



**UNITED STATES ARMY
AVIATION CENTER**

**ANNUAL COMMAND HISTORY
1 January 1992 - 31 December 1992**

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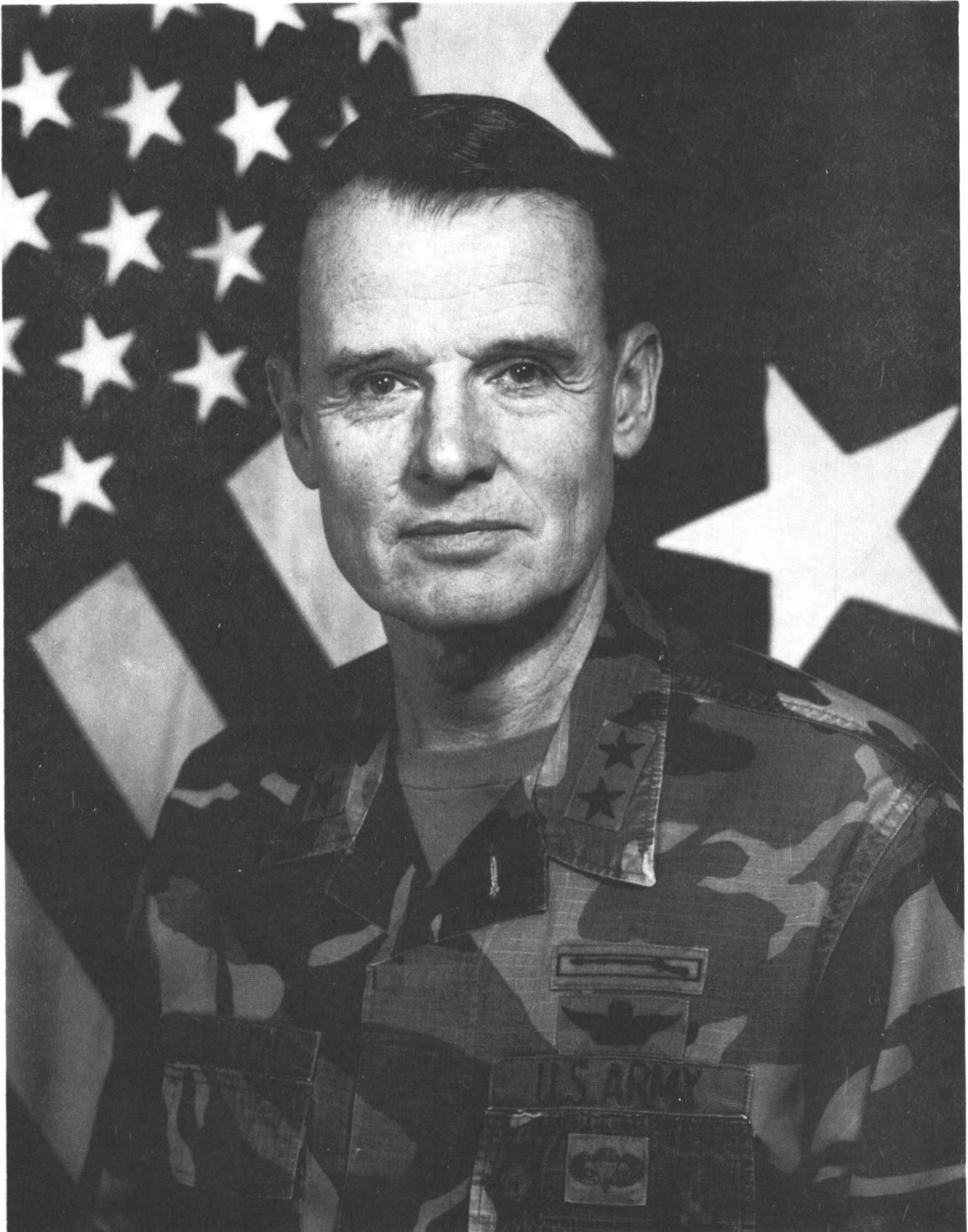
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**Office of the Command Historian
U.S. Army Aviation Center
Fort Rucker, Alabama**

July 1993

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MAJOR GENERAL JOHN D. ROBINSON
COMMANDING GENERAL

FOREWORD

In accordance with guidelines from the Center of Military History and the Command History Office of the U.S. Army Training and Doctrine Command (TRADOC), the 1992 U.S. Army Aviation Center (USAAVNC) annual command history is arranged topically rather than organizationally. Also, it is written from the perspective of the Aviation Center and its commanding general rather than from the perspectives of individual organizations.

The emphasis of this annual history is on the major missions and functions of the USAAVNC, i.e., on training and leader development, doctrine and combat developments, and mission support. These topics constitute three of the four chapters of the history. The main body of the text is followed by six appendices. Three of these appendices deal respectively with USAAVNC organizations at Fort Rucker, the U.S. Army Aviation Logistics School (USAALS) organizations at Fort Eustis, and tenant organizations at Fort Rucker; these appendices briefly describe changes in mission, function, organizational framework, leadership, and personnel strength of the various organizations and provide some other information peculiar to each organization. Other appendices consist of a list of source documents collected by the Aviation Branch History Office, a list of acronyms, and an index.

In accordance with guidance from higher headquarters, the use of acronyms in the text is kept to a minimum. With very few exceptions, acronyms are used only for names of organizations, e.g., TRADOC, DCD (Directorate of Combat Developments), etc. A significant exception is that other acronyms are used in footnotes when they constitute part of the citation.

This entire history and all sources cited herein are unclassified. Some classified documents were collected by the Aviation Branch History Office during the year, but they were not used in the preparation of this volume.

The annual command history is only one of several parts of the historical record of the USAAVNC for any given year. Cost and time constraints require that the command history cover only the most important developments of the Army Aviation Center in the fulfillment of its principal missions. The writing of the historical reports of the individual subordinate units and tenant organizations was the responsibility of the historical officers appointed by the respective directors and commanders. The historical reports submitted by each organization, along with primary documents, transcripts of oral interviews, and other materials, were used as references in writing this annual command history. All materials submitted to the History Office and those collected by the historians are kept on file in the

History Office. Along with the historical review itself, these documents constitute the complete historical record for any given year.

With a very few exceptions, the documents, staff historical reports, and other sources cited are located in the 1992 document file in the Aviation Branch History Office. The documents submitted by directorates, departments, and other USAAVNC and tenant organizations or obtained by the historians from key Aviation Center offices are arranged according to provenance. Transcripts of and notes on oral interviews are organized alphabetically in the oral history file. Most other source materials acquired by the historians are filed in the 1992 document file according to the chapter to which they pertain. In a few instances, documents located in other files in the Aviation Branch History Office are cited; the names of these other files are indicated in the citation. The final notation in each citation (e.g., "DCD" or "Chapter I file") indicates the file or sub-file in the Aviation Branch History Office in which the cited document may be found. Documents in some large files have been assigned document numbers; these numbers are given in footnotes, following the file name.

Considerable effort was expended to obtain documentary support for the historical reports submitted to the History Office. Several organizations provided adequate documentation, and documents submitted to the History Office or obtained by the historians through other means constitute the major sources for this narrative history. When documents were unavailable, some information was taken from the historical reports submitted by the various organizations. However, some reports lacked the necessary clarity, precision, and/or reliability to be used as the only documentation for published history. Therefore, in accordance with TRADOC History Office and Center of Military History guidance, these historical reports were used with discretion. Furthermore, since these reports were already parts of the historical record and were usually compiled by persons who had primary source documentation at their disposal and/or had personal involvement in the activities described, the historians were not in a position to make significant contributions to the record without access to additional sources.

Several issues discussed in this annual history were ongoing at the end of the year. Other issues may have concluded, or they may have developed somewhat further than described herein. The general guideline followed by the historians in dealing with such issues was to describe the developments about which adequate reliable documentation was available. For example, if this historical narrative indicates that some important decision on an issue was to be made in September 1992, and nothing else is said about it, it may be concluded that the historians were unable to obtain documentation regarding what transpired in September and afterwards. Should additional documentation subsequently be made available, further developments relating to these matters will be described in a later annual history.

In the process of writing an annual history, the historian inevitably becomes indebted to many persons for their advice, assistance, and support. I wish to express sincere appreciation to those who supported this endeavor in various ways. I especially thank those who patiently explained technical matters and the unit directors, commanders, and historical officers who cooperated with the historians in the collecting valuable documentary materials to support the writing of this history and to build a document collection on the history of Army aviation.

The 1992 USAAVNC Annual Command History was prepared jointly by the command historian and the deputy command historian. The command historian wrote Chapters I, II, and III and provided overall supervision for the writing of the history. The deputy command historian wrote Chapter IV and compiled appendices I through IV. Appendices V and VI are the results of their combined efforts.

Fort Rucker, July 1993

John W. Kitchens
Command Historian

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CHAPTER I

INTRODUCTION

A. Historical Background

Although U.S. Army aviation was a product of World War II, it traces its origins back to the use of balloons by the Union and Confederate armies during the American Civil War. The 19th and early 20th century balloon corps, like the Army Air Service of World War I and the Army Air Corps of the 1930s, were forerunners of modern Army Aviation, but also and more directly of the Army Air Forces of World War II, which became the U.S. Air Force in 1947. While the Army Aviation Branch of the U.S. Army shares some of the legacies and traditions of the various Army aviation organizations that eventually evolved into the U.S. Air Force, modern Army aviation actually grew out of the Army Ground Forces of the World War II era--quite distinct from the Army Air Corps and Army Air Forces of that period.

Organic Army aviation (organic, that is, to the Army Ground Forces) was established initially within the Field Artillery Branch for aerial artillery fire adjustment. Responsibility for providing aircraft and pilots for aerial fire adjustment had been assigned to the Army Air Corps, but the Air Corps services were deemed by some field artillery officers to be unreliable and unsatisfactory. The Army conducted a series of experiments from 1940 to 1942 using small aircraft organic to the ground forces for artillery fire adjustment. As a result of the success of these experiments, the secretary of War ordered the establishment of organic air observation for field artillery, effective 6 June 1942--hence, the birth of modern Army aviation.

The Department of Air Training was established in June 1942 as a department of the U.S. Army Field Artillery School at Fort Sill, OK. During World War II and the Korean Conflict, Army aviators and mechanics were trained at Fort Sill to adjust artillery fire, to maintain their small, single-engine airplanes, and to provide other types of support to the Army Ground Forces. The training at Fort Sill was generally limited to tactical or advanced training. For the purpose of saving costs by avoiding duplication, the Army Air Corps/Army Air Forces provided primary training for aviators and mechanics of the Army Ground Forces during World War II. Notwithstanding repeated Army attempts to gain responsibility for all training of Army aviation personnel, the Air Force continued providing primary training to Army pilots and mechanics for several years after it became separate from the Army in 1947.

On 16 January 1953, as a result of the rapidly growing demand for trained aviators and aviation mechanics during the Korean Conflict, the Department of Air Training at Fort Sill was reorganized as the United States Army Aviation School. The continued growth of Army aviation contributed to overcrowding at the Oklahoma post, which resulted in the Army's decision to move the aviation school to Camp Rucker, AL. The move occurred during the latter part of 1954. The following year, the Army Aviation Center was established at Rucker, and the post gained permanent status by becoming Fort Rucker.

The U.S. Army Transportation Corps became involved with Army Aviation in 1951, when it initiated a program for training warrant officer candidates as helicopter pilots for combat duty in Korea. In August 1952, the Transportation Corps assumed responsibility from the Ordnance Corps for logistical support of Army aviation. In June 1954, the Transportation Corps and School began field maintenance training of aviation mechanics at Fort Eustis, VA.

After extended negotiations between the Army and Air Force, the Department of Defense (DOD) transferred to the Army responsibility for all training of its own mechanics in 1955 and of its aviators in 1956. Although the maintenance training formerly conducted at Fort Sill was transferred to Fort Rucker in 1954, the Transportation Corps and Fort Eustis were given responsibility for the primary training of mechanics that the Army assumed from the Air Force as well as for most advanced maintenance training.

In 1955 and 1956, Fort Rucker did not have enough air fields for all Army aviator training. Therefore, when responsibility for primary flight training was transferred from the Air Force to the Army, the two primary flight training bases where the Air Force had conducted this training were also transferred to the Army; they became Fort Wolters and Camp Gary. Although some flight training continued to be conducted at these and other locations for several years following the establishment of the school and center in Alabama, essentially all flight training was consolidated at Fort Rucker by 1973. The following year, the school and the center were merged as the U.S. Army Aviation Center. Most maintenance training, however, continued to be conducted by the Transportation Corps at Fort Eustis.

Throughout the mid and late 1970s there was increasing need for the creation of a separate Army aviation branch. Although there was considerable Army-wide sentiment in favor of a separate branch, there was also continuing and deep seated opposition from aviators and non-aviators alike. The opposition to a separate aviation branch resulted in part from Army attitudes regarding the Army Air Corps and the U.S. Air Force. In Army circles, both

were believed to have been unreliable in performing their mission of supporting the ground forces--even after having been given resources to do so.¹

As a result of studies, surveys, and considerable formal and informal dialogue conducted from 1980 through 1982, the remaining opposition to a separate branch diminished considerably, and the Aviation Branch came into being by an order of Secretary of the Army John O. Marsh, Jr., with an effective date of 12 April 1983.²

Following the creation of the Aviation Branch, there was a move toward the gradual consolidation of all aviation-related activities and training under the auspices of the USAAVNC and the branch chief. In 1984, for example, aviation officer courses and an enlisted aeroscout observer course were implemented at Fort Rucker. In 1986 the U.S. Army Air Traffic Control Activity was transferred from the U.S. Army Information Systems Command at Fort Huachuca, AZ, to the USAAVNC at Fort Rucker.³ The Noncommissioned Officer Academy (NCOA) was established at the USAAVNC in 1987.

Another very significant step in the process of the consolidation of Army Aviation was the incorporation into the USAAVNC of the U.S. Army Aviation Logistics School (USAALS) at Fort Eustis, VA, in 1988. Since maintenance training was provided at both Fort Rucker and Fort Eustis, several studies had been conducted over a period of more than twenty years to determine the advantages of consolidation at one place or the other, but conflicting interests and anticipated costs of expanding the facilities at either location prevented any change.⁴

Shortly after the creation of the Aviation Branch in 1983, the USAALS was established at Fort Eustis, effective 1 October of that year. The USAALS was made the proponent for all aviation logistics training, but it was placed under the auspices of the commandant of the U.S. Army Transportation and Aviation Logistics School. The division of

¹This brief summary of the history of Army aviation is extracted from the draft of a history of Army aviation being prepared for publication by the command historian. Parts of the history were published during 1992 in series of articles in Army Aviation and U.S. Army Aviation Digest.

²See, e.g., TRADOC Review of Army Aviation (4 vols Fort Monroe, VA: Headquarters TRADOC, Sep 82) I, 1-10; General Orders no. 6, Secretary of the Army John O Marsh Jr and Gen John A Wickham Jr, 15 Feb 84, sub: Army Aviation Branch, general reference file.

³Ltr DAMO-ZA, Lt Gen Carl E Vuono to distr, 20 Mar 86, sub: air traffic control transfer plan (also encls), USAAVNC History Office, 1986 document file, USAATCA.

⁴Emma-Jo L Davis, History of the United States Army Transportation School, 1942-1962, Ft Eustis: U.S. Army Transportation School, 1967, p. 292, passim.

responsibilities for aviation-related functions was inconsistent with the new branch charter, and recommendations and plans were made for the gradual consolidation of the aviation mission area--including 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 planned consolidation of the aviation mission area was completed before 1988, but notwithstanding repeated branch efforts to realign the USAALS under the USAAVNC in accordance with the terms of the Aviation Branch charter, the logistics school remained separate for almost five years after the creation of the branch.

In December of 1987, however, the vice chief of staff of the Army 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."⁶ The commander of the U.S. Army Training and Doctrine Command (TRADOC) subsequently approved the recommendations of the special study group to transfer command and control of USAALS to the commander of the USAAVNC.⁷

A memorandum of agreement was prepared jointly by the USAAVNC and the U.S. Army Transportation Center and Fort Eustis and signed by their respective commanders in September 1988. The USAAVNC assumed command and control as well as resource management responsibilities for USAALS as of 1 October 1988.⁸

⁵Ltr ATCG, Gen William R Richardson to distr, 11 Jul 83, sub: establishment of aviation proponency, Tab C of "Implementation Plan: Transfer of the U.S. Army Aviation Logistics School, Fort Eustis, Virginia, to the Command and Control of the Commander, U.S. Army Aviation Center," 7 Sep 88 [hereinafter referred to as "Implementation Plan--Logistics,"], 1988 document file, USAALS; "Army Aviation Logistics at Fort Eustis," DA, USAALS: Ft Eustis VA, Sep 89.

⁶Memo, Gen Arthur E Brown Jr for distr, sub: aviation logistics study--study directive, Tab D of Implementation Plan--Logistics.

⁷Msg, General Thurman to distr, 17 Jun 88, sub: command and control of the Aviation Logistics School, 1988 document file, USAALS; Implementation Plan--Logistics.

⁸Memo of agreement, 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, Implementation Plan--Logistics; Permanent orders, USATCFE, to distr, 14 Sep 88, sub: U.S. Army Aviation Logistics School, Implementation Plan--Logistics.

B. Mission

The missions of the USAAVNC in 1992 were in the areas of doctrine, organization, materiel, training, leader development, soldiers/quality of life, and safety/risk management. In the area of doctrine, the USAAVNC was to develop, refine, and disseminate aviation doctrine to optimize aviation's contribution to the combined, joint, and combined arms fight across the operational continuum. It was also to develop tactics, techniques, and procedures from individual to corps level and to develop future warfighting concepts that would integrate aviation across the battlefield operating systems.

The Aviation Center's mission in the area of organization was to determine force structure requirements that optimized the best mix of active and reserve component forces to arrive at the most lethal, deployable, and affordable unit structure. It also developed aviation organizational designs that met the commander in chief's wartime requirements using a building block concept which standardized unit design and support requirements. The USAAVNC also developed documents that allowed for a logical, incremental introduction of new systems into existing unit designs.

In the area of materiel, the USAAVNC focused cost-effective materiel development and technical advancements on optimizing deployability, versatility, and lethality. It also developed and documented materiel requirements to meet battlefield deficiencies, and it developed effective simulators based on battlefield task analysis.

The Aviation Center's training mission focused on combined arms and joint warfighters. It developed training support programs, facilities, and equipment that enabled tough, realistic individual, crew, and collective training programs. It also evaluated and established priorities for simulation strategies based on battlefield task analysis and provided tactically, technically competent officers and soldiers to combat, combat support, and combat service support units. The USAAVNC also administered the Army aviation flight standardization program, defined specific areas of emphasis, evaluated training effectiveness on a global scope, and evaluated training standardization for all Army aviation units.

The USAAVNC developed and executed leader development programs that recognized leadership as a primary dynamic of combat power. It fostered leaders who were able to shape fighting power within units and counseled leaders to understand that only excellence in the art and science of war--coupled with loyalty, cohesion, and fighting spirit of soldiers--would enable units to generate and apply combat power. It also sought to instill the foundations of professional ethics in each leader and soldier.

The Aviation Center provided the command climate and necessary garrison services to provide soldiers, civilians, and families with a safe, healthy environment in which to live and work. Through care and concern, it sought to strengthen the commitment of soldiers and their families to a career of service to the nation. It was prepared to provide critical life support and disaster relief services to the community in the event of emergency and to act as a primary wartime mobilization site.

Finally, the USAAVNC developed risk assessment protocols that would identify areas of risk, both in training and under battlefield conditions. It refined and exported safety programs to make leaders, soldiers, and units sensitive to areas of risk. It attempted to make risk assessment part of the thought process of every aviation officer and soldier.⁹

The mission of the USAALS was 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 (aviation logistics) and 151A (aviation maintenance) areas of concentration and for career management field 67 (aircraft maintenance); and to support the Army Aviation Branch chief and the Combined Arms Support Command commander.¹⁰

C. Command and Control

Overall command and control of the USAAVNC, including the USAALS, was vested in the commanding general, who was supported and assisted by all other members of the USAAVNC command group. Maj. Gen. John D. Robinson commanded the Aviation Center throughout 1992. The commanding general was responsible for the implementation of policies and directives of the Department of the Army (DA) and TRADOC. He was also the principal adviser to and representative of the commanding general of TRADOC for equipment, doctrine, training, tactics, and techniques of aviation and aviation logistics. Through the assistant commandants of USAAVNC and of USAALS, the commanding general established, maintained, and supervised the agencies and departments established for the

⁹USAAVNC Regulation 10-1, "Organization and Functions Manual," pp 9-11, passim; Memo ATZQ-APG, Col Patrick J Bodelson for distr, 21 Feb 92, sub: USAAVNC mission essential task list, also encl, DOS, TADD # 98.

¹⁰"Army Aviation Logistics at Fort Eustis," (Ft Eustis, VA, Sep 89), passim; Historical report, USAALS, CY 92.

efficient execution of assigned missions. The commanding general also served as chief of the Army Aviation Branch.

During 1992 the commanding general of the USAAVNC was especially involved with determining and developing the role of Army aviation in TRADOC's Battle Labs initiative. He also devoted considerable time and effort to the restructure of Army aviation to prepare for the 21st century, to total force integration, to enhancing the role of Army aviation in combined arms and joint training, and to Army aviation combat developments. Other matters of particular interest to USAAVNC commander during 1992 included the establishment of the organizational framework and the technological base to accommodate the rapid growth in importance of simulation in aviation training and the development of combined arms leadership through exchange programs between the Aviation School and other branch schools. The assistant commandant played a support role in these activities and substituted for the commanding general during his absence.¹¹

The assistant commandant of the USAAVNC from 1 January until 17 November was Brig. Gen. (P) Robert A. Goodbary. It was announced on 9 June that General Goodbary had been nominated for promotion to the rank of major general. As of 17 November, General Goodbary's title was changed from assistant commandant to deputy commanding general of the USAAVNC. The principal purpose of this change was to emphasize the branch-wide rather than more limited schoolhouse responsibilities of the position. Changing the title of the second-in-command of the USAAVNC was one aspect of a major reorganization initiative implemented at Fort Rucker during 1992. It also created a command structure that would facilitate the closer incorporation of the USAALS into the USAAVNC.

The assistant commandant/deputy commanding general served as principal assistant to the commanding general, assisted him as directed, and assumed command in his absence. Although the schoolhouse was under the direct daily supervision of the deputy assistant commandant, the assistant commandant/deputy commanding general was responsible for all aspects of training conducted at Fort Rucker and played a major role in directing combat developments, evaluation and standardization, and air traffic control. He frequently represented the branch chief in providing guidance to and maintaining close relationship with aviation brigades and battalions throughout the Army and in directing the execution of various special missions and projects in support of the branch and of aviation training.

¹¹Transcripts of oral interviews, John W Kitchens with Maj Gen John D Robinson, 16 Jun and 14 Sep 92, oral history file; Notes on oral interview, John W Kitchens with Brig Gen (P) Robert A Goodbary, 6 May 93, oral history file.

During 1992, the assistant commandant was especially involved with reorganizing the schoolhouse, finding solutions to aviation gunnery problems so as to permit more meaningful aviation participation in rotations at the combined training centers, updating the Army Aviation Modernization program, implementing total force integration, developing the aviation restructure initiative, and consolidating military helicopter training at Fort Rucker.¹²

Col. Patrick J. Bodelson served as chief of staff of the USAAVNC from 1 January to 27 July, when he was succeeded by Col. Robert N. Seigle. The chief of staff served as principal assistant to the commanding general and assistant commandant in the command and management of the USAAVNC and Fort Rucker, 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; aviation proponentcy; liaison; and safety. The deputy chiefs of staff during the early part of 1992 was Maj. William B. Sutherland and, during the latter part, Maj. Danny L. Ball.¹³

The deputy assistant commandant from 1 January through 27 July was Col. Robert N. Seigle. When Colonel Seigle became chief of staff, Col. Thomas W. Garrett became deputy assistant commandant and continued in the position for the remainder of the year. The deputy assistant commandant served as principal assistant to the assistant commandant in the accomplishment of administrative and management duties associated with assigned aviation training responsibilities 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 and activities. He also acted as the command group's "eyes and ears" in the school, assisted in school house reorganization, coordinated the incorporation of Desert Shield/Storm lessons learned into the school, and administered the Precommand Course. As a

¹²News release no. 92/104/ahe, USAAVNC, 9 Jun 92, Chapter I file; E-mail note, RoundinB to cdrs/dirs, 17 Nov 92, sub: signature block for BG Goodbary, Chapter I file; Transcript and notes on oral interviews, John W Kitchens with BG (P) Robert A Goodbary, 30 June 1992 and 6 May 1993, oral history file. See the section on organizational changes in 1992, below.

¹³Notes on oral interview, John W Kitchens with Col Robert N Seigle, 9 Apr 93, oral history file; E-mail note, TerrillM to cdrs/dirs, 24 July 92, sub; chief of staff, Chapter I file.

senior leader of the Aviation Center, the deputy assistant commandant was also involved with virtually all major school and center projects and planning activities.¹⁴

The positions of deputy assistant commandant-reserve (for U.S. Army Reserve [USAR]) and deputy assistant commandant-national guard (for U.S. Army National Guard [ARNG]) were established and filled at the Aviation Center during 1991. The principal reason for the creation of these positions was to support total force integration by giving greater visibility and emphasis to the reserve components, by integrating reserve component training into the combined arms training program, and by improving readiness levels of reserve component aviators and aviation soldiers. Other branches followed the lead of aviation in creating and filling these positions.

The deputy assistant commandant-USAR throughout 1992 was Col. Clifford L Massengale, and the deputy assistant commandant-ARNG was Col. Mario Meola. They served as the principal assistants to the USAAVNC assistant commandant on total force integration efforts relating to the USAR and the ARNG. Directly and through subordinates in key directorates and other USAAVNC organizations, they participated in the formulation, coordination, and administration of policies, plans, and programs affecting the reserve components. They also provided assistance to reserve component students attending courses of instruction at the USAAVNC and assisted in the resolution of various problems encountered by these students. Finally, they played important roles in the Army aviation total force integration planning.¹⁵

The garrison commander from January through July was Col. Richard N. Roy. Col. Samuel P. Walker succeeded Colonel Roy and remained in the position for the remainder of the year. The garrison commander was 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, civilian personnel, logistics, post security, information management, contracting, equal employment opportunity, and reserve component support. He also chaired boards and committees relating to various personnel and garrison activities.

¹⁴List of significant contributions (for DA 67-8-1), Col Robert N Seigle, DAC file; Notes on oral interview, John W Kitchens with Col Robert N Seigle, 9 Apr 93, oral history file; Notes on oral interview, John W Kitchens with Col Thomas W Garrett, 11 Mar 93, oral history file.

¹⁵Notes on interviews by the command historian with Colonel Meola on 24 Feb 93 and with Colonel Massengale on 9 Mar 93, oral history file.

Cmd. Sgt. Maj. Freddy Finch, Jr., served as USAAVNC command sergeant major the entire year. One of Cmd. Sgt. Maj. Finch's priorities was strengthening the noncommissioned officer support channel so as to better prepare the leaders of the future. The principal function of the command sergeant major was to serve as the primary adviser to the commanding general on all matters pertaining to the enlisted soldiers of the USAAVNC and of the Aviation Branch. He monitored and influenced assignments of senior noncommissioned officers and all aspects of aviation-related enlisted training and made recommendations to the commander regarding these matters. The command sergeant major was also the principal adviser to the commander on all matters relating to discipline, esprit de corps, and proficiency of the enlisted members of the command and of the branch.¹⁶

The assistant commandant of the Aviation Logistics School throughout 1992 was Col. William J. Blair. Colonel Blair was directly responsible to the commander of the USAAVNC and served as his principal assistant in the management of all aspects of aviation logistics training at the USAALS. Mr. Rodney J. Schulz served as deputy assistant commandant, and Sgt. Maj. Alan J. Gott served as sergeant major of USAALS for all of 1992.¹⁷

D. Organizational Changes in 1992

The rapid growth of simulation training at the Aviation Center necessitated frequent organizational changes to effectively support this training. In 1990, the Department of Combined Arms Tactics and the Department of Gunnery and Flight Systems were merged to form the new Department of Tactics and Simulation (DOTS). This reorganization provided some savings and also gave more emphasis to the rapidly growing role of simulation in aviation training.¹⁸ By August 1991, however, it was apparent that the rapid growth of simulation training was causing the existing organization to become out of date. A basic problem was that responsibility for flight training was divided between the Aviation Training Brigade (ATB) and the DOTS. The solution decided upon in 1991 was to transfer all simulation operations and flight academic training to the ATB, thereby consolidating actual

¹⁶In addition to the sources already cited, the following sources were used in compiling the section on command and control: USAAVNC Regulation 10-1, "Organization and Function Manual," pp. 01.01-01.07, passim; 1992 USAAVNC organization charts; John W Kitchens, USAAVNC Annual Command History, 1 January-31 December 1991, (Fort Rucker, AL, Jan 93), (hereinafter referred to as 1991 ACH), passim; and Historical report, Office of Garrison Commander, CY 92.

¹⁷Historical report, USAALS PMO, CY 92.

¹⁸John W Kitchens and Burton Wright III, United States Army Aviation Center Annual Historical Review, 1 January-31 December 1990, (Fort Rucker, AL, June 1991), (hereinafter referred to as 1990 AHR), p. 10.

and simulated flight training and academics under one organization.¹⁹ This transfer was part of a general USAAVNC reorganization plan and was implemented in 1992.²⁰

A major reorganization of the USAAVNC, including USAALS, was planned during 1991 for implementation in 1992; the USAAVNC assistant commandant briefed the commanding general on 21 September 1991 on the recommended organizational changes. These changes were endorsed by the commanding general, further developed by the Directorate of Resource Management (DRM) and outlined in a memorandum of instruction issued in February 1992. The purposes of the reorganization, in addition to accommodating and facilitating the rapidly increasing simulation training, were to reduce duplication and promote better coordination with regard to the training programs at Fort Rucker and Fort Eustis. The reorganization also aimed at promoting cost savings in the entire training program by establishing a more logical and efficient organizational framework.

With the implementation of the planned reorganization in 1992, USAALS became more closely integrated into the USAAVNC by the partial implementation of the "lead/colab" relationships between Fort Rucker directorates and their counterpart organizations at the USAALS. The "lead/colab" relationships had been proposed as a short term arrangement during the 1991 planning sessions. According to this concept, the Fort Rucker directorates would provide the lead, and their counterpart organizations at the USAALS would be in the colab position and would work through the Fort Rucker organizations. In the area of enlisted training, the USAALS organization would provide the "lead," and enlisted training at Fort Rucker would be in the "colab" position. The USAALS would continue to receive direct tasking, however, from the Combat Arms Support Command (CASCOM), the commander of which would also continue to serve as intermediate rater of the USAAVNC commander.²¹

During the reorganizational planning, the USAAVNC leaders also carefully studied the training and training support functions of the Directorate of Training and Doctrine (DOTD), the new Department of Tactics and Simulation (DOTS), the Department of Enlisted

¹⁹Copies of briefing slides, Chapter I file; Historical report, ATB, CY 91; Staffing response, [DOTD to cmd historian, Jan 93], 1991 DOTD file.

²⁰Memo ATZQ-RFM (570-4g), Col C S Ivie for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, also encl # 3, DOS; Historical report, ATB, CY 92; Table of distribution and allowance WOU9AA 0292, ATB.

²¹Memo ATZQ-RFM (570-4g), COL C S Ivie, for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, also encl # 7 "Short Term Lead/Colab Relationship," DOS; "Draft" memo ATZQ-RFM (570-4g), Col Patrick J Bodelson, for distr, sub: lead/colab operating procedures..., DOS, TDD # 95; Kitchens, 1991 AHR, pp. 9-11.

Training (DOET), the 1st Aviation Brigade, and the Aviation Training Brigade (ATB). The DOTD's involvement with doctrine was limited to publishing manuals, and it did very little actual training; this directorate was engaged, for the most part, in training development (i.e., oversight of programs of instruction, task analyses, simulation, and training aids). A large portion of the teaching was under the auspices of the DOTS, but the development of a new course required the coordinated effort of two or three different organizations. During the latter part of 1991, a great deal of study was devoted to a reorganization of the functions and responsibilities of DOTS and DOTD in order to establish a more logical and efficient system for training and training development and also to deal more effectively with simulation and simulation training programs.

The goal was to reorganize the USAAVNC directorates, departments, and commands involved in the training mission according to a model by which some organizations would plan, some would execute, and some would support. The outlines of this concept were approved by the commanding general in September 1991. Upon implementation, the DOTS and the DOET would be discontinued. Elements from these departments would be realigned to the training brigades and the DOTD. A new Directorate of Simulation would be activated, employing most of the assets of the existing DOTD. Only one significant change in this area was actually made in 1991; on 1 October the worldwide simulation support function of DOTS was shifted to DOTD, which then had major responsibility for oversight of simulation. By the end of the year, however, a plan was in place for a general realignment of the functions of several USAAVNC organizations so as to achieve a more logical and efficient organizational framework.²²

One of the major organizational changes within the USAAVNC in 1992 consisted of the establishment of the Directorate of Simulation (DOS) and the abolishment of the DOTS. The DOTS' responsibility for flight academic training and simulator operations was transferred to ATB, and its responsibility for professional development training and aviation doctrine preparation and publication was transferred to DOTD. In lieu of the old DOTS, the DOS was established on 1 March by removing the Simulation Development, Management, and Research Division and the Worldwide Software Division from the DOTD and then by expanding these and other simulation-related functions. The new DOS consisted of four divisions (Operations and Administration, Training Device, Software Development and

²²Historian's notes on organizational meetings of 20 and 24 Sep and 21 Oct 91, 1991 historian's note file; Transcription of interview, John W Kitchens with Col Michael K Mehaffey, 7 Apr 92, oral history file; Historical report, DRM, CY 91; Notes on oral interview, John W Kitchens with Col Robert N Seigle, 9 Apr 93, oral history file.

Management, and Aircraft Survivability Equipment) from March to September and of five divisions (with the addition of Warfighter Simulation) for the remainder of the year.²³

The DOS became the Aviation Branch chief's central point of contact and user representative for the development, fielding, sustainment, and software configuration management of aviation training aids, devices, simulators and simulations, and aircraft survivability training issues. The DOS was to represent the Aviation Branch chief and worldwide users in all actions concerning these devices and all training for their use.²⁴

The Warfighting Simulation Division of the DOS was created provisionally in September 1992 to increase the priority for aviation assets in warfighting simulations across the joint services. The division managed the contract operations of the Aviation Test Bed (see chapters II and III, below) and used the test bed as a vehicle to exploit simulation technology to support collective training, training development, doctrinal development, and materiel development through a variety of programs and tests. The Warfighting Simulation Division was also the focal point for infusing battle lab efforts into simulation to support demonstrations in which aviation was a key player.²⁵

The new DOTD, which began evolving during March 1992, consisted of seven divisions, viz: Program Management, Advanced Tactics, Maneuver & Fires, Combat Support/Combat Service Support, Warrant Officer Training, Individual and Unit Training, and Staff and Faculty Development. In October 1992, the Warrant Officer Division was separated from DOTD and joined with elements of the 1st Aviation Brigade to form the Warrant Officer Career Center (see "Total Warrant Officer Career Center," below). The primary missions of the new DOTD were training, training development, and development of aviation doctrine.²⁶

²³Memo ATZQ-RFM (570-4g), COL C S Ivie, for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, also encl # 2, DOS; Historical report, DOS, CY 92; Memo ATZQ-DS (10-1a) Col Palmer J Penny, for DRM, 7 Oct 92 sub: management/resource alignment study, also encls, DOS.

²⁴Msg [1992, first page missing], Maj Gen John D Robinson to distr, sub: USAAVNC training aids, devices, simulators, ..., CG file.

²⁵Historical report, DOS, CY 92; Tel interview by John W Kitchens with Capt Paul Swicord at Aviation Test Bed, 30 May 92.

²⁶Memo ATZQ-RFM (570-4g), Col C S Ivie for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, DOS; Historical report DOTD; Table of distribution and allowance TCW0U9AA 9301, DOTD.

During the organizational planning sessions of 1991, it was decided that advanced individual training at Fort Rucker would be conducted under the auspices of an enlisted training battalion of the 1st Aviation Brigade. Also, the functions of the other TRADOC battalions of the 1st Aviation Brigade would be modified so as to delineate clearly and logically the training and leader development functions of each battalion. These plans were developed in 1991, but final decisions and the reorganization were still pending at the end of the year.²⁷

In June 1992, the USAAVNC Department of Enlisted Training was converted into a provisionally activated enlisted training regiment, the 2-222nd Aviation. The indicated purpose of this reorganization was to promote increased efficiency.²⁸ The 2-222nd was inactivated on 18 September, however, and its enlisted training functions were assumed by the 1-13th Aviation Regiment; this was one aspect of the 1992 reorganization of the 1st Brigade. In September and October 1992, the responsibility for most USAAVNC non-flight training and leader development was divided among the three TRADOC battalions of the 1st Aviation Brigade. The 1-13th had responsibility for all advanced individual training at the USAAVNC as a result of having absorbed the functions of the 2-222nd. The 1-145th Aviation Regiment was assigned responsibility for officer and warrant officer training and leader development programs. The 1-10th Aviation Regiment then assumed responsibility for Aviation Center staff and support units. These staff and support units included the Air Assault School, artillery support, military police, the 98th Army Band, and the pathfinder unit.²⁹

Another organizational change tentatively decided upon in 1991 and scheduled for implementation on 1 March 1992 consisted of the realignment of the International Military Student Office from the 1st Aviation Brigade to the staff supervision of the deputy assistant commandant.³⁰ This change did not materialize, however; the International Military Student

²⁷Historian's notes, organizational planning meetings of 15 Apr 20 and 24 Sep and 21 Oct 91, 1991 historian's note file; Historical report, 1st Aviation Brigade, CY 91.

²⁸Memo ATZQ-ETB (10-1a), Col Patrick J Bodelson for chief of staff TRADOC, 6 Apr 92, sub: designation of enlisted training battalion, 1st Avn Bde; Permanent orders 63-1, Leon B Blackwell Jr for distr, 9 Jun 92, sub: 2d Battalion 222d Aviation (WOU9ZK), 1st Avn Bde.

²⁹Memo ATZQ-RFM (570-4g) Col C S Ivie for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization; E-mail note, Beth Hall for cdrs/dirs, 21 Sep 92, sub: reorganization of the 2-222nd into the 1-13th Avn Reg, Chapter I file; Permanent orders 103-6, George L Sumrall Jr for distr, 11 Sep 92, sub: 2d Battalion 222d Aviation (WOU9ZK), 1st Avn Bde; "Aviation Battlebook," APO, 1992; Historical report, 1st Aviation Brigade, CY 92.

³⁰Memo ATZQ-RFM (570-4g), Col C S Ivie for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, DOS.

Office was instead realigned within the 1st Aviation Brigade from the 1-145th to become Company D of the 1-13th. This occurred in October 1992.³¹

An organizational change that was totally planned and effectively in place prior to the beginning of 1992, had an official effective date of 1 January 1992. This was the transfer of the Office of Military Personnel/Adjutant General from the Directorate of Personnel and Community Activity (DPCA) to become a separate staff activity under the general oversight of the garrison commander. One of the reasons for this change was the elimination of the O-6 position of director of DPCA in accordance with 0292 table of distribution and allowances. Some functions of the DPCA had been moved to other organizations during 1991. With the loss of responsibility for military personnel administration, DPCA's responsibilities remained limited to community and family activities. The name of the organization was accordingly changed to Directorate of Community Activities (DCA), effective 1 January 1992.³²

With an effective date of 1 October 1992, the U.S. Army Information Systems Command unit at Fort Rucker was discontinued. The Fort Rucker Directorate of Information Management (DOIM) was transferred to the USAAVNC and TRADOC; the realignment was accomplished on schedule and the 0293 table of distribution and allowances was documented.³³

Prior to 1992, proponency for all avionic military occupational skills was transferred from the U.S. Army Signal School (USASIGS) to the USAAVNC. This restructure deleted avionic military occupational specialties 35K, 35L, 35R, and 35M from career management field 28, and at the same time, added military occupational specialties 68N, 68L, and 68Q to career management field 67.³⁴ During 1992, however, the USAAVNC conducted a series of studies in conjunction with representatives from other Army organizations concerning the relocation of the training base for some aviation related military occupational specialties. A decision was made to relocate the training base for 68L, 68Q, 68R, and 93D from Fort Rucker to Fort Gordon. An endorsement by TRADOC of the proposal to transfer

³¹Historical report, 1st Aviation Brigade, CY 92.

³²Memo ATZQ-PAG-M, Lt Col John T Planchon for CofS, 24 Sep 91, sub: realignment of Military Personnel Division/Adjutant General Division, Chapter I file; Memo ATZQ-RFM (570-4g), Lt Col John A Whitson for distr, 6 Dec 91, sub: memorandum of instruction for transfer of Military Personnel Division..., Chapter I file; Memo ATZQ-PA Col Clarence L Belinge for distr, 1 Jan 92, sub: directorate name change, Chapter I file.

³³General Orders No. 20, 1 Aug 92, "Dissolution of USAISC units in the continental United States," DOIM, also Chapter I file; Historical report, DOIM, CY 92.

³⁴Ltr, Maj Gen John D Robinson to Mr Thomas J Edwards, 9 Jan 92, CG file.

proponency for these specialties to the U.S. Army Ordnance School was expected early in 1993. It was also proposed that training for military occupational specialty 68N be relocated to Fort Eustis, VA, with the USAAVNC retaining proponency and that 67N30 and 67V30 training be moved from Fort Eustis to Fort Rucker. These changes were expected to take place in October 1993.³⁵

On 15 July 1992, the 123rd Ordnance Detachment at Fort Rucker was formally inactivated. This unit had provided explosive ordnance disposal support to Fort Rucker and explosive device support to the surrounding area. These functions were assumed by the ordnance detachments at Fort Benning, GA, and Fort McClellan, AL, upon the inactivation of the 123rd.³⁶

In March 1992 the director of administration and management of the Office of the Secretary of Defense approved a plan for the consolidation of all DOD printing services and printing procurement functions to the Defense Printing Service with an effective date of 6 April 1992. Fort Rucker's implementation of this realignment resulted in the transfer of twenty-seven civilian authorizations from the DOIM to the new Defense Printing Service.³⁷

The Text Issue Facility of the 1st Aviation Brigade was transferred from 1st Brigade to the DOIM on 1 October 1992. The transfer was in accordance with Army Regulation (AR) 25-30, which assigned administration of command publications and distribution systems to information management offices. Three personnel authorizations were transferred to DOIM along with the function.³⁸

At the end of 1992 the USAAVNC consisted of thirteen directorates at Fort Rucker and three at Fort Eustis; there were additionally three training departments at Fort Eustis and the Noncommissioned Officer Academy at Fort Rucker. 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 managers or project offices, and several personal and special staff offices. More than two

³⁵Historical report, DOTD, CY 92; Historical report, NCOA, CY 92.

³⁶Memo (310-49c), Capt Anthony Archibald for distr, 7 Apr 92, sub: inactivation of the 123rd Ord Det..., Chapter I file.

³⁷Msg 261628Z Mar 92, Brig Gen John A Hedrick to HQDA, sub: defense management decision 998, consolidation of DOD printing, DOIM; Historical report, DOIM, CY 92.

³⁸Memo ATZQ-BDE (1), Col Robert B Bailey for CofS, sub: transfer of Text Issue Facility--action memo, DOIM.

dozen tenant agencies were also located at Fort Rucker; these agencies were supported by the USAAVNC and engaged in activities closely related to the mission and functions of the Army Aviation Center. In addition to its directorates and training departments, the USAALS had two mission support offices under the assistant commandant.³⁹

During 1990 and 1991, steps were taken at the USAAVNC to revise and update USAAVNC Regulation 10-1, "Organization and Function Manual," to reflect the numerous changes that had occurred since the current manual was published in March 1988. Because of the workload created by Operations Desert Shield and Desert Storm, reductions in force, and reorganization initiatives, this action had not been completed by the end of calendar year 1992.⁴⁰

E. Total Army Warrant Officer Career Center (WOCC)

During the early 1980s studies conducted by TRADOC demonstrated that there were serious problems with the direct appointment of warrant officers. Without a standardized and coordinated training system, the identification and preparation of the most promising future officer technicians were not ensured. In 1983, the vice chief of staff of the Army directed that the direct appointment of warrant officers be replaced by a three-tier warrant officer training system, the primary intent of which was to support earlier warrant officer accession by training them better in preparation for longer utilization. The Total Warrant Officer Study, conducted in 1984 and 1985, supported the three-tier approach but recommended that the system be examined again after five years.⁴¹

During this interim, almost all warrant officer leader development and non specific military occupational specialty training were consolidated at Fort Rucker. In August 1988, the Warrant Officer Candidate School was established at the Aviation Center, and the warrant officer entry courses at Fort Sill and Aberdeen Proving Grounds, MD, were discontinued. Following the initial six-week program in the Warrant Officer Candidate School, aviation candidates began flight training, and the technical services candidates proceeded to various installations for technical and tactical certification.

³⁹See appendices I-III.

⁴⁰Memo, ATZQ-RCM, James H Woodard for distr, 25 Sep 92, sub: Organization and Functions Manual, USAAVNC Regulation 10-1, Chapter I file.

⁴¹"The Total Army Warrant Officer Leader Development Action Plan (WOLDAP)," 27 Feb 92, WOCC

Also in 1988, the Master Warrant Officer Course was established at the USAAVNC. The two-phase course consisted of a correspondence segment and of the resident, non specific, military occupational specialty course. A third phase, consisting of advanced military occupational specialty specific training, was planned but never implemented.⁴²

The DA and TRADOC initiated the Warrant Officer Leader Development Plan in 1990, but little progress was made until 1991. In April 1991, a leader development decision network, consisting of representatives from DA Deputy Chief of Staff for Operations (DCSOPS) (proponent), DA Deputy Chief of Staff for Personnel (DCSPER), TRADOC (action agency), U.S. Total Army Personnel Command (PERSCOM), U.S. Army Special Operations Center (USASOC), U.S. Army Europe (USAREUR), U.S. Army Forces Command (FORSCOM), USAAVNC, and the Center for Army Leadership was agreed upon. In-process reviews were conducted at Fort Monroe on 29-30 May and 10-12 July and at Fort Lee on 31 July-2 August. A workshop was conducted on 27-29 August, and a draft of the Warrant Officer Leader Development Action Plan was developed in October and November. Issues addressed included the leader development process, civilian education, accession and retention, duties and responsibilities, personnel management, warrant officer insignia, and training and professional development.⁴³ The draft plan was staffed with proponent branches, major commands, and leader development decision network agencies during the latter part of 1991.⁴⁴

The chief of staff of the Army approved the Warrant Officer Leader Development Action Plan on 27 February 1992. The final plan contained the following thirteen discrete issues:

- (1) life cycle models for warrant officers, showing the appropriate career pattern by military occupational specialty;
- (2) review and update of Warrant Officer Training System to ensure appropriate content, method, and timing of training;

⁴²John W Kitchens, United States Army Aviation Center 1988 Annual Historical Review (Fort Rucker, AL, June 1989), (hereinafter referred to as 1988 AHR), pp. 35-36.

⁴³Memo DAMO-TRO, Lt Gen Dennis J Reimer for distr, 2 May 91, sub: Warrant Officer Leader Development Action Plan, WOCC; Briefing papers, "Warrant Officer Leader Development Action Plan," 1991 AP file.

⁴⁴Msg 1911507 Sep 91, cdr TRADOC to distr, sub: WO LDDN general officer steering committee, 1991 CG file.

- (3) standardization of warrant officer selection criteria to promote greater Army benefit from services of warrant officers;
- (4) appointment of warrant officers immediately after completion of Warrant Officer Candidate School rather than after completion of certification training;
- (5) systematic assignment of warrant officers to positions according to grade;
- (6) the establishment of the Total Army Career Center as a TRADOC/CAC (Combined Arms Center) tenant organization at Fort Rucker to serve as executive agent for all warrant officer training;
- (7) increased emphasis on warrant officer recruitment in the reserve components;
- (8) more effective explanations of duties and responsibilities of warrant officers in regulations, doctrinal literature, and training courses;
- (9) establishment of higher civilian education requirements for warrant officers at various grades;
- (10) retention of distinctive warrant officer insignia rather than branch insignia and continuation of centralized warrant officer management by Warrant Officer Division of PERSCOM rather than branch management;
- (11) establishment and accreditation of warrant officer candidate schools as regional training sites at state academies for ARNG candidates;
- (12) development and implementation of a warrant officer military qualification standard system;
- (13) Warrant Officer Management Act implementation briefings to inform warrant officers and the Army about changes and procedures.⁴⁵

⁴⁵"The Total Army Warrant Officer Leader Development Action Plan (WOLDAP)," 27 February 1992, WOCC; Historical report, WOCC, CY 92. See "Personnel Management" in Chapter IV for information on the Warrant Officer Management Act.

During 1992 considerable headway was made at Fort Rucker on the implementation of the Warrant Officer Leader Development Action Plan. On 1 October, a mass ceremony was conducted in which 558 former graduates of the Warrant Officer Candidate School, then engaged in flight training as warrant officer candidates, were appointed warrant officers. After that date, warrant officer candidates were accessioned to warrant officer upon completion of the Warrant Officer Candidate Course.

On 2 October 1992, the Total Army Warrant Officer Career Center (WOCC) was established as a provisional organization of the USACAC. The provisional status was scheduled to continue until October 1993. Although the WOCC was made a USACAC tenant agency at Fort Rucker and its personnel wore the Combined Arms Center patch, the WOCC remained on the USAAVNC budget and table of distribution and allowances. Also, USAAVNC general officers continued to rate and senior rate the WOCC leaders. This arrangement was in accordance with a recommendation made by the USAAVNC and accepted by the USACAC in mid 1992. The extensive experience of the USAAVNC in warrant officer training, the preponderance of aviators among the warrant officer ranks, and the location of the WOCC at Fort Rucker were the major reasons for the somewhat anomalous arrangement. The degree to which the WOCC would remain permanently dependent on the USAAVNC was uncertain at the end of 1992.⁴⁶

Positions to staff the WOCC were drawn from the Warrant Officer Training Division of DOTD and the 1-145th Aviation Regiment of the 1st Aviation Brigade. As of 2 October 1992, the center assumed most responsibilities for warrant officer training at Fort Rucker formerly exercised by the 1-145th. The 1st Warrant Officer Company, the organizational element of the center with responsibility for the Warrant Officer Candidate School, was also created in October 1992, but it remained attached to the 1-145th until after the end of the year.⁴⁷

⁴⁶Msg 061600Z May 92, Maj Gen John D Robinson for Maj Gen Malcor, sub: Warrant Officer Career Center, CG file; Notes on conversation by John W Kitchens with CWO5 James R Damron, 15 Apr 93, CG file; Memo ATZQ-RFM (570-4g), Col Robert N Seigle for distr, 31 Aug 92, sub: memorandum of instruction for establishment of the WOCC, WOCC and DRM; Notes on oral interview by Dr John W Kitchens with Col Robert N Seigle, 9 Apr 92, oral history file; Provisional TDA #93-2, based on TDA WOU9AA 0293, WOCC.

⁴⁷Memo ATZQ-RFM (570-4g), Col Robert N Seigle for distr, 31 Aug 92, sub: memorandum of instruction for establishment of the WOCC, WOCC and DRM; Provisional TDA #93-2, based on TDA WOU9AA 0293, WOCC; Historical report, DRM, CY 92; Historical report, WOCC, CY 92. See Chapter II below for information on warrant officer leader development and Chapter IV for warrant officer personnel management.

F. Conferences, Ceremonies, and Awards

In March 1992 Major General Robinson convened a meeting of senior aviation officers aimed at discussing major issues relating to Army aviation and arriving at a consensus so that the Army aviation community would speak with a single voice on matters of aviation requirements, policies, plans, programs, and doctrine. This meeting was billed as an aviation strategy meeting and was referred to colloquially as the "Kahuna" meeting (later as "Kahuna I," because a similar meeting held in October was called "Kahuna II"). The agenda of the first aviation strategy meeting was divided into two parts. Part I was a short doctrine discussion on deploying, fighting, and sustaining the force. This was for disseminating information and for confirmation of current directions in the TRADOC community as coordinated with field commanders. Part II was a more detailed discussion on organization, materiel investment, training, and leader development implications of doctrinal thrusts.⁴⁸

The Kahuna II meeting was conducted on 5 October 1992. The principal areas of discussion included Battle Labs, concepts and studies, training and leader development, doctrine and organization, materiel, soldiers, and safety.⁴⁹

The annual Aviation Brigade Commanders' Conference at Fort Rucker began on 1 December and ended on 3 December 1992. Major topics of discussion at the conference included Battle Labs, the Comanche program, aviation combined arms training strategy, aviation safety, battle command and control, personnel reduction strategy, combined arms and aviation doctrine, and senior rating of warrant officers.⁵⁰

The Apache Users' Conference was held at Fort Rucker in October 1992. Some of the major topics discussed consisted of Apache crew training, depot repairs, gunnery, Apache modernization plan, crew readiness level, combined arms training center rotations, and aviation life support equipment.⁵¹

⁴⁸Memo ATZA-CG Maj Gen John D Robinson for distr, 9 Mar 92, sub: aviation issues meeting..., DAC file.

⁴⁹Historical report, DCD, CY 92.

⁵⁰Agenda, 1992 Aviation Brigade Commanders' Conference, Brigade Commanders' Conference file; Historian's notes, 2 and 3 Dec 92, Brigade Commanders' Conference file.

⁵¹E-mail note, Maj Gen Dave Robinson for cdrs/dirs, 21 Oct 92, sub: Apache users' conference, Chapter III file.

The 1992 Aviation Logistics Conference was held at Fort Eustis in February and was deemed to be the "best planned and implemented gathering" of active and reserve component logisticians ever. The consensus of those attending was that conferences of that type were essential for identifying and solving critical warfighting support issues. Issues discussed at the conference included specialty code 15D (aviation logistics officer), forward repair strategies, forward arming and refueling points, forward support battalions, and a new concept of varying or reducing operational readiness rate on older systems so as to more effectively support the "go-to-war" or modern systems.⁵²

The annual worldwide Aviation Trainers' Conference was conducted at Fort Rucker from 27 to 29 October 1992. The conference was hosted by the Directorate of Training and Doctrine, and forty-four personnel attended.⁵³

The annual Combat Developments Day for Industry was held on 15 December 1992. Briefings were conducted on the Army Aviation Modernization Plan, battle labs, simulation, and enhanced combat requirements system.⁵⁴

The most historically significant ceremony held at Fort Rucker during 1992 was the honor eagle ceremony of 5 June commemorating the 50th anniversary of Army aviation. In June 1942, the chief of staff of the Army issued orders creating organic Army aviation for field artillery and the Department of Air Training at Fort Sill, OK; these were the forerunners respectively of the Army Aviation Branch and the Army Aviation School and Center.

On 31 January 1992, Gen. Gordon R. Sullivan, Chief of Staff of the Army, hosted an honor eagle retirement ceremony for Lt. Gen. Ellis D. Parker, a former chief of the Aviation Branch and commanding general of the USAAVNC. On 16 July 1992, an honor eagle retirement ceremony was conducted at Fort Rucker for Mr. Joseph P. Cribbins, known to Army aviators for many years as "Mr. Army Aviation Logistics." An honor eagle retirement ceremony was conducted on 2 November commemorating the retirement of Congressman William L. Dickinson, a long-time supporter of the USAAVNC and of Army Aviation.

⁵²E-mail note, Col William J Blair to Maj Gen John D Robinson, 28 Feb 92, Chapter I file.

⁵³Historical report, DOTD, CY 92.

⁵⁴Historical report, DCD, CY 92.

Another important ceremony conducted at Fort Rucker during 1992 included an Operation Desert Shield/Storm campaign streamer ceremony on 29 May 1992 for the 2-229th Attack Helicopter Regiment. A ceremony on 15 October marked the retirement of last M-101A1 howitzer (originally designed in 1919) in use by an active duty unit in the continental U.S. The howitzer was retired from service and replaced by an M-102A1 model.

Some of the more prestigious awards bestowed during 1992 are described below. Other awards are described in the appendices of this history. On 9 August Col. Stephen S. MacWillie received the Legion of Merit for his performance as the TRADOC System Manager for Comanche from 1988 to June 1992. Spec. Richard Pfeiffer, Jr., was selected as the USAAVNC Soldier of the Year for 1992, and S. Sgt. Mary B. Pena as the USAAVNC Noncommissioned Officer of the Year. The 1992 TRADOC Retention Noncommissioned Officer of the Year was Fort Rucker's Sfc. Hilair Peters, Jr. Pena and Pfeiffer were awarded Army Achievement Medals and Peters was awarded Meritorious Service Medal from TRADOC at a ceremony held at Fort Rucker on 26 March 1993.⁵⁵

At the Army Aviation Association of America awards ceremony in Atlanta, GA, in April 1992, the following awards were announced: Aviator of the Year--CWO3 James C. Kalahan; Aviation Soldier of the Year--S.Sgt. Everett Franklin Smith III, DA Civilian of the Year Award--James R. Ray; and James H. McClellan Aviation Safety Award--CWO4 Stephen V Rauch.⁵⁶

U.S. Army air traffic control awards were presented during the Army Aviation Association banquet on 4 December 1992 at Fort Rucker. The awards were as follows: Controller of the Year--Cpl. Pedro Gonzalez; Manager of the Year--Sfc. Cornelius Parnell, Jr; Maintenance Technician of the Year--S.Sgt Philip K. Ignasiak; Facility of the Year--Army Flight Operations Detachment, Heidelberg, Germany; Platoon of the Year--First Platoon, Company A, 1st Battalion, 58th Aviation Regiment.⁵⁷

The first winner of a new award, the Joseph P. Cribbins Award for Logistical Excellence, was 1st Lt. James R. Schenck. First Lt. Schenck was the distinguished graduate from class 92-01 of the Aviation Officer Advanced Course.⁵⁸

⁵⁵E-mail note, Lt Col James M Delashaw to cdrs & dirs, 8 Sep 92, Chapter I file; Army Flier, 2 Apr 93.

