



**UNITED STATES
ARMY AVIATION CENTER
1988
ANNUAL
HISTORICAL REVIEW**

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UNITED STATES ARMY AVIATION CENTER

**ANNUAL HISTORICAL REVIEW
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1 January 1988 - 31 December 1988

By

John W. Kitchens

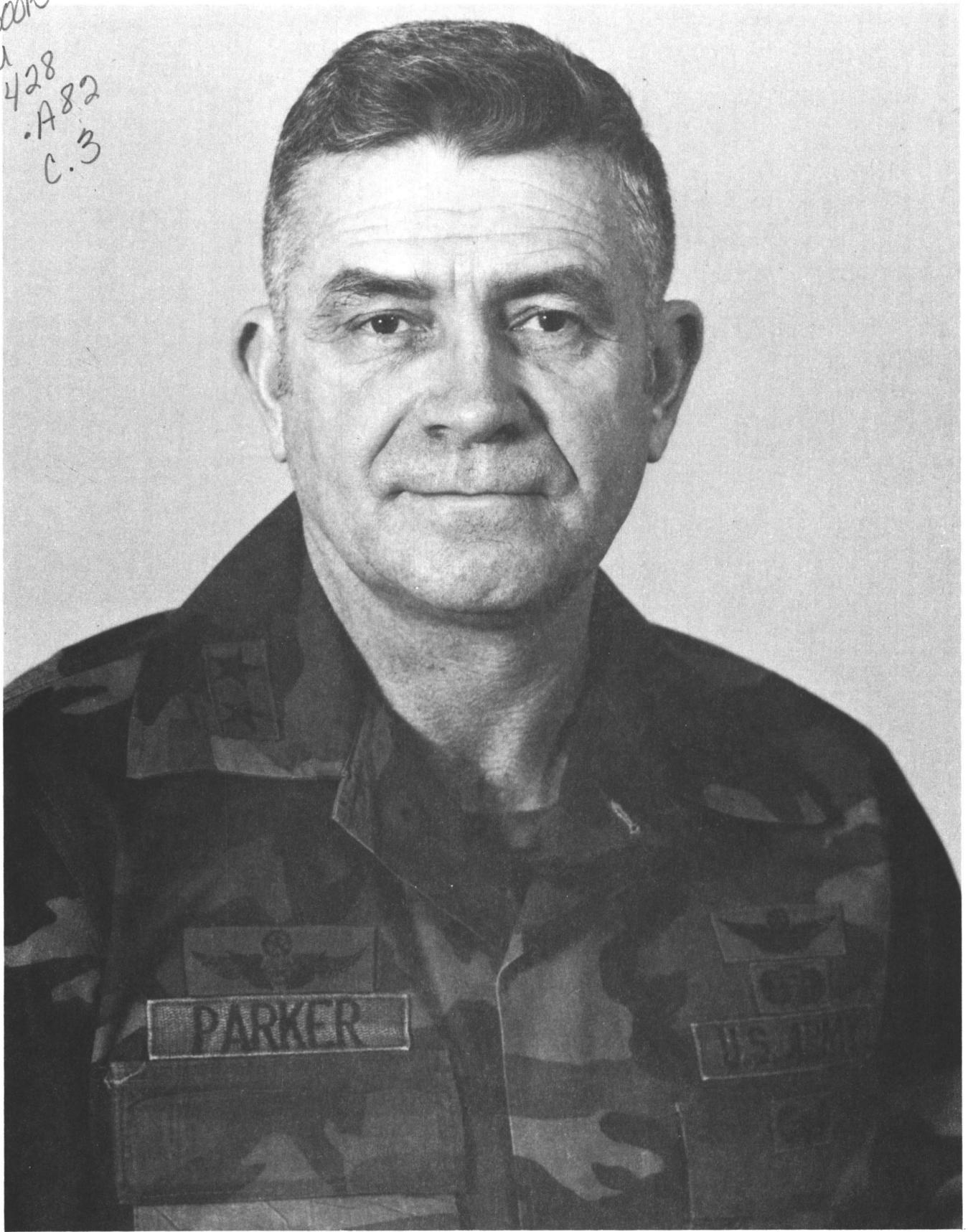
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**MAJOR GENERAL ELLIS D. PARKER
COMMANDING GENERAL**

COMMANDER'S INTRODUCTION

With the possible exception of 1983, when Army Aviation became a branch, 1988 was the best year yet for the U.S. Army Aviation Center (USAAVNC) and for the Aviation Branch. A great deal was accomplished in several distinct areas, including combat developments, safety, training and leader development, awards and honors, and organizational changes.

With regard to combat developments, 1988 was clearly our best year because the Army Aviation Modernization Plan (AAMP) was approved and implemented. The funding guidance and detailed planning for the modernization of the inventory of aircraft contained in the AAMP provided the Aviation Branch with a degree of protection from federal budget cuts. The fielding of Apache battalions also continued during 1988, and the LHX program proceeded toward its goal of developing a fleet of modern light attack and reconnaissance helicopters for the 1990s and beyond.

With regard to safety, 1988 was the first year ever that Army Aviation had fewer than two class A accidents per 100,000 flying hours. Furthermore, the safety record set in 1988 was the third successive annual record, which demonstrated steady and constant improvement. For the USAAVNC specifically, 1988 was the first year on record without a single class A accident charged against the USAAVNC. Finally, 1988 was also the safest year thus far with regard to the combined total accidents of classes A, B, and C.

In the area of training, the implementation of the Multitrack approach to initial entry rotary wing training was clearly of major importance in 1988. Multitrack has increased the efficiency of the transfer of students from primary to advanced flight training and has also paved the way for the development of both a new primary trainer aircraft and the concept of single contractor aviator training.

In the related field of leadership development, the USAAVNC can claim several outstanding achievements for 1988. The Noncommissioned Officer Academy continued to expand and improve and became a model for other installations. On the warrant officer level, 1988 brought both the consolidation of the Army Warrant Officer Candidate School and the inauguration of the new Army Master Warrant Officer Course at Fort Rucker. On the commissioned officer level, the Pre-Command Course was revised as needed, and some fine tuning of the small-group-instruction (SGI) method used in the Officer Advanced Course was implemented. The USAAVNC SGI program also served as a model for the establishment of SGI

programs at other institutions. Finally, since the people who enter the Aviation Branch today are the branch leaders of tomorrow, it should be noted that both officers and enlisted personnel entering Army Aviation during 1988 were, by almost any method of measurement, far above the average of those entering the Army and other branches. The results of the Reserve Officer Training Corps (ROTC) Accession Board which met in December 1988 indicated that Army Aviation was continuing to attract the cream of the crop.

With respect to awards and honors, the winning of the U.S. Army Training and Doctrine Command (TRADOC) Installation of Excellence Award again in 1988--for the third year out of the four since it began--was clearly the most spectacular. Furthermore, during the last week of December, Fort Rucker was selected to compete with one other medium-size post for the Army Installation of Excellence Award early in 1989. Of even greater significance in terms of the saving of lives and materiel which they symbolized, were the three safety awards received by the Aviation Training Brigade and that brigade's subordinate element, the 1st Battalion, 212th Aviation Regiment.

If the approval of the AAMP was the most important achievement of the year, the transfer of proponency for the U.S. Army Aviation Logistics School (USAALS) to the USAAVNC was unquestionably a close second. Since the branch was created in 1983, aviation logistics had been unnaturally separated from aviation operations. For various reasons, however, the problem was not remedied until 1988, when the transfer of command and control was effected as of 1 October. Although no personnel or training functions were physically moved, the transfer of proponency enhances the branch's unity of purpose and cohesion so as to promote its increased responsiveness to the needs of the Army and of the country.



Ellis D. Parker
Major General, U.S. Army
Commanding Officer

PREFACE

In accordance with Training and Doctrine Command (TRADOC) guidelines, the 1988 annual historical review for the U.S. Army Aviation Center (USAAVNC) is organized topically rather than organizationally, as past USAAVNC historical reviews have been. Also in accordance with TRADOC guidelines, the emphasis of the review is clearly on the major missions and functions of the USAAVNC, i.e., on training, leader development, doctrine, combat developments, and mission support. Each of these topics constitutes a separate chapter of the review. The main body of the text is followed by two appendices, which briefly describe the mission, function, organizational framework, leadership, and personnel strength, and provide other information about USAAVNC organizations and tenant organizations respectively.

A very important organizational change in 1988, the transfer of the command and control of the U.S. Army Aviation Logistics School (USAALS) to the USAAVNC commander, effective 1 October 1988, is described in Chapter I. In accordance with an agreement made at Fort Eustis, Virginia, on 17 January 1989, the 1988 annual historical review of the U.S. Army Transportation Center and Fort Eustis was to include the major developments at the USAALS during the first three quarters of 1988, and the USAAVNC review was to cover only the fourth quarter of the year. In this review, the USAALS activities for the time period covered have been integrated into the overall topical organization, but USAALS involvement in particular developments is usually noted, similarly to the manner in which the involvement of particular USAAVNC agencies or tenant organizations is noted when appropriate.

The appendices include a staff directory, a list of acronyms, a list of numbered documents, and an index. In addition to the acronym list, most acronyms are defined at least one time in each chapter in which they are used; very common or frequently used ones, however, may be defined only one or two times in the entire text. The index is divided into two parts--personal names and other terms.

This entire review and all sources cited herein are unclassified. A classified addendum to this review has been prepared to be kept in the USAAVNC History Office.

The annual historical review is only one of several parts of the historical record of the USAAVNC for any given year. Cost and time constraints required that the review cover only the most important developments of the Army Aviation Center in the fulfillment of its principal missions. The responsibility for the writing of the

histories of the individual subordinate units and tenant organizations was left to the historical officers of each unit appointed by each director/commander. These historical reports were usually used as source documents for the history of the center and are also kept on file in the History Office as parts of the historical record for the year. Other parts of the historical record kept on file consist of supporting documents submitted with most of the historical reports, transcripts of oral interviews, and other source materials collected by the historian.

The documents, staff historical reports, and other sources cited are located in the 1988 document file in the USAAVNC History Office. A few documents of exceptional importance have been separated from the other source material, numbered (by chapter and document), and filed in numerical order. The unnumbered documents submitted by directorates, departments, and other USAAVNC and tenant organizations are filed according to provenance. Other source materials are filed according to the chapter in which they are cited.

In the process of writing an annual historical review, the historian inevitably becomes indebted to many persons for their advice, assistance, and support. I wish to express my sincere appreciation to those who supported this endeavor in various ways. I especially thank those who patiently explained technical matters to me, those unit directors/commanders and historical officers who cooperated with me in my efforts to obtain documentary materials to support their historical reports, and the Directorate of Aviation Proponency for administrative support. Mrs. Sandy Yarberry provided invaluable assistance in the preparation of the index and final typescript. Mr. Walker Douglas Paramore, Ms. Lynne B. Kitchens, and 2d Lt. Arthur Price carefully read the review and made very useful suggestions.

John W. Kitchens, Ph.D.
Command Historian

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CHAPTER I

MISSION AND ORGANIZATION

A. Background and Mission

In 1954 the United States Army Aviation School (USAAVNS) moved from Fort Sill, Oklahoma, to Camp Rucker, Alabama. The following year, the Army Aviation Center was established at Rucker, and the post gained permanent status by becoming Fort Rucker. The USAAVNS was the successor to the Department of Air Training, which had been established at Fort Sill in 1942 for the purpose of training Army liaison pilots. The growth of the school during the Korean War contributed to overcrowding at the Oklahoma post, which resulted in the move to Rucker. Although some Army flight training continued to be conducted at other locations for many years following the establishment of the school and center in Alabama, the trend has been toward consolidating flight training at Fort Rucker. This was essentially achieved by 1973, and the following year, the school and the center were consolidated as the United States Army Aviation Center (USAAVNC).¹ Since that time, and especially since the creation of the Aviation Branch in 1983, there has been a trend toward the consolidation of all aviation-related training under the auspices of the USAAVNC and of the branch chief.

The primary mission of the USAAVNC during 1988 was the command, operation, and administration of resources at Fort Rucker. Specifically, the center was responsible for the training and leader development of officers, warrant officers, warrant officer candidates, enlisted personnel, and assigned civilian personnel in various phases of Army aviation. During the last quarter of 1988, the mission of the USAAVNC was expanded to include proponency for the United States Army Aviation Logistics School (USAALS) at Fort Eustis, Virginia.

The USAAVNC was also the proponent for Army aviation-related combat developments, doctrine, training devices and literature, occupational specialties and career management fields, air traffic control, and flight standardization. The center also served as the U.S. Army Training and

¹Richard K. Tierney, Forty Years of Army Aviation (Fort Rucker, Alabama: USAAVNC, 1982), pp. 9-20; Richard P. Weinert, History of Army Aviation: 1950-1962, 2 vols. Fort Monroe, Virginia: U.S. Army Continental Army Command, 1971 and U.S. Army Training and Doctrine Command (TRADOC), 1976, pp. 102-25, passim.

Doctrine Command (TRADOC) integrator for all actions pertaining to aviation materiel developments, supported operational and user testing, ensured the total system integration of aircraft and equipment, and provided support to assigned, attached, or tenant activities at Fort Rucker, Alabama.

B. Organization and Organizational Changes

Overall command and control of the USAAVNC was vested in the commanding general, who was supported and assisted by all other members of the command group. During 1988, Maj. Gen. Ellis D. Parker continued to serve as the commanding general of the USAAVNC as well as chief of the Army Aviation Branch. General Parker was responsible for the implementation of policies and directives of the Department of the Army (DA) and of TRADOC. He was also the principal adviser to and representative of the commanding general of TRADOC for Army aviation equipment, doctrine, training, tactics, and techniques. During the first three quarters of the year, General Parker exercised direct supervision over the activities of the U.S. Army Aviation Board, and, through the assistant commandant of USAAVNC, he established, maintained, and supervised such agencies and departments as were required for the efficient execution of assigned missions.

The assistant commandant of the USAAVNC in 1987, Brig. Gen. Rodney D. Wolfe, served as the principal assistant to the commanding general and assumed command in his absence. General Wolfe was primarily responsible for all aspects of training conducted at Fort Rucker and played a major role in assisting the commander in directing combat developments and the activities of the TRADOC system managers. He also frequently represented the branch chief in providing guidance to and maintaining close relationship with aviation brigades and battalions throughout the Army.

The deputy assistant commandant (DAC) from January through May was Col. Jack E. Easton; Col. Ernest F. Estes served in that capacity from June through December. The DAC served as principal assistant to General Wolfe and as the primary point of contact for mission training activities. Among other specific duties, he monitored and integrated assigned training elements and effected coordination among training elements, higher headquarters, integrating centers, and other schools, installations, and activities.

Col. Willis R. Bunting continued as chief of staff throughout 1988 and served as principal assistant to the commanding general and assistant commandant in the command and management of the USAAVNC, advising and acting for them

as directed. He supervised and directed the staff to ensure coordinated action in accomplishing the assigned missions of the Aviation Branch and of the USAAVNC. The chief of staff exercised primary authority, under the commanding general, over center support activities at the USAAVNC. These included resource management; plans, mobilization, and security; internal review; public affairs; legal affairs; and safety.

The garrison commander in 1988, Col. E. Kirby Lawson III, served as the principal assistant to the commanding general in the command and management of garrison activities of the USAAVNC. The garrison commander had primary responsibility in the areas of personnel and community activities, industrial operations, engineering and housing, medical plans and training, post security, headquarters activities, chaplain activities, civilian personnel, equal employment activity, and reserve component support.

Cmd. Sgt. Maj. John P. Traylor, the USAAVNC command sergeant major throughout 1988, served as the principal enlisted assistant and advisor to the commanding general. He advised and assisted the command group and subordinate commanders on matters affecting utilization, training, morale, discipline, esprit de corps, and proficiency of the enlisted members of the command.²

Two major organizational changes affecting the USAAVNC occurred at the beginning of the fourth quarter of 1988. One of these consisted of the organizational realignment of the U.S. Army Aviation Board and the other, of the USAAVNC's becoming the proponent for the USAALS.

The change in the status of the Aviation Board was part of a general TRADOC reorganizational plan which consolidated all of TRADOC's test and experimentation activities under one new command, the TRADOC Test and Experimentation Command (TEXCOM), headquartered at Fort Hood, Texas. The reorganized TEXCOM Aviation Board continued to support the USAAVNC's needs, but TEXCOM assumed the command responsibility for the overall planning, budgeting, and execution of TRADOC's test and experimentation mission. The rationale for the reorganization was that the consolidation

²The above description of the mission of the USAAVNC and the functions of various members of the command group was based on notes on interviews by the author with the members of the command group during the week of 26-30 Dec 88; and on USAAVNC, Organization and Functions Manual: USAAVNC Regulation No. 10-1 (USAAVNC: Fort Rucker, Alabama), pp. 9-11 and 01.01-01.07.

of all TRADOC testing would promote the more efficient use of personnel and equipment.³

The other major organizational change in 1988, the transfer of command and control of the USAALS from the U.S. Army Transportation Center to the USAAVNC, was of considerably more significance to the Army Aviation Center and Branch. It was also the culmination of a long evolutionary process and of many studies and plans.

The Department of Aviation Maintenance existed as a part of the USAAVNS at Fort Sill, Oklahoma, and was transferred to Camp Rucker in 1954.⁴ Although mechanical and other maintenance training for enlisted personnel has been conducted continuously at Fort Rucker down to the present, aviation-related maintenance training facilities have been established at other posts over the years. In 1983 when the Aviation Branch was implemented, the bulk of this training was carried out at Fort Eustis, Virginia, under the auspices of the commander of the U.S. Army Transportation and Aviation Logistics School (USATALS).

At the time the Aviation Branch was created, recommendations and plans were made for the gradual consolidation of the aviation mission area--including the logistical support. The rationale for the USAAVNC's becoming the proponent for all aviation matters involved cost effectiveness, standardization, training effectiveness, logical and consistent development of doctrine, and organizational responsiveness to defense needs.⁵ Most of the other planned consolidation of the Aviation mission area had been completed before 1988.

³Memo ATCT-C-PAO, Wayne E. Hair for TEXCOM board presidents, 13 Sep 88, sub: news release on formation of TEXCOM, doc I-1. See also, msg, Cdr TRADOC to distr, 12 Jun 87, sub: establishment of TEXCOM, doc I-2.

⁴USA AVNC, U.S. Army Aviation Center, Fort Rucker, Alabama: History, 1954-1964 (USA AVNC: Fort Rucker, Alabama, 1965), p. 14. Although not so entitled, this publication constituted a composite historical supplement or review for the first decade of the USA AVNS/USA AVNC existence at Fort Rucker.

⁵Ltr ATCG, Gen William R. Richardson to distr, 11 Jul 83, sub: establishment of aviation proponentcy, Tab C of "Implementation Plan: Transfer of the U.S. Army Aviation Logistics School, Fort Eustis, VA to the Command and Control of the Commander, U.S. Army Aviation Center," 7 Sep 88 [hereinafter referred to as "Implementation Plan--Logistics,"], doc I-3.

Shortly after the implementation of the Aviation Branch, however, the commander of the USAAVNC and the commander of the newly established USAALS signed a memorandum of agreement which assigned command and control of USAALS to the commandant of the USATALS. Notwithstanding subsequent efforts by the affected agencies to realign the USAALS under the USAAVNC in accordance with the terms of the Aviation Branch charter, the situation remained unchanged for over four years.

A TRADOC study initiated in May of 1987 to determine the necessary changes to establish USAAVNC control over USAALS did not receive Department of the Army (DA) approval because of the identification of the need to consider factors outside TRADOC.⁶ In December of 1987, however, the vice chief of staff of the Army (VCSA) directed a special study group "to conduct a comprehensive study and evaluate the manning, management, and support of aviation logistics, ...to provide recommended corrective action(s), and develop an implementation plan."⁷ The commander of TRADOC subsequently approved the recommendations of the special study group to transfer command and control of USAALS to the commander of the USAAVNC. The approved realignment plan also contained the following provisions: (1) the commander of USAAVNC would be responsible to the commander of the U.S. Army Logistics Center (USALOGC) as well as to the commander of the U.S. Army Combined Arms Center; (2) the commander of USALOGC would have tasking authority over USAALS for aviation logistics matters; (3) USAALS would share existing facilities at Fort Eustis with the Transportation School; (4) the commander of the U.S. Army Transportation Center and Fort Eustis (USATCFE) would provide base operations support to USAALS; (5) the realignment would be implemented within existing resources; and (6) a memorandum of agreement (MOA) would be prepared jointly by the commanders of USATCFE and USAAVNC.⁸

The MOA was signed by the USAAVNC commander on 20 September 1988 and by the USATCFE commander on 23 September 1988. In addition to endorsing the provisions of the TRADOC-approved realignment plan, the MOA stipulated other details concerning the relationships that USAALS would have

⁶Implementation Plan--Logistics.

⁷Memo, Gen. Authur E. Brown, Jr., for distr, sub: aviation logistics study--study directive, Tab D of Implementation Plan--Logistics.

⁸Msg, General Thurman to distr, 17 Jun 88, sub: command and control of the Aviation Logistics School, doc I-4; Implementation Plan--Logistics.

with USAAVNC on the one hand and USATCFE on the other. The USAAVNC assumed command and control as well as resource management responsibilities for USAALS as of 1 October 1988.⁹

The mission of the USAALS did not change as a result of the realignment. It continued to be to develop and conduct aviation logistics training for active Army and reserve component personnel; to support and evaluate aviation logistics training in the field; to conduct and guide development of logistic support concepts, doctrine, materiel, and organizations for Army Aviation; to perform proponency functions for 15D and 151 A areas of concentration and for career management field (CMF) 67; and to support the Army Aviation Branch chief and the commander of USALOGC.¹⁰ Col. Thomas M. Walker continued to serve as assistant commandant of USAALS during the last three months of 1988. With the realignment, Colonel Walker became directly responsible to the commander of the USAAVNC and served as his principal assistant in the management of all aspects of the training departments and directorates of the USAALS.

Another significant organizational change in 1988 was the separation of the civilian personnel functions from the Directorate of Personnel and Community Activities and the creation of the new Directorate of Civilian Personnel. This change became effective on 5 June.¹¹ Several other organizational changes were studied and in some cases decided upon in 1988 but were not implemented until after the end of the year. One of these was the redesignation of the installation Safety Office as the Aviation Branch Safety Office (ABS0).¹² This change, along with the new policy of sending an ABSO representative along with each Directorate of Evaluation and Standardization evaluation/assistance

⁹MOA, Maj Gen Ellis D. Parker, Cdr, USAAVNC, and Maj Gen Samuel N. Wakefield, Cdr, USATCFE, 20 Sep 88 and 23 Sep 88, sub: operating procedures U.S. Army Aviation Logistics School, doc I-5; permanent orders, USATCFE, to distr, 14 Sep 88, sub: U.S. Army Aviation Logistics School.

¹⁰Implementation Plan--Logistics.

¹¹Memo ATZQ-RFM (570-4g), Danny L. Wright for distr, 6 May 88, sub: realignment of Civilian Personnel Office, doc I-6.

¹²Memo ATZQ-RFM (540-4G), Lt Col Richard N. Roy for distr, 20 Jan 89, sub: Installation Safety Office name change; historical report, ABSO, CY 88.

visit, tends to further enhance the USAAVNC's branch responsibilities and functions.¹³

At the end of 1988, the USAAVNC consisted of fourteen directorates and four training departments at Fort Rucker. The USAALS, also under the command and control of the U.S. Army Aviation Branch chief and Center commander, consisted of three directorates and four training departments at Fort Eustis, Virginia. Also at Fort Rucker under the USAAVNC commander, there were two separate commands (Aviation Training Brigade and 1st Aviation Brigade), the U.S. Army Air Traffic Control Activity, four TRADOC systems manager of project offices, and several personal and special staff offices. More than two dozen tenant agencies, which were supported by the USAAVNC and which conducted activities closely related to the mission and functions of the Army Aviation Center, were also located at Fort Rucker.¹⁴

C. Awards, Honors, Conferences, and Ceremonies

In 1988, for the third year out of the four since the beginning of the TRADOC Installation of Excellence Award, Fort Rucker was the winner in the medium-sized post category. Fort Rucker had also won in 1985 and 1986. The award was presented by Gen. Maxwell R. Thurman and accepted by Maj. Gen. Ellis D. Parker on behalf of the many people at Fort Rucker who contributed to it. While all personnel on post contributed to winning the award, special recognition was justly accorded to the personnel of the garrison commander's office, to those of the Directorate of Engineering and Housing, to the leaders and volunteers in the residential areas mayoral program, and to the personnel of the facilities which were singled out by the TRADOC evaluation team as being particularly outstanding. The following facilities were specifically recognized by the team as being the best in each category in TRADOC: the dining facility of the 1st Battalion, 13th Aviation Regiment, 1st Aviation Brigade; the Fort Rucker Main Exchange; the U-Do-It program conversion of a section of a building into a weight room, U.S. Army Aviation Board; the Fort Rucker Central Issue Facility; and the barracks of the

¹³Historical report, ABSO, CY 88; notes on interviews by author with Lt Col Immanuel Sieving, deputy director of Evaluation and Standardization, 27 Jan 89 and with Mr. John T. Persch, USAAVNC safety manager, 31 Mar 89.

¹⁴See the organization chart at Appendix III.

Fort Rucker Noncommissioned Officers Academy.¹⁵ During the last week of 1988, General Parker was also notified that Fort Rucker had been selected as one of the finalists in the Department of the Army Communities of Excellence Competition. It was slated to compete with one other post, Fort Huachuca, Arizona, as the outstanding medium-sized post in the continental U.S. The evaluation for this award was scheduled to occur in March of 1989.¹⁶

Other significant awards won by Fort Rucker as a whole in 1988 included the TRADOC Total Army Family of Excellence (TAFE) award for medium-sized posts. This award was established to recognize the efforts of TRADOC installations' support of the spirit of the TRADOC Reserve Component Family Action Plan. The factors on which installations were rated included the strengthening of reserve and active component relationships, quality of life, and sense of community.¹⁷ Also in 1988 Fort Rucker exceeded TRADOC's goal and was recognized as an outstanding participant in the Army Savings Bond Campaign as a result of its 12 percent increase in overall bond sales.¹⁸

Since 1988 was the safest year ever for Fort Rucker and for Army Aviation, some of the most highly prized awards of the year resulted from new safety records established. Safety-related awards received in 1988 include the Bronze Safety Award by the Aviation Training Brigade and the Army Superior Unit Award by the 1st Battalion, 212th Aviation Regiment. The latter award resulted from the completion of over 226,000 consecutive accident-free flying hours.¹⁹

Among the other major awards received in 1988, two Fort Rucker soldiers, S. Sgt. James K. Prier and Sp4 Patricia A. Werner, were selected as the Forces Command noncommissioned officer and soldier of the year, and the already highly acclaimed Army Aviation Medal of Honor recipient,

¹⁵Army Flier, 13 Oct 88; news release 88/288/wjh, USAAVNC PAO, 7 Oct 88.

¹⁶Note on telephone call to historian from General Parker, 29 Dec 1988; Army Flier, 12 Jan 89.

¹⁷News Release 88/184/ahe, USAAVNC PAO, 7 Jun 88; Army Flier, 16 Jun 88.

¹⁸Army Flier, 30 Jun 88.

¹⁹Army Flier, 16 Jun 88, 8 Sep 88, 20 Oct, and 10 Nov 88; news release 88/298/ahe, USAAVNC PAO, 31 Oct 88; notes on interview by author with Maj Gen Ellis D. Parker, 29 Dec 1988.

CWO4 (Ret.) Michael J. Novosel was accorded the "Elder Statesman of Aviation" award by the National Aeronautic Association. Also, Sgt. Troy O. Martin of the 1st Battalion, 212th Regiment, Aviation Training Brigade (ATB) and Sp4 Walter M. Novtka of the 46th Engineer Battalion, 1st Aviation Brigade, were recognized respectively as the Fort Rucker NCO and soldier of the year at the Army birthday ball on 18 June. The commanding general of the USAAVNC had an honorary Doctor of Laws degree conferred upon him after delivering the commencement address at Miles College and was also awarded the Distinguished Service Medal by Gen. Maxwell R. Thurman, the TRADOC commander, for distinguishing himself as the chief of the Aviation Branch and commander of the USAAVNC. The many other awards and honors received by USAAVNC personnel during 1988 are too numerous to list, but the major Army Aviation Association of America (AAAA)-sponsored awards should be mentioned. These awards honor those individuals and units who were deemed most outstanding in Army-wide competitions. The AAAA trainers of the year awards went to Maj. Mark S. Wentlent of Task Force 118, 18th Aviation Brigade, Fort Bragg, North Carolina, and CWO4 Robert J. Monette, Company D, 1st Battalion, 14th Aviation Regiment, Aviation Training Brigade, USAAVNC.²⁰

Two dedication ceremonies were held at Fort Rucker during 1988. The first of these, Dental Clinic #1, was dedicated on 17 May to the memory of Col. Arthur E. Brown for his dental service at Camp Rucker during World War II in support of the preparation of soldiers for combat duty and for his more than 35 years of distinguished service in the Dental Corps of the Army and the Air Force. In the second ceremony one of the new helicopter stagefields was dedicated on 12 September to the memory of CWO3 Jerry L. Brown, a UH-60 Black Hawk instructor pilot at Fort Rucker, who died in an aircraft accident near Elba, Alabama, in March of 1986.²¹

Many other important ceremonies and conferences, involving numerous foreign and U.S. dignitaries and

²⁰Army Flier, 19 May, 9 Jun, 23 Jun, 30 Jun and 28 Jul 88; news release 88/185/ahc, USAAVNC PAO, 8 Jun 88; AAAA, Army Aviation Center Chapter, "Annual Awards Banquet" program, 8 Dec 88.

²¹Army Flier, 19 May 88; news release 88/260A/ahc, USAAVNC PAO, 3 Oct 88; USAAVNC, "Brown Stagefield Memorialization Ceremony, 12 Sep 88; historical report, DENTAC, CY 88.

officials, occurred at the USAAVNC during 1988.²² Of the several safety related conferences and symposia held at Fort Rucker during the year, the TRADOC Aviation Safety Symposium, held in late January and attended by around ninety persons, including thirty-one general officers, was the most important. In February the USAAVNC hosted the National Security Industry Association TRADOC Conference Series for Industry. At the annual Army Aviation anniversary ball in April, the speaker was Maj. Gen. (Ret.) Richard Kenyon. Another unofficial event of particular interest was the Alabama Special Olympics for handicapped persons, for which Fort Rucker was the host installation in May of 1988. Around 550 personnel were billeted on post for this event and the billeting for a large portion of them was provided under the auspices of the Directorate of Reserve Component Support.

Distinguished U.S. visitors during 1988 included Secretary of the Army John O. Marsh, Jr.; Deputy Secretary of Defense William Howard Taft IV; Assistant Secretary of the Army Delbert Spurlock, Jr.; Assistant Secretary of Defense Grant S. Green; Chief of Staff of the Army, Gen. Carl E. Vuono; Gen. (Ret.) William C. Westmoreland; Vice Chairman of the Joint Chiefs of Staff, Gen. Robert T. Herres; Vice Chief of Staff of the Army, Gen. Arthur E. Brown, Jr; U.S. Senator Richard C. Shelby; U.S. Senator Strom Thurman; Congressman William L. Dickinson; Congressman Les Aucoin; TRADOC Commander, Gen. Maxwell R. Thurman; U.S. Air Force Gen. Robert D. Russ; Sgt. Maj. of the Army Julius Gates; and Special Assistant to the Deputy Chief of Staff for Logistics, Joe Cribbins.

Foreign visitors to Fort Rucker in 1988 included Prince Bandar Bin-Sultan, the Saudi Arabian ambassador to the U.S.; Mr. Neville Trotter, a member of Parliament of the United Kingdom; Mr. J. van Houwelingen, the deputy secretary for defense of the Netherlands; and military officers from Argentina, the Federal Republic of Germany, the Netherlands, Australia, the United Kingdom, Spain, Saudi Arabia, Canada, and China. The delegation from the People's Republic of China in July was led by Gen. He Pengfei, the director of the Equipment Acquisition Bureau of the People's Liberation Army General Staff, and consisted of two other general officers and four other officers. During their visit to the U.S. the Chinese visitors were given briefings on U.S. military rotary wing aircraft, aircraft equipment, and

²²Those conferences dealing with training and leader development are described in appropriate chapters of this historical review. Some of those conferences hosted by, and for the most part affecting only, one USAAVNC unit are described as part of that unit's report in Appendix I, below.

training. The briefings were given by USAAVNC personnel and also by representatives of the Boeing Corporation with the expectation of possible future Chinese purchases of U.S.-manufactured aircraft. A follow-up visit was scheduled for 1989.²³

²³Army Flier, 14 Jan, 10 Mar, 28 Apr and 9 Jun 88; historical report, Protocol Office, CY 88; historical report, DRCS, CY 88; notes on interviews by the author with Col Willis R. Bunting, USAAVNC CofS, 28 Dec 88, and with Lt Col Gus M. Meuli, the deputy director of DOTD, 23 Jan 89; "Itinerary for Visit" [of the Chinese delegation], ATZQ-CS, CofS, USAAVNC, 20 Jul 88, change 2.

CHAPTER II

TRAINING

In 1988, the year designated by both the secretary and chief of staff of the Army as the "Year of Training," the USAAVNC endeavored to promote the spirit of the year's theme by providing the best training possible for the tax dollars expended. The single most significant development in the area of training during the year was the implementation of the Multitrack approach to initial entry rotary wing (IERW) training. This and other major innovations are described in detail below. Almost all training programs at the USAAVNC were affected to some degree by budget cuts brought on by the Gramm-Rudman-Hollings Act during FY 1988. In efforts to prevent the training programs from being affected any more than necessary, the USAAVNC adopted various cost-saving measures in other post programs and activities.¹

Initially, when the budget decrement was announced in early January, the cuts in flight training affected only the graduate courses, such as the instrument flight examiner, rotary wing qualifications, and rotary wing aviator refresher courses. In order to prevent unnecessary training cuts, all programs of instruction were scrutinized and revised to eliminate non-essential hours. These management initiatives streamlined training and resulted in cost savings, estimated by the Directorate of Plans, Training Mobilization, and Security (DPTMSEC), of \$18.8 million. Notwithstanding these and other cost-saving measures, the additional budget decrements announced in February also forced reductions in Initial Entry Rotary Wing and new systems training courses. Because of the budget cuts, the year's total student load for flight training was reduced by approximately one-fourth--to around 4,100.²

Most available statistics on reductions in specific flight training programs were for the fiscal rather than the calendar year. During FY 1988, contracted fixed-wing training was reduced by a total of 222 students for a total savings of approximately \$1.2 million. The rotary wing flight training contract was reduced twice (by 277 students on 1 February and by an additional 197 on 1 April) for a combined savings of approximately \$1.3 million. The flying-

¹See, e.g., "Resource Management," in Chapter VI, below.

²Army Flier, 7 Jan 88; news release 88/75/bg, USAAVNC PAO, 1 Mar 88; historical report, DPTMSEC, CY 88; "USAAVNC White Book, FY 88" 15 Aug 87 and change #5, 21 Apr 88; historical report, DAP, CY 88.

hour reductions led to four change orders against the aircraft maintenance contract. These change orders (dated 7 January, 8 April, 21 April, and 15 July) reduced the contract flying hours by 14 percent and the FY 1988 contract value from \$100 million to \$90 million.³

A. Initial Entry Rotary Wing (IERW) Course

In 1988, more than 1,600 IERW students trained, graduated, and received military aviator wings. These graduates included 707 commissioned officers, 848 warrant officer candidates, and 79 NATO and other foreign officers. Over 500 of the U.S. Army trainees were either Army National Guard or Army Reserve. The civilian contractors, Pan Am Support Services, Inc. (January through September) and Flight Safety International (October through December), conducted IERW training under the auspices of the Aviation Training Brigade (ATB), with ground support provided by the 1st Aviation Brigade (1st Bde).⁴

Prior to the implementation of Multitrack flight training in mid-1988, the TH-55 Osage had been the Army's primary IERW training helicopter since 1965. This small, two-seat, reciprocating-engine helicopter had amassed more than 3.9 million flight hours, and had been used to train more than 47,000 students. Furthermore, this was achieved with an exceptional safety record; since 1979, e.g., more than 770,000 miles had been logged with only one class A accident and no class B accidents. The final Army check-ride flight of the TH-55 was made at Fort Rucker's Shell Field on 3 June 1988. Sixty of the TH-55s were turned over to the Missile Command to be used as drones, one was sent to the U.S. Military Academy for display purposes, and the remainder were to be declared excess property.⁵

Notwithstanding the excellent record of the TH-55 and the tremendous value it had been to Army Aviation, its retirement was necessary for several reasons. First, it was the last reciprocating engine aircraft in the Army's

³Historical report, DOC, CY 88.

