Flight (NOE)	08 (n=365)	08 (n=387)	09 (n=363)	0- (n=238)	N/A	07 (n=320)	07 (n=150)	08 (n=660)	08 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	11 (n=266)	08 (n=302)	10 (n=192)	10 (n=145)	25	13 (n=282)	18 (n= 80)	13 (n=407)	11 (n=1574)
Night Vission Goggle (NVG)	10 (n=215)	07 (n=224)	08 (n=158)	07 (n=113)	N/A	12 (n=131)	10 (n= 68)	11 (n=331)	09 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	07 (n=268)	07 (n=284)	06 (n=264)	02 (n=190)	07 (n= 14)	05 (n=274)	07 (n=134)	09 (n=456)	06 (n=1884)
Other Tasks	03 (n=283)	02 (n=282)	02 (n=267)	01 (n=184)	00 (n= 20)	08 (n=264)	05 (n=141)	05 (n=489)	03 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-7

Percentage of Aviators Identifying Unavailability of Training Support Areas as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	07 (n=262)	10 (n=272)	07 (n=225)	08 (n=176)	09 (n= 23)	08 (n=163)	10 (n=154)	07 (n=479)	08 (n=1754)
Emergency Procedures (orally or in SFTS)	09 (n=264)	10 (n=272)	06 (n=231)	07 (n=181)	00 (n= 24)	11 (n=170)	10 (n=155)	07 (n=492)	08 (n=1789)
Instrument Tasks	09 (n=284)	06 (n=328)	02 (n=287)	04 (n=204)	00 (n= 18)	04 (n=245)	06 (n=142)	04 (n=565)	05 (n=2073)
Terrain Flight (NOE)	33* (n=365)	33 (n=387)	34 (n=363)	25 (n=238)	20	28* (n=320)	28* (n=150)	30* (n=660)	31* (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	18 (n=266)	25* (n=302)	25* (n=192)	19 (n=145)	N/A	13 (n=182)	24 (n= 80)	25* (n=407)	22 (n=1574)
Night Vission Goggle (NVG)	20 (n=215)	26* (n=224)	20 (n=158)	17 (n=113)	N/A	16 (n=131)	32* (n= 68)	28* (n=331)	23 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	10 (n=268)	09 (n=284)	09 (n=264)	10 (n=190)	07 (n= 14)	08 (n=274)	08 (n=134)	09 (n=456)	09 (n=1884)
Other Tasks	16 (n=283)	11 (n=282)	03 (n=267)	01 (n=184)	05 (n= 20)	05 (n=264)	06 (n=141)	04 (n=489)	07 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-8

Percentage of Aviators Identifying an Insufficient Number of Flight Hours as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	28* (n=262)	18 (n=272)	27* (n=225)	18 (n=176)	17 (n= 23)	34* (n=163)	15 (n=154)	18 (n=479)	22 (n=1754)
Emergency Procedures (Orally or in SFTS)	17 (n=264)	13 (n=272)	18 (n=231)	10 (n=181)	04 (n= 24)	21 (n=170)	09 (n=155)	12 (n=492)	14 (n=1789)
Instrument Tasks	25* (n=284)	21 (n=328)	23 (n=287)	21 (n=204)	06 (n= 18)	29* (n=245)	14 (n=142)	19 (n=565)	22 (n=2073)
Terrain Flight (NOE)	22 (n=365)	19 (n=387)	23 (n=363)	21 (n=238)	N/A	28* (n=320)	16 (n=150)	20 (n=660)	21 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	26* (n=266)	20 (n=302)	23 (n=192)	16 (n=145)	N/A	26* (n=182)	15 (n= 80)	18 (n=407)	21 (n=1574)
Night Vission Goggle (NVG)	25* (n=215)	18 (n=224)	21 (n=158)	16 (n=113)	N/A	20 (n=131)	15 (n= 68)	20 (n=331)	20 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	21 (n=268)	15 (n=284)	21 (n=264)	14 (n=190)	00 (n= 14)	21 (n=274)	15 (n=134)	17 (n=456)	18 (n=1884)
Other Tasks	12 (n=283)	06 (n=282)	06 (n=267)	07 (n=184)	00 (n= 20)	14 (n=264)	04 (n=141)	05 (n=489)	07 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-9