⁵⁶Program of 1992 awards luncheon, Chapter I file.

⁵⁷Msg 251935Z Jun 92, cdr USAAVNC to distr, sub: annual air traffic control awards, USAATCA.

⁵⁸Army Flier, 27 Mar 92.

During the retirement ceremony for Lt. Gen. Ellis D. Parker, the chief of staff of the Army announced the creation of a new Army unit award to be named in honor of General Parker. The particulars of the selection process were developed during 1992. It was decided that the award would be known as the "LTG Ellis D. Parker Aviation Unit Award." Aviation battalions in competition would be evaluated in the areas of leadership, training, maintenance, and safety during the preceding calendar year. The USAAVNC would sponsor the competition and provide funding for trophies and certificates. The objectives would be to improve readiness by providing positive incentive for extraordinary excellence in the areas evaluated.⁵⁹

⁵⁹Memo ATZQ-AC, Brig Gen Robert A Goodbary, for DCSOPS, 26 Aug 92, sub: the LTG Ellis D. Parker Aviation Unit Award, with encls, DAC file.

CHAPTER II

TRAINING AND LEADER DEVELOPMENT

The Aviation School Board was established at the USAAVNC in 1992 as a council of colonels chaired by the deputy assistant commandant. The purpose of the board was to review proposals, discuss concepts, and resolve issues that related to more than one organization or represented significant changes in policies or programs. The deputy assistant commandant served as facilitator of the board, and members consisted of the commanders of the two USAAVNC training brigades, the director of simulation, and the directors of training and doctrine of both the USAAVNC and the USAALS¹

The development of an exportable training packet for crew coordination training continued to receive considerable emphasis at the USAAVNC during 1992. The initial idea came from a DCSOPS directive of October 1990. Crew coordination consisted essentially of "the development of a baseline set of documents for all Army aviation soldiers so that they would know everything as a crew that [was] required to be performed in the aircraft." During 1991 the DA tasked the USAAVNC to develop a plan for incorporating crew coordination into flight training. Both the Aviation Training Brigade (ATB) and the Directorate of Simulation (DES) at Fort Rucker were involved in the planning and testing conducted during 1991. A joint working group headed by the deputy assistant commandant began in October 1991. The DES made crew coordination a part of a three-part program, consisting also of risk assessment and battle rostering.²

The Aviation School Board monitored the progress of crew coordination planning during 1992. Tests were scheduled to run from 7 July to 2 September. The team was to consist of twenty personnel. Crew coordination training at Fort Rucker was deferred because of a lack of simulators and the cost of using aircraft for training.³

The numbers of students in the various training programs at the Aviation Center at Fort Rucker during 1992 were as follows:

¹Memo ATZQ-DAC, Brig Gen Robert A Goodbary for distr, 1 Oct 92, sub: Aviation School Board charter, DAC file.

²Kitchens, 1991 ACH, pp. 19, 86-87; Memorandum for record ATZQ-TDI (351), Col Robert N Seigle, 10 Jul 92, sub: monthly school board review, DAC file.

³Memorandum for record ATZQ-TDI (351), Col Robert N Seigle, 10 Jul 92, sub: monthly school board review, DAC file.

undergraduate flight training-----	1,227
graduate flight training-----	2,772
advanced individual training-----	1,421
Noncommissioned Officer Academy--	532
professional development-----	2,300
total-----	8,252

During the year, 291,197 flying hours were clocked in the performance of the training mission, and 8,073 hours were flown for base operations for a total of 299,270 flying hours. A total of 187,333 training flights were scheduled.⁴

The Aviation Center began fiscal year 1992 with a \$17 million unfinanced requirement in flight training accounts. After the mid-year review, an unfinanced requirement of \$12.1 million remained. It was expected that funds to support variable costs based on programmed flight hours would be exhausted by mid August 1992. Since any reduction in initial entry rotary wing courses would interrupt classes then in session, abrogate contract flight training, and predominately affect fiscal year 1993 flight training funds, the only real alternative to ceasing flight operations in August was to reduce student input into graduate courses. The only costs that could be reduced significantly were contractor instructor pilots, petroleum, and parts; the costs for contractor maintenance and refueling were fixed. The USAAVNC accordingly proposed reducing total student input for graduate courses by 5 to 10 percent. However, this reduction would reduce costs by only \$4.8 million, leaving an unfinanced requirement of \$7.3 million.⁵

Additional funding of \$6-8 million for fiscal year 1992 was promised by TRADOC, which also suggested cost cutting in areas other than flight training. Since flight training programs comprised 72 percent of USAAVNC expenses, however, efficiencies in other areas provided few benefits to flight training. As early as June 1992, a discrepancy was already apparent between training requirements and funds proposed to be allocated by TRADOC for fiscal year 1993. The USAAVNC accordingly reiterated its request for the full funding of the assigned flight training mission for fiscal year 1993.⁶

⁴Historical report, DPTMSEC, CY 92.

⁵Msg 051318Z May 92, cdr USAAVNC to cdr TRADOC, sub: FY 92 flight training resources, CG file.

⁶Msg 191400 Jun 92, cdr USAAVNC personal for Maj Gen Lionetti, sub: Fy 92 flight training resources, CG file.

The Aviation Center was required to cut training costs by \$23 million for fiscal year 1993. The plans for the cuts were to concentrate on cutting student input to transition courses to advanced aircraft (AH-64, UH-60, and OH-58D).⁷

A. Initial Entry Rotary Wing Training

During 1992, 583 officers and 578 warrant officers and warrant officer candidates graduated from the common core phase of the Initial Entry Rotary Wing Course. Prior to 1 October, warrant officer candidates became warrant officers upon completion of the initial entry training, but those who graduated after 1 October had already been accessioned (see "Total Army Warrant Officer Career Center" in Chapter I above). The total of 1,161 graduates in 1992 compared to 1,360 in 1991 and 1,576 in 1990. Of the 1992 total, 186 officers and 192 warrant officers completed the OH-58 track, 225 officers and 237 warrant officers completed the UH-1 track, 107 officers and 97 warrant officers completed the AH-1 track, and 105 officers and 91 warrant officers completed the UH-60 track. Also during 1992, thirty-two European/NATO officers completed phase one of the initial entry course, thirty-nine completed phase two contact, twenty-seven completed phase two instrument, and seven completed the UH-1 track. Eleven students completed the Spanish Language Helicopter Pilot Course.⁸

During the early part of 1992 the USAAVNC planned revisions in the multi-track initial entry course. Specifically, the numbers of students programmed to complete their training in the AH-1 and UH-1 were to be reduced, and the number to complete their training in the OH-58 was to be correspondingly increased. The rationale was that since the Army was in the process of phasing out the AH-1 and UH-1, fewer of these aircraft would be available, and fewer aviators qualified to fly them would be required. Also, the OH-58 multi-track aviators received the best tactically oriented training in the initial entry course. Finally, the revision would provide a cost avoidance of an estimated \$6-8 million in flying hours and ammunition expenditure. The USAAVNC established 15 October 1992 as the starting date for the revision in the multi-track training program.⁹

⁷Notes on oral interview, John W Kitchens with Brig Gen (P) Robert A Goodbary, 6 May 93, oral history file.

⁸Academic records data, Chapter II file; Kitchens, 1991 ACH, p. 19.

⁹Msg 011405Z May 92, cdr USAAVNC to cdr TRADOC, sub: FY 93 OH-58/UH-1 multi-track revision, CG file; Msg 070900 Jul 92, cdr USAAVNC to cdr TRADOC, sub: FY 93 OH-58/UH-1 multi-track revision, CG file.

The Army Research Institute Aviation Research and Development Activity (ARIARDA) effected improvements in the assignment of aviator candidates to aircraft training tracks in 1992. With increased automation, the time required for multi-track assignment of the students of a complete training class was reduced from four to six hours to five to ten minutes. This was accomplished by the use of an improved software package for archiving multi-track battery and multi-track assignment algorithm performance. The ARIARDA also initiated research to compare representative personality assessment instruments for utility in augmenting the multi-track test battery.¹⁰

B. Graduate Flight Training

During 1992, 134 students graduated from the C-12 Aviator Qualification Course; 186, from the Fixed Wing Multi-Engine Qualification Course; and 203, from other fixed wing courses. This total of 523 graduates from all fixed wing courses compared to totals of 541 in 1991 and 527 in 1990. In 1992, 231 students completed rotary wing graduate and refresher courses; 289 graduated from rotary wing instructor pilot courses; 265, from rotary wing instructor training methods courses; and 1,072, from rotary wing aviator qualification courses. This total of 1,857 compared to 2,109 in 1991 and 2,552 in 1990. During 1992, twenty-six students graduated from flight simulator specialty courses compared to eight in 1991.¹¹

The ATB and a civilian contractor, Burnside-Ott, provided rotary wing graduate training. All fixed wing training was provided by a civilian contractor, Flight Safety International.¹²

The training of armed OH-58D instructor pilots was scheduled to begin in March 1992, and the pilot qualification courses were scheduled to begin in June.¹³ A supplemental training course was required to transition OH-58D Kiowa-qualified aviators to the OH-58D Kiowa Warrior. This supplemental course was scheduled to continue until fiscal year 1995.

¹⁰Briefing slides, "Aircrew Selection and Classification Status," 19 Nov 92, DAC file; Historical report, ARIARDA, CY 93.

¹¹Academic records data, Chapter II file; Academic records data for 1991, Chapter II file 1991; Kitchens, 1991 ACH, p. 20.

¹²Historical report, ATB, CY 92.

¹³Memo ATZQ-TSM-S (70-li), Brig Gen Robert A Goodbary for Program Executive Officer Aviation, 5 Mar 92, sub: OH-58D Kiowa Warrior training release, CG file.

The supplemental course, as well as the new Kiowa Warrior Aviator Qualification Course, were designed to teach both left and right-seat tasks, including gunnery qualification for all weapons systems. It was necessary that students be both qualified and current in unarmed OH-58D to enroll in the supplemental course. The scheduled beginning date for both the supplemental and the qualification courses was 17 June 1992, but equipment problems caused the first flight training day for both courses to be delayed to 13 July.¹⁴

The armed OH-58D training was to consist in part of "call-for-fire" training using battery computer systems. The Aviation Center had access to only one battery computer system, and three systems were required to adequately support the training. Additional systems to be obtained through normal channels would not be available when OH-58D training began. Therefore, two battery computer systems no longer required at Fort Sill because of the closing of the OH-58 Field Artillery Aerial Observer Course were requested on a transfer or loan basis to support training at Fort Rucker.¹⁵

In July 1992, the USAAVNC gathered together a group of instructor pilots representing both the training base and worldwide standardization activities to review and recommend what OH-58D tasks should be executed when conducting OH-58D aircraft operations in the analog mode. This task list, with accompanying explanations and notes, was forwarded to the Program Executive Officer for Aviation in St. Louis.¹⁶

As training in the OH-58D Kiowa Warrior was phased in, training in the OH-58D Kiowa was scheduled to be phased out. All OH-58D training was interrupted shortly after armed OH-58D training began in July 1992, however, by the worldwide grounding of all OH-58Ds. The grounding was caused by a series of accidents resulting from corrosion of a computer chip in the electronic supervisory control system.¹⁷

When Kiowa Warrior training resumed in September, it was organized into four separate programs of instruction. Course length for qualification was eleven weeks and two days, including 64.8 hours of flight instruction. The supplemental aviator qualification course

¹⁴Memo for record ATZQ-TDI (351), Col Robert N Seigle, 10 Jul 92, sub: monthly school board review, DAC file; Historian's notes, cdrs and staff meeting, 1 May 92, historian note file.

¹⁵Msg 3451000Z Jan 92, cdr USAAVNC to cdr Ft Sill, sub: loan of battery computer system, CG file.

¹⁶Memo ATZQ-TSM-S (70-li), Brig Gen Robert A Goodbary for Maj Gen Dewitt T Irby Jr, 20 July 1992, sub: OH-58D aircrew training manual tasks, CG file.

¹⁷Msg 241500Z Jul 92, cdr USAAVNC to cdr TRADOC, Chapter III file; Memo for record ATZQ-TDI (351), Col Robert N Seigle, 10 Jul 92, sub: monthly school board review, DAC file.

required thirty-three days, including 33.5 hours of flight instruction. This course was to qualify OH-58D Kiowa aviators in the new armed OH-58D Kiowa Warrior. It was discovered during the training of the instructor pilots that the originally planned twenty-seven day transition course for these aviators was insufficient to provide adequate weapon system training. The Instructor Pilot/Methods of Instruction Course was fifty-one days with 63.3 hours of flight instruction.¹⁸

A training deficiency in the AH-64A Aircraft Qualification Course became apparent during 1992. The course was originally fourteen weeks and one day, but it was reduced by four weeks as a result of the budget decrement in 1988. No problems initially resulted from the shortening of the qualification course because the new Apache pilots were rotated through the Apache Training Brigade at Fort Hood, TX, upon completing the qualification course. They often received in excess of 100 flight hours at Fort Hood before being deployed to their parent divisions and corps. During 1992, however, most Apache Qualification Course graduates reported directly to their parent units upon completing the course. They therefore arrived without the level of combat skills needed for unit readiness. The USAAVNC developed a solution for the problem which extended the length of the course from ten weeks to twelve weeks and two days. The addition of the second combat mission simulator at Fort Rucker made it possible to teach the required skills in twelve weeks and two days rather than fourteen weeks as originally estimated. TRADOC approval of the lengthening of the Apache Qualification Course was required as soon as possible so that the additional costs could be reflected in the FY 94 budget, which was already being planned.¹⁹

In March 1992 the USAAVNC negotiated an agreement with the National Guard Bureau (NGB) for the transition training of UH-60 aviators from the Alaska ARNG and from the Eastern ARNG Aviation Training Site in excess of the regularly scheduled DA transition quotas. The USAAVNC agreed to provide all training and training materials for the current USAAVNC cost, and the NGB agreed to provide two instructor pilots and two UH-60 aircraft meeting the standards for transfer. Four additional ARNG aviators were to be trained in each fifth-regularly-scheduled transition class for the duration of the agreement.²⁰

¹⁸Memo for record ATZQ-TDI (351), Col Robert N Seigle, 10 Jul 92, sub: monthly school board review, DAC file; Historical report, ATB, CY 92; Msg 232230Z Jun 92, Brig Gen Robert A Goodbary for cdr TRADOC, sub: OH-58D Warrior aviator qualification supplemental course, CG file.

¹⁹Memo ATZA-TDI (351c), Brig Gen Robert A Goodbary for TRADOC deputy chief of staff for training, 14 Aug 92, sub: course administrative data for AH-64 Aviation Qualification Course, CG file.

²⁰Memorandum of agreement between the NGB and the USAAVNC, John J Stanko Jr and Col Patrick J Bodelson, 25 Mar 92, CG file

The orderly flow of UH-60 training at the USAAVNC was threatened in May 1992 because four UH-60 aircraft that were to have been sent to Fort Rucker no later than 1 May did not arrive on time. Two were to have been sent from FORSCOM, one from the NGB, and one from the USAR. The aircraft were urgently required and were needed through fiscal year 1996 in order to guarantee no interruption in programmed training.²¹

The USAAVNC Aviation School Board met on 16 November to discuss fixed wing issues and incorporate resulting decisions into a training strategy for the future. The DCD opened the meeting with a briefing on fixed wing requirements out to fiscal year 2010. This was followed by a briefing on current and planned future training strategies. The board concluded that the existing Fixed Wing Multi-Engine Qualification Course was an adequate vehicle to produce fixed wing qualified aviators and that the A-90 was an adequate primary trainer for multi-engine qualification. The board decided, however, that there were problems involved in training for the C-12. The conclusion reached was that the current C-12 Aviation Qualification Course was inadequate--both with regard to the ground school and the simulator training provided by the contractor. It was apparent that actual aircraft training was necessary and that the course modification scheduled for fiscal year 1995 should be effected sooner than planned. The Aviation School Board also decided to investigate the proposed termination date of fiscal year 1994 for training for the OV-1.²²

During the latter part of 1991 and early 1992, the USAAVNC DES determined that the instructor pilot courses conducted at the ARNG training sites were equivalent to those conducted at the USAAVNC. Accordingly, the USAAVNC commander gave his approval to conduct instructor pilot courses at those sites with the following conditions: (a) qualification training would be conducted in accordance with current USAAVNC programs of instruction and flight training guides; (b) all end-of-course evaluations would be conducted by the USAAVNC DES; the number of instructor pilot students trained by the ARNG sites would be determined during the structure-manning-decision review process. This policy had the advantage to Army aviation of making the sites available for surge training requirements or resource shortfalls at the USAAVNC.²³

²¹Msg 140830Z May 92, cdr USAAVNC to cdr TRADOC, sub: UH-60 aircraft for the training base, CG file.

²²Memorandum for record ATZA-ATB-C, Col Thomas W Garrett, 25 Nov 92, sub: school board meeting minutes (fixed wing strategy), DAC file.

²³Memo ATZQ-CG, Maj Gen John D Robinson, 21 Jul 92, for Maj Gen Dennis P Malcor, CG file; Briefing slides, "Eastern ARNG Aviation Training Site," DAC file.

C. Joint and Combined Training

Several studies, cost analyses, and joint conferences were conducted during 1992 concerning the possibility of consolidating military helicopter training at Fort Rucker. Air Force helicopter pilots had been trained at Fort Rucker for many years, but Navy, Marine Corps, and Coast Guard helicopter pilots were trained at the Navy's Whiting Field, FL. The Navy used the TH-57 for primary helicopter training, and the Army used the UH-1 for initial entry training but was preparing to transition to the new training helicopter, which would be less expensive to operate. The study conducted by the DOD Inspector General indicated that relocating all undergraduate helicopter pilot training to Fort Rucker would provide a cost avoidance \$79 million annually--assuming the Navy, Marines, and Coast Guard continued to require approximately 550 students per year. This report consequently recommended consolidation, provided further analysis and evaluation at DOD level supported the report's findings. The Navy analysis differed markedly, however, with regard to the savings that would be realized by consolidation as well as other matters. The issue had not been resolved at the end of 1992.²⁴

As the Army and the DOD studied the question of making the USAAVNC the executive agent for all DOD rotary wing training, the possibility arose that responsibility for training Navy and Marine helicopter pilots could be given to Army aviation without full resourcing. That cost could be partly offset, it was suggested, by having some other service provide fixed wing training for Army aviators.²⁵

In April 1992 the USAAVNC commander requested that two Hellfire missiles be released each quarter to support combined arms live-fire exercises conducted at Fort Benning, GA. The missiles were to be fired from Army aircraft such as the AH-64 or OH-58D. The live fire demonstrations would be for basic and advanced aviation and infantry officer course students, Command and General Staff College students, and Air Force War College students.²⁶

²⁴Briefing slides on consolidation of helicopter training, [Oct 92], DAC file; Notes on oral interview by Dr John W Kitchens with Brig Gen (P) Robert A Goodbary, 6 and 21 May 1993, Oral History file; Information paper ATZQ-DPT-P, 30 Sep 92, DAC file.

²⁵E-mail note, Maj Gen Dave [John D] Robinson for cdrs/dirs, sub: F/S brief for the DCSOPS, Chapter III file.

²⁶Memo ATZQ-CG 70-li), Maj Gen John D Robinson for Maj Gen Jay M Garner, 7 Apr 92, sub: request Hellfire modular missile systems..., CG file.

Early in 1992 the USAAVNC became involved with the Southeastern Test and Training Area (SETTA), a multi-service effort to improve the efficiency, effectiveness, and use of airspace, training areas, ranges, and test facilities along the Gulf Coast. The SETTA included Army, Air Force, and Navy installations. A major benefit of USAAVNC involvement was access to about 725 square miles of training areas on Eglin Air Force Base, compared to the 68 square miles available at Fort Rucker. Airspace deconfliction was also a major consideration, since Air Force and Naval airspace abutted Fort Rucker airspace.²⁷

When the ARNG's requirement for a tracked vehicle training area evolved from a platoon size, five-tank maneuver area to force-on-force tactical maneuvering involving twenty to twenty-five tanks, the USAAVNC concluded that Fort Rucker could not support the armor training without first conducting a costly environmental impact study. The USAAVNC consequently recommended that the ARNG investigate the possibility of conducting its force-on-force exercises at Eglin Air Force Base, which was already being used by an Alabama ARNG tank unit as a result of the SETTA arrangement.²⁸

In August 1992, the USAAVNC was invited to participate in a joint training exercise with the U.S. Air Force Air Ground Operations School at Hurlburt Field, FL. The opportunity was declined, however, because of the costs in terms of time, ammunition, and fuel, which would have necessarily come from the training budget.²⁹

D. Simulation and Simulator Training

Simulation became an integral part of Army aviation training during the 1950s. During the 1980s and early 1990s, the use of simulation training increased rapidly. As of February 1992, a total of fifty-eight flight simulators were in use at Fort Rucker and other installations worldwide. An additional twelve flight simulators were scheduled for fielding. Simulators provided a highly efficient method of training Army aviators at a fraction of the cost of training in aircraft. At Fort Rucker alone, flight simulators were used a total of

²⁷Memo ATZA-DPT, Maj Gen John D Robinson for Maj Gen Donald M Lionetti, 2 Jun 92, sub: SETTA membership, CG file.

²⁸Memo ATZA-DPT-R, Maj Gen John D Robinson for Maj Gen Dennis V Crumley, 10 Mar 92, sub: tracked vehicle maneuver training..., CG file.

²⁹Memo ATZQ-AC, Brig Gen Robert A Goodbary for Brig Gen William L Nash, 10 Sep 92, sub: joint training initiatives, CG file.

127,665 hours during fiscal year 1991. This resulted in a cost avoidance of over \$100 million.³⁰

The Aviation Test Bed began as a Defense Advanced Research Projects Agency (DARPA) initiative, called Simulation Network, designed to prove the efficiency of networked simulation. Upon completion of the DARPA test, the DA assumed control of the Simulation Network sites. The Aviation Simulation Network was upgraded with research and development funds during early 1992 and named Aviation Test Bed. The test bed was an ideal laboratory for the study of doctrinal, force structure, materiel acquisition, and training development issues. It provided a real-time, multi-terrain, proliferated interactive threat environment to conduct tests, to prototype equipment, and to validate theories. It used manned devices and semi-automated forces to conduct force-on-force combat scenarios.³¹

In terms of costs, the advantages of training in the Aviation Test Bed compared to actual flying were overwhelming. The cost of flying the AH-64 in 1992, for example, was approximately \$2,185.00 per hour, not including ammunition. In the test bed, the cost of each rotary wing device was approximately \$42.75 per hour; the devices were reconfigurable to various airframes and provided students with unlimited and cost-free ammunition.³²

The students in the Aviation Officer Basic Course spent a total of 135 hours in simulator training at the Aviation Test Bed; and those in the Aviation Officer Advanced Course, 310 hours. Students in the Aviation Senior Warrant Officer Training Course (Warrant Officer Advanced Course) were scheduled to begin simulation training in the Aviation Test Bed during fiscal year 1993. Training costs in the facility were covered by research and development funds through 1992, but TRADOC funds were requested for 1993 and thereafter. Anticipated costs were \$600,000 for 1993, \$650,000 for 1994, and \$700,000 for 1995.³³ The TRADOC could not identify additional research and development funding

³⁰Information paper ATZQ-TDS-SM, Mr Pate, 7 Feb 92, sub: direction of simulation/aviator training for the future, DOS, TDD # 61.

³¹Ltr, Maj Gen John D Robinson to Maj Gen Wesley F Clark, 21 Jan 92, CG file; Information paper ATZQ-DST, Capt Paul Swicord, 16 Sep 92, sub: Aviation Test Bed, DOS, TDD # 63.

³²Msg Aug 92, cdr USAAVNC to cdr TRADOC, sub: funding of training in Aviation Test Bed, CG file.

³³Msg Aug 92, cdr USAAVNC to cdr TRADOC, sub: funding of training in Aviation Test Bed, CG file; Memo ATZQ-TDS-SM (70-17d), Col James W Beauchamp for DPTMSEC, 21 June 91, DOS; Fact sheet, Capt Brown, DOS, TDD # 60.

or justify leader training in the test bed as a valid research and development requirement; it recommended that the USAAVNC develop alternative means to fund the test bed training.³⁴

On 14 February 1992, representatives of various USAAVNC organizations met to establish a rational aircraft survivability equipment training strategy. It was generally agreed that the flight school programs of instruction needed to provide for additional survivability equipment training and that the use of ground radar emitters for tactical training was not satisfactory because of cost and security considerations. The Aircraft Survivability Equipment Trainer II, a desk-top trainer, was fielded during 1992 to provide upgraded classroom training. The Aircraft Survivability Equipment Trainer III, an appended embedded trainer was recommended as a cost-saving solution for providing survivability training in older aircraft such as the OH-58A/C and the UH-1, but funding had not been approved. The Aviation Center nevertheless had the capability to provide some aircraft survivability training in modern aircraft and, with the desk-top trainers being acquired, improvements could be made in the survivability training program.³⁵

The USAAVNC DOS created a mobile training team portable course of instruction for aircraft survivability equipment electronic warfare officers at unit locations. The DOS would provide the instructors for a series of classes to be conducted worldwide during 1993.³⁶

During the early part of 1992, the new USAAVNC DOS developed a training plan for conducting AH-64 integrated crew sustainment training--especially for AH-64 crews not co-located with a combat mission simulator. The objectives of the study were to determine the nature of crew sustainment training tasks for the AH-64 and the most effective medium for conducting the sustainment training without a combat mission simulator.³⁷

Each time the AH-64 combat mission simulator was upgraded, the problem of training foreign students in a simulator with enhanced security classification arose again. In 1992, the

³⁴Msg 072800Z Oct 92, cdr TRADOC to cdr USAAVNC, sub: funding of training in Aviation Test Bed, CG file.

³⁵Memo ATZQ-DSA (70-17a), Lt Col Ralph P Aaron, for CG, 15 Apr 92, sub: joint work group on USAAVNC aircraft survivability equipment training strategy--action memo, also encls, DOS.

³⁶Memo ATZQ-DSA (70-17a), Col Palmer J Penny, for distr 28 Dec 92, sub: aircraft survivability equipment..., also encl, DOS

³⁷Memo ATZQ-DSA (70-17a), Lt Col Ralph P Aaron for dir TRADOC Analysis Command (TRAC), 15 Apr 92, sub: request for approval of study plan..., DOS; Study plan, "AH-64 Integrated Crew Sustainment Training Development Study," March 1992, DOS

USAAVNC developed two options as a possible solution to the problem. The first option was to develop a generic, unclassified data base to be used for training all foreign students. This option would delay the application of the last upgrade to one simulator at Fort Rucker until the data base could be developed and installed. The second option would be to eliminate combat mission simulator training for foreign students and conduct all training in the aircraft. This option would increase the training cost tremendously and would not provide adequate training due to lack of ammunition and adequate ranges. The USAAVNC recommended the first option.³⁸

The USAAVNC DOS completed a draft user evaluation plan for embedded aircraft survivability equipment training for the RC-12N aircraft in June 1992. The survivability equipment system training was scheduled to be evaluated at Fort Huachuca in May and June 1993. The special electronics mission aircraft community determined that enhanced aircraft survivability equipment training was needed because of the high threat profile and the proliferation of electronic warfare countermeasures programmed for special electronic mission aircraft. The embedded training system was a low-risk growth program resulting from the OV-1E cockpit-upgrade product improvement program, which began in 1987 but was later canceled. The embedded training system was redirected to support the RC-12N Guardrail Common Sensor program in December 1989; the first units were scheduled to be installed in military aircraft in March 1993. Integration of the system into the EH-60A Advanced Quickfix began in November 1990 with a scheduled fielding for fiscal year 1995.³⁹

E. Enlisted Training at Fort Rucker

A total of 1,402 enlisted soldiers completed advanced individual training at Fort Rucker during calendar year 1992; this number compared to 1,350 for 1991. The numbers of students completing each advanced individual training class in 1992 were as follows: 93B10--112 students; 93C10--188; 93P10--410; 67N10--396; and 67V10--296. Additionally, fifty-one students completed the Flight Engineering Instructor Course, an additional skill identifier course for noncommissioned officers.⁴⁰

³⁸Msg 150800Z Jan 92, cdr USAAVNC to distr, sub: Apache combat mission simulator training for foreign students, GC file.

³⁹Memo ATZQ-DSA (70-17a), Lt Col Ralph P Aaron for distr, 24 Jun 92, sub: draft user evaluation plan..., also encl, DOS.

⁴⁰Academic records data, Chapter II file; Kitchens, 1991 ACH, p. 24.

A task/site selection board for air traffic control equipment repairer (military occupational specialist 93D) was scheduled to be conducted by the DOTD Enlisted Training Branch from 22 to 26 June 1992. The critical tasks selected by the board were to determine all 93D resident and unit training requirements and lead to the development of soldiers' manuals, job books, and training and evaluation outlines. Major Army commands were requested to prove qualified 93Ds to serve as subject matter experts for the board.⁴¹

Late in 1991, there came to be a serious shortage of military occupational specialties 93BW5 (aeroscout observer) and 13F (fire support specialist). The USAEUR requested an exportable training program for one or both of these specialties in order to train new personnel, but no such program existed. Also, both curricula were extremely resource intensive, both courses were inactive in 1992, and reinstating the courses would take funds away from the USAAVNC flight training program. The USAAVNC therefore suggested that USAREUR request early documentation authority for a second pilot crewmember in lieu of 93BW5 or 13F observers. This would be a more satisfactory permanent solution to the problem--especially since the armed OH-58D Kiowa Warriors (which required a second pilot crewmember) were scheduled to begin replacing the unarmed OH-58D during 1992.⁴²

F. Other Training

During 1992, 172 students graduated from Spanish language aviation courses and 105, from European/NATO aviation courses. These numbers compare to 120 and 72 respectively for 1991. Twenty-one officers completed the Officer Air Traffic Control Course in 1992, compared to twenty-seven during 1991.⁴³

The USAAVNC Air Assault School conducted eleven regular air assault classes with a total of 1,203 soldiers; three critical leaders classes with 50 graduates; and three rappelmaster classes with 15 graduates. The second annual "Air Assault Challenge" competition was conducted during 1992 with forty-five teams completing the event. Graduates from the

⁴¹Msg 261420Z May 92, cdr USAAVNC to AIG 8846, sub: critical task and site selection board ..., CG file.

⁴²Msg 161420Z Jan 92, cdr USAAVNC to CINCUSAREUR, sub: urgent need for 93BW5 aerial observer exportable training program, CG file.

⁴³Academic records data, Chapter II file; Kitchens, 1991 AHR, p. 28.

Aviation Officer Advanced Course and the Initial Entry rotary Wing Course were encouraged to remain at Fort Rucker after graduation to attend air assault training whenever possible.⁴⁴

The 2-229th Aviation Regiment conducted three emergency deployment readiness exercises during 1992. The first of these exercises was conducted in February; the unit was judged to be capable of deployment within the XVIII Airborne Corps time constraints but to have several problems that required the attention of the chain of command and installation support activities.⁴⁵ The second and third emergency deployment readiness exercises were conducted in May and October; only very minor weaknesses were encountered in the May exercise.⁴⁶ The October readiness exercise was conducted as a prelude to a collective training period held from 11 October to 14 November. The collective training, which emphasized night fighting, was a successful first step in the execution of the unit's fiscal year 1993 training plan.⁴⁷

As a result of an aircraft accident that occurred during air combat maneuver training, trainers and threat personnel of the USAAVNC conducted a thorough review of air combat maneuver training. Due to limited resources, the greatly reduced risk to aviation assets, and the expected short duration of any air combat maneuver engagement, commanders were directed to make prudent risk assessments for air combat maneuver training. They were directed that training engagements and maneuvering should achieve the training goal and be limited in duration.⁴⁸

The USAAVNC commander issued a policy memorandum on 3 January 1992 which outlined the installation philosophy on the concept of total quality management--a strategic statistical, and performance-based integrated management system for achieving customer satisfaction. In November 1991, the USAAVNC DRM had begun building the installation foundation for this concept, as outlined in AR 5-1. In January 1992, General Robinson designated the DRM as the point of contact for the implementation of total quality

⁴⁴Historical report, 1st Aviation Brigade, CY 92; Memo ATZQ-AGP-T (340a), Col Robert N Seigle for distr, sub: attendance at air assault training, CG file.

⁴⁵Memo AFZA-AV-ATK-RCO, Col Thomas A Swindell for cdr, 1st Aviation Brigade, 9 Mar 92, Sub: 2-229th AHB deployment exercise, 1st Aviation Brigade.

⁴⁶Memo AFFR-BAH-O, Capt. (P) Mark W Barefield for cdr 2-229th, 6 May 92, sub: S-3/safety after action review..., 1st Aviation Brigade.

⁴⁷Memo AFFR-BAH-O, Capt (P) Mark W Barefield for cdr, 2-229th, 17 Nov 92, sub: after action review, 1st Aviation Brigade.

⁴⁸Msg 021545Z, cdr USAAVNC to AIG 898, sub: air combat maneuver training, CG file.

management at the USAAVNC. The first training session was held in April for fifty top Fort Rucker executives. Shortly afterwards, the TRADOC commander directed the incorporation of the Total Army Quality concept (very similar to the total quality management concept already implemented at Fort Rucker) into all military and civilian training programs by the summer of 1992. In accordance with this directive, USAAVNC DRM personnel trained 899 installation employees in Total Army Quality during 1992.⁴⁹ Total Army Quality training was also incorporated into the officer, warrant officer and noncommissioned officer training programs during 1992.⁵⁰ In mid 1992 the USAAVNC also took steps to promote Total Army Quality training throughout the Aviation Branch.⁵¹

A significant change in the approach to threat training occurred during 1992 as a result of the dramatic events that had occurred since the collapse of the Soviet Union. Early in 1992, major changes which would reflect the new world situation and address the multi-dimensional threats in the contemporary world were proposed. These were implemented in the various USAAVNC training programs later in the year. Also during 1992, the nuclear, biological, and chemical subject matter instruction continued to evolve from a ground Army European theater perspective to an aviation worldwide threat perspective.⁵²

Army aviation had been hampered in its participation in training at the combat training centers since they opened for operation. One of the problems was the cost to a unit of moving its aircraft from homebase to the training center and back again. In 1992 the chief of staff of the Army tasked the USAAVNC to assist in resolving the issue of pre-positioned aircraft fleets for the National Training Center and the Joint Readiness Training Center. The USAAVNC reviewed initial aircraft fleet proposals from both centers; these proposals called for more aircraft than could be afforded and more than seemed to be necessary. The USAAVNC requested three sets of alternatives representing highest, medium, and lowest acceptable fleet levels with assessment of training impact for each fleet level.⁵³

⁴⁹Memo ATZA-RQM, Maj Gen John D Robinson for distr, 3 Jan 92, sub: total quality management philosophy, DRM; Historical report, DRM, CY 92; Memo ATTG-I (350), Gen Frederick M Franks Jr for distr, 26 May 92, sub: Total Army Quality, DRM.

⁵⁰Memo ATZQ-RQM, Maj Gen John D Robinson for Lt Gen Wilson A Shoffner, 14 Jul 92, CG file.

⁵¹Memo ATZA-RQM, Hugh M Weeks for CG, 21 Jul 92, sub: charter for executive steering committee for Total Army Quality, CG file.

⁵²Memo ATZA-DOT-CA-TB (351), CPT Mark E Johnson for Dir DOTS, sub: revision of threat instruction, DOTD; Historical report, DOTD, CY 92.

⁵³Msg 071500Z May 92, cdr USAAVNC for cdr NTC and cdr JRTC, sub: aviation pre-positioned fleet, CG file.

A conference of aviation leaders was held on the pre-positioning issue at St. Louis, MO, on 3 September. Representatives from each of the training centers briefed their respective studies on the pre-positioned fleet. The position of the USAAVNC was that aviation should be involved in every rotation at the combat training centers and that the centers should possibly be used as a mobilization and train-up station for the reserve aviation forces. Several matters were assigned to action officer teams to provide additional data on the issue to a council of colonels and a general officer executive committee scheduled to meet early in 1993. The final presentation was to be made by the Aviation Branch chief to the chief of staff of the Army.⁵⁴

In order to reduce the cost of initial entry cadre training for commanders and staff officers, the USAAVNC negotiated an arrangement for an instructor to come from Fort McClellan twice per year instead of sending USAAVNC personnel to Fort McClellan. An annual cost savings of \$5,000 was expected.⁵⁵

G. Commissioned Officer Leader Development

During 1992, there were 81 graduates from the Pre-Command Course and 436 graduates from the Aviation Officer Advanced Course compared to 83 and 378 respectively during 1991. There were 518 graduates from phase one and 486 from phase two of the Aviation Officer Basic Course in 1992. Since 1991 was a transition year to the new two-phase basic course, the number of graduates that year did not provide a meaningful basis for comparison, but a total of 543 officers completed the old officer basic course in 1990.⁵⁶

A new five-week course, the Aviation Combined Arms Warfighting Course, was instituted as of 18 June 1992 for combined arms officers. The primary mission of the course was to train company grade officers from aviation as well as from other branches in aviation tactics and operations and to prepare them for company command and primary battalion staff

⁵⁴Memo ATZQ-AC (1-1m), Brig Gen (P) Robert A Goodbary, for distr, 14 Sep 92, sub: minutes of the preposition fleet conference held 3 September 1992, DAC file; Msg 271500Z Aug 92, cdr USAAVNC for distr, sub: preposition of aircraft at the combat training centers, CG file; Msg [111415Z Aug 92 ?], cdr USAAVNC for distr, sub: pre-positioning of aircraft at the combat training centers, CG file.

⁵⁵Msg 240800Z Jul 92, cdr USAAVNC for cdr TRADOC, sub: Cadre Training Course, CG file.

⁵⁶Academic records data, Chapter II file; Kitchens, 1991 ACH, p. 30.

positions.⁵⁷ The student exchange programs were discussed at the video teleconference meeting of the Cavalry Board on 15 December 1992. The Armor School continued to support the five-week Aviation Warfighting Course and the Aviation School continued its support of sending aviation captains to the Armor Advanced Course. The Aviation School requested that the Armor School send more armor captains to the Aviation Advanced Course. The Armor School agreed to look into the possibility, and both schools continued to support the exchange program in general. Both schools agreed, however, that exchanges in the basic courses would be difficult because of the differences between the programs at the two schools.⁵⁸

The USAAVNC proposed to take the integration of combined arms operations another step in 1992. It suggested the opening of a dialogue with the Armor Branch and the Infantry Branch on converting aviation brigade assistant S-3 positions to armor or infantry and the S-3 positions in armor and infantry brigades to aviation.⁵⁹

During the second quarter of fiscal year 1992, the USAAVNC DOTD initiated a change in the way battle focused training was taught in the Aviation Officer Basic Course. In order to provide more realistic training, students were required to develop training plans and then to execute their respective training plans in the simulation network. Another change in the basic course during 1992 was the inclusion of a new block of instruction as directed by TRADOC and the USACAC; in February, a Total Army Quality class was incorporated into phase III of the basic course.⁶⁰

H. Warrant Officer Leader Development

During 1992, 613 aviation candidates and 278 other-than-aviation candidates completed the Warrant Officer Candidate School. These numbers compare with 621 and 407 respectively for 1991 and 863 and 646 respectively for 1990. During 1992, 151 warrant officers completed the Aviation Senior Warrant Officer Training Course, and 104 completed

⁵⁷Memo ATZQ-TD (350), Maj Gen John D Robinson for deputy chief of staff for training TRADOC, 24 Apr 92, sub: Officer Advanced Course ... exchange programs; Historical report, 1st Aviation Brigade, CY 92.

⁵⁸Memorandum for record ATSQ-DAS, Col John B Sylvester and Col Thomas W Garrett, 16 Dec 92, sub: Cavalry Board minutes, DAC file.

⁵⁹Memo ATZQ-CDO (71-2a), Brig Gen Robert A Goodbary for distr, 20 Oct 92, sub: brigade assistant S-3/S-3 air, CG file.

⁶⁰Historical report, DOTD, CY 92.

the Master Warrant Officer Course. For comparative purposes, 130 completed the aviation senior course, and 81 completed the master course during 1991.⁶¹

In accordance with the approval by the chief of staff of the Army of the Warrant Officer Leader Development Action Plan in February 1992 (see Chapter I above), a warrant officer training conference was held at Fort Rucker the following June. The purpose of the conference was to address implementation of the mandates in the action plan that dealt with warrant officer training and leader development.

The decisions made at the June conference included the following: (1) change warrant officer course names and revise military education level codes to effect alignment with commissioned officer models; (2) adopt the existing master warrant officer training correspondence package as the new distributive training at the six-year point; (3) adopt the existing resident Master Warrant Officer Training Course as the new course to be taken upon selection to CWO4; (4) develop a new, abbreviated master warrant officer course; (5) conduct a task site selection board. The purpose of the task site selection board would be to accomplish the following: (1) review and update the Warrant Officer Candidate School; (2) ratify the decisions made by the June conference to move existing master warrant officer training to the above indicated level; (3) develop the common core portion of the technical/tactical course; (4) develop the common core portion of the senior warrant officer training; and (5) develop the new master warrant officer course. The new task site selection board was to use the results of a 1989 task site selection board, which were never implemented, as the nucleus for tasks to be considered. Proponent schools were advised to defer their reviews of the training system until the task/site selection board had completed its work.⁶²

The planned multi-level task site selection board meeting was conducted at Hampton, VA, from 31 August through 3 September 1992. Its mission was to review the entire warrant officer education system and to select or ratify tasks for training at all levels.

The decisions of the board were as follows: (1) warrant officer candidate training to be conducted at the WOCC in accordance with a modified version of the recommendations of the 1989 task site selection board; (2) selection of a common core package of leader development for all proponent courses of Warrant Officer Basic Course (formerly the Warrant

⁶¹Academic records data, Chapter II file; Kitchens, 1991 ACH, p. 31.

⁶²Memo ATZQ-TDW, MWO4 David E Helton, for dir DOTD, 26 Jun 92, WOCC; Historical report, WOCC, CY 92.

Officer Technical/Tactical Certification Course); (3) the WOCC to conduct a modified version of the existing distributive phase of the Master Warrant Officer Course as the non-resident portion of the new Warrant Officer Advanced Course with the addition of a module on civilian personnel management; (4) resident phase of the new Warrant Officer Advanced Course to be conducted at the WOCC for warrant officers selected for promotion to CWO3 grade (replacing part of the old Senior Warrant Officer Training Course); (5) the existing curriculum of the Master Warrant Officer Course (with some modifications) to become the new Warrant Officer Senior Staff Course to be conducted at the WOCC for warrant officers upon their selection for promotion to CWO4; (6) develop an abbreviated course to provide professional update for warrant officers selected for CWO5, to be modeled on the DA Force Integration Course conducted at Fort Belvoir, VA, to be conducted by the WOCC.

The WOCC was to be responsible for follow-on actions necessary to implement the board action. The center was to staff selected tasks with task proponents and provide each school or center with the exported packages for inclusion in the warrant officer basic and advanced courses. The center was also to design, develop, and/or revise as necessary the tasks and curriculum of the Warrant Officer Candidate School and the non-resident portions of the basic, advanced, and senior staff courses and to have ultimate approval for their task lists.

The multi-level task site selection board was guided in its actions by the Warrant Officer Leader Development Action Plan, the June 1992 training conference, and the previous actions of the 1989 board. Furthermore, the 1992 board endeavored to minimize training development by using existing training whenever possible. The Military Police School submitted a statement of non-concurrence, consisting of an objection to the process of following the recommendations of the 1989 board and of the 1992 action plan without regard to the systems approach to training process. The consensus was that the deviation from this process was conscious and well-considered; therefore the non-concurrence, though accurate, was unfounded.⁶³

The WOCC was also assigned the missions of rewriting AR 600-11, "Warrant Officer Professional Development," and of creating a military qualification standard system for warrant officers. These tasks were underway at the end of 1992. One action that was completed in 1992 was the conversion of names, course content, and length of warrant officer courses to conform with the new training program. The new Warrant Officer Advanced

⁶³"Warrant Officer Education System, Multi-Level Task Site Selection Board," Hampton, VA, 31 August-3 September 1992, WOCC; Memo ATZQ-WCC (350-1d) Col Steven P Mifflin for cdr TRADOC, 7 Oct 92, sub: common warrant officer training task site selection board, WOCC.

Course, for example, was changed from an eleven-week lecture/conference course to a ten-week course consisting, in large part, of small-group-instruction.⁶⁴

I. Noncommissioned Officer Leader Development at Fort Rucker

During calendar year 1992, ninety-seven personnel graduated from the Advanced Noncommissioned Officer Course, exactly the same number as in 1991. Of this total, thirty-eight completed 68P40 in career management field 67; thirty completed 93C40, six completed 93D40, and twenty-three completed 93P40 in career management field 93. During the year, the Basic Noncommissioned Officer Course graduated 346 students in the following courses: fifty-three in 93B30, seventy-seven in 93C30, forty-two in 93D30, eighty in 93P30, seven in 68L30, fifty in 68N30, nineteen in 68Q30, and eighteen in 68R30. For comparative purposes, 298 students graduated from the basic course in 1991.⁶⁵

Both basic and advanced courses were divided into two phases: viz, common leader training subjects and common aviation/proponency directed subjects. The student enrollment and the size of classes in the Noncommissioned Officer Academy (NCOA) increased during 1992 as a result of the DA policy of making promotions to staff sergeant and sergeant first class dependent upon completion of the appropriate level of noncommissioned officer schooling. Also, a backlog from Desert Shield/Storm increased the size of classes during 1992.⁶⁶

The NCOA integrated "Total Army Quality" into its programs of instruction during 1992. In accordance with guidance received from TRADOC, the academy also completed the integration of combined training involving the advanced course and initial entry training (formerly advanced individual training). The NCOA conducted five field training exercises involving shared training during 1992. Also in 1992, the NCOA incorporated risk assessment and risk management into all facets of its training program. In accordance with DA and

⁶⁴Historical report, WOCC, CY 92.

⁶⁵Academic records data, Chapter II file; Kitchens, 1991 ACH, p. 33.

⁶⁶Historical report, NCOA, CY 92.

USAAVNC requirements, the academy stressed equal opportunity and prevention of sexual harassment in all aspects of training.⁶⁷

In 1992, the NCOA completed a one-year test and analysis of distributive training for the 68P40 advanced course and returned to normal instruction pending analysis of the results. The Aviation Center academy also assumed responsibility for four new basic course programs of instruction in 1992: namely, 68L30, 68Q30, 93D30, and 93P30. The NCOA revised its history program in 1992 so as to include a mandatory reading list and a research paper.⁶⁸

J. Aviation Logistics Training and Leader Development

During calendar year 1992, the USAALS trained 4,365 students--over 200 more than the 4,134 trained during calendar year 1991. Of the students trained in 1992, 545 were officers, 1,109 were noncommissioned officers (advanced and basic noncommissioned officers courses), 2,267 were enlisted, and 444 were officers and enlisted personnel given aviation life support equipment training.⁶⁹

Of the students trained in 1992, there were 1,991 skill level 1 (advanced individual training) students trained in career management field 67. Of these, 16 were trained in 67A10, 8 in 67H10, 268 in 67R10, 25 in 67S10, 440 in 67T10, 254 in 67U10, 121 in 67Y10, 144 in 68B10, 135 in 68D10, 132 in 68F10, 152 in 68G10, 202 in 68J10, and 94 in 68X10. During 1992, USAALS also trained 524 additional skill identifier students; of these, 444 were trained in ASIQ2 (enlisted)/ASIH2 (officer), 6 in ASIW5 (68B), 4 in ASIW5 (68D), 12 in ASIW5 (68F), 23 in ASIW5 (68J), 17 in ASIX1 (68D), and 18 in ASIX1 (68H). Also during 1992, 67 students were trained in the 67R2/30 (T) AH-64 Aircraft Maintenance Transition Course, and 129 were trained in the 68X2/30 (T) AH-64 Armament/Electrical Systems Transition Course.⁷⁰

⁶⁷Memo ATZA-NCO (350a), Cmd Sgt Maj Melvin P Taylor for DRM, 10 Jul 92, sub: integration of Total Army Quality in NCOES programs of instruction, NCOA; Historical report, NCOA, CY 92; Memo ATZA-NCA (351), Cmd Sgt Maj Ronald L Moore for Lt Col Bock, 23 Jul 92, sub: sexual harassment, NCOA.

⁶⁸Historical report, NCOA, CY 92.

⁶⁹Historical report, USAALS DOTD, CY 92; Kitchens, 1991 ACH, p. 33.

⁷⁰Historical report, USAALS DOTD, CY 92.

The DA approved the implementation of the additional skill identifier course ASIW5 (68J), OH-58D Armament/Missile Systems Repairer Course, on 30 September 1991. The course was required to support the fielding of the OH-58D Kiowa Warrior. In December of 1991 TRADOC approved the course administrative data for the eight-week and three-day course to begin in April 1992. The actual starting date of the first class was 1 June.⁷¹

TRADOC approved the course administrative data to resume the 646-68X2/30-T, AH-64 Armament/Electrical System Repairer (Transition) Course, in fiscal year 1993. The course length was twelve weeks and three days. The 601-68B10, Aircraft Powerplant Repairer Course length was increased by three weeks and two days to nineteen weeks and one day. The course length was increased to incorporate the ASIW5 (68B), OH-58D powerplant repairer training into the 601-68B10 course.⁷² In accordance with AR 611-201, the 602-ASIW5 (68D), OH-58D Powertrain Repairer Course was deleted in 1992 and its affiliation with military occupational specialty 68D was rescinded. The OH-58D powertrain repairer training was incorporated into the 602-68B10, Aircraft Powertrain Repairer Course, the length of which was increased by three weeks and two days to sixteen weeks.⁷³

Force reductions created an Armywide shortage of career management field 67 aviation maintenance personnel during 1992. Projections were that the series would be at approximately 93 percent of requirements by the end of fiscal year 1993. The shortages were especially problematical in military occupational specialties 67N, 67V, 67Y, and 93P.⁷⁴

In response to a directive from TRADOC that advanced individual training course lengths be reviewed, the USAALS assistant commandant replied that USAALS advanced individual training courses were high density and high tech and that none could be reduced

⁷¹Memo ATNC-MOS-C (611-1a), Darrel A Worstine for distr, 30 Sep 91, sub: notification of future change...revision of career management field 67..., USAALS DOTD; Memo ATOM-P (ATSQ-LTD-M/23 Dec 91) (351e), 1st end, Paul Treolo Jr for cmdt USAALS, 7 Feb 92, sub: course administrative data for 646-ASIW5..., USAALS DOTD, Historical report, USAALS DOTD, CY 92.

⁷²Memo ATOM-P (ATSQ-LTD-M/30 Mar 92) (351), 1st end, Katie E Rutledge for cdr USAALS, 17 Jun 92, sub: course administrative data for 646-68X20/30-T..., USAALS DOTD; Memo ATOM-P (ATSQ-LTD-M/5 Mar 92) (351e), 1st end, Paul Treolo Jr for cmdt USAALS, 26 Mar 92, sub: course administrative data for 601-68B10..., USAALS DOTD; Memo ATNC-MOS-C (611-1a), Darrel A Worstine for distr, 30 Sep 91, sub: notification of future change...revision of career management field 67..., USAALS DOTD.

⁷³Memo ATOM (ATSQ-LTD-M/3 Feb 92) (351e) 1st end, Col Paul Treolo Jr for cmdt USAALS, 26 Mar 92, sub: course administrative data for 602-68D10..., USAALS DOTD; Memo ATNC-MOS-C (611-1a), Darrel A Worstine for distr, 30 Sep 91, sub: notification of future change to AR 611-201..., USAALS DOTD.

⁷⁴Msg 072100Z Oct 92, cdr TRADOC to distr, sub: aviation maintenance personnel shortfalls, CG file; Msg 201300Z Aug 92, cdr 10th Mtn Div, to cdr USAAVNC, sub: aviation maintenance personnel shortfalls, CG file.

without imposing a significant training burden on aviation units receiving the students. Technical training was already suffering because of past requirements to add non-proponent training to the courses without increasing their length. Efforts to decrease costs were already underway by eliminating the field training exercise and introducing less costly shared training exercises. Other measures were also being planned to reduce training costs.⁷⁵

During 1992 the USAALS DOTD also conducted the military occupational specialty 68J site and media selection panel, completed a job analysis for all skill levels of military occupational specialty 67U, and participated in the drafting and review of a promotional script for the Army Apprentice Aircraft Mechanic program. The USAALS recommended the elimination of ASIX1 for military occupational specialty 68D, effective the first quarter of fiscal year 1995. The course was scheduled to be deleted and the ASIX1 training incorporated into the 601-68B10, Aircraft Powertrain Repairer Course.⁷⁶

In March 1992 TRADOC approved implementation of the 4D-TBA/2C-SQIG, Supplemental OH-58D (Armed) Maintenance Test Pilot Course. The course was put on line, effective October 1992, for the purpose of qualifying OH-58D Kiowa maintenance test pilots in the OH-58D Kiowa Warrior. The course length was two weeks and two days.⁷⁷

The shortage of instructors in 68X and 67R military occupational specialties for the projected student load became serious and was reported to higher headquarters in September. The USAALS assistant commandant reported to TRADOC that as of 31 December 1992, the overall USAALS training assessment was "RED." He reported that the instructor to student ratios were below the minimum program-of-instruction and safety standards and that he was canceling selected classes in two courses beginning on 20 January 1993. He added that he would be forced to cancel other classes unless immediate remedial action was taken and that the requirement to support the School of the Americas training program without additional resources would exacerbate the instructor-shortage problem.⁷⁸

⁷⁵Msg 081423Z Oct 92, cmdt USAALS for cdr TRADOC, sub: review of AIT course lengths, CG file.

⁷⁶Memo ATSQ-LTD-A, 17 Aug 92, sub: elimination of ASIX1..., USAALS DOTD; Script for video on Apprentice Mechanic program, USAALS DOTD; Historical report, USAALS DOTD, CY 92.

⁷⁷Ibid.; Memo, ATOM-P (ATSQ-LTD-M/3 Feb 92) 1st end, Paul Treolo Jr for cmdt USAALS, 26 Mar 92, sub: course administrative data for 4D-TBA/2C-SQIG..., USAALS DOTD.

⁷⁸"Training Capability Report," issue control no. 069208132, 31 Aug 92, DOTD-USAALS; "Training Capability Report," issue control no. 069208101, 31 Dec 92, USAALS DOTD.

Early in 1992, the USAALS was directed to prepare to operate a small unit to execute the balance of the maintenance training for the helicopter school battalion of the School of the Americas that could not be accomplished at Fort Rucker.⁷⁹ The USAALS accordingly trained eleven Spanish speaking students for the School of the Americas. Also in 1992, the USAALS trained nine Spanish-speaking-only students on the T-53 engine as a result of the destruction of the Inter-America School at Homestead Air Force Base by Hurricane Andrew. These training programs were carried out by Spanish speaking instructors using courseware and manuals that had not been translated into Spanish.⁸⁰

The USAALS Department of Aviation Systems Training (DAST) discontinued military occupational specialty 67H training at the end of fiscal year 1992. It was announced that there would be no further fixed-wing training at Fort Eustis. The three salvaged OV-1 aircraft used for 67H training were turned in to the property book officer for property disposal.⁸¹

Training under the 67A10, Aviation Apprentice Mechanic, program continued at Fort Polk, LA, during part of 1992. The training load decreased from May to October, however, as students were reclassified and sent to new assignments. The experiment was concluded in late October.⁸² According to the assistant commandant of USAALS, Col. William J. Blair, the test program demonstrated that the general idea of the Apprentice Mechanic program would work. Training all apprentices in one military occupational specialty, however, was not the answer; it would take a minimum of three separate apprentice tracks to be a successful program.⁸³

During 1992, personnel from the Department of Armed Helicopter Training (DAHT) made temporary duty trips in support of field training or for other purposes to the following places: Fort Hood, TX, Fort Bragg, NC, Fort Chaffee, AK, Pensacola, FL, Germany, Lexington, KY, Mesa, AZ, Richmond, KY, Fort Gordon, GA, Fort Irwin, CA, Fort Worth,

⁷⁹Memo ATZQ-CS, Col Patrick J Bodelson for asst cmdt USAALS, 10 Jan 92, sub: review of draft HSB MOU between USAAVNC and USATCFE, CG file.

⁸⁰Historical report, USAALS DATT, CY 92.

⁸¹Historical report, USAALS DAST, CY 92.

⁸²Historical report, USAALS DAHT, CY 92.

⁸³Notes on oral interview by Dr John W Kitchens with Col William J Blair, Fort Rucker, AL, 3 Dec 1992.

TX, Arlington, TX, Fort Rucker, AL, and Washington, DC.⁸⁴ In the area of leader development, 764 students completed the two weeks and four days of Basic Noncommissioned Officer Course training (compared to 558 in 1991), and 345 students completed the four weeks of Advanced Noncommissioned Officer Course training (compared to 238 in 1991). These personnel completed leadership training in the U.S. Army Transportation Center Noncommissioned Officer Academy before beginning their aviation logistics and technical training in the USAALS.⁸⁵

Of the students completing the basic course, 4 were trained in 67H30, 117 in 67N30, 58 in 67R30, 10 in 67S30, 136 in 67T30, 83 in 67U30, 53 in 67V30, 38 in 67Y30, 35 in 68B30, 45 in 68D30, 40 in 68F30, 41 in 68G30, 12 in 68H30, 56 in 68J30, and 36 in 68X30 military occupational specialties. Of the advanced course students, 3 were trained in 67H40, 50 in 67R40, 95 in 67T40, 40 in 67U40, 90 in 67Y40, 40 in 68K40, and 27 in 68J/X40 specialties.