⁴Historical reports, ATB, 1st Bde, and DAP, CY 88; notes on interview by author with Col Clinton B. Boyd, Cdr, ATB, 13 Jan 89.

⁵Msg, Cdr AVSCOM to HQDA, 23 Feb 88, sub: retirement of TH-55, doc II-1; Army Flier, 9 Jun 88; Montgomery Advertiser, 4 Jun 88; news release 88/177/ahe, USAAVNC PAO, 6 Jun 88; "TH-55 Retirement" (a four-page program prepared for the TH-55 retirement ceremony).

inventory; all others had turbine engines. Furthermore, it lacked hydraulics and seated only two persons. After a careful and detailed study conducted since 1984, in the Department of Gunnery and Flight Systems (DGFS) the USAAVNC concluded that the replacement of the TH-55 with the UH-1 Iroquois (Huey) would be more economical in the long run and also would result in better trained aviators. The Huey was already used as a transition training aircraft following the primary training in the TH-55, so one transition step was eliminated by making it the primary trainer.

The replacement of the TH-55 with the UH-1 was one aspect of Multitrack IERW training. This new approach was needed so as to produce aviators trained in several different airframes. Theretofore, IERW training prepared students for only two aircraft in the Army's active fleet-- the UH-1 and the OH-58. Graduate flight training was thus necessary for Army aviators to qualify in any other aircraft. In the new Multitrack training, following eighteen weeks of primary and instrument training in the UH-1, some students continued in the Huey for advanced training. A second group transitioned to the OH-58 for advanced training. For these two groups, the total time required for completion of IERW training was thirty-six weeks and two days. A third group of students transitioned from primary and instrument training in the UH-1 to advanced training in the UH-60 Black Hawk, and a fourth group, to the AH-1 Cobra. For the third group the total training time was thirty-eight weeks and two days, and for the fourth, forty weeks and two days.⁶ The training in all four tracks consisted of basic combat skills, night flight, night vision goggles (NVG), advanced combat skills, and professional development. Additionally, all tracks except the UH-1 included a transition period, both the UH-60 and AH-1 included navigation, and the AH-1 also included gunnery.⁷

The first Multitrack IERW class began preflight training in May, 1988, the Multitrack students flew in the UH-1 on 25 May, and the first solo flight occurred on 15 June; the first class did not graduate until after the end of 1988. Several problems arose during the process of

⁶Capt Anthony Brogna, "Multitrack: Posturing the Aviation Force to Meet the Challenges of the Next Century," U.S. Army Aviation Digest: Professional Bulletin (hereinafter referred to as Aviation Digest) 1-87-4 (Dec 87), pp. 10-14; historical report, 1st Bde, CY 88.

⁷Memo ATTG-MT (351c) Doreatha Mangrum for Cdr, USAAVNC, 3 Jun 87, sub: revised course administrative data...Multitrack, doc II-2; historical reports, 1st Bde & DPTMSEC, CY 88.

implementing Multitrack. To support increased student loads, for example, more instructor pilots were needed, and personnel requirements were not filled early enough to have the instructors trained prior to the arrival of the larger classes. The problem of the shortage of instructor pilots was so severe in the AH-1 training company that five AH-1 classes had to be cancelled. Serious training problems also resulted from budget constraints during the last two quarters of FY 1988. Because of the budget cuts, the entire advanced combat skills phase of OH-58 IERW training was suspended, and flight time in other courses was reduced.⁹

From another perspective, however, the implementation of Multitrack was expected to provide savings in resources which would enable the USAAVNC to avoid other damaging budget cuts. According to the Directorate of Resource Management (DRM), the Multitrack system led to savings in three areas. First, multitracking reduced the training costs for UH-60 and AH-1S students by training them faster from initial entry to graduation. This gave the Army an annual cost avoidance of \$1,335,702 plus an annual hard budget savings of \$781,733 in TDY costs. The third area of savings would be the reduction in the number of subsequent transitions. In FY 1989, The USAAVNC was expected to train 205 UH-60 students and 350 AH-1S students in the Multitrack Program. These 555 aviators would not need a transition course. Since the unit costs for transitioning UH-60 and AH-1S students would be \$49,328 and \$71,551 respectively, the annual savings would be \$35,155,090.⁹

Warrant officer candidates (WOCs) and commissioned officers were attached to and were provided administrative and operational support and soldierization training by the 1st Battalion, 145th Aviation Regiment, of the 1st Bde while in flight training.¹⁰ All phases of IERW training were provided in Spanish to ten Latin American flight students in 1988 by a company of the ATB. This same unit also provided a refresher course for twenty-nine rated aviators from Colombia.¹¹

⁹Historical report, ATB, CY 88; interview by author with Col Clinton B. Boyd, Cdr, ATB, 13 Jan 88; news release 88/172/jdk, USAAVNC PAO, 31 May 88; Army Flier, 26 May, 23 Jun 88.

⁹Historical report, DRM, CY 88.

¹⁰Historical report, 1st Bde, CY 88.

¹¹Historical report, ATB, CY 88.

Several important changes in the NVG phase of IERW training occurred with the implementation of Multitrack. For example, in the UH-1 track the NVG phase was expanded and became a twenty-day course for student pilots. Qualification included familiarization with the goggles inside a simulator, unaided night flying, oral testing on subjects such as aeromedical factors, aerodynamics, emergency procedures, and actual NVG flying. Companies A and B, 1st Battalion, 212th Aviation Regiment, ATB, were devoted to training student pilots to fly the UH-1 helicopters at night using the goggles.¹²

Although a few minor problems were still being worked out as 1988 ended, the indications were that Multitrack was very successful. Without question, the students who completed training in the new program would be trained for flight duty in a larger portion of the aircraft in the Army's active inventory. The UH-1 was an expensive aircraft to operate, however, and for this reason among others, it was intended to be only a temporary solution to the problem of finding a primary trainer. Even before Multitrack was implemented, plans were underway, not only to design and procure another primary trainer to serve the needs of Army Aviation during the next decade, but also to develop a new concept in training. At the end of the year, USAAVNC personnel were studying designs for three-person training aircraft with turbine engines that would be relatively inexpensive to operate and also permit easy transition to other helicopter tracks. Recognizing that budget constraints would probably prevent the Army's outright purchase of new training aircraft, these planners were also developing the concept of single contractor aviation training (SCAT), which envisioned a single contractor's providing all academic and flight training, simulators, and maintenance and support services for the first eighteen weeks of IERW training. If the contractor also purchased the aircraft, which was one of the possibilities being considered, the Army would simply pay the contractor for producing the trained aviator.¹³

¹²"Aviation Branch Update," 14 Oct 88; Army Flier, 8 Sep 88. See "Night Vision Devices (NVD)," in Chapter V, below, for information about problems, use, and acquisition of NVG.

¹³Notes on interviews by author with Brig Gen Rodney D. Wolfe, 28 Dec 88 and with Col Clinton Boyd, 13 Jan 89; "Aviation Branch Update," 15 June 88; news release 88/345/bjg, USAAVNC PAO, 12 Dec 88; Maj Gen Ellis D. Parker, "Army Aviation Brigade Commander's Conference," Army Aviation (XXXVIII, 2), pp. 6, 49.

B. Graduate Flight Training

Some graduate or transition flight training programs suffered from the initial budget cuts in January 1988, but not the new systems training courses, which consisted of those for the AH-64 Apache, UH-60 Black Hawk, CH-47D Chinook, and OH-58D version of the Kiowa scout helicopter.¹⁴ During the last two quarters of the FY 1988, however, additional budget cuts also affected these training programs. A total of 2,472 graduate flight students completed training programs in 1988.¹⁵

The AH-64 Apache Qualification Course was reduced in length in 1988 from fourteen weeks and one day to ten weeks and one day. The change was needed so as to increase the output of aviators and, at the same time, to lower cost. The major changes consisted of reducing the number of flying hours in the course from 65 to 45.5, and of academic hours from 113.5 to 80.5. It was possible to shorten the course without reducing the quality of the instruction, because the course had originally been designed to put a completely new system in the field. Since that time, the USAAVNC had determined that the course was too long and redundant, that simulators could be used more efficiently, and that time could also be saved by shifting the emphasis to individual training. The Apache instructor pilot (IP) training was left as a two-week add-on to the qualification course until October, at which time it became a separate course. Before the shortening of the Apache Qualification Course, the cost per student was \$124,000 and slightly over 400 students per year were graduating. Costs for the newly structured course dropped to \$80,000 per student, while the student output was increased to over 500 per year, and they were believed to be better qualified.¹⁶ After the changes in the qualification course, more of the training came to be conducted at the unit level by the Apache Training Brigade at Fort Hood, Texas.¹⁷

All basic fixed-wing training at Fort Rucker in 1988 was conducted by the civilian contractor, Flight Safety International. The basic course for all fixed-wing qualification training was eight weeks long, by the end of which the student had acquired forty hours of single-engine

¹⁴Army Flier, 7 Jan 88.

¹⁵Historical report, DAP, CY 88.

¹⁶Army Flier, 7 Jan, 10 Mar 88; "Army Aviation Update," 15 Feb 88.

¹⁷Historical report, DOTD, CY 88.

flying, twenty hours of simulator training for multi-engine planes, and twenty hours of actual flight time in the multi-engine aircraft. Most of the students were commissioned officers, but around forty warrant officers completed the course. After completing the basic fixed wing course, some students went into advanced fixed wing courses--either the OV-1 Mohawk Qualification Course, the OV-1 Mohawk Instructor Pilot Course, or the U-21 Instructor Pilot Course. The Fort Rucker fixed-wing program also offered a two-week C-12 simulator program with no actual flight time; C-12 flight training took place in the units. Contracts for fixed-wing training negotiated in 1988 for FY 1989 involved a decrease in the single engine program with a significant increase in both the simulator hours and the actual flight hours in the multi-engine phase of the basic course.^{1e}

The Rotary Wing Refresher Course was severely affected by the budget cuts. On 26 February, the class size was reduced from twelve to six, and on 1 July, the course was cancelled until the end of FY 1988. During that period the instructor pilots of this program assisted in training IERW students and U.S. Army Individual Ready Reserve aviators.^{1e}

Training for the CH-47B/C was retired at the USAAVNC in mid-1988, when the students in the last CH-47B/C qualification course completed their training.^{2e}

C. Weapons and Gunnery Training

The Army-wide proponent for aerial range and gunnery operations, Standard Training Commission (STRAC) issues, and multi-purpose range complex development was the Weapons and Gunnery Division (WAGD) of the DGFS. The WAGD also developed, conducted, and evaluated performance oriented instruction on aircraft and weapon systems for Army attack and advanced attack helicopters. During 1988, WAGD staff personnel provided instruction in the AH-1 Flight Weapons Simulator, the AH-64 Combat Mission Simulator, the AH-64 Cockpit and Weapons Emergency Procedures Trainer and in the classroom environment. The division trained 359 AH-64 students and 401 AH-1S students during the year, and the simulators logged over thirteen thousand hours.

^{1e}Army Flier, 4 Feb 88.

^{1e}Historical report, ATB, CY 88.

^{2e}Change #5, 21 Apr 88, to ARPRINT, CH-47C aviator qualification, 6 Oct 87; historical report, DPTMSEC, CY 88.

In 1988, the Range and Gunnery Operations Branch (RGOB) of the WAGD prepared several briefings for the DA and OSD about helicopter gunnery training ammunition. The branch also conducted a STRAC weapons program review covering simulation, deficiencies and availability of ranges, ammunition availability, and gunnery programs. This review exposed the need for large firing ranges to accommodate the Hellfire and Hydra 70 rockets and the need to conduct live fire training with an entire attack company. It also contributed to the decision to study the problems regarding helicopter gunnery ranges.²¹

Steps were taken in 1988 to address a problem in the realm of helicopter gunnery training. There were no gunnery ranges available to Army Aviation that would allow the AH-64, or even the AH-1 to engage a threat target array at near maximum effective range of the weapons systems. The Aviation Systems Training Research Branch of the Directorate of Training and Doctrine (DOTD) conducted a detailed study of the problem and identified several alternatives by way of a solution. Late in the year, a series of action officer working sessions, culminating with a general officer steering committee was scheduled, and a recommendation was expected during the first quarter of 1989.²² One of the concepts being considered was for an integrated combined arms range utility site (ICARUS) which would be of adequate size to accommodate the maximum effective ranges of the Army's helicopter weapons systems. Sites under consideration in 1988 were Dugway Proving Ground, Utah, Yakima Firing Center, Washington, and White Sands Missile Range, New Mexico.²³

Gunnery training was enhanced in 1988 by the development of the Area Weapons Scoring System (AWSS). The AWSS was an electronic, objective performance measurement device used to evaluate target effect of the cannon and 2.75

²¹Historical report, DGFS, CY 88; memo ATIC-SP (5-5d), Col Michael E. Ekman for distr, 22 Jul 88, sub: STRAC weapons program review letter of instruction; memo ATZQ-TDI-F (351c), Lt Col Floyd E. Edwards for distr, sub: USAAVNC tasks developed from STRAC weapons program review.

²²Ltr, Maj Gen Parker to Lt Gen J. S. Crosby, 30 Aug 88, doc II-3; white paper ATZQ-TDS-ST (70-17a) "Army Helicopter Gunnery Range Concept," USAAVNC, 10 Aug 88; "Aviation Branch Update," 15 Dec 88.

²³Fact sheet ATZQ-GFS-WR, 27 Oct 88, sub: ICARUS, doc II-4; memo ATZQ-TD, Edwards for CofS, 17 Oct 88, sub: Army helicopter gunnery range; msg, Brig Gen Rodney Wolfe for CINCUSAREUR, 28 Oct 88, sub: ICARUS.

inch rockets during attack helicopter gunnery exercises. The final production version underwent testing at Fort Hood in early 1988, and the devices were installed on Fort Rucker's ranges during the latter part of the year. The AWSS became a critical component in evaluating night weapons training and validating training standards and ammunition requirements. The ultimate goal was to make the system available wherever needed throughout the Army.²⁴

In June of 1988, TRADOC tasked the USAAVNC to review the training programs and standards contained in current publications to ensure that units could meet and were meeting validated go-to-war gunnery training standards. Several questions were raised, and several issues were addressed by various USAAVNC agencies. These issues included AH-1 and AH-64 gunnery training validation studies, attack helicopter results from the combat training centers, reserve component attack helicopter gunnery training requirements, and attack helicopter range requirements.²⁵

The Flight Systems Branch of DOTD was the lead agency for the armor anti-armor (A3) issue. The FY 1988 A3 Master Plan identified significant training and threat deficiencies, and an A3 Special Task Force was organized to resolve these problems. The task force embarked on a mission to educate the field and change training in the institutions to reflect these findings, which resulted in changes in doctrine, tactics, techniques, and procedures.²⁶

D. Enlisted Training at Fort Rucker

During 1988 Advanced Individual Training (AIT) was conducted at Fort Rucker for five military occupational specialties (MOSs); a total of 2,858 students graduated. The numbers of graduates in each MOS were as follows: 93B--170; 93C--424; 93H--7; 93P--714; 67N--897; and 67V--646.²⁷ There was a wide disparity between the numbers of students starting and those graduating in the 93C course, resulting in part from increasing enrollment during the year in order to meet the problem of a shortage that developed in 1987.

²⁴"Aviation Branch Update," 15 Feb 88, historical report, DPTMSEC, CY 88.

²⁵Historical report, DOTD, CY 88.

²⁶Information paper ATZQ-TDI-F, Mr. Pittenger, 3 Jan 89, sub: armor/anti-armor issues update, doc II-5; historical report, CY 88.

²⁷Historical report, DAP, CY 88.

Training for MOS 93C was initiated at the beginning of FY 1988 as a result of the combining of MOSs 93H and 93J.²⁹ The MOS93C10 course was designed to provide enlisted personnel with the skills required to perform air traffic control duties at apprentice-level and with knowledge of visual flight rules, instrument flight rules, air traffic control regulations and concepts, and procedures for the award of the Federal Aviation Administration (FAA) certificate of grades. Reclassification of all air traffic controllers to MOS93C was scheduled to be completed by 1 April 1989.

The proponent for the training of career management field (CMF) 93 students was the Air Operations Training Division of the Department of Enlisted Training (DOET), and for CMF 67 students, the Maintenance Training Division of DOET. Several other departments and units at Fort Rucker also participated in the training of the aeroscout observers, however. These included the Department of Combined Arms Tactics, the Department of Gunnery and Flight Systems, the U.S. Army School of Aviation Medicine, the 1st Bde., and the Aviation Training Brigade. The 1st Bde. provided basic soldier skills training for AIT students.²⁹

In October of 1988 a TRADOC initial entry training (IET) standardization committee visited Fort Rucker to inspect all aspects of training initial entry soldiers. The deficiencies identified by the committee in the area of AIT were relatively minor and were addressed forthwith.³⁰

During 1988 the Maintenance Training Division of DOET continued supplying data to the Army Research Institution (ARI). The goals of the ARI project were to develop techniques to identify the specific skills and abilities required to perform successfully in each entry-level MOS in the Army and to develop procedures for determining the minimum ability requirements for each entry-level MOS. The information provided by the Maintenance Training Division

²⁹See "Personnel Management," in Chapter VI.

²⁹Historical reports, DOET, DPTMSEC, USAATCA, and 1st Bde., CY 88; Sfc Keith D. Wilbur, "Army Training: Theme for 1988," Army Aviation (1-88-12), Dec 88, pp. 6-8.

³⁰Memo ATTG-I (350), Brig Gen S. L. Arnold for Cdr USAAVNC, 19 Aug 88, sub: IET standardization committee installation visit to Fort Rucker; DF (ATZQ-DPT), Col James B. Sauer for distr, 23 Nov 88, sub: corrective actions to IET standardization committee visit.

was to be used for the study and redesign of vocational aptitude tests.³¹

In 1988 the Air Operations Training Division implemented a new seven-part examination for control tower operator certification by the FAA. In accordance with guidelines from the FAA, there was a 120-day transition period beginning on 1 August during which time either the old or the new test could be used. After 1 December, only the new test was used.³²

The Air Operations Training Division also provided mobile training team support to U.S. Army Reserve (USAR) and Army National Guard (ARNG) air traffic control units and new equipment training teams. These involved trips by DOET personnel to Cheyenne, Wyoming, in January and to Fort Meade, Maryland, in May.³³ Also in 1988, considerable progress was made in the further development of exportable training packets for reserve component courses. The packet for the 93P10 was already being widely used in early 1988, the packet for the 93C10 was completed and sent to TRADOC for approval, and the packet for the 93B10 was under development and scheduled for completion in 1989.³⁴

An important change in the programs of instruction of CMF 93 in 1988 consisted of the insertion of thirty hours of tactical instruction. The topics included airspace communications electronics operations, joint interoperability and tactical command and control systems, establishing and leaving a radio net, and directed energy warfare. These lessons were needed to support ATC doctrine for AirLand Battle operations.³⁵

³¹Historical report, DOET, CY 88; DF ATZQ-DET-EM (340d), M Sgt Scott F. Rockwell to DPTMSEC, 14 Dec 88, sub: ARI research support (67).

³²Douglas R. Murphy, FAA, to Cdr USAAVNC, 11 May 88, sub: status of revised control tower operator test; David H. Settle, FAA, to Cdr USAAVNC, 6 Jun 88.

³³Trip Report ATZQ-NCA-EA, Sp1c Ronald W. Bedford to DOET, 22 Jan 88, sub: site visit to instruct course; trip report ATZQ-NCA-RC, Sp1c Ronald W. Bedford to DOET, 20 May 88, sub: mobile training team assistance; historical report, DOET, CY 88.

³⁴'Aviation Branch Update,' 15 Apr 88.

³⁵Historical report, DOET, CY 88.

During 1988, MOS93B personnel were trained in OH-58A/C aircraft. In recognition of the future need for the aeroscout observers to be trained in the OH-58D and AH-58D aircraft, the DOET and the Enlisted Training Branch (ETB) of DOET conducted several study sessions to determine the most appropriate solution. After considering various possibilities, the study group decided to recommend that all 93B training should be expanded to include training in the D model aircraft with a planned start date of 1 October 1991.³⁶ The shortage of MOS93B personnel in 1988 necessitated the development by the USAAVNC of exportable training packets to assist units in training MOS67Vs in basic aeroscout duties.³⁷

The fielding of the new FM 25-100, Training the Force, in November 1988 established the requirement for each unit to develop mission essential task lists (METL). From the METL, battle tasks were to be determined IAW procedures in the manual. Battle tasks for each MOS were then to be used as the basis for MOS training and MOS training products, i.e., soldier training publications and skill qualification tests.³⁸

In early January of 1988 the three first AIT students graduated in the Aviation Soldier Above the Best Program. This recently inaugurated program was developed to promote the total soldier concept. Not only did it recognize the initial entry soldiers' technical achievements in AIT, but it also emphasized motivation, physical fitness, self-discipline, leadership potential, and soldier proficiency. One of the prerequisites to compete in this new TRADOC-approved program was to be a graduate of the Smart Troop Program, a recently inaugurated elective program administered by the Aviation Learning Center requiring forty to sixty hours of MOS training above and beyond the regular course curricula. The Aviation Learning Center made further progress in its efforts to promote excellence in AIT training by implementing a new computer-based education system designed to improve academic skills in 1988. The Smart Troop Program concentrated on teaching the requisite math, reading, and English skills for performing MOS tasks.

³⁶"93BW5 Critical Task List, Aeroscout Observer," 6 Oct 88; historical report, DOTD, CY 88.

³⁷Msg, Cdr USAAVNC to distr, 29 Aug 88, sub: aeroscout observer training assessment.

³⁸Memo ATIC-ITP (350), Maj Gen Wayne A. Downing for distr, 10 Jan 89, sub: guidance for battle focusing the skill qualification test; historical report, DOTD, CY 88.

Students could use the program voluntarily or be assigned to do so by their commanders.³⁹

During 1988 USAAVNC leadership continued efforts begun earlier to have training for CMF 28 and MOS 93D moved from Fort Gordon, Georgia, to Fort Rucker. A feasibility study conducted in 1988 concluded that space for training could be made available in Yano Hall without additional costs as a result of expected reductions in student input in MOSs 67N and 67V courses.⁴⁰ In 1988 the merger of CMF 28 with CMF 67 was approved, but as of the end of the year, it had not been definitely decided whether to move the training to Fort Rucker or to Fort Eustis.⁴¹

In 1988 the Enlisted Training Branch (ETB) of DOTD completed the job and task analysis (JTA) for CMF 28 (MOSs 35 K, L, M, and P), which was being consolidated into CMF 67 (as MOSs 68 N, L, Q, and P respectively). This was the first complete JTA for CMF 28 in over five years. The ETB personnel conducted surveys at several posts in the region and used the data collected to complete the task analysis. The voluminous documentation was sent to Fort Gordon in October so that the necessary changes could be made in the training programs and products.⁴²

During 1988 AIT training was coordinated with leader development programs through horizontal/vertical integration and through joint training exercises. Since the principal purpose of these joint activities was leader development, they are described in Chapter III of this review.

³⁹Msg, Maj Gen Parker for Lt Gen Crosby, 15 Jun 88; Army Flier, 5 Jan and 6 Oct 88; historical report, DOTD CY 88.

⁴⁰Memo ATZQ-R, Col Willis R. Bunting for Cdr TRADOC, [Apr 88], sub: feasibility study for the transfer of CMF-28; DF ATZQ-RCA, Danny L. Wright to CofS, 26 Apr 88, sub: feasibility study for transfer of CMF-28.

⁴¹Memo ATNC-MOS-B (611-1a), Darrel A. Worstine for distr, 3 Jun 88, sub: merger of CMF 28 into CMF 67, doc II-6; notes on interview by author with Cmd Sgt Maj Hartwell B. Wilson, DOET, 10 Jan 88; Maj Gen Ellis D. Parker, "Enlisted Training: Past, Present and Future," Army Aviation, XXXVIII, 1 (31 Jan 89), pp. 4, 56. See also "Personnel Management," in Chapter VI, below.

⁴²"Job and Task Analysis Plan," DOTD, USAAVNC, doc II-7; historical report, DOTD, CY 88.

E. U.S. Army Aviation Logistics School (USAALS)

During the fourth quarter of 1988, 1,278 persons received AIT in CMF 67 at the USAALS.⁴³ Of these, 432 were in series 68, and the remainder were in series 67. Of the series 68 students, 248 soldiers were trained in MOS68J, 105 in 68B/D, 28 in 68F, and 51 in 68G. Of the series 67 students, 77 were trained in MOS67R, 129 in 67Y, 11 in 67S, 1 in 67V, 550 in 67U, and 78 in 67H. Of the MOS67U students, 400 were in course 67U10, and 150 were in course 67U10Y1.

Other advanced individual logistics training at the USAALS included the 66 series technical inspector (TI) courses and the aviation logistics officer courses. Of the 66 series TI students, 171 graduated from the Propulsion and Powertrain Division of the Department of Aviation Trades Training (DATT), 394 from various skill level two courses, and two from a skill level three course. Of the skill level two 66 series graduates, 182 were MOS 66U, 8 were 66H, 84 were 66N, 67 were 66T, 15 were, 66Y, 16 were 66R, 13 were 66N, 6 were 66V, 2 were 66T, and 1 was 66H.

During the period under consideration, 25 officers graduated from the 4D-SQIE Course in DATT, 445 from the Maintenance Management and Maintenance Test Pilot Course, and another 108 from only the maintenance management portion of this course. These aviation logistics students were trained for the UH-1, UH-60, the AH-1, the CH-47, the AH-64, or the OH-58. The maintenance management course underwent a change during this period in that it was changed from a twenty-four hour block to one six-hour conference followed by a repair parts practical exercise. Also during this period, 542 students of various ranks completed the aviation life support equipment course.

The noncommissioned officer educational system (NCOES) students trained at the USAALS during the fourth quarter of CY 1988 included skill levels three and four students in the MOS 67 and 68 series. These personnel completed leadership training in the U.S. Army Transportation Center Noncommissioned Officer Academy (NCOA) before beginning

⁴³In accordance with an agreement made at Fort Eustis, Virginia, on 17 January 1989, the U.S. Army Transportation Corps historian, Mr. Carl Cannon, was to report on the activities and achievements of USAALS for the first three quarters of 1988 (memo for record ATSQ-LAC-PAC, Linda A. Mitchell, 20 Jan 89, sub: USAALS historical reports [870-1]).

their technical training in the USAALS.⁴⁴ In the 67 series at skill levels two and three, USAALS graduated 32 MOS67Rs, 5 MOS67Ys, 8 MOS67Ss, 28 MOS67Vs, 80 MOS67Us, 10 MOS67Hs, 67 MOS67Ns, and 89 MOS67Ts. At skill level four, 148 MOS67Ts, and 12 67Ys graduated. In the 68 series, the graduating students consisted of 17 MOS68K40s, 5 MOS68H30s, 4 MOS68G30s, 12 MOS68DX1s, 13 MOS68FX1s, and 5 MOS68FW5s.

During the period under consideration several new training devices were acquired, ordered, or constructed to improve the quality of training at the USAALS. Also, the Department of Advanced Aviation Logistics Training began preparing a program of instruction for the AIT student Fast Track Program. The program was being designed to provide additional instruction to a select group of students in each class. In December of 1988 the Maintenance Test Flight Division of the Directorate of Evaluation and Standardization conducted a worldwide maintenance test flight evaluator training seminar. The seminar provided technical aircraft systems training, updates on current regulations and policies, and a training workshop on evaluation principles to 131 maintenance test flight evaluators from throughout the Army.

A problem at the USAALS, as in other places, during this period was that budget constraints experienced during FY 1988 placed strains on the training programs by reducing the number of trainers and increasing class size. These problems were only partially alleviated after the beginning of FY 1989.⁴⁵

F. Field Training

In January of 1988 the 226th Attack Helicopter Battalion (ATKHB), an AH-1 Cobra FORSCOM unit attached to the 1st Bde of the USAAVNC, was ordered to prepare for transfer to Fort Hood, Texas, for transition training to an AH-64 battalion. In March the commander of FORSCOM further ordered that the unit would undergo regimental reorganization. The designation eventually settled on for the new Apache unit was 2nd Battalion, 229 Aviation Regiment. On 1 September the unit began deploying to Fort

⁴⁴See Chapter III below.

⁴⁵Historical report, USAALS, Oct-Dec 88.

Hood for seven months of intensive training--from September through March of 1989.⁴⁶

A revised night vision devices (NVD) exportable training package to support training of nonrated crewmembers was made available at the USAAVNC for distribution to units in the field upon request in 1988. This was the same academic training package used for aviator NVD qualification and consisted of printed material and supporting slides.⁴⁷

During 1988, the Department of Combined Arms Tactics (DCAT) provided a considerable amount of off-post training as a result of numerous requests for conference briefings and mobile training teams. Accordingly, DCAT personnel provided aviation-related training support to the 6th Army and 4th Army Centralized Aviation Readiness Training Centers, to 4th Army and 1st Army instructor pilots seminars, to the Minnesota National Guard, and to the 158th Aviation Regiment at Newport News, Virginia.⁴⁸

G. Other Training

The budget reductions in 1988 forced the use of more flight simulator time in lieu of some actual flight training. The Flight Simulator Division (FSD) of the DGFS provided synthetic flight training system support and cockpit procedural training support for all UH-1, UH-60, and CH-47 training at the USAAVNC. The division improved the efficiency of the utilization of the simulators during the year and also developed procedures to maximize the capabilities of the digital imagery graphics visual systems and the UH-1 2B24 system. Another major accomplishment was the development of a user's manual and a formal course of instruction for instructors of the UH-60 flight simulator. Also in 1988, the FSD updated the instructor's guide for the UH-1 flight simulator and, in preparation for the implementation of Multitrack, formulated new lesson plans and student handouts for the UH-1 2C3S cockpit procedural trainer.

⁴⁶Msg, HQDA to Cdr FORSCOM, 29 Jan 88, sub: transition of 226th to AH-64S; Msg, Cdr FORSCOM to Cdr USAAVNC, 8 Mar 88, sub: transition of 226th...; Msg HQDA, to Cdr TRADOC, 21 Jul 88, sub: revised AH-64 fielding plan; permanent orders 165-1 and 165-2, Cdr FORSCOM, 3 Nov 88; historical report, 1st Bde, CY 88; Army Flier, 27 Oct 88 & 6 Apr 89.

⁴⁷"Aviation Branch Update," 15 Feb 89.

⁴⁸Historical report, DCAT, CY 88.

During FY 1988, the UH-1 flight simulators were used 100,477 hours; 55 percent of which were for undergraduate training and the remainder for graduate, remedial, and other training purposes. The UH-60 flight simulator was used 7,027 hours; 67 percent of which were for graduate training, 14 percent for support, and 19 percent for rated aviator training. The CH-47 simulator was used 2,722 hours; 37 percent for graduate training, 24 percent for rated aviator training, and 38 percent for support.

In preparation for IERW training and other increased uses of UH-60 simulators, studies were conducted in late 1987 and early 1988 for the acquisition of new UH-60 training devices. The studies led to a decision to acquire five new devices. One of these, intended for use in the Multitrack program, was scheduled to arrive by December 1988.⁴⁹

The Staff and Faculty Development Division (SFDD) of the DOTD developed policies and procedures relative to the operation and administration of instructional programs at the USAAVNC. Through serving as training consultants and trainers of the Aviation School's staff and faculty, personnel of the SFDD trained over one thousand students in 1988 in one or more of twelve different instructor-training-type courses. Additionally, the division conducted 669 academic classroom evaluations, resulting in the awarding of 203 outstanding instructor letters.⁵⁰

In 1988 the Air Assault School continued to be operated under the auspices of the 1st Aviation Brigade. Approximately 1,230 students were trained in either the two-week air assault course or in the compressed, one-week critical leaders course. The Air Assault School also provided rappelling techniques training to over a thousand AIT students and ROTC cadets and obstacle course training to more than another thousand.⁵¹

Hands-on flight training for flight surgeons was discontinued early in 1988 due to budget constraints. In

⁴⁹Historical report, DGFS, CY 88; DF ATZQ-GFS-F, Col George C. Hollwedel to distr, 4 Jan 88, sub: UH-60A CEPT device requirements; charts on flight simulator use in FY 88, prepared by DGFS; minutes of UH-60A CEPT device requirement meeting ATZQ-GFS-F, Capt Dale S. Weiler, 2 Feb 88; fact sheet/information paper ATZQ-GFS, Capt Weiler, 4 Apr 88, sub: UH-60A CEPTs.

⁵⁰Historical report, DOTD, CY 88.

⁵¹Historical report, 1st Bde, CY 88.

lieu of the fifteen hours of primary training that flight surgeons had theretofore been given in the TH-55, a new course was designed which the director of the DPTMSEC believed to better prepare the flight surgeon for the tasks he would be likely to face when he reached his unit. The new course involved back-seat flight training in all phases from primary through NVG and emergency procedures and also training behind the controls of the Army's most sophisticated simulators.⁵²

An important component of the training program at the USAAVNC was that provided by the U.S. Army School of Aviation Medicine (USASAM). Aeromedical subjects were contained in thirty USAAVNC POIs, demonstrating the vital role of aeromedicine in aircrew training. The U.S. Army Flight Surgeon Primary Course was a seven-week course of instruction taught three times per year for Medical Corps officers and physician assistants assigned to be unit-level flight surgeons. During 1988, 121 students completed this course. The Flight Medical Aidman Course was a four-week program designed to teach medics with divergent backgrounds how to function as air ambulance aidmen. The students received classroom instruction as well as hands-on medical and rescue training in UH-1 and UH-60 helicopters. Approximately 160 students completed the course in 1988. Twenty-five students attended the Essential Medical Training for AMEDD Aviators Course, a two-week course to provide a general knowledge of medical problems encountered in aeromedical evacuations and to teach techniques used in emergency care of the sick and wounded. In these courses and in classes in various other programs, USASAM personnel had 12,174 instructor contact hours and taught a total of 7,571 students during 1988. Also, beginning on 1 October, USASAM conducted the aviation medicine program portion of the aviation resource management surveys in FORSCOM and TRADOC units.⁵³

During 1988 there was a growing need by field units for qualified MOSS 35K aviation unit maintenance (AVUM) and 35R aviation intermediate maintenance (AVIM) W6 aerial electronic warning and defense equipment repairer personnel. These courses were taught at the Army Signal Center, Fort Gordon, Georgia, and efforts were made to improve and expand the instruction program. Beginning in October, every MOS35R completing the AIT was scheduled to be qualified in AVIM aircraft survivability equipment (ASE) W6 maintenance. This was expected to ensure a continuous flow of students

⁵²Ltr, Col James B. Sauer to editor, Aviation Digest (1-89-1) Jan 89, p. 27; "Aviation Branch Update," 14 Oct 88.

⁵³Historical report, USASAM, CY 88.

available for training without the requirement for TDY, and therefore save time and money. The 35K additional skill identifier W6 was not incorporated into the AIT but continued to be trained and tracked as before.⁵⁴

The 46th Engineer Battalion, 1st Aviation Brigade, combined training with participation in two humanitarian missions to Central America in 1988. One group, Task Force 46-1 returned to Fort Rucker at the end of June after a three-month deployment in Honduras. Another group, Task Force 46-2 was deployed to Honduras from July through September. While in Honduras, the engineers, often working with Honduran soldiers, were involved in numerous projects, including the construction of a theater, a dining facility, a bridge, and bathroom facilities for a school. The 46th Engineers also combined training with mission support activities and community improvement projects at and around Fort Rucker (Chapter VI, below), and also spent several days during August engaged in a rigorous field training exercise (FTX) within the confines of the post.⁵⁵

The Equal Opportunity Office of the Directorate of Personnel and Community Activities (DPCA) conducted four, eighty-hour programs of instruction in the Equal Opportunity Representative Course, training fifty-five equal opportunity representatives in 1988. Additionally, equal opportunity and prevention of sexual harassment classes were conducted throughout the year for all IERW students and for many other military and civilian personnel. The Equal Opportunity Office conducted a total of 385 hours of training during 1988.⁵⁶

During 1988, fifty-three ARNG and USAR units with a total strength of 18,751 personnel performed annual training at Fort Rucker. The Directorate of Reserve Component Support (DRCS) coordinated this training and provided administrative and logistical support. The DRCS also coordinated mobilization and counterpart training tours for over two hundred Individual Mobilization Augmentee and Individual Ready Reserve personnel.⁵⁷

⁵⁴"Aviation Branch Update," 15 Aug 88.