Percentage of Aviators Identifying Nonaviation Factors as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	16 (n=262)	15 (n=272)	09 (n=225)	12 (n=176)	39* (n= 23)	18 (n=163)	14 (n=154)	13 (n=479)	14 (n=1754)
Emergency Procedures (orally or in SFTS)	14 (n=264)	12 (n=272)	10 (n=231)	12 (n=181)	38* (n= 24)	16 (n=170)	11 (n=155)	12 (n=492)	13 (n=1789)
Instrument Tasks	13 (n=284)	11	09 (n=287)	13 (n=204)	11 (n= 18)	15 (n=245)	13 (n=142)	11 (n=565)	12 (n=2073)
Terrain Flight (NOE)	12 (n=365)	10 (n=387)	11 (n=363)	11 (n=238)	N/A	14 (n=320)	15 (n=150)	12 (n=660)	12 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	13 (n=266)	11 (n=302)	10 (n=192)	08 (n=145)	N/A	16 (n=182)	18 (n= 80)	12 (n=407)	12 (n=1574)
Night Vission Goggle (NVG)	10 (n=215)	11 (n=224)	13 (n=158)	10 (n=113)	N/A	16 (n=131)	18 (n= 68)	13 (n=331)	12 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	17 (n=268)	16 (n=284)	15 (n=264)	12 (n=190)	14 (n= 14)	22 (n=274)	22 (n=134)	16 (n=456)	17 (n=1884)
Other Tasks	06 (n=283)	10 (n=282)	04 (n=267)	04 (n=184)	20 (n= 20)	11 (n=264)	05 (n=141)	05 (n=489)	07 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

Table S-10

Percentage of Aviators Identifying an Insufficient Amount of Personal Time as an Obstacle to Meeting Initial Qualification Training Requirements

Initial Qualification Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Emergency Tasks	18 (n=262)	18 (n=272)	18 (n=225)	18 (n=176)	22 (n= 23)	12 (n=163)	10 (n=154)	17 (n=479)	17 (n=1754)
Emergency Procedures (orally or in SFTS)	19 (n=264)	17 (n=272)	17 (n=231)	19 (n=181)	17 (n= 24)	14 (n=170)	10 (n=155)	20 (n=492)	17 (n=1789)
Instrument Tasks	20 (n=284)	19 (n=328)	20 (n=287)	23 (n=204)	22 (n= 18)	22 (n=245)	15 (n=142)	20 (n=565)	20 (n=2073)
Terrain Flight (NOE)	12 (n=365)	18 (n=387)	18 (n=363)	20 (n=238)	N/A	19 (n=320)	11 (n=150)	18 (n=660)	17 (n=2483)
Unaided Night Tactical Tasks (Night Hawk)	20 (n=266)	23 (n=302)	18 (n=192)	31* (n=145)	N/A	19 (n=182)	16 (n= 80)	24 (n=407)	22 (n=1574)
Night Vission Goggle (NVG)	23 (n=215)	22 (n=224)	21 (n=158)	27* (n=113)	N/A	20 (n=131)	12 (n= 68)	27* (n=331)	23 (n=1240)
Nuclear, Biological, Chemical (NBC) Tasks	17 (n=268)	19 (n=284)	19 (n=264)	14 (n=190)	21 (n= 14)	19 (n=274)	16 (n=134)	19 (n=456)	18 (n=1884)
Other Tasks	05 (n=283)	07 (n=282)	02 (n=267)	08 (n=184)	05 (n= 20)	06 (n=264)	05 (n=141)	06 (n=489)	06 (n=1930)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

A P P E N D I X T

PERCENTAGE OF AVIATORS IDENTIFYING OBSTACLES TO MEETING TRANSITION TRAINING REQUIREMENTS

Table T-1

Percentage of Total Sample of Aviators Identifying Obstacles to Meeting Transition Training Requirements

Transition Training Requirement	Obstacle								
	Instructor Pilot	Support Personnel	Aircraft	Equipment	AASF Hours	Training Areas	Flight Hours	Non-Aviation	Personal Time
Cobra[a] (n=206)	23	05	45*	20	08	08	27*	10	24
National-Guard-Specific Aircraft (n=1586)	23	04	23	08	11	07	20	12	24
Alternate/Additional Aircraft (n=1487)	20	04	23	11	10	05	23	13	26*

Key: n = total number of aviators responding to each item.

Note: Obstacles considered by 25% or more of the aviators are identified by an astrisk (*).

[a]Includes only aviators from Attack units.