During 1992, 14 officers graduated from the Combat Service Support Pre-Command Course, 18 from the Aviation Logistics Officer Advanced Course, 420 from the Maintenance Management/Maintenance Test Pilot Course, 25 from the Aviation Maintenance Technician Warrant Officer Technical Training Course, and 68 from the Aircraft Armament Maintenance Technician Course. Of the officers trained in the Maintenance Management/Maintenance Test Pilot Course, 49 were trained in OH-58A/C, 16 in OH-58D, 118 in UH-1, 109 in UH-60, 36 in CH-47D, 46 in AH-1F, and 46 in AH-64 helicopter weapon systems.⁸⁶

⁸⁴TDY trip reports, documents #b-1 to b-5, c-1 to c-5, d-1, and e-1 to e-25, USAALS DAHT.

⁸⁵Historical report, USAALS DOTD, CY 92; Kitchens, 1991 ACH, p. 33.

⁸⁶Historical report, USAALS DOTD, CY 92.

CHAPTER III

DOCTRINE AND COMBAT DEVELOPMENTS

A. Doctrine and Force Design

During 1992, the Army reviewed Field Manual 100-5, "Operations," and completed an updated version in draft form. The USAAVNC and the Aviation Branch were very much interested in the revision of this major statement of Army doctrine and applauded the addition of contingency deployment, joint operations, and expanded combat service support discussions. As the document began to take shape, the USAAVNC commander made several recommendations to the TRADOC commander regarding aviation. One was that there should be four instead of three types of combat forces. To armored, light, and special operations, the Aviation Branch chief recommended the addition of "combat aviation." He also recommended expanding the discussion on deployment and early entry operations to include a description of the composition of lethal, early deploying forces. Major General Robinson further suggested that intelligence, artillery deep strike, cavalry, attack helicopter, air defense, and engineer assets might comprise such a force. It would be capable, he asserted, of deterrence, force protection, and fighting (if challenged) before the main body of deployment troops arrived. He also recommended that the term "air maneuver" or "Army air maneuver" be used consistently and regularly in the document and that it be defined as placing "the enemy in a position of disadvantage through the flexible application of combat power in the third dimension." Finally, the USAAVNC commander recommended that more emphasis be given to the concept of risk assessment in the document's discussion of safety.¹

TRADOC announced changes in doctrine development policy in September 1992. These changes included simplifying the doctrine development and approval process by placing responsibility at appropriate levels of command and supporting the basic principle of total quality management. The new policy stressed the concept that doctrine should be a statement of principles and "how to think" about operations rather than "what to think." The new policy also rescinded the requirement to obtain the TRADOC commanding general's approval of maneuver field manuals and branch principle manuals and curtailed extensive Armywide staffing with major commands.

¹E-mail note, Maj Gen Dave Robinson to cdrs/dirs, 11 Oct 92, sub: draft FM 100-5 review, Chapter III file; E-mail note, Maj Gen Dave Robinson to cdrs/dirs, 14 Mar 92, sub: review of FM 100-5, Chapter I file.

Coordination was to be limited to selected target audience representatives, and new or radically changing doctrine was to be tested by conducting low-cost tests.²

The USAAVNC commander took exception in 1992 to the consolidated documentation and table-of-equipment development system implemented in TRADOC. Under the consolidation plan, the combined arms schools/centers were to develop concepts, doctrine, basic structure, and assignment rules. After the schools/centers performed this preliminary work, the final documentation responsibility was turned over to the Combined Arms Center. The integrating center, however, was far removed from groundwork rationale, decisions, and guidance that shaped the organizational design in the respective branch centers and schools. The established review process was not adequate for the schools to correct resultant problems. There had consequently occurred such mistakes as entire military occupational specialties being closed to women and having M-113 armored personnel carriers in every aviation unit. The problem was exacerbated by the fact that the integrating centers both wrote and approved the tables of equipment. The USAAVNC proposed that, during the ongoing TRADOC reorganization of 1992, responsibility for the documentation process be returned to the schools where branch expertise was available. The combined arms centers could then assume supervisory responsibility over the entire requirements generation process--the schools would produce the documents and the integrating centers would integrate them.³

During 1992 the Army structure was still basically the Army of Excellence, designed in 1983 and 1984 and put in place between 1985 and 1988. Numerous modifications had been made in the original design, and many other changes had been proposed as possible means of correcting deficiencies but had not been implemented. By 1991, Aviation units had been rendered too lean and austere, and their ability to accomplish their missions had been put at risk. In late 1991, in response to guidance from higher headquarters and in recognition of an increasingly untenable situation, the USAAVNC and the Aviation Branch undertook an aggressive initiative to reshape Army aviation to confront the new world order evolving from the post cold war environment. During 1992, considerable progress was made on the development of a design for reshaping Army aviation.

In April of 1992, the USAAVNC DCD prepared a survey for aviation leaders, requesting their input in establishing priorities for fixing Army of Excellence deficiencies in the aviation area. Thirteen deficiencies or proposed changes were identified, and respondents

²Msg 041626Z Sep 92, cdr TRADOC to AIG 891, sub: changes in doctrine development policy, Chapter III file.

³Msg 251445Z [Jun 92 ?], cdr USAAVNC to cdr USACAC, sub: documentation consolidation, CG file.

were asked to rank them in order of priority. These thirteen deficiencies, in ranked order, were as follows: (1) create a dedicated aviation support battalion for each division; (2) bring aviation intermediate maintenance units at all echelons to 100 percent capability; (3) add an additional crewchief/doorgunner per utility aircraft in assault, attack and air cavalry units; (4) assign warrant officer pilots to man seats in UH-60, UH-1, and OH-58 aircraft assigned to attack battalions to relieve primary staff officers from functioning as primary aircraft crewmembers; (5) assign one additional individual to each aviation battalion or separate/stand-alone company for the purpose of performing required inspections, servicing, and maintenance to aviation life support equipment; (6) assign additional warrant officer pilots to units using OH-58A/C in aeroscout roles (all scout aircraft to have two pilots, observation/C2, OH-58A/C to continue to have one pilot); (7) increase the pilot to seat ratio to 1.5 pilots per seat for sustained operations (based on an aircraft availability rate of 80 percent); (8) bring class III storage and distribution (including forward area refueling points) at all echelons to 100 percent capability; (9) bring class V storage and distribution (including forward area refueling points) at all echelons to 100 percent capability; (10) bring all type battalion aviation unit maintenance units to 100 percent capability; (11) bring organizational auto maintenance to 100 percent capability; (12) increase the number of aircraft from eight to twelve in the divisional and regimental cavalry troops; (13) increase the number of personnel in all aviation battalion and brigade headquarters.⁴

By the end of 1992, the USAAVNC had formulated the "Aviation Restructure Initiative," a plan to decrease the size of the force but nevertheless to continue to be able to meet the mission as a result of modernization and reorganization. The plan called for fixing the existing deficiencies without significantly increasing manpower; the active component remained within the programmed base of 27,300, and the reserve component experienced a growth of only approximately 1,500 spaces. The redesign initiative also significantly reduced inventories of unmodernized aircraft in both the interim and objective designs. The modernization levels would move from the 1992 level of 30 percent, through an interim level of 78 percent, to a 100 percent modernized fleet in the objective design. Battalions were consolidated in the division, resulting in the elimination of unnecessary overhead. The initiative formed homogenous units by aircraft type to increase efficiency and streamline maintenance procedures. The initiative also addressed the new national military strategy of a continental United States-based power projection army.⁵

⁴E-mail note, Col Theodore T Sendak to cdrs/dirs, 6 Apr 92, sub: prioritization of organization fixes to aviation force structure, Chapter III file.

⁵Briefing slides, "Fixing AOE Aviation Force Structure Deficiencies," Sep 92, DCD; Fact sheet ATZQ-CDO, 26 Jan 93, sub: Aviation Redesign Initiative, DCD; Army Flier, 15 Jan 93; Briefing papers, "Reshaping Army Aviation, 1996-2001, Design for the Future," Feb 93, DCD.

General Robinson and USAAVNC personnel briefed the Army deputy chief of staff for operations on the restructure initiative in December 1992 in preparation for briefing the deputy and chief of staff of the Army. The operations chief approved of the work done by the USAAVNC. He preferred the eighteen attack aircraft battalions over other alternatives. He was concerned about making the third UH-6 company a roundout company but realized that events could well force that expedient. He urged the USAAVNC to work with reserve components to gain their acceptance of force design changes as soon as possible. He wanted the reserve components and also corps commanders on line before the USAAVNC briefed the deputy and chief of staff on the initiative.⁶

The vice chief of the Army also approved of the work accomplished in the restructure planning. He wanted more alternatives explored with regard to active and reserve component mixes and also a cost and savings analysis for the substitution of modern systems for larger numbers of older systems.⁷

Considerable headway was made during the early months of 1992 toward the creation of a Cavalry Board, consisting of representatives from the Armor School and the Aviation School. The USAAVNC viewed the proposed Cavalry Board as an excellent opportunity for the Aviation Center to make headway in its relations with the Armor Center and the Armor Branch.⁸ The Cavalry Board was formally established by a memorandum of agreement between the USAAVNS and the U.S. Army Armor School in April 1992. The purpose of the agreement was to establish a panel (the Cavalry Board) for the purpose of advising the commandants of the two schools on matters of mutual interest pertaining to cavalry doctrine, organization, training, leadership, materiel development, and soldiers. The chairman of the board was the deputy assistant commandant of the Armor School and the vice chairman was the deputy assistant commandant of the Aviation School. Additional permanent members were named from each school.⁹

The Cavalry Board conducted a video teleconference meeting on 15 December 1992. An ongoing issue discussed was the 2nd Air Cavalry Regiment fielding. It was reported that

⁶E-mail note, Maj Gen Dave Robinson for cdrs/dirs, 12 Dec 92, sub: F/S brief for DCSOPS, Chapter III file.

⁷E-mail note, Maj Gen Dave Robinson to cdrs/dirs, 16 Jan 93, sub: meeting with VCSA on force structure, Chapter III file.

⁸Historian's notes, commanders & staff meeting , 4 Feb 92, historian's note file.

⁹Memorandum of Agreement between the U.S. Army Armor School and the U.S. Army Aviation School, Maj Gen John D Robinson and Maj Gen Thomas C Foley, 20 Apr and 10 Apr 92, sub: Cavalry Board memorandum of agreement, DAC file.

the final table of organization and equipment design was not approved but that it would be briefed around 31 December. The USAAVNC stated that Quickfix aircraft could be added afterwards and consolidated at corps level, but the Armor Center indicated unwillingness to support Quickfix aircraft centralized at corps level.

During the Cavalry Board conference, the Aviation Center DCD gave a brief on proposed aviation force structure with the current aircraft inventory. Some division cavalry units would have interim organizations equipped with sixteen AH-1 C-nite scout/attack aircraft. The reason for the interim organization was because there were insufficient OH-58D Kiowa Warriors in the inventory to outfit all active component units. Some heavy divisions would consequently not have OH-58Ds. Ultimately the RAH-66 Comanche would replace all division cavalry aircraft.¹⁰

In June 1990, TRADOC directed a study the focus of which was to determine the most effective regimental cavalry organization to support the XVIII Airborne Corps. Aviation, infantry, and armor were tasked to develop regimental sized cavalry force structures as alternatives to the armored cavalry regiment which served as the base case. During 1992, the USAAVNC supported the USACAC in producing a concept for changing the 2nd Armored Cavalry into a light cavalry regiment of the XVIII Airborne Corps.¹¹

In September 1992, the USAAVNC DCD completed an analysis of the merits of operational mixes of AH-64A and AH-64D helicopters. The study recommended pure fleets of AH-64Ds at corps level. The Army's decision to convert all AH-64A models to AH-64C and AH-64D configuration created a requirement to reexamine the mix issue. Revised recommendations were pending at the end of the year.¹²

During 1992, the DCD researched, wrote, and staffed the aviation forward arming and refueling concept statement. The concept statement discussed the palletized load system and its revolutionary approach to future forward arming and refueling operations. The statement was approved at the Aviation Center and submitted to the USACAC.

¹⁰Memorandum for record ATSB-DAS, Col John B Sylvester and Col Thomas W Garrett, 16 Dec 92, sub: Cavalry Board minutes, DAC file.

¹¹Historical report, DCD, CY 92; Staffing notes, DCD to cmd historian, [Jun 93], DCD.

¹²Report, "Organizational Mix of Longbow Apache Aircraft," 6 Dec 91, DCD; Historical report, DCD, CY 92.

Also during the year, the USAAVNC developed new OH-58D versions of cavalry squadron, attack helicopter battalion, and target acquisition/reconnaissance company tables of equipment for the light infantry division and corps command aviation battalion. The USAAVNC DCD also coordinated redocumentation of Special Operations Aviation tables of equipment with the John F. Kennedy Special Warfare Center and assisted the Combined Arms Center with development of the 2nd Air Cavalry Regiment table of equipment.¹³

Early in 1992, the USAAVNC completed table of equipment justification packages for heavy division command aviation battalions. In the case of assault companies, four options were prepared so as to allow the command aviation battalion to be implemented independently of the planned forward support battalion for the division aviation brigade. There was a net personnel change of zero for the battalion, but the new tables called for six additional commissioned officers offset by six fewer enlisted soldiers. There would be an equipment savings of at least \$1 million as a result of the consolidation of support elements from two separate companies. The justification packages were sent to the USACAC in March 1992.¹⁴

During 1992, the USAALS DCD completed a branch concept for aviation logistics in support of future operations. A new concept was required for aviation logistics to provide effective support to a combined arms force. The concept was based on the necessity to update doctrine, training, leader development, organization, and materiel because of the changing threat environment, technological advances, fiscal constraints, and the requirement for increased operational efficiency. The concept was also designed to correct several logistics shortcomings that had been acknowledged. These included the following: eliminating pass-back maintenance; placing an aviation intermediate maintenance capability forward; gaining dedicated, multi-functional support for aviation brigades, unburdening the maneuver commander; and accommodating aviation logistics cultural changes.¹⁵

In September 1992 the USAALS completed an aviation logistics plan entitled "Logistics Vision in Support of Aviation." The plan addressed several aviation logistics deficiencies. The logistics problems and the proposed solutions were as follows: dedicated aviation support to be provided by the fielding of aviation oriented forward support battalions; the retention of experienced and knowledgeable crew chiefs on aircraft by implementation of

¹³Historical report, DCD, CY 92.

¹⁴Msg 0831530Z Mar 92, Maj Gen John D Robinson to Maj Gen McCaffrey, sub: command aviation battalion..., Chapter III file.

¹⁵U.S. Army Aviation Logistics Branch Concept, USAALS DCD, Concepts and Studies Division, Mar 92, USAALS DCD.

the "stripes-on-the-flightline" program; and the enhancement of the mobility of aviation logistics through containerization and enhanced unit mobility.¹⁶

Air-to-Air Combat II was a force development test and evaluation designed to examine the effectiveness of aviation units in the combined arms fight with an active threat air combat capability. The test was scheduled for fiscal year 1991 but delayed because of Desert Shield/Desert Storm. During 1992, the test was completed using the Air Network/Simulation Network warfighting simulator located at Fort Rucker. Test redesign was conducted in January with \$2.1 million allocated for execution. The USAAVNC DCD developed technical simulation enhancements for the Aviation Test Bed that enabled real-time and post-event analysis. One hundred seventy-six battle simulation runs were analyzed, and significant tactics and data analysis insights were identified. The draft test report was scheduled for release in March 1993.¹⁷

Total Force Integration

An issue of continuing major concern at the USAAVNC during 1992 was total force integration. For example, after visiting the ARNG aviation training sites at Fort Indiantown Gap, PA, and Marana, AZ, and examining their facilities, Maj. Gen. Robinson concluded that these training sites could play an important role in the total force integration effort. He accordingly proposed that the peacetime mission of each of these sites be expanded to the effect that they would augment "the TRADOC aviation training mission as an activity under command and control of the U.S. Army Aviation Center for contingency and mobilization operations." According to General Robinson, this proposal was an initial step in gaining a total force integration package for future aviation training. The concept was favorably considered by the director of the ARNG.¹⁸

In pursuit of total force integration and maintaining a lethal, deployable, and versatile aviation force that encompassed all three Army components, the USAAVNC commander was concerned that quality, knowledgeable people be assigned to the active guard and reserve positions at Fort Rucker. The USAAVNC commander accordingly urged the reserve

¹⁶"Logistics Vision in Support of Aviation," USAALS, 3 Sep 92, DAC file.

¹⁷Historical report, DCD, CY 92.

¹⁸Memo ATZQ-CG, Maj Gen John D Robinson to Maj Gen Donald M Lionetti, 2 Mar 92, sub: assignment of TRADOC mission for the ARNG aviation training sites, CG file.

component commanders to assign personnel to the USAAVNC who met the same high standards that he adhered to in selecting active component personnel. He also urged the reserve component leaders to consider longevity and continuity in assignment in selecting personnel for assignments to the USAAVNC.¹⁹

Battle Laboratories

The concept of battle laboratories grew out of the changing battlefield dynamics that began to emerge from the lessons learned from Desert Shield/Desert Storm. The commanding general of TRADOC formed the battle labs to meet the challenges of reshaping the Army resulting from the ending of the Cold War. The labs were to be innovative in their approaches and were to exploit technology through a battle dynamics focus. The primary thrust underlying the battle labs was for the spirit of "warfighting" to drive technology, identify future battlefield enhancements, and rapidly field outstanding products. The labs were to provide a structured means of examining, experimenting with, and evaluating concepts and technology. The six labs established were as follows: Early Entry, Lethality, and Survivability at Fort Monroe, VA; Depth and Simultaneous Attack at Fort Sill, OK; Mounted Battle Space at Fort Knox, KY; Dismounted Battle Space at Fort Benning, GA; Battle Command and Control at Fort Leavenworth, KS; and Combat Service Support at Fort Lee, VA.²⁰

In June 1992, the USAAVNC DCD established an aviation battle lab support team with a small core staff. The team orchestrated the matrix management of the six battle lab teams, one dedicated to each of the battle labs and headed by a senior aviator with experience and/or expertise in that specific dynamic. The support team was to be the focal point for this team management approach to facilitate the close interaction necessary for aviation participation in all six labs.²¹

Since aviation was a key entity in the three dimensional battlefield and since it cut across the mounted, dismounted, and deep operations battle labs, scheduling conflicts were expected to result in efforts to work effectively with all three of these labs. The USAAVNC

¹⁹Memo ATZA-CG, Maj Gen John D Robinson for Maj Gen Roger Sandler, 20 Apr 92, sub: total force aviation commitment, CG file.

²⁰Note, Gen Frederick M Franks Jr, 28 Jul 92, also encl, DCD file; Historical report, DCD, CY 92.

²¹Historical report, DCD, CY 92.

commander accordingly suggested to the TRADOC commander that each major program of these three labs should be coordinated with the USAAVNC before being finalized by the Combined Arms Center. It was also suggested that the Depth and Simultaneous Attack Battle Lab be designated as the "main effort," which would take precedence over the others in scheduling.²²

In early October the Depth and Simultaneous Attack Battle Lab conducted a tactical-missile live-fire exercise. This exercise evaluated aviation's concept for attack operations in a joint theater missile defense scenario and also demonstrated aviation's ability to pass digitized information across the battlefield.²³

The chief of the USAAVNC battle lab support team reported to the USAAVNC commander on 1 November that the Aviation Center was having varying degrees of success in interfacing with the various battle labs. He rated USAAVNC relations with Depth and Simultaneous Attack as satisfactory in that aviation's success in the Army tactical missile system firing had served aviation well. Also, such issues as communication interfaces, coordination cells, and a doctrinal guide for deep operations were being worked. Aviation relations with Combat Service Support and Mounted Battle Space were also satisfactory. Technology in maintenance (automated trouble shooting procedures and fault isolation) and maintenance force design were being worked with the former. The focus of Mounted Battle Space was almost entirely on horizontal integration of the battlefield, and aviation had been deeply involved in this. In the other three battle labs, however, both progress in general and the degree of aviation involvement were less satisfactory. Up to that time, very little had been accomplished in those three, notwithstanding the efforts of Army aviation to begin work.²⁴

The USAAVNC battle lab team conducted two projects in November. First, the compatibility of ground laser systems with aviation sensors was examined through the night fighting concept exploration program of the Dismounted Battle Space Battle Lab. Later in the month, the team observed "Operation Desert Capture" at the National Training Center under

²²Msg 151310Z Apr 92, cdr USAAVNC to cdr TRADOC, sub: implementation of new battlefield dynamics, CG file.

²³Briefing slides and schedule of events, "White Sands Missile Range D&SA Demo," 6 Oct [92], DCD; Historical report, DCD, CY 92.

²⁴E-mail note, Col Robert M Stewart to Maj Gen Robinson, 1 Nov 92, sub: B/L interface, Chapter III file.

the auspices of the Depth and Simultaneous Attack Battle Lab. This exercise demonstrated the unique capabilities required to gather intelligence and to process and disseminate data.²⁵

A Mounted Battle Space Battle Lab conference was held in December. The major themes of the conference included dominance of ground forces (including the ground regime of the third dimension) in battlespace, situational awareness, focus on systems with effects of massed forces, a smaller but high quality future Army, and the importance of battle labs as an integrating mechanism.²⁶

In December the Mounted Battle Space Battle Lab demonstrated the interoperability of the intervehicular information system with aviation's automated target hand-over system with the goal of horizontally integrating the battlefield--all through the use of simulations. The demonstration established the foundation for a hardware proof-of-concept scheduled for March 1993.²⁷

Near the end of 1992, the commander of the U.S. Army Combined Arms Support Command (USACASCOM) announced the establishment of two additional Combat Service Support Battle Lab initiatives--enhanced maintenance and enhanced ammunition support. Enhanced maintenance was to be a combined effort between the U.S. Army Ordnance Center and the USAALS and was to consist of technology in maintenance and maintenance architecture. Technology in maintenance would aim at enhancing and developing maintenance technology for both ground and aviation-based systems. With regard to maintenance architecture, the CASCOM commander directed that consideration be given to a flexible level maintenance system in lieu of the traditional four levels of maintenance. He also directed that the redesign of maintenance units be studied, so as to provide incremental support via modular designs. The assistant commandant of the USAALS was named as the deputy task force leader for the enhanced maintenance initiative.²⁸

²⁵Briefing slides, "Night Fighting System CEP Test," DCD; Historical report, DCD, CY 92.

²⁶E-mail note, Maj Gen Dave Robinson to cdrs/dirs, 19 Dec 92, sub: mounted B/L session (17-18 Dec), Chapter III file.

²⁷Historical report, DCD, CY 92.

²⁸Msg 091600 Dec 92, cdr USACASCOM for distr, sub: CSS Battle Lab initiatives, ..., USAALS DCD.

Louisiana Maneuvers

Early in 1992 the chief of staff of the Army formulated a concept focusing on the doctrine, organization, training, materiel, and leadership training requirements to transform the Cold War Army into a post Cold War Army and to transition the new Army into the 21st century. The name given to the concept, "Louisiana Maneuvers," was inspired by the U.S. General Headquarters Army maneuvers of 1940 and 1941.

The late 20th century Louisiana Maneuvers were to use interactive computer simulations and exercises to evaluate the capabilities of the Army in a myriad of scenarios and roles. Louisiana Maneuvers were described as a process, not a test or exercise. The entire Army as well as other services would be involved; it would be a laboratory for evaluation and assessment and a catalyst for transition. The TRADOC commander, Gen. Frederick Franks was General Sullivan's deputy exercise director of the project, and a general officer steering group was formed with representatives from all major Army commands.²⁹

Ten major issues were identified by the Louisiana Maneuvers board of directors as elements to be focused on during the process. These consisted of the following: (1) the force structure of the regular Army and USAR forces in the Continental U.S.; (2) identification and assessment of new technology and the acceleration of the acquisition process with resource savings; (3) improved logistics support at lower costs; (4) improvement of mobilization processes, possibly in simultaneous support of multiple theaters; (5) assessment of ability to deploy a large force in a short time; (6) maintaining ownership of the night in the 21st century; (7) improving effectiveness in joint, combined, or coalition force operations; (8) possible requirements for headquarters above corps; (9) the appropriate mix, effectiveness, and vulnerability of existing and evolving joint and tactical intelligence force structure; and (10) doctrinal employment and alternative fielding plans for weapons systems and equipment.³⁰

Several of the above issues were briefed to a general officers working group on 7 December 1992. The interface between Louisiana Maneuvers and Battle Labs was especially emphasized during this briefing. Aviation expected to participate in Louisiana Maneuvers and Battle Labs with Apache, Apache Longbow, and Kiowa Warrior aircraft in simulation. It was necessary to keep in mind, however, that when the new Comanche went into production, it

²⁹Msg (from incomplete copy), [General Sullivan to distr], sub: Louisiana Maneuvers 1994, DOS; Memo AMCLG-SC-M, Maj Gen Thomas B Arwood, for distr, 25 Mar 1992, sub: Louisiana Maneuvers 1994, DOS.

³⁰Briefing papers, "Major Issues," encl # 4 under Louisiana Maneuvers, DOS.

would be the cornerstone of Army aviation fleet. General Sullivan's statement, "Put the Comanche with the right tank and let's see what we get," was thought by the Army aviation community to capture the essence of the Louisiana Maneuvers.³¹

Doctrinal Publications

In July 1992, the USAAVNC published the final draft of the planning guide, "Army Aviation Deployment for Contingency Operations." The final version of the document was published late in 1992. The guide was written to assist Army aviation brigade/battalion/squadron commanders and their staffs in effectively planning and executing contingency deployments. It addressed deployment readiness preparation during peacetime, predeployment preparations on alert, deployment execution, arrival in theater, and redeployment to home station. The planning guide was a necessary recognition of and adjustment to the drastically changed world situation since the breakup of the Soviet Union.³²

The USAAVNC worked on revising several field manuals during 1992, but none was completed. Field Manual 1-104, "Tactics, Techniques and Procedures for Forward Arming and Refueling Points," was originally published in July 1985; it was under revision during 1992 and scheduled for completion in fiscal year 1994. A coordinating draft of a revision of Field Manual 1-113, "Tactics, Techniques, and Procedures for Assault Helicopter Unit Operations" was expected to be published in fiscal year 1993. Also expected to be completed in fiscal year 1993 was "Tactics, Techniques, and Procedures for the Command Aviation Battalion/Company," a revision of Field Manual 1-118. Field Manual 1-120 (formerly 95-100), "Army Air Traffic Services Contingency and Combat Zone Operations," was scheduled for completion and distribution early in fiscal year 1994. Field Manual 1-300, "Flight Operations Procedures" (formerly "Tactics, Techniques, and Procedures for Flight Operations and Airfield Management") was in the final editing stage and scheduled for release in fiscal year 1993.³³

During 1992, the U.S. Army Air Traffic Control Activity (USAATCA) updated parts of Army Regulation 95-2, "Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids." The chapters updated by the USAATCA described Army policy for the

³¹Copy of briefing, "TRADOC Action Plans for LAM '93," 7 Dec 92, DOS; Historical report, DOS, CY 92.

³²Planning guide, "Army Aviation Deployment for Contingency Operations, USAAVNC, 1 Feb 93, DOTD.

³³Historical report, DOTD, CY 92.

establishment, operation, management, and evaluation of air traffic control and air traffic services units, personnel, and equipment.³⁴

The USAATCA also revised Training Circular 95-93, "Air Traffic Control Facility Operations and Training," which was redesignated as Field Manual 1-303. The revised field manual was scheduled for distribution during the first quarter of 1993.³⁵ As a result of the downsizing of the USAAVNC DOTD, proponency for Field Manual 1-120, "Army Air Traffic Services and Combat Zone Operations," was shifted from DOTD to USAATCA. The transfer of responsibility was formalized in a memorandum of agreement.³⁶

Field Manual 1-108 was a contracted writing project with Military Professional Resources Incorporated. It involved close cooperation between the USAAVNC and the U.S. Army John F. Kennedy Special Warfare Center. The manual would explain the role of Army Special Operations Aviation and would be for use by corps, army, joint, and combined force commanders.³⁷

The USAAVNC concluded in 1992 that Training Circular 1-204, "Night Flight Techniques and Procedures," needed updating. Input was solicited from field units for the revision. The revised version was to incorporate information on operations in various climates and conditions in different areas of the world.³⁸

Women in Army Aviation

A series of studies, inquiries, and meetings was conducted at Fort Rucker during 1992 regarding the current and future role of women in Army aviation. The studies and inquiries focused on attitudes and perceptions relating to women in aviation as well as statistics and existing limitations on women's roles. A working group to study the issue was

³⁴Historical report, USAATCA, CY 92; Excerpts from revised AR 95-2, USAATCA.

³⁵Field Manual 1-303, "Air Traffic Control Facility Operations and Training," USAATCA; Historical report, USAATCA, CY 92.

³⁶Memorandum of agreement between DOTD and USAATCA, sub: responsibility for the development of air traffic services doctrine, USAATCA; Historical report, USAATCA, CY 92.

³⁷Information paper ATZQ-TD-DD, 12 Mar 92, sub: FM 1-108, Army Special Operation Aviation, DAC file.

³⁸Msg 101100Z Jan 92, cdr USAAVNC to AIG 898, sub: update of the TC 1-204, ..., CG file. An additional source for most of the information on doctrinal publications was: Information paper ATZQ-TDI-L, 2 Nov 92, sub: doctrine update, Brigade Commanders' Conference file.

formed as a result of a meeting held by the commanding general in January 1992. The charter of the working group was to take a deeper look at the problems that surfaced during the January meeting and to formulate courses of action to rectify the problems. Most female officers indicated that a positive mood was beginning to emerge and that real change in attitudes and in opportunities for women had already occurred. They added, however, that there was still a long way to go. Several women aviators had some Army experiences in which they believed themselves to have been discriminated against in obtaining positions for which they were competent and legally eligible.³⁹

In anticipation of changes in Army policy regarding the roles of women in the Army, the vice chief of the Army requested the thoughts of the USAAVNC commander on the issue of women in aviation. The USAAVNC commander therefore outlined the relevant data. Women constituted 4.5 percent of Army aviators in 1992, but accession targets in fiscal year 1993 were for women to be 16 percent of the total lieutenant accessions. No goal had been established for warrant officers. Some questions that had to be studied included allowing pregnant aviators to fly and permitting them to hold key positions, since pregnancy would render them non-deployable. Other issues that would have to be addressed included possible gender bias in the Army's central selection process for promotion, command, and schools. Objective analyses of women's performance in combat in Panama and Iraq indicated that they had performed well and that they could do the job.⁴⁰

B. Army Aviation Modernization Plan

The chief of staff of the Army gave final approval to the Army Aviation Modernization Plan in 1988. This plan called for the continued procurement of AH-64, UH-60, OH-58D, and CH-47D aircraft, for the continued improvement of existing systems as needed to meet changes in threat or safety issues, and the development of new systems as required. It also called for the gradual retirement of older aircraft to maintain a maximum fleet age of twenty years for attack and reconnaissance aircraft and thirty years for lift, cargo, and fixed-wing aircraft.⁴¹

³⁹Memo ATZQ-DAC, Col Robert N Seigle for Maj Gen John D Robinson, 10 Apr 92, sub: women in aviation, also encls, DAC file.

⁴⁰Memo ATZQ-CG, Maj Gen John D Robinson to vice chief of staff DA, sub: women in Army aviation, DAC file.

⁴¹See, e.g., Kitchens, 1988 AHR, p. 47.

During the years between 1988 and 1992, The Army Aviation Center produced annual updates to the Army Aviation Modernization Plan. Although funding decreased with the changing world conditions, and the reduction in the total number of Army aircraft fleet became an integral aspect of the plan, the modernization of the fleet and of the various systems on Army aircraft remained the central focus. The development of a new light attack helicopter was an integral aspect of the modernization plan from the beginning. By mid 1991, the acquisition of a new reconnaissance/attack aircraft had become probable, and it had been designated as the RAH-66 Comanche.⁴²

By 1992, other branches of the Army had developed modernization plans, and the Army had begun the annual development of "The United States Army Modernization Plan." The detailed statement of the annual update of the Army Aviation Modernization Plan became Annex L of the Army's overall modernization plan. This aviation annex was prepared in 1992 for final approval and publication in early 1993.

The 1992 update of the Army Aviation Modernization Plan was prepared jointly by the USAAVNC, Aviation and Troop Command (ATCOM), and the Aviation Division of DCSOPS. The update supported the Army modernization objectives of projecting and sustaining the force, protecting the force, winning the battlefield information war, conducting precision strikes, and dominating the maneuver battlefield. It recognized that a multi-polar global threat environment had replaced the bipolarized world of the Cold War era. The projected role and mission as well as aircraft requirements of Army aviation were adjusted accordingly. For example, the total number of Army aircraft was projected to decline from 7,793 in fiscal year 1992 to 6,150 in fiscal year 1999. The Army planned to reduce its rotary wing inventory from eight to six types between 1992 and 2010 and to reduce the total number of its rotary wing aircraft from approximately 7,500 in 1992 to 5,900 in 2010. The 1992 version of aviation's modernization plan was a plan designed to contribute to the flexible deterrent options and continental U.S.-based, force-projection Army prescribed in the national military strategy. The plan projected a trained and ready aviation force capable of deploying, fighting, and sustaining across the continuum of military operations.⁴³

⁴²Kitchens and Wright, 1990 AHR, pp. 58, 62; Kitchens, 1991 ACH, 44-45, 52-55.

⁴³"Army Aviation Modernization Plan," January 1993, DCD; "The Comanche Courier," no. 001, February 1993, Chapter III file.

C. Equipment Requirements

Aviation technology base development was managed by the Aviation and Troop Command (ATCOM [replaced Aviation Systems Command in July 1992]). The USAAVNC DCD provided input representing the users' needs with regard to research and development. The ATCOM used this input in the resource allocation decision-making process. The DCD prioritization process relied heavily on the military judgement and experience of the DCD action officers to determine which research and development projects had more potential benefit for future operational requirements. According to the user prioritization schedule submitted in February 1992, the following projects were given high priority: day/night adverse weather pilotage; air-to-air mission equipment package/weapons evaluation; battlefield distributed simulation-development; multi-sensor aided targeting; advanced helicopter pilotage; obstacle avoidance system; tactical data acquisition and correlation; optical/infrared countermeasure; radar deception and jamming; and soldier integrated protective ensemble.⁴⁴

AH-64 Apache

Notwithstanding its history of mechanical and logistical problems, the Army's primary attack helicopter performed very well during Operation Desert Storm. Also, of the 194 Apache problems that had been identified, 132 were corrected by the end of 1991. Of the sixteen long-standing top-priority issues, eight remained uncorrected at the beginning of 1992. These eight issues were as follows: (1) shaft driven compressor failures; (2) main rotor blade debonding; (3) main rotor strap pack failures; (4) field repair of lead lag links; (5) 701C engine integration; (6) APX-100 transponder mode four; (7) very high frequency radio problems; and (8) pylon pivot wear/cracking.⁴⁵

In an effort to resolve the problem of the integration of the 701C engine, the U.S. Army Aviation Technical Test Center (USAATTC) conducted a preliminary airworthiness evaluation of the T700-GS-701C equipped AH-64A Apache with MOD 5/F1 engine controls. Overall engine-airframe response of the 701C equipped AH-64A helicopter was satisfactory. Within the limited scope of the evaluation, no deficiencies were noted. Five shortcomings were identified, however, the most important of which was the frequent illumination of the

⁴⁴"6.3A User R&D Prioritization," February 1992, DCD; Historical report, DCD, CY 92.

⁴⁵Historical report, TRADOC Systems Manager (TSM) Longbow, CY 92; Memo ATZQ-TSM-W (70-1i), Col David F Sale for CG, 3 Dec 92, sub: AH-64 T-701C digital engine control system safety risk assessment action memorandum, TSM Longbow; Memo ATZQ-CG, Maj Gen John D Robinson for Col James R Snider, sub: system safety risk assessment, also encl entitled "System Safety Risk Assessment" 5 Nov 92, TSM Longbow.

high rotor speed light during maneuvers that required a low power setting. Several fixes were planned by the materiel developers with further testing by the USAATTC to follow.⁴⁶

Later in 1992, the integration of the 701C engine and three other top priority problems were solved. The other three deficiencies resolved during 1992 consisted of the main rotor blade debonding, main rotor strap pack failures, and very high frequency radio problems.⁴⁷

The shaft driven compressor problem was the most serious unresolved design problem and was made the priority issue during both 1991 and 1992. Although it caused no serious accidents during 1992, the problem persisted. The USAAVNC, ATCOM, McDonnell Douglas Helicopter Company, and Allied Signal Company investigated the compressor problem during 1992. A new unit with dual compressors was developed, and several successful bench tests were conducted; testing was continuing at the end of the year.⁴⁸

Operation Desert Storm highlighted several other Apache deficiencies which urgently required correction. While the lack of an integrated global positioning system was the most serious of these problems, it was part of the larger modernization strategy and could not easily be resolved independently. Other urgent problems highlighted during Desert Storm consisted of the reliability of the 30 mm gun, the target acquisition designation system, the battery, desert filtration, nap-of-the-earth communications problems, high frequency radio, identification friend or foe, the single channel ground and air radio system, and sustainment problems relating to corrosion control and H-11 bolt swap-out. The USAAVNC commander recommended that these problems be separated from the Apache modernization efforts and be corrected as soon as possible.⁴⁹

An Apache users' conference was held at Fort Hood, TX, from 20 to 22 October. Twelve issues/concerns were developed during the conference and presented to the branch

⁴⁶Memo STEAT-AQ-TA, Lt Col Marvin L Hanks for cdr U.S. ATCOM, 2 Feb 93, sub: report, preliminary air worthiness evaluation of T700-GE-701C..., USAATTC; Historical report, USAATTC, CY 92.

⁴⁷"Apache Program Progress Review," Dec 92, TSM Longbow; Historical report, TSM Longbow, CY 92; Note from TSM Longbow to historian [Mar 93], response to staffing of 1992 history, TSM Longbow.

⁴⁸Historical report, TRADOC Systems Manager (TSM) Longbow, CY 92; Memo ATZQ-TPO-A, Maj Gen Rudolph Ostovich III, for Maj Gen Donald R Williamson, 25 Apr 91, sub: AH-64 shaft driven compressor failures, DCD.

⁴⁹Memo ATZA-TSM-W (70-li), Maj Gen John D Robinson for Maj Gen Jay M Garner, 13 Mar 92, sub: AH-64A program requirements, Chapter III file.

chief for his consideration. These issues included the following: (1) the effect of the reduction in quantity of ammunition on helicopter gunnery readiness; (2) depot maintenance problems; (3) the need for aviation life support equipment technicians in Apache battalions; (4) shortage of depot-level spare parts; (5) crew readiness levels; (6) adverse impact of Army draw down on readiness; (7) difficulties of funding annual deployments to combined arms training centers; (8) the need for an integrated global positioning system to enhance deployability of Apache battalions; (9) shortages of AH-64 commissioned officer transitions; (10) shortcomings of simulation for AH-64 training; and (11) limitations of the M-43 mask.⁵⁰

The USAAVNC DCD wrote change 14 to the materiel need for the AH-64 and sent it out for worldwide staffing in December 1992. This change incorporated the requirements for the AH-64C and updated the requirements for the AH-64A and AH-64D.⁵¹

During 1992 the Aviation Center developed a priority- ordered list of modifications for the AH-64 C/D. The USAAVNC also identified those modifications which should be started only when the aircraft was remanufactured during the AH-64 C/D conversion. While some of the proposed modifications were possibly not affordable, they represented field commanders' requirements confirmed by the combat developer. Some of the items on the list, in order of priority, consisted of the following: (1) image intensifier; (2) altitude warning; (3) digital scan converter; (4) alternate laser coding; (5) Hellfire test set; (6) corrosion prevention; (7) pressure regulator pylon improvements; (8) transmission upgrade; (9) digital map; (10) altitude hold; (11) air-to-air capability; and (12) fuel control warning panel. The USAAVNC also recommended that the upgrades be effected at appropriate times and that every effort should be made to minimize the number of times that the aircraft were disassembled.⁵²

In 1992, the AH-64s used for training at the USAAVNC were the oldest Apaches in the fleet (1982-1985 models). They averaged more than 2,500 hours per airframe, compared to an average of 500 hours on the total Apache fleet. More modern aircraft were needed at Fort Rucker so that students would be trained in aircraft configured the same as unit organic

⁵⁰Memo ATZQ-TPO-A (70-1i), Col David F Sale and Col James R Snider for distr, 21 Sep 92, sub: AH-64 users' conference, with encls, TSM Longbow; Memo ATZQ-TSM-W (70-li), Col David F Sale for CG, 23 Oct 92, sub: AH-64 commanders and users conference..., TSM-Longbow.

⁵¹Historical report, DCD, CY 92.

⁵²Memo ATZQ-CDI (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby, Jr, 16 Nov 92, sub: Army aviation ... modernization strategy, Chapter III file.

aircraft. Also, more modern aircraft would reduce operating and support costs. The USAAVNC commander accordingly requested that the National Guard Bureau (NGB) agree to consider a delayed fielding of eighteen AH-64s to ARNG units in order to provide the USAAVNC with production line Apaches. Eighteen of the older Fort Rucker Apaches would be identified and processed through a maintenance upgrade program.⁵³ The NGB, however, objected to unilaterally supporting the USAAVNC requirements, as the request would "destroy carefully developed fielding plans."⁵⁴ The USAAVNC commander accordingly applied to the TRADOC commander for resources for modernizing the Fort Rucker Apache fleet. He estimated that the USAAVNC would reduce operation and support costs by at least \$23.6 million annually if eighteen of the older aircraft were replaced by new Apaches.⁵⁵

OH-58D Kiowa and Kiowa Warrior

The OH-58D, built by Bell Helicopter Textron Incorporated, was the result of the Army Helicopter Improvement Program. The OH-58D entered service in December 1985 and represented a complete modernization of the OH-58A airframe. The OH-58D featured a four-blade main rotor system, an advanced cockpit display system using multi-function displays, and a mast-mounted sight to provide a day/night targeting capability. In 1987, armament was added to fifteen production OH-58Ds to support Operation Prime Chance, the deployment of U.S. Navy ships to escort U.S. flagged vessels crossing the Persian Gulf. The weapons were added as stand-alone armament systems, and were not integrated into the computerized cockpits. The success of these Prime Chance OH-58Ds led to a program to modify all OH-58Ds to an armed configuration with integrated weapons systems; this new aircraft was designated the Kiowa Warrior.

In 1991 the USAATTC was tasked to conduct a preliminary airworthiness evaluation of the Kiowa Warrior. The tests were completed in December of that year. The objectives were to provide a limited assessment of the aircraft's handling qualities and of armament/aircraft compatibility during weapons firing and to determine compliance with selected system specifications. One enhancing characteristic, five deficiencies, eleven shortcomings, and thirteen instances of specification noncompliance were identified. The

⁵³Msg 271000Z Jul 92, cdr USAAVNC to cdr NGB, sub: AH 64 aircraft redistribution for USAAVNC, Chapter III file.

⁵⁴Msg 171521Z Aug 92, cdr NGB to cdr USAAVNC, sub: AH-64 aircraft redistribution for USAAVNC, Chapter III file.

⁵⁵Msg 120730Z Oct 92, cdr USAAVNC to cdr TRADOC, sub: AH-64 aircraft replacement, Chapter III file.

most significant of the deficiencies was unsatisfactory autorotative landing. The other deficiencies were as follows: (1) potential for catastrophic injuries to the pilot in a crash; (2) transient engine/rotor speed droop; (3) inadequate lateral cyclic control margins under some operating conditions; and (4) insufficient lateral cyclic control margin when landing at a 10 degree sideslope with a downslope lateral. The problems identified were correctable, and the USAATTC made specific recommendations in some instances.⁵⁶

Instructor pilots and key personnel were trained at the Bell Helicopter facility in Arlington, TX, in January 1992 in preparation for the delivery of four OH-58D Kiowa Warriors to the 4-17th Cavalry in February. A few of the aircraft were released to Fort Rucker and Fort Eustis in March. By June of 1992, Fort Rucker had received sixteen of an allotted twenty-five, and Fort Eustis had received seven of its allotted twelve.⁵⁷ An acceptance ceremony was conducted at the Center Parade Field at Fort Rucker on 5 June in recognition of the newest member of Army aviation's fleet of aircraft.⁵⁸

The proponent for the OH-58D Kiowa Warrior force development test and experimentation was TRADOC. The evaluation was to be conducted in two phases: phase I during fiscal year 1993 and phase II during 1994. Phase I was to provide a quick look at the OH-58D critical operational issues. The USAAVNC DCD prepared two chapters of the test and evaluation plan for phase I and submitted them to the Aviation Test and Experimentation Command in August 1992. The tests were to be used to answer questions from the Office of the Secretary of Defense about tactical employment and maintainability of the armed OH-58D.⁵⁹

The 1992 Army Aviation Modernization Plan indicated a base force requirement of 507 OH-58D Kiowa Warriors, but the existing procurement authority in 1992 was for only 351 of these aircraft. Another procurement matter of concern to the manager of the OH-58D program in 1992 was that the simulator requirement was being understated. Thirteen to

⁵⁶"Preliminary Airworthiness Evaluation of the Kiowa Warrior Helicopter," USAATTC, March 1992, USAATTC.

⁵⁷Memo ATZQ-TSM-S (70-li), Col Ted D Cordrey for aviation officer XVII Airborne Corps, 30 Jan 92, sub: OH-58D Kiowa Warrior fielding, TSM OH-58D; Historical report, TSM OH-58D, CY 92; E-mail note Col Ted D Cordrey to BownsN, 11 Jun 92, sub: OH-58D Kiowa Warrior, TSM OH-58D; Army Flier, 26 Mar 93.

⁵⁸Historical report, TSM OH-58D, CY 92.

⁵⁹Memo ATZQ-TSM-S (70-li), Col Ted D Cordrey for aviation officer XVIII Airborne Corps, 30 Jan 92, sub: OH-58D Kiowa Warrior fielding, TSM OH-58D; Historical report, TSM OH-58D, CY 92; Col Stephen S MacWillie for cdr Aviation Test and Experimentation Command, 14 Aug [92], sub: transmittal of ...test and evaluation plan for the force development test and experimentation, also encls, DCD.

fourteen simulators would be required for 351 aircraft, but twenty would be required for 507 aircraft. The system manager recommended that efforts be made to acquire the larger number of simulators in case they were required.⁶⁰ The USAAVNC commander recommended to the Army Aviation Program Executive Office that the total procurement be increased to the 507 aircraft required to equip the base force, along with the necessary quantity of simulators and other support equipment.⁶¹

On 1 October 1992, E Troop of the 2-229th Attack Helicopter Regiment was activated. The mission of E Troop involved both the OH-58D Kiowa Warrior and the RAH-66 Comanche; it was to define the tactics, techniques, and procedures for the Comanche as well as perform the force development test and experimentation for the Kiowa Warrior.⁶²

Extensive reviews were conducted of OH-58D maintenance manuals and the maintenance allocation chart during 1992. Because different methods were being used to boresight at Fort Rucker, Fort Eustis, and Fort Bragg, a technical review of boresighting procedures was conducted. The purpose was to establish a standard boresighting procedure for the OH-58D Kiowa Warrior.⁶³

Following a series of incidents, all OH-58Ds worldwide were grounded on 22 July 1992. The reason for the grounding was that a computer chip in the electronic supervisory control system was unprotected and had corroded. After the problem was identified and corrected, the grounding order was lifted in September.⁶⁴

The USAAVNC DCD prepared a field development test and evaluation for the OH-58D during 1992. The scope of the test and evaluation changed numerous times, and all

⁶⁰Memo ATZQ-TSM-S (70-li), Col Ted D Cordrey for DCD, 13 Oct 92, sub: Army...modernization strategy..., TSM OH-58D.

⁶¹Memo ATZQ-CDI (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 16 Nov 92, sub: Army aviation ... modernization strategy, Chapter III file.

⁶²Army Flier, 9 Oct 92; Historical report, TSM OH-58D, CY 92; ATZQ-TSM-S (70-li), Col Ted D Cordrey for HQDA, 16 Nov 92, sub: OH-58D Kiowa Warrior aircraft qualification, TSM OH-58D.

⁶³Memo ATZQ-TSM-S, Col Ted D Cordrey for cdr U.S. Army Signal School & Ft Gordon, 12 Mar 92, sub: review of OH-58D maintenance manuals, TSM OH-58D; Memo ATZQ-TSM-S (70-li), Col Ted D Cordrey for cdr USAALS, 10 Mar 92, sub: establish...maintenance allocation chart, TSM OH-58D; Historical report, TSM OH-58D, CY 92; Memo ATZQ-TSM-S (70-li), 23 Nov 92, Col Ted D Cordrey for asst cmdt USAALS, 23 Nov 92, sub: technical review... boresighting procedures, TSM OH-58D.

⁶⁴Msg 101200Z Aug 92, cdr USAAVNC to AIG 898, sub: preparation for ungrounding of the OH-58D, Chapter III file; Briefing slides, "Aviation Safety Action Team, OH-58D Grounding Rescission," CG file.

changes had to be coordinated with the test unit tester, the TRADOC systems manager, and the program manager. The scope of the test and evaluation varied from an instrumented firing range force-on-force test, to an assessment of the Army aviation unit in Somalia, to a quick look assessment during an annual field exercise rotation.⁶⁵

New Training Helicopter

In January of 1992, it was announced that \$46.4 million had been appropriated for fiscal year 1993 and \$30.6 million for fiscal year 1994 for the new training helicopter. Combined with the \$23.5 million appropriated for fiscal year 1992, a total of \$100.5 million had been appropriated for the purchase of 157 new training helicopters and twelve cockpit procedural trainers. As a result of the fiscal year 1993 appropriation, TRADOC and Fort Rucker were no longer responsible for funding the various agencies involved with the new training helicopter program.⁶⁶

The principal reason for replacing the UH-1 with a commercial aircraft was to save the Army a projected \$44 million annually. The expected cost of operating the new trainer was \$218 per hour, versus \$587 per hour for the UH-1. The training level achieved with the new training helicopter would be equal to or greater than that being attained with the UH-1. The average age of the UH-1 being used in 1992 was about twenty-five years. The increased availability of the new training helicopter, coupled with a reduced student load, was expected to allow the core training fleet to be reduced from 229 UH-1s to 157 of the new training aircraft. The 157 new helicopters, along with twelve cockpit procedural trainers, were to be delivered in three lots over a three-year period. The lots were to be of thirty-seven, seventy, and fifty aircraft respectively; the first initial entry rotary wing class to use the new training helicopter was scheduled to begin in August 1994.

Four helicopter manufacturers--Eurocopter (Aerospatiale) Helicopter Corporation, Bell Helicopter Textron, Grumman Aircraft Corporation, and the Enstrom Helicopter Corporation--were considered serious contenders for the contract for supplying the new training helicopter. The formal request for proposal was released to industry on 1 May 1992 with contract award

⁶⁵Historical report, DCD, CY 92.

⁶⁶E-mail note, to Robinson, Goodbary, etc, sub: NTH funding, DOS doc # TDD 3.

scheduled for 26 February 1993. A training effectiveness user evaluation was scheduled to be conducted at Fort Rucker from 24 September through 27 November 1992.⁶⁷

The date for the user testing of helicopters being proposed as the Army's new training helicopter had been rescheduled a total of seven times because one or more companies were not prepared for the test and/or were challenging the legitimacy of stipulated requirements. Requirements that were challenged included Federal Aviation Administration (FAA) certification, cruise airspeed, turbine engine, and endurance time. One company (which was not one of the companies considered serious contenders for the contract) was partly or totally responsible for the seven reschedulings; the user test was thereby delayed from September 1989 to September 1992.⁶⁸

In October 1992 the new training helicopter program manager was notified that three of the competitors had operated their aircraft above their respective FAA-certified maximum gross weight limits. These competitors were Bell Helicopter, Enstrom Helicopter, and the Grumman/Schweizer team. By 12 October the FAA had determined that none of the aircraft had their structural integrity or airworthiness compromised and all were safe for continued evaluation. These occurrences had no apparent impact on the user evaluation.⁶⁹

During 1992, consideration was also given to the nomenclature for the new training helicopter. The designation "TH" (for training helicopter)-67A was selected. It was thought that an Indian name of Creek or Muskogee origin should be used because the helicopter was to be used only at Fort Rucker, which was within the territory claimed by peoples of the Creek Confederacy. Muskogee or Creek names that were considered included Coosa, Sehoy, Menawa, and Creek. Non-Creek names also being considered included Arapaho and Sequoya. Representatives of the Creek Nation were involved in the process, and a "troop test" was conducted with the name, "Coosa," to determine whether it was acceptable. It was deemed acceptable by 72 percent of respondents. No final decision on the name had been made at the end of the year, but the USAAVNC had forwarded the following names (in order

⁶⁷Information papers ATZQ-DST, Jim Hawkins, 13 Apr & 11 Sep 92, sub: new training helicopter program, DOS, TDD # 18.

⁶⁸E-mail note, Judith L Hollen to AaronR, sub: new training helicopter update, DOS, TDD # 17; Information paper, 23 May 92, sub: Schweizer's influence on the NTH program," 23 Mar 92, DOS, TDD # 17.

⁶⁹Memo SFAE-AV, Maj Gen Dewitt T Irby Jr for Mr Conner, 11 Oct 92, sub: new training helicopter effectiveness user evaluation, Chapter III file.

of priority) to ATCOM: Coosa, Arapaho, Sequoya. ATCOM was to forward its recommendation to the DA and DOD for final approval.⁷⁰

UH-60 Black Hawk

In June 1992, the U.S. Army Medical Department Center and School submitted its requirements for the UH-60Q medical evacuation helicopter. The "Q" aircraft series designation was approved on 25 June 1991 for medical evacuation Black Hawk aircraft. Characteristics for the UH-60Q were derived from a number of approved requirements documents, mission needs statements, and other approved documents for the UH-60 aircraft. The emerging medical evacuation requirements were also listed and described. The UH-60Q was to be used in wartime to evacuate patients, to transport medical teams, to ensure delivery of class VIII supplies and blood, and to rescue patients and crewmembers from downed aircraft.⁷¹

The prototype UH-60Q was built by Serv-Air, Inc. at the Army Bluegrass Depot in Lexington, KY. Although the drive train was the same as the standard Black Hawk, the UH-60Q had advanced avionics equipment, an AVR-2 laser warning receiver, an AN/ARS6 personnel locator system, a global positioning system, a tactical air navigation system, a doppler and inertial navigation system, and high frequency and satellite communications. Changes in passenger space would give crews more flexibility in performing their missions. A different litter arrangement and an external rescue hoist would allow up to nine litter or ambulatory patients to be carried at one time. Also, the external stores support system would allow for additional fuel and supplies for long range or longer duration missions. The cost of the prototype aircraft was \$6.2 million.⁷²

The USAAVNC DCD worked closely with the program manager on the UH-60 modernization and materiel need update. The UH-60Q (medical evacuation) draft operational requirements document was completed and sent to TRADOC for approval.⁷³ The

⁷⁰E-mail notes, James Hawkins and LandryL to PennyP, 28 Sep, 2 Oct, 5 Oct, & 2 Nov 92, sub: proposed names and model designation for the new training helicopter, DOS, TDD # 23.

⁷¹Memo HSMC-FCM (70-lf), Col Hershell L Moody, for cdr TRADOC, 16 Jun 92, sub: approval ... for DUSTOFF Black Hawk (UH-60Q), also encl, Chapter III file.

⁷²Army Flier, 12 Feb 92.

⁷³Historical report, DCD, CY 92.

USAAVNC supported retrofitting 120 of the 1985 configuration UH-60As to UH-60Q model medical evacuation aircraft. The Aviation Center also supported a plan to keep the UH-60 production line open and running at a minimum of 60 aircraft per year.⁷⁴

Another enhanced UH-60, the UH-60L was being developed for air assault operations. The 101st Airborne Division requested approval of the requirements for "buddy start hoses" and fast-rope insertion/extraction system on UH-60Ls assigned to the 101st. The Aviation Center worked on documenting the requirements during 1992.⁷⁵

RAH-66 Comanche

The RAH-66 Comanche was a lightweight, armed reconnaissance helicopter developed by the Boeing-Sikorsky Joint Program Office. The aircraft integrated advanced technologies to provide the Army a real-time reconnaissance capability operable in adverse environments (high/hot, night, visual obscurants). The Comanche embodied the imperatives of deployability, versatility, lethality, survivability, and supportability. It was to be fielded into the Army's cavalry organizations and would be the attack aircraft in attack helicopter battalions in light divisions; in heavy divisions, the Comanche would complement the Apache by serving as the scout aircraft. The T800-LHT-800 turbine engine, developed by the Light Helicopter Turbine Engine Company was the powerplant for the Comanche.⁷⁶

In April 1991 the Army selected the Boeing-Sikorsky team to begin development of the RAH-66 Comanche armed reconnaissance helicopter. Work commenced on the demonstration/validation prototype phase of the program under a contract to complete and build prototype aircraft for testing all critical elements of the total weapon system. In January 1992, the Office of the Secretary of Defense directed that the aircraft design and program be restructured to incorporate certain additional features which the Desert Storm experience indicated were essential to operation on the modern battlefield.⁷⁷

⁷⁴Memo ATZQ-CDI (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 16 Nov 92, sub: Army aviation ... modernization strategy, Chapter III, file.