⁵⁵Army Flier, 7 Jul, 25 Aug, 6 Oct 88; news release 88/206/amo, USAAVNC, PAO, 30 Jun 88; historical report, 1st Bde, CY 88.

⁵⁶Historical report, DPCA, CY 88.

⁵⁷Historical report, DRCS, CY 88.

CHAPTER III

LEADER DEVELOPMENT

A. Aviation Pre-Command Course (APCC)

The purpose of the APCC was to provide battalion, group, brigade, and other equivalent command designees with an update and refresher on recent and current developments in Army Aviation. Topics covered in the course included equipment, tactics, electronics, fire support, NBC (nuclear, biological, and chemical) trends, logistics, maintenance, training management, and safety and medical considerations. The course was limited to field grade officers who had been designated by the DA to assume command of an aviation battalion, brigade, group, or other equivalent unit. Reserve component commissioned field grade officers who were either in command or had been designated to command an aviation battalion, brigade, group, or other equivalent unit were also eligible.

In 1988 the course length was three weeks, class size ranged from one to sixteen, and a total of 101 persons graduated.¹

B. Aviation Officer Advanced Course (AVOAC)

The AVOAC course included instruction and practical exercise in Army Aviation and professional military subjects in common functional areas such as unit leadership, command and employment on the modern battlefield, and demonstrations and staff planning for aviation combat. The purpose of the course was to provide captains with advanced-level training in company/troop leadership, operation planning functions, aviation unit employment, and professional development in common military subjects and branch specific functions. About 36 percent (258 hours out of a total of 716) of the AVOAC continued to be taught in the small-group-instruction (SGI) mode in 1988. There were several minor program-of-instruction (POI) changes during 1988, but no major changes occurred.²

The POI for the AVOAC was sent to TRADOC for approval in June 1988 and was approved on 12 July 1988 with the stipulation that required changes, as directed by TRADOC,

¹POI, APCC, course no. 2G-F42, Nov 88; historical report, DAP, CY 88.

²Addendum to historical report, 1st Bde, CY 88.

would be made. USAAVNC disagreed with the reductions in instructor contact hours (ICH) and the loss of the ammunition requirements. A rebuttal was sent to TRADOC in August 1988. TRADOC approved the ammunition requirements, but the ICH were to remain at the levels stated in the 12 July approval letter.³

Students in the AVOAC were assigned to Companies E and F of the 1st Battalion of the 13th Regiment of the 1st Bde. During 1988, 415 students graduated from the course.⁴

C. Aviation Officer Basic Course (AVOBC)

The AVOBC was a nine-week course which constituted the first phase of an arduous three-part, forty-four week program. The young second lieutenants in this program were attached to and provided administrative and operational support by the 1st Battalion, 145th Aviation Regiment, of the 1st Bde during this forty-four week period. The second and third phases consisted of the two parts of the initial entry rotary wing training described in Chapter II, above. Before beginning flight training, the young lieutenants completed the AVOBC, which consisted of soldierization skills and academic subjects. The former included physical training, weapons training, land navigation, leadership, small unit tactics, and NBC warfare. The academic subjects included military justice, field artillery, combined arms tactics, first aid, intelligence, counterintelligence, terrorist activities, and military history.

It was during this initial phase of the course that the young officers were exposed to various leadership positions and had their leadership mettle tested. In order to assist in the leadership assessment of the officers, a new program, the Leadership Assessment Program was implemented in 1988. This program helped the young officers to improve their leadership skills in a risk free environment, and it also aided in the assessment of their leadership roles during field exercises. During 1988, 477 new lieutenants completed the AVOBC.⁵

³Historical report, DOTD, CY 88.

⁴Historical report, DAP, CY 88.

⁵Historical reports, 1st Bde and DAP, CY 88; "The Aviation Officer Basic Course and the Platoon Commander," Aviation Digest (1-87-1) Sep 87, pp. 2-11.

D. Master Warrant Officer (MWO) Course

In 1988, Fort Rucker became the center of nonspecific MOS Army warrant officer training. An important part of this new warrant officer training system centered at the USAAVNC was the MWO Course. The first class in this program, consisting of thirty highly qualified, senior, chief warrant officers (CWO4s), selected by a Headquarters, Department of the Army (HQDA) board, began on 26 September 1988. These distinguished individuals graduated on 8 December as the Army's first master warrant officers. The two-phase training course consisted of a lead-in correspondence course that qualified the student to attend phase two, the resident, nonspecific MOS course at Fort Rucker. A third phase, consisting of advanced MOS-specific training was planned but not yet implemented.

Of the thirty students who completed the first class, seven were from aviation career fields and twenty-three from technical services career fields. They had an average of 28.5 years of military service, and among them they had a total of 519 months in combat, fifteen baccalaureate degrees, nine masters degrees, and one doctorate. Seven of the graduates had language expertise in German, two in French, and one each in Spanish, Thai, Polish, and Japanese. Among them, they had published two books and over forty-nine professional articles.

The graduates of the first class and subsequent MWOs were scheduled to be assigned to fill requirements calling for strong communicative skills and training capability, expanded leadership responsibility, system integration ability, and system management or development work. They were to wear distinctive insignia and to be senior to all other warrant officers, regardless of date of rank as CWO4. The Office of Personnel Systems (OPS) of the Directorate of Aviation Proponency (DAP) began studying assignment and table of organization and equipment (TOE) position coding for the new MWO and produced a staff study recommending changes to the existing position coding. The plans were ultimately to develop USAAVNC's position for TRADOC and the Soldier Support Center, with the purpose of the placement of the aviation MWOs in accordance with the needs of the branch.⁶

⁶News release 88/322/dh, USAAVNC PAO, 14 Nov 88; "Aviation Branch Update," 15 Aug 88; "Graduation Ceremony of Master Warrant Officer Training Course, Class 88-1," USAAVNC, 8 Dec 88; historical report, 1st Bde., CY 88; historical report, DAP, CY 88; memo ATTG-MT (11), Doreatha Mangrum to Cdr USAAVNC, 26 Jan 88, sub: course administrative data...Master Warrant Officer Training Course.

E. Aviation Senior Warrant Officer Training Course (ASWOTC)

On 17 October 1988, the first ASWOTC started. This new course replaced the Warrant Officer Advanced Course, the last class of which graduated on 9 December. As of the end of 1988, there were few changes other than the name. As was the case with the old course, the new course was designed to provide the students with a general knowledge of the role of Army Aviation as it related to the missions and functions of the Army, of the functions and procedures of aviation units, and of combined arms operations. Either the old course or the new one was to be required to qualify a warrant officer to serve at the W3 and W4 level in those positions coded "SW" on authorization documents.⁷

F. Warrant Officer Candidate (WOC) School

In August of 1988 virtually all leadership training for WOCs became consolidated at Fort Rucker with the creation of the Warrant Officer Candidate School. The warrant officer entry courses at Fort Sill, Oklahoma, and Aberdeen Proving Ground, Maryland, were discontinued in April and July respectively, and the only remaining warrant officer entry training outside Fort Rucker was a small reserve component program at Fort McCoy, Wisconsin. The consolidation of WOC training at Fort Rucker required increases in personnel and additional barracks, office and dining space to accommodate a 61 percent increase in student load.

WOC training at Fort Rucker in 1988 was administered and provided operational support by Company A, 1-145th, 1st Bde. The six-week program was a tough, high-stress, and demanding transition period out of enlisted status. It consisted of rigorous physical training, military leadership, counseling, situational training, and academics. In 1988, 1,514 students graduated; 985 were aviation candidates, and 529 were technical service candidates. Upon completion of this phase of their training, the nonaviators proceeded to various installations for technical and tactical certification, and the aviation candidates began IERW training.⁸

⁷Maj Gen Ellis D. Parker, "The Warrant Officer Training System in Transition," Army Aviation (Professional Bulletin 1-88-11), Nov 88, p. 1; historical report, DPTMSEC, CY 88.

⁸Historical report, 1st Bde, CY 88; "Aviation Personnel Notes," Aviation Digest (1-88-3) Mar 88, p. 13; historical report, DAP, CY 88.

G. Noncommissioned Officer Academy (NCOA) at Fort Rucker

After almost two years of study and planning, the NCOA formally opened at the USAAVNC on 1 October of 1987. During 1988, 39 Advanced Noncommissioned Officer Course (ANCOC) students and 236 Basic Noncommissioned Officer Course (BNCOC) students graduated from the new NCOA at Fort Rucker. The ANCOC graduates consisted of 22 MOS93Cs, air traffic controllers, and 17 MOS93Ps, aviation operation supervisors. The BNCOC graduates consisted of 151 MOS93Cs, 63 MOS93Ps and 22 MOS93Bs. The 93B30, Aeroscout Observer Course, began in March 1988.^a

For both ANCOC and BNCOC students, approximately the first half of the courses consisted of leadership training in classrooms. The latter half of the courses involved both leader development and advanced technical training. In accordance with TRADOC guidelines, the USAAVNC NCOA implemented shared training and horizontal integration involving AIT, BNCOC, and ANCOC students during 1988. Both ANCOC and BNCOC students gained valuable leadership experience by supervising other students under realistic conditions in field training exercises (FTXs) while being observed by the instructor cadre. Preparations for FTXs involving enlisted students of all levels required extensive planning and coordination, but this was achieved during the year. TRADOC guidelines and USAAVNC planning envisioned vertical integration involving enlisted personnel of all levels along with students from the aviation officer advanced course (AVOAC). This vertical integration phase was still under study at the end of the year.¹⁰

Another important innovation consisted of the implementation of SGI in selected parts of both the ANCOC and BNCOC in March of 1988. This was modeled on the SGI instituted in the AVOAC in 1987, and as had been done for the AVOAC, the NCOA instructors were trained specifically for SGI. Some classes were then broken down into groups of eight students, with each group under the supervision of an

^aHistorical report, NCOA, CY88; notes on interview by author with Cdr of NCOA, Cmd Sgt Maj Hartwell B. Wilson, 10 Jan 89; memo ATME-RU (570-5a), William A. Griffin for Cdr USAAVNC 29 Feb 88, sub: validation of aeroscout observer basic NCO course program of instruction.

¹⁰Msg ATTG-I, Cdr TRADOC to Cdr USAAVNC, 22 Feb, 14 Mar 88, sub: shared field training exercises and...; DF ATZQ-DPT-P (350), Col James B. Sauer to distr, 8 Jul 88, sub: integration of FTXs for AVOAC and AIT, doc III-1; historical reports, DOET and NCOA, CY 88; notes by author on telephone interview with 1st Sgt Norman Maurice, 30 Mar 89.

instructor and with the students taking turns in giving presentations and/or leading class discussion.¹¹ Also in 1988, the USAAVNC NCOA sent an NCO instructor to the Military History Instructor Course conducted by the Combat Studies Institute at Fort Leavenworth. He was the first, and thus far the only, NCO to complete the course.

In February and March of 1988 a TRADOC NCOA accreditation team conducted an accreditation evaluation of the USAAVNC NCOA. Following corrective action with regard to a few relatively minor shortcomings, the academy was accredited in April.¹²

Also in 1988, plans and all necessary arrangements were made for the introduction of two additional courses into the curriculum of the NCOA. These consisted of the ANCOC 35P, avionic equipment maintenance supervisors, and ANCOC 93D, air traffic control systems/sub-systems and equipment supervisors. Advanced training for these personnel was previously conducted at Fort Gordon, Georgia, and the scheduled move was part of the general plan to consolidate aviation training under the Aviation Branch. The first classes of these courses were scheduled to begin in early January 1989.¹³

H. Leader Development at the U.S. Army Aviation Logistics School (USAALS)

All students who are given thirty or forty-level technical training at the USAALS received common core leader development training at the Transportation Center NCOA prior to entering advanced aviation logistics training in USAALS. The length of the ANCOC was five weeks and two days, and, of the BNCOC, two weeks and two days. Since these courses included students with music and transportation as well as aviation MOSSs, the three groups were separated according to branch for some portions of the NCOA training. A few aviation students who had already received advanced level

¹¹Historical report, NCOA, CY 88; notes by author on telephone conversation with Sfc Robert Kelley; 30 Mar 89.

¹²Ltr ATTG-I, Gen M. R. Thurman to Maj Gen E. D. Parker, 19 Apr 88, sub: accreditation evaluation; historical report, NCOA, CY 88.

¹³Memo ATZQ-CS (351e), Col Andrew Miller for distr, sub: relocation of CMF 28 and MOS 93D, doc III-2; historical report, DOTD, CY 88; historical report, DOET, CY 88; Army Flier, 12 Jan 89; notes on interview by author with Cmd Sgt Maj Hartwell B. Wilson, 10 Jan 89.

technical training attended only the NCOA before returning to their duty station. Most aviation students, however, moved from the NCOA into the USAALS Department of Advanced Aviation Logistics Training (DAALT), and then into technical and aviation specific leader training.¹⁴

Within USAALS, common aviation maintenance management training for 67 and 68 series MOSs and common technical inspector skills training for the 66 series MOS is conducted in the DAALT. During the fourth quarter of CY 1988, common aviation maintenance management training was conducted for 51 ANCOC students and 183 BNCOC students. Common technical inspector skills training was conducted for 73 technical inspection students. As at Fort Rucker, the leadership training at USAALS during the period under consideration involved horizontal integration and shared training in FTXs in which ANCOC, BNCOC, and AIT students participated. During the fourth quarter of CY 1988, 9 FTXs were conducted involving 19 ANCOC students, 131 BNCOC students, and 461 AIT students. This shared training reinforced the leadership skills of the ANCOC and BNCOC students by providing them the opportunity to organize and operate aviation units in a field environment without the guidance of commissioned officers.

Also during that period, the DAALT began preparing a program of instruction for a new BNCOC/TI (technical inspector) course designed to qualify all BNCOC students to perform the duties of a technical inspector. This program was scheduled to be implemented on 1 October 1989.

Other major leader development activities at USAALS involved the plans to establish an aviation logistics officer advanced course during FY 1989. General Parker made the decision to have the course taught at Fort Eustis, and the Directorate of Evaluation and Standardization of USAALS conducted an evaluation of the analysis and design of the course. Several other USAALS departments also became involved in plans and preparations for the new officer course.¹⁵

¹⁴Notes taken by author on telephone interviews with Mr. Robbins, DOTD, USAALS, and Mr. John Ball, Transportation Center NCOA, 31 Mar 89.

¹⁵Historical report, USAALS, fourth quarter of CY 88; msg, DA, DACS-7B to distr, 25 Oct 88, sub: DA aviation logistics study, doc III-3.

I. Other Leader Development Activities

An integral aspect of leader development consisted of the personal contact among Army Aviation brigade commanders and the interrelationship between them and the branch chief and other USAAVNC personnel made possible by the Army Aviation Brigade Commanders (AVCOM) Conference held annually at Fort Rucker. The 1988 AVCOM Conference occurred from 6 through 9 December and was attended by around 140 Army aviators and civilians. In keeping with the Army's theme for 1988, the theme of the conference was "Training: The Cornerstone of Combat Readiness," but those attending discussed a wide range of topics, including various common problems and methods of dealing with them. The conference provided fertile ground for the exchange of ideas among all those attending, and especially for building closer relationships between active and reserve components. The Department of Combined Arms Tactics (DCAT) planned, hosted, and coordinated the conference.¹⁶

Personnel from DCAT were involved in several off-post leader development activities. Col. Frank Estes, the director of DCAT, briefed U.S. Army Aviation tactics and doctrine during the U.S.-Brazil Staff Talks in April; in May, Col. Estes presented the AH-64 doctrine training team executive summary to key personnel of the 18th Airborne Corps. Also DCAT instructor teams presented the USAAVNC-developed Aviation Branch Specific Training to the Command and General Staff Officer Course at Fort Leavenworth, Kansas. DCAT also cooperated with the U.S. Army Aviation Logistics School in preparing a briefing on aviation matters to Lieutenant General Tuttle in November.¹⁷

During 1988 the U.S. Army Air Traffic Control Activity's (USAATCA's) representative at the PERSCOM continued to assist in assigning air traffic control (ATC) personnel to positions requiring special skills or management training and in nominating ATC personnel to participate in professional development training. The field representative at the FAA Academy coordinated Army and DOD training requirements and quotas for DOD personnel to attend the FAA Academy, including a three-year projection for military training requirements.¹⁸

¹⁶Army Flier, 1 and 8 Dec 88; Maj Gen Ellis D. Parker, "Army Aviation Brigade Commanders Conference," Army Aviation (XXXVIII, 2) Feb 89, pp. 6 and 49; historical report, DCAT, CY 88.

¹⁷Historical report, DCAT, CY 88.

¹⁸Historical report, USAATCA, CY 88.

Since advanced education of various types was considered to be a very important aspect of leader development, the branch chief urged aviation commanders to encourage their subordinates to work on civilian degrees through the advanced civil schooling or other programs, especially in areas currently in high demand, such as engineering and communications.¹⁹

Another important aspect of leader development for aviation officers consisted of the attending senior service colleges. In 1988 twenty-two aviators were selected by the board from 878 aviator candidates, and several others were revalidated from 1987. If all of those selected or revalidated in 1988 attend in 1989, aviators would constitute 10 percent of the 354 officers attending the senior service college in 1989. With regard to the Command and General Staff College, the Aviation Branch did less well. Only ninety-two aviators were selected for the 1988-89 academic year, leaving the branch in ninth position.²⁰

In June of 1988, General Parker addressed an Aviation Branch problem concerning efficiency reports on and promotion of lieutenants. The problem was that the length of aviation training caused lieutenants to have a very thin file; consequently, there was relatively little information for board members to use in judging an individual's leadership potential. The branch chief accordingly directed raters and senior raters to help correct the problem by using the completion of flight training and other indications of leadership potential as bases for writing the lieutenants' first reports so that their careers would not be adversely affected by the length of time spent in flight training.²¹ On another promotion-related matter, the majors promotion list released at the end of 1988 was good news for the Aviation Branch. The overall first time considered selection rate was 68.7 percent, and aviation's first time considered rate was 72 percent, the highest rate among the combat arms branches. With regard to the previously considered rates, the overall Army rate was 18.5 percent, and aviation's rate was 23.8 percent.²²

During 1988, the USAAVNC designed survey forms and developed plans to produce a comprehensive analysis of the critical aviation tasks of Aviation Branch company grade

¹⁹"Aviation Branch Update," 15 Apr 88.

²⁰Ibid., 15 Feb and 15 Dec 88.

²¹Ibid., 15 Jun 88.

²²Ibid., 15 Feb 89.

officers. The survey was to be conducted in 1989 to determine whether these officers should be trained in the basic or advanced course or in the unit environment.²³

During the week of 28 November-2 December 1988, Lt. Col. Kenneth Pierce and M. Sgt. Larry Roberts from the Combat Studies Institute, Combined Arms Center, conducted a staff assistance visit at the USAAVNC to examine the Military History Education Program (MHEP). They reported that the MHEP at the USAAVNC was sound and basically in conformity with regulations. The lack of a separate and conveniently located bookstore was, in the visitors' opinion, perhaps the weakest link in the USAAVNC program. They made several other suggestions, but they emphasized that these were to be considered as possible means of enhancing the program rather than as criticisms of it.²⁴

²³"Aviation Branch Update," 15 Dec 1988.

²⁴Memo ATZQ-DAP-H, Dr John W. Kitchens for distr, 9 Dec 88, sub: military history education staff assistance visit.

CHAPTER IV

DOCTRINE

A. Doctrinal Literature

Some very important doctrinal publications were produced during 1988. The preparation and distribution of others were cancelled or delayed in accordance with TRADOC guidance to reduce expenditures and redundancy. TRADOC also directed in 1988 that only principles manuals should be field manuals (FMs) and that the others should become training circulars (TCs). The USAAVNC accordingly decided that the only two field manuals were to be FM 1-100 and FM 1-111. During the TRADOC Doctrine Conference later in the year, however, a new concept called 'Vision '91' suggested the conversion of doctrinal literature back to the FM medium and the possible discontinuation of TCs. This concept had not been implemented as of the end of 1988.¹

A new principles manual, the first revision of FM 1-100, Doctrinal Principles of Army Aviation in Combat Operations was completed in final draft form in 1988 and was scheduled for fielding during the first quarter of 1989. This manual underwent several title changes during the production process, and the fielding date was delayed one quarter to provide adequate time to incorporate changes resulting from the TRADOC-scheduled August 1988 Doctrinal Review and Approval Group. The new manual provided the doctrinal tenets for the employment of aviation in modern warfare.

Another publication that was virtually completed in 1988 and scheduled for distribution in 1989 was the new TC 1-115, Medium Helicopter Battalion. Formerly an FM entitled Cargo Helicopter Battalion, the title of this publication was changed during the period of its production so as to more closely capture the current Army Aviation employment concepts. The TC 1-115 described the battalion's mission, organization, and employment techniques. The USAAVNC also made progress toward the production of revisions of FM 1-111, Aviation Brigades, and TC 1-117, Aerial Reconnaissance Squadron, in 1988. The FM 1-111 was distributed in coordinating draft form in November and was reviewed by those attending the Aviation Commanders Conference in

¹Memo ATZQ-TDD (310-2g), Lt Col Floyd E. Edwards for AC 26 Feb 88, sub: USAAVNC doctrinal literature program change, doc IV-1; memo ATZQ-TDD (310-2g), Brig Gen Rodney D. Wolfe for Cdr TRADOC, 9 Mar 88, sub: FY 88 doctrinal contract changes; historical report, DOTD, CY 88.

December. A coordinating draft of TC 1-117 was also printed and distributed for field review and was submitted to Brigadier General Wolfe in December for final approval. Also, TC 1-113, Assault Helicopter Unit Operations, was submitted for USAAVNC team review and to the assistant commandant for approval.

In the area of gunnery, new doctrinal literature in 1988 consisted of a revision of FM 1-140, Helicopter Gunnery. The field manual was changed to a TC that would provide a precise task list by type aircraft, mandate practice and simulation tables, revise scoring standards, and specify the mode-of-flight element of "conditions." The tables would be standardized/prescriptive but mission-specific above crew level. This arrangement would apply stronger control over task proficiency requirements and, at the same time, retain flexibility for cavalry, heavy attack, and light attack to train for their respective missions.²

During 1988, the Operations and Procedures Division of the U.S. Army Air Traffic Control Activity (USAATCA) completed all review, revision, staffing, and submission of TC 95-93, Air Traffic Control Facility Operations and Training. This document was scheduled for distribution in March 1989, to replace FM 1-200. It established and standardized policy and procedures for the conduct of Army air traffic control (ATC) facility training programs. The Operations and Procedures Division also completed all actions associated with the review, revision, staffing, and submission of Part 2, "ATC General Provisions" of AR 95-2, Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids.

In 1988, the USAATCA's Requirements Division completed the rewrite of AR 95-9, Terminal Airspace, Airports, Navigational Aids (NAVAIDS), and Obstructions, for inclusion into AR 95-2, and also completed the final draft of TB 95-1, U.S. Army Air Traffic Control and NAVAID Facility Standards. Final action on TB 95-1 was being held in abeyance pending inclusion of newly acquired ATC equipment.³

²DF ATZQ-TDD (310-2g), Col Floyd E. Edwards to AC 27 Jun 88, sub: request for slippage of production milestones for FM 1-100; DF ATZQ-CAT-DD (310-2g), Col Ernest F. Estes to Dir DOTD, 31 May 88, sub: title change of FC 1-115; Aviation Branch Update, 15 Apr and 15 Dec; historical report, DCAT, CY 88.

³Historical report, USAATCA, CY 88.

At the USAALS, the final draft of FM 1-500, Army Aviation Maintenance, was fielded during the latter part of 1988 for final review prior to submission to the Logistics Center Doctrinal Review Board. The USAALS was also in the process of revising FM 1-508-1, Aviation Life Support Equipment: Maintenance Program; FM 1-513, Aerial Recovery Operations; and FC 1-115, Cargo Helicopter Battalion.⁴

B. Dissemination and Evaluation

The Aircraft Survivability Training Management (ASTM) Branch of the Directorate of Training and Doctrine (DOTD) developed the concepts and methodology for the training of aviators with tactical and technical skills in the use of aircraft survivability equipment. The ASTM Branch also acted as the training management agency for the USAAVNC to ensure the completion of all training milestones, technical manual validations, and testing of training for aircraft survivability equipment (ASE). The branch ensured that ASE training plans, concepts, doctrine, and tactics were timely and also that they were fully integrated into the training development program.⁵

Task Force 1-112, Aviation Training Brigade, was activated in April 1986. This was the Army's first unit dedicated to testing air combat doctrine and tactics from start to finish. During the two years of its operations before its deactivation at Fort Rucker on 29 March 1988, the unit first conducted aeroscout tests of the OH-58D helicopter in air cavalry and attack helicopter operations. Afterwards, it engaged in various other activities including tests to validate the Army's concepts for using the scout and gunship helicopters together, for the Army Helicopter Improvement Program (AHIP), for the AHIP training course, and for the use of enlisted soldiers as aeroscout observers.⁶

In August 1988 the USAAVNC hosted the Latin American Tactical Helicopter Symposium (LATHS). The symposium was conducted in Spanish (with Spanish translations of English presentations) and was attended by representatives from Argentina, Bolivia, Brazil, Chile, Costa Rica, Ecuador, Colombia, El Salvador, Guatemala, Honduras, Mexico, Uruguay, Venezuela, the Dominican Republic, and Peru. The purpose of the symposium was to provide a forum for representatives

⁴Historical report, USAALS, 4th quarter, CY 88.

⁵Historical report, DOTD, CY 88.

⁶Army Flier, 7 Apr 88.

from Latin American countries and the U.S. to exchange tactical helicopter employment doctrine as it applied to low intensity conflicts.⁷

⁷DF ATZQ-DPT-P (310-1q), Col James B. Sauer to CofS, 25 Jul 88, sub: memo of instruction for LATHS; historical report, DPTMSEC, CY 88.

CHAPTER V

COMBAT DEVELOPMENTS

A. Army Aviation Modernization Plan (AAMP)

The paramount development in 1988 was the final approval by the chief of staff of the Army and the DOD of the AAMP. The overall objective of the AAMP was to equip the aviation force structure with a modern yet cost effective fleet. The plan called for the continued procurement of AH-64, UH-60, OH-58D, and CH-47D aircraft. Product improvements were to be accomplished on these existing systems as needed to meet changes in threat or safety issues. Also, new systems were to be developed and fielded in accordance with a plan for a maximum fleet age of twenty years for attack and reconnaissance aircraft and thirty years for lift, cargo, and fixed-wing aircraft. Most importantly, perhaps, the AAMP provided Army Aviation a degree of assurance of adequate funding for a five-year period to begin modernizing the Army's inventory of aircraft. As a result of the plan, for example, funding for new aircraft increased from \$2.4 billion to more than \$3.5 billion for FY 1989. The final procurement plan provided for approximately \$3.5 billion per year, in FY 1989 dollars adjusted for inflation, to be spent on Army aircraft procurement through the year 2007.

An essential aspect of the AAMP was the continued development of a new light helicopter (LHX). The fielding of the armed reconnaissance and light attack LHX was expected to provide an increased capability over current aircraft, and its procurement, along with other modernizing actions, would permit a reduction in the size of the fleet without reducing its effectiveness. The AAMP called for the immediate retirement of helicopters that were clearly out of date and were costing valuable resources to maintain. The expectation was that the current fleet of approximately 8,600 aircraft would be reduced to a fully modernized fleet of about 6,500 aircraft by 2007. That aspect of the AAMP began to be implemented in 1988 by the retirement and storage of several UH-1s.

The AAMP also contained sections on air traffic control, the Army Aviation Personnel Plan (A²P²), the Air Combat Master Plan, and other aviation-related programs in an effort to provide a totally integrated reference document for Army Aviation. Because of expanding technology and increasingly complex weapons systems and an Army of a fixed size, it was necessary to plan to be able to do more with fewer people, in less time, and with fewer mistakes. The AAMP was expected to meet this challenge by providing

aviation planners with an updated and dynamic road map and with relative assurance of adequate funding to maintain the effectiveness of Army Aviation in tomorrow's Army.¹

B. Equipment Requirements

The Concept and Studies Division of the Directorate of Combat Developments (DCD) played a central role in the Concept Based Requirements System (CBRS) by leading the effort to determine both the deficiencies of Army Aviation in close combat and solutions to those deficiencies. The problems were being addressed through literature search, wargaming, analysis, and coordination with doctrine writers, trainers, force structure designers, and materiel developers. The results of these efforts were incorporated into the Mission Area Development Plan and the DA Battlefield Development Plan. Several branches of DCD also contributed to the development of the Mission Area Concept (MAC), the key document outlining Army Aviation's desired capabilities. The analyses involved in the MAC indicated the extent to which Army Aviation could meet the desired capabilities.

Also in 1988, DCD was informally tasked by HQDA and TRADOC to put together an aviation technology-based needs statement. HQDA believed that a specific statement of user needs in the science and technology area would provide better guidance in the formulation and execution of research and development (R&D) programs. No document format was provided, so DCD put together a functional document in coordination with AVSCOM R&D program managers. Several draft iterations were prepared and staffed for comment. Further action was awaiting additional guidance from HQDA and TRADOC.²

Aircraft Design and Testing

During 1988 the U.S. Army Aviation Development Test Activity (USAAVNDTA) conducted a production prove out test of the AH-1F C-NITE system with a total of 1300 rounds of 20 mm ammunition fired during 17.7 flight hours with all systems active. All six of the TOW 2 missiles fired during the test hit the target. Due to the limited nature of the

¹ "Army Aviation Modernization Plan," May 88, doc V-1; historical report, DCD, CY 88; transcript of interview by author with Maj Gen Ellis D. Parker, 29 Dec 88; "Aviation Branch Update," 15 Feb and 15 Apr 88; Army Flier, 27 Oct 88.

² Historical report, DCD, CY 88.

test, however, conclusions relating to changes in system performance compared to previous C-NITE configurations could not be made. The C-NITE system retained boresight for at least 13.6 operating hours, but additional tests needed to be conducted to support the determination of recommended boresight intervals.³

During the third year of AH-64 Apache fielding, tests continued to be conducted to provide more data concerning the aircraft's capabilities and to eliminate all of its problems. For example, an accelerated flying hour test was conducted in 1988 by the USAAVNDDTA to identify maintenance trends that could adversely affect the Apache fleet as it grew older. During a forty-five day period (thirty-four flying days) an Apache was operated a total of 245.9 hours with combat mission gross weights and involving maneuvers representative of those encountered in combat. This aircraft ended the test with a total of 1,670 flying hours--more hours in so short a time period than any production helicopter has flown since the war in Vietnam. The test team consisted of mechanics, shop personnel, quality control technical inspectors, and pilots. The same team maintained four other test AH-64s at Fort Rucker and two more at off-site facilities during the period of these tests. During the year, the team conducted several other tests, including two classified projects involving the full range of reliability, availability, and maintainability, as well as environmental assessments. As a result of these tests, the Apache team made several recommendations which resulted in production line changes and product improvements to the AH-64, its mission equipment, and its maintenance procedures.⁴

One Apache problem solved in 1988 by the USAAVNDDTA was the phenomenon referred to as "horizontal blooming." This problem, which had been plaguing the Army for some time, consisted of a vision obstruction caused by a bright spot on the screen of the pilot night vision sensor (PNVS) when the aircraft was put in a sharp turn. This problem made it difficult to fly the aircraft in formation at night--especially from the rear seat. The tests indicated that the installation of preamplifier circuit cards in the PNVS effected a definite improvement and that horizontal blooming would soon become a problem of the past.⁵

³Historical report, USAAVNDDTA, CY 88.

⁴Transcript of end-of-tour interview by author with Col John P. Kennedy, TRADOC System Manager for Apache Helicopter, 6 Jul 88 (hereinafter referred to as "Kennedy interview"); Army Flier, 7 Jul 88.

⁵Army Flier, no date, 1988.

Another test conducted in 1988 involved a new chemical-biological protective mask for use with the AH-64 helmet. The older mask, the M24, was incompatible with the AH-64 helmet, so the M43 mask was developed to resolve this problem. The tests were designed to address the use of corrective lenses that were to be ground to an individual crewmember's prescription and then glued to the mask's lens piece. The use of contact lenses was also to be explored. The M43 was typed classified for limited production-urgent in September 1986 for the AH-64 battalions. In February 1987, the contract was awarded to Scott Aviation, with scheduled delivery of production masks set for January 1988. The delivery was delayed as a result of numerous production problems, and production and delivery was scheduled to resume in March 1989. In November 1988, an in progress review (IPR) met to resolve deficiencies found during fielding of the M43 to the Apache Training Battalion at Fort Hood, Texas, and to Apache battalions in Europe.⁶

During 1988 the USAAVNDDTA conducted several customer tests on AH-64 systems and components. These included an alternate source hydro-mechanical unit fuel control, a special study of a coated blast shield, a support test of the Martin Marietta automatic control module and pre-amplifier cards, an improved frequency modulated aircraft communications system, an on-going test of a main rotor droop stop assembly, and an Apache cold weather test.⁷

In 1987 TRADOC tasked the Threat Division of the DCD to write an update to the AH-64 systems threat assessment report (STAR). The division initiated the work in November 1987 and distributed a coordination draft for comment on 2 March 1988. Upon receipt of the comments, the division revised the document to include a change in format and distributed a revised draft on 8 August. Final comment and validation from HQDA was expected by 15 January 1989, and the final version was to be distributed by mid-February.

During February 1988, AVSCOM and USAAVNC agreed upon the Multistage Improvement Program (MSIP) (a system evolution upgrade program to counter the threat, enhance safety, increase survivability, and extend the aircraft's operational life) for the AH-64. In August, change 13 to AH-64 materiel need, outlining improvements required for the MSIP, was distributed for comment. The final coordinated

⁶"Aviation Branch Update," 15 Aug 88; historical report, DCD, CY 88.

⁷Historical report, USAAVNDDTA, CY 88.

change 13 was forwarded from the USAAVNC to TRADOC for approval in December.⁹

Various types of problems with the Apache were encountered and addressed in 1988, and several modifications were made. According to some analysts, none of the problems was serious, the Apache was by far the best attack helicopter ever developed, and it was capable of being modified so as to continue being the Army's first-line-of-defense helicopter for many years.⁹ According to some other users, however, the AH-64 still had serious problems, and numerous modifications and corrections would be necessary before it would become a reliable combat helicopter.¹⁰

The most important development relating to the UH-60 Black Hawk in 1988 was the UH-60 MSIP. During the latter part of 1988 DCD personnel conducted analyses of UH-60 airframe performance for mission profiles in the Middle East and Europe. The missions were air assault, combat resupply, and transfer of critical equipment. The factors measured were fuel usage, lift capability, and time required to accomplish the mission. Other DCD personnel initiated the STAR to support the UH-60 MSIP. TRADOC approved the MSIP in August, but HQDA scrutinized several of the aircraft improvements involved and, because of higher priority projects, recommended reductions. A VCSA decision was pending at the end of the year.

Other Black Hawk-related developments in 1988 included the definition of training and testing requirements for the UH-60L model, continued research and development towards procurement of the Air Volcano Mine Dispensing System, and the fielding of the External Stores Support System (ESSS). The procurement of Black Hawk Hellfire kits was cancelled by HQDA, due to higher priority programs and budget constraints. The General Electric T700 engine won the UH-60 engine competitive contract over Rolls Royce Turbo Mecca in July.¹¹

⁹Memo ATZQ-CDM-C, Col Theodore T. Sendak to Cdr TRADOC, 24 Feb 89, sub: proposed change 13 to the AH-64 materiel need, doc V-2; historical report, DCD, CY 88; TRADOC Reg 381-1, "Military Intelligence: Threat Management," 1 Feb 88.

¹⁰See, e.g., Kennedy interview.

¹⁰See, e.g., Washington Post, 19 Mar 89.

¹¹Historical report, DCD, CY 88; msg, HQDA to distr, 15 Dec 88, sub: Hellfire on UH-60A Black Hawk, doc V-3.