Table T-2

Percentage of Aviators Identifying Unavailability of Instructor Pilots as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	23 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23 (n= 206)
National-Guard-Specific Aircraft	31* (n=282)	28* (n=255)	21 (n=147)	14 (n=146)	06 (n= 18)	24 (n=123)	13 (n=150)	22 (n=465)	23 (n=1586)
Alternate/Additional Aircraft	25* (n=257)	19 (n=222)	22 (n=147)	13 (n=127)	23 (n= 22)	22 (n=135)	17 (n= 93)	20 (n=484)	20 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-3

Percentage of Aviators Identifying Unavailability of Support Personnel as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	05 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	05 (n= 206)
National-Guard-Specific Aircraft	04 (n=282)	04 (n=255)	01 (n=147)	01 (n=146)	06 (n= 18)	02 (n=123)	09 (n=150)	04 (n=465)	04 (n=1586)
Alternate/Additional Aircraft	05 (n=257)	05 (n=222)	00 (n=147)	03 (n=127)	00 (n= 22)	04 (n=135)	04 (n= 93)	05 (n=484)	04 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-4

Percentage of Aviators Identifying Unavailability of Aircraft as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	45* (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45* (n= 206)
National-Guard-Specific Aircraft	24 (n=282)	22 (n=255)	20 (n=147)	21 (n=146)	33* (n= 18)	29* (n=123)	28* (n=150)	19 (n=465)	23 (n=1586)
Alternate/Additional Aircraft	29* (n=257)	21 (n=222)	23 (n=147)	15 (n=127)	46* (n= 22)	27* (n=135)	24 (n= 93)	21 (n=484)	23 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-5

Percentage of Aviators Identifying Unavailability of Support Equipment as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	20 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20 (n= 206)
National-Guard-Specific Aircraft	10 (n=282)	08 (n=255)	08 (n=147)	10 (n=146)	00 (n= 13)	11 (n=123)	11 (n=150)	06 (n=465)	08 (n=1586)
Alternate/Additional Aircraft	14 (n=257)	09 (n=222)	10 (n=147)	13 (n=127)	09 (n= 22)	13 (n=135)	10 (n= 93)	09 (n=484)	11 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-6

Percentage of Aviators Identifying Unsatisfactory Operational Hours of the AASF as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	08 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08 (n= 206)
National-Guard-Specific Aircraft	10 (n=282)	14 (n=255)	10 (n=147)	10 (n=146)	06 (n= 18)	11 (n=123)	11 (n=150)	12 (n=465)	11 (n=1586)
Alternate/Additional Aircraft	12 (n=257)	10 (n=222)	13 (n=147)	06 (n=127)	14 (n= 22)	08 (n=135)	07 (n= 93)	11 (n=484)	10 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-7

Percentage of Aviators Identifying Unavailability of Training Support Areas as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	08 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08 (n= 206)
National-Guard-Specific Aircraft	09 (n=282)	08 (n=255)	03 (n=147)	07 (n= 146)	06 (n= 18)	04 (n=123)	13 (n=150)	05 (n=465)	07 (n=1586)
Alternate/Additional Aircraft	08 (n=257)	05 (n=222)	03 (n=147)	02 (n=127)	00 (n= 22)	04 (n=135)	07 (n= 93)	05 (n=484)	05 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-8

Percentage of Aviators Identifying an Insufficient Number of Flight Hours as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit: Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	27* (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27* (n= 206)
National-Guard-Specific Aircraft	22 (n=282)	23 (n=255)	20 (n=147)	15 (n=146)	06 (n= 18)	29* (n=123)	15 (n=150)	17 (n=465)	20 (n=1586)
Alternate/Additional Aircraft	27* (n=257)	24 (n=222)	24 (n=147)	18 (n=127)	23 (n= 22)	27* (n=135)	16 (n= 93)	21 (n=484)	23 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-9

Percentage of Aviators Identifying Nonaviation Factors as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	10 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10 (n= 206)
National-Guard-Specific Aircraft	14 (n=282)	12 (n=255)	04 (n=147)	08 (n=146)	11 (n= 18)	13 (n=123)	13 (n=150)	13 (n=465)	12 (n=1586)
Alternate/Additional Aircraft	13 (n=257)	14 (n=222)	06 (n=147)	11 (n=127)	18 (n= 22)	16 (n=135)	12 (n= 93)	15 (n=484)	13 (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

Table T-10

Percentage of Aviators Identifying an Insufficient Amount of Personal Time as an Obstacle to Meeting Transition Training Requirements