⁷⁵Memo ATZQ-CDM-CD (70-li), Maj Gen John D Robinson for Maj Gen John E Miller, 8 Jul 92, sub: enhancements for UH-60L ..., CG file.

⁷⁶Memo ATZQ-TSM-C (10-1a), Col Theodore Duck for cdr TRADOC, 29 Jul 92, sub: 1992 annual report for TSM Comanche, Chapter III file.

⁷⁷Kitchens, 1991 ACH, pp. 52-55; The Comanche Courier, no. 001, Feb 93.

In February 1992, the DA issued guidance for the implementation of the new defense acquisition strategy announced by President Bush in his 1992 State of the Union Message. The new strategy concentrated more on research and development of new systems and less on production contracts. There was to be no production commitment for the planned 1,292 Comanche aircraft, and the funds for the engineering, manufacturing, and development phase of the program were removed. The Comanche was to continue to be developed as a demonstration validation prototype program that would include the Longbow fire control system, aviation survivability equipment, crew armor, and a T800 growth engine. The objective was to prove out critical technology and Comanche systems. A design decision would then be made in 1997 at the milestone II to enter into the engineering, manufacturing, and development phase.⁷⁸

During 1992 the USAAVNC DCD wrote the Comanche requirements document in the operational requirements document format. The document was completed and submitted to TRADOC for approval in December 1992.⁷⁹

By the end of 1991, the Longbow integration into the Comanche was a planned product improvement. Also, the preliminary design review of the demonstration validation phase of the Comanche contract was near completion.⁸⁰ In mid January 1992, the decision was made to integrate the Longbow, as part of the baseline design, into 33 percent of the Comanche fleet. It was also decided to include the weight of all combat kits in aircraft performance predictions. While missions could be performed in this configuration, the 500 feet per minute vertical rate of climb operational requirement could not be met under the most demanding conditions. It was therefore decided to increase the power of the T800-LHT-800 engines by 12 percent. Studies were conducted to determine which of the several engine growth options best suited the new Comanche requirements. In July, a request for proposal for a T800 growth engine and Comanche air vehicle support plan was sent to the Light Helicopter Turbine Engine Company. The company returned the proposal on 4 September, and a proposal evaluation board was convened in St. Louis, MO, to determine the detail, scope, and cost of the growth engine program. The board was still in session at the end of the year.⁸¹

⁷⁸Memo, Douglas A Brook and Stephen K Conner for distr, 4 Feb 92, sub: implementation of acquisition decisions, TSM Comanche; Historical report, TSM Comanche, CY 92.

⁷⁹Historical report, DCD, CY 92.

⁸⁰Kitchens, 1991 ACH, pp. 53-54.

⁸¹Historical report, TSM Comanche, CY 92; "T800 Proposal Evaluation Team--Schedule," TSM Comanche.

A base model of the T-800 engine designed for the Comanche was installed on a UH-1 at Fort Rucker in 1992 for testing purposes. The base model was a 1,300 horsepower engine, whereas a 1,500 horsepower engine was to go in the Comanche. Nevertheless, many aspects of engine performance and maintenance could be tested with the less powerful engine in the UH-1 pending the construction of the first Comanche prototype.⁸²

CH-47 Chinook

In addition to the continuous improvement and sustainment of the CH-47D, the major concern during 1992 was to begin plans either for a follow-on aircraft or the modernization of the CH-47D; the decision was to modernize the CH-47D. The required operational capability for the cargo helicopter was rewritten, staffed, and submitted to TRADOC for approval. The existing CH-47D met most of its mission requirements, but deficiencies existed in payload, operational range, nap-of-the-earth communication, and accurate navigation. Also, the age of the CH-47 airframe was nearing thirty years; as useful life limits were reached, supportability requirements increased substantially, placing the force at risk in terms of combat effectiveness and safe operations. The CH-47D modernization plan was put on hold later in the year, however, because of budget constraints.⁸³

The MH-47E was to be the next generation medium lift helicopter designed specifically for Special Operations Aviation and Special Operation Forces. It was under development, testing, and production concurrently with the MH-60K. These two aircraft were to have very similar upgrades over the existing MH-47D and MH-60L aircraft. They would provide increased mission capability and reliability over the existing aircraft. The Army planned to buy 25 MH-47Es plus a prototype. The first aircraft was scheduled for delivery in November 1992. New systems added to the aircraft included the following: terrain following/terrain avoidance radar; integrated cockpit, air-to-air refueling, internal auxiliary fuel tanks; upgraded doorgun; external rescue hoist; coupled flight controls; rotor brake; fast rope rappelling system; long range external fuel tanks, forward looking infrared radar; additional troop seating; and increased subsystem redundancy.⁸⁴

⁸²Army Flier, 28 Aug 92.

⁸³Memo ATZQ-CDM-C (70-li), Maj Gen John D Robinson, for cdr TRADOC, 28 Aug 92, sub: improved CH-47 cargo helicopter revised operational capability, also encl, DCD; Historical report, DCD, CY 92.

⁸⁴Information paper ATZQ-CDM-CS, 9 Mar 92, sub: MH-47E update, DAC file.

Special Electronic Mission Aircraft

On 23 January 1992 a fixed wing/special electronic mission aircraft council of colonels meeting was conducted via video teleconference. It was reported that since the last council of colonels meeting in August 1991, the following actions had been taken: (1) a retirement/replacement plan for fixed wing aircraft was being implemented; (2) CASCOM was conducting the total distribution system study, which included fixed intratheater cargo movement; (3) the establishment of a fixed wing initial entry course had been disapproved; (4) the C-12 would replace the U-21 in the long term; (5) the USAAVNC would conduct the RC-12K Aircraft Qualification Course special electronic mission qualification at the U.S. Army Intelligence Center and School (USAICS) in accordance with a memorandum of understanding between the USAAVNC and the USAICS; and (6) fixed wing exportable training packages were being developed.⁸⁵

A fixed wing/special electronic mission aircraft users' conference was held at Fort Huachuca, AZ, from 17 to 21 August 1992. Participants were scheduled to break into five working groups to address various user issues. The five working groups and some of the principal issues discussed in each group were as follows: (1) Army airspace command and control--airspace coordination, communication link for airspace information, and air tasking orders; (2) modernization--contractor support for new systems, interim requirements following retirements of OV-1 Mohawk, remote relay capability, and training courses for the new RC-12N; (3) force structure--the force structure required to support "Crazy Horse," manning of the integrated processing facility, logistical support required for retirement of Mohawk aircraft (1992-1997), and the aerial exploitation battalion's transition to unmanned aerial vehicles; (4) operational support airlift--activation of operational support airlift in October 1992, organization of theater fixed wing company/battalion, maintenance test pilot requirements, restructure of fixed wing training for C-12, and fixed wing fleet modernization program; and (5) advanced Quickfix--advanced Quickfix mission profile, Quickfix location and support, effective Quickfix tasking and reporting, and aircraft survivability equipment training.⁸⁶

A draft mission need statement for a replacement aircraft for the U-21 was completed and staffed worldwide in October 1992. This aircraft program, known as C-XX, was scheduled to be forwarded to TRADOC early in 1993. A fixed wing investment strategy work group, consisting of all fixed wing proponent users met in 1992. The work group

⁸⁵Msg [1st page missing], sub: results of fixed wing/special electronic mission aircraft systems ..., CG file.

⁸⁶Memo ATZQ-CDM-C (70-li), Col Stephen S MacWillie for CG, 7 Aug 92, sub: response to commander's inquiry, also encl, CG file.

developed a modernization strategy designed to reduce the number of aircraft types, while combining user requirements and exploring joint acquisition. This coordinated strategy was intended to serve as the future foundation for all fixed wing modernization efforts.⁸⁷

Unmanned Aerial Vehicles

The USAAVNC involvement with unmanned aerial vehicles increased markedly during 1992. A mission need statement for reconnaissance and surveillance was completed on 12 May 1992. The analysis of the required mission was to perform reconnaissance and surveillance missions across the operational continuum. Short-range unmanned aerial vehicles were undergoing technical testing during 1992 and were deemed to have great potential for these purposes. Adapting existing army platforms (OH-58 A/C, UH-1, or AH-1F) into surveillance platforms in manned or unmanned configurations was also being considered.⁸⁸

A working group met at the USAAVNC in August and recommended that the Aviation Center become more proactive in the development of unmanned aerial vehicles. The rationale was that, since Army aviation supported most branches of the Army through special electronic mission aircraft, medical, general support, special operations, attack, and cavalry missions, the assumption by the branch of future unmanned aerial missions would be consistent with current practice. Furthermore, aviation's involvement with aircraft safety, airspace, training, logistics, and employment caused the branch to be the logical proponent of unmanned aerial vehicles.⁸⁹

Another study of the unmanned aerial vehicle issue conducted during 1992 was broader in scope and implication. It observed that the Aviation Branch was not the Army unmanned aerial vehicle proponent, and in some respects, for good reason. The study concluded that if aviation should become the proponent, aviators would have to broaden their current parochial perspective relative to both the use of unmanned aerial vehicles and the need for single-purpose aircraft. Unmanned aircraft, the study asserted, would be an inevitable part of the future battlefield, and future budgets would be split between manned and unmanned aircraft. The Aviation branch could either actively participate in optimizing the

⁸⁷Historical report, DCD, CY 92.

⁸⁸Mission and need statement for reconnaissance and surveillance collection, 12 May 92, DAC file.

⁸⁹Memo ATZQ-CDC-C (5), Col Stephen S MacWillie for CG, [Aug 92], sub: recommendations of unmanned aerial vehicle working group--action memo, DAC file.

relationship between manned aircraft and unmanned aerial vehicles, or it could let some other proponent slowly whittle away at a genuine need for manned aircraft on the future battlefield.⁹⁰ The Aviation Branch chief, believed that Battle Labs would help to clarify the future role of unmanned aerial vehicles, and perhaps also indicate which branch should be the proponent for them. Although he expected Army aviation to become more involved with them than in the past, he did not think in June 1992 that the Aviation Branch should become the proponent.⁹¹

Other Aircraft

The USAAVNC DCD and the AH-1 program manager worked continuously on the AH-1 system improvement program process and also on a service life extension program for the aircraft. The life extension program would enable the AH-1 to remain an effective fighter until approximately 2015. Safety, reliability and maintainability would be improved, and parts obsolescence and the deteriorating vendor base would be addressed. This plan was put on hold because of the Kahuna II (see Chapter I above) meeting in September 1992.⁹²

The CH-54 heavy lift helicopter had not been used by the active Army for several years but continued to be used by reserve component forces. The CH-54 was scheduled to be totally retired by the end of fiscal year 1993.⁹³

The active Army was scheduled to retire the OV-1 Mohawk at the end of fiscal year 1996. The drawdown was to begin in fiscal year 1993 with training to be closed out at Fort Rucker and Fort Huachuca in fiscal year 1994. The OV-1 had already been retired from the reserve component inventory.⁹⁴

⁹⁰White paper, "Unmanned Aerial Vehicle Implications to Manned Army Aircraft," undated and unsigned document, DAC file.

⁹¹Transcription of oral interview, John W Kitchens with Maj Gen John D Robinson, 6 Jun 92, oral history file.

⁹²Briefing slides, "Objectives for AH-1F Service Life Extension," DCD; Historical report, DCD, CY 92.

⁹³Memo TAPC-PI-MOS (611-1a), Darrel A Worstine for distr, 11 Feb 1993, sub: proposed change to AR 611-201..., Proponency-USAALS; Historical report, Proponency-USAALS, CY 92.

⁹⁴Memo TAPC-PLO (15-11a), Col Leroy B Outlaw for distr, 6 Nov 1992, sub: MOS 156A, OV-1 pilot and 67H observation airplane repairer..., Proponency-USAALS.

Three RC-12N aircraft were scheduled to be fielded during 1992; initial ground school and flight training were to occur at Fort Huachuca, AZ, in December 1992, to be followed by training at Hunter Army Airfield, GA. The Guardrail Common Sensor aircrew training was to be used in the RC-12N training process. A briefing on this training system was conducted at Hunter Army Airfield in April 1992.⁹⁵

In December 1992 the USAAVNC completed a mission need statement for the C-XX medium range utility airplane and requested TRADOC's approval of the statement. The medium range turbo jet airplane would fill the operational support airlift mission. This mission was to provide efficient and effective transportation of commanders, key staff personnel, couriers, critical repair parts, and equipment in support of both peacetime and wartime operations.⁹⁶

Weapons Systems

Compared to the original Hellfire warhead, the improved warhead was more robust and had a lower flight profile and better countermeasure effectiveness against fielded advanced armor. It was in full scale development and testing during 1992, and 4,000 had been delivered to the Army by July. Another Hellfire improvement program was the Hellfire optimized missile system. Funding and priority issues were still being developed for the optimized missile system during 1992. Both of these programs continued to be managed by the TRADOC Systems Manager Airborne Target Acquisition and Weapon System (TSM ATAWS) during 1992.⁹⁷

In June 1992, the USAAVNC endorsed the testing of the millimeter wave X-rod missile technology to examine its possible application to Army aviation. Air Force tests had confirmed the ability of the X-rod millimeter wave seeker to autonomously locate and engage targets. The potential existed to integrate the X-rod seeker onto the Army Hellfire missile. If

⁹⁵Memo ATZQ-DSA (600d), CWO4 Don L King for dir DOS, 13 Apr 92, sub: trip report--Hunter AAF GA 7-8 Apr 92, DOS.

⁹⁶Memo ATZQ-CDM-C (70-li), Maj Gen John D Robinson for Maj Gen Larry G Lehowicz, [Dec 92], sub: C-XX medium range utility airplane, also encl, DCD.

⁹⁷Memo ATZQ-TSM-ATAWS (10-1a), Col David F Sale for cdr TRADOC, 20 Jul 92, sub: 1992 annual report for...TSM ATAWS, TSM Longbow.

successful, the X-rod would provide the Army attack and scout fleets with a true fire-and-forget missile capability.⁹⁸

The DCD conducted a study of attack and reconnaissance aircraft armaments in 1992. The study was intended to analyze the existing aviation weaponry and to suggest new weapons needed for future conflicts. The study was terminated before future weapon concepts could be addressed. It was therefore to be published only as a Fort Rucker technical report.⁹⁹

The USAAVNC submitted a mission needs statement in 1992 intended to partially resolve the problem of the inability of Army helicopters to defend against enemy helicopters, to suppress enemy air defenses, to conduct air-to-air combat, and to conduct combined arms air defense. The mission needs statement called for a multi-role self-defense weapons system (called "Quick Draw").¹⁰⁰

Air-to-Air Stinger

The Aviation Center reaffirmed its air-to-air missile requirements early in 1992 and concurred with ongoing Stinger missile improvements in the near term. The USAAVNC recommended that the improvement program be designed to allow for possible mid-term upgrades to improve the Stinger performance with regard to clutter, range, and off-axis. The USAAVNC also recommended the building of a lightweight fire-and-forget missile with significantly enhanced capabilities in the far term.¹⁰¹

The engineering and manufacturing development phase of the air-to-air Stinger was completed by July 1992. Progress toward eventual installation of the air-to-air Stinger on the AH-1 and OH-58D continued during the year, but the weapon failed a major user test with the AH-64 at Yuma, AZ, in that it did not perform in a clutter environment. Consequently, it was dropped from the Longbow Program of which it had been a part. User oversight of the air-to-air Stinger was transferred to the USAAVNC DCD. The TSM ATAWS recommended

⁹⁸Msg 081900Z Jun 92, cdr USAAVNC to cdr MICOM, sub: testing the X-rod missile, CG file.

⁹⁹Historical report, DCD, CY 92.

¹⁰⁰Memo ATZQ-CDM-C (70-li), Maj Gen John D Robinson for Gen Frederick M Franks, 25 Aug 92, sub: multi-role self defense weapon system (Quick Draw), also encl, CG file.

¹⁰¹Memo ATZQ-CDM, Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 14 Jan 92, sub: air-to-air missile ..., CG file.

in July 1992 that the name of the organization be changed to TSM Longbow in order to more accurately reflect its mission upon being divested of responsibility for the air-to-air Stinger. The TSM ATAWS also recommended that TRADOC Headquarters continue to assist in obtaining an improved Stinger or an alternate air-to-air missile in a timely manner.¹⁰²

Although air-to-air Stinger missiles were issued to aviation units to conduct live-fire training exercises, it was necessary to fire the missiles at pole targets. This procedure met only one of four gunnery table requirements. Existing targets were ineffective, very expensive, and lacked diverse scenarios; targets towed behind or below another vehicle tended to be dangerous. The aviation community continued to need a good moving target for the air-to-air Stinger missiles to track and engage during live-firing exercises. Accordingly, the USAAVNC drafted an operational requirements document for an air-to-air Stinger target during 1992. The target was to provide an effective means of training Army aviation air crews. It was to permit crews to train using simulated combat tasks rather than unrealistic training tasks and to provide a probability of hits comparable to the weapon's actual combat capability.¹⁰³

Longbow

The critical design review for the Longbow Apache was accomplished in October 1991, and that year ended with the Longbow Apache competing with the RAH-64 Comanche for increasingly scarce developmental and procurement dollars.¹⁰⁴ This uncertainty about the future of the Longbow system continued through May 1992, when the 1995-1999 program objective memorandum established the funding for 227 Longbow Apaches (AH-64Ds) and 584 AH-64Cs. The AH-64C could be converted into a Longbow Apache by the addition of several systems in a field environment. Both models would receive significant upgrades in their cooling and electrical systems; also 1553B data buses, glass cockpits, and reliability enhancements would be added. The first flight of the Longbow Apache occurred on 14 May

¹⁰²Memo ATZQ-TSM-ATAWS (10-1a), Col David F Sale for cdr TRADOC, 20 Jul 92, sub: 1992 annual report for...TSM ATAWS, TSM Longbow; Historical report, TSM Longbow.

¹⁰³Memo, ATZQ-DSA (70-17a), Lt Col Ralph P Aaron for cdr U.S. Army Missile Command, 26 Jun 92, sub: operational requirement document for air-to-air Stinger targets, also encl, DOS.

¹⁰⁴Kitchens, 1991 ACH, pp. 48, 52-55, 60-62.

1992; there were no major programmatic milestones scheduled for the year. Longbow was scheduled to be incorporated into the RAH-66 Comanche at a future date.¹⁰⁵

During October and November 1992, the TSM ATAWS conducted a force development data collection simulation effort for the Longbow Apache using the McDonnell Douglas engineering design simulator. This simulation effort pitted a Longbow Apache company against a motorized rifle battalion consisting of heavy armor, attack helicopters, air defense, and ground maneuver units. The scenarios reflected a European environment. The primary objective of the exercise was to develop and refine Longbow Apache tactics, techniques, and procedures in order to optimize the combat potential of the aircraft during the upcoming initial operational test and experimentation. The trials were also conducted to determine the optimal mix of Longbow and non-Longbow Apaches in warfighting scenarios and to assess the crew training potential of the engineering design simulator. All objectives were accomplished on schedule. The exercises proved the capabilities and shortcomings of the simulator to support training for the operational test programs and early unit training.¹⁰⁶

Avionics

During 1992 the USAAVNC DCD and the Program Manager, Aviation Electronics Combat (PM AEC) restructured the avionics system improvement program established in December 1991. The 1992 effort aligned the DA funding lines with system improvement program priorities; because of reduced funding, the PM AEC could not afford to continue all of the ongoing programs. Also, low priority programs were being fully funded while programs high on the list had no money. The USAAVNC DCD reviewed the priorities, proposed cuts in some programs, and limited the application of others to modern airframes. The PM AEC conducted an executive steering group meeting in September 1992 attended by the USAAVNC commander. Some programs were not considered for adjustment because they were being financed by other program managers. The 1992 list of avionics systems improvement programs adjusted and ranked by priority to maximize warfighting capability is as follows: (1) aviator's night vision imaging system/heads-up display; (2) single channel ground and air radio system; (3) global positioning system; (4) high frequency nap-of-the-

¹⁰⁵Memo ATZQ-TSM-ATAWS (10-1a), Col David F Sale for cdr TRADOC, 20 Jul 92, sub: 1992 annual report for...TSM ATAWS, TSM Longbow; Historical report, TSM Longbow, CY 92.

¹⁰⁶Test report, "Force Development Data Collection Simulation Effort for Tactics, Techniques and Procedures for the Longbow Apache," Fort Rucker, AL, 15 Dec 92, TSM Longbow.

earth communication; Have Quick II; (5) improved data modem; (6) Army airborne command and control system; and (7) automatic message processing system.¹⁰⁷

During 1992 the USAAVNC DCD prepared the operational requirements document for the Army airborne command and control system. The system capability was to vary from a voice communications box and a paper map board to voice and data communications with automated work stations and near-real time intelligence updates. The system would be modular to provide rapid reconfiguration to support various missions, organizations, and battlefield damage repair. It would consist of three configurations--the ground maneuver brigade, the corps/division, and the aviation brigade/battalion versions. Input was solicited from division and corps commanders with regard to their requirements for airborne command and control equipment.¹⁰⁸

The DCD also revised the required operational capability for nap-of-the-earth communications in 1992 and sent the revised document to TRADOC for approval. Approval by TRADOC would permit the materiel developer to proceed through milestone three of the program. Operational testing was to occur prior to the fielding of the equipment. There was a requirement for communications capability that was reliable, secure, and electronic countermeasures-resistant. Army aircraft would use the nap-of-the-earth communications capability for air-to-air and air-to-ground communications.¹⁰⁹

The Army aviation community gave considerable emphasis during 1992 to the integration of the global positioning system in Army aircraft. It was expected that the utility version of the 1553B miniaturized airborne global positioning system receiver would be available in fiscal year 1992 and that production units would be available in fiscal year 1996. Also, UH-60 and CH-47D aircraft were scheduled to have units available for full integration prior to fiscal year 1997, provided installation A-kits were developed for the CH-47D. Global positioning system funding had been redistributed in order to purchase 1,800 small lightweight receivers in fiscal year 1992 and 2,000 precise lightweight receivers in fiscal year

¹⁰⁷Memo ATZQ-CDM-A (70-li), Col Stephen S MacWillie for AC, 6 Nov 92, sub: avionic system improvement program priorities, CG file; Memo ATZQ-CDM-A (70-li), Brig Gen Robert A Goodbary for Maj Gen Dewitt T Irby, [Nov 92], sub: avionics systems improvements program priorities, also encl, CG file.

¹⁰⁸Msg [1992], [cdr USAAVNC] to distr, sub: Army airborne command and control system, CG file; Operational requirements document for the Army airborne command and control, system, DCD.

¹⁰⁹Memo ATZA-CD (70-li), Maj Gen John D Robinson for Brig Gen Larry G Lehowicz, 26 Aug 92, sub: final draft operational requirements document..., CG file; Operational requirement document for nap-of-the-earth communications (draft), DCD.

1993. Army aviation would thereby have an interim global positioning system in contingency corps units and a much improved integrated system in the future.¹¹⁰

The USAAVNC submitted a required operational capability to TRADOC in August 1990 with a requirement for 185 Black Hawk command and control systems; General Foss approved the requirement for seventy-five systems in March 1991. During the latter part of 1991 and early 1992, the USAAVNC and the USACAC worked on the future Army aviation force structure; a USACAC proposal resulting from this work required 328 UH-60s with the enhanced console capability for command and control aircraft. The USAAVNC then began preparing an operational requirements document that supported the maneuver commander with an enhanced console equivalent to an airborne tactical command post. Engineering changes in 1992 focused on operational improvements to the system; these improvements consisted of satellite communication scanning, sixty-watt power amplifier for extended range, telescoping mast antennas, and longer coaxial cables.¹¹¹

An executive steering group meeting was held on 22 September on Army aviation avionics issues. The steering group supported an overall avionics architecture concept, and the PM AEC was tasked to develop a white paper on avionics architecture to be coordinated with the USAAVNC DCD. The steering group decided that it was not necessary to establish a TRADOC systems manager for avionics at that time. The DCD had established an avionics cell, and this approach would be revisited to determine its effectiveness after a period of time. The steering group also decided to remove the UH-60 interim crashworthy flight data recorders through attrition and to apply no additional funds to maintaining or utilizing that system.¹¹²

The USAAVNC approved the critical operational issues and criteria of the radar frequency interferometer in July 1992. The purpose of the interferometer was to locate air defense radars before they acquired the friendly aviation force. This information was needed while aircraft were beyond the air defense unit's ability to detect and/or engage the host aircraft.¹¹³

¹¹⁰Memo ATZQ-CG (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 14 Jan 92, sub: global positioning system status and funding problems, CG file.

¹¹¹Memo ATZQ-CG (70-li), Maj Gen John D Robinson for Gen Frederick M Franks Jr, 3 Feb 92, sub: Army airborne command and control system, CG file.

¹¹²Memo SFAE-AV-S, Robert V Hutson for distr, 21 Oct 92, sub: executive steering group meeting, CG file.

¹¹³Memo ATZQ-CDM-ES, Col Stephen S MacWillie for distr, 22 Jul 92, sub: approved critical operational issues..., DCD.

Simulators and Other Training Aids

In March of 1992, the Software Development and Management Division of the newly created DOS became the Aviation Branch chief's central point of contact and the user representative for the development, fielding, sustainment, and software configuration management of training aids, devices, simulators, and simulations. The division was given specific responsibility to perform life cycle management of aviation training aids, devices, simulators, and simulation from initial requirement to final disposition of unneeded equipment; to perform software development and configuration management of these training aids throughout their life cycle; and to maintain liaison and dialogue with Army agencies involved with this equipment, with equipment users, and with industry representatives.¹¹⁴

As a result of the inability to move an AH-64 combat mission simulator to Saudi Arabia so as to maintain proficiency during Desert Shield/Storm, a requirement emerged to have the capability of moving aviation training to the theater of operations. Also, with the changing Army force structure, aviation could no longer afford to invest in permanently fixed solutions to flight and combat mission simulators. It was apparent that the next generation of Army aviation simulators would require maximum flexibility to meet the Army's mission. Therefore, the production model of the cockpit weapons and emergency procedures trainer was canceled in 1991. The integrated crew sustainment trainer temporarily filled the AH-64 training gap. Early in 1992, the mobile aircrew sustainment trainer program took shape. Requirement documents stipulated that the AH-64 mobile trainer, as well as the UH-60 flight simulator and the OH-58D combat mission simulator, be transportable and mobile. Also, this next generation of simulators would maximize commonality of computer and visual systems, support structure, etc.¹¹⁵

In March of 1992, the USAAVNC notified appropriate Army agencies of its priorities on AH-64 training device upgrade and acquisition. The USAAVNC priorities were as follows: (1) provide funding to complete acquisition of hands-on maintenance trainers for Fort Eustis, which were necessary in order to return category B aircraft to the fleet; (2) delete upgrade of combat weapons and emergency procedure trainer for sustainment training and

¹¹⁴Msg 201525Z Mar 92, Maj Gen John D Robinson to distr, USAAVNC training aids, devices, simulators, and simulations..., DOS

¹¹⁵Memo ATZQ-CG, Maj Gen John D Robinson for cdr U.S. Army Training Support Center, sub: mobile aircrew sustainment trainer..., DOS, TADD # 46; Information paper, ATZQ-DST, Mr. Pate, 21 Sep 92, sub: mobile aircrew sustainment trainer..., DOS, TADD # 46; Msg 2231900Z Aug 92, cdr USAAVNC to distr, sub: mobile aircrew sustainment trainer..., DOS, TADD # 47; E-mail note, AaronR to Robinson, 22 Aug 92, sub: mobile aircrew sustainment trainers briefing, CG file.

provide minimal upgrades to these trainers to support initial qualification training; (3) reprogram funds for sustainment upgrades to support acquisition of mobile/transportable integrated crew sustainment trainers to support Apache field units which did not have access to a combat mission simulator; (4) delete combat mission simulators numbers 11 and 12 and reprogram funds for these devices for acquisition of integrated crew sustainment trainers; and (5) procure combat mission simulator number 10 for fielding in fiscal year 1994.¹¹⁶

The coordinating draft of the operational requirements document for the UH-60 mobile aircrew sustainment trainer- utility was distributed for review and comments in September. The primary purpose of the UH-60 mobile trainer was to provide sustainment training for UH-60 aviators that did not have direct access to UH-60 flight simulators.¹¹⁷

When the required operational capability for the Kiowa Warrior was approved in 1990, it stipulated that a combat mission simulator was "desired." It became obvious in 1992 that the simulator was essential, however, and that not having recognized the requirement for an OH-58D combat mission simulator was a major shortcoming in the program. An updated cost and training effectiveness analysis validated the requirement, and a request was submitted to change the priority of the approved requirement from "desired" to "required."¹¹⁸ Given this change, the DA would normally have initiated an OH-58D simulator program, but funds were not available. The DA accordingly directed that the USAAVNC develop a proposal for an alternate OH-58D training strategy.¹¹⁹

During 1992, the Comanche program assumed the lead in conducting force development testing in simulation. To accomplish this, the TRADOC-sponsored Test Scheduling and Review Committee approved \$4.5 million for 1992 and \$3.4 million for 1993 to buy Comanche simulation capabilities for the Aviation Test Bed. In June of 1992, the USAAVNC commander requested that the TRADOC commander approve the release of those

¹¹⁶Msg 231330Z Mar 92, cdr USAAVNC to distr, sub: USAAVNC position on AH-64 training devices, Chapter III file.

¹¹⁷Memo ATZQ-DST (70-17d), Lt Col Ralph P Aaron for distr, 16 Sep 92, sub: coordinating draft mobile aircrew sustainment trainer..., DOS, TDD # 85.

¹¹⁸Memo ATCD-MV (70-li), Maj Gen Wesley K Clark for HQDA, 26 Jun 92, sub: recommended change to the simulator training device..., TSM OH-58D; Ltr, Maj Gen John D Robinson to Maj Gen Dennis P Malcor, 11 Aug 92, CG file.

¹¹⁹Msg 20150Z Nov 92, DA to cdr USAAVNC, sub: training strategy for OH-58D Kiowa Warrior fleet, CG file.

funds. The TRADOC deputy chief of staff for resource management had ruled that the test bed improvement should be funded through research and development appropriation.¹²⁰

The Desert Hawk simulator was being developed during 1992 for UH-60 training in Saudi Arabia. It would use a geo-specific data base derived from Defense Mapping Agency data and would therefore be quite different from the UH-60 flight simulator, which used a non specific generic data base. As of August 1992, the data base was deemed to be progressing well; some improvements were required in the roll-on terrain (which was not geo-specific), but all deficiencies were expected to be corrected by the time of the final data base review in late 1992.¹²¹

The final government inspection of the block update configuration II of the Apache combat mission simulator was conducted during an in-plant test at Binghamton, NY, in February 1992.¹²² The USAAVNC subsequently addressed the issue of training foreign students on the classified simulator. The USAAVNC recommended that the classified data be evaluated to determine releasability so that foreign students could be authorized to use the simulator on a case-by-case basis.¹²³

The combat mission simulator with the block update configuration II (load 4.16) was tested from 30 November to 5 December at Fort Rucker. The equipment was found to be acceptable for training purposes. There were, however, around forty discrepancy reports; most of them were minor, but some would limit training. They were scheduled to be closed out in February 1993.¹²⁴

The DOS assisted the Program Manager Training Devices (PM TRADE) in conducting the government final inspection of the CH-47D flight simulator computer upgrade program at Fort Hood, TX, in July 1992. The tests could not be completed because the

¹²⁰Ltr, Maj Gen John D Robinson to Gen Frederick M Franks Jr, 22 Jun 92, CG file.

¹²¹Memo ATZQ-DDS (70-17a), Gerand la Cross for dir DOS, 26 Aug 92, sub: trip report--UH-60 FS Desert Hawk data base review, DOS.

¹²²Memo AMCPM-TND-SPA, Wanda I Fuentes for T Fletcher, 28 Jan 92, sub: team members supporting the Apache CMS BUC II..., DOS; Historical report, DOS, CY 92.

¹²³Msg 0281000Z Jan 92, cdr USAAVNC to distr, sub: Apache combat mission simulator training for foreign students, DOS.

¹²⁴Memo for record ATZQ-DST (70-17d), Mr John E Rivenbark, 11 Dec 92, sub: Apache BUC load 4.16, DOS, TDD # 41.

contractor was not adequately prepared, and twelve deficiency reports were generated. Retesting was tentatively scheduled for September 1992.¹²⁵

The government rejected the critical design review of the AH-1 flight and weapons simulator in March 1992 because the software test cases were not available for government examination. In July, a DOS team met with a contractor team at Orlando, FL, to review the test cases. The test cases were still incomplete and/or unacceptable at that time. At the best, they would satisfy the minimum requirements of the critical design review. The contractor, Computer Technology Associates, was deemed to have displayed minimum acceptable achievements at each stage of the acquisition process. Although DOS made eighty-eight updates to the software baseline during 1992 and recommended that the project be supported to its completion, the contract was terminated by the Simulation, Training, and Instrumentation Command (STRICOM) before the end of the year.¹²⁶

In December 1992 a DOS representative participated in the review of pre-production support proposals and the development of the DOD Project 2851 simulator digital data base at McLean, VA. The purpose of the technical/management proposal was to change the emphasis of the Project 2851 program to stress immediate visual support to the user community. The Army had signed a letter of agreement in principle with the Air Force program director on Project 2851, but no funds had been identified. The statement of work for the DOD simulator data base facility was reviewed for clarity. The facility was to be operated by contractors in St. Louis, MO, and was to be operational by 1994.¹²⁷

In an effort to economize, STRICOM planned to consolidate its many operations and maintenance contracts worldwide. Initial planning called for a primary civilian contractor to support, maintain, and coordinate the utilization of eleven separate training device/instrumentation systems at the combat training centers. Multiple Integrated Laser Engagement System/Air-to-Ground Engagement Simulation was included. Ten of the separate training device/instrumentation systems would be located at the combined training centers. The live-fire area weapon scoring system would continue to be a portable system and would travel

¹²⁵Memo ATZQ-DSS (70-17a), Darlene T Barnes for dir DOS, 14 Aug 92, sub: trip report--government final inspection CH-47D flight simulator, DOS.

¹²⁶Memo ATZQ-DDS (70-17a), Michael J Edwards for dir DOS, 13 Aug 92, sub: trip report--evaluation of software test cases..., DOS; Historical report, DOS, CY 92; Ltr, Maj Gen John D Robinson to Maj Gen Dennis P Malcor, 18 May 92, CG file.

¹²⁷Memo ATZQ-DDS (70-17a), Donald A Ethington for dir DOS, 9 Dec 92, sub: trip report--Project 2851, DOS.

upon request from Fort Hood, TX, to the users' ranges. It was expected that the scheduling and utilization of the portable area weapons scoring system would not change.¹²⁸

During 1992, the USAAVNC expended considerable time and effort toward restoring funding for the development of the aviation combined arms tactical trainer. The trainer was a set of training devices in which networked joint and combined arms warfare training could be conducted. The need for the trainer was based on verified training deficiencies and the lack of a suitable combined arms training capability for removing these deficiencies. The trainer basic company set would consist of eight aircraft modules with various work stations to support combined arms training. It was to be networked to armor, infantry, artillery, engineer, and air defense artillery forces on a simulated battlefield.¹²⁹

The issue of generic or reconfigurable cockpits versus specific aircraft cockpits was raised again during the year as a cost cutting measure.¹³⁰ A training development study indicated that a generic cockpit would be more cost effective than a specific cockpit. The position of the Aviation Center, however, was that a generic cockpit would not be more cost effective because it would not duplicate or simulate necessary flying skills, it would not be as training-effective as specific cockpit trainers, and it could result in negative habit transfer of critical skills. Therefore, generic cockpit training could not substitute for flying hours, and any savings generated by generic cockpits would have to be spent paying for additional aircraft hours that would not be needed if specific cockpits were used.¹³¹

During the latter part of 1992 the Army Research Institute Aviation Research and Development Activity (ARIARDA) conducted research and collected data on the simulator training research advanced testbed for aviation. The simulator arrived at Fort Rucker on 18 May and became partially operational on 20 July. Data collection began on 28 September. The ARIARDA conducted an experiment concerning the attentional effects of heads-up display information overlaid upon the aviator's night vision imaging system and a

¹²⁸Memo ATZQ-DSA (70-17a), Lt Col Ralph P Aaron, for dir DOTD, 22 Jul 92, sub: area weapons scoring system, DOS.

¹²⁹Fact sheet ATZQ-DST, CWO3 Williams, 10 Dec 92, sub: aviation combined arms tactical trainer, DOS, TADD # 36.

¹³⁰Ltr, Maj Gen Dennis P. Malcor to Maj Gen Dave Robinson, 28 Jan 92, DOS; Ltr, Maj Gen John D Robinson to Maj Gen Dennis P Malcor, DOS.

¹³¹Ltr Maj Gen John D Robinson to Maj Gen Dennis P Malcor, 24 Feb 92, CG file; Memo ATZQ-TDS-SM (70-17d), Col James W Beauchamp for dir TRADOC Analysis Command, 14 Jun 91, sub: aviation combined arms tactical trainer, DOS.

psychophysical assessment of the fiber optic, helmet-mounted display subsystem of the simulator. A building was constructed during 1992 to house the simulator.

The ARIARDA conducted an informal preliminary evaluation of an automated hover trainer completed by Charles River Analytics to develop the automated instructional capabilities of the UH-1 training research simulator. The hardware used in the preliminary evaluation was limited to approximately five spoken syllables, and the synthesized speech was lacking in clarity. Steps were taken to acquire better quality speech synthesis hardware and software for the experimental evaluation of the fully automated trainer--planned for fiscal year 1993.¹³²

Following a period of relatively little activity, the DCD divested itself of Janus wargame capability in 1991 and reassigned personnel to areas considered to have higher priority. In 1992, the Janus wargame was revived, but it was necessary to initiate a training program and to bring in personnel from TRADOC Analysis Command to conduct a training session. Janus computer software was also upgraded, and numerous modifications to the Janus data base were made. By November, modeling in support of a study was underway. The AH-64C and AH-64D helicopters were modelled in various scenarios to determine the most effective fighting mix of the two models.¹³³

During 1992, the Defense Advanced Research Projects Agency (DARPA) conducted simulation demonstrations and exercises relating to the agency's War Breaker program. War Breaker was a program designed to develop and demonstrate advanced technologies and systems supporting battle management and synchronized attack against time-critical, fixed, and mobile targets. The War Breaker program was structured in the following four major areas: surveillance and targeting; intelligence correlation and planning; simulation; and systems engineering and demonstrations. A series of technology and systems demonstrations was scheduled for each of these areas for the 1992 to 1997 period. During the latter part of 1992, the USAAVNC participated in a series of War Breaker simulation exercises called Zealous Pursuit.¹³⁴

¹³²Historical report, ARIARDA, CY 92.

¹³³Historical report, DCD, CY 92.

¹³⁴Ltr, Maj David L Neyland to Lt Col Ralph Aaron, 26 Apr 92, DOS; Historical report, DOS, CY 92; "War Breaker Simulation Engineering and Modelling," DARPA Bidders' Conference, 10 Apr 92, DOS; Report, "War Breaker Zealous Pursuit," John C. Tallas, 8 Oct 92, DOS.

The purpose of War Breaker was not to develop a new bomb, satellite, or airplane. Instead, DARPA expected to build upon existing systems and improve them in revolutionary fashion via better processing, conductivity, command and control, database utilization, etc. The War Breaker program would provide the timely exploitation of the intelligence products from national sensors to end users, command and control access across the entire infrastructure, and end-to-end integration and exploitation from sensor to shooter. Phase I of War Breaker, a technology demonstration and architecture validation exercise, was scheduled for September through December 1992.¹³⁵

Aircraft Survivability Equipment Trainers

With the reorganization of the USAAVNC in March of 1992, the Army Aviation Branch chief's central point of contact and representative for aircraft survivability training issues became the Aircraft Survivability Equipment Training Management Division of the newly created DOS. The division had responsibility for training management of aircraft survivability equipment throughout its life cycle, for employment of new technologies into training systems for combat training, for coordinating aviation's combat simulations for the combined training centers, and for managing the development of new equipment training for aircraft survivability equipment.¹³⁶

In May of 1992, arrangements were made to distribute Aircraft Survivability Equipment Trainer II software Armywide and to send new equipment training teams to teach one group at each installation how to operate the equipment. The trained groups were then to train all other users at their respective installations. Upon having their electronic information delivery systems (i.e., the computers that were to be used to process the training software) accredited, aviation units were to report their readiness so that schedules could be established for delivering the software and dispatching the mobile training teams.¹³⁷

A brigade commanders' conference was conducted at Buffalo, NY, in February 1992 to educate senior leaders on the Aircraft Survivability Equipment Trainer IV. Commanders were eager for the new trainer to be fielded and were confident that it would be an important

¹³⁵Information paper ATZQ-DST, Capt Paul Swicord, 15 Sep 92, sub: War Breaker, DOS, TDD 69.

¹³⁶Msg 201525Z Mar 92, Maj Gen John D Robinson to distr, sub: USAAVNC training aids...and aircraft survivability equipment training management..., DOS; Historical report, DOS, CY 92.

¹³⁷Memo ATZQ-DSA (70-17a), Lt Col Ralph P Aaron for distr, 18 May 92, sub: Aircraft Survivability Equipment Trainer II software and new equipment training team, DOS.

asset to aviation's preparation for exercises at the combined training centers. Interest was also expressed in reviving Aircraft Survivability Equipment Trainer III, which had not been funded.¹³⁸

An in-process review of the Aircraft Survivability Equipment Trainer IV was conducted in St. Louis, MO, in March to brief the work being completed on the original contract. The user test plan was scheduled to be delivered to the USAAVNC for review as a completed document by the end of March.¹³⁹ Later in the year, representatives from DOS visited Fort Drum and Griffiss Air Force Base, NY, to assist in the correction of problems in preparation for the testing of the training device.¹⁴⁰

Plans were developed for the integration of the Aircraft Survivability Equipment Trainer IV into the National Training Center during early and mid 1992. FORSCOM had responsibility for resolving the question of who should man the trainer. The plan as proposed by FORSCOM in May was that the air defense elements of the "Opposing Forces" would operate the trainer systems at the combined training centers, and contractors or military personnel (specific MOS not identified) would operate the systems at other locations. Video interface between the systems and the National Training Center was very limited. The target engagement sequence was to be recorded on a video recorder. The National Training Center expected to be ready to receive and support Aircraft Survivability Trainer IV systems by September 1992, provided testing at Fort Drum went well.¹⁴¹

The Aircraft Survivability Equipment Trainer IV prototype was field tested against multiple integrated laser engagement system-equipped helicopters on a controlled range at Fort Drum, NY, in June 1992. Although no major faults were discovered, numerous minor system problems surfaced during the field test. The contractor engineers believed these problems could be fixed and would not interfere with the fielding of the prototype at the National Training Center in October.¹⁴²

¹³⁸Memo ATZQ-DSA (600d), CWO3 Barry L Williams for dir DOS, 3 Mar 92, sub: trip report--Buffalo, NY, brigade commanders conference..., DOS.

¹³⁹Memo ATZQ-DSA (600d), CWO3 Barry L Williams for dir DOS, 17 Mar 92, DOS.

¹⁴⁰See, e.g., memo ATZQ-DSA (600d), Sfc Larry W Minton for dir DOS, 18 May 92, sub: trip report--Griffiss AFB, NY, 10-16 May 92, DOS.

¹⁴¹Memo ATZQ-DSA (600d), Capt James A Bond for dir DOS, 18 May 92, sub: trip report--Fort Irwin, CA, 12-13 May 92, DOS.

¹⁴²Memo ATZA-DSA (600d), Capt James A Bond for dir DOS, 22 Jun 92, sub: trip report--Fort Drum, NY, 2-5 Jun 92, DOS.

During late August and early September, acceptance testing of the Aircraft Survivability Equipment Trainer IV was conducted by the contractor at Buffalo, NY, under the supervision of engineers from the Missile and Space Intelligence Center. The testing began on 25 August. Numerous minor problems were encountered, but most of them were resolved during the testing. The remaining testing was to be conducted in Buffalo and at the National Training Center; it was to be completed by 15 October--prior to the use of the trainer prototype during rotation 93-02 in November.¹⁴³

The Aircraft Survivability Equipment Trainer IV was operated against the 5th Mechanized Infantry Division during the National Training Center rotation 93-02. The threat simulator was under evaluation by civilian contractors. A variety of problems were encountered that reduced the effectiveness of the trainer prototype as a threat simulator at the training center. These included limited night fighting capability, maintenance/module durability, repair parts, tactical employment, lack of visual modification, and lack of experienced operators. It was expected that most of these problems would be corrected before the next rotation.¹⁴⁴

Multiple Integrated Laser Engagement System/Air to Ground Engagement Simulation II

In March 1992, a prototype system of the Multiple Integrated Laser Engagement System/Air-to-Ground Engagement Simulation II system was tested at the National Training Center. The system performed all required functions at ranges less than and greater than those required by the system specifications. The overall operational effectiveness rate of 52.2 percent compared to a rate of approximately 20 percent on previous tests. The effectiveness rate for distances greater than eight kilometers was around 30 percent. Only two materiel-related problems were encountered during the use of the system for training and deployment. Indications were that the system would provide Army aviation the necessary force-on-force, team, crew, and individual training for operating at the National Training Center.¹⁴⁵ In

¹⁴³Memo ATZA-DSA (600d), Capt James A Bond for dir DOS, 9 Sep 92, sub: trip report--Sierra Research, Buffalo, NY, 24 Aug-4 Sep 92, DOS.

¹⁴⁴Memo ATZQ-DSA (600d), Capt James A Bond for dir DOS, 17 Nov 92, sub: trip report--NTC..., DOS.

¹⁴⁵Memo ATZQ-DSA (70-17a), Robert W Martin for dir DOS, 2 Apr 92, sub: Multiple Integrated Laser Engagement System..., DOS; Notes on oral interview, John W Kitchens with Brig Gen Robert A Goodbary, 6 May 92, oral interview file.

April and June 1992, councils of colonels met at Fort Rucker to review Air-to-Ground Simulation II progress and to analyze data from the National Training Center.¹⁴⁶

An operational test program review of the Multiple Integrated Laser Engagement System/Air-to-Ground Engagement Simulation II requirements for replication of AH-64 weapons systems was conducted at Fort Rucker in December 1992. The system performed the operational armament capabilities of the AH-64 for Hellfire missile, 30 mm gun, and Hydra 70 rockets. However, the system did not replicate all Hydra 70 munitions--only the M151 high explosive warhead. This lack of capability was primarily because of the inability of the combined training centers' instrumentation systems to process or handle real-time indirect fires. The system did not have designed within it the space and firmware for inclusion of indirect fire munitions. The USAAVNC recognized the limitations of the system and planned to utilize each additional capability as it became available.¹⁴⁷

Air Traffic Control Equipment

In December 1991, the USAAVNC DCD lost its subject matter expert for tactical air traffic services and requested that the USAATCA provide the necessary assistance.¹⁴⁸ USAATCA's responsibility in this area was formalized in a memorandum of agreement with DCD in 1992. The USAATCA served as the subject matter expert for all ongoing and future developmental air traffic services programs and for upgrades to current tactical air traffic services equipment. During 1992, five air traffic services programs were under development; these consisted of tactical terminal control system, air traffic navigation integration and coordination system, tactical airspace integration system, forward area sheltered terminal, and mobile microwave landing system. In October and November 1992, the USAATCA completed and gained TRADOC approval of the operational requirements document for the

¹⁴⁶Msg 081530Z Jun 92, cdr USAAVNC to distr, sub: announcement of AGES II council of colonels meeting 23 Jun 92, DOS.

¹⁴⁷Memo ATZQ-DSA (70-17a), Palmer J Penny for distr, 9 Dec 92, sub: Multiple Integrated Laser Engagement..., also encl, DOS.

¹⁴⁸Memo ATZQ-CDM (70-li) Col Theodore T Sendak for USAATCA, 5 Dec 91, sub: request for assistance, USAATCA.

tactical terminal control system and the air traffic navigation integration and coordination system.¹⁴⁹

During 1992 the USAATTC conducted tests of ocean-based aerostat support for low-level airborne reconnaissance in support of the Program Executive Office, Intelligence and Electronic Warfare. During the first part of the year, testing of individual systems that would comprise the reconnaissance mission were completed using a Beech D-18T aircraft. In July, a modified C-23 aircraft being used to test the work station integration crashed; the aircraft was totally destroyed, and three crew members were killed. The program was left at a standstill until a replacement aircraft could be identified and modified.¹⁵⁰

In 1992 the USAAVNC completed the revision of the operational requirements document for the air traffic navigation integration and coordination system and submitted the document to TRADOC for approval. Approval of the revised document by TRADOC would permit the materiel developer to proceed with the formal acquisition program. The air traffic navigation, integration, and coordination system was a highly mobile tactical area surveillance and precision approach air traffic control system. The need for the system was identified within the Battlefield Development Plan 94-08; it would support the overall mission areas of maneuver and command and control. The expeditious flow of air traffic would provide a force multiplier by allowing for continuous unimpeded operations. The new system would further generate air traffic movement by providing area navigational assistance, integrating air traffic during joint and combined operations, and coordinating air movement within the Army airspace command and control system.¹⁵¹

In October 1992 the operational requirements document for a tactical terminal control system was approved by TRADOC. The tactical terminal control system was a mobile air traffic services communications system. It would allow operators to provide air traffic

¹⁴⁹Historical report, USAATCA, CY 92; Memo ATCD-GI (70-1i), Bettie B Gonser for cdr USAAVNC, 16 Oct 92, sub: tactical terminal control system operational requirements document, USAATCA; 1st end ATZA-ATC-DS (ATCD-GI/3 Dec 92) (70-li), Col Stephen S MacWillie for cdr USAATCA, 12 Jan 93, also encl, USAATCA.

¹⁵⁰Historical report, USAATTC, CY 92; The Dothan Eagle, 19 Jul 92.

¹⁵¹Memo ATZQ-CDM-A (70-li), Maj Gen John D Robinson for Brig Gen Larry G Lehowicz, 21 Sep 92, sub: approval of the operational requirements document for the air traffic navigation integration and coordination system, also encl, CG file.

services at remote landing zones, drop zones, pick-up zones, and temporary helicopter operating areas.¹⁵²

Aviation Logistics Equipment

A demonstration of the palletized load system was conducted at Fort Rucker on 20 and 21 May. The palletized load system was a truck with a self-loading/unloading capability. The system consisted of an all-wheel-drive truck, a trailer, and flatracks. The flatracks were eight feet wide by twenty feet long with a capacity of 16.5 tons. Only one operator was required to deliver two flatracks with up to thirty-three tons of cargo, discharge the full flatracks to the ground, retrieve two empty flatracks, and leave the area--all within a matter of minutes. The fielding of the system would significantly change the way the Army delivered many commodities and items of equipment to the field.¹⁵³

During 1992, operational requirements documents were completed and approved for the battle damage assessment and repair kit, the unit maintenance aerial recovery kit, the standard aircraft towing system, and the shop equipment contact maintenance shelters. Mission needs statements were approved for an aviation ground recovery system, a generic aircraft nitrogen generator, and a portable engine test set.¹⁵⁴

The critically needed new aircraft tool set went to user test at the National Training Center with the 1-101st Aviation Battalion. The USAALS monitored the development of a new lightweight plastic tool box during the test of the tool set.¹⁵⁵

¹⁵²Memo ATCD-GI (70-li), Bettie B Gonser for cdr USAAVNC, sub: tactical terminal control system operational requirements document, also encl, DCD.

¹⁵³E-mail note, Jo Ann Allen to cdrs/dirs, 1 May 92, sub: PLS demo, Chapter III file.

¹⁵⁴Historical report, USAALS DCD, CY 92; Operational requirements document for battle damage assessment repair kits, 6 Nov 92, USAALS DCD; Memo ATCD-SL (70-lf), Bettie B Gonser for distr, 14 Dec 92, sub: operational requirements document for the unit maintenance aerial recovery kit, USAALS DCD.

¹⁵⁵Historical report, USAALS DCD, CY 93; Memo ATCD-SL (70-lf), Bettie B Gonser for distr, 11 Mar 93, sub: operational requirements document for the new aviation tool system II, USAALS DCD.

Other Equipment Requirements

In 1992 the USAAVNC adopted the helicopter emergency egress device and the aircrew anti-exposure suit used by the Air Force, Navy, Marines, and Coast Guard. Army aviators lacked the capability to safely egress from aircraft that went down over water, and no other item in the military system met the requirement for emergency egress from a submerged aircraft. Cost per unit for the egress device would be less than \$300 per unit.¹⁵⁶

Delivery of the aviation battle dress uniform began in November of 1992. Delivery was scheduled to continue through fiscal year 1995.¹⁵⁷

In 1992 the USAAVNC concurred with a proposal to procure chemical protective undergarments for combat vehicle crewmen as long as the expenditure did not detract from the work underway on developing chemical protective undergarments for aviators.¹⁵⁸

The USAAVNC DCD researched, developed, and changed the requirements for the M-43 series protective mask primary and auxiliary blower system. The elimination of the primary and auxiliary blower system saved \$3.5 million on the fiscal year 1993 M-43A1 contract. The directorate also researched, developed, and reviewed the operational requirements document for the XM-45 aviation aircrew protective mask during 1992. This mask would be used throughout the Army aviation community to provide protection against field concentrations of chemical and biological agents, toxins, and radioactive fallout particles. It would also have the capability to provide refractive error lens correction when required and would be compatible with current and future night vision devices.¹⁵⁹

An AH-64 with airborne target handover system/avionics integration was chosen as the aircraft with which to test electromagnetic environmental effects. Following extensive coordination between ATCOM, Program Manager AH-64, and the USAAVNC DCD, an agreement was reached in 1992 regarding the AH-64 mission environment and the associated

¹⁵⁶Memo ATZQ-CDM-C (70-li), Maj Gen John D Robinson for cdr TRADOC, 20 Nov 92, sub: DA 2028 changes to common table of allowance, also encl, Chapter III file.

¹⁵⁷Fact sheet ATZA-CDM-S, Maj Karl Heinz Graef, 3 Dec 92, sub: aircrew battle dress uniform two-piece flight suit, DCD; Historical report, DCD, CY 92.

¹⁵⁸Msg 301455Z Jul 92, cdr USAAVNC for Maj Gen Rigby HDQA, sub: chemical protective undergarment funding, Chapter III file.

¹⁵⁹Historical report, DCD, CY 92; Operational requirements document for the aircrew protective mask (draft) DCD.

electromagnetic environmental effects criteria. The electromagnetic environmental effects for the AH-64A, AH-64B, Longbow, OH-58D, UH-60, and MH-47 were released in 1992, using aeronautical design standards 37 as the criteria for testing.¹⁶⁰

During 1992, the Program Executive Officer, Aviation, and the USAAVNC worked together on developing a program for managing Army aviation flight data recorders and ultimately replacing the tape flight data recorders with newer solid state systems. A flight data process action team was created in mid year to promote the development of the solid state systems, but the USAAVNC was concerned that the team's charter did not adequately cover the tape systems then in use.¹⁶¹ Accordingly, the USAAVNC established a flight data records automation development team to identify the functional requirements for automating the aviation flight records and the USAAVNC flying hour programs and to design state-of-the-art information system products/services capable of accomplishing those requirements in a timely and efficient manner. The USAAVNC team was scheduled to have its first meeting on 30 September 1992.¹⁶²

During 1992 the USAAVNC continued its efforts to end the proliferation of aviation helmets by developing a common base helmet for all Army aircraft. The USAAVNC proposal was for a base helmet to be developed for the RAH-66 Comanche. Expensive aircraft-unique equipment was to attach to the helmet but remain in the aircraft. The base helmet that was developed for the Comanche would then become the standard helmet for all Army aircraft. The common helmet would simplify logistical requirements needed to maintain crew helmets, and keeping the expensive attachments in the aircraft would reduce wear and tear to the equipment and therefore reduce technician workload.¹⁶³

The TRADOC approved the operational requirements document for the aviation mission planning system in August 1992. The aviation mission planning system was a battle synchronization tool that would automate aviation mission planning tasks. The system would also provide the means to generate mission data for use in either hard copy or electronic

¹⁶⁰Historical report, DCD, CY 92.

¹⁶¹Memo ATZQ-CDM-S (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 13 Apr 92, sub: flight data recorder, CG file; Memo ATZQ-CDM-S (70-li), Maj Gen John D Robinson for Maj Gen Dewitt Irby Jr, 16 Jun 92, sub: flight data recorder process action team, also encl, CG file.

¹⁶²Memo ATZQ-DPT-RT (15-la), Maj Gen John D Robinson for distr, 6 Oct 92, sub: flight records automation development team, CG file.

¹⁶³Memo ATZQ-CDM-S (70-li), Maj Gen John D Robinson for Maj Gen Dewitt T Irby Jr, 4 Feb 92, sub: Army aviation common helmet, CG file.

formats. The functions of the system included tactical command and control, mission planning, mission management, and maintenance management.¹⁶⁴

In September 1992 the USAAVNC completed the test support packages for the aviator's night vision system/heads-up display for the CH-47. The aviator's night vision system/heads-up display was a sensory gathering system that took various analog and digital aircraft sensor information into a data accumulator box, converted it into symbology such as altitude and airspeed, and transmitted the information into an optical combiner attached to the objective end of the night vision system. The heads-up display was compatible with the M-43 protective mask, corrective eye glasses, and helmet protective visors.¹⁶⁵

During 1992, the USAAVNC DCD endorsed and recommended approval of the joint mission need statement for the aircrew integrated ensemble. The ensemble fell within five areas of the Battlefield Development Plan and would address deficiencies in nuclear, biological, and chemical protection; individual protection; target identification; employment of camouflage and directed energy weapons, and other deficiencies identified by the user.¹⁶⁶

¹⁶⁴Memo ATCD-MV (70), Bettie B Gonser for distr, 10 Aug 92, sub: operational requirements document for the aviation mission planning system, also encl, DCD.