In early 1988 Army depot employees at Chambersburg, Pennsylvania, installed the first 450-gallon prototype fuel tanks on the Black Hawk helicopter. These two modified F101 fighter plane, twenty-foot long tanks, coupled with the two standard 230-gallon tanks, made the Black Hawk capable of flying more than 1,000 miles without being refueled and enabled it to self-deploy overseas. Another Black Hawk was outfitted with the large fuel tanks and flown to Fort Rucker for flight testing by the USAAVNDDTA. Upon completion of the testing, it was expected that depot employees would produce around 300 modified fuel tanks for use on Black Hawks.¹² By the end of the year the tests were near completion. Eight long-range test flights were completed, and the last three were for 1,438, 1,274, and 1,375 nautical miles. On the last one, the aircraft was aloft for 11.5 hours and landed with 900 pounds of fuel. Final analysis was incomplete at the end of the year, but the data appeared very promising.¹³

During 1988 USAAVNDDTA personnel supported the self-deployment and endurance testing of the UH-60, involving the auxiliary fuel tanks and also other tests on that aircraft to collect data to be submitted to the UH-60 project manager and to UH-60 users.¹⁴

Another modification of the UH-60 in 1988 consisted of the integration of the command console (AN/ASC-15B(V)1) into 20 Black Hawks. This console afforded much needed communications versatility by providing brigade and higher level maneuver commanders with tri-service communication capabilities to direct a combined arms or joint operation. The system could also act as a battlefield coordination element in the event of catastrophic command post failure. Quickly and easily removed from the aircraft, it could provide a prime node from which to exercise tactical command and control while at battle sites other than the principal one. The USAAVNDDTA expected that about 300 of the consoles would be obtained and began developing training and training strategies to support the system.¹⁵

In January 1988, the LHX program was recognized by the OSD as an integral component of the AAMP. Subsequently, the AAMP was approved, but changes in the program strategy of the LHX were necessary as part of that approval. Until January 1988, the LHX program strategy provided for a family

¹²Army Flier, 3 Mar 88.

¹³"Aviation Branch Update," 15 Dec 88.

¹⁴Historical report, USAAVNDDTA, CY 88.

¹⁵"Aviation Branch Update," 15 Apr 88.

of aircraft consisting a scout/attack aircraft and of a utility/assault aircraft utilizing the common parts of the scout/attack. Because of the enormous funding requirements for these two airframe programs, the utility/assault aspect of the program was cancelled. Also, the acquisition strategy was changed. Rather than entering full scale development from concept exploration as in the Army Streamlined Acquisition Program, the LHX program was directed to include a demonstration/validation (DEM/VAL) phase. The DEM/VAL would permit the refinement and development of a mission equipment package (MEP) which could be carried over into other Army Aviation programs. This DEM/VAL phase was scheduled to be a part of the LHX MSIP.

During 1988, TRADOC Systems Manager (TSM)-LHX and DCD personnel and the LHX program manager worked closely together to keep the LHX on track through the preparation and conduct of briefings at HQDA and OSD, as well as through participation in program reviews. In April, the commanders of USAAVNC and TRADOC approved the LHX required operational capabilities (ROC) document. The TSM and the DCD worked with ODCSOPS to obtain HQDA approval and reworked the ROC in accordance with guidance received from HQDA. In the meantime, the request for proposal (RFP) required significant changes due to a revision in acquisition strategy. On 9 June a Defense Acquisition Board (DAB) Milestone I Decision Review approved the LHX program to proceed into the DEM/VAL phase, and, on 17 June, the Defense Resources Board funded the LHX program as presented in the AAMP. Also on 17 June, however, the deputy secretary of defense ordered that major emphasis during the DEM/VAL phase be placed on developing and integrating LHX MEP technology rather than airframe development, that the MEP technology effort should be structured so that appropriate portions were applicable to upgrading present inventory aircraft via MSIPs, and that cost saving economies should be practiced by cooperation with Navy and Air Force aircraft development programs.

On 21 June 1988 the revised RFP was released to industry. Competition was formally limited by the under secretary of the Army on 16 June 1988 to two contractor teams--Boeing Helicopter Company and Sikorsky Aircraft versus the team of McDonnell Douglas Helicopter Company and Bell Helicopter Textron, Inc. The LHX Program Evaluation Board (PEB) convened in September 1988 at the Melvin W. Price Support Center in Granite City, Illinois. The TSM coordinated the participation of TRADOC personnel as key members of that board. To expedite the initiation of the DEM/VAL work, the two teams of contractors were placed under letter contract (cost plus fixed fee) on 1 November 1988. The PEB continued its efforts to evaluate the contractors' proposals through the remainder of the year.

The first LHX cost and operational effectiveness analysis (COEA) had been completed in 1987. A study completed by the Rand Corporation and the Institute for Defense Analyses in late 1987 supported the analysis results that the LHX should be a conventional helicopter. Consequently, all that remained to be done was an update to the COEA, which was completed in April 1988 in preparation for the Milestone I DAB. As a result of the DAB and the restructuring of the acquisition strategy, a new COEA was directed with TRADOC Analysis Command in the lead. A general officer steering group was appointed in September to provide guidance for the conduct of the COEA. The first meeting of the committee was held at the USAAVNC in October.

Also in October, TRADOC approved the formation of an early operational capabilities (EOC) unit for the LHX. The EOC unit was to provide the USAAVNC commander with the assets necessary to develop and test doctrine, force structure, tactics, and procedures as the LHX weapon system developed. Additionally, the personnel assigned to the EOC would be utilized for the conduct of early user tests and experimentation and initial operational test and evaluation.

The selection of a winning contractor team for the T800 engine for the LHX was announced in October. The Source Selection Evaluation Board (SSEB) recommended that the Light Helicopter Turbine Engine Company be awarded a full scale development contract. During the competition leading up to that selection, both teams had demonstrated the maintainability of their proposed engines. During the demonstrations, TRADOC soldiers performed unit level maintenance tasks while dressed in standard uniforms, arctic clothing, and NBC protective clothing.^{1e}

In preparation for the development-of-training requirement for the LHX, the Aviation Systems Training Research Branch of the DOET completed an LHX Milestone II cost and training effectiveness analysis (CTEA) study plan in December 1988. The plan contained detailed estimates on LHX training requirement and procedures and provided

^{1e}Historical report, TSM-LHX, CY 88; memo, William H. Taft IV for secretary of the Army, 17 Jun 88, sub: LHX Milestone I Acquisition Decision Memorandum, doc V-4; "LHX Program Schedule," dated Nov 88; msg, Gen Thurman to Maj Gen Parker, 10 Nov 88, sub: LHX EOC unit support for early and continual user test and experimentation, doc V-5; quarterly reports TSM-LHX second, third, and fourth quarters, FY 88, and first quarter, FY 89; "Aviation Branch Update," 15 Apr and 14 Oct 88; memo ATZQ-TSM-LH, Col Stephen S. MacWillie for distr, 28 Nov 88, sub: LHX historical summary, doc V-6; historical report, DCD, CY 88.

feasible training alternatives and a cost trade-off analysis of them.¹⁷

USAAVNDTA personnel participated in the engineering development ground and flight tests of the OV-1D MSIP equipment at the manufacturer's facility at Stuart, Florida. During the flight testing, 81.7 hours were flown to verify system integration, leading to implementation of five software modifications. The aircraft was then transferred to Calverton, New York, where 46.6 hours were flown, and additional software modifications were incorporated.

The USAAVNDTA's product improvement test of the UH-1 two-piece engine deck began in June 1983 and was completed in May 1988. The test encompassed 3,105 flight hours conducted to assess durability and maintainability characteristics of the engine deck, with strain gauge and vibration data taken at the midpoint and end of the test. The UH-1 logistical evaluation, which lasted eighteen months and 1,264 flight hours, was phased out to make way for an improved UH-1 logistics evaluation test. This latter test, initiated in September 1988, involved two UH-1s equipped with several product improvements, including an improved particle separator, improved servo cylinders, and improved avionics.¹⁸

The Army's first true scout helicopter, the OH-58D was based on an OH-58A airframe that had been modified to accept totally new dynamics consisting of a four-blade soft-in-plane main rotor, a 650 horsepower engine, a transmission rated for 455 horsepower, an improved tail rotor, and other modifications. Although the OH-58D was originally intended to complement attack aircraft in the anti-armor and cavalry missions, the OSD prohibitions against deployment of the OH-58D with the AH-64 and the reductions in programmed quantities limited planned deployments to the field artillery aerial observer and the cavalry and reconnaissance roles. Fifteen aircraft were modified to carry Hellfire, ATAS, Hydra-70 rockets, or .50 caliber machine guns.

The AAMP called for 477 OH-58Ds, and HQDA identified requirements for 592, but as of the end of 1988, only 375 had been funded. The Army was considering a proposal for fielding OH-58Ds to replace OH-58C and AH-1S aircraft in the armored cavalry regiments, cavalry squadrons of selected heavy divisions, and the attack helicopter battalions of some infantry and airborne divisions. An Army Systems

¹⁷"Study Plan Milestone II: CTEA for the LHX," USAAVNC, Dec 88, doc V-7; historical report, DOTD, CY 88.

¹⁸Historical report, USAAVNDTA, CY 88.

Acquisition Review Council (ASARC) was planned for February 1989 to provide a decision on arming the aircraft. Funds were programmed for arming production aircraft beginning in FY 1990, but the primary issue was funding for the program before that date; the retrofit of previous production aircraft remained unfunded. The ROC plans were being revised to reflect an armed version of the OH-58D, however, and the FY 1989 Defense Authorization Bill directed the Army to install electrical and hardware provisions for armament on the aircraft during the basic aircraft modification.

Matériel testing of the OH-58D continued during 1988. The final airworthiness and flight characteristics tests were on-going. Tests scheduled for completion in June 1989 included operations in the armed configuration.¹⁹

Early in 1988 the USAAVNDDTA completed the OH-58D climatic testing and began compiling and analyzing the data. The mast-mounted sight, avionics, navigation, and airborne target handover systems were thoroughly tested at temperatures ranging from 70 to minus 50 degrees Fahrenheit at Eglin Air Force Base, Florida. The immediate purpose of the tests was to allow early detection and correction of any subsystem faults, with the long-range benefit of saving field units time by improving the aircraft's operational readiness. USAAVNDDTA also tested a new aircraft modular survival system (AMSS) that was tailored to provide a longer term survival in specific climatic environments for the aircrews of all Army aircraft.

In 1988 the TSM-Scout tasked a division of DCD to prepare an OH-58D STAR in support of a decision brief to the chief of staff of the Army. In November, the final revised draft was sent to HQDA for validation. The DCD work on the armed OH-58D in 1988 consisted primarily of preparing the documentation necessary to advance the system to the decision stage. The documentation included an operational and organizational plan and the required operational capability, as well as the primary testing document, the Test and Evaluation Master Plan. Although the Operational Test and Evaluation Agency was the evaluator for the system, DCD personnel attended several test integration working groups and produced draft issues and criteria for a force development test and experimentation projected to take place in 1992. Also in 1988, a division of DCD developed a scenario and performed two weeks of wargaming to examine the utility of the armed scout versus the unarmed scout in an air cavalry troop.²⁰

¹⁹Historical report, TSM-OH-58D, CY 88.

²⁰Historical report, DCD, CY 88.

The DCD hosted the fourth annual CH-47 User Requirements Conference at Fort Rucker in October. Budget constraints caused the CH-47D ROC update in June to be terminated. The Extended Range Fuel System (ERFS) program initial test integration working group was held at Corpus Christi Army Depot, and the ERFS technical test was conducted at Fort Rucker by the USAAVNDDTA. This testing consisted of 6.5 hours of long-range test flight of 887 nautical miles with four 600 gallon fuel tanks installed in the cabin. A conservative estimate of maximum range was computed at 1,059 nautical miles.

In 1988, the USAAVNDDTA also conducted several other tests and surveys on the CH-47. A live fire test was being conducted to provide continuous evaluation of safety, reliability, and logistics aspects of aircraft operation and maintenance. The USAAVNDDTA testing followed an accelerated flight and maintenance schedule which resulted in the aircraft leading the fleet in terms of flight time. Cumulative USAAVNDDTA CH-47 flight hours were 4,084 as of 31 December 1988. Also, in a cross-shaft alignment vibration survey, conducted in cooperation with Boeing Helicopter Company, USAAVNDDTA pilots flew various flight profiles with three different cross-shaft alignments. The data were forwarded to Boeing for analysis.

In September 1988, the Aviation Applied Technology Directorate (AATD), in coordination with AVSCOM, awarded contracts for a vertical take-off/landing investigation of the Advanced Cargo Aircraft (ACA). This investigation was to define Army combat and combat support airlift requirements and provide conceptual designs for size and configuration for an ACA and to identify technological programs required to support ACA development. Contract requirements were to be completed within fourteen months. The ACA has been scheduled to replace the CH-47 during the 2000-2015 time frame.²¹

In January 1988, the deputy under secretary of the Army for operations research signed a memorandum stating that Army involvement in the V-22 tilt rotor aircraft would be limited to monitoring only for the next several years and that no further study effort was needed. The final draft report for the V-22 aircraft was submitted to TRADOC on 19 May 1988. The TRADOC Analysis Command certified the report of 4 August and submitted it to HQ TRADOC on 5 August.²²

²¹Historical reports, DCD and USAAVNDDTA, CY 88.

²²Historical report, DCD, CY 88.

Weapons Systems

The Army's contribution to joint counterair operations was air defense, and, as a member of the combined arms team, Army Aviation participated in the air defense effort by conducting air combat operations as necessary. The Army has recognized air-to-air combat on a future battlefield to be a definite possibility and consequently placed a high priority on the effort to integrate the Air-to-Air Stinger (ATAS) onto the OH-58, AH-64, AH-1, and UH-60 aircraft. The ATAS was a nondevelopmental item that did not fully meet aviation air-to-air missile requirements, but it was to serve as an interim solution until a new system could be funded and developed.

Development and operational tests proved the capability and reliability of ATAS integration onto the OH-58, and a production contract was awarded for an ATAS weapons system for the OH-58 in February. Also in 1988, the request for proposal was released to prospective contractors to integrate the ATAS onto the AH-1. The AH-1 ATAS program was to integrate through the fire control computer using both the pilot's heads-up display and the copilot-gunner's telescopic sight unit for target acquisition. Funding constraints during 1988 coupled with the maturity of the AH-1 life cycle did not support a full scale production decision during that period.

Research and development efforts were also underway during the early part of 1988 to integrate ATAS onto the AH-64 and UH-60 aircraft to take full advantage of their sophisticated day/night acquisition and computer systems. A technical user test of the ATAS mounted on the AH-64 took place at Yuma Proving Grounds, Arizona, during October and December.²³

The AH-64 Apache ATAS program began with the signing of a twelve-month integration contract with McDonnell Douglas Helicopter Company in September 1987. By the end of 1988, the integration of the ATAS on the AH-64 was well underway. The ATAS provided the Apache with four Stinger missiles mounted on pylons attached to each wingtip. Its target acquisition and sighting functions were integrated into the existing target acquisition and designation sight and the integrated helmet and display sight system. Either crewmember would be able to acquire, track, and engage enemy aircraft with the fire-and-forget weapon. The addition of the ATAS to the Army's front line attack helicopter was

²³ "Aviation Branch Update," 15 Apr 88; historical reports, DCD, and TSM-ATAWS, CY 88.

vital because it addressed the issues and requirements for moving into the air-to-air arena.

The USAAVNDTA began a production prove out testing of the ATAS on the AH-64 at Yuma Proving Ground in October 1988. Testing included reliability, compatibility, logistic supportability, human factors, safety, captive flight trainer tests, missile firing, and boresight retention. This testing was scheduled to be completed in February 1989.

The program for mounting the ATAS on the UH-60 was being redesigned so as to provide hard points for ATAS mounting only on the MSIP aircraft. Should requirements dictate, the ATAS launcher could be attached via pylons attached to hard points, and a modified pilot's display unit could provide the missile sight system for target acquisition.²⁴

In June of 1988, the Aviation Systems Training Research (ASTR) Branch of DOTD completed a draft of an independent evaluation plan (IEP) for the Multiple Integrated Laser Engagement System (MILES) ATAS initial operational test and evaluation (IOTE). The MILES ATAS was to be an addition to the basic MILES and other MILES variations, a family of low powered, eye-safe laser transmitters and receivers designed to simulate the operational characteristics of various weapons systems. The IEP presented the issues and criteria needed to assess the effectiveness of the new device.²⁵

TRADOC initiated the Armor Anti-Armor Master Plan (A³P) to resolve the Army's decreasing ability to destroy enemy tanks. In 1988 DCD personnel made considerable progress in defining aviation anti-armor requirements on the future battlefield. They also provided major input to the development of TC 90-16(S), participated in the mobile training team for armor anti-armor issues from August 1988 to August 1989, presented a block of classified instruction on the latest developments in the field, and participated in the development of the A³P.²⁶

Several significant events occurred during 1988 with regard to the Hellfire program. The most significant of these was the Armor Anti-Armor Special Task Force study on

²⁴Historical reports, TSM-ATAWS and USAAVNDTA, CY 88; "Aviation Branch Update," 15 Dec 88; quarterly report, TSM-ATAWS, 31 Dec 88.

²⁵"Draft, IEP for the MILES ATAS IOTE," USAAVNC, Jun 88.

²⁶Historical report, DCD, CY 88.

Hellfire briefed to the chief of staff of the Army. The chief of staff directed the Hellfire program manager to continue the tandem warhead development program but to also consider other warhead configuration alternatives to improve lethality and robustness of the weapon. In 1988 Hellfire was placed on the DOD Operational Test Directorate oversight list, which required the writing and approval of a test and evaluation master plan that delineated all new developmental technical and operational issues and testing requirements.

Work continued during 1988 on a digital autopilot for Hellfire to provide increased capability over the basic missile, but testing was discontinued until this improvement could be consolidated with the tandem warhead and other significant improvements. The Hellfire program manager developed a tandem warhead arrangement to increase missile lethality, and also initiated warhead improvements to increase effectiveness against reactive armor. A contract was awarded in May to begin the eighteen-month development effort. The warhead product improvement increased the length and weight of the missile, and the program manager and the TSM were investigating options for reducing these.

Procurement and fielding of Hellfire integration on the UH-60A Black Hawk was cancelled, primarily because of funding constraints and the absence of a use requirement. Hellfire was integrated into the OH-58D for Operation Prime Chance. After initial integration and training difficulties, the armed OH-58D was successfully deployed to the Prime Chance area of operation.

The Hellfire program objective memorandum was increased from a 1987 low of 1200 missiles to 4200 missiles, thus permitting viable competition. Through FY 1988, 23,135 missiles had been contracted, but fewer than half of them had been delivered to the Army. HQDA approved a plan to conduct Hellfire system verification live firings, but release of assets to conduct the live-fire exercises was being held in abeyance until the missile inventory could support both fielding requirements/war reserves and the verification program.²⁷

Army Aviation's gunnery expertise was improved in 1988 by the development of the new Hydra-70 family of rockets. These rockets provided a broad range of warheads and fuze combinations for selective effects against air and ground targets. The warheads were to be delivered by the new Mk66

²⁷Historical report, TSM-ATAWS, CY 88; quarterly reports TSM-ATAWS, 31 Mar and 31 Dec 88. Operation Prime Chance is discussed in the classified addendum to this historical review.

rocket motor, which was designed with wrap-around fins and a fluted nozzle assembly that rotated the rocket in the launcher to provide trajectory stability and improved accuracy. The Mk66 motors had a two-to-one speed advantage over the Mk40 motors. Additionally, they could be fired more effectively throughout all flight regimes at ranges of 500 to 8,800 meters. In 1988, DCD personnel participated in the development of high resolution scenarios to support further study of the Hydra-70 and also initiated change to Hydra-70 multipurpose sub-munitions ROC to correct lethality data against standing and prone troops.²⁸

The Airborne Adverse Weather Weapon System (AAWWS) was a target acquisition system which used new technology to detect, classify, and engage a variety of threat targets. In conjunction with a fire control computer, the AAWWS was capable of developing a fire control solution, which was fed to an AAWWS seeker on the Hellfire missile for fire and forget engagements.

On 25 January 1988, the commander of the USAAVNC directed that the TSM ATAWS assume management for AAWWS. Action officers from TSM-ATAWS and from DCD and DOTD were assigned to the program. The AAWWS program was being managed under the Army Streamlined Acquisition Process and was in the proof of principle phase during 1988.

In 1988, the AAWWS program was formally linked with the AH-64 MSIP, and the DCD was given the task of preparing the necessary documentation to carry the AH-64 MSIP AAWWS to an Army Systems Acquisition Review Council (ASARC). The DCD was extensively involved with the AAWWS throughout the year and formed a USAAVNC task force in October to prepare the necessary documentation and briefings on the matter. The AH-64 MSIP and AAWWS were scheduled to undergo an ASARC Milestone V and Milestone IB respectively in May 1989, to permit the AAWWS to proceed into the initial development phase and the MSIP into the full scale development phase of the acquisition process.

The first firing of an AAWWS test missile occurred in November with outstanding results. The test missile was not a complete missile in that only the inertial guidance package (no radar) was used, but the success of the firing prompted a decision to enhance the capability of the next missile well beyond that originally planned. A draft AAWWS ROC was completed and had been distributed for world-wide staffing at the end of 1988.

²⁸ "Aviation Branch Update," 15 Feb 88.

A team of Army AH-64 aviators, human factors engineers, and training developers was formed in 1988 to conduct a simulator air crew experimentation of the AAWWS on a continuing basis over a twelve-month period. At the end of 1988, the team had successfully completed two sessions using an AAWWS simulator at the contractor facility in Orlando, Florida. These sessions yielded numerous improvement suggestions for cockpit controls and displays, task sequence procedures, and training programs. The program assessment at the end of the year was that, although technical problems were being experienced, it was expected that they probably could be solved, and a more accurate assessment could be made at a later date.²⁹

DCD personnel participated in Janus model users group meetings in February and September 1988. The purpose of the meetings was to discuss user problems and issues and to suggest improvements concerning the Janus simulation. Both meetings produced Janus model upgrades.³⁰

During 1988, the USAAVNC continued efforts to acquire approval of the Hellfire materiel need of the Multipurpose Lightweight Missile System (MLMS) air-to-air ROC. TRADOC directed a change in mission design of follow-on to Stinger, which necessitated revision of the operational and organizational plans.³¹

Avionics

Army Aviation's use of night vision goggles (NVG) and the problems involved in the procurement of newer model NVG became the focus of considerable concern in the public press and in Congress during 1988. The principal event which led to the growing concern was an accident on 8 March 1988 at Fort Campbell, Kentucky, which killed seventeen soldiers. As early as 1973, Army aviators tested the AN/PVS-5 model NVG, which had been designed and used primarily to permit soldiers to drive trucks at night without headlights, to fly a UH-1 helicopter at night. That first test ended disastrously, but later tests were more promising, so in 1977 the Army ordered its helicopter pilots to begin flying missions with the AN/PVS-5 model NVG. The use of the AN/PVS-5 was intended to be a quick-fix until special aviator goggles could be manufactured.

²⁹Quarterly reports, TSM-ATAWS, 31 Mar 88 and 31 Dec 88; historical reports, TSM-ATAWS and DCD, CY 88.

³⁰Historical report, DCD, CY 88.

³¹Historical report, DCD, CY 88.

Because of the time required for design and then contracting, production, and procurement problems, however, most Army aviators were still using the older model in 1988. A modified or cutaway version, which permitted the pilot to see around the ocular tubes, had advantages over the original version of the AN/PVS-5 and had come into general use, but even this modified version was inferior to the new model, the AN/AVS-6, in several respects. For example, the AN/PVS-5 multiplied available light by approximately 1,000 times, while the newer model multiplied light by from 2,000 to 3,000 times. The problem in 1988 was that, even after the AN/AVS-6 went into production in 1982, production delays and quality control problems prevented any one of the three contracts the Army let since that time from being filled as scheduled. Prior to December 1987, the Army had contracted with two corporations for the production of approximately 7,000 goggles, but only around 3,000 were ever delivered. In December of 1987 the Army let a contract worth \$54 million for 5,500 more goggles. Four companies submitted bids, but ITT Corporation of Roanoke, Virginia, one of the original two companies involved in the manufacture of the devices since 1982, was awarded an exclusive contract over the objections of some government officials as well as the other companies. The final decision was made by the Army Materiel Command with the rationale that an exclusive contract, in comparison with a dual-source contract, would save the government around \$6 million. The same problems of production delays and rejections of NVG because of defects continued to hamper the procurement of the new goggles throughout 1988. As of the end of 1988, the Army only had an estimated 3,500 sets of the AN/AVS-6 model, and they were being fielded at a rate of approximately 250 per month.

Some congressional and other critics were proposing a ban on night training until more of the newer goggles could be fielded, but the Army argued that the use of the goggles was essential to national defense, because, since the Army's mission was to prepare soldiers and leaders to fight and win anywhere at any time, it was necessary to train at night and to train with goggles. Only with the goggles, the Army maintained, could pilots fly low-level missions under enemy radar without external lights.³² Furthermore, the Army's and the USAAVNC's statistics conclusively demonstrated that all NVG in the inventory were perfectly safe when properly trained for and used, and that, in the 108 class A rotary wing accidents that had occurred since 1986, NVG had not been the primary cause in a single one and had been cited as one of the contributing factors in only six. Furthermore,

³²Montgomery Advertiser, 12 Feb 89, pp. 1C-2C; "Night Vision Goggle Perspective," USAAVNC briefing papers, Mar 89, doc V-8.

Army aircraft accident rates have almost constantly declined for thirty years, even with the inauguration and subsequent increase of higher risk nap-of-the-earth, nighttime, and multiship flying. In the opinion of the chief of the Aviation Branch, the solution to whatever problem there may have been with regard to the NVG was to redouble efforts with regard to the training for the use of them.³³

Examples of efforts to address the NVG problem in 1988 consisted of the emphasis given to it by the Directorate of Evaluation and Standardization (DES). Early in the year, aviation leaders were notified that NVG procedures would be one of the areas the DES teams would be inspecting during the year, and that one of the objectives was to determine whether changes were needed. Also, the DES produced and distributed two videotapes intended to increase mission capability and safety when NVG were used. One of the tapes was for the operational pilot and focused on NVG capabilities and limitations. It stressed visual cues, scan techniques, invisibility of wires, and field-of-view problems. The second tape was for the aviation unit commander's use and dealt with the development of standard operating procedures for NVG. It emphasized the establishment of aided and unaided routes, areas and airspace procedures, and aircraft and equipment modification requirements.³⁴

The Aircraft Survivability Training Management (ASTM) Branch of DOTD participated in the development and testing of aircraft survivability equipment (ASE) concepts, devices, systems, and equipment during 1988. Specifically, the ASTM Branch developed the training test support package for the force development test and experimentation, which was to be conducted in three parts. The DCD, DCAT, DOTD, and the Aviation Board completed the test support package, and TRADOC approved it. Part I consisted of anechoic chamber testing of AH-1 and AH-64 helicopters for ASE electromagnetic interference. Part II required the development of tactics for a single aircraft to use in conjunction with on-board ASE suite to defeat various threat air defense weapons. Part III was scheduled to be force-on-force

³³"Night Vision Goggle Perspective," USAAVNC briefing papers, Mar 89; notes by author on Army Aviation Brigade Commanders Conference, 6-9 Dec 88; Maj Gen Ellis D. Parker, "Army Aviation Brigade Commanders Conference," Army Aviation (XXXVIII, 2) Feb 88; "Aviation Branch Update," 14 Apr 89.

³⁴"Aviation Branch Update," 15 Feb and 15 Jun 88.

testing of aviation units against a combined arms threat.³⁵ During 1988, the USAAVNDDTA conducted logistical evaluation tests of ASE on the AH-1, UH-60, and CH-47.³⁶

In 1988 DCD personnel reviewed the Operational Test Evaluation Agency's (OTEA's) test reports of the follow-on evaluation of the tests conducted at Fort Sill, Oklahoma, during the period of 11 April through 10 May. This review constituted a continuous evaluation, in conjunction with USAAVNDDTA, of the Single Channel Ground & Airborne Radio System (SINGARS) on lead-the-fleet CH-47 and UH-1 aircraft. The DCD also reviewed and commented on test and evaluation master plans for a product improvement verification test of SINGARS in UH-60 aircraft. During October, the directorate coordinated a maintenance demonstration in conjunction with the U.S. Army Research Institute Aviation Research and Development Activity (ARIARDA), USAAVNDDTA and DOTD at Cairns Army Airfield.³⁷

Other Equipment and Materiel

During 1988, the USAAVNDDTA conducted tests of the Aircrew Integrated Helmet System (AIHS) and of the SPH-4 Helmet Laser Protective Device (LPD). Two types of laser protective visors (LPVs) and two types of laser protective spectacles were tested. Pilots experienced a variety of difficulties with both the LPVs and the spectacles. Although some of the LPDs tested were suitable for day instrument flight rule (IFR) flights, other LPDs were unsafe for night visual flight rule (VFR) and night IFR flights. The TEXCOM Aviation Board also conducted customer tests of product improvements to the SPH-4 helmet during 1988 and issued the final letter report on these tests in November.³⁸

With regard to ASE, camouflage, concealment, and deception were all aspects of an ongoing program in 1988. The purpose or objective was to reduce the vulnerability of aviation assets by the use of both passive and active measures. One facet of this program, a three-color aircraft paint concept, was scheduled for evaluation in February 1989. Tentative plans, depending on the success of the

³⁵Historical report, DOTD, CY 88.

³⁶Historical report, USAAVNDDTA, CY 88.

³⁷Historical report, DCD, CY 88.

³⁸Historical report, USAAVNDDTA, CY 88; 'Customer Test of Product Improvements to the SPH-4 Flyer's Helmet, Final Letter Report, TEXCOM Aviation Board, 4 Nov 88.

evaluation, were made to begin implementation of a three-color paint program for all tactical aircraft. This camouflage paint, a passive measure, would be complemented with active measures such as three-color canopy covers, an ultra lightweight net system, full size three-dimensional decoys, and two-dimensional photo mats.³⁹ Examples of these devices were displayed at the Army Aviation Brigade Commanders Conference in early December.

A user evaluation test of a new battle dress uniform flight suit was completed during the first half of 1988, and the data was then analyzed to determine user acceptance of the two-piece flight suit, which was very similar in appearance to the Army battle dress uniform (BDU). The evaluation was made in garrison and tactical environments during day and night operations to determine compatibility with the aircraft and its systems, appearance and design properties, logistical support requirements, and the safety and health implications associated with wearing the uniform. The tests involved 57 test participants and 38,404 hours of wear, including 4,823 hours of flight wear. The final test report was completed by the U.S. Army Aviation Board on 18 August 1988.⁴⁰

The USAALS at Fort Eustis developed several types of repair and maintenance equipment. A new aircraft tool system (NATS), which included all common hand tools used for aircraft maintenance, was evaluated at Hunter Army Airfield, Georgia, in 1988. This new tool set was to be deployed as an integral part of all Army Aviation units and would be used wherever scheduled or unscheduled maintenance was performed on Army aircraft. The NATS was expected to enhance safety, mobility, and aviation maintenance by decreasing inventory time while reducing weight and space required for tools. The TEXCOM Aviation Board issued a final test report of the NATS in November 1988.⁴¹

In 1988 also, the early user test and evaluation (EUT&E) of the Aircraft Combat Maintenance/Battle Damage Repair System (ACM/BDRS) was conducted. The aircraft involved in the test were the OH-58, UH-60, and AH-1. The

³⁹"Aviation Branch Update," 15 Dec 88.

⁴⁰"Aviation Branch Update," 15 Jun 88; historical reports, TEXCOM Aviation Board and USAAVNDDTA, CY 88; "Concept Evaluation Program of the Aircrew Uniform, . . . , Final Test Report," U.S. Army Aviation Board, 18 Aug 88.

⁴¹"Aviation Branch Update," 15 Aug 88; "Concept Evaluation Program of the New Aircraft Tool System (NATS), Final Test Report," TEXCOM Aviation Board, 4 Nov 88.

EUT&E provided data to evaluate the capability of crewmembers to provide rapid combat damage assessment, deferral of repair, and accomplishment of safe, expeditious repair in order to return the aircraft to combat within four hours. The ACM/BDRS was composed of electrical, fuel cell, structural, and pneudraulic repair kits. The repairs performed during the test were selected from validated ACM/BDRS manuals, and special attention was given to the time required for assessment and repair, quality of work performed, transportability of kits, and human factors engineering.⁴²

The USAALS also conducted a test during October and November which indicated that a 7.5 ton crane would be a viable substitute for the SCAMP, a self-propelled crane heretofore used in the AH-64 units. Other combat development activities by the USAALS during the last quarter of 1988 included the early test and evaluation of the fuel cell, electrical system, fluid line, and structures kits of ACM/BDRS; the evaluation of the unit maintenance aerial recovery kit (done in conjunction with the ACM/BDR test); participation in a logistics system program review hosted by the Logistics Center at Fort Lee, Virginia; and participation in several workshops and briefings.⁴³

C. Force Design

Aviation Forward Support Battalion (FSB)

During the latter part of 1988 the TRADOC Independent Evaluation Directorate (TIED), with support from the USAAVNC and other agencies, completed an evaluation of an aviation FSB that would support the aviation brigade. The aviation FSB would locate in the brigade support area and provide the brigade commander with one or two days of all classes of supply, maintenance support teams, recovery and repair operations, and base cluster defense command and control. The staff of the FSB would continuously interact with the brigade staff to anticipate support requirements and orchestrate its own assets, as well as those of the division support command and the main support battalion, to facilitate the aviation brigade's combat operations. The TIED evaluation indicated that the aviation FSB was a viable concept, and that it could provide advantages in responsiveness, flexibility, and dedicated tailored support over the current area support methods. The TIED evaluation team recommended that a proposed unit be fielded, allowed to

⁴²"Aviation Branch Update," 14 Oct 88.

⁴³Historical report, USAALS, fourth quarter, CY 88.

achieve initial operational capability (approximately six months), and then be evaluated on a long-term basis to fine-tune the organization and staffing. Among other changes related to the implementation of the aviation FSB, it would be necessary to inaugurate an advanced officer course for aviation logisticians (see Chapter III, above) in the USAALS at Fort Eustis.⁴⁴

AirLand Battle-Future

The Combined Arms Combat Development Activity (CACDA) drafted three AirLand Battle-Future concepts in 1988 and sent them to USAAVNC for review. DCD personnel provided comments on each concept and also sent CACDA copies of aviation-related concepts developed by DCD. In November 1987 the VCSA directed the formation of a special study group at the Combined Arms Center (CAC) to develop an AirLand Battle-Future concept for the year 2004. The study group developed the following three concepts: Extended Close Combat, which was close combat primarily through direct fires; Maneuver by Fires, which was close combat primarily through indirect fires with aviation being the principal exploitation instrument; and Simultaneous Operations, which combined elements of the other two to provide for fighting deep battles and close battles simultaneously.⁴⁵

Special Operations Forces (SOF)

After eight years and approximately six attempts, all parties came to an agreement at HQ TRADOC on 15 August 1988 with regard to what SOF would look like. The SOF TOEs were being reviewed at HQDA and ODCSOPS, and were expected to be approved by the end of January 1989. The SOF included the Special Forces Branch (SFB), Special Operations Aviation (SOA), and Psychological Operations, with SFB having the lead on the FAA. The SOA component was to consist of one Regular Army regiment of three battalions and one ARNG battalion. The SOF FAA was to be presented in March 1989. The purpose of the SOA portion of the FAA would be to update the VCSA on the status of the SOA and to focus attention on

⁴⁴Transcript of interview by author with Maj Gen Ellis D. Parker, 29 Dec 88; notes on interview with Col Joel Hinson, 25 Jan 89; "Army Aviation Branch Update," 15 Feb 89.