Transition Training Requirement	Type of ARNG Unit								
	Atk (N=524)	Air Cav (N=519)	Cmbt Supp (N=559)	Gen Supp (N=343)	Air Surv (N= 46)	Air Ambul (N=440)	Trans (N=249)	Other (N=960)	Total Sample (N_T=3640)
Cobra[a]	24 (n=206)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24 (n= 206)
National-Guard-Specific Aircraft	24 (n=282)	23 (n=255)	23 (n=147)	24 (n=146)	22 (n= 18)	20 (n=123)	27* (n=150)	26* (n=465)	24 (n=1586)
Alternate/Additional Aircraft	26* (n=257)	25* (n=222)	27* (n=147)	29* (n=127)	32* (n= 22)	17 (n=135)	18 (n= 93)	30* (n=484)	26* (n=1487)

Key: N_T = total number of aviators responding to the survey; N = total number of aviators in each type of unit responding to the survey; n = total number of aviators responding to each item; N/A = training requirement is not applicable to a specific type of unit.

Note: Obstacles considered by 25% or more of aviators in a type of unit are identified by an asterisk (*).

[a]Includes only aviators from Attack units.

A P P E N D I X U

ARMY NATIONAL GUARD AVIATION TRAINING LOG

ARMY NATIONAL GUARD AVIATION TRAINING LOG

DIRECTIONS

- Use No. 2 black lead pencil only.
- Do NOT use ink or ball point pen.
- Write your response in the appropriate boxes.
- Make heavy black marks that fill the circle completely.
- Erase cleanly any answer you wish to change.
- Make no stray marks on the answer sheet.
- Give social security number and month reported.
- The glossary of terms is on page 4.

SOCIAL SECURITY NUMBER

MONTH REPORTED

DO NOT MARK IN THIS AREA 071601

PART 1: FLIGHT AND SIMULATOR HOURS LOGGED

1a. Number of Flight and Simulator Hours Logged Against Your ATM Minimum Iteration Requirements and Checkrides Not as Part of ARTEP Training (Combined Arms/Collective)

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC (HRS)

1b. Number of Flight and Simulator Hours Logged Against Your ATM Minimum Iteration Requirements During ARTEP Training (Combined Arms/Collective)

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC (HRS)

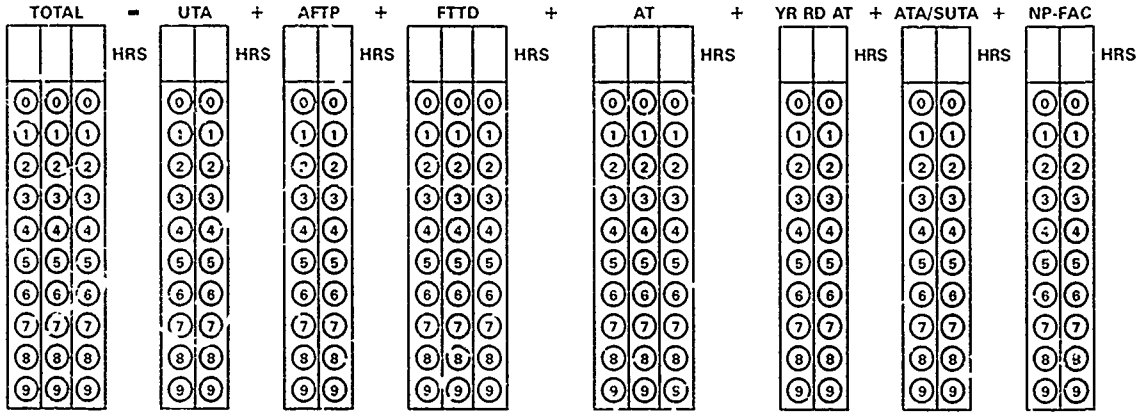
1c. Number of Flight and Simulator Hours Spent in ARTEP Training (Combined Arms/Collective) Not Logged Against Your ATM Minimum Iteration Requirements

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC (HRS)