¹⁶⁵Test support packages, "Aviator's Night Vision System/Heads-up Display (Ch-47), Sep 92, DCD.

¹⁶⁶Memo ATZQ-CDM-S (70-li), Col Stephen S MacWillie for CG, [1992], sub: aircrew integrated ensemble--action memorandum, also encls, DCD.

CHAPTER IV

MISSION SUPPORT

A. Resource Management

On 29 January 1992, the Secretary of Defense and the Chairman, Joint Chiefs of Staff, outlined the specifics of the coming year's defense budget. The Department of Defense budget for FY 1993 totaled \$267.6 billion, \$9.9 billion less than the budget passed by Congress for FY 1992. This budget also cut the six year defense plan (FY 1992-1997) by some \$63.8 billion.¹

Just five days earlier, U.S. Army Training and Doctrine Command (TRADOC) provided guidance to U.S. Army Aviation Logistics School's Directorate of Resource Management (DRM) for the fiscal year 1992 appropriation budget and manpower guidance. Training and Doctrine Command based this guidance on five imperatives: support TRADOC mission essential task list, support commander's flexibility, minimize impact of funding changes to installations, maintain Operation Cross Level promises, and take prudent risks.²

The FY 1992 appropriation budget and manpower guidance authorized an increase of \$106.4 million above the August 1991 guidance. Total Army operations and maintenance funding for fiscal year 1992 was \$348.2 million (\$316.4 million in direct funds, \$31.2 million in automatic reimbursement funds, and \$.6 million in funded reimbursement).³

The increase of funds authorized by TRADOC was to pay for stock fund depot level repairables. After 1 April 1992, Army installations were required to pay for depot level repairables which had been free before 1 April.⁴

Total fiscal year 1992 expenditure of TRADOC operations and maintenance funds was \$362.2 million of which \$321.1 million were direct funds, \$40.8 million, automatic

¹ Army Flier, 31 Jan 1992.

² Operation Cross Level was an attempt to take unused funds or funds from other programs and move them to where they were most needed. A Cross Level list was created to provide issues that needed funding. See: E-mail note, Gary Lewis to Rogerssf, 4 Dec 91, sub: results of operation cross level, DRM.

³ Memo ATRM-B, Maj Gen Henry M Hagwood Jr to distr, 24 Jan 92, sub: FY 92 appropriation budget and manpower guidance, DRM.

⁴ Notes on oral interview by Dr Burton Wright with Mr Jerry Leavis, 23 Mar 93, oral history files.

reimbursement funds, and \$.3 million, funded reimbursement. For comparison, U.S. Army Aviation Center's (USAAVNC) fiscal year 1991 TRADOC actual obligations were \$337.3 million.

In March 1992, USAAVNC received TRADOC guidance for the fiscal year 1993 command operating budget. According to this guidance, USAAVNC would receive a total of \$362.5 million, of which \$326.4 million would be direct dollars, \$35.5 million, automatic reimbursable dollars, and \$.6 million, funded reimbursement dollars. This was an increase of \$122.5 million over 1992's command operating budget. Requirements totaled \$408 million, leaving an unfinanced requirement of \$45.5 million for fiscal year 1993.⁵

On 4 August 1992, the Aviation Center received the results of TRADOC's review of the fiscal year 1993 command operating budget unfinanced requirements. Training and Doctrine Command accepted some of the USAAVNC's "cannot do" issues and agreed to continue to look for funding to support some of the other unfinanced requirements.⁶

Training and Doctrine Command provided fiscal year 1993 appropriation budget guidance to DRM on 1 December 1992. This guidance reflected congressional funding adjustments documented in the Department of Defense Appropriations Act signed by President Bush on 6 October 1992. Aviation flight training funds were decremented by \$23.3 million due to a congressionally mandated reduction in flight hours and their substitution with classroom hours.⁷

The total disbursements of the Finance and Accounting Division of the DRM in 1992 was \$490.5 million. Accounting support was provided by the division for an annual budget of over \$450 million. A mobile finance support office was operated at Camp Shelby, MS, during the summer months to support Army Reserve and National Guard training of over 20,000 soldiers.⁸

⁵ Kitchens, 1991 AHR, p. 73; Memo ATRM-B, Maj Gen Henry M Hagwood Jr for distr, undated, sub: FY 93 TRADOC budget guidance, DRM; Commander's statement FY 93 command operating budget, Maj Gen John D Robinson, to TRADOC 22 May 92, DRM.

⁶ E-Mail note, Lt Col Rick Massey to distr, 4 Aug 92, sub: FY 93 TBG installation unfinanced requirements review, DRM.

⁷ Memo ATRM-B, Maj Gen Henry M Hagwood Jr, 1 Dec 92, sub: FY 93 appropriation TRADOC budget guidance, DRM.

⁸ Historical report, DRM, CY 92.

During 1992, Internal Review and Audit Compliance Office (IRAC) completed fourteen audits and made forty-one recommendations expected to result in monetary savings of \$4.8 million. Audit work was accomplished at the 1st Aviation Brigade, Aviation Training Brigade, Directorate of Logistics, Directorate of Engineering and Housing, Directorate of Training and Doctrine, Directorate of Contracting, Directorate of Community Activities, Directorate of Civilian Personnel, Directorate of Plans, Training, Mobilization, and Security, Chaplain Activities Office, Equal Opportunity Employment Office and the Department of Defense dependent schools.

The directorate provided command liaison for sixteen visits by the following external audit organizations: U.S. Army Audit Agency, U.S. General Accounting Office, Department of Defense Inspector General and the TRADOC Internal Review and Audit Compliance Office.⁹

Because of a review conducted by IRAC, the Directorate of Plans, Training, Mobilization, and Security (DPTMSEC) implemented new aircraft management policies that went into effect on 1 August 1992. The IRAC review noted that aircraft were being scheduled after the time for scheduling had passed which cost more money under contract terms. After 1 August, the Aviation Training Brigade ensured that all aircraft requirements were submitted to DPTMSEC within the time frame and guidelines outlined in the aircraft maintenance contract. The Director, DPTMSEC monitored Aviation Training Brigade aircraft schedule changes to ensure they were made within the time frames of scheduling and maintenance.¹⁰

The U.S. Army Aviation Logistics School (USAALS) annual funding program and obligations totalled \$9.3 million for the fiscal year 1992, \$.5 million less than funding for 1991. Of the total obligations for the year, \$7 million was for civilian pay, \$107,777 for incentive awards, and \$1.5 million for class IX supplies. During the fiscal year, 1,353 temporary duty orders were funded.¹¹

The Inspector General (IG) conducted special inspections during 1992 in the following areas: NCO-ER procedures, barracks utilization, contracting, civilian employee functions,

⁹ Historical report, IRAC, CY 92.

¹⁰ Memo ATZQ-DPT, Col Ralph J W K Hiatt to distr, 23 Jul 92, sub: Scheduling of aircraft, Chap IV file; Memo ATZQ-IRO (11-7a), Woodrow J Farrington to chief of staff, 9 Mar 92, sub: IRAC Office review of aircraft management, Chap IV file.

¹¹ Historical report, USAALS PMO, CY 92.

and the organizational inspection program.¹² Major General Robinson directed the Inspector General to conduct a special command climate survey. This survey was distributed to several directorates and units within the installation. The IG also processed 443 action requests and informal inquiries and provided quarterly updates of these actions to the command group and brigade commanders.¹³

Budget projections for FY 1993 appeared to significantly affect the Comanche development program. Since the Soviet Union disappeared as a viable threat, U.S. forces could be supported by the existing AH-64 fleet. Redirecting the Comanche program projected a saving of \$3.4 billion through 1997.¹⁴

The Directorate of Combat Developments (DCD) was one of the few directorates on post that managed its own finances. During 1992 the directorate spent \$576,463.20 for studies to include Army aviation unmanned aerial vehicle, rocket lethality, Army airborne command and control console, and nap-of-the-earth communications. Fort Leavenworth paid \$63,619.60 for a DCD cost analysis study on a prepositioned helicopter fleet.¹⁵

B. Personnel Management

The number of civilian workers in the Army as a whole steadily dropped (from 402,927 in 1989 to 349,744 in 1991) over the preceding three years. The Army's goal by the end of FY 1992 was to have a civilian work force of 342,000.¹⁶ Because of budget reductions for FY 1993, the U.S. Army was required to reduce its strength by 138,000 personnel during 1992 and by 99,000 in 1993.¹⁷ Budget manpower guidance to Fort Rucker for FY 1993 directed a reduction 232 authorizations (78 officers, 40 warrant officers, and 114 civilians) at Fort Rucker. Given the severe reductions that affected other military bases, Fort Rucker was fortunate during 1992.

¹² Memo ATZQ-IG (20-1a), Lt Col Charles L Gant to Maj Gen John D Robinson, sub: general inspection of Directorate of Contracting, CG file.

¹³ Historical report, IG, CY 92.

¹⁴ Army Flier, 31 Jan 92.

¹⁵ Historical report, DCD, CY 92.

¹⁶ Army Flier, 24 Jul 92.

¹⁷ Army Flier, 31 Jan 92.

Enlisted authorizations were increased by thirty-two for the fiscal year. Transfer of the Directorate of Information Management from the Information Systems Command to Training and Doctrine Command offset Fort Rucker reductions by 106 positions (1 officer, 19 enlisted, and 86 civilians). A reduction-in-force was executed in September 1992, but because of efforts of the command group and directors/managers at all levels, only twelve employees were separated.¹⁸ The freeze imposed earlier on promotions and hiring was not lifted even after the reduction-in-force.¹⁹

Officer promotions during 1992 were as follows: thirteen lieutenant colonels were considered for colonel and two were selected; thirty-five majors were considered for promotion to lieutenant colonel with ten selected; a total of fifty-three captains were considered for major with twenty-three selected; thirty-nine first lieutenants were considered for captain and thirty-five selected; thirty chief warrant officer fours were considered and fifteen were selected; twenty-six chief warrant officer three's were considered and twenty-one were selected; sixty-six chief warrant officer twos were considered for promotion with fifty-three selected; and thirteen master warrant officers were designated. The Aviation Center received the fiscal year 1993 officer distribution plan in July 1992 which mandated a reduction of five aviation captains.

Enlisted promotions in 1992 were as follows: thirty-seven master sergeants were considered for sergeant major with one selected; 134 sergeants 1st class were considered with twenty-two selected, and 453 staff sergeants were considered for the next higher rank with sixty-one selected.

During 1992, the Office of Military Personnel/Adjutant General (OMP/AG) exceeded the Department of the Army's standard of ninety-eight percent accuracy and less than two percent late entries when imputing data into the standard installation/division personnel system. Computers became an even more important part of personnel administration in 1992 with the implementation of a subnet computer system that allowed data to be shared among the various divisions of OMP/AG as well as other organizations throughout Fort Rucker.

During the year, AG processed a total of 2,001 officer evaluation reports (OERs) and 2,081 noncommissioned officer evaluation reports (NCO-ERs). In 1992 the TRADOC standard for late submission was two and one-half percent. Fort Rucker's late rate for OERs

¹⁸ Memo, ATZQ-RFM (570-4g), Col C S Ivie for distr, 10 Feb 92, sub: memorandum of instruction for implementation of USAAVNC/USAALS reorganization, DRM; Historical report, DRM, CY 92.

¹⁹ E-Mail note, CoeM to all cdns/dirs, 18 Sep 92, sub: RIF, Chap IV file.

during the year was less than one percent. The late rate for NCO-ERs was also the same as OERs, and the OMP/AG's late rate in this category was less than two percent.

In 1992, fifty-three initial term soldiers re-enlisted out of a target number of fifty-seven. A total of 109 mid-career soldiers re-enlisted out of a potential 109. In the career category, no particular number was set, but ninety-five soldiers re-enlisted from that group. In the reserve components, fifty-four soldiers out of fifty-four eligible for re-enlistment did so.²⁰

On the civilian personnel side of USAAVNC the 1992 reduction-in-force required a total of 166 civilian positions be eliminated. After retirements, reassignments, and internal adjustments made by the Directorate of Civilian Personnel, only twelve personnel were actually separated. The average monthly civilian strength for 1992 was 3,016 compared with 3,112 in 1991. The directorate processed more than 8,000 personnel actions during the year, and also provided personnel support and guidance to the 827 personnel of Fort Rucker's tenant units and 400 nonappropriated fund personnel.²¹

The Aviation Proponency Office (APO) performed a major revision of the Army Aviation Personnel Plan. Some of the changes were the redefinition of branch qualification standards for commissioned officers, prerequisites for warrant officer candidates, and career paths for all aviation officers.²² Both publications provided career professional development guidance to all total force personnel.²³

The Aviation Proponency Office also was responsible for a proposal to eliminate the aviation officer area of concentration 15E, tactical communication aviation (air traffic control). The new specialty designation was now 15B, combat arms operations aviators. The change was necessary because officers training in 15E were forced into a narrow career track.²⁴

²⁰ Historical report, AG, CY 92.

²¹ Historical report, DCP, CY 92.

²² United States Army Aviation Center, Army Aviation Personnel Plan, Fall 1992, Fort Rucker, Alabama, 1992, APO.

²³ Historical report, APO, CY 92.

²⁴ Memo, Lt Col Robert L Johnson to U S Total Army Personnel Command (TAPC-PI-MO), 4 Dec 91, sub: Recommended change to Army regulation 611-101, commissioned officer classification system, aviation officer area of concentration 15A, APO; Memo, Lt Col Robert L Johnson to U S Total Army Personnel Command, 4 Dec 91, sub: Recommended change to Army regulation 611-101, commissioned officer classification system,

Public Law 101-189 changed the criteria under the Aviation Career Incentive Act. The original law set down criteria for incentive pay based on number of years in aviation specific assignments. The change allowed a waiver of requirements for aviators failing to meet the Aviation Career Incentive Act guidelines. Aviation Proponency initiated development of a standard waiver policy for Army aviators.²⁵ During the year, APO also recoded flying positions normally not open to women aviators due to direct combat position coding as available to them.²⁶ During late 1991 and early 1992, APO developed a minority recruiting plan and video for the Aviation Branch.²⁷

On 2 November 92, the Deputy Chief of Staff for Personnel approved the establishment of functional area 90 (Logistics). The new functional area developed officers from Ordnance, Transportation, Quartermaster Corps and Medical Service as well as the aviation personnel through the grade of O-6 into multi-functional logistics officers. This initiative allowed aviation logisticians to compete for multi-functional command and staff positions resulting in increased promotional opportunities.²⁸

A reclassification plan for military occupation specialty 67H (observation airplane repairer) to support retirement of the OV-1 Mohawk was approved on 9 November 1992.²⁹ Action to eliminate MOS 67X (heavy lift helicopter repairer) was initiated on 18 Nov 1992. Training for this aircraft was discontinued at Ft. Eustis in FY 1985. The MOS was no longer required by AR 611-201. A proposal was staffed worldwide by Deputy Chief of Staff, Personnel and Intelligence, in late 1991 with final action by 6 April 1993.

aviation officer area of concentration 15E, APO; Historical report, APO, CY 92.

²⁵ Memo, Maj Gen John D Robinson to Lt Gen Thomas P Carney, 8 Jun 92, sub: Waiver to aviation career incentive act of 1989, APO; Historical report, APO, CY 92.

²⁶ Historical report, APO, CY 92.

²⁷ Memo, Maj Gen John D Robinson to aviation brigade commanders, 12 Dec 91, sub: minorities and females, APO.

²⁸ Information paper ATSQ-LAC, 25 Nov 92, sub: 15B/90, USAALS DOTD.

²⁹ Memo, PERSCOM, TAPC-PLO, 9 Nov 92, sub: MOS 156A, OV-1/RV-1 pilot and 67H observation airplane repairer, personnel support plan for retirement of the OV-1 Mohawk airplane, USAALS DOTD.

Additional skill identifier X1's (AH-64 maintenance) association with MOS 68D (aircraft power train repairer) was eliminated on 18 February 1992. This identifier was not necessary for 68D.³⁰

During 1992, the downsizing of the Army threatened the 98th Army band. Training and Doctrine Command had not selected the band for continuation. As of the end of the year, no final decision had been made, but USAAVNC strongly supported its continued existence.³¹

On 13 December 1992, Defense Management Report Decision 910 implemented the capitalization of accounting and disbursing operations by the Defense Finance and Accounting Service.³² One officer, six enlisted, and thirty-nine civilians were transferred from the USAAVNC's Directorate of Resource Management to the Defense Finance and Accounting Service as a result of this consolidation effort.³³

With the U.S. military facing deep personnel cuts in 1992 and beyond, the Army initiated a pilot transition assistance office called the Army Career and Alumni Program (ACAP). This program was created to coordinate and oversee the quality of transition services and was offered to those military and civil service personnel and their families who leave service.

As organized in 1992, ACAP was built upon existing transition services and two new initiatives. One new initiative was the Transition Assistance Office and the other the Job Assistance Center. The Transition Assistance Office resulted from a memorandum of understanding between Ft. Rucker and the Alabama Department of Employment and Training as well as the U.S. Department of Labor Veterans' Employment and Training Service. As part of the understanding, Ft. Rucker supplied adequate work space, furniture, utilities to get

³⁰ Memo, PERSCOM, TAPC-PI-OC, 18 Feb 93, sub: notification of future change to AR 611-201, E-9310-2, military occupational specialty 68D, USAALS DOTD.

³¹ Msg 011930Z, Jun 92, Maj Gen Robinson to Maj Gen Lionetti, sub: inactivation of the 98th Army band, Fort Rucker, AL, WCSWAA, CG File; Msg R101315Z Feb 92, cdr TRADOC to DA Wash DC, sub: inactivation of 98th Army band, CG file; Notes, commanders and staff meeting, 4 Feb 92.

³² Memo, ATRM-AF, 30 Jun 92, sub: defense management report decision 910 data call, DRM

³³ Historical report, DRM, CY 92.

the office started as well as publicity about the program, and an adequate supply of participants.³⁴

The Transition Office of ACAP was the first stop for individuals leaving the Army. There each individual was provided expert advice on benefits and entitlements available and an individualized transition plan developed to better manage their transition process.

The Job Assistance Center was developed as a contracted service agency that provided job search skills training, job referrals, and career counseling. Much of the initial work of assistance was done through job assistance seminars where an overview of the current job market was provided, and job search skills taught.³⁵

The commanding general of TRADOC was concerned that some soldiers had not received assistance during the weeks preceding their leaving service. He directed that every effort should be made to ensure that each soldier that departed the U.S. Army be helped at least 180 days prior.³⁶ The Army Career and Alumni Program did just that.

Another assistance to those losing their jobs because of downsizing or retirement was the priority placement program. Employees registered under this program received priority placement considerations throughout the Defense Department. Prior placement consideration was extended before that given to local placements. The program provided protection to separated employees but allowed the Army to retain its experienced personnel.³⁷

Congress passed the Warrant Officer Management Act in October and President Bush signed it in December 1991. The act provided a comprehensive and uniform system of appointment, promotion, separation, and retirement of warrant officers. The law also established the new grade of chief warrant officer 5 (CWO5). With the act in force beginning in 1992, warrant officers throughout the Army now had a personnel management system that paralleled the system used to manage commissioned officers.³⁸

³⁴ Memorandum of understanding, 25 Feb 92, USAAVNC and Alabama Department of Employment and Training and U.S. Department of Labor Veterans' Employment and Training Service, CG file.

³⁵ Historical report, ACAP, CY 92.

³⁶ Msg R 181600Z Nov 92, cdr TRADOC to ATG 7432, sub: Army career and alumni program, CG file.

³⁷ Memo ATZQ-DCP (690), Col Robert N Seigle to distr, 1 Oct 92, sub: department of defense program for stability of civilian employment, CG file.

³⁸ Title XI - Warrant Officer Management Act (secs. 1101-1132), APO

The warrant officer management act directed that warrant officers be administered in terms of years of warrant officer service instead of active federal service. The first selection board for the new CW05 rank designation was conducted during the summer of 1992 and announced ninety-eight selectees of which fifteen were stationed at Fort Rucker. CW05 David Helton and CW05 Tom Ault were the first of the Fort Rucker fifteen to be promoted on 1 October 1992.³⁹

The Army initiated the civilian leader development action plan which provided for side-by-side training opportunities for civilians and military personnel. The Aviation Center developed career management and training in management fields 64 and 93 for both civilian and military pilots. These two fields were expanded and civilian employment specialties were reviewed for integration into this development effort.⁴⁰

During the year, USAAVNC took a hard look at continuing the 93B aeroscout observer military occupation specialty. There were three problems with this specialty: apparent lack of utilization; career path injustices; critical task selection. The sensing from around the Army was that 93B's were often used as detail soldiers. The 1991 brigade commanders conference recommended deletion of the 93B specialty. Five possible recommendations were developed during this conference: (1) status quo; (2) replace 93B one-for-one with the 67V ASI Z1; (3) delete 93B, do not fill the seat and use spaces to pay other bills; (4) delete 93B and fill the seat with an enlisted aviator; and (5) delete 93B and fill the seat with a second pilot.⁴¹ No decision had been made by the end of 1992.⁴²

The Aviation Career Incentive Act of 1988 increased the percentage of an aviator's career that had to be spent in flying assignments for which aviators received incentive pay. Given service needs, aviation officers were often forced, through no fault of their own, to spend more time in non-aviation assignments than the incentive act allowed. The Aviation Center requested a waiver of the percentage of an aviation officer's career so that if officers were forced by necessity into other assignments, the incentive pay was still available. This

³⁹ Historical report, WOCC, CY 92.

⁴⁰ Memo ATZQ-AP (TACP-CPP-D/12 Dec 91) (611-1a) 2d End, Maj Gen John D Robinson to cdr, TRADOC, sub: civilian leader development action plan, CG file.

⁴¹ Memo ATZQ-AP (611-1a), Lt Col Robert L Johnson to cg, 14 Aug 92, sub: read ahead packet for 93B briefing, 18 Aug, CG file.

⁴² Phonecon, CW05 Clifford Brown, AP, 3 May 93.

waiver was necessary to continue to attract high quality officers into Army aviation and retain them.⁴³

Civilian as well as military personnel were affected by downsizing. The secretary of the Army's office sent out several policy statements on a cap for higher civilian pay grades (i.e, GS-13/15). According to a special 30 September 1991 message the number that could not be exceeded was the 30 September 1991 strength in each of the high grades. However, a total of six exceptions to the cap were enumerated in the message: if commitment made before 19 February 1992; placement resulting from statutory restoration or reemployment actions; application of new job classification standards to existing encumbered positions; mandatory placements under the Defense Department priority placement programs; actions taken to comply with order or settlement in a judicial or administrative process; and reduction-in-force/transfer of function placements.

The Department of Defense wide hiring freeze remained in effect, but there was a total of five categorical exceptions to hiring freeze allowed: internal movement, temporary employees, mandatory priority placement program (PPP) actions, statutory restoration or reemployment actions, and actions to comply with order/settlement in a judicial or administrative process.⁴⁴

The Equal Employment Opportunity Office's (EEOO) Black Employment Program elected officers for 1992. They were as follows: Curtis Carter, chairperson; Otis Johnson, vice-chairperson; Brenda Perryman, recorder; Augusta Bell, correspondent; Barbara Harper, budget officer; Sam Chatman, parliamentarian. The Black Employment Program sponsored a number of seminars throughout 1992. The subjects discussed were preparation of an SF-71, the budget process, performance standards, financial management, ethics behavior in the work force, consumer credit and the work force profile.

The Federal Women's Program at Fort Rucker also elected new officers for CY 1992. They were: Carley Palo, chairperson; Annette Williams, vice-chairperson; Sheila Sullivan, recorder; Helen Burrows, correspondent; Genevieve Normand, budget officer; and Johanna Roberts, parliamentarian. During the year, the program compiled and published two reference works: "FWP Planning Guide" and "Child Care/Elderly Care."

⁴³ Memo ATZQ-AP (611-1a), Maj Gen John D Robinson to General Frederick M Franks, TRADOC, 8 June 1992, sub: waiver to aviation career incentive act of 1989, CG file.

⁴⁴ E-mail note, Rosenbel to all cdrs/dirs, 9 Apr 92, sub: hire freeze and high grade cap, Chap IV file.

The Equal Employment Opportunity Office experienced an increase in the number of complaints of discrimination during 1992. There were 101 precomplaints filed in FY 92 compared with 85 in FY 91. The office achieved a successful resolution rate of 88.9 percent in the informal/contact stages. Formal complaints filed totaled twenty-eight. On 1 October 1992 the Equal Employment Opportunity Commission issued 29 Code of Federal Regulations (CFR) Part 1614 which superseded 29 CFR 1613. This new regulation significantly changed the manner in which EEO complaints are processed by reducing the administrative processing time the agency used to reach a final decision.⁴⁵

C. Information Management

During 1992 the Directorate of Information Management (DOIM) connected Fort Rucker's mainframe computer (IBM 4381) to the defense data network using an ethernet system.⁴⁶ The new network performed file transfers, electronic mail and other communications between computers within the net or across the country faster than ever before. Fort Rucker had access to an improved data sharing network.⁴⁷

To upgrade Fort Rucker's ability to access the defense message system, DOIM connected USAAVNC's mainframe computer to an AT&T 3b2 located at the post telecommunications center. This new system replaced equipment that had been in use for nearly twenty years, and upgraded unclassified message traffic to allow a paperless writer-to-reader communication system.⁴⁸

In 1992, DOIM initiated a program to completely change the telephone system at Fort Rucker. The phone system as it existed in January 1992 was completed in the 1940s and prone to frequent breakdowns. The Directorate of Information Management began planning the replacement of the old phone lines with fiber optic cable which would allow clearer telephone conversations with less static. Also, the new fiber optic cables were less susceptible

⁴⁵ Historical report, EEOO, CY 92.

⁴⁶ Statement of work, 1 Oct 90, sub: DRM subnet design, DOIM.

⁴⁷ Historical report, DOIM, CY 92; Notes on oral interview by Dr Burton Wright with Mr Leighton, DOIM, and Mr John Dyess, 29 Mar 93, oral history file.

⁴⁸ Technical acceptance recommendation (ASQB-702-2), 17 Dec 92, Project Number 03H-008-90, title: Army standard electronic message host w/AMS System, DOIM.

to bad weather. The projected cost of the system when completely installed was projected at \$9 million.⁴⁹

During the year, a cost reduction policy regarding photocopying was put into effect. A cost-per-copy contract was adopted because the then acting director of DOIM, Mr. John G. Dyess, attended a FORSCOM conference where that command's cost-per-copy contract was briefed. Forces Command's experience had resulted in considerable savings, so Mr. Dyess sought to implement a similar program at Fort Rucker.⁵⁰ The final contract to Danka Business Systems of Dothan was awarded on 4 February with the first increment of the four increment contract to cost \$90,057.66 for the rest of 1992.⁵¹

The Public Affairs Office (PAO) inaugurated a new command information radio program called "Fort Rucker on the Air" in April, producing it from canned material provided by Soldier's Radio and Television and from local material gathered by PAO personnel. The Army Broadcasting Service selected Fort Rucker as one of the first installations to receive satellite down-link equipment. The equipment was received, but not installed by the end of 1992.

During 1992, the Army Flier changed its focus as a community newsletter to a command information newspaper.⁵² The Army Flier also began using a complete desktop publishing system for layout and design. The heart of this system was a Microtec computer that provided a complete newspaper editorial capability. Once the Microtec system finished generating the Army Flier, the data was transferred to a MacIntosh 2CI computer equipped with the Quark Xpress program which put the material into page form for printing.⁵³ This system allowed for a concise presentation of news, living features, and sports and allowed a broadening of approaches to writing. The Army Flier also established new procedures and guidelines for story writing and photojournalism.

⁴⁹ Notes, oral interview by Dr. Burton Wright with Mr. Leighton, DOIM Director, and Mr. Dyess, Deputy, 29 Mar 93, oral history file.

⁵⁰ Notes, oral interview by Dr. Burton Wright with Mr. Leighton, Director, DOIM and Mr. John Dyess, 29 Mar 93, oral history file.

⁵¹ SF 33, Contract Number DABT01-92-D-007, 4 Feb 92, DOIM.

⁵² Notes, commanders and staff meeting, 1 May 92, Historian's note file.

⁵³ PHONECON, Lt Col Hart, PAO, 8 Apr 92.

A new backup file was created to enhance the command information publication query response time.⁵⁴ A new data base index was established to eliminate the need for stocks of on-hand newspapers. This new data base index contained a record of every article published in the Army Flier and began with the December 1992 edition and continued with each subsequent edition. Offices for PAO personnel were improved by approximately \$15,000 worth of renovations.

During the year, Aviation Digest published articles on the Battle Command Training Program, Warfighter 91, aircrew training, and a series of historical articles highlighting the first fifty years of Army aviation history to name a few. An article in the July/August issue focused on FM 100-5 and discussed the roles of Army aviation in the new strategic arenas of peacekeeping, terrorism, insurgency, low-intensity conflict, and counterdrug operations. In the final issue of 1992, the lead article focused on the contribution of Army Aviation to Persian Gulf naval operations. Army OH-58D's operated from U.S. Navy vessels in the Gulf and performed a variety of critical missions.⁵⁵

D. Air Traffic Control

A concern for Maj. Gen. Robinson during 1992 was the integration of Army airspace command and control. In a June, 1992 message for TRADOC, USAAVNC's commander pointed out that the lessons of Desert Shield/Desert Storm demonstrated the great difficulty in coordinating airspace requirements. The inability to control this important area could have a significant impact on future combat operations. The commanding general wanted to ensure that individual efforts of branches, schools, and centers in all airspace matters be integrated into an Army plan and the Army must be fully integrated with the other services to ensure complete compatibility.⁵⁶

In support of this goal, the commanding general approved the operational requirements document for the tactical terminal control system. This system allowed the operator(s) to provide air traffic services at remote landing zones, drop zones, pick-up zones, and temporary helicopter operating areas. It also provided the capability for ground-to-air

⁵⁴ An alibi file is simply an information bank used by the PAO to check the accuracy of information they print. If a mistake is made in a notice or information in the Army Flier, a copy of the original message is available. PHONECON, Lt Col Hart, PAO, 8 Apr 93.

⁵⁵ Historical report, PAO, CY 92.

⁵⁶ Msg 222100Z Jun 92, Maj Gen Robinson to cdr CAC, sub: Army airspace command and control, CG file.

communications between air traffic service units and other army aircraft, other services aircraft and allied aircraft.⁵⁷

As the Army's air traffic control proponent, the U.S. Army Air Traffic Control Activity (USAATCA) remained involved in all facets of air traffic control, air traffic services, and air space during 1992. The Requirements Division, USAATCA, as the fixed base air traffic control requirements developer, continued its implementation of the defense department's 5000.2 equipment procurement series. This division also wrote five mission need statements of which the recorder/reproducer system and communications console system were approved by Department of the Army during the year.⁵⁸

The precision approach radar mission statement was still pending approval at the end of 1992. This request was initiated because the current radar system used was fielded nearly thirty years before with an expected life cycle of only twenty years.⁵⁹ Upon receipt of the approved mission needs statement, the Requirements Division established joint work groups and held in-progress reviews to verify stated user requirements. Operational requirements documents were written and staffed worldwide and forwarded to Training and Doctrine Command for approval.

Since material needs were required to fix air traffic control deficiencies, developers were informed of needs and provided information on the reliability, availability, and maintainability necessary in each system. The activity reviewed the material developers documents for these systems.

The Air Traffic Control Activity worked on approval of a change on the ND500 burst encoder. This waiver authorized the 4th Battalion, 58th Aviation Regiment not to place a turn

⁵⁷ Memo, Maj Gen John D Robinson to Col Daniel Ferezan, 11 Aug 92, sub: approval of the operational requirements document for the tactical terminal control system.

⁵⁸ Memo DAMO-FDR, Maj Gen J M Garner for commander, USAAVNC, 26 May 92, sub: mission need statement for the fixed-base air traffic control recorder/reproducer life-cycle replacement, USAATCA; Memo DAMO-FDR, Maj Gen J M Garner for commander, USAAVNC, 26 May 92, sub: mission need statement for the air traffic control communications console program, USAATCA; Historical report, USAATCA, CY 92.

⁵⁹ Memo ATZQ-ATC-DR (95-9b), Lt Col Robert M Stewart for HQDA, DCSOPS, Attn: DAMO-FDV, 10 Jan 92, sub: mission need statement for the fixed-base air traffic control precision approach radar system life-cycle replacement program, USAATCA; Historical report, USAATCA, CY 92.

burst encoder in the Nautel ND 500 NDB system. The waiver remained in force so long as a backup system was kept operational.⁶⁰

In another case, the dictaphone time code general/reader series battery backup change was approved by USAATCA. The change applied only to the AN/TNH-24 (V) I-4, and allowed the system to be used without battery backup.⁶¹ Because of feedback from the field, the USAATCA authorized remote maintenance monitor software changes so that the system allowed the maintenance personnel to hand off radar controls for maintenance purposes.⁶²

In a memorandum dated 25 February, USAATCA set forth policy on the development of a standard ground control approach facility incorporating existing AN/FSC-92 (V) equipment and programmed digital bright radar tower indicator equipment. The Air Traffic Control Activity identified facilities that would be modified to meet the new configuration.⁶³

During 1992 USAATCA provided maintenance and supply services to air traffic control units around the world.⁶⁴ The transfer of air traffic control proponentcy from Information Systems Command to TRADOC in 1986 recommended all maintenance and repair services provided be on a reimbursable basis. On 1 October, 1992, this was formalized in a memorandum of instruction for obtaining maintenance support for fixed base air traffic control systems. Under this memorandum, USAATCA maintained separate accounts for each field installation and deducted funds as services were provided. Quarterly funding status reports were provided to each installation for execution of funds.⁶⁵ However, the funding support for this effort came from either USAAVNC accounts or additional funds

⁶⁰ Memo, ATZQ-ATC-DR (95-9b), Lt Col Robert M. Stewart for commander, Eighth U.S. Army, 14 Apr 92, sub: waiver approval, USAATAC; Historical report, USAATCA, CY 92.

⁶¹ 1st End Lt Col Robert M Stewart for commander, U.S. Army Training and Doctrine Command, ATTN: ATBO-HM, 20 Jul 92, sub: dictaphone recorder configuration change approval, USAATCA; Historical report, USAATCA, CY 92.

⁶² 1st End, Francis N Anderson for U S Army Aviation Troop Command, Attn: AMCPM-ATC-D, 10 Sep 92, sub: AF/FPN-66 radar remote maintenance monitor controller functions, USAATCA; Historical report, USAATCA, CY 92.

⁶³ Memo, ATZQ-ATC-DR (95-9b), Lt Col Robert M Stewart for commander, U.S. Army Aviation Systems Command, ATTN: AMCPM-ATC, 25 Feb 92, sub: configuration of the standard Army ground-controlled approach facility, USAATCA; Historical report, USAATCA, CY 92.

⁶⁴ Msg, 041450Z Aug 88, HQDA to distr, sub: review of air traffic control transfer plan, CG file.

⁶⁵ Memo, ATZQ-ATC-A (340a), Francis N Anderson for distr, 17 Nov 1992, sub: maintenance support for fixed base ATC systems, USAATCA; Historical report, USAATCA, CY 92; Msg 242015Z Feb 92, Col Patrick J Bodelson to cdr USAAVNC, sub: area maintenance supply facility, CG file.

from TRADOC. This funding supported operations for only the first quarter of 1992. USAAVNC did not have the funds to support the effort beyond that time. TRADOC accepted this factor as a "cannot do."⁶⁶

An important air traffic control function provided by USAATCA in 1992 was assistance and guidance for branch evaluation and standardization. USAATCA conducted inspection and assistance visits to more than thirteen Army air traffic control installations, flying in excess of 500 flight hours.⁶⁷

Federal aviation administration certification flight inspection teams and crews performed evaluations of twenty air traffic control facilities and navigational aids. As a result, a precision approach path indicator was commissioned at Redstone Arsenal.⁶⁸ Site surveys were conducted during 1992 at Andalusia, Al, and Fort Polk, La.⁶⁹

For the first time, a flight inspection of the instrument training airway system at Fort Rucker was completed by USAAVNC's Directorate of Evaluation and Standardization. During the inspection five commendables and twelve findings/observations were found in the areas of air traffic control training and navigational aids/equipment.⁷⁰

⁶⁶ Msg 242015Z Feb 92, Col Patrick J. Bodelson to cdr TRADOC, sub: area maintenance supply facility, CG file.

⁶⁷ Memo ATZQ-ESF (95) Maj Gen John D Robinson for Distribution, 7 Oct 92, sub: Department of the Army aviation standardization program and areas of interest for FY 93, USAATCA; Historical report, USAATCA, CY 92.

⁶⁸ FAA Form 8240-19 dtd 3 Mar 92, Flight Inspection Report - Nondirectional Beacon, Direction Finding, Visual Aids, Communications, Historical report, USAATCA, CY 92.

⁶⁹ E-mail note, Jack A Holmes for USAATCA, 26 Feb 92, sub: VOR approach at Andalusia-Opp airport; FAA Form 8240, BOR, VOR/DME, Vortac, Tacan, Orbital Plot, dtd 23 Jul 92, Location: Fort Polk, LA; Memo ATZQ-ATC-DR (95-9c) Col Melvin J McLemore to cdr, TRADOC, 30 Jan 90, sub: resiting of Esto ground controlled approach, ATB; Memo ATZQ-ATB-TO, Col Thomas M Roy to Department of the Army, Southeast Region, Federal Aviation Administration, sub: air traffic control requirements for GCA at Andalusia/Opp municipal airport, ATB; Historical report, USAATCA, CY 92.

⁷⁰ Memo, ATZQ-ATC-Me (95-50a), Curtis E Carter for director, USAATCA, 19 Jan 93, sub: report of U.S. Army air traffic control evaluation/assistance visit - Fort Rucker, AL, Historical report, USAATCA, CY 92.

The C-12 used by the USAATCA for inspections underwent an equipment upgrade during September-December, 1992 that ensured its compatibility with the Federal Aviation Administration through 1997.⁷¹

USAAVNC's air traffic control battalion, 1-11th Aviation Regiment was responsible for the installation of thirteen AN/FMQ-13 wind-speed-direction indicators. The AN/FMQ-13's replaced the older model GMQ-11's. The battalion also began work on installation of a ground controlled approach facility at the Andalusia municipal airport as well as updating air traffic control facilities at the Troy municipal airport.⁷² The Andalusia-Opp facility replaced the one at Esto, Florida, which had been in operation since the late 1960's. The Esto facility closed in December 1992.⁷³ To prepare the new Andalusia-Opp ground control approach facility, a 18,000 pound, forty-four foot tall air traffic control tower had to be moved from the Wolf Pit refueling field near Brantley, Alabama, to the Andalusia-Opp airport. A CH-47 from F Company, 1-14 Aviation Regiment transported the tower, and pathfinders from C Company, 509th Parachute Infantry Regiment prepared it for movement.⁷⁴ The 1-11th's air traffic control detachments at military and civilian airfields throughout southern Alabama handled a total traffic count of 3,130,277 during 1992.⁷⁵

Cairns Army radar approach control signed a letter of agreement with the USAATCA that provided for non-verbal coordination of arriving aircraft through the use of the ARTS/D-BRITE interface. Because of the upgrading of the air traffic control system throughout the United States, Cairns radar approach control initiated a request for two new radar units. These two units were made necessary by a requirement to remain compatible with changes in the national airspace system. Cairns approach control also was involved in a cooperative test with the new training helicopter office. The new training helicopter office conducted flight tests using the Cairns instrumental training airways system.

⁷¹ Memo ATZQ-ATC-ME (95), Gregory A Waltz for record, 15 Sep 92, sub: airplane upgrade at FAA maintenance facility, Oklahoma City, OK., Historical report, USAATCA, CY 92.

⁷² Memo ATZQ-ATB-TO (95-9b), Robert H Jackson to cdr, 1-11th, 6 Jan 93, sub: ATC projects, Historical report, ATB, CY92.

⁷³ The Esto site was leased land, and part of the leased area is still in government use, but the part used for the CGA facilities was canceled. PHONECON with William Wells, DEH, 19 Apr 92; Memo ATZQ-ATB-T, Capt Larie J Wilson to Post Historian, 19 Feb 93, sub: 1-11th Aviation Regiment annual historical report, Historical report, ATB, CY 92; 3rd end ATTG-A (ATZQ-ATC-DR/30 Jan 90), Col Joseph W Kuppich to cdr, TRADOC, sub: resiting of Esto ground controlled approach, Historical report, ATB, CY 92.

⁷⁴ Army Flier, 25 Oct 92.

⁷⁵ Memo ATZQ-ATB-TO (95), Maj Ricky C Smith to distr, 7 Jan 93, sub: year end traffic count for 1992, ATB.

Two months of flight research culminated in the development of Fort Rucker's responses to the national airspace system modernization site questionnaire. It took nearly two months to research and answer the more than 500 questions in the questionnaire.⁷⁶

E. Library, Museum and Training Support

During 1992 the U.S. Army Aviation Museum acquired two World War I aircraft--a British SE-5A pursuit/fighter and a French Neuport 28-C pursuit/fighter--for its permanent collection. Two research and development projects, the rotor systems research aircraft and the advancing blades concept, were also acquired. Construction began on a full scale replica of the Wright Brothers' "B" Model Military Flyer with delivery expected sometime during 1993.

In June of 1992 the Museum opened a special 50th anniversary exhibit featuring two diorama presentations. One centered around the J-3 Piper Cub to commemorate the first use of light fixed-wing craft acting as airborne artillery observers during the Louisiana Maneuvers in 1941 - the beginning of "organic" Army Aviation; the other featured an AH-64 Apache and focused on its use in 1991's Operation Desert Storm.⁷⁷

The Aviation Technical Library was the lead agency on post during the installation of the integrated library system. The Technical Library, Aviation Learning Center, and the Center Library were networked to a new computer system that consolidated administrative and technical processes of checking out and accounting for library books. The integrated library system was the first of its kind in TRADOC.

Using its limited number of personnel, the Aviation Technical Library also indexed the Army Times, and the index was distributed by Training and Doctrine Command and submitted to the Defense Technical Information Center, and the National Technical Information Center. These agencies distributed the index world-wide.

⁷⁶ Memo ATZQ-ATS-TR, Jerry W Byrd to cdr C company, 3 Dec 92, sub: ARAC division historical report for CY 1992, Historical report, ATB, CY 92.

⁷⁷ Historical report, DCA, CY 92.

The Aviation Learning Center served a total of 47,100 customers which was an increase of 2,333 from 1991, and issued 7,854 smart troop subcourses, an increase of 4,854 from 1991. The center received an AH-64 cockpit familiarization trainer during the year.⁷⁸

F. Logistics Support

The Directorate of Logistics (DOL) Aircraft Logistics Management Division's oversight of aircraft maintenance performed on USAAVNC aircraft fleet involved some historical occurrences in calendar year 1992. The Aviation Center started 1992 with seventeen OH-58D aircraft without armament and known as "vanillas". Ten of the seventeen aircraft were turned back to Bell Helicopter to be reconfigured as the OH-58D(I) "Kiowa Warrior". The remaining OH-58D aircraft were put in flyable storage for retrograde/transfer.

The Aviation Center received the first of 25 OH-58D(I) "Kiowa Warriors" on 31 January 92. The twenty-five aircraft were split into two fleets: seventeen armed and eight D/I or improved aircraft without weapons systems. The eight D/I models did not have armament or the mast mounted sight installed because they were used only for contact training. During the year, the OH-58D "vanillas" flew 2,555 hours and the OH-58D(I) "Kiowa Warriors" flew 2,142.1 hours.⁷⁹

The Aviation Center leadership was concerned during the year about the safety of used parts replacements. A message was sent to General Franks expressing this concern and the need for a quick decision because of the imminence of the stock fund depot level repairable system on 1 April. According to USAAVNC, sixty-two safety of flight messages had been sent forward in the past twelve months. The cost totalled \$1,816,955. The cost for parts would have been \$1,747,485 if bought new, but under stock funded system, the cost was cut down to \$504,211. This data highlighted the impact of man hour costs over and above the cost of parts replaced.⁸⁰

To prepare for the implementation of the stock funding of depot level repairables, the logistics directorate looked into various ways to reduce repair costs and maximize returns.

⁷⁸ Historical report, DOTD, CY 92.

⁷⁹ Historical report, DOL, CY 92.

⁸⁰ Msg 3131608Z Feb 92, Maj Gen John D Robinson to cdr TRADOC, sub: Need for decision on funding for safety of use parts replacements, CG file; Historical report, DOL, CY 92.

One of the ways recommended was to minimize delays in returns related to the quality deficiency report system. To that end, DOL sent a message to the Rock Island Depot (Illinois) that requested assistance in accelerating disposition instructions. On the date of the message (25 March 1992), DOL was awaiting disposition instructions on sixteen quarterly deficiency reports valued at \$85,383.65. The oldest deficiency report of the sixteen listed was 105 days old. The Aviation Center recommended that a holding area for their quarterly deficiency reports be designated so that all of these reports could be shifted there, or that USAAVNC receive immediate credit for returns upon receipt and approval of the quarterly deficiency report.⁸¹

The magnitude of the problem could be judged from an assessment of the total picture. The total monetary value of the 327 quality deficiency reports from all commodity commands totalled \$7,055,725.03 with the oldest dating back to 3 April 1991. USAAVNC requested prompt action to relieve this backlog.⁸²

The Maintenance Division of DOL was directly involved in the installation of flight simulators at Fort Rucker. One AH-64 and one UH-60FS flight simulator were installed, tested, inspected, and scheduled for training during the period May-July 1992. During Desert Shield/Desert Storm training was often hampered by a lack of simulators. Activation of these two new simulators insured that no training bottlenecks would occur during future mobilizations.

Supply and Services Division's Central Issue Facility provided organizational clothing and individual equipment including flight clothing and flight gear to support the training and leader development mission in CY 92. The Consolidated Installation Property Book Office assisted four soldiers with preparation for overseas replacement requirements for deployment to Somalia.

The automated asset accountability system and logistics marking system was installed in the property book office by Training and Doctrine Command. This system provided a bar coding capability which made inventories and equipment accountability more efficient and

⁸¹ Msg 251930Z Mar 92, Maj Gen John D Robinson to cdr AMCCOM, sub: stock funding of depot level repairables, CG file; Historical report, DOL, CY 92.

⁸² Msg 140900 Jan 92, cdr USAAVNC to dir, SLA, Fort Belvoir, sub: need for more expeditious response to quality deficiency reports, CG file.

effective.⁸³ A memorandum of agreement between the joint computer-aided requisition and logistical support system office and USAAVNC was signed.⁸⁴

During the period 6-20 May 92, transportation support was provided by DOL for the 2/229th Attack Helicopter Battalion's movement to and from Fort Bragg, North Carolina to participate in exercise "Operation Bold Shift". Eight trucks were required for transporting 132,312 pounds of equipment. Furthermore, during the period 3-7 August 1992, transportation support was provided to the 2/229th Attack Helicopter Battalion to move to Fort Bragg, North Carolina, for annual deployment training. Arrangements were made for fifty line hauls to transport 1,290,395 pounds of equipment.

During September-October 1992, the Fort Rucker unit movement coordinator facilitated the contract commercial air movement of approximately 132 service members from Jackson International Airport, Jackson, Mississippi, to Germany and return, in support of the REFORGER 92 exercise.

On 18 December 1992, two line hauls consisting of three military vehicles were shipped to the port of Garden City, Georgia, for the 256th Signal Battalion's support during "Operation Restore Hope". Seven quick recovery vehicles were shipped to other installations in support of joint training operation: four to Fort Chaffee, two to Fort Huachuca, and one to Fort Benning.⁸⁵

Environmental concerns impacted on DOL during 1992. Fuel storage tanks had to be excavated in March due to underground leakage. Immediate funding in the amount of \$400,000 was spent to excavate and dispose of the storage tanks. When these tanks went off-line, only 242,000 gallons of capacity was available, and daily demand averaged 110,000 gallons. By regulation USAAVNC had to have at least thirty days of fuel on hand, and the remaining 132,000 gallons would last less than two days. Since funds were not available to build new underground tanks, the only way to continue flight operations and have the necessary reserve was to lease temporary above ground storage tanks.⁸⁶

⁸³ Historical report, DOL, CY 92.

⁸⁴ Memorandum of Agreement, 28 Mar 92, between Project Manager, JCALS and USAAVNC, CG file.

⁸⁵ Historical report, DOL, CY 92.

⁸⁶ Msg 251550Z Feb 92, Col Patrick J Bodelson to cdr USAAVNC, sub: fuel storage tanks, CG file.

Like DOL the Army Materiel Command - Logistics Assistance Office (AMC-LAO) office at Fort Rucker was deeply involved in preparing the post for the new stock funds depot level repair system. AMC-LAO sponsored a discussion with other logistics assistance representatives on the new system. An agreement was reached on changing standard operating procedures to include the logistics assistance representatives input into the quality deficiency report process.

These discussions highlighted shortcomings in the current report process, i.e., lack of knowledge of Army Materiel Command policy and procedures for the initial failures of the depot level repair system. One of the reasons for the shortcoming was that not all message traffic concerning this new repair system had been read by those who should be concerned, nor was this information passed along to other agencies.⁸⁷ Two AMC-LAO personnel briefed avionics supervisors on the logistics representatives roles in submitting deficiency reports under the new stock funds depot level repair system.⁸⁸

AMC-LAO assisted in the inventory of the push support package for OH-58D school aircraft. Because of the additional school aircraft a need arose for a ground power source at their hangar, and AMC-LAO helped to obtain such a device to aid in repair and maintenance.⁸⁹

The Air-to-Air Stinger, Project Management Office (ATAS PMO), Dyncorp, and ATB worked with AMC-LAO on a quick fix modification for the air-to-air stinger flight trainer which had been experiencing overload problems. This modification disabled the system to prevent an overload. The modification work on twenty flight trainers took just three working days (13-16 Oct 92).⁹⁰

G. Evaluation and Standardization

To perform its mission for FY 1992, the Directorate of Evaluation and Standardization (DES) required \$757,000 for operating expenses. TRADOC provided only \$275,000 in funding support leaving a shortfall of \$482,000. The Army Aviation Center

⁸⁷ E-mail note, AMXLA-L-C-RU, Info: Issue [LAPCEP-SFDLR], AMC-LAO.

⁸⁸ Historical report, AMC-LAO, CY 92.

⁸⁹ E-mail note, 12 Apr 92, Mr. James for distr, sub; Kiowa Warrior, AMC-LAO.

⁹⁰ E-mail note. 25 Oct 92, Mr. James to distr, sub: MOD-ATAS, AMC-LAO.

asked TRADOC for more funding support. Meanwhile, DES executed its missions in a cost effective manner (i.e., utilizing National Guard and Army Reserve aircraft where possible). In the first six months of the fiscal year, DES expended only thirty-five percent of its budget. However, if the rate of funds spent remained constant through the rest of FY 1992, DES would have run out of money in March. An infusion of \$330,000 allowed DES to perform the balance of its remaining visits. Thirty-eight unit visits, however, had to be canceled.

The effect on the readiness and safety of Army aviation by a lack of funding was an extremely serious situation. The Aviation Center requested permission from TRADOC to be relieved from evaluation and standardization inspection of active, reserve, and guard units.⁹¹ Training and Doctrine Command denied the request, and directed DES to continue with its inspections and visits. For its part TRADOC attempted to come up with supporting funds to continue the inspection visits.⁹²

The directorate completed its FY 1993 master evaluation plan which involved a total of five branch liaison team visits to basic training sites and nine visits to selected U.S. Army Reserve Forces schools and state military academies. At least 200 hours of classroom evaluation were also included in the evaluation plan.⁹³

In past years inspections, DES had often been perceived as a threat rather than a help. Brigade commanders viewed a DES inspection as a painful experience with future careers on the line. In 1992, DES at the direction of the commanding general, dispelled these negative images. The directorate's inspections and visits were still inspections, but with a different slant. Units and especially units with new commanders were now assisted by DES in a variety of ways; coached by information gathered by DES from other visits; commanders were asked by DES to identify beforehand what areas they wanted inspected.⁹⁴

Units with new commanders were visited by DES within 120 days of assumption of command. The directorate supplied new commanders with a menu listing all areas in which DES had the responsibility to assist. The new commander in concert with DES identified the

⁹¹ Msg 0501600Z, Feb 92, Col Patrick J Bodelson to cdr TRADOC, sub: mission without resources, CG file.

⁹² Notes on oral interview by Dr. Burton Wright with Lt Col Livaudais and DES staff, 25 Mar 93.

⁹³ Memo ATZQ-ESE (1-1d) Col Edward H Littlejohn for DAC, no date, sub: master evaluation plan (RCS ATTG-45)--ACTION MEMORANDUM, DES.

⁹⁴ Lt Col Chris Sieving, "DES Report to the Field -- Mission, Process, and Product," United States Army Aviation Digest, November/December 1992, pp. 68-69.

areas within the unit that required assessment/assistance. The directorate then tailored the team to meet the needs of the unit.⁹⁵

During the year, DES was one part of a four-part team involved in the Army aviation standardization program. The principal aim of the program was to develop and train air crews capable of performing their individual and collective tasks as members of the combined arms team. The directorate was tasked by the commanding general to concentrate on the aircrew training program as well as individual crew and collective aviation tasks.⁹⁶

In an effort to streamline and simplify aviation standardization, DES sent a message to the field asking input on initiatives in the areas of pre-mission planning process, aircrew training programs, standing operating procedures, safety, and Army regulation 95 series (1,3,20,27) so that good ideas from aviation units worldwide could be used in the streamlining process.⁹⁷

The National Guard Bureau requested USAAVNC to approve a course of instruction for fixed-wing aviation training (C-12, U-21). The contract training was to be conducted under the direction of the Eastern ARNG Training Site at Fort Indiantown Gap, Pa. Initially DES disapproved the action based on an evaluation of the Flight Safety International program of instruction and mandated a series of detailed changes needed for approval. These changes were made during 1992 and DES approved the training.⁹⁸

The reserve components were assisted by USAALS' Directorate of Evaluation and Standardization (DOES). The directorate was given ten schools by TRADOC to assist in accrediting and affiliation by the directorate.

During 1992, USAALS DOES developed the maintenance test pilot standardization program for fixed wing units. Full implementation was required by September, 1993. The

⁹⁵ 1st End, Maj Gen John D Robinson to commander, Aviation Brigade, 25th Infantry Division, 21 Jul 92, sub: restructure of aviation resource management survey.

⁹⁶ Memo ATZQ-ESF (93), Maj Gen John D Robinson for distr, 1 Oct 92, sub: Department of the Army aviation standardization program and areas of interest for FY 92, DES.

⁹⁷ Msg, 301048 Oct 92, Daniel Rodebaugh for cdr, USAAVNC, sub: streamlining/simplifying of aviation standardization, training, and safety requirements, DES.

⁹⁸ Memo, NGB-AVN (95) Col John J Stanko for cdr, USAAVNC, 31 Jan 92, sub: fixed wing qualification/training for Army aviators, DES; 2nd End, ATZQ-ESP (NGB-AVN/31 Jan 92) Col Donovan R Cumbie for cdr, USAAVNC, sub: no subject, DES; 6th End, ATZQ-ESF (NGB-AVN/31 Jan 92) (95), sub: no subject, DES.

directorate conducted an internal course evaluation on advanced noncommissioned officer course field training exercises as well as on the aircraft armament maintenance technician course, AH-64 track.

The Maintenance and Test Flight Standardization Division of USAALS conducted twenty-four visits and one hundred-eight evaluations during second quarter 1992. The division also conducted twenty end-of-course evaluations. Evaluations both external and internal by the division totalled 254 for 1992. The division also supported 108 Department of the Army standardization visits in conjunction with aviation resource management surveys.⁹⁹

H. Commercial Activities and Contracting

In late 1991, the Chief of Staff, Army urged installation commanders to seek lower cost alternatives to "business as usual" and directed maximum use of competition based on cost within the private sector.¹⁰⁰ The amount of funding competitively contracted by USAAVNC's Directorate of Contracting (DOC) totalled \$154,798,675. This total represented 92 percent of contracts awarded.

One example of competitive bidding was a contract for the transport and process of waste oil. This was the first time in seven years that this particular contract was awarded on the basis of competitive bidding. No appreciable savings resulted from this action, but the precedent for more competitive contracting was established.¹⁰¹

In response to the Army chief of staff's directive, USAAVNC prepared two simplified cost comparison studies in January 1992 for the Directorate of Engineering and Housing--one on boiler plant operations and the other on refuse collection. The study for boiler plant operations was canceled in October because in-house estimates did not meet the required cost threshold to pursue competition with the private sector. The most efficient organization developed by the management study for boiler plant operations was implemented through attrition.¹⁰² The refuse collection study was canceled in November 1992 because of section

⁹⁹ Historical report, USAALS DOES, CY 92.

¹⁰⁰ Message, HQDA, 132015Z Dec 91, sub: commercial activities cost competitions, DRM.

¹⁰¹ Information paper, Nomination for the FY 92 Barbara L. Jones Award (28 Jan 92), DOC.

¹⁰² Management Study for Boiler Plant Operations certified by Garrison Commander on 7 Jul 92, DRM.