⁴⁵Historical report, DCD, CY 88.

the problem of financing the sixteen additional CH-47s required in the SOA structure.⁴⁶

Operational Support Airlift (OSA)

In April 1988, TRADOC tasked the USAAVNC to examine thirteen issues relating to OSA and to report the results by 1 August. An in-process review (IPR) held in July 1988 focused the study, for the near-term, on defining wartime requirements using a data base gathered in 1986 and 1987. The USAAVNC Directorate of Plans, Training, Mobilization, and Security had the lead in the study, and the DCD analyzed the data. On 19 September DCD briefed the results at a TRADOC IPR. Pursuant to the 19 September briefing, the CACDA was tasked to conduct a second portion of the OSA study. A special study group assembled at Fort Leavenworth to examine optimal aircraft stationing, organization, manning, and aircraft mix. The study group briefed the commander of CACDA on 16 November and the chief of staff of TRADOC on 16 December. The future focus of the study was to propose OSA action plans to the senior leadership of the Army.⁴⁷

Fielding of Aircraft and Weapons Systems

On 30 September 1988, TRADOC officially disestablished the TSM-Apache, indicating that the AH-64 had joined the list of systems that had officially achieved an initial operational capability. Because of significant problems experienced in the field, however, the commander of USAAVNC decided to utilize his own resources to continue intensive management of this program. Therefore, the TRADOC Project Office, Apache (TPO-A) was chartered and placed under operational control of TSM-Airborne Target Acquisition and Weapons Systems (ATAWS) to continue fielding management and to ensure that the Apache users' issues continued to receive proper attention. During the latter part of 1988, TPO-A was involved in the VCSA review, MSIP development and definition, and the AH-64 integrated logistic system assessment, and also addressed immediate self-deployability and flight safety issues.⁴⁸

During 1988, the AH-64, the Army's newest attack helicopter and the primary tank-killing aircraft, continued

⁴⁶Historical reports, DCD and DAP, CY 88.

⁴⁷Ibid.

⁴⁸Historical report, TSM-ATAWS, CY 88.

to be fielded in the U.S., and the first three battalions equipped with this outstanding aircraft were fielded in Europe. The first Army Aviation unit had been equipped with the AH-64 in May 1986, and by the end of 1988, a total of eleven Apache units had been fielded.

In 1988 General Thurman appointed the USAAVNC as the proponent for an evaluation of AH-64 battalion-deep operations. The TRADOC Independent Evaluation Directorate was designated as the evaluator and TEXCOM, as the tester. The DCD produced a proposed scenario and threat laydown and participated in working group meetings in September and October, which formulated issues and criteria.⁴⁹

As a result of the Army Aerial Scout Test, the OH-58D was certified to Congress as the most cost effective scout for the reconnaissance mission, and plans for arming all OH-58Ds were well under way by the end of 1988. The first fielding was scheduled for April 1992, but since the OH-58D was so well suited to deployment, that date could well be accelerated. The fielding of the basic OH-58D was also progressing smoothly and was well ahead of schedule at the end of 1988. The 1st, 4th, and 5th mechanized infantry divisions at Fort Riley, Kansas, and Fort Polk, Louisiana had already received their quota of six aircraft each.⁵⁰

Detailed planning for fielding fifteen aircraft to each corps in USAREUR was ongoing at the end of the year. The ODCSOPS had published a proposed OH-58D FYs 1990-1996 fielding plan. The training of field artillery aerial observers in FY 1989 was not funded at the level required to support the fielding plans, but HQDA, TRADOC, and TAPA were seeking resolution to the problem.⁵¹

During the latter part of 1988, the Eighth Army received twenty enhanced Black Hawks. The enhanced aircraft, which constituted an exchange and not an increase of UH-60s in the Eighth Army, provided the commanders with extensive improvements in navigation, avionics, aircraft survivability, and command and control. All maintenance and training were conducted under contract, with the USAAVNC prepared to provide contingency training support on an as-needed-and-identified basis when contract training was completed.⁵² With the external stores support system and

⁴⁹Historical report, DCD, CY 88.

⁵⁰"Aviation Branch Update," 15 Dec 88.

⁵¹Historical report, TSM-OH-58D, CY 88.

⁵²"Aviation Branch Update," 15 Jun 88.

external fuel tanks (see above) Black Hawks would be able to self-deploy to Europe in the future.

In 1988 the formal memorandum of agreement (MOA) was renegotiated and signed by the commanders of the USAAVNC and the U.S. Army Intelligence Center and School (USAICS) reestablishing guidelines for the coordination and accomplishment of actions of mutual interest regarding the efficient development of special electronic mission aircraft (SEMA), and SEMA organizations, training, training devices and simulators, and doctrine. Based on the original agreement negotiated in 1984, the 1988 MOA redefined the responsibilities of each command in the continued development of an effectively managed and well equipped, trained, and managed Army SEMA force.⁵³

The first deliveries of the ATAS, in FY 1989, were scheduled to go to the institutional training base at Fort Rucker and to the USAALS at Fort Eustis. The forward deployed aviation units equipped with OH-58Cs were to receive the ATAS system early in FY 1990. The fielding and training strategy in effect in 1988 combined institutional training and the use of a new equipment training team and a doctrinal training team to ensure that users were knowledgeable in ATAS operations, maintenance, sustainment, and current air combat tactics and techniques. Plans were developed to equip up to 2,100 aircraft with the ATAS.⁵⁴

Air-to-Air Combat (ATAC)

In 1988, the ASTR Branch of DOTD conducted a pilot study to evaluate the effectiveness of various weapons and tactics used in helicopter ATAC. This study involved comparative hit and kill ratios for each aircraft as a function of range and weapon and also provided an evaluation of additional simulator requirements for helicopter ATAC simulation. References to the performance of particular weapons were deleted from the final report for security reasons. Insufficient data were available to provide

⁵³MOA, Ellis D. Parker, Cdr USAAVNC, and Julius Parker, Jr, Cdr USAICS, 1 Dec 88, sub: special electronic mission aircraft (SEMA) and SEMA training, doc V-9; historical report, DAP, CY 88.

⁵⁴"Aviation Branch Update," 15 Apr 88.

statistically conclusive results, but valuable information for planning future studies was collected.⁶⁶

In June, the DCD initiated the first phase of the three-phase ATAC study. The purpose of the study was to develop analytical tools for TRADOC to use in evaluating the contribution of ATAC. By early October, phase I was completed.⁶⁶

In accordance with directions from TRADOC, the start date for phase II of the study (ATAC II) was delayed from August 1988 to early 1989. Plans continued in 1988, however, to ensure that the test would accomplish its purpose, which was to examine how Army of Excellence-structured aviation units could conduct ATAC as a member of the Combined Arms Team, using currently fielded hardware and interim doctrine and tactics. The results of the test would be used to further refine ATAC doctrine, tactics, force design, training, and materiel.⁶⁷

Impact of AAMP on Force Structure

The AAMP refocused aviation programs by providing a framework for modernization for a period of thirty years, based on \$3.58 billion annual level funding concepts (with 2 percent inflation). The OSD's review of the AAMP resulted in increased procurement of AH-64s, OH-58Ds, and UH-60s and the conversion of the remaining CH-47 aircraft to CH-47Ds. The current force accounting system in 1988 did not reflect the AAMP strategy for reducing the force, and changes could not be defined until the distribution/fielding strategy was finalized. The DA ODSCOPS Aviation was in the process of refining aircraft distributions to support AAMP implementation.

In June 1988, the CACDA briefed the Army of Excellence update to the CSA; the VSCA tasked ODSCOPS to conduct a rump functional area assessment (FAA) in-process review (IPR) of the impact of the AAMP on the Aviation Force. The IPR would encompass the implementation phase laydown of the AAMP (i.e. training, funding, and fielding of the AAMP force). In August 1988, the VSCA directed a review of the impact of

⁶⁶"MULTISIM, A Minimum Air-to-Air Combat Simulation Capability: Report of a Pilot Study," by James W. Dees, Ph.D., and Capt Timothy R. Cornett, DOTD, Dec. 88; historical report, DOTD, CY 88.

⁶⁶Historical report, DCD, CY 88.

⁶⁷"Aviation Branch Update," 15 Feb 89.

implementing the AAMP. The Aviation Center conducted most of the analysis to support this review during September through November 1988. The DCD assessed the impact of the AAMP on force structure, stationing, manning, warfighting capability, and training, and the VCSA was briefed on 17 November 1988.

The AAMP projected a gap of 1,073 utility aircraft to meet command and control and aeromedevac requirements. In 1988, the Materiel Logistics Systems Division of DCD commenced a study to determine viable options to fill the gap. Options included replacing the engines in the UH-1s and changing the dynamic components along the power train, or acquiring a non-developmental aircraft. A recommendation and a decision were expected in FY 1989. The retirement of the UH-1 began in FY 1988 and was scheduled to be completed in FY 1992.⁸⁸

In 1988 the Office of Personnel Systems (OPS) participated in an FAA to show the impact of the AAMP on personnel and force structure--including projections of future personnel requirements by grade and MOS. In cooperation with the DCD and with assistance from the Soldier Support Center and the ODCSPER, OPS factored the effects of MOS changes and of the AAMP into the current personnel management authorization document to project personnel requirements by grade and MOS in FY 1996. The underlying assumption was that the structure would remain constant except as affected by the AAMP. As the lead agency in this study, DCD reported to the VCSA.⁸⁹

⁸⁸'Army Aviation Modernization Plan,' May 1988, doc V-10; historical report, DCD, CY 88.

⁸⁹Memo ATZQ-DAP-PS (611-1a), Col Joel H. Hinson for Cdr U.S. Army Soldier Support Center, sub: rump functional area analysis, doc V-11; historical report, DAP, CY 88.

CHAPTER VI

MISSION SUPPORT

A. Resource Management

The FY 1988 installation contract signed by the USAAVNC commander and the commander of TRADOC provided for operation and maintenance, Army (OMA) financing of \$248.8 million and for ten significant unfinanced requirements totaling \$33.0 million. The FY 1988 TRADOC OMA actual total obligations were \$284.8 million; this total consisted of Program 2--\$9.0 million; Program 7--\$0.6 million; Program 8--\$275 million; and Program 9--\$0.1 million. The continuity of the work load and funding at contract signing was broken on several occasions by congressional cuts, late additions, and other unprogrammed actions leading to differences between the contract and obligation totals.

During 1988, the Program and Budget Division (PBD) of the Directorate of Resource Management (DRM) directed its major effort toward programming, executing, reviewing, and reporting budgetary matters. Due to unprecedented funding limitations compared to the initial work load requirements, the division conducted monthly resource reviews from February through September. In February, the PBD was involved in coordinating the distribution of major OMA funding adjustments, which netted an increase of \$2.5 million. The most significant of these adjustments were an increase of \$11.6 million for flight training, a decrease of \$11.7 million due to the Gramm-Rudman-Hollings cuts, and the increase of \$2.5 million for the civilian pay raise and retirement systems conversions.

In comparison with FY 1988, the FY 1989 contract, signed in December of 1988, provided for \$260.1 million for OMA and ten significant unfinanced requirements totaling \$18.7 million.¹

As a result of budget reductions resulting from the Gramm-Rudman-Hollings Act, the USAAVNC was forced to cut costs in various ways during 1988. It was estimated in early January, following the announcement of the first cuts, that reductions of about \$20 million in the OMA portion of the installation budget would be required. The DRM had the challenging task of promoting and documenting the saving of money following the budget cuts.

¹Historical report, DRM, CY 88.

Through Project SPIRIT (Systematic Productivity Improvement Review in TRADOC), TRADOC issued a savings goal of \$18.6 million for FY 1988. In response to the goal set by TRADOC, Fort Rucker effected and reported hard-budget savings of \$66.7 million and cost-avoidance savings of approximately \$136.5 million. Also, through the Capital Investment Program, Fort Rucker received funding for five capital investment projects with an estimated total life savings of \$6.1 million.²

A significant portion of the USAAVNC's cost cutting during 1988 resulted from the policies, plans, procedures, and directives developed and executed by the Force Management Division of the DRM. As part of the Army's efforts to balance the force structure with budgetary limitations, the USAAVNC received a reduction of 267 officer/warrant officer positions. To effect this reduction, 129 spaces had to be converted to contract; 119 spaces, to DA civilians; 1 space, to enlisted; and 18 spaces were deleted without replacement.³

Civilian hire freezes were another means used to cut costs in 1988. As a result of a TRADOC announcement in October 1987 that the allocated FY 1988 manpower was subject to be reduced by 5 percent, the USAAVNC commander ordered a selective civilian hire freeze on 22 October, effective immediately. From that time until 28 February 1988, only authorized full-time positions essential to mission accomplishment, health, welfare, and safety were filled. Also, sixty-four temporary employees were released from duty on 1 January 1988.⁴ Then on 29 February 1988, as a result of TRADOC's ordering further manpower reductions on 19 February, a total hire freeze for full-time permanent and temporary civilian employees was declared. The complete civilian hiring freeze was in effect until the end of FY 1988. During that period no promotions were approved; only critical positions were filled, and these, insofar as possible, from excess personnel within the work force. The

²Historical report, DRM, CY 88; "SPIRIT: Fort Rucker Support Plan, FY 88 Update," RCS-ATRM 91; "FY Project SPIRIT Program End-of-Year Final Invalidated Totals," chart provided by DRM; "FY 88 Capital Investment Program," chart provided by DRM.

³Historical report, DRM, CY 88; msg Cdr USSAVNC to Cdr TRADOC, 16 Apr 86, sub: officer/warrant officer reductions.

⁴Memo ATZQ-RFM (570-4c), Col Andrew J. Miller to distr, 22 Oct 87, sub: selective civilian hire freeze--TRADOC Units, doc VI-1; historical report, DCP, CY 88; historical report, DRM, CY 88.

chief of staff was the approving authority for any exception to the hiring freeze. Also, thirty-two additional temporary employees and twenty-three student aides had to be released by 11 March.⁵ Largely as a result of the freeze, the total number of civilian employees was reduced from a high of 3,400 in February to 3,100 in October. Eighty-three Fort Rucker employees (seventy-one TRADOC) opted for the early retirement program, which many major commands authorized to assist in reducing personnel costs. There were also fifteen disability retirements, eighty-three regular retirements, and seven civilian deaths in 1988. All of these contributed to the civilian force reduction.⁶

Even before the Gramm-Rudman-Hollings cuts were announced, flying-hour and task-iteration requirements for aircrew training manual staff aviators had been waived as a cost cutting measure.⁷ Following the announcement of the budget cuts, the decision was made to reduce the output of the flight training programs by about 20 percent for the remainder of the fiscal year.⁸ Insofar as possible, however, measures were taken to reduce spending in other areas so as to avoid reducing flight training more than absolutely necessary.⁹

In addition to the savings in personnel costs described above, four construction projects totalling \$982,660 were cancelled due to budget cuts or loss of funds. Also, the contract for security guards was reduced by \$117,450.00 and the requirements for custodial services were reduced on 1 August for additional savings.¹⁰

The Resource Management Division of the Directorate of Plans, Training, Mobilization, and Security (DPTMSEC) served as the resource manager for the Department of Combined Arms Tactics (DCAT), Department of Gunnery and Flight Systems

⁵DF ATZQ-RFM (570-4c), Col Willis R. Bunting to distr, 29 Feb 88, sub: civilian hire freeze--TRADOC units, doc VI-2; historical report, DRM, CY 88.

⁶Historical report, DCP, CY 88.

⁷Memo ATZQ-CA0, Col James B. Sauer, command aviation officer, 20 Nov 87.

⁸Army Flier, 7 Jan 88.

⁹See, e.g., "Construction and Physical Plant Improvements," below. See Chapter II for details about the impact of budget cuts on training programs.

¹⁰Historical report, DOC, CY 88.

(DGFS), Department of Enlisted Training (DOET), the 1st Aviation Brigade (1st Bde), the Aviation Training Brigade (ATB), the Directorate of Aviation Proponency (DAP), and the DPTMSEC. The division was responsible for the programming, management, and execution of budgeted funds from TRADOC and Forces Command (FORSCOM). The total amount obligated for the programs administered by the Resource Management Division of DPTMSEC was \$54.4 million--\$52.3 million from TRADOC, and \$2.1 million from FORSCOM.¹¹

The Internal Review and Audit Compliance Office (IRAC) maintained and refined an auditable entity inventory of all areas subject to audit coverage at the USAAVNC, Fort Rucker, and the Aviation Branch. The IRAC Office also exercised staff supervision over and negotiated/coordinated all visits by external audit agencies and performed follow-ups on all internal and external audits. In addition, the IRAC Office prepared reports for headquarters regarding implementation of audit recommendations and other major audit/review activities. In 1988, the IRAC Office performed forty-five audits, fifteen follow-up audits, and forty audit-related administrative projects. It also provided audit liaison for twenty external audit agency visits/contracts and issued thirty-one audit and follow-up reports, which contained fifty-two recommendations and monetary benefits totaling \$1,152,361.¹²

In compliance with its mission of providing the commanding general with a continuing assessment of the operational and administrative effectiveness of directorates, commands and activities at Fort Rucker, the Office of the Inspector General conducted inspections of thirteen units during 1988. These consisted of DRM, Directorate of Logistics (DOL), Directorate of Combat Developments (DCD), Directorate of Evaluation and Standardization (DES), Secretary General Staff (SGS), Protocol Office, ATB, DPTMSEC, Center Chaplain, Military Police Activity (MPA), Safety Office, 1st Bde, and Public Affairs Office (PAO). Also during 1988, 20 informal inquiries were completed and 151 IG action requests were processed. To assist the units and activities in staying abreast of sensitive issues, a quarterly "Inspector General Information Bulletin" was compiled and distributed.¹³

¹¹Historical report, DPTMSEC, CY 88.

¹²Historical report, IRAC Office, CY 88.

¹³Historical report, Office of IG, CY 88; memo ATZQ-IG (20), Lt Col Wayne R. Hansom for distr, 22 Feb and 6 Sep 88, sub: Inspector General Information Bulletin.

B. Personnel Management

With regard to military personnel resources, the Aviation Branch continued to do very well in attracting new cadet officers, warrant officer candidates, and enlisted personnel that ranked well above the average for other branches as well as the Army as a whole by almost any method of measurement. Of the 376 officers scheduled for FY 1988 accessions, 91 were graduates of the U.S. Military Academy (USMA) and 274 were ROTC graduates. Of the total, 70 percent were Regular Army (RA), and 67 percent were distinguished military graduates (DMG). At the ROTC Accession Board in December of 1988, the popularity of the Aviation Branch remained strong, and the overall quality of branch accessions, with regard to both RA cadets and DMGs, was the highest in recent years. Of the 268 ROTC accessions selected for the Aviation Branch in 1989, 82.4 percent were RA and 84.3 percent were DMGs.¹⁴

As a result of the budget decrement, many officers' active duty service obligation requirements were relaxed during FY 1988 so as to permit early release or retirement. This early release policy combined with the reduction in flight training, also caused by budget cutbacks, to create shortages of aviators and to make it difficult for the Army to recover its considerable investment in flight training. An especially serious shortage of aviation warrant officers existed in 1988 and frequently created situations requiring company grade officers to serve in warrant officer positions. Insofar as possible captains and lieutenants remained in warrant officer positions no longer than one year and were usually given significant extra duties. Also, to help alleviate the shortage of warrant officers, the quotas for warrant officer candidates (WOCs) in the initial entry rotary wing course were increased for FYs 1989 through 1991.¹⁵

Several aspects of the military personnel management for the whole Aviation Branch were conducted by the Office

¹⁴Memo ATZQ-GC (340d), Col E. Kirby Lawson III for Cdr USAAVNC, sub: after action report, school year 1989-90 ROTC selection board, 21 Dec 88, doc I-5; "Quality of Aviation Force," a chart prepared by the Office of Personnel Systems (OPS), DAP, USAAVNC; PAO, USAAVNC, "Aviation Branch Update," (hereinafter referred to as "Aviation Branch Update", 15 Feb 88.

¹⁵"Aviation Branch Update," 14 Oct 88 and 15 Feb 89.

of Personnel Systems (OPS) of the DAP.¹⁶ Throughout the year, for example, OPS worked to prepare a proposal for a special operation aviation skill identifier to facilitate identifying and utilizing aviators with particular skills. The proposal was completed and forwarded to the Soldier Support Center (SSC) for staffing. The proposed changes updated the area of concentration designation for Aviation Branch commissioned and warrant officers and also the aviation skill identifiers, including the new G6 (maintenance test pilot) skill identifier, thereby facilitating the tracking of aviator skills. The DA approved this proposal in June.¹⁷

A DOD task force report on women in the military, released in January 1988, resulted in OPS being tasked to determine which aviation units and positions would be closed to women in accordance with specific guidelines involved in the application of the "risk rule." The overall purposes of the project, which was incomplete at the end of the year, were to prevent women from being excluded from positions except those in which the risks were equal to or greater than those for direct combat units, and also the converse. Another ongoing project at the end of the year was a study of the Army's military education level four (MEL-4) qualifications for aviation specialties. This study, concerned with selection, school capacity, and operational requirements for MEL-4 qualified officers in each of the basic branches, was an outgrowth of the Army Commanders Conference in August 1988. The Combined Arms Center (CAC) had the lead in the project.¹⁸

With regard to the personnel management of enlisted soldiers, the revision of MOS93P, flight operations coordinator, to MOS93P, aviation operations specialist, was approved by ODCSPER in 1987 and, for the most part, implemented in 1988. This change provided a grade structure more in accordance with the standards of grade and also

¹⁶See, e.g., "Impact of AAMP on Force Structure" in Chapter V, above.

¹⁷Memo ATZQ-DAP-PS, Col Joel H. Hinson for Cdr SSC, [Nov 88], sub: recommended changes to AR 611-101...special operations aviation, doc VI-3; memo ATNC-MOS-B (611-1a), Darrel A Worstine for Cdr USAAVNC, 13 and 20 Jun 88, sub: revision of Aviation Branch 15... & approved change to AR 611-101,....

¹⁸Msg, DA to TRADOC, 16 Mar 88, sub: review of positions and units closed to women; msg, AMC to distr, 23 Jun 88, sub: military education level 4 alternatives; historical report, DAP, CY 88.

conformed to the Army of Excellence TOE requirements. In accordance with another decision made in 1987, the merging of MOS93H, air traffic control tower operator, and MOS93J, air traffic control radar controller, into MOS93C, air traffic control operator, the personnel started their conversion in 1988. The OPS sent messages to the field and otherwise publicized the criteria and schedule for reclassification to MOS93C. At the end of 1988, 69 percent had converted; the remainder had until April of 1989 to reclassify.¹⁹ Another enlisted soldier personnel management action in 1988 consisted of the merger of CMF 28 into CMF 67. This change had been studied since 1984 and steps had been taken toward its implementation since 1985, when an MOA between the commander of USAAVNC and the commander of the U.S. Army Signal Center and School transferred personnel proponency for CMF 28 to the Aviation Branch. The approved changes provided that all CMF 28 personnel, with the exception of MOS35P50, would be recoded into the 68 series of CMF 67; the 35P50 would be incorporated into MOS67Z.²⁰

The preparations for the implementation of the Multitrack approach to initial entry rotary wing (IERW) training included the determination of anticipated future requirements for aviators to be trained in each track each year and the development of a method for testing students' relative aptitudes for various training tracks. As planned in early 1987, requirements for UH-1 tracked pilots for FY 1989 (the first full year of Multitrack) would be approximately 36 percent of the total; for the OH-58, 18 percent; UH-60, 22 percent; and AH-1, 23 percent.²¹

As the proponent for aviator selection, a tenant activity at the USAAVNC, the U.S. Army Research Institute Aviation Research and Development Activity (ARIARDA), played an important role in this aspect of personnel management. Part of ARIARDA's research focused on the development of optimal methods for selecting and assigning aviators, using as the criteria institutional success and performance in the operational environment. Selection efforts ranged from development of initial screening paper-and-pencil tests to

¹⁹Ltr ATNC-MOS-B, Dawson C. May to distr, 1 Jun 87, sub: revision of CMF 93 (aviation operation), doc VI-4; historical report, DAP, CY 88.

²⁰Memo ATNC-MOS-B (611-1a), Darrel A. Worstine for distr, 3 Jun 88, sub: merger of CMF 28 into CMF 67, doc VI-5; historical report, DAP, CY 88.

²¹Memo ATTG-MT (351c), Doreatha Mangrum for Cdr USAAVNC, 3 Jun 88, sub: revised course administrative data...Multitrack, doc VI-6.

performance-based tests of aptitude, in which aptitudes were classified by mission type.

One personnel management-related activity of ARIARDA in 1988 was the development and pre-operational validation of new flight aptitude selection tests (FAST). Using data collected on the IERW training performance of 715 flight students who completed the new FAST battery during the first week of training, ARIARDA concluded that the new FASTs were highly reliable, that the alternate forms of most of the tests were equivalent, and that a subset of the tests could significantly improve the predictive validity of the IERW selection process.

Another ARIARDA project in 1988 was the development of a peer comparison procedure for the Aviation Officer Advanced Course (AVOAC). Data were collected to evaluate a peer comparison procedure as a component in the process used to select honor graduates for the AVOAC. The results indicated that the procedure was easy to use and highly reliable, and there was a consensus among the members of each section about the peers with the highest potential as aviation officers. User reaction to the procedure, however, was very negative. A draft of the final project report was prepared and distributed for internal review.²²

During the first half of 1988, the ARIARDA developed and implemented the Multitrack Aviator Candidate Classification Algorithm. This algorithm incorporated computerized tests from the Army Research Institute, the Naval Aerospace Medical Research Laboratory, the Air Force Human Resources Laboratory, and the University of Texas. The algorithm used a combination of seventeen test scores to produce a set of four numbers for each IERW student. Each number corresponded to one of the four aircraft used in the IERW Multitrack training program (UH-1, AH-1, OH-58, and UH-60). The algorithm was based on a series of tests, including a psychomotor test, which was to be completed within the first ten days of training. All other tests were conducted during the first forty days of training. The results of all tests were then correlated with the Army's requirements for aviators trained in the various tracks to assign the IERW students to tracks most appropriate to their skills as well as to the Army's needs. The process was validated by the Aviation Systems Training Research (ASTR) Branch of DOTD, and ARIARDA formally turned the process over to the USAAVNC in November 1988. Administrative

²²Historical report, ARIARDA, CY 88; "Pre-operational Validation of New Army Flight Aptitude Selection Tests," report of a research project done for ARIARDA under contract by Anacapa Sciences, Inc., 1988.

responsibility for the algorithm testing and computation was transferred to the DAP, but the 1st Bde and some other directorates continued to play supporting roles.²³

Another type of personnel management was provided by the Adjutant General (AG) Division, which formulated plans, policies, and programs for personnel administration, and managed a full range of military support for the installation. In 1988 the AG Division exceeded all established reenlistment objectives for active and reserve components in all categories. The Fort Rucker Retention Branch won the TRADOC and FORSCOM reenlistment awards in 1988 for the fourth consecutive year. In 1988, a total of 258 soldiers were retired at Fort Rucker. Many of these joined some 15,000 other retirees in the area of southern Alabama and Mississippi and northwest Florida, who were served in various ways by the Fort Rucker AG Division. Support was also provided to family members of retirees and to ARNG and USAR personnel in the area.

Officer and warrant officer assignment actions pertaining to permanent personnel on Fort Rucker were handled by the Officer Management Branch (OMB) of the AG. In 1988, this branch coordinated with Personnel Command (PERSCOM) to ensure the timely arrival of AH-1 and OH-58 instructor pilots for the newly initiated Multitrack training. The OMB also had the primary responsibility for developing year-group management for company grade officers. A company grade rotation plan was implemented, which guaranteed that company grade officers would leave Fort Rucker branch qualified. Officer promotions for Fort Rucker in FY 88 were as follows: 21 considered and 7 selected for colonel, 27 considered and 8 selected for lieutenant colonel, 50 considered and 29 selected for major, 17 considered and 15 selected for captain, 28 considered and 19 selected for chief warrant officer 4, and 91 considered and 48 selected for chief warrant officer 3.

Senior enlisted promotions for Fort Rucker in 1988 were as follows: 41 considered and 8 selected for sergeant major, 176 considered and 28 selected for master sergeant, and 438 considered and 70 selected for sergeant first class.

²³Historical report, ARIARDA, CY 88; memo ATZQ-TDS-ST (70-17a), Col James B. Sauer for distr, 16 May 88, sub: memorandum of instruction for Multitrack algorithm validation; DF ATZQ-TDS-ST (70-17a), Col Floyd E. Edwards to CofS, 19 Oct 88, sub: confirmation of responsibilities for Phase III of Multitrack algorithm program; DF ATZQ-TDS-ST (70-17a), Col Floyd E. Edwards to DAP, 21 Oct 88, sub: transfer of administrative responsibilities for Multitrack algorithm program; historical report, DOTD, CY 88.

In 1988 the Welcome Center and the Transition Point were combined to form the Personnel Processing Branch (PPB) of the Personnel Service Center (PSC) of the AG Division. The PPB in-processed 3,125 soldiers and out-processed 8,196 soldiers in 1988. During the year, the Personnel Plans and Actions Branch of the PSC processed 13 Legions of Merit, 341 Meritorious Service Medals, and 339 casualty cases (of which 304 involved funeral detail support).²⁴

The staff of the Equal Opportunity Office (EEO) assisted the commander in achieving racial harmony and equal opportunity through education, affirmative action, and implementation of special activities. The EEO staff conducted visits to approximately thirty-nine units in 1988 for discussions and/or structured interviews. These discussions and interviews concerned equal opportunity training, unit morale, promotions and awards, unit education and training programs, complaints of discrimination and sexual harassment, and other such issues. During 1988, there were seven formal racial discrimination complaints, one formal gender complaint, two formal sexual harassment complaints, and three formal unfair treatment complaints. Three of the complaints were found to have bases, and appropriate action was taken; the others were dismissed as being without foundation. The EEO staff also participated in the planning and conduct of several ethnic observances during 1988. These included the celebration of Dr. Martin Luther King's birthday, Black History Month, Holocaust Week Observance, Asian-Pacific Heritage Week, National Hispanic Week, and Native American Day.²⁵

Civilian personnel management was conducted in 1988 by the Directorate of Civilian Personnel (DCP). A follow-up locality wage survey was conducted during the summer. The survey was done in conjunction with the DOD Wage Fixing Authority and was designed to collect detailed wage and benefit data from selected private concerns in the Dothan area. The DCP reported the information to the DOD for processing and computations, which would ultimately result in the new yearly wage grade pay schedule for Dothan area federal employees. In April 1988, the DCP formalized a nonappropriated fund (NAF) handicap employment program. The military spouse employment preference program began within the NAF system at Fort Rucker in June 1987. In June of 1988, a change which extended the period of eligibility for persons covered by the program became effective. An agreement between the USAAVNC et al. and the American Federation of Government Employees (AFGE), negotiated in

²⁴Historical report, DPCA, CY 88.

²⁵Historical report, DPCA, CY 88.

1985 but not put into effect because of changes made by TRADOC and not agreed to by AFGE, finally became effective on 2 May 1988, after the AFGE withdrew its request for further review.²⁶

The civilian counterpart to the military personnel-oriented EOO was the Equal Employment Opportunity Office (EEOO). In 1988 the EEOO published a multiyear "Affirmative Employment Program Plan, FY 88-92" and revised the USAAVNC Regulation 600-4 pertaining to the Equal Employment Opportunity Committee. A major development in 1988 was that the assistant secretary of the Army for manpower and reserve affairs, Mr. Delbert L. Spurlock, Jr., directed that black employment programs be implemented at Army installations, that black employment program managers be appointed, and that black employment program committees be appointed to assist the program managers in carrying out their responsibilities. The objectives of these actions was to further the DA policy of ensuring equal opportunity in the hiring, advancement, training, and treatment of black employees and to strive toward the achievement of a civilian work force in which black employees were represented in every occupational category and grade level commensurate with their representation in the relevant civilian work force. The program was implemented at Fort Rucker with the first meeting of the committee being held on 22 September 1988. Also, the USAAVNC Regulation 600-7 establishing the Black Employment Program Committee and the committee's bylaws were written.²⁷

C. Information Management

The Directorate of Information Management (DOIM) was organized as the U.S. Army Information Systems Command (USAISC)-Fort Rucker, a tenant agency at the USAAVNC. This

²⁶Ltr, Wayne Griffin (chairman, Local Wage Survey Committee) to DOD Wage Fixing Authority, 28 Feb 89, sub: information required for federal wage system survey of the Dothan area; historical report, DCP, CY 88; "Agreement between USAAVNC et al. and AFGE, Local 1815," effective 2 May 1988. See "Resource Management," above, and "Commercial Activities and Contracting," below, for other significant civilian personnel management activities.

²⁷Historical report, EEOO, CY 88; "Affirmative Employment Program Plan, FY 88-92," USAAVNC, 7 Mar 88; memo DA, Delbert L. Spurlock, Jr. for distr, 3 Feb 88, sub: DA Black Employment Program guidance; memo ATZQ-EEO (310-2d), Maj Gen Ellis D. Parker for distr, 22 Feb 88, sub: equal employment opportunity and affirmative employment.

organization nevertheless played a major role in various aspects of information management for the USAAVNC, and made considerable progress in all information mission area disciplines during 1988. Several new automated systems were installed, and the Local Area Network (LAN) was widely used to provide communications among the directorates. In an effort to integrate the growing automation requirements on post, the Information Center of the USAISC-Fort Rucker designed and began implementation of an installation-wide microcomputer network (MICRONET) to accomplish the single work station concept. The primary function of the MICRONET was to allow all microcomputers to share hardware and software resources and to communicate with each other at the microcomputer to microcomputer level.

In 1988, TRADOC ordered the expeditious integration of all TRADOC Decision Support System (TDSS) mainframes through a dedicated long-haul communications system and also the accelerated acquisition of automation equipment and the activation of local networks to provide maximum access to all TRADOC subordinate units. Fort Rucker was one of the first TRADOC installations to activate a connection between its TRADOC information systems integration mainframe and the TDSS. The USAAVNC has been one of the leaders in acquiring additional automation equipment and in implementing the required communications links required by TDSS.^{2e}

A Defense Data Network (DDN) interface message processor was installed and activated in the Dial Central Office on Fort Rucker during the early part of 1988. The interface message processor provided a more economical means for Fort Rucker's long-haul communications requirements by providing both dedicated and dial-in access to other DOD users on the DDN.

In October 1988 the Languard Status Monitoring System was installed at Fort Rucker. This system provided the ability to monitor the LAN and provided visual and aural alarms on the broadband coaxial cable. The monitoring system facilitated the troubleshooting of problems on the broadband coaxial cable by pinpointing the locations of any failing component. Also in October, an NCR 3690 Comtern front end processor was installed in replacement of an older

^{2e}USAAVNC Reg 25-1, "Information Management: Organization, Planning, and Management," 1 Mar 88; memo ATZQ-I, Lt Col Kirk M. Knight for Cdr USAAVNC, 17 May 88, sub: FY 88 Information Management Plan; "Implementation Plan for Fort Rucker Microcomputer Network (MICRONET)" USAISC, Fort Rucker, Jan 89, doc VI-7; memo ATRM-IA, Gen M. R. Thurman for distr, 16 Jul 87, sub: TRADOC DSS Basic Policy; historical report, USAISC-Fort Rucker/DOIM, CY 88.

model to support the Army Standard Information Management System (ASIMS). This new automatic data processing equipment provided the Army with state-of-the-art technology and allowed for future growth on the ASIMS network. It also provided the necessary hardware configuration needed to interface with other Army data communication networks.²⁹

In another aspect of information management for and about the Aviation Branch, the USAAVNC, and Fort Rucker, the USAAVNC Public Affairs Office (PAO) played a major role. In 1988 the Public Information Section of the PAO responded to about 850 media queries and escorted more than 320 media visitors. The section generated 352 news releases, and each was distributed to an average of 25 media outlets. The Community Relations (CR) section met 224 requests for military participation in various community activities in 1988. Additionally, the CR section implemented two new programs in 1988. These were the Community Liaison Program, wherein designated battalions sponsored communities in an assigned geographical area, and the Spirit of Fort Rucker Award, designed to recognize Wiregrass area individuals for outstanding support to Army Aviation and Fort Rucker.

The PAO section with major responsibility for providing information to the public was Command Information (CI). The CI's main vehicle for providing information to the Fort Rucker community was the Army Flier, a weekly newspaper edited by the PAO staff but published by a civilian enterprise through advertising sales and at no cost to the government. The CI section also published the 1988 Fort Rucker Unofficial Guide as a service to newcomers, visitors, and conference participants. Finally, the CI section published and disseminated the "Aviation Branch Update," a bimonthly memorandum from the chief of the Aviation Branch, which was mailed to approximately 400 Aviation Branch and other U.S. Army leaders worldwide. This was one of General Parker's major vehicles for communicating his messages on aviation issues to the field.³⁰

Another USAAVNC-based publication that played a major role in the dissemination of professional aviation information to the members of the branch was the U.S. Army

²⁹Historical report, USAISC-Fort Rucker/DOIM, CY 88; memo ASNL-ND-NB (25-3), Gerald R. Mowery for distr, 19 Oct 88, sub: NCR Comtern 3650 front end processors; contract no. DABT01-88-C-2041, DOC Fort Rucker and Atlanta Technologies, Inc, 9 Sep 88, sub: installation of Languard Network Monitoring System.