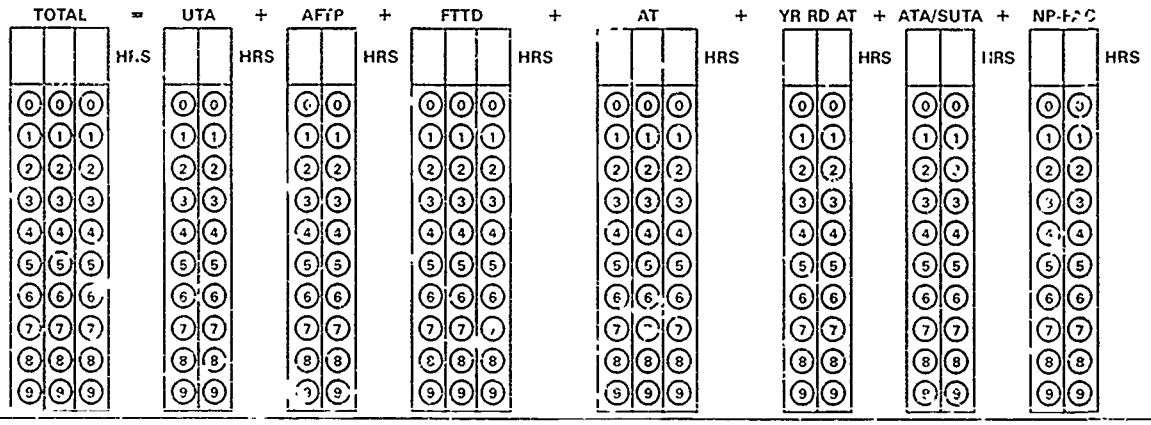
MAKE NO MARKS

IN THIS SHADED AREA

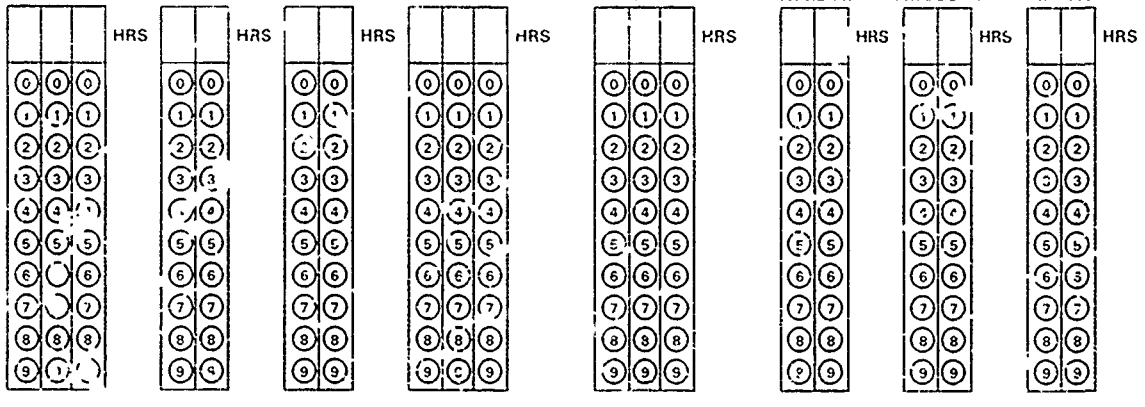
1d. Number of Flight and Simulator Hours Spent on Training and/or Evaluation of Other Aviators (e.g., as UT, IP, SIP, or IFE) Not Logged Against Your ATM Minimum Iteration Requirements



1e. Number of Flight and Simulator Hours Not Logged Against Your ATM Minimum Iteration Requirements and Not Reported in Section 1a Through Section 1d