312, FY 1993 DOD Authorization Act, which placed a one-year moratorium on the award of new contracts resulting from commercial activity competitions.¹⁰³

Due to environmental management requirements to close the on-post landfill, a new method of refuse collection was required for FY 1993.¹⁰⁴ To implement the requirements DOC calculated that new refuse collection equipment and an off-post landfill would be required.¹⁰⁵

During the year, one new support contract worth \$11.9 million was awarded to UNC Aviation services to provide initial entry rotary wing flight training. The contract was based on training 2,500 students during the first six months of the contract. Burnside-Ott, the former flight contractor, became a subsidiary of UNC Aviation Services and continued to operate as before. The contractor was required to provide classroom and flight instruction for eleven separate courses.¹⁰⁶ The DOC exercised options on previously awarded contracts for: aircraft maintenance; C-12 initial qualification training; fixed wing multi-engine qualification course; refuel/defuel services; and operation, maintenance, and repair of the aerial gunnery range.¹⁰⁷

The Aviation Center's Directorate of Contracting was one of the first TRADOC installations to participate in an electronic data interchange pilot program. The electronic data interchange provided enhanced possibilities for purchases of small value contracts.¹⁰⁸

¹⁰³ Message, HQDA, 162025Z Nov 92, sub: one year moratorium on commercial activities contracting, DRM.

¹⁰⁴ Management Study for Refuse Collection certified by Garrison Commander on 7 Aug 92, DOC.

¹⁰⁵ Historical report, DRM, CY 92.

¹⁰⁶ Contract No. DABT01-92-C-005, rotary wing, to include limited fixed wing, flight training services, UNC Aviation Services, Fort Rucker, Alabama, DOC; Army Flier, 6 Mar 92; E-Mail note, PolivkaP to all cdrs/dirs, 6 Mar 92, sub: new flight training contract, Chap IV file.

¹⁰⁷ SF 30, Modification of Contract, 1 Oct 92, Dyncorp, Num DABT01-88-C-3000, operation to extend the term of the contract for FY 1993, DOC; SF 30, modification of contract, 1 Oct 92, Flightsafety International, Inc, Num DABT01-90-C-0031, to exercise the option of FY 93, DOC; SF 30, modification of contract, 1 Oct 92, Flightsafety International, Inc, Num DABT01-90-C-0034, to exercise the option for FY 93, DOC; SF 30, modification of contract, 1 Oct 92, Sikorsky Support Services, Inc, Num DABT01-90-C-0209, DOC; Historical report, DOC, CY 92.

¹⁰⁸ Information paper, Nomination for the FY 92 Barbara L. Jones Award, p. 3, DOC.

I. Construction and Physical Plant Improvements

The Directorate of Engineering and Housing (DEH) planned 226 individual construction projects with an estimated cost of \$11,582,902.00 in 1992, and the Job Order Contracting Branch contracted a total of \$350,448 worth of projects.¹⁰⁹ Major construction projects contracted for by either Fort Rucker's DEH or the Mobile District, Corps of Engineers, totalled \$6,798,592.35 for 1992.

At the end of 1992, more than 4,000 work requests remained unfilled because loss of DEH personnel forced postponement of many requests. Lack of funds and personnel also hampered the preventive maintenance program.¹¹⁰

Four U.S. Army Reserve centers were added to DEH's responsibility for upkeep and construction -- two at Montgomery, one at Opelika and one at Tuskegee.¹¹¹ This brought the total number of centers serviced to fifty-four. Two additional centers being built in Mobile and Vicksburg fall to DEH for support when completed.¹¹² Responsibility for providing some funding support for reserve centers was transferred from DEH to the 121st U.S. Army Reserve Command while contracting support remained with DEH.¹¹³

Working in conjunction with the garrison commander's office, DEH executed eight domestic action programs construction projects. Since the directorate continued to be responsible for construction support for Camp Shelby in event of mobilization, DEH personnel attended a mobilization conference at Camp Shelby, Mississippi, 12-13 December 1992 to coordinate support requirements for any future contingency.¹¹⁴

¹⁰⁹ List of construction projects for FY, 92, DEH; Job order contracting, FY 92, DEH; Historical report, DEH, CY 92

¹¹⁰ Notes on oral interview by Dr Burton Wright with Col Robert B Gatlin, Director, DEH, 30 Mar 92, oral history file.

¹¹¹ Memo AFRC-AAL-EN (420), Col H Inge Waddle for cdr, U.S. Army Infantry Center, 13 Apr 92, sub: transfer of real property responsibility, DEH.

¹¹² Notes on oral interview by Dr. Burton Wright with Col. Robert B. Gatlin, Director, DEH, 30 Mar 93, oral history file.

¹¹³ Historical report, DEH, CY 92; notes on oral interview by Dr. Burton Wright with Col. Robert B. Gatlin, Director, DEH, 30 Mar 93, oral history file.

¹¹⁴ Historical report, DEH, CY 92.

Final construction work during the year was completed on the \$15 million family support complex which housed the new child care center, chapel complex, and family life center. Two new general officer quarters were built by DEH in 1992--one for the deputy commanding general at 43 Red Cloud Road and the other for the commanding general, U.S. Army Safety Center at 47 Red Cloud.¹¹⁵

During 1992 the DEH finalized the area development plan. A total of seventy WWII temporary buildings approximating 280,000 square feet were to be destroyed when new facilities laid out in the area development plan were constructed in 1994 and 1995. The new soldier support center was planned as a 130,000 square foot building intended to house twenty-three activities that currently occupy twenty-six WWII buildings scheduled for demolition. The 560 personnel occupying these buildings would be relocated to the new center.

The new aviation training and combat development center was estimated to cost \$22 million and would release forty-four buildings for replacement, and relocate approximately 930 personnel to the new facility. The area development plan coordinated the design and location of these new facilities as well as detailed plans for locating utility upgrades, roadways, parking, and landscaping.¹¹⁶

The 46th Engineer Battalion completed twenty-seven construction projects. Two nonappropriated fund projects and three domestic action board projects were also completed by the battalion. The total value of these projects was \$354,316 and involved 26,164 man hours. Eight projects completed for USAAVNC's DEH involved unit funds and were valued at \$18,174.¹¹⁷

One of the important funding projects planned for in 1995 by DEH was the construction of the aviation training and combat development center. In a 9 September 92 message, TRADOC announced the withdrawal of funds for the training and combat center. The Aviation Center requested that FY 1995 funding be restored on the basis that the facility can accommodate 927 personnel from eighteen separate post activities and eliminate forty-four

¹¹⁵ PHONECON, Mr. Bill Wells, DEH Plans and Operations Division, 8 Apr 92; The project began on 22 Apr 1977, Program, ribbon cutting ceremony for service member support complex, Ft Rucker, 17 Jan 92, Chap IV file; Army Flier, 13 Mar 92; Program, dedication - main post chapel complex, 4 Mar 92, Chaplains Office.

¹¹⁶ Msg. 280805Z, Feb 92, Lt Col William Norton to cdr, USAAVNC, sub: area development plan, CG File; Army Flier, 13 Mar 92.

¹¹⁷ Historical report, DEH, CY 92.

temporary WWII era buildings with a considerable saving in heating, cooling, and upkeep.¹¹⁸

Cairns Army airfield was given a \$1.0 million facelift in 1992 with money provided by TRADOC from year end funds. The renovations completed at Cairns included a refurbished VIP lounge, new windows, and exterior insulation.¹¹⁹

J. Safety, Security, and Legal Services

In early 1992, the commanding general highlighted his desires that Army aviation place a stronger emphasis on risk assessment and risk management. The large number of aviation accidents during Desert Shield/Desert Storm underscored the necessity to take a penetrating look at how risks are managed in the U.S. Army.

Because flying was a high risk environment, its continuous assessment was vital to keep class A accidents to a minimum. As of June 1992, eighty-four class A through C aviation accidents had occurred of which 17 were class A. The class A accidents caused nine fatalities. When compared with the thirty seven fatalities in FY 91, the number nine seemed to be a distinct improvement, but nine was too many to Army aviation leadership.¹²⁰

Of the seventeen Class A accidents, nine were as a result of human/crew error. These errors were divided into four basic categories: standards failure where standards were not clear or did not exist; training failure or standards existed but were not known ; leader failure or standards were known but not enforced; and individual failure or standards were known but not followed. Seventy-three percent of the forty overall accidents analyzed were caused by individual failure.¹²¹ Risk, therefore, had to be managed more effectively.

Risk management was a process that enabled leaders to make good decisions in a logical manner; a five-step building block process that was easily integrated into any decision making process, ie., FM 101-5: Staff Organization and Operations. Risk assessment was a

¹¹⁸ Msg 242000Z Sep 92, Maj Gen John D Robinson to cg TRADOC, sub: aviation training and combat development center, CG file.

¹¹⁹ Army Flier, 25 Nov 92.

¹²⁰ Information paper, ATZQ-S, 21 September 92, sub: aircraft accident analysis, DAC File, Chap IV.

¹²¹ Information paper, ATZQ-S, 21 Sep 92, sub: aircraft accident analysis, DAC file, chap IV.

part of risk management. There are five steps in risk management: identify hazards; assess the hazards; make a risk decision; implement the control established as a result of steps one through three; and supervise.¹²²

To determine more about why risk assessment and risk management were not being used more often in Army aviation a process action team was chartered by the USAAVNC Chief of Staff "to examine the issue of why lip service [was] being paid to risk management by aviation units..."

The team developed a survey that was calculated to determine true attitudes about risk and what was being done about it. The data revealed no particular surprises. A majority of the units felt that they were being effective as far as risk management was concerned. Yet, only 15 percent of the respondents had any formal risk assessment training. The team concluded that there was no intent to evade the rules of risk, but what was being done, however much it was believed to be doing the job, was not based on a true understanding of the problem or how to address it. In short, aviation personnel needed formal training so that all could understand risk.¹²³

During 1992, USAAVNC aircraft alone flew a total of 294,222 hours or 21 percent of the Army's total flying hours with a 4.5 percent of the Army's class A aviation accidents.¹²⁴ In the area of motor vehicle and job safety, the cumulative rate of accidents of either type per million miles at Fort Rucker was .46. The TRADOC ceiling for this type of accident was 1.68 per million miles.¹²⁵ In the area of military disabling accidents, USAAVNC experienced .11 accidents per 200,000 man hours. The TRADOC ceiling in 1992 was .163 per 200,000 man hours.¹²⁶ These low accident ratings at Fort Rucker were a product, in part, of the Aviation Branch Safety Office's work in stressing flying and personal safety throughout the year.

The ability to know what weather might occur during flight was an important part of safety. On 10 August, Fort Rucker's weather station inaugurated an automated weather

¹²² Flightfax, December 1991.

¹²³ Memo, ATZQ-S, Ronald Cox to DAC, 18 Mar 92, sub: process action team final report--ACTION MEMO, DAC files, chap IV.

¹²⁴ Historical report, ABSO, CY 92.

¹²⁵ Briefing slide, sub: Army Motor Vehicle Accident Rate, ABSO.

¹²⁶ Briefing slide, sub: Military Disabling Injury Rate, ABSO.

distribution system. The system cost \$260,000 and was funded by the U.S. Air Force. Pilots now had access to up-to-date weather information before take-off.¹²⁷

During the year, the aviation safety team of the U.S. Army Research Institute Aviation Research and Development Activity (ARIARDA) tested an exportable crew coordination training package. This research focused on identifiable error patterns of flight operations that could be corrected through improved crew coordination training. ARIARDA developed thirteen observable qualities of crew coordination which enabled instructor pilots to focus on specific deficiency areas and initiate training improvements.¹²⁸

Testing at Fort Rucker demonstrated that when combined with flight training, this program significantly improved cockpit performance. A field test was conducted in August 1992 using the 5th and 9th Aviation Battalions, 101st Aviation Brigade. The results showed a significant reduction was achieved in human error chains that often caused accidents. The training program package was formally adopted in November, 1992.¹²⁹

Helmet mounted displays (HMD) were being examined for Army aviation during the year. The Army Research Institute conducted an experimental investigation using the Simulator Training Research Advanced Test Bed (STRATA) to see if these helmet displays handicapped safe flight operations while using night vision goggles.¹³⁰

Using the STRATA's rapid prototypic utility software, the flight symbology was superimposed over a night vision goggle image. Thirty-two test aviators flew the STRATA under night conditions. The pilots were required to navigate over a route containing both ground targets and terrain obstacles. The control group used night vision goggles alone and the test group goggles with helmet displays superimposed.¹³¹

¹²⁷ E-Mail note, ATZQDPW to all cdrs/dirs, 10 Aug 92, sub: base weather station VIP open house, Chap IV file.

¹²⁸ M L Thordsen, G A Klein, and S Wolf (May, 1992), Observing Team Coordination within Army Rotary-Wing Aircraft Crews (ARI Research Note 92-40), Klein Associates, Inc. for ARI Aviation R&D Activity, Fort Rucker, AL. AD A252-234, ARIARDA; Historical report, ARIARDA, CY 92.

¹²⁹ Historical report, ARIARDA, CY 92.

¹³⁰ PHONECON with Dr. Robert Wright, ARIARDA, 31 Mar 92, support for the test came from aviation safety funding; also see, J. E. Stewart (June, 1992), A Research Prospectus for the Simulator Training Research Advanced Testbed for Aviation (STRATA), (Draft) ARI Aviation R&D Activity, Fort Rucker, AL, Historical report, ARIARDA, CY 92.

¹³¹ Historical report, ARIARDA, CY 92.

According to ARI experts the study's somewhat mixed results were caused in part by the test subjects themselves. All participants were non-AH-64 pilots and, therefore, unfamiliar with the AH-64 simulator used for the test. The pilots also tended to spend as much time getting used to the system as looking through the night goggles with or without HMDs.¹³²

The Aviation Center also monitored the development of a cable warning system for Army helicopters. This system provided aircraft with a one kilometer warning of energized high tension wires which had been a major cause of catastrophic aircraft accidents. Tests demonstrated that this device had the capability to reduce the number of class A accidents.¹³³

The TRADOC command safety officer, Mr. George W. Morgan, visited USAAVNC in December 1992 and was briefed on a potential safety problem involving instructor pilots. As budgets shrank, the number of students to be trained lowered significantly. New instructor pilots were laid off, forcing more senior pilots to move into different aircraft. Instructor pilots were less effective during these transition periods, and operated at a slower pace to match the reduced skill levels. Retraining of instructor pilots on some aircraft took as long as six months to complete. These resulted in fewer students being trained. The safety director for TRADOC recommended that the cost of reduction be fully covered.¹³⁴

As a result of the crash of a Department of Energy helicopter in Nevada in 1991, the Directorate of Evaluation and Standardization was tasked in 1992 to provide subject matter assistance to advise the security helicopter review team from Department of Energy headquarters. Three directorate experts traveled to various locations around the country and reviewed safety programs (i.e., airspace management, crew endurance, obstacle avoidance, refueling, and risk assessment) used by Department of Energy aviation facilities with recommendations transmitted to the Department of Energy at the conclusion of the evaluation.¹³⁵

¹³² PHONECON with Dr Dennis K Leedom, ARIARDA, 31 Mar 93.

¹³³ Msg, 291730Z Jul 92, cdr USAROSG to cdr USAAVNC (ATZQ-CG), sub: cable warning system for Army helicopters, Chapter IV File.

¹³⁴ Memo ATOS-A (385-95), George W Mortan to cg, 30 Dec 92, sub: flight training decrement at Fort Rucker, CG file.

¹³⁵ Memo ATZQ-ESF, Col Donovan R Cumbic to cdr, USAAVNC, 20 Feb 92, sub: executive summary of the Department of Energy security helicopter review team, DES.

Safety was woven into the development of new aviation technology. Upon the initiative of the commanding general, USAAVNC, a representative of the Army Safety Center was added to the new training helicopter source selection evaluation board.¹³⁶

The Directorate of Engineering and Housing's safety responsibilities in 1992 included fire safety, and work with hazardous materials. The Fire Prevention and Protection Division provided hazardous materials training to Fort Rucker organizations. During the year, fire safety personnel responded to 3,264 flight emergencies, an increase of seventeen over 1991, and extinguished thirty-seven fires, an increase of one over 1991. One major hazardous materials fire occurred on 7 October when a large fuel tanker truck caught fire causing one fatality.

Fire safety for children was a part of the Fire Prevention and Protection Division's safety program during 1992. A total of 3,833 children from pre-school age to the sixth grade were trained using the fire escape house facility. Two hundred forty-eight adults were also given similar training.¹³⁷

During 1992, the administrative law division of the Staff Judge Advocate provided 415 written opinions regarding interpretation of laws and regulations affecting installation operations. The division continued to implement a long running program barring undesirable individuals from post and streamlined the system to provide quicker responses to requests for expulsion. The division also implemented a youth assistance program to deal with juvenile misconduct on post. Fifty-nine youth cases were adjudicated during the year.¹³⁸

Fort Rucker's military police activity investigated 457 non-felonious crimes and closed 441 of them during 1992 and fifteen absent without leave personnel were returned to military control. The military police activity continued its support of the drug abuse education program by providing briefings to 120 students at the Fort Rucker elementary school.¹³⁹ The activity was also asked by TRADOC to provide one narcotics detection team to support U.S. customs.¹⁴⁰

¹³⁶ Memo ATZQ-TDS-SM (70-17d), Col James W Beauchamp for cdr, USAAVNC, no date, sub: response to CG's inquiry - new training helicopter and safety, DOS.

¹³⁷ Historical report, DEH, CY 92.

¹³⁸ Historical report, SJA, CY 91.

¹³⁹ Historical report, MPA, CY 92.

¹⁴⁰ Msg RR 271301Z Oct 92, cdr TRADOC to cdr USAAVNC, sub: Army counter drug support, CG file.

The Security Division coordinated operational security reviews of twenty-six documents and reports, maintained accreditation of 555 automated information system used to process sensitive or classified information, processed 402 requests for personal security investigation, conducted 3,220 local records checks, validated 3,956 security clearances, administered the revocation or denial of eight security clearances, obtained or validated 850 clearances for warrant officer appointments, verified ENTNAC completion for 622 soldiers attending MOS training, conducted ninety-two compliance inspections, coordinated forty-seven foreign visit requests involving seventy-three foreign visitors, and presented operational security training to 1,520 military and civilian employees.¹⁴¹

The Directorate of Combat Development's Threat Security Office evaluated for content a total of three field manuals and training circulars during 1992. The office also interfaced directly with the AIRNET/SIMNET facility and the aircraft survivability equipment trainer program to provide threat expertise in the designing of the training simulations. As the aviation center's threat expert, the Threat Support Office provided input to the multi-command Manual 3-1, Volume II, Threat Reference Guide and Countertactics (U). During the year, more than fifteen threat briefings were given by the office to various groups on post.¹⁴²

The Administrative Law Division of the SJA provided 415 written opinions regarding aspects of the law and regulations governing installation operations. The division also dealt with a total of fifty-nine cases of juvenile misconduct during 1992. The Contract Law Division of SJA reviewed and processed 227 contract actions involving \$200 million. The division also researched and wrote legal opinions, cure notices and other actions supporting the U.S. government in protests filed with the federal court during 1992.¹⁴³

The SJA's claims division completed 3,860 personal claimant and potential claimant interviews which was an increase of 1,200 over 1991. The office also conducted 6,685 inspections, investigations, and telephone consultations. Personnel claims totalled \$712,899 and tort claims \$58,692. In addition \$424,127 was recovered from various actions involving

¹⁴¹ Historical report, DPTMSEC, CY 92.

¹⁴² Historical report, DCD, CY 92.

¹⁴³ Historical report, SJA, CY 92.

medical care recovery, property damage recovery, and household goods recovery from carriers.¹⁴⁴

The Legal Assistance Division provided legal assistance to 5,633 personnel during 1992, and during income tax preparation time, the division assisted in filing 778 soldier income tax returns.¹⁴⁵

The Military Justice Division tried seven courts-martial and also prosecuted all traffic offenses and misdemeanors committed on Fort Rucker which totalled 1,341 tickets and six jury trials. Fines totalling \$38,945 and assessments of \$3,005 were collected. Personnel from the division also served as recorders on five officer elimination boards and prepared all the necessary paperwork for memoranda of reprimand, and congressional inquiries.¹⁴⁶

K. Medical and Dental Support

Loss of personnel in drawdowns affected the dental activity during 1992. The 1992 authorization of thirteen dental officers was expected to be cut to nine by the latter part of 1993. The thirty-one per cent decrease in staff was not matched by a similar decrease in military personnel at Fort Rucker. Also, the elimination of a slot in pediatric dentistry degraded the capability of the dental activity to care for the children of active duty personnel.¹⁴⁷

Lyster Army Hospital was also affected by the drawdowns, causing considerable concern for its commander, Col. Robert J. Kreutzmann. Hiring freezes reduced the capacity of Lyster to meet current needs and expand the Gateway to Care program. This impacted heavily on nursing schedules because with fewer nurses available, hours and demands rose to higher levels.

¹⁴⁴ Memo for Record, undated, sub: monthly report, SJA; Personnel claims status report, Office 241, 1 Oct 92, SJA; Affirmative Claims Status report, 24 Sep 92, SJA; Historical report, SJA, CY 92.

¹⁴⁵ Legal assistance operations, 1992, Office: Fort Rucker, SJA; Memo, Lt Col Phillip Kennerly to Office of the Judge Advocate General, 28 May 92, sub: After-action report on tax assistance, SJA; Historical report, SJA, CY 92.

¹⁴⁶ Statistics for 1992, undated, SJA; Historical report, SJA, CY 92.

¹⁴⁷ Msg, 181700Z Jun 92, Col Robert L Childress to cdr TRADOC, sub: Fort Rucker Dental Care, CG file.

During 1992 the hospital was forced to accept priority placement program employees at two grades higher than table of distribution and allowance authorizations. As a result, finite health care dollars were not only used to pay for inflated grades, but also for up to sixty days of living expenses during initial assignment. There was also a long waiting period for these PPP individuals to return from overseas.

Rates for CHAMPUS were reduced by fifteen percent. Many physicians in partnership with Lyster had already agreed to accept between 65 and 75 percent of allowable rate. This trend impacted adversely on radiology, obstetrics, gynecology and other services at Lyster.¹⁴⁸

In spite of the cuts, Lyster sought to provide quality health care to the Fort Rucker military community. To be more responsive to the needs of the active duty community, Lyster hospital extended its sick call hours. Soldiers and their dependents now had three instead of two separate times during the day when they could see a physician. The extra hours were intended to reduce waiting time for families and soldiers who came to the emergency room after hours for routine care or minor illnesses.¹⁴⁹

Lyster Army Hospital was built in 1968 with only a minor renovation in 1984. In 1992, \$100,000 was provided by Health Services Command to renovate patient rooms and suites as well as other parts of the hospital. On the second floor thirty-three patient rooms were refurbished with new floors, some repainting, and new wallpaper.¹⁵⁰

Patient rooms were not the only Lyster renovation project completed during the year. An ambulance service building to house emergency medical personnel and their equipment was completed at a cost of \$130,000. The new 1,500 sq. ft. building provided classroom facilities to train emergency personnel and allowed them to remain close to their emergency vehicles while attending training sessions. Living quarters were included in the building so that emergency personnel would be able to respond more quickly.¹⁵¹

¹⁴⁸ Msg 181400Z May 92, Col Robert J Kreuzmann to cdr, TRADOC, sub: Army Medical Care, CG file.

¹⁴⁹ Army Flier, 24 Jan 92.

¹⁵⁰ Army Flier, 6 Mar 1992.

¹⁵¹ Dothan Eagle, 15 Apr 92.

L. Contingency Operations

Since the termination of Operation DESERT SHIELD/DESERT STORM, the Army spent considerable time compiling important "lessons learned". In a letter to General Frederick Franks, Maj. Gen. Robinson, USAAVNC commander outlined the lessons from aviation's point of view.

Army aviation provided the mobile support for early arriving units. In fact, the only significant anti-tank protection for XVIII Airborne Corps were its attached AH-64 battalions. Apaches and other army helicopters confirmed the concept of air maneuver as part of the combined arms team. Such concepts needed to be institutionalized and reflected in Army doctrine. The command, control, communication, and intelligence (C3I) systems were inadequate to handle high tempo conflict in the third dimension. Sustainment of committed forces including Army aviation was a continual problem. Aviation repair and logistical support units were not organized to provide twenty-four hour sustainment. The sustainment phase of the operation owed such success as it had because of the commitment of National Guard and Army Reserve combat support and combat service support forces.¹⁵²

The Aviation Center was notified in late 1992 that the individual mobilization augmentee allocation to Fort Rucker was to be reduced from 112 to 40. The Center replied that reducing the allocation below eighty-two would adversely impact key programs at Fort Rucker and lengthen the mobilization response time in case of an emergency. The eighty-two required spaces included sixty-three in the USAR Aviation Training Brigade (Augmentation), labeled as "among the best examples of total force integration in the Army." These soldiers, it was asserted, were fully integrated into the training system at the Aviation Center. The nineteen additional required spaces were aligned against requirements in the SJA, Chaplaincy, logistics, and training; they would be required early in the mobilization process, and their positions could not be readily filled by other Army personnel.¹⁵³

During 1992, Fort Rucker continued to practice for any contingency operation or mobilization. On 13 June 1992, Fort Rucker was host for a Reserve component unit mobilization conference for units that were scheduled in the event of notification to mobilize

¹⁵² Ltr, Maj Gen John D Robinson to General Frederick M Franks Jr, Jan 92, CG file.

¹⁵³ Msg 121730Z Nov 92, cdr USAAVNC to cdr TRADOC, sub: reduction in individual mobilization augmentee allocation, CG file.

at USAAVNC.¹⁵⁴ As 1992 ended, Fort Rucker hosted the 2d Army commander, Lt. Gen. Ebbesen, and briefed him on how USAAVNC would function as a mobilization station in the event of emergency or contingency operations.¹⁵⁵

Bravo Company, 46th Engineer Battalion was deployed to Arizona to support Joint Task Force Bravo in anti-drug operations on the U.S.-Mexican border. During this contingency operation Army engineers repaired and upgraded border roads totalling twenty-eight miles. These roads were used by law enforcement officials to interdict drug trafficking.¹⁵⁶

Some drug interdiction operations took place in Honduras and involved the Aviation Center. The 128th Aviation Brigade requested the assignment of UH-60M models in lieu of the UH-1V models they had been flying. The Black Hawk carried far more passengers during MEDEVAC missions than the UH-1V. It also operated in the sometimes difficult flying conditions in the country.¹⁵⁷ The 128th Aviation Brigade also recommended the permanent stationing of four CH-47D aircraft in Honduras in order to maximize safety, training, and preclude continual and expensive rotations of aircraft to and from Honduras.¹⁵⁸

During the summer months, both the 46th Engineers and the 2-229th deployed from Fort Rucker on contingency training missions or to take part in various operations such as

¹⁵⁴ Memo, Col Ralph J W K Hiatt to distr, 8 Apr 92, sub: Fort Rucker reserve component unit mobilization conference, 11 June 1992; Memo, Col Ralph J W K Hiatt to distr, 8 Apr 92, sub: Memorandum of instruction - reserve component unit mobilization conference, 13 June 1992, DPTMSEC.

¹⁵⁵ Memo, Col David W Swank to distr, 16 Nov 92, sub: Memorandum of instruction - mobilization station mission briefing for the 2d U.S. Army commander -- Lt. Gen. Ebbesen, DTPMSEC.

¹⁵⁶ Historical report, 1st Aviation Brigade, CY 92; E-Mail note, WachutkaS to BaileyR, 22 Sep 92, sub: update, Chap IV file; Army Flier, 8 Jan 93.

¹⁵⁷ Fact Sheet, 128th Aviation Brigade to cdr, USAAVNC, Nov 92, purpose: to recommend permanent assignment of three UH-60M to 4-228th Avn Bn in support of JTF-B, Chapter IV File.

¹⁵⁸ Fact Sheet, 128th Aviation Bde to cdr, USAANVC (ATCQ-TDA), 18 Nov 92, purpose: to recommend permanent assignment of four CH-47D's to 4-228th Avn Bn in support of JTF-B, Chapter IV File.

Fuentes Camino 92.¹⁵⁹ Fort Rucker personnel also prepared to take part in Joint Chief of Staff Exercise Prime Directive 92.¹⁶⁰

Hurricane Andrew

Units of the 1st Aviation Brigade were sent to south Florida to support the relief effort in the wake of the devastation caused by Hurricane Andrew. Both of 1st Aviation Brigade's FORSCOM battalions (2-229th Attack Helicopter Battalion and 46th Engineers) deployed elements to Dade County (Florida) to assist in relief work.¹⁶¹

The 2-229th departed for Florida on 29 August and returned 23 September 1992.¹⁶² Initial elements of the "Flying Tigers" departed within eighteen hours of notification and deployed 46 soldiers, 5 OH-58Cs, 3 UH-60Ls, and a mobile kitchen trailer.¹⁶³

During operations in south Florida, the 2-229th logged more than 100,000 flight hours and transported more than 150,000 pounds of cargo and 600 passengers. The OH-58C aircraft assisted relief efforts by conducting air surveys in areas inaccessible to vehicles. Ground elements of the 2-229th worked closely with the American Red Cross in relief efforts.¹⁶⁴

The 46th Engineer Battalion deployed 170 soldiers and their equipment to Dade county during September to perform projects ranging from restoring electrical power to

¹⁵⁹ Memo, Col David W Swank to distr, 31 Aug 92, sub: POR processing for 46th Engineer Battalion, DPTMSEC; Memo, Col David W Swank to distr, 7 Jul 92, sub: POR processing for 2-229th Attack Helicopter Battalion, DPTMSEC.

¹⁶⁰ Memo, Col David W Swank to distr, 10 Dec 92, sub: Memorandum of instruction for participation in JCS exercise PRIME DIRECTIVE 93, DPTMSEC.

¹⁶¹ Msg 242300Z Aug 92, cdr FORSCOM to USAAVNC, sub: execute order -- hurricane andrew response, CG file; Historical report, 1st Aviation Brigade, CY 92; E-Mail note, BaileyR to Robinson, 22 Sep 92, sub: emergency relief mission, Chap IV file.

¹⁶² Army Flier, 2 Oct 92.

¹⁶³ OPORD 92-08-12, 281200U Aug 92, 1st Aviation Brigade; Army Flier, 4 Sep 92.

¹⁶⁴ Army Flier, 2 Oct 92.

making buildings habitable. The battalion deployed 20 five-ton dump trucks, 6 bulldozers and 4 scoop loaders 600 miles to Homestead Air Force Base.¹⁶⁵

The 256th Signal Company also departed for Florida.¹⁶⁶ Their primary mission in Florida was to assist in the development, maintenance, and repair of air traffic control facilities at Homestead AFB and southern Florida.¹⁶⁷

Directorate of Logistics maintenance, transportation, and supply and services assistance was provided to units deploying to Miami in the wake of Hurricane Andrew. In fact, meals ready to eat were furnished to support hurricane victims during the period, 16-22 August 92. Seventy-seven line hauls were made to and from Miami between 30 August-11 September 92, carrying 1,913,975 pounds. During the period 8-10 September 1992, transportation support was provided to the 46th Engineer Battalion for movement to Davis-Monthan Air Force Base, Arizona -- 3,342,302 pounds loaded on sixty-two rail cars.¹⁶⁸

The Directorate of Contracting provided support to the 256th Signal Company and 46th Engineer Battalion as they prepared to deploy to south Florida in the wake of Hurricane Andrew. Seven contracting officers supported Fort Rucker units, and two blanket purchase agreements were prepared with on site authorization for purchases of unit supplies while units were in Florida.¹⁶⁹

Operation Restore Hope

When the national command authority made the decision to commit U.S. Army personnel to assist the United Nations in stabilizing Somalia, USAAVNC was put on the alert by the commanding general to be prepared to assist in any way.¹⁷⁰

¹⁶⁵ Historical report, 1st Aviation Brigade, CY 92; Army Flier, 4 Sep 92.

¹⁶⁶ Memo, Mr M J Wesley to distr, 10 Dec 92, sub: POR Processing for 256th Signal Company, DPTMSEC.

¹⁶⁷ Phonecon with Capt Ray, 256th Signal Company, 16 Mar 92.

¹⁶⁸ Historical report, DOL, CY 92.

¹⁶⁹ Information paper, Nomination for the FY 92 Barbara L. Jones Award, pp. 3-4.

¹⁷⁰ E-Mail note, Robinson to all cdrs/dirs, 3 Dec 92, sub: JTF Somalia requirements, Chap IV file; E-Mail note, SwankD to all cdrs/dirs, 4 Dec 92, sub: Somalia, Chap IV file; E-Mail note, SwankD to all cdrs/dirs, 17 Dec 92, sub: operation restore hope, Chap IV file.

In December, 1992, a 2-229th UH-60 helicopter and its aircrew was deployed to Somalia in support of the 10th Mountain Division.¹⁷¹ The L model UH-60 sent to Somalia was a special command and control aircraft with added communications capability to control units on the ground. The crew consisted of CWO3 James Holbrook, CWO2 Daniel G. Kennedy, Sgt. Kevin D. Self, and Spec. W. Scott Nation.¹⁷² One member of the Army Flier staff, S. Sgt. Kucharek was sent to Somalia to support the 10th Mountain Division.¹⁷³

¹⁷¹ Montgomery Advertiser, 11 Dec 92.

¹⁷² Historical report, 1st Aviation Brigade, CY 92.

¹⁷³ Historical report, PAO, CY 92.

APPENDIX I

USAAVNC ORGANIZATIONS AT FORT RUCKER¹

A. Directorate of Combat Developments (DCD)

Col. Theodore T. Sendak served as director of DCD through May, and Col. Stephen S. MacWillie was the director for the remainder of the year. Lt. Col. Harold J. Brecher was deputy director until 9 July and Col. Albert L. Patterson III was deputy director from 25 June through 31 December. Mr. Richard S. Maccabe served as technical advisor for the entire year and also as division chief for Concepts and Studies Division from 10 July through 31 December. During 1992, DCD consisted of six divisions but in October the Aviation Battle Lab Support Team was created and added to the directorate. These divisions, with their respective chiefs, during 1992 were as follows: Concepts and Studies--Lt. Col. Patrick F. Link from 1 January until 30 May, Maj. Dale F. Maddox from 1 June until 9 July and Mr. Richard S. Maccabe from 10 July through 31 December; Systems Integration and Prioritization--Lt. Col. Steven L. Remley from 1 January until 30 May and Albert E. Easterling from 1 June until 31 December; Material and Logistics Systems--Col. Robert J. H. Anderson from 1 January until 18 June, Maj. Bradley N. Rounding from 19 June until 9 July, and Lt. Col. Harold J. Brecher from 10 July through the remainder of the year; Organization and Force Development--Lt. Col. John R. Buchanan from 1 July until 31 December; Threat Office--Lt. Col. Delma C. Hendricks for the entire year; and the Program Management Office--Mrs. Maxine S. Dowling for the entire year. Col. Robert M. Stewart served as chief of the Aviation Battle Lab Support Team from its creation. As a result of the reduction-in-force, DCD lost thirteen civilian positions in 1992. The directorate strength at the beginning of the year was sixty-five civilians and sixty-three military, and at the end of the year, fifty-two civilians and sixty-six military.²

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

The brigade commander in 1992 was Col. Robert B. Bailey. The deputy commander was Lt. Col. James M. Diamond from January to June and Lt. Col. Charles H. Dove from June to December. The brigade sergeant major was Cmd. Sgt. Maj. Gary L. Wright. The

¹ Unless otherwise indicated, the missions of USAAVNC organizations in Appendix I did not change in 1992.

² Historical report, DCD, CY 92.

1st Aviation Brigade consisted of three training battalions and two U.S. Army Forces Command battalions. The training battalions and their commanders were as follows: 1st Battalion, 10th Aviation Regiment--Lt. Col. Charles F. Doroski; 1st Battalion, 13th Aviation Regiment--Lt. Col. Kerry M. Brown; 1st Battalion, 145th Aviation Regiment--Lt. Col. Mark S. Wentlent. The Forces Command battalions and their commanders were as follows: 46th Engineer Battalion (Combat)(Heavy)--Lt. Col. William F. Reyers, 1 January to 1 July, and Lt. Col. Sean M. Wachutka, 1 July to 31 December; and the 2nd Battalion, 229th Attack Helicopter Regiment--Lt. Col. William B. Bryan from 1 January to 16 July, and Lt. Col. Kenneth L. Travis from 17 July to 31 December. The 1st Aviation Brigade consisted of five battalions of twenty-four companies, two detachments, and the 98th Army Band. The permanent party personnel at the beginning of the year totaled 364 of which forty-eight were civilians, and 398 at the end of the year, of which 105 were civilians. The total number of permanent party personnel and students assigned to the brigade at year's end was 2,739. The large increase in civilian personnel was due to the integration of the Department of Enlisted Training into the 1st Aviation Brigade in March 1992 as the 2-222nd Aviation Regiment. Later in the year, the 2-222nd merged with the 1-13th into a single battalion.³ The 2-229th Aviation Regiment was presented with two campaign streamers and a Valorous Unit Citation for their performance during Operation Desert Shield and Desert Storm.⁴ The awards were presented by Lt. Gen. Gary E. Luck, commander, XVIII Airborne Corps.⁵ The Army's first Comanche helicopter company was activated at Fort Rucker during 1992. Attached to the 2-229th Attack Helicopter Regiment, it was designated as E Troop. The troop employed the OH-58D "Kiowa Warrior" to develop the initial tactics and employment techniques for the Comanche.⁶

C. Aviation Training Brigade (ATB)

The Aviation Training Brigade executed several changes in its organizational structure in 1992. A and B Companies of 1-212th Aviation Regiment were combined to form A Company, 1-212th on 22 November 1992. The combined company provided introductory rotary wing night and night vision goggle training. B and E companies of the 1-14th Aviation Regiment were combined into B Co., 1-14th to provide both undergraduate and graduate OH-

³ Historical report, 1st Brigade, CY 92.

⁴ Permanent Orders 60-11, 22 Apr 92, Valorous Unit Award, 1st Aviation Brigade.

⁵ Historical report, 1st Aviation Brigade, CY 92.

⁶ Historical report, 1st Aviation Brigade, CY 92; Army Flier, 9 Oct 92.

58A/C training. The brigade commander throughout 1992 was Col. Thomas M. Roy. The command sergeant major was Cmd. Sgt. Maj. Richard L. Jacobs until 31 October 1992 when he was replaced by Cmd. Sgt. Maj. Ronald W. Alexander. The four training battalions of Aviation Training Brigade in 1992 and their respective commanders were as follows: 1st Battalion, 11th Aviation Regiment--Lt. Col. Charles H. Dove from January through June and Lt. Col. Richard L. Gill for the remainder of the year; 1st Battalion, 14th Aviation Regiment--Lt. Col. Steven T. Cronin; 1st Battalion, 212th Aviation Regiment--Lt. Col. Harold S. Barrett from January through July and Lt. Col. Steven R. Accinelli for the remainder of the year; 1st Battalion, 223d Aviation Regiment--Lt. Col. Julius S. Scott.⁷

D. Aviation Proponency Office (APO)

The chief of Aviation Proponency from 1 January through 31 December 1992 was Lt. Col. Robert L. Johnson. The strength of office during 1992 was four officers, two warrant officers, four noncommissioned officers, and two civilians.⁸

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

There was an important addition to the directorate's mission during 1992. On 24 February, DPTMSEC was directed by the chief of staff, USAAVNC to assume the strategic planning mission for USAAVNC and Fort Rucker. Three additional spaces to support this added mission were included in the 0293 table of distribution and allowances.⁹ The director of DPTMSEC from January to August 1992 was Col. Ralph J. W. K. Hiatt, and the director from August through December 1992 was Col. David W. Swank.¹⁰ The deputy director throughout the year was Mr. Clyde S. Tullos. The eight divisions of DPTMSEC with their respective heads in 1992 were as follows: Resident Training Management Division--Ms. Mary Brown; Chief Aviation Division--Maj. David L. Rotolo; Chief, Plans, Operations, and Mobilization Division--Maj. Douglas M. Taylor to July 1992 and Maj. Ronald V. Flick July through December; Chief, Range Division--Maj. Ronnie D. Matthews; Chief, Security

⁷ Historical report, ATB, CY 92.

⁸ Historical report, APO, CY 92; PHONECON, Sgt Maj Weiss, 14 Apr 92.

⁹ Memo ATZQ-RFM (570-4g), Col Patrick J Bodelson to DPTMSEC, sub: strategic planning - vision 2000, CG file.

¹⁰ E-Mail note, Col Ralph J W K Hiatt, 4 Aug 92, sub: new director, DPTMSEC, Appendix I file.

Division--Mr. Rodney D. Logan; Chief, Training Service Center--Mr. Clarence N. O'Rear; Chief, Education Division--Mr. John W. Bush; Commander, Detachment 9, 1st Weather Group--Maj. Peter A. Morse.¹¹

F. Directorate of Evaluation and Standardization (DES)

The director from 1 January through 13 August was Col. Donovan R. Cumbie. Col. Edward H. Littlejohn assumed duties as the new director on 14 August 1992 and served in that capacity for the remainder of the year.¹² The deputy commander from 1 January to 27 February was Lt. Col. Immanuel C. Sieving III, and from 28 February to the end of the year Lt. Col. Patrick A. Schado was the deputy commander. The three divisions of DES and their respective heads were as follows: Operations and Administration--Lt. Col. Patrick A. Schado from 1 January through 27 February, Maj. Ronald H. Alexander from 28 February through 20 July, and Lt. Col. Immanuel C. Sieving III from 21 July through 31 December; Flight Standardization--Maj.(P) Walton C. Carroll from 1 January until 23 June and Capt.(P) Mark V. Evetts from 24 June through 31 December; Evaluation--Maj. Stephen F. Koach for the entire year. At the beginning of the 1992, 67 military and 19 civilians were assigned to DES and at the end of the year 58 military and 17 civilians remained.¹³

G. Directorate of Logistics (DOL)

The director of DOL in 1992 was Mr. G. J. Leavis. The deputy directors were Mr. Archie Fondren through January and Mr. Richard E. Spriggs, Sr., from February through December. The noncommissioned officer in charge was M. Sgt. James E. Long. Divided into six divisions at the beginning of 1992, the DOL was reorganized into five divisions during the year. The division chiefs were as follows: Resource Management--Mr. Joel White from January to April, CWO4 Jerry L. Lawhorn from April through September; Aircraft Logistics Management--Lt. Col. Carson R. Francis; Plans and Operations--Mr. Donald Fricks from January to September; Maintenance--Mr. Carl E. Swanstrom, Jr.; Supply and Services--Mr. William P. Treadaway; and Transportation--Mr. Benjamin C. Peoples. In October, two

¹¹ Historical report, DPTMSEC, CY 92.

¹² E-Mail note, SaylesJ to all cdrs/dirs, 28 Aug 92, sub: new director of evaluation and standardization, Chap IV file.

¹³ Historical report, DES, CY 92.

divisions (Resource Management and Plans and Operations) were reorganized into a single division designated Plans, Operations, and Resource Management Division. CWO4 Jerry L. Lawhorn served as the new division's first chief. The DOL began the year with 306 civilians and 57 military personnel and ended the year with 297 civilians and 79 military.¹⁴

H. Directorate of Engineering and Housing (DEH)

During 1992, the director of DEH was Lt. Col. William E. Norton until 25 August 1992 when he was replaced by Col. Robert B. Gatlin from 26 August 1992 to 31 December 1992.¹⁵ The deputy director for the entire year was Mr. Julian F. Botts. The six divisions of the directorate and their respective division heads in 1992 were as follows: Engineering Plans and Services--Mr. Delmer O. Owens; Engineer Resources Management--Mr. Charles A. Spencer; Operations and Maintenance--Mr. Ronald E. Leatherwood; Fire Prevention and Protection--Mr. Jerry B. Grammont; Housing--Miss Patricia Sales; and Supply and Storage--Mr. Paul C. Wheeler. The directorate totalled 478 personnel in December 1992.¹⁶

I. Directorate of Training and Doctrine (DOTD)

DOTD was originally Directorate of Training and Simulation, but was changed when a new Directorate of Simulation was created on 1 March 1992.¹⁷ At this time the simulation missions were removed from DOTD, but the remainder of DOTD missions remained essentially unchanged with the exception that most of the doctrine development for Army aviation was given to DOTD. The director from January through August was Col. Michael K. Mehaffey. On 17 August, Col. Charles M. Burke assumed duties as the director for the remainder of the year.¹⁸

¹⁴ Historical report, DOL, CY 92.

¹⁵ E-Mail note, NortonW to all cdrrs/dirs, 25 Aug 92, sub: director of engineering and housing, Chap IV file.

¹⁶ Historical report, DEH, CY 92.

¹⁷ E-Mail note, Vothw to all cdrrs/dirs, sub: new DOTD, Chap IV file.

¹⁸ E-Mail note, MehaffeM to all cdrrs/dirs, 14 Aug 92, sub: sign-off, Chap IV file; Historical report, DOTD, CY 92.

J. Directorate of Community Activities (DCA)

In January 1992, the Directorate of Personnel and Community Activities was retitled the Directorate of Community Activities due to Civilian Personnel and Military Personnel Office/Adjutant General Division becoming separate activities. In January, DCA opened its new child development center. The center was a modern facility with the capability of providing a wide range of services for the community. From January through September the director was Col. Clarence L. Belinge, and from October through December, Lt. Col. Errol C. Pratt was the director.¹⁹ The heads of subordinate offices and divisions of DCA at the end of 1992 were as follows: Assistant Director for Community Activities--Mr. Evan E. Smith, Jr.; Equal Opportunity Office--Sfc. John A. Holeva; Army Aviation Museum--Mr. R. S. Maxham; Community Recreation--Mr. J. Wade Henderson; Alcohol/Drug Abuse Prevention and Control Office, formerly Alcohol/Drug Abuse Division--Mr. Ronald R. Sorrells; Community Operations--Mr. Robert Duff; Services--Ms. Jane W. Andrews; Fort Rucker Dependent Schools--Dr. Linda Stewart; Family Support--Ms. JoAnne Blanks; and Marketing--Ms. Mary S. Robertson. At year's end, the directorate had 338 civilians and 7 military assigned.²⁰

K. Directorate of Simulation (DOS)

The mission of the newly created Directorate of Simulation during 1992 was to develop simulation strategies for training aids, devices, simulations and simulators, aircraft survivability equipment and the management, standardization, and quality assurance for software used in simulators. The new directorate was also the Aviation Center's proponent for new simulation concepts such as interactive software and warfighting simulation situations such as the Louisiana Maneuvers, Warbreaker and Battle Labs.²¹ The director through the first months of operation was Lt. Col. Ralph P. Aaron until August when he was replaced by Col. Palmer J. Penny, and the deputy director from inception to the end of the year was Lt. Col. Harold Thomas.²² The division heads for 1992 were as follows: Operations and Plans Branch--Maj. Dale E. Lebsack; Administration Section--Mr. Al Gibson; Training Devices Division--Mr. Hubert Pate; Aircraft Survivability Training Management Division--Mr. John

¹⁹ E-Mail note, MacdonaC to all cdns/dirs, 20 Aug 92, sub: new DCA, Chap IV file.

²⁰ Historical report, DCA, CY 92.

²¹ Historical report, DOS, CY 92.

²² E-Mail note, Majorie A Conley, 10 Aug 92, sub: new director of simulation, Appendix I file.

Hogan; Software Development and Management Division--Mr. Thomas K. Flohr; Warfighting Simulation Division--Lt. Col. George Welch.²³ At the end of the year a total of sixty personnel--thirty-two civilians, eleven officers, eight warrant officers, and nine enlisted personnel--were assigned to DOS.²⁴

L. Noncommissioned Officer Academy (NCOA)

During 1992 the NCOA reorganized under USAAVNC Reg. 10-1 with the addition of a new development cell directly under the commandant's office. This new section developed and wrote aviation specific lesson material, reviews, and adapted U.S. Army Sergeants Major Academy material for NCOA needs.²⁵ The commandant of the NCO Academy from 1 January 1992 to 15 July 1992 was Cmd. Sgt. Maj. Melvin P. Taylor. The commandant from 16 July 1992 to year's end was Cmd. Sgt. Maj. Ronald L. Moore. The assistant commandant from January through September was 1st Sgt. Leon M. Holland and from October through December M. Sgt. Robert L. Prueter served in that position. The Advanced Noncommissioned Officer Course chief was M. Sgt. Joseph W. Kelly from January through May and Sfc.(P) Patrick Kohler from June through December. The Basic Noncommissioned Officer course chief was M. Sgt. Robert L. Prueter from January through September and Sfc. Raymond Lopez from October through December. The development cell chief, from its inception in March through December, was M. Sgt. Ronnie L. Williamson. At the beginning of the year there were thirty-four military and five civilian personnel assigned. At the end of the year there were forty-one military and four civilian personnel assigned. One civilian slot was vacant as a result of the civilian reduction-in-force and several military slots were gained with the inception of the academy's new development cell. The academy instituted the William T. Butts Award for leadership in November 1992 with the support of the NCO Association. This award was presented to one student in each cycle who best exemplified the principles of duty, honor, and devotion to country as determined by both his peers and small group leaders.²⁶ The biannual accreditation of the NCOA concluded in February 1992 with no shortcomings for the third consecutive evaluation--a distinction no other academy has achieved. The Aviation Center NCOA received very high marks for quality of training and

²³ E-Mail note, Capt Kern E Mosher, 27 Feb 92, sub: activation of directorate of simulation, Appendix 1 file.

²⁴ Historical report, DOS, CY 92.

²⁵ Memo ATZQ-NCA (10-5a), Cmd Sgt Maj Ronald L Moore for DRM, 14 Oct 92, sub: organization and functions manual, USAAVNC Regulation 10-1, NCOA; Historical report, NCOA, CY 92.

²⁶ Historical report, NCOA, CY 92.

living conditions. The evaluation concluded with a recommendation that TRADOC continue to accredit all Fort Rucker NCOA courses.²⁷

M. Directorate of Civilian Personnel (DCP)

Mr. Lynden H. Rosenberry remained as the director of civilian personnel for the entire year. The divisions of the directorate and their respective chiefs during 1992 were as follows: NAF Personnel--Mr. John Arnold; Position Management and Classification--Mr. Wayne Griffin; Management and Employee Relations--Mrs. Dorothy Parrish; Technical Services--Mr. George M. Brawley; Training and Development--Mr. Fred Smith; and Recruitment and Placement--Mrs. Gennie Weiss.²⁸

N. Office of the Inspector General (IG)

Lt. Col. Charles L. Gant served as inspector general from January until June, and Maj. William S. Ewell for the remainder of the year. Major David Pruitt was the Chief of Assistance/Investigations Branch from January until March, and Maj. William S. Ewell from April until June. This position was vacant for the remainder of the year even though M. Sgt. Deborah L. Seimer (the NCOIC) fulfilled its responsibilities. The Chief of the Inspection Branch was Mr. Keith A. Jack for the entire year. The strength figures for the IG were seven military and three civilians at the beginning of the year and six military and four civilians at the end of the year.²⁹

O. Staff Chaplain Office

The installation staff chaplain during 1992 was Chaplain (Col.) Marvin K. Vickers, Jr., and Chaplain (Lt. Col.) Ervin L. Shirey, Jr., served as operations and support chaplain for half the year and was replaced by Chaplain (Maj.) Henry B. Moreau. Sister Mary C. Kavanaugh served as the Catholic religious education director, Mr. Louie Reynolds was the

²⁷ Historical report, NCOA, CY 92; "Evaluation Summary," USAAVNC NCOA, 6-10 Feb 92, NCOA.

²⁸ Historical report, DCP, CY 92.

²⁹ Historical report, IG, CY 92.

Protestant director, and Sfc. Terry Floyd was the NCOIC for the activity. There were thirteen chaplains and nine chaplain assistants assigned during the year.³⁰

P. Office of the Staff Judge Advocate (SJA)

Lt. Col. Phillip L. Kennerly was the Staff Judge Advocate for the entire year and Maj. Milton C. Spaulding was the deputy director. Personnel strength of the SJA office was thirty personnel throughout the year.³¹

Q. Public Affairs Office (PAO)

Lt. Col. Gerard J. Hart served as the public affairs officer throughout the year. Ms. Patricia S. Kitchell remained as the editor of the U.S. Army Aviation Digest. M. Sgt. Daniel Coberly, S. Sgt. Jay C. Mathews, Sgt. Michael Kucharek and Spec. Susan Bouchard were awarded command information awards of excellence by U.S. Army Training and Doctrine Command for their contributions to the redesign of the Army Flier format. The PAO office also received the TRADOC communities of excellence award for 1992 in the large installation category.³²

R. Aviation Branch Safety Office (ABSO)

The safety manager for the year was Mr. John T. Persch. Mr. Ronald Cox was president of the Aircraft Accident Investigation Board for 1992. In recognition of Aviation Branch Safety Office's work in the area of safety, USAAVNC received a plaque from the National Highway Traffic Safety Administration for achieving more than seventy percent post wide use of seat belts.³³

³⁰ Historical report, Chaplain, CY 92.

³¹ Historical report, SJA, CY 92.

³² Historical report, PAO, CY 92; Msg R 150800Z Oct 92, cdr TRADOC to AIG 7432, sub: TRADOC communities of excellence award winners, CG file.

³³ Historical report, ABSO, CY 92.

S. Internal Review and Audit Compliance Office (IRAC)

The internal review officer for 1992 was Mr. Woodrow J. Farrington. Mr. H. Vance Haney served as chief of the Internal Review Branch and Mr. Don W. Phillips as chief of the Audit Compliance Branch. The office was staffed with eight civilians throughout the year.³⁴

T. Equal Employment Opportunity Office (EEOO)

Mr. James W. Harris was the equal employment opportunity officer for 1992. Other key EEO Office personnel included the following: Affirmative Employment Program manager and Black Employment Program manager--Mr. Lawrence DeRamus; Federal Women's Program manager--Ms. Johnnie Early; Hispanic Employment Program manager (collateral duty)--Ms. Miriam Ray; equal employment opportunity specialist--Ms. Ruby J. Warren; and information system management specialist (changed to Equal Opportunity Assistant in November)--Ms. Marcia Smith. There were five permanent civilian employees and one Department of the Army intern at the beginning and at the end of the year.³⁵

U. Directorate of Contracting (DOC)

The director in 1992 was Mr. Peter C. Polivka. The directorate was organized into four divisions, which, with their respective chiefs during 1992, were as follows: Contracting--Mrs. Gloria G. Wheeler; Contract Administration--Mr. Allen Wagstaff; Purchasing--Mrs. Nelda B. Livesay; and Support--Mrs. Carol Wrinn. In its support of Army reserve centers, DOC assumed responsibility for eight contracts and five letters of authorizations from Fort Benning. The total number of reserve centers served by the DOC rose from twenty-six in 1991 to thirty in 1992. Lyster hospital transferred its professional service contracting from Health Services Command to DOC. The two requirements Lyster transferred in 1992 were orthopedic surgery and nursing services.³⁶ The directorate ended 1992 with a total personnel

³⁴ Historical report, IRAC, CY 92.

³⁵ Historical report, EEOO, CY 92.

³⁶ Nomination paper, Nomination for the FY 92 Barbara L. Jones Award, DOC.

strength of forty-three, an increase of one from 1991.³⁷ The DOC won the Barbara L. Jones Memorial Award for FY 1991 as the best Directorate of Contracting in TRADOC.³⁸

V. Directorate of Resource Management (DRM)

Two functions (accounting and disbursing) of the Finance and Accounting Division were transferred to the Defense Finance and Accounting Service in December 1992. Lt. Col. John A. Whitson served as director of Resource Management until 13 June 1992. Maj. Stephen D. Milburn arrived on 24 August 1992 to serve as director and was promoted to the rank of Lieutenant Colonel on 15 October 1992.³⁹ Mr. Hugh M. Weeks was deputy director and served as acting director prior to the arrival of Maj. Milburn. At the end of 1992, DRM consisted of five divisions. These divisions and their respective chiefs were as follows: Finance and Accounting--Maj. Robert J. Miks; Cost and Management Analysis--Mr. James H. Woodard; Force Management--Mr. Howell Flowers; Program and Budget--Mr. Floyd Rogers; Total Quality Management Resource--Mrs. Hazel Odom. At the beginning of 1992, DRM's strength stood at 186 appropriated fund and eleven nonappropriated fund employees assigned and ended the year with 147 appropriated fund and ten nonappropriated fund employees. The decrease resulted from the absorption of DRM's accounting and disbursing operations by the Defense Finance and Accounting Service.⁴⁰

W. Aviation Branch Historian Office

Dr. John W. Kitchens served as Aviation Branch command historian for the entire year, and Dr. Burton Wright III, as deputy command historian. The office strength was three civilians and one military at the beginning of the year, and three civilians at the end of the year.

³⁷ Historical report, DOC, CY 92.

³⁸ Memo ATZQ-C (715), Peter C Polivka for cdr, TRADOC, ATTN: ATBO-ACR, Col O Wayne Downhour, sub: The Barbara L. Jones memorial award for fiscal year 91, DCD.

³⁹ E-Mail note, WeekH to all cdrs/dirs, 28 Aug 92, sub: new DRM, Chap IV files.

⁴⁰ Historical report, DRM, CY 92.