³⁰Historical report, PAO, CY 88.

Aviation Digest, Professional Bulletin. The Aviation Digest published professional information of an operational, functional nature concerning safety and accident prevention, air traffic control, training and doctrine, maintenance, operations, research and development, aviation medicine, and other aviation-related subjects. Following a funding crisis and the temporary suspension of publication during part of 1987 resulting from the cancellation of the publication of DA periodicals, the Aviation Digest resumed publication with provisional professional bulletin status. Notwithstanding unsuccessful efforts to arrange for permanent funding, the Aviation Digest published twelve issues in 1988. Although the Aviation Digest adopted the theme concept with a different theme for each issue, it also adhered to the spirit of the Army's theme for 1988 by publishing articles emphasizing training each month.

Funding for the Aviation Digest was provided for FY 1988 and part of FY 1989 from the Office of the Deputy Chief of Staff for Operation and Plans (ODCSOPS) by a transfer of resources through TRADOC. This permitted the USAAVNC to release bids for a printing contract and to award the contract early in 1988. The U.S. Army Information Systems Command provided some funds to continue publication during the early part of FY 1989, but a permanent and adequate source of funding for the Aviation Digest had not been arranged at the end of CY 1988.³¹

D. Air Traffic Control (ATC)

In 1988 the U.S. Army Air Traffic Control Activity (USAATCA) finalized the Army's ATC and Air Traffic Service Master Plan that incorporated both fixed-base and tactical facilities. The master plan was the vehicle that the Army was to use to inform the users and other interested agencies of ATC near-term (1989-1994) and far-term (1995-2004) plans and requirements. USAATCA and other USAAVNC personnel consolidated the fixed and tactical requirements into one plan that would become part of the Aviation Center Long Range Plan and the Army Aviation Modernization Plan (AAMP). It identified requirements for the near and far terms in support of the National Airspace System Plan (NASP) and the

³¹Ltr DAMO-TRS, George H. Harmeyer to Cdr USAAVNC, 17 Jul 87, sub: ODCSOPS review and support of Aviation Digest; ltr SFIS-APR-P (310-2d), Leta F. Vandemark to Cdr USAAVNC, 8 Feb 88, sub: Program 1421-S,...Aviation Digest; historical report, DAP, CY 88.

Army Airspace Command and Control System for training and combat.³²

The USAATCA was the Army's technical representative on NASP matters. One of the cornerstones of the NASP was a 1988 agreement between the DOD and the Federal Aviation Administration (FAA), which identified and delineated the agencies' respective responsibilities in the National Airspace System (NAS). This agreement outlined the national policy for realignment of some radar approach control jurisdictions between 1995 and 2000. In general, the DOD was to provide approach control services at locations where the majority of air traffic was military, where DOD had the capability to provide service equivalent to NAS services provided by FAA, and where DOD had requested to be the provider of ATC service. According to policy guidelines, four Army Radar Approach Controls (ARACs) would be maintained. These were to be at Fort Rucker, Alabama; Fort Campbell, Kentucky; Fort Hood, Texas; and Fort Drum, New York. The ARAC at Fort Sill, Oklahoma, was to be consolidated with the radar approach control at Altus Air Force Base, Oklahoma, and operated by the Air Force.³³

During 1988 the USAATCA completed a plan to improve control of airspace management and aircraft in high density training areas and ranges. That plan, based on positive and procedural control methodology in FM 100-103, Army Airspace Command and Control in a Combat Zone, was approved and placed in effect on 18 May 1988. Positive control was accomplished by electronic means and could use either radar or flight following in special use airspace, corridors, and transition and training areas. Procedural control measures were accomplished by non-electronic means. Procedural control within the flying area was accomplished jointly by the air traffic and airspace officer, G/S-3 air, and other users. It was necessary for all users to coordinate their activities with a central agency to achieve effective, efficient, flexible, and safe use of airspace. The plan emphasized that areas involving the NAS had to conform to all applicable rules and regulations of the FAA.³⁴

On 4 March 1988 the CAC commander approved the Air Traffic Services (ATS) interim operational concept. This concept was completed after review and after incorporating the recommended changes received from worldwide staffing.

³²Historical report, USAATCA, CY 88; 'Aviation Branch Update,' 15 Dec 88.

³³'Aviation Branch Update,' 14 Oct 88.

³⁴'Aviation Branch Update,' 15 Aug 88.

At the end of the year, it was at TRADOC for final approval. The concept described how ATS would support combat operations on the AirLand battlefield and provided an overview of ATS functions within deep, close, and rear operations area across the spectrum of conflict. The concept was to be the foundation for the development of future doctrine, training, force structure, and materiel. The primary mission of Army ATS on the AirLand battlefield would be to facilitate airspace use at all Army operational levels during peacetime and periods of conflict. Army ATS supported both en route and terminal flight operations and was a key element of the Army Aviation Command and Control (A²C²) system.

In 1988 the USAATCA's Requirements Division validated seventy-seven navigational aids requirements worldwide. These requirement surveys ranged from the relocation of nondirectional beacons to the establishment of new ATC towers and approach control facilities. The Systems Evaluation and Maintenance Office conducted worldwide flight inspection and assistance to Army ATC and navigational facilities using Army aircraft modified and specially equipped by the FAA for the performance of aerial flight inspection. The Area Maintenance and Supply Facility of the Systems Maintenance Division operated a repairable facility for modules and components of selected ATC equipment and provided on-site maintenance support when malfunctions were beyond the capability of local maintenance personnel.

The USAATCA was responsible for the accountability and obligations of OMA funds for the USAATCA and also for the 1st ATC Battalion, 11th Aviation Regiment, 1st Aviation Brigade, and for the 256th Signal Company. Numerous ATC equipment surveys and installation projects were postponed or cancelled due to lack of funds. Funding restraints also limited ATC systems evaluations and other TDY trips by USAATCA personnel.³⁰

The USAAVNC hosted the Air Traffic Control Commanders Conference in late March. ATC commanders and key staff officers from throughout the world attended the two-day conference, where they heard field reports from Army major commands, including TRADOC, FORSCOM, Communications and Electronics Command, the USAR, and the U.S. Army Aviation Research and Development Activity. Issues covered included tactical ATC services, ATC personnel, future equipment, flight following in remote areas, and current and future ATC doctrine.³⁰

³⁰Historical report, USAATCA, CY 88.

³⁰Army Flier, 24 Mar 88.

E. Basefield Realignment

The expansion of flight training in and around Fort Rucker during recent years created problems of congestion, especially in areas of corridor crossovers. These problems generally resulted from training helicopters flying between their basefields and the stagefields to which they went for daily training activities. The construction of three new stagefields, which were opened for use in 1988, did not alone solve the problem and was not expected to, although they were sorely needed. The problem of congestion was expected to be exacerbated in 1988 with the implementation of Multitrack, so efforts began in 1987 to solve it by a basefield realignment plan. Although the plans were developed in 1987, most of the implementation occurred in 1988. The revised regulations governing airspace, stagefields, basefields, and range usage were published in February 1988 as USAAVNC Pamphlet 95-15, "Directory of Aviation Training Facilities and Procedures." The plan provided for the realignment of parent basefields with different combinations of outlying stagefields. This realignment, the opening of the new stagefields, and the consequent creation of different corridors eliminated most corridor crossovers and relieved the airspace congestion even as the new Multitrack program was being implemented. After realignment, Lowe Army Heliport was the home of most UH-1 training; Cairns Army Airfield, of the UH-60, UH-1 instrument training, and fixed wing training; Hanchey Army Heliport, of OH-58D, CH-47D, AH-1, and AH-64 training; and Shell Field, of OH-58A and OH-58C training. The realignment began on 18 December 1987 with the transfer of the UH-60 fleet from Lowe to Cairns, and was completed on 24 June 1988 with the movement of the last CH-47s to Hanchey. The proponent agency for the basefield realignment was the Airfield/Airspace Branch, Aviation Division, DPTMSEC.³⁷

An incidental effect of the opening of the new stagefields and of the basefield realignment was a significant reduction in the requirement for leased landing areas. The number of acres leased was reduced from 3,520 at the end of 1987 to 2,229 at the end of 1988.³⁸

³⁷USAAVNC Pamphlet 95-15, 1 Feb 88, doc VI-8; news release 88/47/ahe, USAAVNC PAO, 11 Feb 88; Army Flier, 7 Jan 88, 18 Feb 88, 30 Jun 88; historical report, DPTMSEC, CY 88.

³⁸Historical report, DEH, CY 88.

F. Training and Leader Development Support

The Aviation Division of the DPTMSEC provided aviation technical guidance for the conduct of all aviation training at the USAAVNC in 1988. The division revised USAAVNC Regulation 350-5, "USAAVNC Aircrew Training Program," which governed procedures for the conduct of all aircrew training programs. The two major changes effected by the revision consisted of the designation of the UH-1 as the primary aircrew training manual aircraft for all staff aviators, and the delegation of aircrew training program certification responsibility from the director of DPTMSEC to the director or commander of each staff aviator's unit.³⁰

A major training support facility at the USAAVNC was the Aviation Learning Center (ALC). The ALC provided remedial and supplemental instruction to reinforce the training programs and also computer programs and other materials for educational and/or personal enjoyment. In 1988, a total of 55,213 students utilized the ALC; 10,988 were WOCs, 9,567 were officer IERW students, 30,456 were enlisted, 3,438 were graduate students, and 764 were permanent party. The ALC performed important functions in support of the new MOS93C smart troop program and the MOS93P flight specialist program.

Foreign students at the USAAVNC were provided very important support by the International Military Student Office (IMSO), formerly the Office of Allied Military Training. The IMSO provided or coordinated whatever assistance and indoctrination was necessary for the international students to obtain the training at Fort Rucker for which they had come, and also to adjust to United States lifestyles and cultural differences. In 1988, 372 international students, representing 30 different nations, received training at the USAAVNC.⁴⁰

During 1988 the Training and Training Support Division (TTSD) of DPTMSEC processed approximately 1,025 Air Assault School quotas, 1,890 personnel action requests for training of military and civilian personnel, and 11,600 formal school training requirements for both military and civilian personnel. The TTSD also coordinated, prepared and distributed training schedules for each resident class at the USSAVNC. It distributed approximately 35,000 training schedules to a total of approximately 10,000 students for over 50 in-resident courses. The TTSD also provided

³⁰Historical report, DPTMSEC, CY 88; USAAVNC Reg 350-5, 5 Jul 88.

⁴⁰Historical report, DAP, CY 88.

classroom support and training areas to ARNG and USAR units conducting training at Fort Rucker. The Aircraft Management Branch of TTSD coordinated the use of the USAAVNC aircraft, served as liaison between the aircraft users and the DOL and maintenance contractor, and scheduled over 283,900 training flights and almost 400 special mission flights. The Test Control Branch of TTSD administered skill qualification tests to 2,217 soldiers in 1988. The Nuclear, Biological, and Chemical (NBC) Branch of TTSD assisted FORSCOM, TRADOC, and reserve units in NBC readiness training. During 1988 the NBC Branch provided training visits to ten ANG and USAR units and provided NBC chamber support to over 2,000 soldiers.⁴¹

The 260th Field Artillery Detachment of the 1st Bde provided indirect fire support for training programs at the USAAVNC with 105 mm artillery and 4.2 inch mortar illumination rounds. During 1988, the detachment fired 7,588 rounds of artillery and mortar ammunition during more than 200 day and night missions in support of training for the officer basic, instructor pilot, aerial observer and AH-1 transition courses.⁴²

During 1988, a subordinate element of the ATB developed plans to consolidate flight training center (FTC) facilities at Cairns Army Airfield. The closing of Bluesprings, Runkle and Wolfpit Flight Communication Centers resulted in estimated savings of \$50,000 in vehicle maintenance, rental, and mileage. The completion of the consolidation was scheduled to occur in 1989.⁴³

During 1988 the USAAVNC sent mobile training teams to Jamaica, Bahrain, the Philippines, Pakistan, and Colombia. It also participated in a EURO/NATO conference held in The Hague, which improved and expanded the existing training arrangements of the member nations.⁴⁴

The New Equipment Training Development (NETD) Branch of the Directorate of Training and Doctrine (DOTD) prepared training packages, provided new equipment training instructors, and in other ways supported training programs in several new systems for aviation units Army-wide during 1988. These included the UH-60A External Stores Support

⁴¹Historical report, DPTMSEC, CY 88.

⁴²Historical report, 1st Bde, CY 88.

⁴³Historical report, ATB, CY 88.

⁴⁴Msg, NLALTC ZEIST to Cdr USAAVNC, 8 Jul 88, sub: E/N BHPT Conf 14; historical report, DPTMSEC, CY 88.

System and Extended Range Fuel System, the UH-60 Hellfire and CINC HAWK training, and the OH-58D unit training plan. The NETD Branch also supported USAAVNC and Army Aviation training interests with regard to the Army Modernization Training Automated Systems for all new equipment training plans; the LHX Preliminary Evaluation Board; reviews and validations of the Global Positioning System held at Rockwell-Collins in Cedar Rapid, Iowa; air traffic control; and scout helicopters.⁴⁵

Another branch of DOTD, Aviation Simulation Materiel Development (ASMD), supported training at the USAAVNC and throughout the Army by developing requirement documents and coordinating with Army agencies and civilian contractors in the development and fielding of flight simulators and training devices. In 1988 the following flight simulators and training devices were fielded: three AH-64 combat mission simulators, five UH-60 simulators, three AH-1S flight and weapons simulators, and one CH-47D flight simulator. The ASMD also initiated a block upgrade configuration to bring the AH-64 combat mission simulators up to the latest AH-64 aircraft configuration, including equipment change proposals and simulator equipment enhancements.⁴⁶

The Aviation Systems Training Research (ASTR) Branch of DOTD produced a preliminary study and the Aircraft Survivability Training Management (ASTM) Branch of the DOTD submitted a Project SPIRIT recommendation during 1988 which outlined actions taken to produce cost avoidance savings associated with Identification Friend or Foe (IFF)

⁴⁵Msg, Cdr AVSCOM to Cdr TRADOC, 6 Oct 88, sub: new equipment training for the UH-60A...; memo ATSE-TDN, U.S. Army Engineer School to USAAVNC, sub: VOLCANO individual and collective training plan; DF ATZQ-TDS-ET (70-1a), Kenneth W. Cox to Dir DOTD, 8 Dec 88, sub: trip report, NAVSTAR global position system; memo (ATZQ-TDS-ET (70-1a), Michael C. Buchieri for Dir DOET, sub: training requirements for new air traffic control systems; memo ATZQ-TDS-ET (70-1a), Michael C. Buchieri for Dir DOET, 18 Mar 88, sub: OH-58D TRADOC issues; memo ATZQ-TDS-ET (70-1a), Capt Joseph L. Bourgeois for Dir DOET, 23 Mar 88, sub: trip report, OH-58D unit training plan; historical report, DOTD, CY 88.

⁴⁶DF ATZQ-TDS-SM (70-17d), Daniel J. Bradley to Dir DOTD, 5 Apr 88, sub: trip report; material inspection and receiving report, transportation officer, Fort Rucker, 26 May 88; news release, Link Flight Simulation Corporation, 17 Oct 88; "Study Plan, AH-64 CMS Requirement Study," DOTD, Dec 88; historical report, DOTD, CY 88.

institutional training. IFF training had been identified as the key for preventing fratricide during joint service operations, and the commander of the USAAVNC tasked DOTD to determine the most cost effective method(s) of correcting the resident pilot training in IFF Mode 4 operations. The ASTM Branch designed and developed a table top trainer for the AN/APX-72 and AN/APX-100 IFF systems that emulated all operational aspects of the systems as employed in the aircraft. Three trainers of each type IFF system were determined to give the maximum utilization with the minimal cost of local construction. At the end of 1988, three AN/APX-72 trainers had been completed and tested; the three AN/APX-100 trainers were under construction. The estimated cost of construction of the six trainers was \$81,258. When compared with the \$800,273 estimated cost of the equipment required to make the training aircraft at the USAAVNC IFF capable, the total estimated cost avoidance was \$719,015.⁴⁷

The Flight Systems Branch (FSB) of DOTD produced the 1989 Army Aviation Annual Written Examination (AAAW) for six aircraft categories and three location varieties for a total of 18 AAAW versions. The FSB also developed a training strategy for nonrated enlisted crewmember training. Analysis for this project was approximately 90 percent complete by the end of the year. The branch also developed a training plan to qualify nonrated crewmembers for night vision device (NVD) operations. A USAAVNC exportable training package was used for the academic training. In response to NVD investigation findings and recommendations, the USAAVNC commander adopted the position requiring a third NVD qualified and equipped crewmember on all UH-1, UH-60, and CH-47 NVD flights.⁴⁸

The ARIARDA, a tenant activity at Fort Rucker, provided important training support to the USAAVNC in the form of research to determine the training effectiveness of new technology. Among other training support research activities in 1988, ARIARDA developed a low-cost visual flight simulator for UH-1 training research (the UH1 TRS) and began simulation research on the use of the attack helicopter flight simulators. The positive results of research studies of the UH1 TRS, with regard to both training effectiveness and cost savings, led ARIARDA to develop plans for follow-on research addressing the training effectiveness of alternative low-cost image generators. The attack helicopter simulator training research involved the

⁴⁷"Preliminary Training Development Study: Aircraft Survivability Equipment, Identification Friend or Foe," USAAVNC, DOTD, Mar 88; historical report, DOTD, CY 88.

⁴⁸Historical report, DOTD, CY 88.

collection of data on the use of the AH-1 Flight and Weapons Simulator and the AH-64 Combat Mission Simulator. Malfunctions of the area scoring device, however, forced rescheduling the AH-64 data collection to 1989.

Another ARIARDA project begun but not concluded in 1988 involved research to determine the extent to which aircraft flight recorders could be used to enhance training. In 1988, preliminary research plans were made to evaluate the training effectiveness of prototype versions of the Army Airnet system. ARIARDA provided recommendations for improving the characteristics of early versions of the device, but formal training effectiveness research was deferred until 1989. ARIARDA personnel developed a near-infrared projection system in 1988 and began conducting research to determine the training effectiveness of the device as a supplement to NVG flight training. Other ARIARDA training research projects in 1988 included the evaluation of threat capability training using computer-based memorization system software, research in computer-based instructional strategies, aviation part-task trainers, and map interpretation and terrain analysis training.⁴⁹

The Officer Training Branch (OTB) of DOTD was responsible for overseeing the application of the systems approach to training for all commissioned and warrant officer training at the USAAVNC. The OTB was specifically charged with conducting front-end analysis for all branch-specific officer professional development training. The action plan to fully exploit and institutionalize horizontal and vertical integration (HVI) was approved by TRADOC on 17 March 1988. The first major requirement outlined in the action plan was to conduct course reviews. Training departments began course reviews in July 1988, and the HVI of training was expected to be fully incorporated into all areas of USAAVNC training by the end of FY 1989.⁵⁰

In response to a TRADOC directive that revisions of MQS II manuals be discontinued and all efforts be directed toward the development and fielding of MQS III manuals by the end of January 1989, the USAAVNC asked for permission to consolidate the MQS II and MQS III manuals into one. Approval was given, and the USAAVNC completed the MQS II/III

⁴⁹Historical report, ARIARDA, CY 88; "Army Aviation Ammunition and Gunnery Survey," research report 1492, ARIARDA, Aug 88; memo for record AMCPM-TP-TM, Donald P. Checkwick, 7 Sep 88, sub: minutes of AAWWS simulation training meeting 1 Sep 88.

⁵⁰Historical report, DOTD, CY 88.

manual in December and sent it to center staff for coordination.¹

As the manager of the USAAVNC Army Training and Evaluation Program (ARTEP), the Unit Training Branch (UTB) of DOTD accomplished a milestone event in the transition from ARTEP to ARTEP Mission Training Plans (MTP) with the fielding of ARTEP 1-227-10-MTP, Air Traffic Control Platoon, in 1988. The UTB was the lead agency in DOTD for TRADOC's reserve component (RC) training strategy for the future. Representatives of the RC units convened for a RC workshop in November 1988, and Aviation National Guard and Army Reserve unit representatives identified unique RC training needs. As 1988 came to an end the USAAVNC was analyzing the information gathered in order to tailor training products for RC requirements.²

The Aviation Technical Library was a major support facility for training and leader development at the USAAVNC. In 1988, in preparation for the installation of an automated integrated library system, the TRADOC Library Network (TRALINET) provided the Aviation Library with four microcomputers. Among other things, the new integrated system was to provide an online service for public access to the library's catalog. The catalog would also be available to offices at the USAAVNC through the Army/Local Area Network (A/LAN). Arrangements were also being made to include the holdings of the library of the Aviation Museum in the integrated system. Other equipment improvements in 1988 included the upgrading of the microcomputer used for interlibrary loans and the installation of another microcomputer to provide automated serials check-in and monitoring.

Research in the Aviation Technical Library by both patrons and staff was significantly facilitated by two other innovations in 1988. One consisted of the acquisition from TRALINET of a computerized system for rapid searches of some of the most frequently used indices (such as Business Periodicals Index, Applied Science and Technology, etc). Also in 1988 the library staff began indexing the Army Flier and the Army Times, utilizing a hard disc microcomputer. Both of these indices were eventually to become parts of the

¹Historical report, DOTD, CY 88.

²Msg, Maj Gen Parker for Lt Gen Crosby, 3 Dec 88, sub: aviation reserve component training for the future workshop; historical report, DOTD, CY 88.

library's integrated system and to become accessible via A/LAN.⁵³

Audiovisual materials and other training aids were designed, developed, fabricated, purchased, issued, and maintained by the Training Service Center (TSC) of DPTMSEC. In 1988, TSC produced and provided 1,617,395 visual information products and services to the USAAVNC and other units operating within Fort Rucker and its geographical support area. These included 44,102 graphic items, 824,786 negative equivalent photographic items, 208,012 audiovisual support items, 3,177 copies of videotapes, 67 new videotape productions, and several complex mechanical and electronic training devices, including an OH-58 flight control trainer, and a CH-47D emergency procedure trainer.⁵⁴

G. Logistical Support

Logistical support to the USAAVNC and tenant agencies at Fort Rucker in 1988 was provided by the Directorate of Logistics (DOL). Notwithstanding declining resources, the DOL was able to accomplish its mission and to meet the challenge of doing more with less. The total actual OMA expenditure for logistical support in FY 1988 was approximately \$152.5 million, of which \$29.14 million were total base operations, \$1.53 million were general purpose forces, \$0.38 million were central supply and maintenance, and \$121.47 million were training, medical, and other general personnel activities. In addition, total stock fund expenditures amounted to \$70 million.⁵⁵

At the beginning of FY 1988, Fort Rucker had converted its motor pool vehicles to Government Service Administration (GSA) management. During the fiscal year, GSA replaced approximately 250 older vehicles with 215 new and usually smaller vehicles. The combination of GSA management and fewer, more reliable, and smaller vehicles have contributed to an approximated annual saving of over \$500 thousand. After the conversion to GSA management, the Management Analysis Division conducted a study of GSA administrative use vehicles to determine whether missions could be accomplished with fewer and/or less expensive vehicles. The recommendations of this study were approved by the USAAVNC chief of staff and resulted in additional significant savings. In August of 1988 DOL received

⁵³Historical report, DAP, CY 88.

⁵⁴Historical report, DPTMSEC, CY 88.

⁵⁵Historical report, DOL, CY 88.

approval to convert the aircraft maintenance contractor's 215 vehicles to GSA management effective 1 December 1988. This conversion was expected to save an additional \$350 thousand annually.⁵⁶

Another action planned in 1987 and implemented in 1988 was the establishment on Fort Rucker of a branch of the Red River Army Depot, Texarkana, Texas. This mini depot was established in early January 1988, and items began to be shipped out of it immediately. By the end of the year, the branch depot was shipping 20 percent of the maintenance contractor requisitions and had shipped 569 parts to bases all over the world.⁵⁷

In October 1988 DynCorp replaced Sikorsky Support Services as the contractor for aircraft maintenance. The new contract contained provisions for supply incentives and other cost saving incentives designed to improve supply management and to be of economic benefit to both the Army and the contractor. The maintenance contract with DynCorp was scheduled to run through September 1993.⁵⁸

On 1 June 1988 Fort Rucker implemented Project PRIME (Policy for Rucker Inventory Management and Execution), a requisition objective computation policy designed to reduce the number of requisitions without increasing the value of items in inventory. PRIME featured a variable add and retain criteria; a variable safety level based on unit price, demands and stock-out probabilities; economic order quantities; and the ability to set stock levels to achieve stock availability rates or inventory dollar investments. By the end of the year, PRIME had reduced high priority requisitions by 20 percent, improved initial fill rate from 72.4 percent to 77 percent, reduced lines at zero balance from 14.9 percent to 11.2 percent, and reduced receiving

⁵⁶Ibid.; MOU between Interagency Fleet Management System, GSA, and USAAVNC, James W. Wurman, TRADOC, and Donald F. Layfield, GSA, 26 Jun and 19 Jun 1987; memo ATZQ-RPB, Mr. Danny L. Wright for CofS, 8 Apr 88, sub: TRADOC fact sheet (status of GSA vehicles); DF ATZQ-RMA, Lt Col Richard N. Roy, to CofS, 16 Nov 88, sub: management study report on GSA vehicle fleet; historical report, DRM CY 88.

⁵⁷Army Flier, 28 Jan 88; historical report, DOL CY 88.

⁵⁸"Aircraft Maintenance Contract: DABT01-88-C-3000," USAAVNC, Directorate of Contracting, Fort Rucker, Alabama, pp. 1-29, passim; historical report, DOL, CY 88.

workload by up to 34 percent--all with no net increase in the value of inventory.⁸⁰

In March 1988, the USAAVNC requested a change in the UH-1 daily inspection requirement to a fifteen hour/fourteen day daily system and an extension of the 150-hour phase maintenance system to a 300-hour system. The expected cost savings from the adoption of both plans would be over \$3 million per year. On 25 October, AVSCOM approved a limited six-month evaluation of both proposals, and then published the maintenance evaluation plan in November. The data collection was cost prohibitive for Fort Rucker, however, so at a meeting held at HQDA on 5 January 1989, a decision was made to initiate evaluation on 6 February 1989, with AVSCOM absorbing the out-of-target costs.⁸²

The USAAVNC Directorate of Reserve Component Support (DRCS) planned and coordinated logistical support for USAR units in twenty-nine counties in Alabama and forty-one counties in Mississippi during 1988. The DRCS also supported five senior and forty-three junior ROTC units in Alabama, Florida, and Mississippi, and conducted annual supply discipline evaluation at 108 USAR and ROTC units in those three states. The DRCS also maintained property book control over receipt, storage, and issue of supplies, clothing, and equipment for eighty-eight units and activities.⁸¹

H. Evaluation and Standardization

Evaluation and standardization support for the USAAVNC and for aviation units Army-wide was provided by the Directorate of Evaluation and Standardization (DES) at Fort Rucker and by the Directorate of Evaluation and Standardization (DOES) of Fort Eustis. In order to achieve and maintain the highest possible standards during FY 1988, the DES continued to make available to all Army aviators the aviation standardization and training seminars, the branch training teams and the instructor pilot and standardization instructor pilot seminars. All aviation commanders were

⁸⁰"PRIME (Policy for Rucker Inventory Management and Execution): Background, Model Evaluation, Actual Performance," by Art Hutchison, Inventory Research Office, 12 Oct 88; historical report, DOL, CY 88.

⁸²Memo AMSAV-ME, Col Gary D. Johnson for Cdr USAAVNC, 25 Oct 88, sub: 15 hour/14 day and modified UH-1 phased maintenance requirements...; historical report, DOL, CY 88.

⁸¹Historical report, DCRS, CY 88.

directed to further develop the effectiveness of their aircrew training programs (ATPs) and were informed that flight evaluation emphasis would continue to focus on training scenarios based on tactical situations and simulated combat missions incorporating night vision systems and aircraft survivability equipment operating procedures. Other areas of special interest in FY 1988 included the following: command knowledge and management of the ATPs, unit quality control programs, development and execution of training scenarios that incorporated both unit mission and individual requirements, flight crew qualification and selection programs, and aircraft armament systems maintenance.^{e2}

In support of these goals, DES personnel made approximately 275 trips during 1988. Of these, ninety were evaluation and assistance visits made in concert with the USAATCA, and twenty-eight were for seminars and/or branch liaison team visits. The DES provided assistance to reserve as well as active Army units. At the USAAVNC, the DES assessed the effectiveness of the systems approach to training by conducting 4 full-course evaluations, 11 major blocks of instruction within courses, and 324 classroom evaluations. The DES also provided evaluation and standardization support to the USAAVNC and to the branch by processing numerous recommendations for changes to aircraft operators' manuals and checklists, by evaluating programs of instruction, and by providing subject matter experts to monitor combat development projects.

The DOCES conducted a worldwide maintenance test flight evaluator training seminar during December of 1988. Because of funding constraints, only two of the twenty-two scheduled trips were made by DOES during the fourth quarter of 1988.^{e3}

I. Commercial Activities (CA) and Contracting

Early in 1988 Army officials conducted CA cost studies in three USAAVNC organizations; the Directorate of Logistics (DOL), the Directorate of Engineering and Housing (DEH), and the Training Service Center (TSC), a division of the

^{e2}Memo ATZQ-ESE, Maj Gen Ellis D. Parker for distr, 1 Oct 87, sub: DA aviation standardization program and areas of interest for FY 88.

^{e3}Historical reports, DES and USAALS, CY 88. The after action reports of several of the 1988 aviation standardization and training seminars and lists of external taskings for 1988 are in the History Office files.

DPTMSEC. According to the DRM these organizations provided products and services that were available from the private enterprise sector. The purpose of the cost studies was to create the most efficient organization (MEO) possible within the Army. This was the initial step in the process of determining whether it was more efficient and less costly to continue providing these products and services through the Army organizations or to provide them through civilian contractors.⁸⁴

Following the initial CA cost studies, circumstances required that they be reviewed and revised. The conditions which necessitated the revisions were unsubstantiated work loads, the time period (June 1985 to May 1986) of the work loads used in the original study, inconsistencies found by Internal Review and Audit Compliance, and functional managers' requests. The revisions involved thorough reviews and rewrites to ensure that the management studies addressed the most current work load, operating procedures, etc. Study narratives, staffing, and recommendations were reworked in their entirety and received scrutiny comparable to that given to the original studies. Because of missing work load documentation, a new year of work load data was compiled for the entire Supply and Services Division of DOL. Following the development of the MEO, realignment to this optimum structure was initiated in all three of the units studied. The revised MEOs had not been approved at the end of 1988, and no details were available because of their sensitive nature.⁸⁵

For testing purposes, the DEH was reorganized, and its work force was restructured in April 1988 to achieve the most efficient possible level of productivity under Army operation and management. With TRADOC approval, the solicitation of bids from contractors for the performance of DEH functions was delayed from 1 December 1988 to 1 September 1989. It was expected that, should a contract be awarded, DEH would continue to be staffed by a residual force of civil service employees to perform duties not properly delegable to a nongovernmental agency.⁸⁶

During 1988 all DOL employees except those of the Aircraft Logistics Management Division were assigned against

⁸⁴Memo ATZQ-RFM (5-20a), Col Carey E. Williams for distr, 22 Oct 87, sub: MEO implementation--commercial activities; Army Flier, 3 Mar 88; historical report, DRM, CY 88.

⁸⁵Historical report, DRM, CY 88.

⁸⁶Historical report, DEH, CY 88.

the MEO table of distribution and allowance. Temporary appointments relating to commercial activities were extended through 1988. As CA studies neared completion, numerous new job descriptions were required in order to effect changes in position structure included in the MEO. Position classification specialists were involved in the CA studies during all stages, providing position management advice in the earlier stages and classification of job descriptions in the later stages.⁶⁷

With regard to contracting, a total business dollars amount of \$178.8 million was expended during FY 1988. The TRADOC goals for contracts with small disadvantaged businesses and woman-owned businesses were exceeded. One of the major contracts awarded was the cost-plus multiple-incentive aircraft maintenance contract for FY 1989, awarded to DynCorp of Reston, Virginia, for \$83 million. The contract contained four one-year option periods for a total five-year evaluated cost of \$397 million. DynCorp was selected from seven companies which submitted proposals seeking the contract.⁶⁸

A contract for rotary wing flight training services was negotiated and signed in 1988 with Burnside-Ott Aviation Training Center, Inc., with an effective date of 1 January 1989. The total amount of this contract was \$17,765,658. Certain fixed wing training courses were included in the contract.⁶⁹

In 1988, a CA study for hospital housekeeping, Lyster Army Hospital, was completed with the award of a contract on 3 August in the amount of \$274,535.91 to Teltara, Inc. A total of twenty-four bids, including the government's bid, was received. Other contracts signed in 1988 included a security guard contract with Liberty Protective Services, Inc., a custodial services contract with Lanyap Corporation, and a laundry contract with Robertson-Penn, Inc.⁷⁰

⁶⁷Historical report, DCP, CY 88.

⁶⁸Historical report, DOC, CY 88; "Aircraft Maintenance Contract, DABT01-88-C-3000," USSAVNC, Fort Rucker, Ala.

⁶⁹"Rotary Wing Flight Training Services, Contract Number DABT01-89-C-7003," Burnside-Ott Aviation Training Center, Inc and USAAVNC.

⁷⁰Historical report, DOC, CY 88. Copies of the contracts mentioned are in the History Office files.

J. Construction and Physical Plant Improvement

Major construction projects begun earlier and completed in 1988 included three new stagefields for a total cost of approximately \$15 million; a nonappropriated fund (NAF) financed guest house, \$1.4 million; repairs and alterations to existing unaccompanied officer quarters (UOQ), \$1.3 million; upgrade of Skelly Stagefield, \$.8 million; repairs to the 4500 block, \$1.2 million; and a new UOQ with a capacity for 150 persons, \$5 million. Major uncompleted projects begun in 1988 or earlier consisted of the aerial gunnery range, with an estimated cost of \$15.7 million, and an estimated completion date of January 1990; and the Army Aviation Museum (see Section K, below). A major project approved but not begun in 1988 was an NAF financed youth center with an appropriation of \$1.7 million, with \$1.2 million funded locally.⁷¹

Some very important construction and physical plant improvement projects were achieved in support of both training and quality of life at Fort Rucker by the 46th Engineer Battalion of the 1st Aviation Brigade. In support of flight training, for example, the 46th Engineers upgraded Guthrie Airfield to accommodate AH-64s of the newly formed FORSCOM Apache regiment at Fort Rucker, added new UH-60 parking pads and upgraded the ILS tower at Cairns Army Airfield, and effected other improvements at various landing facilities. Other projects included site clearing for the new museum and construction of a facility for range maintenance operations and of a running track for AIT students. The 46th Engineers also made several improvements to the facilities of the Air Assault School, including rebuilding the rappelling tower, which helped prepare the engineers for their mission in Honduras (Chapter II, above) shortly afterwards. In the course of their own training during 1988, the engineers also performed numerous construction projects in support of improving the quality of life on and around Fort Rucker.⁷²

In 1988, the construction of the tank maneuver area was completed with the assistance of the Alabama National Guard. Also, the eastern sector of the aerial gunnery range was

⁷¹"Area Engineer Office: Status of Construction," 15 Jan 89; "Status of Corps of Engineers Contracts," 23 May and 21 June 89; historical report, DEH, CY 88.