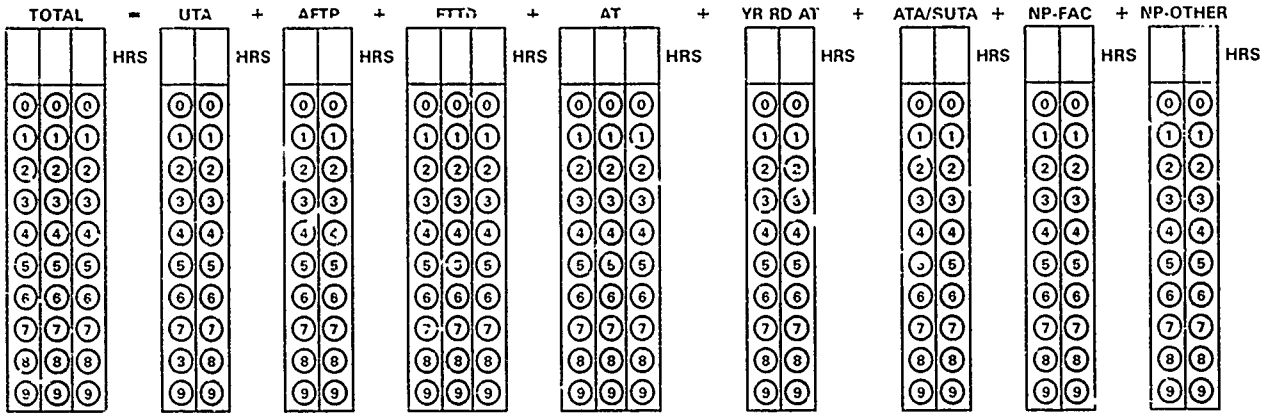


1. TOTAL FLIGHT HOURS. Total Number of Flight Hours and Simulator Hours Logged (from Section 1a Through Section 1e)

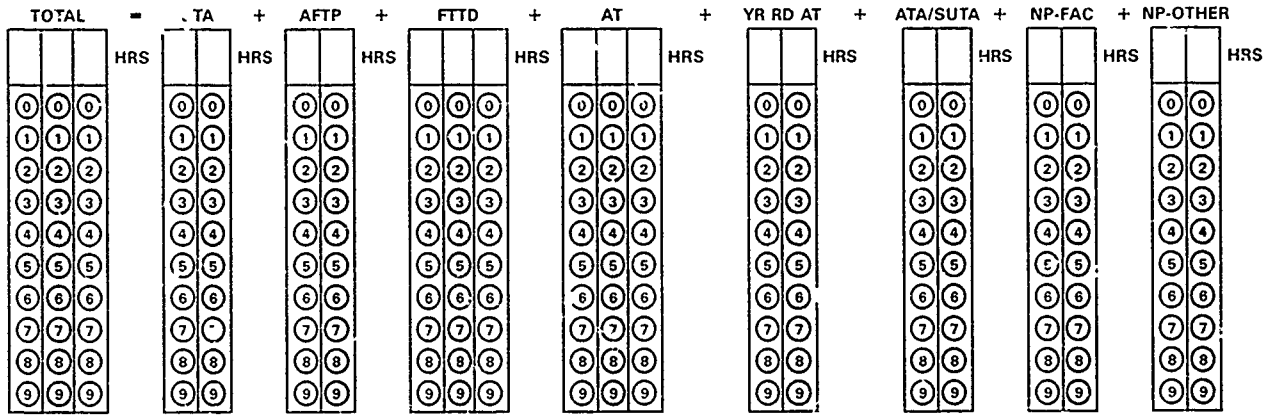


PART 2: HOURS SPENT IN NONFLYING ACTIVITIES

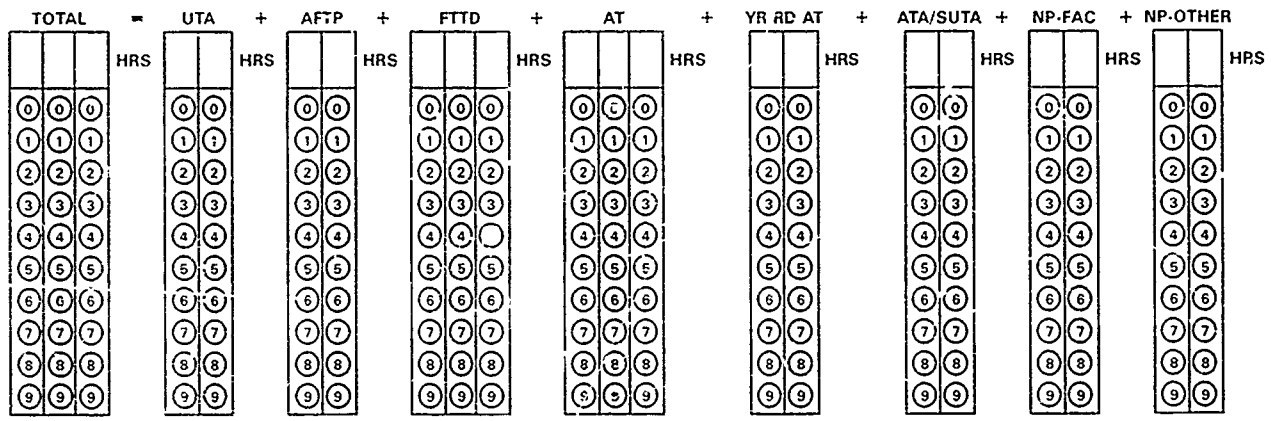
2a. Nonflying Hours Spent in Required Additional Duties (e.g., Supply Officer, Motor Officer, Administrative Duties, etc.)