X. U.S. Air Traffic Control Activity (USAATCA)

A major effort was initiated in 1992 to fragment Army air traffic control among several USAAVNC directorates to provide a better service to USAAVNC and the U.S. Army. After an in-depth manpower survey and extensive mission analysis a decision was rendered by the USAAVNC commander to retain the activity as the U.S. Army's centralized manager for air traffic control. In conjunction with this decision management layers were abolished in the Air Traffic Control Management and Development Office and the Mobile Maintenance Division resulting in downgrading three supervisory positions to worker level. Residual actions continued into 1993 to complete the reorganization effort. Manning levels remained unchanged except for the loss of one civilian position; USAATCA strength at end of 1992 was four officers, two warrant officers, fifteen enlisted personnel, thirty-one civilians, and two reserve component positions. Lieutenant Colonel Stewart was replaced as director by Mr. Francis N. Anderson on 8 September. The activity Sergeant Major position formerly held by Sergeant Major Wilkins was redesignated as a staff position.⁴¹

Y. Directorate of Information Management (DOIM)

During 1992, DOIM was realigned from U.S. Army Information Systems Command to the Aviation Center and the U.S. Army Training and Doctrine Command. When the Army field printing plant was placed under the control of the Defense Printing Service, DOIM was tasked to control funding and approve all printing requests for Fort Rucker. Additionally, functions and resources of the Student Text Issue Facility were transferred from 1st Aviation Brigade to DOIM effective 1 October 1992.⁴² Lt. Col. Alan R. Levy was the director from 1 January to 2 July 1992. The acting director from July to October was Mr. John G. Dyess.⁴³ From October 1992 to the end of the year, Mr. Floyd O. Leighton II assumed the duties of director. Mr. James E. Clements was the deputy information systems manager through 15 June 92. The four divisions of DOIM and their respective chiefs during 1992 were as follows: Operations Division--Mr. Louis E. Boothe; Support Division--Mr. John G. Dyess; Information Center--Mr. J. L. Weeks to 8 October 1992, and Mr. Harold E. Helms to the end of the year. DOIM began the year with an assigned strength of twenty-one military

⁴¹ Historical report, USAATCA, CY 92; E-Mail note, AndersonF to all cdrs/dirs, 9 Sep 92, sub: director, USAATCA, Chap IV file.

⁴² Historical report, DOIM, CY 92.

⁴³ E-Mail note, LevyA to all cdrs/dirs, 17 Jun 92, sub: passing of the mantle, Chap IV file.

personnel and 127 civilians.⁴⁴ During 1992, DOIM experienced a sharp drop in personnel due to the realignment and reduction-in-force actions and by the end of the year strength was 109 personnel.⁴⁵

Z. TRADOC Systems Manager (TSM), Comanche

The TSM Comanche from 1 January 1991 through 17 June 1992 was Col. Stephen S. MacWillie. On 18 June, Col. Theodore A. Duck assumed the responsibilities as TSM-Comanche. His senior assistants were Mr. Glenn Harrison, Lt. Col. James M. Delashaw, Maj. George Quinn, and Maj. Steven L. Ochsner. Nine military personnel and two civilians served in TSM Comanche during 1992. Four additional "operational personnel" under TSM Comanche direction were assigned to the manufacturing contractor's facility.⁴⁶

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

Col. David F. Sale served as the TSM ATAWS director throughout the year. His senior assistants were Mr. Paul Revels, Maj. David J. L. Blinkinsop, Major Howard T. Bramblett, Maj. Alvin Abejon, Capt. Mark Swanson, CWO3 Larry Niver. During the latter part of 1992, the name of TSM ATAWS was changed to TSM Longbow to take effect during CY 93.⁴⁷

BB. TSM, OH-58D Helicopter

The manager in 1992 was Col. Ted D. Cordrey, and his principal assistants were Maj. Donald K. Saxon, CWO4 Donald A. Price, Maj. Jerry L. Cornell, Capt. Robert M. Cumbie, CWO3 Blaine D. Pendleton, and CWO3 J. M. Hardwick, Jr. The noncommissioned officer-in-charge was Sfc. Thomas W. Tompkins.⁴⁸

⁴⁴ Historical report, DOIM, CY 92.

⁴⁵ Historical report, DOIM, CY 92.

⁴⁶ Historical report, TSM Comanche, CY 92.

⁴⁷ Historical report, TSM ATAWS, CY 92; PHONECON with Mr. Paul Revels, TSM Longbow, 15 Apr 93.

⁴⁸ Historical report, TSM OH-58D, CY 92.

CC. TRADOC Project Office (TPO) Apache

The director for 1992 was Lt. Col. Alan G. Johnson, Jr.. Maj. Mike Hassel served as the assistant director for the entire year. TPO Apache continued under the supervision of TSM ATAWS during 1992.⁴⁹

DD. Military Police Activity (MPA)

On 1 September 1992, Lt. Col. Thomas N. Copeland relinquished provost marshal responsibilities to Lt. Col. Lance J. Luftman. The deputy provost marshal was Mr. Allison Hutcheson. On 1 May 1992, Capt. Jan T. Swicord assumed command of A Company, Military Police Activity from Capt. Jeniphr G. Kistaler. First Sergeant duties changed from Sfc. Thomas L. Gromley to 1st Sgt. Jerry D. Smith and on 6 April 1992 to 1st Sgt. Mark A. Connor.⁵⁰

EE. Army Career and Alumni Program (ACAP)

The mission of ACAP was to provide a quality transition experience to those being separated from military or government service and to reduce the negative effects of the draw down on future recruitment and retention. The director of ACAP from its inception to December, 1992 was Mrs. J. E. Escalfullery. Ms. Pat Adkins and Mr. Ed Brown were the transition services specialists. Ms. Renae R. Ramer was the secretary. Current strength of the office from its inception to year's end was four civilian personnel.⁵¹

FF. Office of Military Personnel/Adjutant General (OMP/AG)

Mr. M. J. Wesley served as the Adjutant General during the entire year.⁵²

⁴⁹ Historical report, TSM ATAWS, CY 92.

⁵⁰ Historical report, MPA, CY 92.

⁵¹ Historical report, ACAP, CY 92.

⁵² Historical report, OMP/AG, CY 92.

APPENDIX II

USAAVNC ORGANIZATIONS AT FORT EUSTIS¹

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

Col. William J. Blair served as assistant commandant and Mr. Rodney Schultz, as deputy assistant commandant in 1992. Sgt. Maj. Alan J. Gott served as USAALS' sergeant major throughout the year. CWO4 James R. Barrett, Jr., was the safety officer, and Mr. Michael Walsh served as the threat advisor from January through August. Mrs. Phyllis Schultz coordinated protocol activities throughout the year. Mrs. Linda Mitchell coordinated historical and public affairs assignments from January through June and Sfc. Marcos Meza, for the remainder of the year. The USAALS organizational structure changed in June, 1992. The Departments of Attack Helicopter Training, Aviation Systems Training, and Aviation Trades Training were placed under USAALS DOTD. A Training Operations Division and Training Plans Division (TPD) were created and also placed under DOTD. The Department of Advanced Aviation Logistics Training was eliminated as a separate department and placed under USAALS DAST. This realignment gave USAALS a basic organizational structure of three directorates, three departments, and two offices. In January 1992, USAALS' authorized military and civilian strength was 884. A reduction-in-force was conducted during the year and by December the authorized strength had decreased to 836.²

B. Program Management Office (PMO)

Maj. Frank J. Stashak served as chief of the office throughout the year. Other key personnel included M. Sgt. Randy M. Horsely, M. Sgt. Bobby Warren, Mrs. Billie L. Summerford, and Mrs. Linda A. Mitchell. The total strength of the office was seventeen at the beginning of the year and sixteen at the end of the year.³

¹ Unless otherwise indicated the missions of USAALS directorates/departments did not change during 1992.

² Historical report, USAALS, CY 92.

³ Historical report, USAALS PMO, CY 92.

C. Department of Aviation Trades Training (DATT)

From January through June, Lt. Col. Wilcox was the department director, from June until December, Maj. Richard Caniglia replaced Lt. Col. Wilcox. Mr. William Eustis, the department deputy director retired and was succeeded in September by Mr. Richard Jackson. During the first quarter of 1992, Sgt. Maj. Kinzer, Chief of the Structures and Pseudraulics Division, was transferred to a new position and replaced by M. Sgt. Karl Moody. CWO4 Evan Strawbridge was succeeded by Sfc. Walker as NCOIC of Aviation Life Support Equipment Division (ALSE) in July; Sgt. Maj. Buchanan, NCOIC of Propulsion and Powertrain Division was succeeded by Sfc. Kevin Spruel in August, and M. Sgt. Garcia, NCOIC of Electrical and Electronics Division was succeeded by M. Sgt. Behny. As of 31 December assigned personnel strength of USAALS DATT was 134, eighteen less than the authorized strength of 162. The department's authorization in 1991 was 208 personnel.⁴

D. Department of Advanced Aviation Logistics Training (DAALT)

On 1 August, DAALT was eliminated as a separate department of USAALS and became the Advanced Aviation Logistics Division within DAST.⁵

E. Department of Attack Helicopter Training (DAHT)

Lt. Col. Mark S. Jones was director until 15 May when he was replaced by an interim director, Mr. Tom P. Hall until 16 June when Maj. John E. Decker became the new director. On 1 August Sgt. Maj. Gary L. Freeman was replaced as DAHT sergeant major by Sgt. Maj. Edward L. Wall. On 1 June, under the realignment of USAALS departments and divisions, the Aircraft Armament Division which had been under DATT was assigned to DAHT. The number of divisions of DAHT increased from three to four. The department as a whole was realigned under control of DOTD.⁶

⁴ Historical report, USAALS DAAT, CY 92: also see, John W. Kitchens, USAAVNC Annual Command History (U), 1 January to 31 December 1991. (Fort Rucker, AL, 1992), p. 112.

⁵ Historical report, USAALS DAST, CY 92.

⁶ Historical report, USAALS DAHT, CY 92.

F. Directorate of Evaluation and Standardization (DOES)

Lt. Col. Douglas A. Cahill was the director until May 1992 and Maj. Russell Stansifer was the acting director for the remainder of the year. The chief of the Evaluation Division was CWO4 George S. Hrichak, and the chief of the Maintenance Test Flight and Standardization Division was Maj. James Fitzpatrick from January through March 92. From March to May, Maj. Russell Stansifer was the chief, and from May until December, CWO4 Ruffin Moore was acting chief. The NCOIC of the division was Sfc. Class Robert Zagarello until April when Sfc. Daniel T. Wyffels became the NCOIC for the remainder of the year. At year's end, the strength of USAALS DOES was nineteen, four less than in 1991.⁷

G. Leader Development/Personnel Proponency Office (LD/PPO)

Maj. Guy A. Wills was chief LD/PPO until 17 July 1992 when he was replaced by Maj. William M. Gavora. CWO4 Milton L. Ford, Sgt. Maj. Rufus L. Stills, and Mr. James N. McFadden remained as proponency managers throughout 1992 for career management field 67 Warrant Officer MOS 151A (Aviation Maintenance Technician), Enlisted (Aircraft Maintenance), and civilian career management field 93 (Aircraft Maintenance) respectively.⁸

H. Department of Aviation Systems Training (DAST)

Lt. Col. Alan D. McKeag was DAST director until 30 June when he was replaced by Mr. Kenny Deskins until 15 August. Lt. Col. William C. Townsend, Jr. became the director on 16 August and served in that capacity for the rest of 1992. The department sergeant major was Sgt. Maj. Eugene R. Rossner. The department strength at the beginning of the year was 242 and 217 at the end of the year.

On 1 August, the Department of Advanced Aviation Logistics Training was reorganized and became the Advanced Aviation Logistics Division within DAST. The former director of Advanced Aviation Logistics Training Sgt. Maj. Edward A. Wall was reassigned to the Department of Attack Helicopter as the department sergeant major.

⁷ Historical report, USAALS DOES, CY 92; also see, John W. Kitchens, USAAVNC Annual Command History (U), 1 January to 31 December, 1992. (Fort Rucker, AL, 1992), p. 113

⁸ Historical Report, USAALS LD/PPO, CY 92

The six respective division and their chiefs were as follows: On 1 September, Sfc. Thomas L. Gaither became the chief of Advanced Aviation Logistics Division; Maintenance Management Division--Maj. James L. Brook until 29 June and Capt. (P) Robert S. Saunders for the remainder of the year; Officer Professional Development Division--Maj. Joseph H. Stribrny until 29 June and Maj. Robert W. Haynie for the remainder of the year; Utility Helicopter Division--MSG Larry L. Watson until 15 November and Sgt. Maj. Gary L. Freeman for the remainder of the year; Cargo Helicopter Division--M. Sgt. (P) Jack M. Johnson until 21 April and Sgt. Maj. William G. Williams for the remainder of the year; Fixed Wing Division--Sfc. Larry M. Grogan for the entire year.⁹

I. Directorate of Training and Doctrine (DOTD)

Beginning in November 1992 the DOTD assumed direct oversight of the total training mission of the USAALS. The DOTD completed reorganization on 1 November 1992 with three training departments and two divisions. During CY 92, Col. Dennis W. Healy continued to serve as the Director of DOTD. The Deputy Director, DOTD through 1992 was Mr. David M. Lamb. Sgt. Maj. Willie E. Robertson was DOTD Sergeant Major throughout the year. From January through October 1992 Mr. William H. Zinn served as the Chief, Distributive Training Division and then from November through December 92 as the chief of the newly organized TPD. From 1 January thru 17 May 92, Maj. Tommy F. Orr served as Chief, Resident Training Division at which time Mr. Matthew S. Maney became chief thru October 1992; then from November thru the remainder of the year, Maj. Maney became chief of the newly organized Training Operations Division. The Training Analysis Division (TAD) chief was Maj. Amparo T. McKissick from January thru 2 February 1992. Mrs. Irene Hill became chief, TAD until it was absorbed by TPD on 1 November 1992.¹⁰

J. Directorate of Combat Developments (DCD)

With the movement of organizational documentation personnel authorizations to the Combined Arms Support Center, Fort Lee, Virginia, that function was phased out of the USAALS' combat development mission. Mandated personnel cuts also forced elimination of the one remaining Threat Office authorization in October 1992 and therefore eliminated that

⁹ Historical report, USAALS DAST, CY 92.

¹⁰ Historical report, USAALS DOTD, CY 92; E-Mail note, BlairW to Robinson, 16 Sep 92, sub: sit rep - DOTD staff realignment, Chap IV file.

function from the directorate's mission. Col. Robert B. Kean and Mr. Robert E. Howard served as director and deputy director respectively throughout the year. The directorate's four subordinate divisions with their respective chiefs were as follows: Concepts and Studies--Maj. John Kane throughout the year; Material Logistics Systems Division--Maj. John Tryon from January through June, and Major William Savora from July through December; Test and Evaluation Division--Maj. Al Yeske throughout the year; and Organization and Personnel Systems Division--Mr. Tom Reichert (acting chief) throughout the year.¹¹

¹¹ Historical report, USAALS DCD, CY 92.

APPENDIX III

TENANT ORGANIZATIONS AT FORT RUCKER¹

A. U. S. Army Aviation Technical Test Center (ATTC)

The commander from 1 January through 25 August was Col. John A. Hagan, and the commander for the remainder of the year was Col. Joseph L. Bergantz. The technical director was Mr. Jim McCrory and the directorate/division heads for 1992 were as follows: Airworthiness Qualification--Lt. Col. Marvin L. Hanks; Flight Systems--Lt. Col. Daniel Adee; Management, Plans and Operation--Maj. Wade H. Brinson until 18 June 92 and Lt. Col. John V. R. Redington for the remainder of the year; Technical Test Support and Logistics--Maj. Robert L. Waters until 18 June 92 and Lt. Col. Wade H. Brinson for the remainder of the year. The manpower authorization at the end of fiscal year 1992 were 40 officers, 12 warrant officers, 71 enlisted personnel, and 170 civilians. The workforce of the ATTC was augmented by 210 contractor personnel during fiscal year 1992. The annual operating budget for fiscal year 1992 was \$36.0 million. This was an increase of \$1.1 million over the FY 91 budget. The increase represented depot level repairable funding.²

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

The ARIARDA chief in 1992 was Mr. Charles A. Gainer. Other key personnel were Maj. Dale S. Weiler, Maj. William C. Barker, Dr. Dennis K. Leedom, Mr. Gabriel P. Intano, Dr. Dennis C. Wightman, Dr. Robert H. Wright, Dr. John A. Dohme, Dr. John E. Stewart, and Dr. William R. Howse. At the beginning of the year, ARIARDA's strength was twenty-one personnel, and by 31 December, strength had fallen to sixteen personnel.³

C. U.S. Army Aeromedical Center (USAAMC)

Col. Robert J. Kreutzmann was the Aeromedical Center commander throughout the year. The deputy commander for clinical services was Lt. Col. Jerry W. Hope from January through June and Lt. Col. Warren S. Silberman for the remainder of the year. The deputy

¹ Unless otherwise stated, the missions of USAAVNC tenant organizations did not change in 1992.

² Historical report, ATTC, CY 92.

³ Historical report, ARIARDA, CY 92.

commander for administration was Col. Otha G. Miles until July and Lt. Col. Tommy W. Mays for the remainder of the year. Lt. Col. Kevin Mason was the director of the U.S. Army Aeromedical Activity until July and Col. James Zarinczuk to December. Maj. Lynele Rockwell served as chief of preventive medicine for 1992. The deputy commander for veterinary services was Col. William B. Smith.⁴

D. Detachment 1, 14th Flying Training Wing, Air Training Command

Captain Joseph Torsani III was the detachment commander throughout the year. The strength of the detachment at the end of 1992 was one officer, one enlisted.⁵

E. Test and Evaluation Coordination Office (TECO)

TECO was originally tasked to provide coordination between USAAVNC and elements of the Operational Test and Evaluation Command on matters pertaining to tests and evaluations, but that mission was expanded in 1992 to include the Aviation Logistics School, the U.S. Army Chemical School and the U.S. Army Military Police School. The Chief of TECO during 1992 was Lt. Col. Lawrence A. Tessier. At the end of the year, he was replaced by Maj. F. Stephen Duke.⁶ Strength of TECO during 1992 was one officer, two NCOs, and one civilian.⁷

F. Multi-Media Branch, Directorate of Army Aviation and Safety, National Guard Bureau

The chief of the branch was Lt. Col. William W. Shawn, and the assigned strength for 1992 was five National Guard military technicians and one civilian employee.⁸ During 1992, the Multi-Media Branch obtained funding for a 2,480 square foot television studio attached to the existing facility. Four functional areas of the existing facility were also

⁴ Historical report, USAAMC, CY 92.

⁵ Historical report, Det 1/14 FTW, CY 92.

⁶ Historical report, TECO, CY 92.

⁷ Phonecon, Maj. Duke, TECO, 12 Apr 93.

⁸ Historical report, Multi-Media Branch, CY 92

approved for renovation. The total cost of the construction project was \$234,000, and another \$200,000 was spent for studio equipment such as television cameras, pneumatic pedestals, and supporting production equipment. During the year, the branch completed fifty-two major productions and reproduced 48,490 minutes of television programs.⁹ A total of 900,500 pieces of printed materials involving posters, risk assessment cards, training schedule cards, and crack-and-peel stickers for the annual Safe-Guard and Safe-Flight safety countermeasure programs were provided to fifty-four states and territories in support of their aviation and general safety programs.¹⁰

G. U.S. Army Safety Center (USASC)

Brigadier General Dennis Kerr commanded the center in 1992. The deputy commander was Col. William Stolarcek until June 1992 when he was replaced by Col. Herman S. Heath. Sergeant Major David Kuhns departed in February 1992 and was replaced by Cmd. Sgt. Maj. designate Samuel Reynolds. Until June 1992, the major subordinate elements of the Safety Center with the respective directors were as follows: Directorate of Systems Management--Col. Herman S. Heath; Directorate of Media Management and Production--Mrs. Mary Windham; Directorate of Investigations and Operations--Col. Brock Wells; Directorate of Information Technology--Mr. Willard F. Darrow; and Directorate of Doctrine, Training, and Evaluations--Mr. James T. Lopez. In June 1992, the Commanding General directed a major reorganization, based on total Army quality principles. This reorganization resulted in the division of Safety Center functions into two major subdivisions and one office; Programs Division, headed by Col. Brock Wells; and Information and Systems Technology, under Dr. James Hicks. A management office headed by Mr. Bob Williamson was created to centrally manage manpower resources and money. The Safety Center's assigned strength throughout 1992 was sixty-four military personnel and eighty-nine civilians. USASC was able to meet manpower reductions levels without a reduction-in-force.¹¹

⁹ DD Form 2054/2, Audiovisual (AV) Annual Production and Library Report; Historical report, Multi-Media Branch, CY 92.

¹⁰ Historical report, Multi-Media Branch, CY 92.

¹¹ Historical report, USASC, CY 92.

H. Army Material Command Logistic Assistance Office (AMC LAO)

The AMC LAO chief during 1992 was Mr. Bernard James. Assigned strength of the office was reduced from fifteen at the end of 1991 to seven by December 1992.¹²

I. Total Army Warrant Officer Career Center (WOCC)

The mission of the Warrant Officer Career Center was to act as the executive agent for warrant officer professional development in the U. S. Army. The charter of the center specifically required that it conduct all common warrant officer training courses, and identify, develop and export common core material for inclusion into the continued professional development of the Army's warrant officers. The center's first and also its director throughout 1992 was CWO5 David E. Helton. The commandant for 1992 was CWO5 James R. Damron.¹³

¹² Historical report, AMC-LAO, CY 92; Phonecon with Mr. James, AMC-LAO, 5 Apr 93.

¹³ Historical report, WOCC, CY 92.

APPENDIX IV

LIST OF APPENDED DOCUMENTS

The following list comprises most of the documents collected by the Aviation Branch historians relative to CY 1992. The documents are located in the archives of the Branch History office (building 5306). The documents in the archives are organized, for the most part, according to provenance, i.e., the directorate/office from which the documents were obtained; this list is similarly organized. Some documents were collected by the historians individually and from various sources. These are organized by the chapter of the 1992 history to which they relate. Some of the documents in this list are not cited in the 1992 annual history. Documents that are enclosures of other documents are filed together with the cover document and are not listed separately in this appendix.

A. COMMANDING GENERAL CORRESPONDENCE FILE

1. Msg, Cdr USAAVNC to Cdr TRADOC, 230900Z Jan 92, subj: TDA Aviation Reductions. (2 pgs)
2. Msg, Cdr AVSCOM to Cdr USAAVNC, 02200Z Mar 92, subj: AH-64 Helicopter Maintenance Allocation Chart Review. (1 pg)
3. Msg, Cdr USAAVNC to Cdr TRADOC, 011930Z Jun 92, subj: Inactivation of the 9th Army Band, Fort Rucker, AL. (1 pg)
4. Msg, Cdr USAAVNC to distr, 101429Z Jul 92, subj: Readback of Runway-hold-short Clearances. (1 pg)
5. Msg, Cmnt C&GSC to Cdr USAAVNC, 091200Z Aug 92, subj: Presidential Commission on Assignment of Women in Armed Forces Testimony. (3 pgs)
6. Msg, Cdr FORSCOM to Cdr USAAVNC, 242300Z Aug 92, subj: Execute Order, Disaster Relief. (4 pgs)
7. Msg, Cdr USAAVNC to Cdr USAIC, 021330Z Mar 92, subj: 498th Medical Company Air Ambulance, Ft. Benning, GA. (1 pg)
8. Msg, Cdr USAAVNC to Cdr TRADOC, 280805Z Feb 92, subj: Area Development Plan. (1 pg)
9. Msg, Cdr USAAVNC to Cdr AVSCOM, 021000Z Mar 92, subj: Pilot's User Review of AH-64A Operator's Manual and Checklist. (1 pg)
10. Memo, Lt. Col. Charles Gant to CG, USAAVNC, 29 Apr 92, subj: General inspection of Directorate of Contracting. (2 pgs)
11. Memo, Col. Patrick J. Bodelson to DPTMSEC, 24 Feb 92, subj: Strategic Planning - Vision 2000. (1 pg)
12. Msg, Cdr TRADOC to AIG 7432, 150800Z Oct 92, subj: TRADOC Communities of Excellence Plaque Winners. (1 pg)

13. Msg, Cdr TRADOC to Cdr USAAVNC, 271301Z Oct 92, subj: Army Counter Drug Support. (1 pg)
14. Msg, Cdr TRADOC to Chief of Staff, 181600Z Nov 92, subj: Army Career and Alumni Program. (1 pg)
15. Msg, Cdr FORSCOM to Cdr USAAVNC, 271600Z Feb 92, subj: Aviation Maintenance. (2 pgs)
16. Msg, Cdr USAAVNC to Cdr TRADOC, 242015Z Feb 92, subj: Area Maintenance Supply Facility. (2 pgs)
17. Msg, Cdr USAAVNC to Cdr TRADOC, 251550Z Feb 92, subj: Fuel Storage Tanks. (3 pgs)
18. Msg, Cdr USAAVNC to Cdr TRADOC, 0501600Z Feb 92, subj: Mission Without Resources. (4 pgs)
19. Msg, Cdr TRADOC to Cdr USAAVNC, 101315Z Feb 92, subj: Inactivation of 98th Army Band, Fort Rucker, AL. (1 pg)
20. Msg, Cdr USAAVNC to Cdr TRADOC 071400Z Feb 92, subj: MTOE Stationing Review. (3 pgs)
21. Msg, Cdr USAAVNC to Cdr TRADOC 181700Z Jun 92, subj: Fort Rucker Dental Care. (2 pgs)
22. Msg, Cdr USAAVNC to Dir, SLA, Fort Belvoir, 140900Z Jan 92, subj: Need for More Expeditious Response to Quality Deficiency Reports. (2 pgs)
23. Msg, Cdr USAAVNC to Cdr TRADOC, 131608Z Feb 92, subj: Need for Decision on Funding for Safety of Use Parts Replacements. (2 pgs)
24. Memorandum of Agreement between USAAVNC and Project Manager, JCALS, 28 Mar 92. (4 pgs)
25. Msg, Cdr USAAVNC to Cdr TRADOC, 181400Z May 92, subj: Army Medical Care. (5 pgs)
26. Msg, Cdr USAAVNC to Cdr USACAC, Ft. Leavenworth, 222100Z Jun 92, subj: Army Airspace Command and Control. (1 pg)
27. Msg, Cdr USAAVNC to Cdr TRADOC, 071800Z Apr 92, subj: Inactivation of the 9th Army Band. (2 pgs)
28. Memo, Lt. Col. Robert Johnson to CG, USAAVNC, 14 Aug 92, subj: Read Ahead Packet for 93B Briefing, 18 August, 1045-1145. (17 pgs)
29. Memorandum of Understanding between Alabama Department of Employment and Training and Fort Rucker and U.S. Department of Labor, Veterans' Employment and Training Service (no date). (3 pgs)
30. Msg, Cdr USAAVNC to AIG 898, 061000Z May 92, subj: Accident Prevention. (2 pgs)
31. Letter, ATZQ-AP (TAPC-CPP-D/12 Dec 91) (611-1a) 2d End, Maj. Gen John D. Robinson to Cdr TRADOC, subj: Civilian Leader Development Action Plan. (1 pg)
32. Msg, Cdr USAAVNC to Cdr AMCCOM, Rock Island, IL, 251930Z Mar 92, subj: Stock Funding of Depot Level Repairables. (3 pgs)
33. Msg, Cdr USASC to Cdr USAANVC (ATZQ-CG), 291730Z Jul 92, subj: Cable Warning System for Army Helicopters. (1 pg)

34. Fact Sheet, 128th Aviation Brigade to Cdr USAAVNC (ATZQ-TDA), purpose: To Recommend Permanent Assignment of Three UH-60Ms to 4-229th Avn Bn in Support of JTF-B. (1 pg)

35. Fact Sheet, Cdr 128th Avn Bde to Cdr USAAVNC (ATZQ-TDA), subj: Early Turn-in of the USARSO OH-58 Helicopter Fleet. (2 pgs)

36. Fact Sheet, Cdr 128th Avn Bde to Cdr USAAVNC (ATTN-TDA), purpose: To Recommend Permanent Assignment of Four CH-47D's to 4-228th Avn Bn in Support of JTF-B. (1 pg)

B. DEPUTY ASSISTANT COMMANDANT

1. DAC Responsibilities (no date). (4 pgs)

2. List, Officer's Branched into Army Aviation, Fort Benning, GA, Jan 92-Sep 92. (1 pg)

3. Memo, Brig. Gen. Robert A. Goodbarry, 1 Oct 92, subj: Aviation School Board Charter. (2 pgs)

4. Information Paper (no date), subj: Parker Aviation Unit Award. (2 pgs)

5. Memo, Brig. Gen. Robert A. Goodbarry to Headquarters, Department of the Army (ODCSOPS/DAMO-TR), 26 Aug 92, subj: The LTG Ellis D. Parker Aviation Unit Award. (20 pgs)

6. Memo, Col. Thomas W. Garrett to distr, 25 Nov 92, subj: School Board Meeting Minutes' (Fixed Wing Strategy). (3 pgs)

7. Memorandum of Agreement, U.S. Army Aviation School and U.S. Army Armor School, subj: Cavalry Board Memorandum of Agreement. (2 pgs)

8. Memorandum for Record, Col. Thomas W. Garrett, 16 Dec 92, subj: Cavalry Board Minutes. (5 pgs)

9. Memo, Col. Thomas W. Garrett to AP, 10 Nov 92, subj: Cavalry Board for 4th Quarter FY 93. (1 pg)

C. DEPUTY ASSISTANT COMMANDANT - CHAPTER I FILE

1. Memo, ATZQ-AC, Brig. Gen. Robert A. Goodbarry to HQDA-ODCSOPS, 26 Aug 92, subj: The LTG Ellis D. Parker Aviation Unit Award. (20 pgs)

2. Memo, Maj. Gen. John D. Robinson to distr, 9 Mar 92, subj: Aviation Issues Meeting Fort Rucker, Alabama, 1330-1700, 13 March 1992. (11 pgs)

3. Memo, ATZQ-CDI (70-li), Col. Theodore T. Sendak to distr, subj: Aviation Strategy Meeting. FOUO (12 pgs)

4. Memo, Lt. Col. Stephen L. Remley, (no date), subj: Aviation Strategy Meeting. (9 pgs)

5. Briefing Slides, "Commitment to Total Force Integration (AC/RC)", USAAVNC. (44 pgs)

D. DEPUTY ASSISTANT COMMANDANT - CHAPTER II FILE

1. Memo, Col. Robert N. Seigle to Maj. Gen. John D. Robinson, 10 Apr 92, subj: Women in Aviation. (18 pgs)

2. Memo, Maj. Deborah K. Ridout to DAC, 24 Aug 92, subj: Working Group to Address Women's Issues. (2 pgs)
3. Briefing Slides, "Women in Army Aviation" (no date). (24 pgs)
4. Briefing Slides, "Women in Army Aviation" (no date). (19 pgs)
5. Memo, Maj. Gen. John D. Robinson to Vice Chief of Staff Army, (no date), subj: Women in Army Aviation. (2 pgs)
6. "Aviation School Board Charter", ATZQ-DAC, 1 Oct 92. (2 pgs)
7. Memorandum for Record, ATZQ-TDI (351), 16 Feb 93, subj: School Board Meeting. (5 pgs)
8. Memo, ATZQ-ATD-C, Col. Thomas W. Garrett to distr, 25 Nov 92, subj: School Board Meeting Minutes' (Fixed Wing Strategy). (22 pgs)
9. Memorandum for Record, ATZQ-TDI (351), 28 Jul 92, subj: Monthly School Board Review. (7 pgs)
10. Memorandum for Record, ATZQ-TDI (351), 10 Jul 92, subj: Monthly School Board Review. (6 pgs)
11. Memorandum for Record, ATZQ-TDI (351), (no date), subj: Monthly School Board Review. (13 pgs)
12. E-Mail, ODOMN to DAWKINSL, 181315Z Mar 92, subj: Schoolhouse Executive Council Meeting. (2 pgs)
13. E-Mail, KONITZER to SEIGLER, 102157Z Aug 92, subj: Reorganization. (24 pgs)
14. Briefing Slides, "Training Requirements". (16 pgs)
15. Concept, "Combat Aviation Training Center", 15 Apr 91. (5 pgs)
16. Memo, Brig. Gen. Robert A. Goodbary to distr, 14 Sep 92, subj: Minutes of the Preposition Fleet Conference held 3 September 1992. (6 pgs)
17. Briefing Slides, "Prepositioning of Aircraft at the Combat Training Centers: Air Group Engagement Systems II, PM TRADE. (10 pgs)
18. Briefing Slides, "JRTC Aviation Prepo Fleet", Joint Readiness Training Center, 3 Sep 92. (7 pgs)
19. Briefing Slides, "National Training Center, Preposition Aviation Study" (no date). (15 pgs)
20. Briefing Slides, "Undergraduate Helicopter Pilot Training, ITRO Study." (10 pgs)
21. Briefing Slides, "UHPT Consolidation (DOD-IG Report)". (10 pgs)
22. Briefing Slides, "Undergraduate Helicopter Pilot Training". (6 pgs)
23. Memo, Col. David W. Swank to CG, (no date), subj: Analysis of ITRO Study Cost Report. (15 pgs)
24. Memo, Col. David W. Swank to CG, 2 Oct 92, subj: Analysis of ITRO Study Negative Comments. (15 pgs)

25. Memo, Col. Charles M. Burke to CG, 18 Sep 92, subj: USAAVNC Training Divestiture Information. (18 pgs)
26. MOA between the U. S. Army Armor School and the United States Army Aviation School, (no date), subj: Cavalry Board Memorandum of Agreement. (2 pgs)
27. Memorandum for Record, ATSB-DAS, 16 Sep 92, subj: Cavalry Board Minutes. (5 pgs)
28. Memo, Col. Thomas W. Garrett to DAC, Fort Knox, 10 Nov 92, subj: Cavalry Board for 4th Quarter BY 93. (2 pgs)
29. E-Mail, DAWKINSL to GARRETTT, 081548Z Dec 92, subj: 15 December Cavalry Board VTC Issues Summary. (5 pgs)
30. Memo, ATSB-DAC, Col. Robert N. Seigle to distr, 15 Jun 92, subj: Cavalry Board Minutes. (5 pgs)
31. Memo, ATZQ-TDM, Col. Thomas W. Garrett to Dir DOTD, 8 Dec 92, subj: 15 December 1992 Cavalry Board Issue Summary. (9 pgs)
32. Memo, Capt. Thomas A. Balish to Chief of Staff, Armor School, 7 Dec 92, subj: Cavalry Board Briefing Slides. (19 pgs)
33. Briefing Slides, "OBC Exchange", USAAVNC (no date). (14 pgs)
34. Memorandum for Record, ATSB-DAS, 24 Aug 92, subj: Cavalry Board Minutes. (5 pgs)
35. Briefing Slides, "Aircrew Selection and Classification Status", 19 Nov 92, ARIARADA. (27 pgs)
36. Memo, ATZQ-RQM, Hugh A. Weeks to CG, 21 Jul 92, subj: Charter for Executive Steering Committee for Total Army Quality -- ACTION MEMORANDUM. (1 pg)
37. Briefing Slides, "Combined Logistics Officer Advanced Course, " DOTD USAALS (no date). (8 pgs)
38. Briefing Slides, "Eastern ARNG Aviation Training Site" (no date). (19 pgs)
39. Briefing Slides, "Crew Coordination Development Plan Update" (no date). (19 pgs)
40. E-Mail, DAWKINSL to SEIGLER, 171141Z Jul 92, subj: Support for Crew Coordination Validation Test at Fort Campbell. (2 pgs)

E. DEPUTY ASSISTANT COMMANDANT - CHAPTER III FILE

1. Information Paper, ATZQ-CDM-CS, 9 Mar 92, subj: MH-47E Update. (2 pgs)
2. Information Paper, ATZQ-TD-DD, 12 Mar 92, subj: FM 1-108, Army Special Operation Aviation. (1 pg)
3. Memo, AMSAV-GD, Col. Stuart W. Gerald to Maj. Gen. John D. Robinson, 7 Jan 92, subj: AVSCOM Readiness Update to CSA. (1 pg)
4. Briefing Slides, Aviation Logistics Assessment, U.S. Army Aviation Systems Command, Jan 92. (25 pgs)

5. Msg (DRAFT), HQDA to Cdr USAAVNC, Jan 92, subj: Aviation Readiness. (3 pgs)
6. Article, "Where Have All the Man-Hours Gone?", Army Aviation, 31 Dec 91. (5 pgs)
7. Survey, Aviation Operational Maintenance Personnel Status. (3 pgs)
8. Concept Paper (DRAFT), "Aviation Branch Operations Concept", DCD, Aug 92. (58 pgs)
9. Report, "Logistics Vision in Support of Aviation", USAALS, 3 Sep 92. (24 pgs)
10. Memo, Sgt. Maj. Fredy Finch to Sergeant Major of the Army, 27 Oct 92, subj: Aviation Mechanics. (10 pgs)
11. Briefing Slides, "Logistics Vision in Support of Aviation", USAALS. (25 pgs)
12. Operational Requirements Document, "Information Fusion System for Enemy Detection (Infused), Modular Mission Payload (MMP). (7 pgs)
13. White Paper, "Unmanned Aerial Vehicle Implications in Manned Army Aircraft". (20 pgs)
14. Mission Need Statement, "Reconnaissance and Surveillance Collection", 12 May 92. (3 pgs)
15. Memo, Col. Stephen S. MacWillie to CG, (no date), subj: Recommendations of the Unmanned Aerial Vehicle Working Group -- ACTION MEMO. (8 pgs)
16. Memo, Mr. M. K. O'Connor to Mr. Jim Crook, 15 Sep 92, subj: Group I Report to the Subcommittee. (19 pgs)

F. DEPUTY ASSISTANT COMMANDANT - CHAPTER IV FILE

1. Information Paper, ATZQ-S, 21 Sep 92, subj: Aircraft Accident Analysis. (12 pgs)
2. Memo, (690-200b), John T. Persch to DAC, 14 Jan 92, subj: Chapter of the Process Action Team (PAT) -- ACTION MEMORANDUM. (3 pgs)
3. Memo, ATZQ-S, Ronald Cox to DAC, 18 Mar 92, subj: Process Action Team Final Report-- ACTION MEMO. (46 pgs)
4. Briefing Slides, "Protect the Force -- Risk Assessment and Management, "A Leader's Challenge." (25 pgs)
5. Article, "Risk Management vs. Risk Assessment: What's the Difference." Flightfax, Dec 91. (2 pgs)

G. GARRISON SUPPORT COMMAND

1. Annual Historical Report, GSC, CY 92. (1 pg)

H. DIRECTORATE OF COMBAT DEVELOPMENTS

1. Fact Sheet, ATZQ-CDO, 26 Jan 93, subj: Aviation Redesign Initiative. (1 pg)
2. Fact Sheet, ATZQ-CDO, 24 Mar 93, subj: Aviation Functional Area Assessment. (1 pg)

3. Briefing Slides, "Fixing AOE Aviation Force Structure Deficiencies, September 1992." (17 pgs)
4. Briefing Slides, "Reshaping Army Aviation 1996-2001, Design for the Future, February 1993." (62 pgs)
5. The United States Army Modernization Plan, Volume II, Annex L, Aviation, January 1993. (78 pgs)
6. 6.3A User R&D Prioritization (Feb 92). (2 pgs)
7. Briefing Slide, "Directorate of Combat Developments - 1 Jan 92." (1 pg)
8. Briefing Slide, "Directorate of Combat Developments - 31 Dec 92." (1 pg)
9. Briefing Slide, "Program Management Office." (1 pg)
10. Briefing Slide, "ORG/F Jan 92." (1 pg)
11. Briefing Slide, "OD/G Dec 92." (1 pg)
12. Briefing Slide, "Aviation Battle Lab - Support Team Organization." (1 pg)
13. The United States Army Modernization Plan, Volume 1, Executive Summary, January 1993. (82 pgs)
14. Army Aviation Modernization Plan - Briefing, "Army Aviation in the Combined Arms Team", January, 1993. (51 pgs)
15. Memo, ATZQ-TPO-A, Maj. Gen. Rudolph Ostovich to Maj. Gen Donald R. Williamson, 23 Apr 91, subj: AH-64 Shaft Driven Compressor Failures. (3 pgs)
16. Memo, Maj. Gen. Richard D. Beltson to Assistant Secretary of the Army (RD&A), 16 Dec 91, subj: Apache Helicopter Modernization Strategy -- ACTION MEMORANDUM. (10 pgs)
17. Report, Organizational Mix of Longbow Apache Aircraft, 6 Dec 91. (7 pgs)
18. Memo, ATCD-GI (70-1i), Bettie B. Gonser to Cdr USAAVNC (ATZQ-CDM-ES), 16 Oct 92, subj: Tactical Terminal Control System Operational Requirements Document. (29 pgs)
19. Memo, ATCD-MV (70), Bettie B. Gonser to distr, 10 Aug 92, subj: Operational Requirements Document for the Aviation Mission Planning System. (28 pgs)
20. Memo, ATZQ-CDM-ES, Col. Stephen S. MacWillie to distr, 23 Jul 92, subj: Approved Critical Operational Issues and Criteria for the Radar Frequency Interferometer in Support of the Milestone III Decision. (5 pgs)
21. Mission Need Statement, Aviation Electro-Optical Counter Measures. (4 pgs)
22. Operational Requirement Document, Nap-of-the-Earth Communications. (12 pgs)
23. Operational Requirements Document, Army Airborne Command and Control System. (19 pgs)
24. Briefing slides, Objectives for AH-1F Service Life Extension. (14 pgs)
25. Memo, ATZQ-CDM-C (70-1i), Col. Stephen S. MacWillie to Cdr Aviation Test and Experimentation Command (CSTE-TAV), 14 Aug 92, subj: Transmittal of Chapter One and Two of the Test and Evaluation Plan for the Force Development Test and Experimentation Phase I of the Kiowa Warrior. (66 pgs)

26. Statement of Work, OH-58D Kiowa Warrior, Force Development Test and Experimentation, Phase I, Aviation Test Bed Facility. (5 pgs)
27. Cover Sheet, DAMO-FDV, Proposed UH-60Q, Appendix 1 to the UH-60A Material Need, 2 Feb 92. (33 pgs)
28. Memo, ATZQ-CDM-C (70-1i), Maj. Gen. John D. Robinson to Cdr TRADOC (ATCD-ET), 28 Aug 92, subj: Improved CH-47 Cargo Helicopter Revised Operational Capability. (7 pgs)
29. Memo, ATZQ-CDM-C (70-1i), Maj. Gen. John D. Robinson to Maj. Gen. Larry G. Lehowicz, (no date), subj: C-XX Medium Range Utility Airplane. (8 pgs)
30. Fact Sheet, ATZQ-CDM-S, 3 Dec 92, subj: Aircrew Battle Dress Uniform two-piece flight suit. (4 pgs)
31. Operational Requirements Document (DRAFT), Aircrew Protective Mask. (27 pgs)
32. Aviation Life Support Equipment, Modernization Plan, Annex E. (17 pgs)
33. Army Modernization Plan, Aviation Supportability Branch, Material Logistics Systems Division, DCD, 1992, Appendix 3, Combat Air Crew. (5 pgs)
34. Memo, ATZQ-CDM-S (70-1i), Col. Stephen S. MacWillie to CG USAAVNC, (No date), subj: DA 2028 Changes to Common Table of Allowances 50-900 -- ACTION MEMORANDUM. (2 pgs)
35. Memo, ATZQ-CDM-S (70-1i), Col. Stephen S. MacWillie to CG USAAVNC, (No date), subj: Aircrew Integrated Ensemble -- ACTION MEMORANDUM. (11 pgs)
36. Memo, ATCQ-CDM-C (70-1i), Maj. Gen. John D. Robinson to Cdr TRADOC (ATCD-RM), (No date), subj: DA 2028 Changes to Command Table of Allowances 50-900. (4 pgs)
37. Memo, ATCQ-CDM-S (70-1i), Col. Stephen S. MacWillie to CG USAAVNC, (No date), subj: Procedural Safeguards for the Auxiliary Aviation Lighting Devices -- ACTION MEMORANDUM. (3 pgs)
38. Memo, ATZQ-CDM-S, Col. Stephen S. MacWillie to Project Manger--Soldier (AMCPM-Soldier), subj: Auxiliary Aviation Lighting Devices. (1 pg)
39. Memo, ATZQ-CDM-S, Col. Stephen S. MacWillie to Program Executive Officer Aviation (AMSAV-LFF), (No date), subj: Milestone III In-Process Review for the Life Raft and Container Assembly: Inflatable, One Man, Vee Bottom. (1 pg)
40. Memo, ATZQ-CDM-S (70-1i), Col. Stephen S. MacWillie to CG USAAVNC, (No date), subj: Blower System for the M43A1 Chemical Protective Mask. (3 pgs)
41. Memo, ATZQ-CDM-S (70-1i), Col. Stephen S. MacWillie to Cdr U.S. Army Aviation and Troop Command (AMCPM-ATC), (No date), subj: Manpower, Personnel, and Training Assessment for the Tactical Terminal Control System. (2 pgs)
42. Systems MANPRINT Management Plan, subj: Air Traffic Navigation Integration-Coordination System, 7 Dec 92. (19 pgs)
43. Systems MANPRINT Management Plan, subj: Aircrew Integrated Helmet System, HGU-56P, 7 Dec 92. (21 pgs)
44. Systems MANPRINT Management Plan, subj: Aviation Tactical Operations Center, Jun 92. (6 pgs)

45. Systems MANPRINT Management Plan, subj: Automated Intelligence Processing/Dissemination System, (No date). (11 pgs)
46. Systems MANPRINT Management Plan, subj: Tactical Data Acquisition and Correlation, Jun 92. (7 pgs)
47. Memo, ATZQ-CDM-S (70-1i), Col. Stephen S. MacWillie to Program Executive Officer, Aviation (SFAE-AV-AEC), (No date), subj: Manpower, Personnel, and Training Assessment for the Radar Warning System (APR-39A (XE-2)). (3 pgs)
48. Systems MANPRINT Management Plan, Radar Warning Receiver, 9 Dec 92. (15 pgs)
49. Systems MANPRINT Management Plan, Tactical Airspace Integration System, (No date). (12 pgs)
50. Systems MANPRINT Management Plan, AN/GRC-206(V)5, Tactical Terminal Control System. (20 pgs)
51. Means of Employment, Sep 92, subj: Aviator's Night Vision System/Heads Up Display ANVIS/HUD (CH-47). (9 pgs)
52. Memo, ATZQ-CDC-S (5), Maj. Dale F. Maddox to Chief MLSO, (ATZQ-CDM-ES), 3 Jun 92, subj: Test Support Packages for the Follow-on Operational Test and Evaluation of the Aviator's Night Vision Imaging System/Heads Up Display. (1 pg)
53. Operational Study, Scenarios and Simulation Branch DCD, (No date), subj: Utility Helicopter, UH-60, Mission Profiles/Operational Mode Summaries. (69 pgs)
54. Operational Study, Scenarios and Simulation Branch DCD, (No date), subj: Cargo Helicopter CH-47D, Mission Profiles/Operational Mode Summaries. (60 pgs)
55. Memo, ATZQ-CDM-S (71-3c), Col. Stephen S. MacWillie to distr, 1 Oct 92, subj: Approved Initial Training Test Support Package for the Follow-on Operational Test and Evaluation of the Aviator Night Vision Imaging System/Heads-up Display. (18 pgs)
56. TRADODC Document System, 16 Oct 92, subj: Organizational/Operational Concepts and MQS/QQPRI Information (Basis of Issue Narrative Guidance). (42 pgs)
57. Logistics Concepts, (No date), subj: AV/AVS-7, Head Up Display. (2 pgs)
58. Computer Printout, 28 Apr 93, subj: Table of Organization and Equipment, Air Recon Troop (OH-58D). (99 pgs)

I. DIRECTORATE OF EVALUATION AND STANDARDIZATION

1. Annual Historical Report 1992, Directorate of Evaluation and Standardization, 16 Apr 93. (6 pgs)
2. Memo CG (ATZQ-ESF) to distr, 1 Oct 91, subj: Department of the Army Aviation Standardization Program and Areas of Interest for FY 92. (7 pgs)
3. Memo, Dir DES (ATZQ-ESF) to Cdr USAAVNC, 20 Feb 92, subj: Executive Summary of the Department of Energy Security Helicopter Review Team. (2 pgs)
4. 1st End, Asst. Director of Indiv Tng (ATTG-1A) to Cdr TRADOC, subj: Department of Energy (DOE) Security Helicopter Review Team. (6 pgs)

5. Memo, Cdr ATB (ATZQ-ATB-O) to distr, 15 Dec 92, subj: New Training Helicopter Draft Memorandum of Agreement. (1 pg)
6. Msg, Daniel Rodebauch to Cdr USAAVNC, 301048, Oct 92, subj: Streamlining/Simplifying of Aviation Standardization Training, and Safety Requirements. (3 pgs)
7. Memo, Dir DCD (ATZQ-CDM-CS (70-1i) to distr, 30 Apr 92, subj: Review of APPENDIX 1, UH-60A Black Hawk Material Need, Production, Updated (NM) (P) for DUSTOFF Black Hawk (UH-60Q). (2 pgs)
8. Memo, Dir DES (ATZQ-ESF (95) to Cdr 160th Special Operations Regiment (Airborne) (AOSI-CG-AV), Fort Campbell, Ky. (3 pgs)
9. Memo, Chief, Operations and Training Division (DAMO-TRO) to Chief, Army National Guard Aviation Division, 5 Mar 92, subj: Authority to Conduct UH-60 and CH-47D Aircraft Qualification Courses at the Eastern Army National Guard Aviation Training Site. (2 pgs)
10. Memo, Maj. James Barron (ATZQ-TDI-F) to Dir DES; Cdr ATB; Cdr ETB; Dir DOTD, 21 Apr 92, subj: Non-rated Crewmember Exportable Training Package for the CH-47D, UH-1, and UH-60. (3 pgs)
11. Memo, Dir DOTD (ATZQ-TDI-F) (351c) to Dir DES; Cdr ATB; Cdr ETB; Dir DOTD, 1 Jun 92, subj: Non-rated Crewmembers Exportable Training Package for the CH-47D, UH-1, and UH-60. (3 pgs)
12. Memo for the Record, Dir DES (ATZQ-ESF (95) to DOTD, 5 May 92, subj: Review of AH-1S Aviator Qualification Course Program of Instruction and Flight Training Guide for the Western National Guard Aviation Training Site. (1 pg)
13. Memo, Col. John J. Stanko (NGB-AVN) (95) to HQ, DAMO-TRO, 31 Jan 92, subj: Fixed Wing Qualification/Training for Army Aviators. (8 pgs)
14. Project Status List, Project Management System, 1 Apr 92. (2 pgs)
15. Memo, Dir DES (ATZQ-ESE) (I-1d) to DAC, 28 Sep 92, subj: Master Evaluation Plan -- ACTION MEMORANDUM. (8 pgs)
16. Memo, Dir DES (ATZQ-ESE) to DOTD, Enlisted Tng Branch, 30 Jun 92, subj: Evaluation of Aerial Adjustment of Artillery, Enlisted Aeroscout Observer Course. (10 pgs)
17. Memo, Otis L. Johnson (ATZQ-ESE) to Cdr Eval Div, 10 Jun 91, subj: Follow-up Evaluation of the Rotary Wing Instrument Flight Examiner Course. (3 pgs)
18. Information Paper, ATTG-E, 20 Jan 93, subj: Quality Assurance Program. (5 pgs)
19. Briefing Slides (Copies), DOES Workshop, 27-29 Oct 92, subj: Reserve Component Training Institutions. (14 pgs)
20. Memo, Dir DES (ATZQ-ESE-E) to Cdr TRADOC, 31 Mar 93, subj: Interim Accreditation of the 3388th United States Army Reserve Forces School. (22 pgs)
21. Fund Status Report, DRM to Dir Eval and Standardization, 9 Oct 92. (4 pgs)
22. USAAVNC Form 71, Report of Military Manpower Utilization, Dir DES to Force Management Division, TRADOC, 6 Jan 92, subj: Supporting Information for RCS CSFOR-78. (2 pgs)
23. Aviation Digest, Nov/Dec 92 issue.