⁷²Historical report, 1st Bde, CY 88; Army Flier, 23 Jun 88. Copies of construction directives and/or project acceptance certificates relating to most of the above-described projects are in the History Office files.

completed, and the installation of the remote target system at that range was begun in November 1988.⁷³

K. U.S. Army Aviation Museum

The mission of the U.S. Army Aviation Museum was to collect, restore, preserve, and exhibit Army Aviation aircraft and to serve as the DA repository for Army Aviation artifacts, documents, and other items relating to the role of Army Aviation from 1941 to the present. In addition to supporting the training and leader development programs at the USAAVNC by exhibiting artifacts and interpreting the history of Army Aviation, the museum hosted thousands of other visitors ranging from school children to VIPs. There were a total of 101,001 visitors during 1988. During the year the staff increased from five to eight permanent positions and also consisted of several temporary positions. A portion of Building 6013 was reconstructed to comply with Army regulations concerning proper temperature and humidity conditions for storage of Museum artifacts. Thirty-three items were donated or transferred to the museum during the year. These ranged from aircraft (including a TH-55 Osage, an AH-1G Cobra, and a TG-3 Glider) to small personal items.⁷⁴

After almost eight years of fund-raising efforts spearheaded by the Army Aviation Museum Foundation, \$5 million had been raised through contributions and federal government matching funds before the end of 1987. Early in 1988 the funds were turned over to the Corps of Engineers, and a decision was made to negotiate a construction contract with W. M. Marable, Inc., of Tuskegee, Alabama, through the 8A program for disadvantaged minority contractors, administered by the Small Business Administration. Two construction companies of Dothan, Alabama, filed formal protests with the Government Accounting Office (GAO) against the awarding of the contract to Marable without giving local contractors an opportunity to submit bids, but negotiations between the Corps of Engineers and Marable on various aspects of the project continued. In early March the GAO dismissed the protests, and the contract with Marable was signed on 11 March. The formal ground-breaking

⁷³Historical report, DPTMSEC, CY 88.

⁷⁴Historical report, DPCA, CY 88.

ceremony was held on 28 March, and construction was scheduled to be completed by September of 1989.⁷⁵

In recognition of the role of Congressman William L. Dickinson in obtaining federal matching funds for the museum and of his efforts on behalf of the Army and Army Aviation, the Army Aviation Museum Foundation and the commanding general of the USSAVNC requested that an exception be made to the Army regulation prohibiting the naming of public building for living persons. The secretary of the Army acceded to this request in June of 1988, and the museum was slated to be named for the Alabama congressman.⁷⁶

L. Recreation, Morale, Religion

A wide range of recreational, personal, and morale support was provided to Fort Rucker personnel and their families through the activities of several agencies operating under the supervisory authority of the assistant director for community and family activities of the Directorate of Personnel and Community Activities (DPCA). These agencies consisted of the Financial Management Division, the Community Operations Division, the Community Recreation Division, the Services Division, the Family Support Division, and the Alcohol and Drug Abuse Division. The activities and services provided by these agencies included the various recreational activities on post, physical fitness facilities, recreational facilities at Lake Tholocco, the campground at Lake Eufaula, tour and travel services, package beverage sales (to be transferred to the Army and Air Force Exchange Service (AAFES) in March 1989 in accordance with an agreement signed in October 1988), financial and personal counseling, youth activities, and alcohol and drug abuse testing and counseling.

Another major personnel support activity, the Fort Rucker Dependent Schools, provided free public education to dependent children in grades K through 6 as well as to the four-year old handicapped children of military personnel

⁷⁵Ltr, Richard J. Saliba to GAO 10 Feb 88, sub: Army Aviation Museum; Dothan Eagle, 11, 12, 19 Feb, and 5 Mar 88; Enterprise Ledger, 11 Feb and 11 Mar 88; Montgomery Advertiser 15 and 29 Mar 88; Army Flier, 31 Mar and 4 Aug 88.

⁷⁶Minutes of meeting of Board of Directors of Army Aviation Museum Foundation, E. Ray Fitzgerald, secretary, 8 Dec 87; memo ATZQ-GC (340-d); Maj Gen Ellis D. Parker for Cdr USTAPA, Casualty and Memorial Affairs Center, sub: naming of United States Army Aviation Museum; ltr, Maj Gen Charles E. Dominy, to Senator Richard Shelby, 17 Jun 88.

residing on Fort Rucker. In 1988 the Schoolwide Enrichment Model began serving high achieving students in grades 2 to 6, four-year old children who were developmentally delayed were provided speech services at the elementary school, new playground equipment was installed in the primary school, and extensive remodeling was effected at the elementary school. Also, computer assisted instruction was expanded so that there were two or more computers in each classroom, teachers in grades 2, 4, and 5 were trained to fully implement the Schoolwide Enrichment Model, and the clinical supervision approach was initiated to assist teachers in selecting the appropriate teaching strategies. Student achievement scores continued to be at or above the national average in all areas tested.⁷⁷

Several types of morale support were provided in 1988 by the 1st Bde. The Spouse Day Course, continued to be a popular and useful indoctrination program. Also, the 98th Army Band, attached to the 1st Battalion, 10th Aviation Regiment (1-10th), of the 1st Bde provided morale support by providing highly spirited and motivational music at 213 ceremonies. The band gave 4 post-wide concerts and 111 small ensemble/combo performances. The band also provided bugler support for 255 funerals and marched in 24 parades and gave 19 performances in the civilian community.⁷⁸

The Chaplain Activity Office (CAO) personnel provided the religious programs (including worship services, weddings, baptisms, and funerals) ordinarily available in a civilian community of comparable size. Services were conducted for Catholic, Protestant, Lutheran, and Jewish personnel. Masses and Spanish Bible Studies were conducted for Spanish speaking Catholics and Protestants. The CAO also met the religious, spiritual, social, and morale needs of the personnel of the Fort Rucker community by conducting programs in parenting skills, marriage preparation, marriage enrichment, stress and family preparations for togetherness, individual counseling, and retreats and outings. The CAO sponsored around a dozen special events, including the Easter Sunrise Service, the Post Revival, and the Monthly Prayer Breakfast Program.⁷⁹

M. Safety, Security, and Legal Services

With regard to safety, 1988 was the best year yet, both

⁷⁷Historical report, DPCA, CY 88.

⁷⁸Historical input, 1st Bde, CY 88.

⁷⁹Historical report, CAO, CY 88.

for the USAAVNC and for Army Aviation as a whole. It was the first year ever that Army Aviation had fewer than two class A accidents per 100,000 flying hours. Furthermore, the safety record set in 1988 was the third successive annual record, which demonstrated a steady and constant improvement. For the USAAVNC specifically, 1988 was the first year on record, insofar as can be determined, without a single class A accident charged against Fort Rucker. Finally, 1988 was also the safest year ever with regard to a combined total of all USAAVNC accidents of classes A, B, and C.⁸⁰

In an MOA dated 8 September 1988, the U.S. Army Safety Center (USASC) and ARIARDA joined forces to conduct safety research projects. Among the various areas of cooperation, ARIARDA provided assistance in revising the human factors portion of the U.S. Army Aviation Safety Officers Course and in adding a section on air crew coordination and communication. ARIARDA also provided technical management of all research and development work units and gave USASC personnel periodic informational briefings and reports on the progress of on-going research and development activities.⁸¹

The Fort Rucker Resident Agency, Third Region, USACIDC provided support to the USAAVNC in the investigation of serious crimes committed by Army personnel and against the Army on Fort Rucker and in the surrounding region. Statistically, the workload of the Fort Rucker Resident Agency increased dramatically over that of 1987. There was a 236 percent increase in the area of drug suppression investigations and a 24 percent increase in economic crime investigations (fraud, waste, and abuse). The investigation workload for general crimes remained constant, but the increase in other areas required a 38 percent decrease in the conduct of crime prevention surveys.⁸²

The post security functions ordinarily provided by a civilian contractor were provided by the soldiers of A Company, Military Police Activity (MPA), during an interim period beginning on 1 October, following the expiration of

⁸⁰Historical report, Safety Office, CY 88; "Class A, B, and C Accident Rates," a set of charts prepared by the Safety Office and submitted with CY 88 historical report; notes on interview by author with Maj Gen Ellis D. Parker, 29 Dec 88.

⁸¹Historical report, ARIARDA, CY 88.

⁸²Historical report, Fort Rucker Resident Agency, Third Region, USACIDC, CY 88.

the contract held by Hyde Security Services, Inc. In addition to its normal traffic and other responsibilities, the MPA took on gate guard duty and roving patrol functions at the airfields and ammunition supply points. The additional duties required the MPA to change from eight to twelve-hour shifts. There were no serious criminal incidents which resulted in loss of life on Fort Rucker in 1988. The provost marshal during 1988 was Lt. Col. James M. Craven and the Operations Officer was Maj. Paul E. Goldsmith. The MPA maintained an average of eighty-three military policemen and around twenty civilians.^{e3}

Another aspect of security was that provided by the Emergency Operations Center (EOC) of the DPTMSEC. In January of 1988, Fort Rucker acquired a new emergency warning system. The new system had three main parts: (1) a television preempt system which could interrupt all cable television on post to provide warnings; (2) a siren system with public address and all-clear signaling capabilities; and (3) a telephone hotline system with twenty-eight telephones located in strategic offices on post.^{e4} The NBC Branch of DPTMSEC provided a nucleus for an operational NBC element in the EOC, monitored the development and operational testing of NBC-related equipment, and participated as an evaluator of NBC readiness.^{e5}

In 1988, the Security Division of the DPTMSEC processed 178 requests for personnel security investigations; conducted 5,434 local records checks; validated or issued 4,339 security clearances; denied, revoked, or suspended security clearances of 56 military and civilian personnel; conducted 41 security inspections, cleared 16 classified and unclassified documents for release to industrial firms, prepared 100 replies to foreign visit requests in clearing 428 foreign military and civilian representatives to visit Fort Rucker, presented briefings to 4,312 personnel, and prepared 217 automated systems for processing. The "Terrorism Counteraction Plan," Part 14 of the USAAVNC's "Peacetime Contingency Plan" was published in 1988.^{e6}

Detachment 9, 5th Weather Squadron, DPTMSEC the USAAVNC was kept advised of weather conditions which could affect

^{e3}Army Flier, 20 Oct 88; historical report, 1st Bde, CY 88; historical report, MPA, CY 88.

^{e4}Army Flier, 28 Jan 88.

^{e5}Historical report, DPTMSEC, CY 88.

^{e6}Historical report, DPTMSEC, CY 88; "Terrorism Counteraction Plan," USAAVNC, Apr 88.

property and training. In 1988 Detachment 9 initiated testing and preparation for acquisition of several new weather detection systems. It began testing and/or investigating the benefits of a lightning detection sensor, a lightning detection network with high resolution sensors, and automated weather observing equipment for possible use at the basefields. In 1988 the detachment undertook extensive preparations for two major equipment acquisitions that would modernize station operations in the detection and surveillance of severe storms. "Severe Weather," Part 9 of Fort Rucker's "Peacetime Contingency Plans" was published in 1988.^{e7}

During 1988, the Office of the Staff Judge Advocate (OSJA) provided legal services for the USAAVNC and the installation. The Military Justice Division of the OSJA tried eighteen general, nine special, and six summary courts-martial; served as recorders in five administrative separation boards, and assisted the Youth Assistance Program in resolving fifteen offenses involving juveniles. The Claims Division processed 1,273 claims and paid claimants \$823,407.00. Fifty federal tort claims were paid amounting to \$42,799.99. The Legal Assistance Division provided counseling for almost 3,000 clients and prepared 1,242 wills and 5,142 other legal documents. This division also provided forty hours of instruction to seventy-five unit tax advisors and assisted hundreds of personnel with tax returns. Electronic tax filing became available in 1988 for the first time. The Administrative Law Division researched and rendered approximately seven hundred written legal opinions and answered over one thousand telephonic inquiries. This division also reviewed and processed 235 contract actions and reviewed 75 final decision letters and other administrative actions. The OSJA also provided 404 hours of academic instruction in support of the USAAVNC and its programs. The topics covered included law of war, military justice, standards of conduct, administrative law, and legal assistance.^{e8}

N. Medical and Dental Support

The health care support provided to Fort Rucker was enhanced in 1988 through the implementation in early May of the Military-Civilian Health Services Partnership Program. Under this program, civilian practitioners worked in military facilities under an agreement with the Army. As a

^{e7}Historical report, DPTMSEC, CY 88; "Severe Weather," USAAVNC, Feb 88.

^{e8}Historical report, OSJA, CY 88.

result of the implementation of the program, the Lyster Army Hospital staff came to be augmented with thirteen health care professionals in the following specialties: general practice, dermatology, obstetrics and gynecology, anesthesia, neurology, and urology. Consequently, services were expanded and, in some cases, reestablished. The workload in the Radiology, Pathology, and Histology departments/sections increased considerably during 1988.

The Pharmacy Service began operating a refill pharmacy located in the PX mall on 1 August. Also on 1 August, community health nurses and staff implemented a preventive medical health risk appraisal program. Using limited resources, the staff had processed 650 health risk appraisals as of 3 December 1988. A private building on post was targeted as a future site for full-time health risk appraisal services. The Nutrition Care Division continued to support the expanded mission of diet therapy for patients with hypercholesterolemia and to educate the post population on proper diet to reduce risks of diseases. The Air Ambulance Division continued to participate in the Military Assistance to Safety and Traffic Program (MAST) with twenty road-side rescues and thirty-seven hospital transfers.

In 1988 the U.S. Army Aeromedical Activity (USAAMA) continued its worldwide mission as a central medical review authority for recommending a soldier's fitness for flying duty. The USAAMA personnel educated and supported flight surgeons in the field and corresponded Army-wide on aeromedical issues. The USAAMA was involved in an continuing program of modernizing its operations by automation, supported by mainframe computers at the U.S. Army Aeromedical Research Laboratory (USAARL). The flight surgeons office automation system was designed to reduce administrative error and speed the processing of flying duty medical examinations.⁸⁸

As a result of the continuing spread of human immunodeficiency virus (HIV), an Army-wide policy regarding HIV and flight status was established. All personnel who were on flight status (i.e., who were required to meet class 1A, 2, or 3 medical standards) who were found to be HIV-positive would immediately be medically restricted from flying duty. The action would possibly have to be initiated by the unit commander since the flight surgeon would not necessarily have been notified of an HIV-positive patient. The medical restriction was to be temporary, but would remain in effect pending review of each individual case by the commander of the U.S. Army Aeromedical Center and final

⁸⁸Historical report, USAAMC, CY 88.

action by the waiver authority as specified in Army regulations.⁹⁰

An important type of medically-related support was provided by the Alcohol and Drug Abuse Division of DPCA. In 1988 this division processed 16,741 urinalysis specimens in support of the installation's bio-chemical testing program. The very low percentage of positive results (less than one-half percent) was indicative of the effectiveness of the USAAVNC's past drug-abuse prevention efforts. During the year, the division provided rehabilitative services for 341 military and civilian personnel and educational and awareness training services to over 4,000 persons on various aspects of alcohol and drug abuse. The annual holiday campaign to deter alcohol and drug abuse during the months of October to December was waged again, and it was apparently successful as there were no serious incidents during the period.⁹¹

O. Volunteer Activities

Several major charitable and volunteer efforts should be mentioned here as having involved and/or benefited all of Fort Rucker. The post thrift ship was completely remodeled under the auspices of the Officers Wives Club and opened under new management in 1988. Also, the volunteer program operated by Army Community Services of the DPCA was estimated to have managed a volunteer effort valued at around \$2 million. The 1988 Christmas Bazaar was also very successful.⁹² The 1988 Combined Federal Campaign at Fort Rucker was the most successful ever and was very important to the quality of life on the post because so many activities had come to be supported by non-appropriated funds and were supported in part by the proceeds of this fund raising drive.⁹³

Important voluntary mission support was provided in 1988 through the post "U-Do-It" program, through which materials were provided for individuals who wanted to improve their work environment by remodeling or

⁹⁰"Aviation Branch Update," 15 Aug 88.

⁹¹Historical report, DPCA, CY 88.

⁹²Notes on interview by author with Col E. Kirby Lawson III, GC, 22 Dec 88.

⁹³Notes on interview by author with Col Willis R. Bunting, CofS, USAAVNC, 28 Dec 88; historical report, Department of Gunnery and Flight Systems (DGFS), CY 88.

refurbishing. The lack of an ATC tower for Brown Stagefield, when it was otherwise ready for use early in the year, led the personnel of the 1st Air Traffic Control Battalion of the ATB to obtain the necessary materials and restore an old tower that had been donated to the museum, and use it at the stagefield until a fixed tower could be built. The same unit also reconstructed their office space at the new stagefield by installing interior walls and dropped ceilings. The estimated contract cost of the office modifications alone was between \$35,000 and \$40,000, but, through the U-Do-It program, it cost only \$5,000.⁹⁴

Some of the most outstanding volunteer and charitable work by Fort Rucker personnel was that of the soldiers of the 1st Bde. Soldiers of all ranks and at all stages of their rigorous training programs not only contributed money, but also their valuable time to all kinds of voluntary and charitable causes. These included but were by no means limited to the Red Cross, the Aviation Museum, the Boy Scouts, Operation Santa Claus, the Alabama Special Olympics, Army Emergency Relief, and repair and construction projects at several area schools and playgrounds.⁹⁵

In 1988 Fort Rucker personnel increased participation in the Army savings bond campaign by 12 percent. Although that was only about half of Fort Rucker's goal, it exceeded the 10 percent goal set by TRADOC.⁹⁶

In 1988 the mayoral program, which was already in effect at several other TRADOC installations was implemented at Fort Rucker. The purpose of the program was to permit family members who lived in government quarters to participate in decisions affecting their neighborhoods and quarters. Each housing area elected a mayor, vice mayor and several council members to represent the interest of the family members. The program was supported administratively and logistically by the DPCA. Several Fort Rucker officials believed that the improvements in the appearance of the post brought about through the mayoral program was an important factor in the winning of the TRADOC Installation of Excellence Award in 1988.⁹⁷

⁹⁴News release 88/81/jdk, USAAVNC PAO, 7 Mar 88; Army Flier, 11 Feb 88.

⁹⁵Historical report, 1st Bde, CY 88.

⁹⁶Army Flier, 30 Jun 88.

⁹⁷Interview by author with Col E. Kirby Lawson, Fort Rucker Garrison Commander, 22 Dec 88; Army Flier, 21 Apr 88.

Finally, another Army Aviation symbol came into being in 1988 as a result of a contest sponsored by the Officers Wives Club, which sponsored a contest for the design of an Army Aviation scarf. The winning design, selected by a broadly-based board of judges was submitted by Karen Smith, whose husband was assigned to the DAP at the time of the contest.^{ee}

^{ee}Army Flier, 23 Mar 89.

APPENDIX I

USAAVNC ORGANIZATIONS

A. Command Group

Some key command group positions and personnel not mentioned in Chapter I include the following: deputies to the chief of staff--Lt. Col. John C. Tallas, Lt. Col. Edward D. Chandler from January to June, and Lt. Col. Douglas B. Batson from June through December; assistant garrison commander--Lt. Col. Paul D. Spangler; garrison command sergeant major--Sgt. Maj. Robert F. Dyer until July and Sgt. Maj. John D. Rook from July through December; protocol officer--Capt. Pamela J. Champion through March, Capt. Benjamin H. Williams III from April through July, and Capt. Barry E. Bazemore for the remainder of the year; and secretary general staff (SGS)--Capt. Roger W. Buterbaugh until February and Capt. Kim A. Minkinow for the remainder of the year.¹

B. 1st Aviation Brigade (Air Assault) (1st Bde)

During 1988 the 1st Aviation Brigade continued with its principal missions of providing quality training and ensuring the combat readiness of its assigned FORSCOM units. The brigade also provided command and control for reserve mobilization units. The brigade commander in 1988 was Col. Moses Erkins; the deputy commanders were Lt. Col. Lee A. Merchen from January to October and Lt. Col. Lawrence R. Retta for the remainder of the year; and the brigade sergeant major was Cmd. Sgt. Maj. Birdell Sturgies. The 1st Aviation Brigade consisted of three training battalions and two FORSCOM battalions. The training battalions and their commanders were as follows: 1st Battalion, 10th Aviation Regiment--Lt. Col. Lawrence R. Retta from January to October, and Lt. Col. Ralph J. W. K. Hiatt from October through December; 1st Battalion, 13th Aviation Regiment--Lt. Col. Herman S. Heath from January to July, and Lt. Col. Ronald P. Dale for the remainder of the year; and 1st Battalion, 145th Aviation Regiment--Lt. Col. Michael S. Byington. The FORSCOM battalions and their commanders were as follows: 46th Engineer Battalion (Combat) (Heavy)--Lt. Col. John F. Sheffey from January to July, and Lt. Col. David K. Phillips for the remainder of the year; and the 2nd Battalion, 229th Attack Helicopter Battalion--Lt. Col. Larry R. Sloan from January to July, and Lt. Col. Michael C. Pascoe from July through December. The permanent party

¹Historical reports, SGS and Protocol, CY 88.

personnel at the beginning of the year totaled 2,804, of which 71 were civilians; and at the end of the year, of 3,262, of which 62 were civilians. In the TRADOC's Installation of Excellence competition, the dining facility of the 1st Battalion, 13th Aviation Regiment, of the 1st Brigade was named best dining facility in TRADOC.²

C. Aviation Training Brigade (ATB)

The principal missions of the ATB were to give flight instruction and training at initial entry and advanced levels and to provide air traffic control services to the USAAVNC and Fort Rucker. The commander of ATB during 1988 was Col. Clinton B. Boyd, and the deputy commander was Lt. Col. Robert J. Scurzi. The command sergeant major until 18 April was Cmd. Sgt. Maj. Joseph Davis, and, for the remainder of the year, Cmd. Sgt. Maj. Tony R. Faulkner. The four training battalions attached to the ATB in 1988 and their commanders were as follows: 1st Battalion, 11th Aviation Regiment--Lt. Col. David C. Gwin until 29 June and Lt. Col. Charles B. Jones for the remainder of the year; 1st Battalion, 14th Aviation Regiment--Lt. Col. Daniel J. Boccolucci; 1st Battalion, 212th Aviation Regiment--Lt. Col. James A. Orhood until 6 July and Lt. Col. Steven F. Rausch for the remainder of the year; 1st Battalion, 223d Aviation Regiment--Lt. Col. Edward A. Just until 14 January, and Lt. Col. Ramond L. Schaefer, from then until the end of the year. During 1988, the 1-212th, which provided flight training in the UH-1 aircraft, logged a total of 87,711 flight hours, during the course of which the battalion completed 200,000 flight hours without a class A, B, or C accident.³

D. Directorate of Aviation Proponency (DAP)

The mission of the DAP was to administer several mission support functions, including those of the school secretary and those relating to Aviation Branch personnel proponency. The director of DAP and the school secretary was Col. Joel H. Hinson, and the deputy director and assistant school secretary was Maj. (P) William Smith from January until April, Capt. Langford Fowler from May through June, and Lt. Col. Colon Keel for the remainder of the year. The divisions of DAP and their respective heads were as follows: Office of Personnel Systems--Maj. Robert S.

²Historical Report, 1st Bde, CY 88; Army Flier, 13 Oct 88.

³Historical report, ATB, CY 88; Army Flier, 23 Mar 88.

Tekell until 1 August and Maj. Stephen D. Mundt from then through December; Academic Records Division--Ms. Betty Webb; Aviation Technical Library--Ms. Beverly Hall; Aviation Learning Center--CWO4 Joseph A. DeCurtis; International Military Student Office--Maj. Michael W. Jackson; Aviation Digest--Ms. Patricia S. Kitchell; and Training Support Division--Mr. Donald Johnson. Also, the Army Aviation Branch historian was under the administrative supervision of DAP; the historian position was filled by Dr. Herbert P. LePore during January and February, and by Dr. John W. Kitchens from May through December.⁴

E. Directorate of Plans, Training, Mobilization, and Security (DPTMSEC)

The director of DPTMSEC in 1988 was Col. James B. Sauer, and the deputy director was Mr. Clyde S. Tullos. The directorate was composed of nine divisions. These divisions with their respective heads in 1988 were as follows: Resource Management--Mr. Charles A. Welch; Aviation--Capt. William J. Coughlin from January through May, and Maj. Manuel Andino from July through December; Resident Training Management--Ms. Mary Brown; Training and Training Service--Maj. Lloyd Carr from January through April, and Capt. (P) Forman Moore from April through December; Plans, Operations, and Mobilization--Maj. Michael F. Krejci; Range--Capt. Israel Irizarry, Jr., from October through December; Security--Mr. Marion Hill; Training Service Center--Ms. Jane Preston; 9th Detachment, 5th Weather Squadron--Maj. William Market from January to June, and Maj. Douglas Pearson for the remainder of the year. The major organizational change in the directorate during 1988 was that the Range Branch of the Training and Training Services Division was redesignated as the Range Division with the responsibility for coordinating the use of the Fort Rucker range complex.⁵

F. Directorate of Evaluation and Standardization (DES)

The mission of the DES in 1988 was to serve as the proponent agent for the Army Aviation standardization program; to evaluate Army-wide implementation of the program as executive agent for the Army Deputy Chief of Staff for Operations and Plans (DCSOPS); to collect and analyze training effectiveness data concerning unit resident and nonresident training programs; and to provide feedback to the training and combat development process. The directors

⁴Historical report, DAP, CY 88.

⁵Historical report, DPTMSEC, CY 88.

of DES in 1988 were Col. John C. Shaw, Jr, from January to June and Col. Michael H. Abbott from June through December. The deputy directors were Lt. Col. William B. Bauer from January to June and Lt. Col. Immanuel C. Sieving III from late June through December. The three divisions of DES and their respective heads were as follows: Flight Standardization Division--Lt. Col. Immanuel C. Sieving III from January through February, and Lt. Col. William B. Dixon from February through December; Evaluation Division--Capt. (P) William P. Gerhardt from January to August, and Capt. (P) Robert C. Putnam from August through December; and Operations and Resource Management Division--Lt. Col. Immanuel C. Sieving III from February through June, and Lt. Col. Michael D. Weaver from September through December.⁶

G. Directorate of Logistics (DOL)

The DOL planned and directed the installation logistic support of the USAAVNC and of tenant activities at Fort Rucker. This support included supply, transportation, equipment maintenance, aircraft maintenance and quality assurance, laundry and dry cleaning, food services, and mortuary services. The directorate also planned and provided installation logistical support for mobilization and other contingencies. The director of DOL in 1988 was Col. Danny A. Young, the deputy director, Mr. Perry S. Grantham, and the NCOIC, Sgt. Maj. Clyde L. Floyd. The six divisions into which DOL was divided and the chief of each division in 1988 were as follows: Resource Management--Mr. Archie Fondren; Aircraft Logistics Management--Lt. Col. Wayne L. Dandridge; Maintenance Division--Mr. Carl E. Swanstrom, Jr., Plans and Operations--Maj. David P. Fultz from January through August, and Capt. Kathy Reynolds from September through December; Supply and Services--Mr. James Brackin from January through September, and Mr. Paul Treadaway from October through December; and Transportation Division--Mr. Daniel S. Tully, Jr. The DOL began the year with 382 civilians and 57 military personnel, and ended the year with 336 civilians and 70 military personnel. The DOL consistently exceeded the established goals and objectives of the Fort Rucker Affirmative Action Program.⁷

H. Directorate of Engineering and Housing (DEH)

The mission of the DEH in 1988 was to operate and

⁶Historical report, DES, CY 88.

⁷Historical report, DOL, CY 88.

maintain the installation's facilities and manage its natural resources. These responsibilities extended to remote sites, sub-installations, and support for reserve activities throughout a large geographical area of Alabama, Florida, Georgia, and Mississippi. The director of DEH in 1988 was Lt. Col. Bobby L. Holland, and the deputy director was Mr. Frank O. White. As a result of the commercial activities cost study of DEH (see Chapter VI, above), the directorate was restructured in April to enhance its efficiency. Among other things, this restructuring reduced the number of DEH divisions from ten to six. The six divisions of the reorganized directorate and the division heads in 1988 were as follows: Commercial Activities--Mrs. Kathryn Cooper; Engineering and Resource Management--Mr. Bobby Skipper from January through March and Mr. Don Cooper from April through December; Engineer Plans and Services--Mr. Julian F. Botts; Operations and Maintenance--Mr. Ronald Leatherwood from January to June and Mr. Joseph B. Hayes for the remainder of the year; Fire Protection--Mr. Jerry B. Gramont; and Housing--Miss Patricia Sales.^a

I. Directorate of Training and Doctrine (DOTD)

The major functions of DOTD included collective and individual training developments relative to aviation doctrine, job and task analysis, and staff management of design and development of resident and extension training and doctrinal literature. Additionally, DOTD served as the TRADOC proponent and user representative for the acquisition of new simulators and training devices for existing and emerging aviation systems. DOTD also performed resident training and development of the USAAVNC staff and faculty. The director of DOTD in 1988 was Col. Floyd E. Edwards, and the deputy directors were Lt. Col. LeRoy D. Gould from 1 January to 7 August and Lt. Col. Gus M. Meuli for the remainder of the year.

In 1988 the DOTD consisted of four divisions. These divisions with their respective chiefs were as follows: New Systems Training and Simulator Acquisition--Lt. Col. Michael W. Cupples; Individual and Unit Training--Maj. Gary G. Lynde from January to July and Lt. Col. Lee A. Merchen from October through December; Staff and Faculty Development--Mr. Charles A. Thomley; and Doctrinal Literature Management--Maj. Michael Brown. At the beginning of the year, the directorate had a total strength of 209 (87 military and 122

^aHistorical report, DEH, FY 88.

civilians) and at the end of the year, 197 (88 military and 109 civilians).⁹

J. Directorate of Personnel and Community Activities (DPCA)

The mission of the DPCA was to establish policies, procedures, and practices governing various aspects of personnel management and installation morale, welfare, and recreation activities. The directorate also exercised staff supervision over the Army and Air Force Exchange Service (AAFES) and the Fort Rucker Dependent Schools, exercised administrative control over private organizations, and served as program director for numerous activities of the installation. The director of DPCA in 1988 was Col Frederick I. Steiner, and the NCOIC was M. Sgt. Alan F. Larson.

The subordinate offices, divisions, and units in DPCA and their respective heads in 1988 were as follows: Resource Management Office--Ms. Glenda J. Himes; Equal Opportunity Office--M. Sgt. Jerry W. Barger from January through February and Sfc. Devin C. Burbank for the remainder of the year; Army Aviation Museum--Mr. Thomas J. Sabiston; Office of Community and Family Activities--Mr. Evan E. Smith, Jr.; Community Recreation--J. Wade Henderson; Alcohol and Drug Control Office--Mr. Ronald R. Sorrells; Clinic--Mr. James H. Elmore; Office of Adjutant General--Col. Leon B. Blackwell, Jr. from January through June and Lt. Col. John T. Planchon from July through December; Personnel Service Center--Maj. Paul B. Funding in January and Maj. Roger W. Buterbaugh from February through December; Adjutant General Sgt. Maj.--Sgt. Maj. William Gillard from January to October and Sgt. Maj. Eddie H. Farmer for the remainder of the year; and Fort Rucker Dependent Schools--Dr. Linda C. Godsey. The strength figures for DPCA (including nonappropriated fund employees) were 772 at the beginning of the year and 671 at the end of the year. All except around 85 persons were civilians.¹⁰

K. U.S. Army Aviation Logistics School (USAALS)

The mission of the USAALS was to develop and conduct aviation logistics training for active Army and reserve component personnel; support and evaluate aviation logistics training in the field; conduct and guide the development of logistics support, concepts, doctrine, materiel, and

⁹Historical report, DOTD, CY 88.

¹⁰Historical report, DPCA, CY 88.

organizations for Army Aviation; perform proponentry functions for areas of concentration 15D and 151A and for career management field 67; and support the Army Aviation branch chief and the commander of the U.S. Army Logistics Center. As a result of the USAAVNC's assuming command and control of the USAALS, effective 1 October 1988, USAALS became a non-supporting tenant activity at Fort Eustis, Virginia. Throughout the fourth quarter of 1988 Col. Thomas M. Walker served as assistant commandant of the USAALS, Mr. Rodney J. Schulz as deputy assistant commandant, and Sgt. Maj. Jerry Pittman as the USAALS sergeant major.

The USAALS consisted of three directorates, four training departments, and two offices. During the period from 1 October through 31 December 1988, these units with their respective directors or chiefs were as follows: Program Management Office--Lt. Col. Zalph H. Andrews, Jr.; Department of Aviation Trades Training--Lt. Col. Bobby W. Williamson; Department of Advanced Aviation Logistics Training--Sgt. Maj. Ray J. Taylor; Department of Attack Helicopter Training--Lt. Col. Philip Manuel; Directorate of Evaluation and Standardization--Lt. Col. John Davenport; Personnel Proponentry Office--Maj. Jan Payne to 25 November and Maj. Guy A. Wills from then through December; Department of Aviation Systems Training--Lt. Col. John H Acock, Jr.; Directorate of Training and Doctrine--Col. Robert Terry; and Directorate of Combat Developments--Lt. Col. Thomas P. Cole.

The third annual Aviation Logistics and Maintenance Commanders Conference was held from 17 through 21 October 1988. The participants addressed a wide range of issues in the areas of proponentry, training, doctrine, organization, equipment and maintenance management. The USAALS Birthday Ball was held on 21 October, in conjunction with the conference.¹¹

L. Department of Gunnery and Flight Systems (DGFS)

The DGFS provided aviation academic and systems training, cockpit and procedural training, and flight simulator training for students, staff, faculty, and other Army aviators. During 1988 the department implemented academic training in support of thirty-seven programs of instruction (POIs) and was the proponent for thirteen of these POIs as well as for aviation weapons and gunnery doctrine.

¹¹Historical report, USAALS, 4th quarter, CY 88; "Aviation Logistics and Maintenance Commanders Conference, 17-21 October 1988" (conference program).

The director of DGFS in 1988 was Col. George C. Hollwedel, Jr, and the deputy directors were Lt. Col. Robert E. Harry from January to November and Lt. Col. Clarence L. Belinge for the remainder of the year. The department sergeant major was Sgt. Maj. Frederick D. Haney.

In 1988, the DGFS consisted of three training divisions. These divisions with their respective chiefs were as follows: Aviation--Lt. Col. John W. Wall from January to June and Maj. Walton C. Carrol from June through December; Flight Simulator--Capt. Dale S. Weiler; Weapons and Gunnery--Lt. Col. John H. Bonn. From March of 1987 until October 1988 the Multi-Track Implementation Division operated within the DGFS with the mission of coordinating and facilitating all the issues concerning multitrack implementation. When this division was dissolved in October, the Aviation Division became the proponent for Multitrack.

At the beginning of 1988, there were 240 personnel (125 military and 115 civilians) employed in DGFS. At the end of the year, with a total strength of 247, the civilians were still at 115, and the military personnel had increased to 132.¹²

M. Department of Combined Arms Tactics (DCAT)

During 1988 the DCAT continued with proponent responsibility for assigned professional development courses and continued to provide subject matter expertise in the development, review, and fielding of training publications, tests, and other literature. The department also continued to provide training teams for field and other off-post training. The director of DCAT from January through July was Col. Ernest F. Estes, and, from August through December, Col. Malvin L. Handy. In October 1988, the assistant director was Lt. Col. Green, and the division chiefs were as follows: Combined Arms--Maj. Anton; Command Leadership--Maj. Prater; Doctrine--Lt. Col. Smith. To enhance the fun aspect of becoming tactically proficient and knowledgeable, DCAT obtained funding to produce a threat trivia game. The game was carefully examined for accuracy and has been scheduled to be classified as a training aid.¹³

¹²Historical report, DGFS, CY 88.

¹³Historical report, DCAT, CY 88.

N. Department of Enlisted Training (DOET)

The DOET conducted academic training for the USAAVNC in support of flight maintenance, flight operations, air traffic control, and aeroscout observer instruction. The director of DOET in 1988 was Cmd. Sgt. Maj. Hartwell B. Wilson, and the deputy director was Sgt. Maj. Billy R. Smith. The Department consisted of two training divisions. The chiefs of the Maintenance Training Division were Sgt. Maj. Jack R. Scott from January through June and Sgt. Maj. Richard A. Howard from July through November. The chief of the Air Operations Training Division was Sgt. Maj. Steven A. Lewis. The strength figures of DOET at the beginning of 1988 were 238 military and 63 civilians for a total of 301; and 244 military and 67 civilians for a total of 311 at the end of the year.¹⁴

O. Noncommissioned Officer Academy (NCOA)

The NCOA conducted training for the USAAVNC to support flight operations, air traffic control, and aeroscout observer for the Basic Noncommissioned Officers Course (BNCOC) and flight operations and air traffic control for the Advanced Noncommissioned Officer Course (ANCOC). The commandant of the NCOA in 1988 was Cmd. Sgt. Maj. Hartwell B. Wilson, and the assistant commandant was Sgt. Maj. Gary L. Wright from January through August and 1st Sgt. Norman W. Maurice from September through December. The two training branches and their respective chiefs were as follows: ANCOC--M. Sgt. Norman W. Maurice from January through August, Sfc. Robert M. Kelley from September through November, and Sfc. Gary R. Vandusen during December; BNCOC--Sfc. Donald G. Winn.