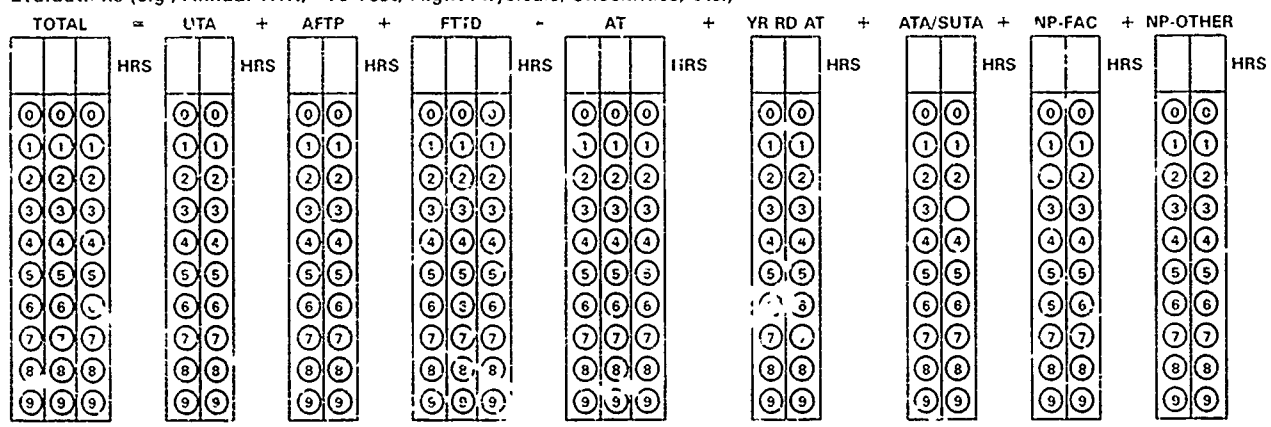
2b. Nonflying Hours Spent Undergoing and Administering Training in Military Education, Common Soldier Skills, and Career Development (e.g., Correspondence Courses, etc.)



2c. Nonflying Hours Spent on Pre-Post Flight Tasks (e.g., Pre-Post Flight, Planning, Weather/Mission Briefs, Flight Records, etc.)



2d Nonflying Hours Spent Preparing for, Undergoing, and Administering Oral and Written Nonflying Aviation Evaluations (e.g., Annual Writ, -10 Test, Flight Physicals, Checkrides, etc.)



2e. Nonflying Hours Spent in Miscellaneous Activities (e.g., Crew Rest, Dead Time, Inspections, Meals, Formations, etc.)

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC + NP-OTHER

HRS

2(TOTAL NONFLYING HOURS). Total Number of Hours Spent on Nonflying Activities (from Section 2a Through Section 2e)

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC + NP-OTHER

HRS

3(OVERALL TOTAL). Total Number of Hours Spent on all National Guard Activities in the Previous Month From Section 1 (TOTAL FLIGHT HOURS) and Section 2 (TOTAL NONFLYING HOURS)

TOTAL = UTA + AFTP + FTTD + AT + YR RD AT + ATA/SUTA + NP-FAC + NP-OTHER

HRS

071601

DO NOT MARK IN THIS AREA

MAKE NO MARKS IN THIS AREA

PLEASE CHECK THAT:

A. SECTIONS 1a + 1b + 1c + 1d + 1e = SECTION 1 (TOTAL FLIGHT HOURS)

B. SECTIONS 2a + 2b + 2c + 2d + 2e = SECTION 2 (TOTAL NONFLYING HOURS)

C. SECTIONS 1 (TOTAL FLIGHT HOURS) + 2 (TOTAL NONFLYING HOURS) = SECTION 3 (OVERALL TOTAL)

GLOSSARY

UTA – Unit Training Assembly

AFTP – Additional Flight Training Period

FTTD – Full Time Training Duty (24 Hour Day)

AT – Annual Training (24 Hour Day)

YR RD AT – Year Round Annual Training (24 Hour Day)

ATA/SUTA – Additional Training Assembly or Split Unit Training Assembly

NP-FAC – Nonpay Status at National Guard Facility

NP-OTHER – Nonpay Status Away From National Guard Facility (e.g., home, office)