At the beginning of the year, there were twenty-two military personnel and one civilian on the staff of the NCOA. At the end of the year, there were twenty-three military personnel and one civilian. The NCOA was accredited by TRADOC on 19 April 1988. During the 1988 Installation of Excellence evaluations, the NCOA was cited as having the best student barracks.¹⁵

P. Directorate of Civilian Personnel (DCP)

The DCP conducted civilian personnel operations, including but not limited to, employee development, labor

¹⁴Historical report, DOET, CY 88.

¹⁵Historical report, NCOA, CY 88.

relations, position management, recruitment and placement, employee counselling, job classification, technical services, and incentive awards. The director of DCP was the principal advisor to the commander and to unit managers concerning civilian personnel matters. With an effective date of 5 June 1988, the management of civilian personnel affairs was removed from DPCA and made a separate directorate. The assistant director for civilian personnel before the change, and the director of DPC afterwards, was Mrs. Marjorie P. White. The divisions of the directorate and their respective chiefs during the later part of 1988 were as follows: NAF Personnel--Mr. John Arnold; Position Management and Classification--Mr. Wayne Griffin; Management Employee Relations--Mr. Arthur Capron; Technical Services--Mr. George M. Brawley; Training and Development--Mr. Arthur Capron; Recruitment and Placement--Mr. Allen Rehberg.¹⁶

Q. Directorate of Reserve Component Support (DRCS)

The DRCS had the primary responsibility for the coordination of training, administration, and logistical support for U.S. Army Reserve (USAR), Army National Guard (ARNG), and Reserve Officer Training Corps (ROTC) units. The following persons exercised the functions of director of DRCS in 1988, during the indicated periods: Lt. Col. Donald R. Byars--January-April; Lt. Col. Charles E. Fern--April-June; Lt. Col. Barry B. Chestnut--June-July; and Col. Clifford L. Massengale--July-December. At the time of the Alabama Special Olympics in May 1988, the DRCS provided billeting accommodations for a large portion of the Special Olympics participants. In November 1988, the ARNG Liaison Office, which provided counseling and assistance for ARNG personnel in training at Fort Rucker, was transferred to the Directorate of Combat Developments.¹⁷

R. Office of the Inspector General (IG)

The Office of the IG had the mission of inquiring into and reporting upon matters affecting the state of economy, efficiency, discipline, readiness, and morale of the command. The IG during 1988 was Lt. Col. (P) Wayne R. Hansom. Maj. William F. Horn II served as chief of the Inspections Branch until August and Maj. Terry Teeter, for the remainder of the year. Capt. Kevin R. Barreras was

¹⁶Historical report, DCP, CY 88; memo ATZQ-RFM (570-4g), Mr Danny L. Wright for distr, 6 May 88, sub: realignment of Civilian Personnel Office, doc I- ?.

¹⁷Historical report, DRCS, CY 88.

chief of the Assistance Branch until April, and Capt. Irene G. Mauss, from April through December. The strength figures for the Office of the IG at the beginning the year were seven military and three civilians; at the end of the year, there were seven military and two civilians.^{1e}

S. Chaplain Activity Office (CAO)

The mission of the CAO was to provide for the religious and moral needs of the Fort Rucker community; to assist the commander in ensuring that the policies and leadership practices of the command were in keeping with strict moral, ethical, and humanitarian standards; to emphasize the welfare of the soldier and provide specialized ministries when locally required; and to provide a comprehensive program of religious education, pastoral care, and chaplain support activities. The center chaplain during 1988 was Chaplain (Col.) John M. Allen; Chaplain (Lt. Col.) Alton W. Boulware was pastoral coordinator; and Chaplain (Maj.) Gustaf Steinhilber served as family life chaplain until replaced by Chaplain (Maj.) David E. Greka in June. The 1st Bde and ATB chaplains were Chaplain (Maj.) John Humphrey and Chaplain (Maj.) Ervin L. Shirey respectively. Sister Mary Kavanaugh was the Catholic religious education director, Mr. Louie Reynolds was the Protestant religious director, and S. Sgt. (P) Terry Floyd was the NCOIC for the activity. There were twelve chaplains and fourteen chaplain assistants assigned during the year.^{1e}

T. Office of the Staff Judge Advocate (OSJA)

The OSJA furnished legal services for the USAAVNC, conducted the prosecution and administration of courts-martial, and administered the Federal Magistrate Court, which handled all traffic and minor criminal offenses that took place on the military reservation. The OSJA also provided legal assistance to soldiers, family members, and retirees; processed claims both for and against the government; and performed legal research and prepared legal opinions relative to interpretations of application of laws, regulations, statutes, and other directives which affected the administration of personnel, business, property, and financial operations of the installation. The OSJA was directed by Col. Joseph C. Fowler, Jr, from January to 20 June and by Lt. Col. Everett M. Urech for the remainder of the year. The OSJA consisted of the following five

^{1e}Historical report, Office of IG, CY 88.

^{1e}Historical report, CAO CY 88.

divisions: Administrative, Military Justice, Legal Assistance, Claims, and Administrative Law. The authorized operating strength of the OSJA in 1988 was seven commissioned officers, one warrant officer, ten enlisted soldiers, and thirteen civilians; three of the civilians were attorneys.²⁰

U. Public Affairs Office (PAO)

The mission of the PAO in 1988 was to publicize information about and promote understanding of the USAAVNC, the Army Aviation Branch, and Fort Rucker. This mission was accomplished through the dissemination of information via media outlets, speeches, visits, and community activities. The public affairs officers in 1988 were Lt. Col. Steven F. Rausch from January through June and Lt. Col. Robert C. McDonald from July through December. Ms. Betty J. Goodson was the deputy public affairs officer, and the NCOIC was Sfc. David L. Malone from January through May and M. Sgt. William H. Witcraft from June through December. In 1988, the PAO consisted of three sections, which, with their respective chiefs were as follows: Public Information--Mr. William J. Hayes; Command Information--Mr. Christopher T. Greene; Community Relations--Ms. Sheryl W. Milum. The PAO began the year with eight military personnel and seven civilians, and ended the year with six military and eight civilians.²¹

V. Safety Office

The mission of the Safety Office was to promote the accomplishment of the USAAVNC's mission by implementing a safety program to maintain at the lowest possible level all manpower and materiel losses due to accidents. The safety manager in 1988 was Mr. John T. Persch, and Mr. Ronald Cox was president of the Aircraft Accident Investigation Board. The USAAVNC commander made the decision in 1988 to redesignate the installation Safety Office as the Aviation Branch Safety Office, with expanded functions; the change was scheduled to take place early in 1989.²²

²⁰Historical report, OSJA, CY 88.

²¹Historical report, PAO, CY 88.

²²Historical report, Safety Office, CY 88.

W. Internal Review and Audit Compliance (IRAC) Office

The IRAC Office exercised staff supervision over the USAAVNC, Fort Rucker, and Army Aviation Branch internal review program. This involved performing comprehensive audits and internal reviews of all functions and activities. The internal review officer from 1 January through 9 April 1988 was Mr. Kenneth D. Barrett and, for the remainder of the year, Mr. Woodrow J. Farrington. Mr. Don W. Phillips served as chief of the Audit Compliance Branch, and Mr. Farrington, as chief of the Internal Review Branch until he became the internal review officer. The IRAC Office was staffed with fourteen civilians at the beginning of the year and with twelve civilians at the end of the year.²³

X. Equal Employment Opportunity (EEO) Office

The mission of the EEO Office was to provide equal opportunity in employment for all personnel regardless of race, color, religion, sex, national origin, age, or mental or physical handicap; to promote the full realization of equal employment opportunity through a continuing affirmative employment program; and to advise the commanding general on matters pertaining to equal opportunity for civilian personnel. The EEO officer in 1988 was Mr. Charles F. Auman; the affirmative employment program manager, Mr. James W. Harris; the interim Black Employment Program manager, Mr. James W. Harris from May through December; the Federal Women's Program manager, Ms. Merle W. Wise; the Hispanic Employment Program manager (collateral duty), Ms. Irma P. Finocchiaro; and the equal employment opportunity specialist, Mr. Lawrence D. DeRamus.²⁴

Y. Directorate of Contracting (DOC)

The DOC was responsible for planning, directing, and executing the procurement and contracting mission of the USAAVNC and Fort Rucker. The DOC also provided procurement support to the tenant organizations at Fort Rucker and to USAR centers in the area. The director of DOC in 1988 was Mr. Peter C. Polivka. The directorate was organized into four divisions, which, with their respective chiefs during 1988 were as follows: Contracting--Mrs. Gloria G. Wheeler;

²³Historical report, IRAC Office, CY 88.

²⁴Historical report, EEO Office, CY 88.

Contract Administration--Mr. Allen Wagstaff; Purchasing--Mrs. Nelda B. Livesay; Support--Mr. Lucius Toney, Jr.^{2e}

Z. Directorate of Resource Management (DRM)

The DRM was the commanding general's principal staff office for overall financial and manpower management, USAAVNC organization, and approved management programs. During 1988, Mr. Danny L. Wright was deputy director of DRM and served as director from January until June when Lt. Col. (P) Richard N. Roy became director.

In 1988, the DRM consisted of five divisions. These divisions with their respective chiefs were as follows: Finance and Accounting--Maj. Walter R. Beyer III; Cost Analysis--Mr. James H. Woodward; Force Management--Mr. Howell Flowers; Management Analysis--Mrs. Hazel J. Odom; Program and Budget--Mr. Jerry M. Lindsey.^{2e}

AA. Directorate of Combat Developments (DCD)

The DCD produced and coordinated operational concepts, organization design, and materiel system requirements for Army Aviation. The directorate ensured the necessary and effective interface, handoff, and integration with USAAVNC training developments; training analysis and evaluation programs; and other related actions. The director of DCD advised the commander on matters relating to force developments, combat development actions, aviation-related scientific discoveries, engineering matters, research analysis techniques, research and development activities, and related matters. Col. Frank H. Mayer served as director of DCD from January through May 1988, Lt. Col. Clyde P. Yates from June to July, and Col. Theodore T. Sendak from July through December. Lt. Col. Cook M. Waldran was deputy director from January through July and Lt. Col. Harold J. Brecher, for the remainder of the year.

During 1988, the DCD was organized into five major divisions. These divisions with their respective chiefs were as follows: Test and Evaluation--Lt. Col. David W. Swank from January through June and Lt. Col. Cook M. Waldran from July through December; Concepts and Studies--Lt. Col. (P) Clyde P. Yates from January through July and Lt. Col. William J. Wallace for the remainder of the year; Organization and Force Development--Maj. (P) Douglas B. Batson from January through May and Maj. (P) John R.

^{2e}Historical report, DOC, CY 88.

^{2e}Historical report, DRM, CY 88.

Buchanan from June through December; Materiel and Logistics Systems--Lt. Col. (P) John M. Riggs from January through May, Lt. Col. Harold J. Brecher from June through August, and Lt. Col. Palmer J. Penny from August through December; Threat--Maj. Delma C. Hendricks. Also, there was a Air Traffic Services Division (under Maj. John R. Buchanan) from January through May, when its functions were assumed by other DCD divisions. A National Guard Liaison Office became part of the directorate in June, and there was a Program Management Office (under Mrs. Janice L. Treadway until September, and Mrs. Maxine S. Dowling from October through December) throughout the year.²⁷

BB. U.S. Army Air Traffic Control Activity (USAATCA)

The USAATCA served as the functional proponent for worldwide Army air traffic control (ATC) management, standardization, evaluation, and development of fixed base facilities and navigational aid systems. The activity was the integrator for all proponent responsibilities of Army air traffic services and ATC. It also served as the DA executive agent on airspace matters, including planning and development of ATC systems and architecture with the Federal Aviation Administration, Department of Defense, and allied nations. The director of the USAATCA in 1988 was Col. Melvin J. McLemore, the deputy director was Mr. Douglas D. East, and the activity sergeant major was Sgt. Maj. Paul D. Williams.

During 1988, the USAATCA consisted of five major divisions or offices. These offices with their respective chiefs or directors were as follows: Air Traffic Control Development--Mr. Alphonse A. Ayo; Air Traffic Control Management--Mr. Francis N. Anderson; Systems Evaluation and Maintenance--Lt. Col. Robert E. Bell, Jr.; Aeronautical Services--Col. William F. Dismukes; and National Airspace Systems Plan Coordination--Lt. Col. (P) James E. Dooley III. As of 31 December 1988, the strength figures for the USAATCA were 62 military personnel and 66 civilians for a total of 128.

The USAATCA award winners for 1988 were: Spec. John J. Thornton--ATC Controller of the Year; CW03 James B. Faux--ATC Manager of the Year; Spec. Steven M. Haag--ATC Maintenance Technician of the Year; Fulda Tower, 3/58th Aviation Regiment, Federal Republic of Germany--ATC Facility

²⁷Historical Report, DCD, CY 88.

of the Year; and the 11th ATC Platoon, Florida National Guard--Combat Support ATC Platoon of the Year.²⁹

CC. TRADOC Systems Manager (TSM), Light Helicopter (LHX)

The TSM-LHX conducted the total systems management for the LHX and the T800 engine within TRADOC during 1988. Acting for the commanders of USAAVNC and TRADOC, the TSM-LHX discharged the user's responsibilities in the development, testing, training, and (in coordination with the receiving commands) the fielding of the LHX. The TSM-LHX in 1988 was Col. Wallace D. Gram from January until March, Lt. Col. William J. Wallace from March until July, and Col. Stephen S. MacWillie for the remainder of the year. Lt. Col. William J. Wallace, Maj. (P) James M Delashaw, and Maj. Michael E. Rusko served as assistants to the TSM during the year. The assistant TSM for the T800 engine was Sfc. Robert Weaver until August and Sfc. William B. Doughty II for the remainder of the year. CWO4 Mark W. Ammon assumed the duties of assistant TSM for Mission Equipment Package/Cockpit Integration in September.²⁹

DD. TSM, Airborne Target Acquisition and Weapon System (ATAWS)

The TSM-ATAWS began the year as the TSM V-22 and Air Launched Missile Systems. Because of the Army's decision to cancel participation in the V-22 program in January of 1988, the charter and the mission as well as the name of the unit changed. The mission of the TSM-ATAWS was to conduct total system fielding management for the Airborne Adverse Weather Weapon System; the Multipurpose Lightweight Missile System (including the Air-to-Air Stinger, Air Defense Suppression Missile, and follow-on Air-to-Air Missile); Semi-Active Laser HELLFIRE product improvements (including Digital Autopilot, Advanced Warheads, electro-optical countermeasures, and fire and forget seekers). Additionally, TSM-ATAWS provided supervision of the TRADOC Project Office for Apache.

Lt. Col. Walter L. Hinman served as the TSM during 1988. He was assisted by Lt. Col. Ronald J. Wimberley, Maj. Richard A. Scales, Capt. Ronald F. Salyer, a secretary, and two officers in the Apache Project Office. Since this TSM office managed three systems, duties were assigned by system, with each assistant TSM responsible for the

²⁹Historical report, USAATCA, CY 88.

²⁹Historical report, TSM-LHX, CY 88.

management of one system and all associated functional areas.³⁰

EE. TSM, OH-58D Helicopter

The mission of the TSM-OH-58D was to conduct total system management for the scout helicopter systems within TRADOC; to ensure that total system efforts were developed and fully integrated early and continuously throughout the deployment cycle; and to manage the total system approach for the OH-58D helicopter. The TSM in 1988 was Col. James R. Cox, and the assistants were Lt. Col. Clarence T. Ebbinga and CWO4 Michael L. Davis.³¹

³⁰Historical report, TSM-ATAWS, CY 88.

³¹Historical Report, TSM-OH-58D, CY 88.

APPENDIX II

TENANT ORGANIZATIONS

A. U.S. Army Information Systems Command (USAISC)-Fort Rucker, Directorate of Information Management (DOIM)

During 1988 the USAISC-Fort Rucker/DOIM provided continuous support in the areas of communications, automation, records management, printing, publications, mail, and distribution. These concerted efforts were accomplished through the assistance of a \$3 million procurement of automation equipment and a reorganization within USAISC. The reorganization of the unit was necessitated as a result of budget constraints and the need to maintain the highest possible level of information mission area (IMA) support and service to the installation.

The commander of USAISC-Fort Rucker in 1988 was Lt. Col. Kirk M. Knight, and the deputy information systems managers were Mr. Terry N. Browden from January through August and Mr. James E. Clements from October through December. The four divisions of the organization and their respective chiefs during 1988 were as follows: Operations & Systems Integration--Mr. James E. Clements; Resource Management and Plans--Mr. John G. Dyess; Information Center--Mr. Harold Helms; and Logistics Support--Mr. Wallace Lee.¹

B. U.S. Army Aviation Development Test Activity (USAAVNDTA)

The mission of the USAAVNDTA was to plan, conduct, and report on tests of aviation systems and aviation-related support equipment for the Army and for non-Army government agencies and private industry. Col. Lawrence Kajala commanded the USAAVNDTA during 1988. During the year, the activity engaged in over 100 tests. The tests were accomplished at Fort Rucker and at various other locations throughout the country. Over eight thousand flight hours were flown in the accomplishment of the activity's test mission. In 1988, the USAAVNDTA reported \$5.9 million cost avoidance for its customers by piggybacking of tests.²

C. U.S. Army Research Institute Aviation Research and Development Activity (ARIARDA)

The mission of the ARIARDA was to conduct aircrew

¹Historical report, USAISC-Fort Rucker/DOIM, CY 88.

²Historical report, USAAVNDTA, CY 88.

training technology research and determine the training effectiveness of new technology; to provide technical expertise to the USAAVNC in the area of aircrew performance and training; and to provide manpower, personnel, and training (MANPRINT) research support to aviation system acquisition. The ARIARDA's research was performed primarily at two locations, the USAAVNC and the Aviation Systems Command (AVSCOM), in St. Louis, Missouri. The research program sponsored a variety of critical issues from flight simulator design and effectiveness and aviator initial skill training and skill sustainment, to aviation weapons systems analysis, including MANPRINT objectives.

In 1988, the ARIARDA supervisor was Mr. Charles A. Gainer. Other key personnel included Mr. Thomas R. Metzler--team leader; Dr. Thomas M. Longridge--technical team leader; Dr. Robert H. Wright--aviation requirements; Mr. Gabriel P. Intano--technical team leader; and Maj. James M. Casey--R&D coordinator.³

D. U.S. Army Aeromedical Center (USAAMC) and U.S. Army Dental Activity (DENTAC)

The commander of the USAAMC in 1988 was Col. N. Bruce Chase, the deputy commander for clinical services was Col. Thomas I. Clements, the deputy commander for administration was Col. John E. Matt, the DENTAC commander was Col. Richard A. Nurnberg, and the deputy DENTAC commander was Col. John R. Larue. The major divisions with their respective chiefs during 1988 were as follows: Clinical Support--Maj. Carol A. Black; Environmental Health--Maj. Rebecca H. DePonti, Pharmacy Service--Maj. William L. Estes; Logistics; Maj. Jerry D. Crum, Department of Medicine--Maj. (P) Warren S. Silberman; Air Ambulance--Maj. Allen Vannoy; Audio Section--Capt. Catherine L. S. Cook; Physical Therapy--Capt. Gregg Forlini; Information Management--Capt. Franklin D. Rowland, General Surgical Service--Capt. (P) Dino P. Saracino; Patient Administration--Capt. (P) Gregory Howard; Biological Medical Equipment--CWO3 Julian Rudolph; and Brown Dental Clinic--Lt. Col. Jay M. Walters. The total strength of DENTAC in 1988 was fourteen officers, fifteen enlisted personnel, and twenty-nine civilians.⁴

E. U.S. Army School of Aviation Medicine (USASAM)

The USASAM consisted of a unique blend of aviation and

³Historical report, ARIARDA, CY 88.

⁴Historical reports, USAAMC and DENTAC, CY 88.

medical personnel with the mission of providing aviation medicine and aeromedical training programs to U.S. Army Aviation personnel so as to assist the Army in overcoming its aerospace challenges on the future battlefield. The dean of the USASAM was Lt. Col. Wehrly, and the assistant dean was Lt. Col. Duncan. As of 31 December 1988 USASAM had a total strength of 35 persons, consisting of four civilians, fifteen NCOs and sixteen officers.°

F. 3588th Flying Training Squadron, Air Training Command (3588th FTS)

The 3588th FTS monitored the individual training and progress of U.S. Air Force students during the Army undergraduate helicopter training program; conducted Air Force-unique flight training; provided administrative assistance to Air Force students undergoing training; and served as liaison between the Army and the Air Force. During the month of February, Air Force students began to receive nap-of-the-earth check rides in order to align the Air Force program with that of the Army. In October, as a result of the implementation of Multitrack, the Air Force again realigned its program with that of the Army, but the overall program length remained unchanged for Air Force students. In FY 1988, twenty-nine Air Force students completed undergraduate helicopter training. The commander of the 3588th FTS in 1988 was Lt. Col. Charles L. King, and the operations officer was Maj. James J. Tanner. Permanent party personnel consisted of twelve officers, three enlisted persons, and one civilian.°

G. Test and Experimentation Command Aviation Board (TEXCOM AVNBD)

The mission of the TEXCOM AVNBD remained essentially the same as that of the U.S. Army Aviation Board before the implementation of the reorganization and realignment on 2 October 1988. In meeting its broad-based mission throughout the year, the Aviation Board planned, conducted, and reported on operational tests and other user-type tests involving aviation materiel. These activities included concept evaluation programs, innovative tests, and force development testing and experimentation as well as operational feasibility tests. In addition, the Aviation Board participated in flying developmental test mission profiles in cooperation with the USAAVNDDTA.

°Historical report, USASAM, CY 88.

°Historical report, 3588th FTS, CY 88.

Col. Gilbert H. Fredrick commanded the Aviation Board from January through October, and Col. Tommie A. McFarlin, during the month of December. The deputy commander was Lt. Col. Leo N. Fanning, Jr. from January through July and Lt. Col. Ronald R. Boykin, from August through December also exercised the duties of commander during the month of November. Sgt. Maj. Nicholas K. Smythe served as sergeant major from January through August, and Sgt. Maj. Jack R. Scott for the remainder of the year. The major divisions of the Aviation Board and their respective chiefs were as follows: Support--Mr. Bobby L. Tindell; Technical/Operations--Maj. Gary S. Mulrooney from January through October and Maj. Bradley D. Schlund from November through December; and Test--Lt. Col. Roland R. Boykin from January through July, and Maj. Robert S. Tekell for the remainder of the year. Personnel strength at the beginning of the year consisted of fifty-one military and fifty-three civilians. At the end of the year, there were forty-two military and fifty-three civilians.⁷

H. Fort Rucker Resident Agency, Third Region, U.S. Army Criminal Investigation Command (USACIDC)

The mission of the Fort Rucker Resident Agency, USACIDC) was to provide criminal investigative support to elements of the USAAVNC and Fort Rucker. This support included the investigation of all serious crimes committed by Army personnel and all offenses of which the Army was a victim within an area of responsibility encompassing twenty-seven counties in southern Alabama and ten counties in northern Florida. The Fort Rucker Resident Agency also provided criminal investigative support to the U.S. Army Corps of Engineer District Office, Mobile, Alabama, and to elements of the 121st Army Reserve Command headquartered in Birmingham, Alabama.

The Fort Rucker Resident Agency was subordinate respectively to the Fort Benning District, Third Region, USACIDC; to Headquarters (HQ), Third Region, USACIDC, Fort Gillem, Georgia; and HQ, USACIDC, Falls Church, Virginia. The special agent in charge of the Fort Rucker Resident Agency during 1988 was Mr. Robert L. Beightol; other key personnel included Mr. Terry C. Crump, Mr. Troy D. Richards, and Ms. Helen Frye. During 1988, the personnel strength of the Fort Rucker Resident Agency consisted of seven special agents and three civilian support persons.⁸

⁷Historical report, TEXCOM AVNBD, CY 88.

⁸Historical report, Fort Rucker Resident Agency, Third Region, USACIDC, CY 88.

APPENDIX III
USAAVNC STAFF DIRECTORY
October 1988

APPENDIX IV

LIST OF ACRONYMS

1st Bde	1st Aviation Brigade
3588TH FTS	3588th Flying Training Squadron
A/LAN	Army/Local Area Network
A ³	Armor Anti-Armor
AAAA	Army Aviation Association of America
AAWE	Army Aviation Annual Written Examination
AAFES	Army and Air Force Exchange Service
AAMP	Army Aviation Modernization Plan
AATD	Aviation Applied Technology Directorate
AAWWS	Airborne Adverse Weather Weapon System
ABSO	Aviation Branch Safety Office
ACA	Advanced Cargo Aircraft
ACM/BDR	Aircraft Combat Maintenance/Battle Damage Repair
AFGE	American Federation of Government Employees
AG	Adjutant General
AHIP	Army Helicopter Improvement Program
AIHS	Aircrew Integrated Helmet System
AIT	Advanced Individual Training
ALC	Aviation Learning Center
AMSS	Aircraft Modular Survival System
ANCOC	Advanced Noncommissioned Officer Course
APCC	Aviation Pre Command Course
ARAC	Army Radar Approach Controls
ARI	Army Research Institute
ARIARDA	Army Research Institute Aviation Research Development Activity
ARTEP	Army Training and Evaluation Program
ASARC	Army Systems Acquisition Review Council
ASE	Aircraft Survivability Equipment
ASIMS	Army Standard Information Management System
ASMD	Aviation Simulation Materiel Development
ASTM	Aircraft Survivability Training Management
ASTR	Aviation Systems Training Research
ATAC	Air-to-Air Combat
ATAC II	Air-to-Air Combat Phase II
ATAS	Air-to-Air Stinger
ATAWS	Airborne Target Acquisition and Weapons Systems
ATB	Aviation Training Brigade
ATC	Air Traffic Control
ATKHB	Attack Helicopter Battalion
ATP	Aircrew Training Programs
ATS	Air Traffic Services
AVCOM	Aviation Brigade Commanders
AVIM	Aviation Intermediate Maintenance
AVOAC	Aviation Officer Advanced Course
AVOBC	Aviation Officer Basic Course
AVSCOM	Aviation Systems Command
AVUM	Aviation Unit Maintenance

AWSS	Area Weapons Scoring System
BDU	Battle Dress Uniform
BNCOC	Basic Noncommissioned Officer Course
CA	Commercial Activities
CAC	Combined Arms Center
CACDA	Combined Arms Combat Development Activity
CAO	Chaplain Activity Office
CBRS	Concept Based Requirements System
CI	Command Information
CMF	Career Management Field
COEA	Cost and Operational Effectiveness Analysis
CR	Community Relations
CTEA	Cost and Training Effectiveness Analysis
CWO	Chief Warrant Officer
DA	Department of the Army
DAALT	Department of Advanced Aviation Logistics Training
DAB	Defense Acquisition Board
DAC	Deputy Assistant Commandant
DAP	Directorate of Aviation Proponency
DATT	Department of Aviation Trades Training
DCAT	Department of Combined Arms Tactics
DCD	Directorate of Combat Developments
DCP	Directorate of Civilian Personnel
DCSOPS	Deputy Chief of Staff for Operations and Plans
DDN	Defense Data Network
DEH	Directorate of Engineering and Housing
DEM/VAL	Demonstration/Validation
DENTAC	U.S. Army Dental Activity
DES	Directorate of Evaluation and Standardization
DGFS	Department of Gunnery and Flight Systems
DMG	Distinguished Military Graduates
DOC	Directorate of Contracting
DOET	Department of Enlisted Training
DOIM	Directorate of Information Management
DOL	Directorate of Logistics
DOTD	Directorate of Training and Doctrine
DPCA	Directorate of Personnel and Community Activities
DPTMSEC	Directorate of Plans, Training, Mobilization, and Security
DRCS	Directorate of Reserve Component Support
DRM	Directorate of Resource Management
EEOO	Equal Employment Opportunity Office
EOC	Emergency Operations Center or Early Operational Capabilities
EOO	Equal Opportunity Office
ERFS	Extended Range Fuel System
ESSS	External Stores Support System
ETB	Enlisted Training Branch
EUT&E	Early User Test and Evaluation
FAA	Federal Aviation Administration
FAA	Functional Area Assessment

FAST	Flight Aptitude Selection Tests
FM	Field Manual
FORSCOM	Forces Command
FSB	Flight Systems Branch
FSB	Forward Support Battalion
FSD	Flight Simulator Division
FTC	Flight Training Center
FTX	Flight Training Exercise
GAO	Government Accounting Office
GSA	Government Service Administration
HQ	Headquarters
HQDA	Headquarters, Department of the Army
HVI	Horizontal and Vertical Integration
ICARUS	Integrated Combined Arms Range Utility Site
ICH	Instructor Contract Hours
IEP	Independent Evaluation Plan
IERW	Initial Entry Rotary Wing
IET	Initial Entry Training
IFF	Identification Friend or Foe
IFR	Instrument Flight Rule
IG	Inspector General
IMA	Information Mission Area
IMSO	International Military Student Office
IOTE	Initial Operational Test and Evaluation
IP	Instructor Pilot
IPR	In Progress Review
IRAC	Internal Review and Audit Compliance Office
JTA	Job and Task Analysis
LAN	Local Area Network
LATHS	Latin American Tactical Helicopter Symposium
LHX	Light Helicopter
LPD	Laser Protective Device
LPV	Laser Protective Visor
MAC	Mission Area Concept
MANPRINT	Manpower, Personnel, and Training
MAST	Military Assistance to Safety and Traffic Program
MEL-4	Military Education Level Four
MEO	Most Efficient Organization
MEP	Mission Equipment Package
METL	Mission Essential Task Lists
MHEP	Military History Education Program
MICRONET	Microcomputer Network
MILES	Multiple Integrated Laser Engagement System
MLMS	Multipurpose Lightweight Missile System
MOA	Memorandum of Agreement
MOS	Military Occupational Specialties
MPA	Military Police Activity
MSIP	Multistage Improvement Program
MTP	Mission Training Plans
MWO	Master Warrant Officer
NAF	Nonappropriated Fund
NAS	National Airspace System

NASP	National Airspace System Plan
NATS	New Aircraft Tool System
NAVAIDS	Navigational Aids
NBC	Nuclear, Biological, and Chemical
NCOA	Noncommissioned Officer Academy
NCOES	Noncommissioned Officer Educational System
NETD	New Equipment Training Development
NVD	Night Vision Devices
NVG	Night Vision Goggles
ODCSOPS	Office of the Deputy Chief of Staff for Operations and Plans
OMA	Operation and Maintenance, Army
OMB	Officer Management Branch
OPD	Operations and Procedures Division
OPS	Office of Personnel Systems
OSA	Operational Support Airlift
OSJA	Office of the Staff Judge Advocate
OTB	Officer Training Branch
OTEA	Operational Test Evaluation Agency
PAO	Public Affairs Office
PBD	Program and Budget Division
PEB	Program Evaluation Board
PERSCOM	Personnel Command
PNVS	Pilot Night Vision Sensor
POI	Program of Instruction
PPB	Personnel Processing Branch
PSC	Personnel Service Center
R&D	Research and Development
RA	Regular Army
RC	Reserve Component
RFP	Request for Proposal
RGOB	Range and Gunnery Operations Branch
ROC	Required Operational Capabilities
ROTC	Reserve Officer Training Corps
SCAT	Single Contractor Aviation Training
SEMA	Special Electronic Mission Aircraft
SFDD	Staff and Faculty Development Division
SGI	Small Group Instruction
SGS	Secretary General Staff
SINCGARS	Single Channel Ground & Airborne Radio System
SOA	Special Operations Aviation
SOF	Special Operations Forces
SSC	Soldier Support Center
SSEB	Source Selection Evaluation Board
STAR	Systems Threat Assessment Report
STRAC	Standard Training Commission
SWOTC	Senior Warrant Officer Training Course
TAFE	Total Army Family of Excellence
TC	Training Circular
TDSS	TRADOC Decision Support System
TEXCOM	Test and Experimentation Command
TEXCOM AVNBD	Test and Experimentation Command Aviation Board
TI	Technical Inspector

TIED	TRADOC Independent Evaluation Directorate TPO-A
TOE	Table of Organization and Equipment
TPO-A	TRADOC Project Office, Apache
TRADOC	Training and Doctrine Command
TRALINET	TRADOC Library Network
TSC	Training Service Center
TSM	TRADOC Systems Manager
TTSD	Training and Training Support Division
UOQ	Unaccompanied Officer Quarters
USAALS	U.S. Army Aviation Logistics School
USAAMA	U.S. Army Aeromedical Activity
USAAMC	U.S. Army Aeromedical Center
USAARL	U.S. Army Aeromedical Research Laboratory
USAATCA	U.S. Army Air Traffic Control Activity
USAAVNC	U.S. Army Aviation Center
USAAVNDTA	U.S. Army Aviation Development Test Activity
USAAVNS	U.S. Army Aviation School
USACIDC	Fort Rucker Resident Agency, Third Region, Criminal Investigation Command
USAICS	U.S. Army Intelligence Center and School
USAISC	U.S. Army Information Systems Command
USALOGC	U.S. Army Logistics Center
USAR	U.S. Army Reserve
USASAM	U.S. Army School of Aviation Medicine
USASC	U.S. Army Safety Center
USATALS	U.S. Army Transportation and Aviation Logistics School
USATCFE	U.S. Army Transportation Center and Fort Eustis
USMA	U.S. Military Academy
UTB	Unit Training Branch
VCSA	Vice Chief of Staff of the Army
VFR	Visual Flight Rule
WAGD	Weapons and Gunnery Division
WOC	Warrant Officer Candidate

APPENDIX V

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APPENDIX VI

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- I-1. Memo ATCT-C-PAO, Wayne Hair for TEXCOM board presidents, 13 Sep 88, sub: news release on formation of TEXCOM.^a
- I-2. Msg, Cdr TRADOC, 12 Jun 87, sub: Establishment of TEXCOM.
- I-3. "Implementation Plan: Transfer of the U.S. Army Aviation Logistics School, Fort Eustis, VA to the Command and Control of the Commander, U.S. Army Aviation Center," 7 Sep 88.
- I-4. Msg from Gen Thurman: Command and control of the Aviation Logistics School, 17 Jun 88.
- I-5. MOA, operating procedures, U.S. Army Aviation Logistics School, 20 Sep 88.
- I-6. Memo ATQZ-RFM (570-4g), Danny L. Wright, 6 May 88, sub: Realignment of Civilian Personnel Office.
- II-1. Msg, Cdr AVSCOM to HQDA, 23 Feb 88, sub: Retirement of TH-55.
- II-2. Memo ATTG-MT (351c), Doreatha Mangrum for Cdr, USAAVNC, 3 Jun 87, sub: Revised course administrative data...Multitrack.
- II-3. Ltr, Maj Gen Parker to Lt Gen J.S. Crosby, 30 Aug 88.
- II-4. Fact sheet ATZQ-GFS-WR, 27 Oct 88, sub: ICARUS.
- II-5. Information paper ATZQ-TDI-F, Mr. Pittenger, 3 Jan 89, sub: Armor/anti-armor issues update.
- II-6. Memo ATNC-MOS-B (611-1a), Darrel A. Worstine, 3 Jun 88, sub: Merger of CMF 28 into CMF 67.
- II-7. "Job and Task Analysis Plan", DOTD, USAAVNC.
- III-1. DF ATZQ-DPT-P (350), Col James B. Sauer, 8 Jul 88, sub: Intergration of FTXs for AVOAC and AIT.

^aThe Roman numerals indicate chapter number and the Arabic numerals indicate the document numbers within each chapter.

- III-2. Memo ATZQ-CS (351ie), Col Andrew Miller, sub: Relocation of CMF 28 and MOS 93D.
- III-3. Msg, DA, DACS-7B, 25 Oct 88, sub: DA aviation logistics study.
- IV-1. Memo ATZQ-TDD (310-2g), Lt Col Floyd E. Edwards for AC, 26 Feb 88, sub: USAAVNC doctrinal literature program change.
- V-1. "Army Aviation Modernization Plan," May, 88.
- V-2. Memo ATZQ-CDM-C, Col Theodore T. Sendak to Cdr, TRADOC, 24 Feb 89, sub: Proposed change 13 to the AH-64 materiel need.
- V-3. Msg, HQDA, 15 Dec 88, sub: Hellfire on UH-60A Black Hawk.
- V-4. Memo, William H. Taft IV for secretary of the Army, 17 Jun 88, sub: LHX Milestone I Acquisition Decision Memorandum.
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