J. DIRECTORATE OF SIMULATION

1. AC Report, Aircraft Survivability Training Management Division, DOS, USAAVNC. (8 pgs)
2. Memo, CWO3 Barry Williams to Dir DOS, 3 Mar 92, subj: Trip Report--Buffalo, NY, Brigade Commander's Conference on Aircraft Survivability Equipment Trainer IV, 23-25 Feb 93. (4 pgs)
3. Memo, Lt. Col. Ralph Aaron to DOTD, ATB, DCD, DOS-TDD, TSM-OH-58, 11 Mar 92, subj: System Training Plan for the AN/APR-48 Radar Frequency Interferometer. (1 pg)
4. Memo, Lt. Col. Ralph Aaron to Cdr U.S. Army Signal Center, 11 Mar 92, subj: System Training Plan for AN/APR-48 Radar Frequency Interferometer. (1 pg)
5. Memo, Lt. Col. Ralph Aaron to Cdr U.S. Army Signal Center, 14 Mar 92, subj: Training Requirements for the AN/APR-39A(V) 2 Radar Signal Detecting Set. (1 pg)
6. Memo, CW03 Barry Williams to Dir DOS, 17 Mar 92, subj: Trip Report--St. Louis, MO, 9-10 Mar 92. (3 pgs)
7. Memo, Lt. Col. Ralph Aaron to Chief of Staff, 18 Mar 92, subj: Response to Chief of Staff Inquiry. (6 pgs)
8. Memo, Ralph Martin to Dir DOS, 2 Apr 92, subj: Multiple Integrated Laser Engagement System, Air-to-Ground Engagement Simulation II Assessment for National Training Center Rotation 92-06--Trip Report. (4 pgs)
9. Memo, Lt. Col. Ralph Aaron to Dir, CAC, Collective Training Instrumentation and Engineering Support, 10 Apr 92, subj: Draft Format for the Tactical Engagement Simulation Training System Master Plan. (1 pg)
10. Memo, Lt. Col. Ralph Aaron to Cdr U.S. Army Signal Center, 13 Apr 92, subj: Training Requirements for the AN/APR-39A(V)2 Radar Signal Detecting Set. (10 pgs)
11. Memo, CWO4 Don L. King to Dir DOS, 13 Apr 92, subj: To Attend a Briefing on the RC-12N Guardrail/Common Sensor Aircrew Training in support of Fielding the Aircraft to the 224th MI Bn. (3 pgs)
12. Memo, John F. Hogan to C, OPS, 14 Apr 92, subj: Mission Essential Task List Development. (2 pgs)
13. Memo, Lt. Col. Ralph Aaron to CG, 15 Apr 92, subj: Joint Work Group on the U.S. Army Aviation Center Aircraft Survivability Equipment Training Strategy--ACTION MEMO. (6 pgs)
14. Memo, Lt. Col. Ralph Aaron to Dir, TRADOC Analysis Command, White Sands Missile Range, 15 Apr 92, subj: Request for Approval of Study Plan for the AH-64 Integrated Crew Sustainment Training, Training Development Study. (11 pgs)
15. Memo, Lt. Col. Ralph Aaron to Chief, Integrated Logistics Support Office, U.S. Aviation Research and Development Activity, 18 Apr 92, subj: Integrated Logistic Support Plan for Aircraft Survivability Equipment/Avionics Control System. (1 pg)
16. Memo, Lt. Col. Ralph Aaron to Cdr U.S. Army Intelligence Center and School, 29 Apr 92, subj: System Training Plan for the AN/APR-39A(V)2 Radar Signal Detecting Set. (1 pg)
17. Memo, Lt. Col. Ralph Aaron to DCD, 30 Apr 92, subj: Abbreviated System MANPRINT Management Plan for AN/APR-39A(XE-2) Radar Warning Receiver. (6 pgs)

18. Memo, Lt. Col. Ralph Aaron to Cdr TRADOC, 18 May 92, subj: Approval of System Training Plan for the AN/APR-48A Radar Frequency Interferometer. (1 pg)
19. Memo, Lt. Col. Ralph Aaron to distr, 18 May 92, subj: Aircraft Survivability Equipment Trainer Software and New Equipment Training Team Plan. (11 pgs)
20. Memo, Sfc. Larry Minton to Dir, DOS, 18 May 92, subj: Trip Report--Griffiss AFB, NY, 10-16 May 92. (1 pg)
21. Memo, Capt. James Bond to Dir, DOS, 18 May 92, subj: Trip Report--Fort Irwin, CA, 12-13 May 92. (5 pgs)
22. Memo, Lt. Col. Ralph Aaron to Chief of Staff, 20 May 92, subj: Clarification and Information on Manning of Aircraft Survivability Equipment Trainer. (3 pgs)
23. Memo, Lt. Col. Ralph Aaron to Project Manager for Aircraft Survivability Equipment, 26 May 92, subj: AN/APR-39(XE2) Radar Signal Detecting Set Test and Evaluation Master Plan. (2 pgs)
24. Memo, Lt. Col. Ralph Aaron to DOTD, 1 Jun 92, subj: Doctrine and Tactics Training for AV/AVR-2 Laser Detecting Set. (1 pg)
25. Memo, Lt. Col. Ralph Aaron to distr, 8 Jun 92, subj: Training Test Support Package for the AN/APR-48A Radar Frequency Interferometer Initial Operational Test and Evaluation. (1 pg)
26. Msg. Cdr USAAVNC to distr, 061530Z Jun 92, subj: Announcement of AGES II Council of Colonels Meeting, 23 Jun 92. (2 pgs)
27. Memo, Capt. James Bond to Dir DOS, 22 Jun 92, subj: Trip Report--Fort Drum, NY, 2-5 June 92. (2 pgs)
28. Memo, Lt. Col. Ralph Aaron to Cdr U.S. Army Collective Training Instrumentation Engagement Systems, 23 Jun 92, subj: Multiple Integrated Laser Engagement System Range Extensions for Aircraft Survivability Equipment Trainer. (1 pg)
29. Memo, Lt. Col. Ralph Aaron to Project Manager for Aircraft Survivability Equipment, et. al., 24 Jun 92, subj: Draft User Evaluation Plan for the Embedded Aircraft Survivability Equipment Training Module of the Aircraft Survivability Equipment/Avionics Control System for the RC-12N. (13 pgs)
30. Memo, Lt. Col. Ralph Aaron to Commander, U.S. Army Missile Command, 26 Jun 92, subj: Operational Requirement Document for Air-to-Air Stinger Targets. (16 pgs)
31. Memo, Lt. Col. Ralph Aaron to DCD, 26 Jun 92, subj: Draft Annexes, Aircraft Survivability Equipment, weapons, Medevac, and Aviation Life Support Equipment for the Aviation Modernization Plan. (3 pgs)
32. Memo, Lt. Col. Ralph Aaron to Cdr Operational Evaluation Command, 26 Jun 92, subj: Training Solutions for the Interoperability Concerns of the AN/APR-39A(V) and the AN/ALO-136(V)l/5 on Attack Helicopters. (2 pgs)
33. Memo, Sfc. Peyton Abrams to Dir, DOS, 15 Jul 92, subj: Trip Report--Hughes Danbury Optical Systems, Danbury, CT, 6-9 Jul 92. (6 pgs)
34. Memo, Lt. Col. Ralph Aaron to Dir, DOTD, 22 Jul 92, subj: Area Weapon Scoring System. (2 pgs)

35. Memo, Capt. James Bond to Dir, DOS, 17 Jul 92, subj: Trip Report--Kelly AFB, San Antonio, TX, 14 Jul 92. (2 pgs)
36. Memo, Col. Palmer Penny to DCD, 26 Aug 92, subj: Initial Basis of Issue Plan Feeder Data and Initial Qualitative and Quantitative Personnel Requirements Information for the Detecting Set Laser: An/AVR-2A: LIN: 232430. (2 pgs)
37. Memo, Col. Palmer Penny to DCD, 3 Sep 92, subj: Amendment I Basis of Issue Plan Feeder Data and Amendment 1, Qualitative and Quantitative Personnel Requirements Information for the Detecting Set Radar Signal: AN/APR-39A (V)2, LIN: 232335, NET Plan: CEC 890013, BOIP: 86-0464-S, ICP #HO58AA. (2 pgs)
38. Memo, Capt. James Bond to Dir, DOS, 9 Sep 92, subj: Trip Report--Sierra Research, Buffalo, NY, 24 Aug-4 Sep 92. (2 pgs)
39. Memo, Col. Palmer Penny to APG, 11 Sep 92, subj: Responses to 1991 Brigade Commander's Conference Issues. (3 pgs)
40. Memo, Sfc. Larry Minton and Sfc. Peyton Abrams to Dir, DOS, 23 Sep 92, subj: Trip Report--ASE Maintenance Training Needs Assessment, Fort Gordon, GA, 31 Aug-3 Sep 92. (8 pgs)
41. Memo, S. Sgt. Douglas R. Cooke to Dir, DOS, subj: Trip Report--AN/AVR-2 and 2A, Program Review, Hughes Danbury Optical Systems, Inc., Danbury, CT, 19-21 Oct 92. (2 pgs)
42. Memo, Sfc. Peyton Adams to Dir, DOS, subj: Trip Report--Aircraft Survivability Equipment Trainer II Fielding in U.S. Army Europe. (4 pgs)
43. Memo, Col. Palmer Penny to Project Manager for Aviation Electronic Combat, 2 Nov 92, subj: Request Your Support for Aircraft Survivability Equipment Representation in Emerging Warfighting Simulations. (1 pg)
44. Memo, Sfc. Payton Abrams to Dir, DOS, 13 Nov 92, subj: Trip Report--AN/AVR-2A Engineering Change Proposal Meeting, CECOM Meeting, Fort Monmouth, NJ, 9-10 Nov 92. (3 pgs)
45. Memo, Capt. James Bond to Dir, DOS, 17 Nov 92, subj: Trip Report--NTC, Fort Irwin, CA, 28 Oct-15 Nov 92. (1 pg)
46. Memo, Mr. Robert Martin to Dir, DOS, 27 Nov 92, subj: Air Ground Engagement Simulation II First Article Test Government and Follow-on Test and Evaluation Planning Meeting and AH-64 Longbow Tactical Engagement Simulation System Meeting at PM TRADE, Orlando, FL, 23-24 Nov 92. (6 pgs)
47. Memo, Col. Palmer Penny to TSM-W, TPO-A, 9 Dec 92, subj: Multiple Integrated Laser Engagement System Air Ground Engagement Simulation II Replication of 30mm and Hydra 70 for the Apache--ACTION MEMO. (18 pgs)
48. Memo, Col. Palmer Penny to DOTD, DCD, ATB, DES, AVN PROP, 28 Dec 92, subj: Aircraft Survivability Equipment/Electronic Warfare Officers Course--ACTION MEMO. (4 pgs)
49. Annual Historical Report, SDMD, 1992. (2 pgs)
50. Msg, Cdr USAAVNC to DA, DAMO-FDV, 201525Z Mar 92, subj: U.S. Army Aviation Center Training Aids, Devices, Simulators, and Simulations and Aircraft Survivability Equipment Training Management Point of Contact. (4 pgs)
51. Memo, Lt. Col. Ralph Aaron to CG, USAAVNC, 16 Mar 92, subj: U.S. Army Aviation Center Training Aids, Devices, Simulators, and Simulations and Aircraft Survivability Equipment Training Management Point of Contact Designation -- ACTION MEMO. (1 pg)

52. Memo, Gerald La Cross to Dir DOS, 26 Aug 92, subj: Trip Report - UH-60 FS Desert Hawk Data Base Review. (13 pgs)
53. Memo, Lt. Col. Mark Russell to Cdr USAAVNC, 3 Sep 92, subj: TDY Support for the Black Hawk and Desert Hawk Flight Simulator Program. (1 pg)
54. Memo, Wanda Fuentes to Code 633, 28 Jan 92, subj: Team Members Supporting the Apache CMS BUC II in-Plant Test at Binghamton, N.Y. (2 pgs)
55. Memo, Darlene T. Barnes to Dir, DOS, 14 Aug 92, subj: Trip Report - Government Final Inspection CH47D Flight Simulator Computer Upgrade Program at Fort Hood, TX. (7 pgs)
56. Memo, Michael Edwards to Dir, DOS, 13 Aug 92, subj: Trip Report - Evaluation of Software Test Cases at Offices of Computer Technology Associates Incorporated. (31 pgs)
57. Memo for Record, Michael Edwards, 15 Sep 92, subj: Phone Conversation with Ms. Sue Ellen Sahagan-Dorland. (7 pgs)
58. Memo, Donald Ethington to Dir, DOS, subj: Review Pre-Production Support Proposals Prepared by Planning Research Corporation and Development of Project 2851 Standard DOD Simulator Digital Data Base/Common Transformation Program, 2-4 Dec 92, McLean, VA. (5 pgs)
59. Memo for Record, Thomas Flohr, 15 Mar 92, subj: Georgia Tech Selective Fidelity Conference. (1 pg)
60. Memo for Record, Thomas Flohr, 15 Sep 92, subj: Distributive Interaction Simulation Workshop. (1 pg)
61. Ltr, Norman Miller, Dir, Sales and Marketing, Software Systems to Don Ethington, USAAVNC, 1 Jun 92, subj: Invitation to attend Multi User's Group Meeting. (2 pgs)
62. Memo for Record, Thomas Flohr, 15 Oct 92, subj: Interservice/Industry Training Systems and Education Conference. (1 pg)
63. PROFFS Note, Col. Palmer Penny to ROBINSON, 064529 Oct 92, subj: Virtual Reality Workshop. (6 pgs)
64. Memo, Donald Ethington to Dir, DOS, 15 Dec 92, subj: Trip Report - Army Project Screening for FY 93 Defense Modeling and Simulation Office Research Project. (2 pgs)
65. Annual Historical Report, Warfighting Simulation Division, CY 92. (8 pgs)
66. Memo, Maj. Gen. Thomas Arwood to distr, 25 Mar 92, subj: Louisiana Maneuvers 1994. (6 pgs)
67. Briefing Slides, Louisiana Maneuvers. (25 pgs)
68. Briefing Slides, Force Structure Issues. (19 pgs)
69. Briefing Slides, TRADOC Action Plans for LAM '93. Briefing to Louisiana Maneuvers General Officer's Working Group by MG Lehowicz, 7 Dec 92. (28 pgs)
70. Aviation Test Bed (AIRNET/AVTB). (14 pgs)
71. Warfighting Simulation Division participation in Family of Simulations Conference, 27-29 Oct 92. (13 pgs)

72. Report on War Breaker. (1 pg)
73. Ltr, Maj. David Neyland to Lt. Col. Ralph Aaron, 26 Apr 92, subj: War Breaker. (1 pg)
74. PROFFS note, Robert Tanner to PULLEN, 180440 May 92, subj: E3 Demo Plan, schedule. (1 pg)
75. Preliminary Playbook for September, WAR BREAKER Phase I Testing. (25 pgs)
76. Information Paper, ATZQ-DST, 1 Jun 92, subj: USAAVNC Participation in War Breaker. (2 pgs)
77. Warbreaker/Zealous Pursuit, 8 October 1992. (3 pgs)
78. "Kanewske, Charlie", 2 Nov 12:47 U, Minutes Zealous Pursuit II. (computer scenario information) (5 pgs)
79. "tor-ruck rk-sun, 9 Nov 07:42 -0...., ZP III Outline. (computer scenario information) (5 pgs)

K. IST AVIATION BRIGADE

1. Annual Historical Report, 1st Aviation Brigade, CY 92. (2 pgs)
2. Annual Historical Report, 1-10th Aviation Regiment, CY 92. (1 pg)
3. Article, "509th Soldiers 'Do Right Thing'", Army Flier (no date).
4. Article, "Post Leaders Face Incarceration, Bail Goes to Army Emergency Relief", Army Flier (no date).
5. Article, "Brigade Makes Earth Day a Priority", Army Flier (no date).
6. Article, "Pathfinders Offer Post Land Navigation Training", Army Flier (no date).
7. Article, "Pathfinders Dip into Lake Airborne Style", Army Flier (no date).
8. Article, "C/509th Set to Compete for Badges", Army Flier, 28 Aug 92.
9. Article, "Air Assault School to Host Air Assault Challenge", Army Flier (no date).
10. Article, "NCOA Chapter Pedals to Help Family Member", Army Flier, 30 Oct 92.
11. Article, "USAAVNC Hosts 2d Annual Air Assault Challenge", U.S. Army Aviation Digest, May/June 1992.
12. Article, "Recital Series Continues at Fort Rucker", Army Flier (no date).
13. Annual Historical Report, 1-10th Aviation Regiment, CY 92. (1 pg)
14. Historical Input, 1st Quarter, 1-13th Aviation Regiment, CY 92. (4 pgs)
15. Historical Input, 2nd Quarter, 1-13th Aviation Regiment, CY 92. (3 pgs)
16. Program, Change of Command, 1-13th Aviation Regiment, 30 Jun 92.
17. Historical Input, 3rd Quarter, 1-13th Aviation Regiment, CY 92. (2 pgs)

18. Historical Input, 4th Quarter, 1-13th Aviation Regiment, CY 92. (3 pgs)
19. Program, Activation Ceremony, Headquarters and Headquarters Company, 1-13th Aviation Regiment, 15 Oct 92.
20. Article, "Company 'Decks the Halls' of Geneva", Army Flier, 4 Dec 92.
21. Article, "Halloween Means 'Horror' of Chili, Exercise for Cook-Off Participants", Army Flier, 6 Nov 92.
22. Annual Historical Report, 1-145th Aviation Regiment, CY 92. (5 pgs)
23. Annual Historical Report, 2-229th Attack Helicopter Regiment, CY 92. (14 pgs)
24. Memo, S3, 2-229th to S3 7th Ranger Regiment, 18 Nov 91, subj: Recon Team Support for 2-229th Hel Regt ARMS 19-21 Feb 92. (1 pg)
25. Article, "229th Bring Home Coveted Chennault Cup", Army Flier, 4 Sep 92.
26. Permanent Orders 60-11, 22 Apr 92, subj: Valorous Unit Award. (1 pg)
27. Brief, Hurricane Andrew OPOD 92-08-12 (U), 181200 Aug 92. (5 pgs)
28. Article, "Flying Tigers Head for Florida", Army Flier, 4 Sep 92.
29. Article, "Soldiers Receive Thanks for Help After Andrew", Army Flier (no date).
30. Article, "Flying Tigers Return from South Fla. Duty", Army Flier, 2 Oct 92.
31. Article, "Unit Activates in Support of Comanche Project", Army Flier, 9 Oct 92.
32. Article, "Fort Rucker Sends Four Soldiers to Somalia", Montgomery Advertiser, 12 Dec 92.
33. Article, "Rucker Black Hawk Crewmen Join U.S. Efforts", Dothan Eagle, 12 Dec 92.
34. Memo, Col. Thomas A. Swindell to Cdr 18th Aviation Brigade, 9 Mar 92, subj: 2-229th AHB Deployment Exercise. (12 pgs)
35. Memo, Capt. Mark W. Barefield to Cdr 2-229th Attack Helicopter, 1st Aviation Brigade, 6 May 92, subj: S-3/Safety After Action Review, EDRE Exercise, Operation Tigre Blocqueo, 1-5 May 92. (13 pgs)
36. Memo, Capt. Mark W. Barefield to Cdr 2-229th Attack Helicopter Regiment, 17 Nov 92, subj: After Action Review for Collective Training Period, 1st Quarter, FY 93. (3 pgs)
37. Memorandum for the Record, Capt. Carl L. Giles, subj: Unit Historical Notes. (2 pgs)
38. Article, "Tigers in the Field", Army Flier, 6 Nov 92.
39. Memorandum, Capt. Thomas E. Hunke, 15 Oct 92, subj: Tactical Steering Committee Observations. (4 pgs)
40. Article, "Air-to-Air II Simulates Combat for 2-229th", Army Flier (no date).
41. WARNORD 92-03, OPERATION "BENGAL CLAW" (U), 031500 Mar 92. (6 pgs)
42. Historical Input, 46th Engineers, CY 92. (6 pgs)

L. AVIATION TRAINING BRIGADE

1. Annual Historical Report, ATB, CY 92. (2 pgs)
2. Annual Historical Report, 1-14th Aviation Regiment, CY 92. (6 pgs)
3. Annual Historical Report, 1-223rd Aviation Regiment, CY 92. (3 pgs)
4. Annual Historical Report, 1-11th Aviation Regiment, CY 92. (15 pgs)
5. Memo, Howell L. Flowers to distr, 10 Aug 92, subj: Change 2 to Personnel Augmentation Requirements TDA CCNUM 0192. (2 pgs)
6. Memo, Maj. E. W. Reaves to DRM (ATZQ-RFM), 27 Jul 92, subj: Personnel Augmentation Requirements Table of Distribution and Allowances. (1 pg)
7. Memo, 3rd End, Col. Joseph W. Kuppich to Cdr USAAVNC (ATZQ-ATC-DR), 30 Jan 90, subj: Resiting of Esto Ground Controlled Approach. (82 pgs)
8. Memo, Maj. Ricky C. Smith to ATB, 1-11th (S1), 22 Jan 93, subj: S2/S3 Annual Historical Report, CY 92. (9 pgs)
9. Memo, Sfc. Dennis L. Martinez to S-1, 1-11th Avn, ATB, 25 Jan 92, subj: Annual Historical Report. (1 pg)
10. Memo, Capt. Ricky L. Burrell to Cdr 1-11th Avn, 23 Jan 93, subj: A Company 1-11th Avn, Annual Historical Report for 1992. (4 pgs)
11. Memo, Capt. Douglas A. Garmer to 1-11th Avn (S1), 13 Jan 93, subj: Annual Historical Report FY 92. (5 pgs)
12. Memo, 1st Sgt. Jerry D. Seimer to S-2/3, 1-11th Avn (Unit Historian), 15 Jan 93, subj: Annual Historical Report 1992. (3 pgs)
13. Memo, Mr. Jerry W. Byrd to Cdr C Company, 3 Dec 92, subj: ARAC Division Annual Historical Report for CY 1992. (5 pgs)

M. U.S. ARMY AIR TRAFFIC CONTROL ACTIVITY

1. Annual Historical Report, USAATCA, CY 92 (pgs)
2. Msg, Lt. Col. Robert Stewart to Cdr USAAVNC, 111505Z, Jun 92, subj: Air Traffic Control Fixed-Base Minimum Shift. (2 pgs)
3. Information Paper, ATZQ-ATC-DR, 26 Feb 92, subj: Andalusia/Opp Municipal Airport Environmental Impacts. (2 pgs)
4. Memo, Lt. Col. Robert Stewart to Cdr TRADOC, 27 Feb 92, subj: Air Traffic Control Requirements Survey for a Ground Controlled Approach Facility at the Andalusia/Opp Municipal Airport. (2 pgs)
5. Air Traffic Control Statement of Support Requirements for A Ground Controlled Approach Facility at Andalusia/Opp Municipal Airport, 4 Feb 92, USAATCA. (11 pgs)

6. Memo, Bettie Gosner to Cdr USAAVNC, 6 Dec 91, subj: Submission of Facilities Request - Ground Control Approach for Andalusia-Opp Municipal Airport. (1 pg)

7. Memo, Col. Thomas Roy to USAATCA, Ft. Rucker, 22 Oct 92, subj: Request for Ground Controlled Approach. (2 pgs)

8. Report, U.S. Army Environmental Hygiene Agency, Aberdeen Proving Ground, MD, subj: Nonionizing Radiation Protection Survey No. 24-24-0610-88 Radio Frequency and Ultrasound Radiation Sources, U.S. Army Aviation Center and Fort Rucker. (16 pgs)

9. Disposition Form, ASNB-RUC-B, QA, S-2/3, USAISC Sign Bn-FTR to DPT, USAAVNC, 21 Aug 85, subj: Results of Esto GCA Survey. (2 pgs)

10. Disposition Form, ASNB-RUC-B, S-2/3, USAISC Sig Bn-FTR to DPT, USAAVNC, 19 Sep 85, subj: Change to Esto Approach Plate. (1 pg)

11. Memo, Lt. Col. David Gwin to DPTMSEC, USAAVNC, 27 Jul 87, subj: Request for Requirement Survey at Esto Ground Control Approach. (2 pgs)

12. Memo, CWO2 James Hartsfield to Cdr 10th ATC Bn (SPT), Ft. Rucker, 6 Aug 87, subj: Esto GCA Update (Radar Blind Spot). (2 pgs)

13. Memo, Sfc Robert Jackson to Cdr 29 Jul 87, subj: Status of Various Esto Problems. (3 pgs)

14. Memo, Lt. Col. David Gwin to Deputy Assistant Commandant, USAAVNC, 10 Aug 87, subj: Elimination of Blind Spots at Esto GCA. (2 pgs)

15. Disposition Form, ATZQ-ATB-TO, S-2/3 to DEH, 18 Sep 87, subj: Request for Cost Analysis. (26 pgs)

16. Memo, Col. Melvin McLemore to Cdr 10th Air Traffic Control Battalion, 18 Sep 87, subj: Air Traffic Control Evaluation of Radar Coverage and Radar Blind Spots at Esto Ground Controlled Approach. (26 pgs)

17. Memo, Col. Melvin McLemore to Cdr TRADOC, 14 Dec 89, subj: Replacement of Esto Ground Controlled Approach Communications Control System. (2 pgs)

18. Memo, Col. Melvin McLemore to Cdr TRADOC, 30 Jan 90, subj: Resiting of Esto Ground Controlled Approach. (5 pgs)

N. ASSISTANT COMMANDANT, U.S. ARMY AVIATION LOGISTICS SCHOOL

1. Annual Historical Report, USAALS-AC, CY 92. (1 pg)

O. DIRECTORATE OF EVALUATION AND STANDARDIZATION--USAALS

1. Annual Historical Report, USAALS-DOES, CY 92. (5 pgs)

P. LEADER DEVELOPMENT/PERSONNEL PROPONENCY OFFICE--USAALS

1. Annual Historical Report, USAALS-Proponency, CY 92. (2 pgs)

2. Information Paper, ATSQ-LAC, 25 Nov 92, subj: 15B/90. (15 pgs)

3. Memo, Col. Leroy B. Outlaw to distr, 6 Nov 92, subj: MOS156A, OV-1/RV-1 Pilot and 67H Observation Airplane Repairer, Personnel Support Plan for the Retirement of the OV-1 Mohawk Airplane. (7 pgs)

4. Memo, Darrel A. Worstine to distr, 11 Feb 93, subj: Proposed Change to AR 611-201, Military Occupational Specialty 67X (Heavy Lift Helicopter Repairer) Reserve Component Only. (9 pgs)

5. Memo, Darrel A. Worstine to distr, 18 Feb 93, subj: Notification of Future Change to AR 611-201, E-9310-2, Military Occupational Specialty 68D (Aircraft Powertrain Repairer). (11 pgs)

Q. DIRECTORATE OF COMBAT DEVELOPMENTS--USAALS

1. Annual Historical Report, USAALS-DCD, CY 92. (4 pgs)

R. DEPARTMENT OF AVIATION TRADES TRAINING--USAALS

1. Annual Historical Report, USAALS-DATT, CY 92. (4 pgs)

S. DEPARTMENT OF AVIATION SYSTEMS TRAINING-USAALS

1. Annual Historical Report, USAALS-DAST, CY 92 (4 pgs)

T. DEPARTMENT OF TRAINING AND DOCTRINE-USAALS

1. Annual Historical Report, USAALS-DOTD, CY 92. (8 pgs)

2. Memo, Darrel A. Worstine to Commandant, USAALS, 30 Sep 91, subj: Recommended Change to AR 611-201, Revision of Career Management Field 67 (Aircraft Maintenance). (33 pgs)

3. Ltr (1st End), Col. Paul Treolo to Commandant, USAALS (ATSQ-LTD-M), 23 Dec 91, subj: Course Administrative Data 646-ASIWS, OH-58D Aircraft Armament/Missile Systems Repairer. (7 pgs)

4. Ltr (1st End), Katie E. Rutledge to Commandant, USAALS (ATSQ-LTD-M), 30 Mar 92, subj: Course Administrative Data for 646-68X20/30-T, AH-64 Armament/Electrical System Repairer (Transition). (7 pgs)

5. Ltr (1st End), Col. Paul Treolo to Commandant, USAALS (ATSQ-LTD-M), 5 Mar 92, subj: Course Administrative Data for 601-68B10. (6 pgs)

6. Ltr (1st End), Col. Paul Treolo to Commandant, USAALS (ATSQ-LTD-M), 3 Feb 92, subj: Course Administrative Data for 602-68D10, Aircraft Powertrain Repairer. (6 pgs)

7. Memo, Col. Dennis W. Healy to Chief, Proponency (SFC Gartman), 17 Aug 92, subj: Elimination of Additional Skill Identifier XI for Military Occupational Specialty 68D. (1 pg)

8. Ltr (1st End), Col. Paul Treolo to Commandant, USAALS (ATZQ-LTD-M), 3 Feb 92, subj: Course Administrative Data for 4D-TBA/2C-SQIG, Supplemental OH-58D (Armed) Maintenance Test Pilot Course. (8 pgs)

9. TRADOC Form 351, Training Capability Report, 31 Aug 92. (1 pg)

10. Report, Col. William J. Blair to Cdr TRADOC (ATTG-U), subj: Training Capability Report. (13 pgs)

U. PROGRAM MANAGEMENT OFFICE-USAALS

1. Annual Historical Report, USAALS-PMO, CY 92. (3 pgs)

V. AVIATION BRANCH SAFETY OFFICE

1. Annual Historical Report, ABSO, CY 92. (1 pg)
2. Briefing Slide, Class A Aircraft Accident Rates, ABSO 92. (1 pg)
3. Briefing Slide, Army Motor Vehicle Accident Rate, ABSO 92. (1 pg)
4. Briefing Slide, Military Disabling Injury Rate, ABSO 92. (1 pg)

W. INSPECTOR GENERAL

1. Annual Historical Report, IG, CY 92. (3 pgs)

X. INTERNAL REVIEW AND AUDIT COMPLIANCE OFFICE

1. Annual Historical Report, IRAC, CY 92. (2 pgs)

Y. CHAPLAIN ACTIVITY OFFICE

1. Annual Historical Report, Chaplain Activity Office, CY 92. (8 pgs)
2. Program. "Ribbon Cutting Ceremony for Service Member Support Complex, 17 Jan 92." (3 pgs)
3. Program. "Dedication. Main Post Chapel Complex, 4 Mar 92." (2 pgs)
4. Command Master Religious Plan. USAAVNC Chaplain Activities Office, FY 92. United States Army Aviation Center and Fort Rucker. (62 pgs)

Z. STAFF JUDGE ADVOCATE

1. Annual Historical Report, SJA, CY 92. (3 pgs)
2. Memo, Maj. Gen. John L. Fugh to Cdr USAAVNC, 15 May 92, subj: 1991 Chief of Staff Award for Excellence in Legal Assistance. (1 pg)
3. Labor statistics, SJA, CY 92. (1 pg)
4. Memorandum for Record, subj: Monthly Report, SJA. (1 pg)
5. Personal Claims Status Report, Office 241, The Staff Judge Advocate's Status Report of October 1, 1992. (1 pg)
6. Affirmative Claims Status Report, The Staff Judge Advocate's Status report for September 24, 1992. (1 pg)

7. Legal Assistance Operations, Fort Rucker, End Year 1992. (1 pg)

8. Memo, Lt. Col. Phillip L. Kennerly to Office of the Judge Advocate General, subj: After-Action Report on Tax Assistance. (3 pgs)

AA. PUBLIC AFFAIRS OFFICE

1. Annual Historical Report, PAO, CY 92. (15 pgs)

BB. DIRECTORATE OF RESOURCE MANAGEMENT

1. Annual Historical Report, DRM, CY 92. (7 pgs)

2. AR 5-1, 12 Jun 92, Army Management Philosophy. (58 pgs)

3. Memo, ATZQ-RQM, 3 Jan 92, subj: Total Quality Management Philosophy. (3 pgs)

4. Charter of the Executive Steering Committee, 10 Jul 92. (2 pgs)

5. Memo, ATTG-I, 26 May 92, subj: Total Army Quality. (2 pgs)

6. BMG Start Position for Schedule 8, 9 Mar 91. (5 pgs)

7. Memo, ATRM-B, 24 Jan 92, subj: FY 92 Appropriation Budget and Manpower Guidance. Phased Obligation Plan for FY 92. (8 pgs)

8. Memo, ATRM-B, undated, subj: FY 93 TRADOC Budget Guidance. Commander's Statement FY 93 Command Operating Budget (COB), Maj Gen John D. Robinson, to TRADOC 22 May 92. (4 pgs)

9. TRADOC Profs Note, 4 Aug 92, subj: FY 93 TBG Installation Unfinanced Requirements Review. (2 pgs)

10. Memo, ATRM-B, 1 Dec 92, subj: FY 93 Appropriation TRADOC Budget Guidance. (10 pgs)

11. Memo, CSA, 27 Feb 92, subj: Warrant Officer Leader Development Action Plan. (52 pgs)

12. Memo, ATZQ-RFM, 31 Aug 92, subj: Memorandum of Instruction for Establishment of the Warrant Officer Career Center. (3 pgs)

13. Message, HQTRADOC, 300845Z Jul 91, subj: Manpower and DOIM Offices. (1 pg)

14. Memo, ATRM-AF, 30 Jun 92, subj: Defense Management Report Decision (DMRD) 910 Data Call. (2 pgs)

15. Msg, HQDA, General Sullivan Sends, 132015Z Dec 91, subj: Commercial Activities Cost Competitions. (1 pg)

16. Management Study for Boiler Plant Operations certified by Garrison Commander on 7 Jul 92. (45 pgs)

17. Msg, HQDA, 162025Z Nov 92, subj: One Year Moratorium on Commercial Activities Contracting. (1 pg)

18. Management Study for Refuse Collection certified by Garrison Commander on 7 Aug 92. (38 pgs)

19. E-mail note, Gary Lewis to Rodgersf, 4 Dec 91, subj: Results of Operation Cross Level. (2 pgs)
20. Schedule 50 Transaction File, FY 92, 6 Nov 91. (6 pgs)
21. Schedule 50 Transaction File, FY 92, 5 Nov 91. (2 pgs)
22. E-mail note, Gary Lewis to Rogersf, 10 Oct 91. (3 pgs)
23. On-line TDA system - 8 print, U.S. Army Aviation Center and Ft. Rucker, WO Career Ctr, 28 Apr 93. (3 pgs)
24. Memo, ATZQ-RFM (570-4g), Col. C. S. Ivie for distr, 10 Feb 92, subj: Memorandum of Instruction for Implementation of USAAVNC/USAALS Reorganization. (62 pgs)
25. Memo, Maj. Gen. Henry M. Hagwood to distr, 21 Apr 92, subj: FY 93 TRADOC Budget Guidance. (39 pgs)
26. Memo, Maj. Gen. Henry M. Hagwood to distr, 1 Dec 92, subj: FY 93 Appropriation TRADOC Budget Guidance. (16 pgs)
27. E-Mail, MASSEYR to TOWERJ, 041552 Aug 92, subj: FY TBG Installation Unfinanced Requirements. (2 pgs)
28. Memo, Maj. Gen. Henry M. Hagwood to distr, 24 Jan 92, subj: FY 92 Appropriation Budget and Manpower Guidance. (20 pgs)
29. Memo, Mervin A. Frantz to Commanders, TRADOC Installations (DRMs), 30 Jan 92, subj: Defense Management Report Decision 910 Data Call. (4 pgs)
30. Amendment No. 1, Commercial Activities Management Study, Boiler Plans Section, Operations and Maintenance Division, Directorate of Engineering and Housing, 31 Aug 92. (43 pgs)
31. Amendment No. 2, Commercial Activities Management Study Refuse Collection and Disposal Function, James H. Woodard and Gail P. Jay, 13 Oct 92. (97 pgs)

CC. DIRECTORATE OF PLANS, TRAINING, MOBILIZATION AND SECURITY

1. Annual Historical Report, DPTMSEC. (12 pgs)
2. Memo, Col. Ralph Hiatt to distr, 8 Apr 92, subj: Fort Rucker Reserve Component Unit Mobilization Conference, 13 June 1992. (7 pgs)
3. Memo, Col. Ralph Hiatt to distr, 8 Apr 92, subj: Memorandum of Instruction - Reserve Component Unit Mobilization Conference, 13 June 1992. (7 pgs)
4. Msg, #01317, Fort Rucker to USATWO, subj: 412th Direct Deployment Exercise. (1 pg)
5. Memo, Col. David Swank to distr, 16 Nov 92, subj: Memorandum of Instruction - Mobilization Station Mission Briefing for the 2d U.S. Army Commander - LTG Ebbesen. (9 pgs)
6. PROFFS note, FORDD to NORTHJ, 092725 June 92, subj: PD93 (For FY93) Requirements. (1 pg)
7. Memo, Mr. M. J. Wesley to distr, 10 Dec 92, subj: POR Processing for 256th Sig Company. (3 pgs)

8. Memo, Col. David Swank to distr, 31 Aug 92, subj: POR Processing for 46th Engineer Battalion. (9 pgs)
9. Memo, Col. Ralph Hiatt to distr, 7 Jul 92, subj: POR Processing for 2-229th Attack Helicopter Battalion. (9 pgs)
10. Memo, Col. David Swank, 10 Dec 92, subj: Memorandum of Instruction for Participation in JCS Exercise PRIME DIRECTIVE 93. (38 pgs)
11. Memo, Col. Ralph Hiatt, 22 Jun 92, subj: Amendment to PSA Execute Agreement. (7 pgs)
12. Msg, Cdr FORSCOM to Cdr USAAVNC, 091400Z Jul 92, subj: Reforger 92 Airlift Execution Procedures. (5 pgs)
13. Memo, Cmd. Sgt. Maj. Fredy Finch and John Bush to distr, 5 May 92, subj: Learning Center Advisory Board Minutes, 23 Mar 92. (2 pgs)

DD. AVIATION PROPONENCY

1. Annual Historical Report, AP, CY 92. (8 pgs)
2. Ltr (1st End), Cdr USAAVNC Ft Rucker to Lt. Col. Robert L. Johnson, 2 May 91, subj: Orders 122-318, DA, HQS, 101st Abn Div (ASSLT) & Ft Campbell, Ft Campbell, KY 42223-5000. (1 pg)
3. Memo, Lt. Col. Robert Johnson to Cdr U.S. Total Army Personnel Command (TAPC-PI-MO), 4 Dec 91, subj: Recommended Change to Army Regulation 611-101, Commissioned Officer Classification System, Aviation Officer Area of Concentration 15E. (6 pgs)
4. Memo, Lt. Col. Robert Johnson to Cdr U.S. Total Army Personnel Command (TAPC-PI-MO), 17 Dec 91, subj: Recommend Change to Army Regulation 611-101, Commissioned Officer Classification System, Aviation Officer Area of Concentration 15E. (5 pgs)
5. Memo, Maj. Gen. John D. Robinson to Lt. Gen. Thomas Carney, Deputy Chief of Staff for Personnel, 8 Jun 92, subj: Waiver to Aviation Career Incentive Act of 1989. (3 pgs)
6. Memo, Maj. Gen. John D. Robinson to Aviation Brigade Commanders, 12 Dec 91, subj: Minorities and Females. (1 pg)
7. Memo, Maj. Gen. John D. Robinson to Aviation Professors of Military Science, 12 Dec 91, subj: Minorities and Females. (1 pg)
8. Aviation Warrant Officer -- Personnel Plan and Career Guide, Fall 1992, Ft. Rucker, AL. (56 pgs)
9. United States Army Aviation Center, Army Aviation Personnel Plan, Fall 1992, Fort Rucker, AL. (142 pgs)

EE. EQUAL EMPLOYMENT OPPORTUNITY OFFICE

1. Annual Historical Report, EEOO, CY 92. (11 pgs)
2. Desire list (PA), Work Force Profile by Grade/Pay Level, 1 Jan 93. (1 pg)
3. Desire list (PA), Work Force Profile, 4 Jan 93. (1 pg)

4. Desire list (PA), Work Force Profile by PATCOB, 4 Jan 93. (1 pg)
5. Memo, Maj. Gen. John D. Robinson to distr, 30 Oct 92, subj: Equal Employment Opportunity - Affirmative Employment. (1 pg)
6. Memo, Maj. Gen. John D. Robinson to distr, 3 Jan 92, subj: Commanding General's Policy on Sexual Harassment. (2 pgs)
7. Memo, Col. Patrick Bodelson to distr, 6 Feb 92, subj: Payments for Equal Employment Opportunity Complaints Processing. (1 pg)
8. Memo, Col. Patrick Bodelson to distr, 6 feb 92, subj: Complaints of Discrimination by Civilian Employees. (1 pg)
9. Affirmative Employment Program Report on Special Emphasis Program, TRADOC Form 392-9, Jan 93. (7 pgs)
10. Affirmative Employment Program Report on Special Emphasis Program, TRADOC Form 392-9, 30 Sep 92. (9 pgs)
11. Affirmative Employment Program Report on Special Emphasis Program, TRADOC From 392-9, 30 Jun 92. (7 pgs)
12. Affirmative Employment Program Report on Special Emphasis Program, TRADOC From 392-9, 21 Apr 92. (7 pgs)
13. Memo, Maj. Gen. Donald Lionetti to Cdr USAAVNC, 19 Jun 92, subj: Equal Employment Opportunity Staff Assistance Visit, 21-23 April 1992. (4 pgs)

FF. DIRECTORATE OF CIVILIAN PERSONNEL

1. Annual Historical Report, DCP, CY 92. (1 pgs)
2. Memo, Col. Richard M. Roy to Cdr TRADOC (ATBO-C), 15 Apr 92, subj: Notification of Proposed Reduction in Force at U.S. Army Aviation Center, Ft. Rucker, Alabama and U.S. Army Information Systems Command, Ft. Rucker, Alabama. (2 pgs)

GG. MILITARY POLICE ACTIVITY

1. Annual Historical Report, MPA, CY 92. (3 pgs)

HH. DIRECTORATE OF INFORMATION MANAGEMENT

1. Annual Historical Report, DOIM, CY 92. (9 pgs)
2. E-Mail, BARTOB to AOUTHARM, 261413 Mar 92, subj: DMRD 998 Implementation Message. (2 pgs)
3. General Orders No. 20, HQDA, "Dissolution of United States Army Information Systems Command Units in the Continental United States". (3 pgs)
4. Memo, Col. Robert A. Bailey to COFS, 16 Sep 92, subj: Transfer of Text Issue Facility--ACTION MEMO. (1 pg)

5. Memo, 1 Oct 90, subj: DRM Subnet Design. (13 pgs)
6. Technical Acceptance Recommendation, 17 Dec 92, subj: Army Standard Electronic Message Host w/HMS System. (10 pgs)
7. Technical Acceptance Recommendation, 10 Dec 92, subj: Army DCT9000 Replacement System. (6 pgs)
8. Technical Acceptance Recommendation, 17 Dec 92, subj: Telecommunication Center Ft. Rucker, AL. (6 pgs)
9. SF 33, Solicitation Offer and Award, No. DABT01-92-D-007, 18 Mar 92, subj: Copier Support for USAAVNC. (58 pgs)

II. DIRECTORATE OF ENGINEERING AND HOUSING

1. Annual Historical Report, DEH, CY 92. (9 pgs)
2. Report, Basic Statistics, DEH. (1 pg)
3. Memo, Col. H. Inge Waddle to Cdr U.S. Army Infantry Center (ATZB-EN-OPNS), 13 Apr 92, subj: Transfer of Real Property Responsibility. (2 pgs)
4. List, Corps of Engineers Projects, DEH 92. (1 pg)
5. List, FY 92 Engineering Projects, DEH. (6 pgs)
6. Report, DEH Job Order Contracting FY 92. (1 pg)
7. Briefing Slide, Service Orders Received Cantonment. (1 pg)
8. Briefing Slide, Total Service Orders Cantonment. (2 pg)
9. Briefing Slide, Service Orders Received Cantonment. (2 pgs)
10. Briefing Slide, Service Orders Received Army Family Housing. (3 pgs)
11. Briefing Slide, Total Service Orders Received Army Family Housing. (2 pgs)

JJ. DIRECTORATE OF LOGISTICS

1. Annual Historical Report, DOL, CY 92. (5 pgs)

KK. DIRECTORATE OF CONTRACTING

1. Annual Historical Report 1992, Directorate of Contracting, 8 Mar 93. (5 pgs)
2. Contract, No. DABT01-92-C-0054, Rotary Wing, To Include Limited Fixed Wing, Flight Training Services, UNC Aviation Services, Fort Rucker, Alabama. (360 pgs)
3. Modification of Contract, DABT01-88-C-3000, DynCorp, 1 Oct 92. (2 pgs)
4. Modification of Contract, DABT01-90-C-0031, Flightsafety Int'L, Inc, 1 Oct 92 (2 pgs)

5. Modification of Contract, DABT01-90-C-0034, Flightsafety Int'L Inc, 1 Oct 92 (2 pgs)
6. Modification of Contract, DABT01-90-C-0290, Sikorsky Support Service, Inc, 1 Oct 92. (2 pgs)
7. Modification of Contract, DABT01-90-C-0003, 30 Sep 92. (2 pgs)
8. Nomination Packet, U.S. Army Aviation Center, Directorate of Contracting, Nomination for the FY 91 Barbara L. Jones Memorial Award. (40 pgs)
9. Nomination Packet, U.S. Army Aviation Center, Directorate of Contracting, Nomination for the FY 92 Barbara L. Jones Memorial Award. (38 pgs)

LL. DIRECTORATE OF TRAINING AND DOCTRINE

1. Annual Historical Report, DOTD, CY 92. (2 pgs)
2. Diagram, DOTD Organization. (1 pg)
3. Diagram, Old DOTD Organization. (1 pg)
4. Diagram, DOTS Organization. (1 pg)
5. Diagram, Interim DOTD. (1 pg)
6. Computer printout, On-Line TDA System, Section II - Personnel Allowance, 1 May 1992. (13 pgs)
7. Historical Perspective of Advanced Tactics Division (Mar-Dec 92), DOTD, 17 Feb 93. (2 pgs)
8. Memo, Lt. Bradford R. Bock to DOTD, OPS (Maj. Marquette), subj: Staff Annual Historical Reports for 1992 Annual Command History. (7 pgs)
9. Memo, Capt. Mark E. Johnson to Dir DOTS, subj: Revision of Threat Instructions. (4 pgs)
10. Planning Guide, Army Aviation Deployment for Contingency Operations, 1 Feb 93. (168 pgs)
11. Memo, Maj. Carl T. Brooks, 22 Feb 93, subj: Staff Annual Historical Reports for 1992 Annual Command History. (1 pg)
12. Report, Individual and Unit Training Division, CY 92. (6 pgs)
13. Ltr (1st End), Capt. Mark W. Hayes to Chief, DOTD Operations, no date, subj: Staff Annual Historical Reports for 1992 Annual Command History. (2 pgs)
14. Memo, Charles A. Thomley to OPS, DOTD, 22 Feb 93, subj: Staff Annual Historical Reports for 1992 Annual Command History. (2 pgs)

MM. DIRECTORATE OF COMMUNITY ACTIVITIES

1. Annual Historical Report, DCA, CY 92. (3 pgs)

NN. ADJUTANT GENERAL

1. Annual Historical Report, AG, CY 92. (1 pg)

OO. NONCOMMISSIONED OFFICERS ACADEMY

1. Annual Historical Report, NCOA, CY 92. (6 pgs)
2. Memo, Cmd. Sgt. Maj. Ronald L. Moore to DRM (CMAD), 16 Oct 92, subj: Organization and Functions Manual, USAAVNC Regulation 10-1. (3 pgs)
3. Memo, Cmd. Sgt. Maj. Ronald L. Moore to Lt. Col. Bock, 23 Jul 92, subj: Sexual Harassment. (1 pg)
4. Evaluation Summary, U.S. Army Aviation Center Noncommissioned Officer Academy, 6-10 Feb 92, sub: BNCOC and ANCOG CMFs: 93 and 68. (3 pgs)
5. Ltr (lst End), Col. Robert B. Gatlin to NCOA, 21 Oct 92, subj: Request for Building 3822 as Dayroom/Storage Area. (2 pgs)

PP. TRADOC SYSTEMS MANAGER OH-58

1. Annual Historical Report, TSM OH-58, CY 92. (4 pgs)
2. Memo, Col. Ted D. Cordrey to Aviation Officer, XVIII Airborne Corps, 30 Jan 92, subj: OH-58D Kiowa Warrior. (2 pgs)
3. Memo, Col. Ted D. Cordrey to DCD (ATZQ-CDI), 13 Oct 92, subj: Army Aviation Program Executive Office Modernization Strategy in Response to the House Appropriation Committee's Language. (2 pgs)
4. E-Mail, Col. Ronald Thomas to PARAMORJ, 111553 Jun 93, subj: OH-58D Kiowa Warrior. (2 pgs)
5. Memo, Col. Ted D. Cordrey to HQDA DCSLOG (DALO-AV), 23 Oct 92, subj: Comanche Early Operational Capability Unit Equipment Update. (1 pg)
6. Memo, Col. Ted D. Cordrey to HQDA (DAMO-TRS), 16 Nov 92, subj: OH-58D Kiowa Warrior Aircraft Qualification. (6 pgs)
7. Memo, Col. Ted D. Cordrey to Cdr U.S. Army Signal School (ATTN ATZH-DT), 12 Mar 92, subj: Review of OH-58D Maintenance Manuals. (7 pgs)
8. Memo, Col. Ted D. Cordrey to Assistant Commandant, USAALS (ATSQ-LTD), 23 Nov 92, subj: Technical Review of Proposed OH-58D Kiowa Warrior Boresighting Procedures. (4 pgs)
9. Memo, Col. Ted D. Cordrey to Director of Combat Developments, 23 Oct 92, subj: American Helicopter Society Article. (9 pgs)
10. E-Mail, CORDREYT TO TAYLORD, 290825 May 92, subj: Kiowa Warrior Acceptance Ceremony. (2 pgs)
11. Memo, Maj. Gen. Wesley Clark to HQDA (DAMO-FDE), 26 Jun 92, subj: Recommended Change to the Simulator Training Device Appendix OH-58D Helicopter Improvement Program OH-58D ROC Dated 18 April 1990. (1 pg)

12. Memo, Dr. Burton Wright to Branch Historian 16 April 93, subj: Grounding/Ungrounding of OH-58D. (1 pg)

QQ. TRADOC SYSTEMS MANAGER COMANCHE

1. Annual Historical Report, TSM COMANCHE, CY 92. (4 pgs)
2. Memo, Douglas A. Brook and Stephen K. Conner, 4 Feb 92, subj: Implementation of Acquisition Decisions. (2 pgs)
3. Briefing Slide, T800 Proposal Evaluation Team Schedule, TSM COMANCHE. (1 pg)
4. Briefing Slide, Restructured Comanche Proposal Evaluation Team -- Board Schedule, TSM COMANCHE. (1 pg)
5. Program, Activation Ceremony of Comanche Troop, 2-229th Attack Helicopter Regiment, 1 Oct 92.

RR. TRADOC SYSTEM MANAGER LONGBOW

1. Annual Historical Report, TSM LONGBOW, CY 92. (7 pgs)
2. Memo, Col. David F. Sale to CG, 3 Dec 92, subj: AH-64 T-701C Digital Engine Control System Safety Risk Assessment Action Memorandum. (2 pgs)
3. Msg, PEO AVN (SFAE-AV-AAH-L) to AIG 11668/12530, subj: 1992 Apache Users Conference. (6 pgs)
4. Memo, Col. David F. Sale to distr, 21 Sep 92, subj: AH-64 Users' Conference 20-22 Oct 92. (14 pgs)
5. Memo, Col. David F. Sale to CG, 23 Oct 92, subj: AH-64 Commanders and Users Conference at Killeen, TX, 20-22 Oct 92. (8 pgs)
6. Program Objective Memorandum, "Key Funding Table," TSM LONGBOW. (1 pg)
7. CWO4 Larry A. Niver and CWO3 Geoffrey A. Vandewart. Force Development Data Collection Simulation Effort for Tactics, Techniques and Procedures for the LONGBOW Apache. Fort Rucker, AL: TRADOC System Manager for Longbow, 1992. (138 pgs)
8. Memo, Col. David F. Sale to Cdr TRADOC (ATCD-ET), 20 Jul 92, subj: 1992 Annual Report for TRADOC System Manager for Airborne Target Acquisition and Weapon Systems. (5 pgs)
9. Apache Newsletter, Issue 13, March, 1993. (62 pgs)
10. Briefing Slides, AH-64A Modernization, TSM Longbow. (4 pgs)
11. Apache Readiness Improvement Program, TSM Longbow. (8 pgs)
12. Briefing Slides, Accomplishments Since Last PPR, TSM Longbow. (6 pgs)
13. Briefing Slides, Apache PPR, Dec 92, TSM Longbow. (13 pgs)

SS. U.S. ARMY SAFETY CENTER

1. Annual Historical Report, USASC, CY 92. (1 pg)

TT. U.S. ARMY OPERATIONAL TEST AND EVALUATION COMMAND

1. Annual Historical Report, TECO, Cy 92. (1 pg)

UU. U.S. ARMY AVIATION TECHNICAL TEST CENTER

1. Annual Historical Report, USAATTC, CY 92. (17 pgs)
2. Memo, Lt. Col. Marvin L. Hanks to Cdr U.S. Army Aviation and Troop Command (AMSAT-R-B), 12 Feb 92, subj: Report, Preliminary Airworthiness Evaluation of the T-700GE-701C Equipped AH-64A with MOD 5A/F-1 Engine Controls, TECOM Project No. 4-A-100-AAH-140. (48 pgs)
3. Final Report, Preliminary Airworthiness Evaluation of the Kiowa Warrior Helicopter, Airworthiness Qualification Test Directorate, USAATTC, Mar 92. (172 pgs)
4. Report, Cold Weather Demonstration of the AH-64 Helicopter, Flight Systems Test Division, USAATCA, May 92. (114 pgs)
5. Memorandum for Record, Eddrid R. Adams, 28 Jan 92, subj: Test Record, Support of First Article Test of AH-064A Apache Gun Accuracy, TECOM Project No. A-AI-100-AAH-120. (5 pgs)
6. Report, OH-58D Built-In Test/Fault Detection and Location System, USAATCA, May 92. (18 pgs)
7. Report, Production Qualification Test of Armed OH-58D, USAATCA, Mar 92. (128 pgs)
8. Report, Kiowa Warrior Software Development Test, USAATCA, Dec 92. (68 pgs)
9. Memo, Jim McCrory to distr, 28 Jan 92, subj: Quarterly Report No. 92/1, Logistics Evaluation Lead the Fleet Testing of Aircraft/Aircraft Survivability Equipment, TECOM Project No. 4-AI-190-LTF-001. (32 pgs)
10. Memo, Jim McCrory to distr, 29 Apr 92, subj: Quarterly Report No. 92/2, Logistics Evaluation Lead the Fleet Testing of Aircraft/Aircraft Survivability Equipment, TECOM Project No. 4-AI-190-LTF-001. (33 pgs)
11. Memorandum for Record, Jerry F. Robke, 10 Jul 92, subj: Quarterly Report No. 92/3, Logistics Evaluation Lead the Fleet Testing of Aircraft/Aircraft Survivability Equipment, TECOM Project No. 4-AI-190-LTF-001. (33 pgs)
12. Memorandum for Record, Jerry F. Robke, 2 Nov 92, subj: Quarterly Report No. 92/4, Logistics Evaluation Lead the Fleet Testing of Aircraft/Aircraft Survivability Equipment, TECOM Project No. 4-AI-190-LTF-001. (60 pgs)
13. Memo, Jim McCrory to U.S. Army Aviation System Command (AMSAV-8), 16 Jul 92, subj: Test Record, CH-47D Lead-the-Fleet Post-Production Sand Test, TECOM Project No. 4-AI-190-LTF-001. (6 pgs)
14. Report, Airworthiness and Flight Characteristics Test of A/MH-6N Helicopter, USAATCA, Test Plan, Dec 91. (35 pgs)

15. Final Report, Engineering Evaluation of Aeronautical Design Standard-33C, Handling Qualities Requirements for Military Rotorcraft, Utilizing An Ah-64A Apache Helicopter, Nov 91. (245 pgs)

16. Memo, Lt. Col. Marvin L. Hanks to Cdr U.S. Army Aviation Systems Command (AMSAV-8), 13 May 92, subj: Report, Qualitative Engineering Evaluation of UH-1H/V Helicopters Equipped with Metal, Composite, and Erosion Taped Composite Main Rotor Blades, AVSCOM Project No. 95-05-1. (11 pgs)

17. Memo, Jim McCrory to distr, 26 Aug 92, subj: Approved Final Report, Preproduction Qualification Test of the Aircrew Cold Weather Clothing System, TECOM Project No. 8-EI-495-ACS-007. (45 pgs)

18. Memo, Jim McCrory to Program Executive Officer, Aviation (SFAE-AV-RAH-Q), 4 Jun 92, subj: Test Record, Support of Unified Reliability, Availability, Maintainability Prototype Test, TECOM Project No. 4-AI-190-LHX-001). (12 pgs)

VV. U.S. ARMY AEROMEDICAL CENTER

1. Annual Historical Report, USAAC, CY 92. (2 pgs)
2. Article, "Sick Call Hours Extended at Lyster Army Hospital", Army Flier, 24 Jan 92.
3. Article, "Hospital Rooms Undergo Face Lift", Army Flier, 6 Mar 92.
4. Article, "Lyster Building Dedicated", Dothan Eagle, 15 Apr 92.
5. Ltr, Kenneth G. Hermann to Mr. Tommy Mayes, 11 Dec 92, subj: Accreditation of Lyster Hospital. (2 pgs)

WW. DETACHMENT 1, 14TH FLYING TRAINING WING (ATC)

1. Annual historical report, Det. 1, 14th Flying Training Wing, 8 Feb 93. (6 pgs)

XX. AMC LOGISTICS ASSISTANCE OFFICE

1. Annual Historical Report, AMC LAO, CY 92. (6 pgs)
2. Ltr, AMC Logistic Assistance Office, 23 Nov 92, subj: Logistic Support Activity. (1 pg)
3. E-Mail, LAOTRUC to GPHILIPP, 300925 Jan 92, subj: LAPCEP. (3 pgs)
4. E-Mail, Info message, 17 Apr 92, subj: Foreign Military Sales Assistance. (1 pg)
5. E-Mail, Info message, 3 Nov 92, subj: TSU Initial Failure. (1 pg)
6. E-Mail, Info message, 28 Oct 92, subj: Electronics Component Assembly and ATAS Launcher. (1 pg)
7. E-Mail, Info message, 18 Feb 92, subj: Kiowa Warrior. (1 pg)
8. E-Mail, Info message, 4 Dec 92, subj: Kiowa Warrior. (1 pg)
9. E-Mail, Info message, 5 Oct 92, subj: Air-to-Air Stinger Captive Flight Trainer Modification. (1 pg)
10. E-Mail, Info message, 7 Apr 92, subj: SFDLR/QDR Guidelines. (1 pg)

11. E-Mail, Info message, 3 Apr 92, subj: SFDLR Meeting. (1 pg)

12. E-Mail, Info message, 16 Apr 92, subj: SFDLR Training. (1 pg)

YY. U.S. ARMY RESEARCH INSTITUTE AVIATION RESEARCH AND DEVELOPMENT ACTIVITY

1. Annual Historical Report, ARIARADA, CY 92. (9 pgs)

2. A list of fourteen research projects conducted by ARIARADA are available from the Historian's office upon request.

ZZ. MULTI-MEDIA BRANCH

1. Annual historical report, Multi-Media Branch. (4 pgs)

AAA. ARMY CAREER AND ALUMNI PROGRAM

1. Information Paper, ATZQ-ACA, 10 Feb 93, subj: Army Career and Alumni Program at Fort Rucker. (2 pgs)

2. Army Career and Alumni Program -- Transition Guidebook. Washington, D.C.: U.S. Government Printing Office, 1992. (79 pgs)

3. Brochure. "Army Career and Alumni Program".

4. Brochure. "ACAP -- Serving Those Who Served".

BBB. WARRANT OFFICER CAREER COLLEGE

1. Annual Historical Report, WOCC, CY 92. (5 pgs)

2. Memo, CWO5 David Helton to Director, DOTD, 26 Jun 92, subj: Warrant Officer Training System Review Conference. (9 pgs)

3. Memo, General Gordon R. Sullivan to distr, 27 Feb 92, subj: Warrant Officer Leader Development Action Plan. (52 pgs)

4. Report, Warrant Officer Education System -- Multi Level Task Site Selection Board, 31 Aug-3 Sep 92. (77 pgs)

5. Memo, Col. Robert N. Seigle to distr, 31 Aug 92, subj: Memorandum of Instruction for Establishment of the Warrant Officer Career Center. (6 pgs)

6. Title XI - Warrant Officer Management, Legislative Provisions, Legislative Provisions Adopted. Warrant Officer Management (secs. 1101-1132), U.S. Congress. (20 pgs)

CCC. CHAPTER I FILE

1. E-Mail, ROUNDING to All Cdrs/Dirs, 170949 Nov 92, subj: Signature Block for BG Goodbarry. (1 pg)

2. News Release, No. 92/104/ahe, 9 Jun 92, subj: Promotion of Brig. Gen. Goodbarry. (1 pg)
3. E-Mail, TERRILLM to All Cdrs/Dirs, 240644 Jul 92, subj: Chief of Staff. (2 pgs)
4. Memo, Cl. Clarence L. Belinge to distr, 1 Jan 92, subj: Directorate Name Change. (1 pg)
5. Memo, Lt. Col. John A. Whitson to distr, subj: Memorandum of Instruction for Transfer of the Military Personnel Division/Adjutant General from the Directorate of Personnel and Community to the Garrison Commander. (6 pgs)
6. General Orders No. 20, HQ, DA, 1 Aug 92, subj: Dissolution of United States Army Information Systems Command Units in the Continental United States. (3 pgs)
7. Memo, Capt. Anthony J. Archibald to distr, 7 Apr 92, subj: Inactivation of the 123rd Ord Det, Ft Rucker, AL. (2 pgs)
8. E-Mail, HALLB to All Cdrs/Dirs, 210857 Sep 92, subj: Reorganization of 2-229th into the 1-13th Avn Regt. (1 pg)
9. E-Mail, BODELSOP to All Cdrs/Dirs, 251649 Mar 92, subj: WOLDAP Implementation Plan. (1 pg)
10. News Release, No. 92/155/ahe, 17 Sep 92, subj: Swearing-in of Warrant Officers. (3 pgs)
11. Article, "550 Warrant Officers get Commissioned at Ceremony", Army Flier, 9 Oct 92.
12. Program, Warrant Officer Appointment Ceremony, U.S. Army Aviation Center, Ft. Rucker, 1 Oct 92.
13. E-Mail, HELTOND to All Cdrs/Dirs, 251247 Sep 92, subj: Warrant Officer Career Center Opening. (1 pg)
14. Memo, CW5 Helton to distr, 1 Jan 93, subj: Assumption of Command. (1 pg)
15. E-Mail, SWANKD to All Cdrs/Dirs, 191703 Aug 92, subj: Initial Entry Rotary Wing Training Standdown 1 October 1992. (1 pg)
16. E-Mail, FLICKR to All Cdrs/Dirs, 281603 Apr 92, subj: Visit by CW3 Hennen. (1 pg)
17. E-Mail, ROBINSON to All Cdrs/Dirs, 281725 Feb 92, subj: Aviation Logistics Conference. (2 pgs)
18. Memo, Maj. Gen. John D. Robinson to distr, 8 Jun 92, subj: Army Aviation and Fort Rucker 50th Anniversary Message. (1 pg)
19. E-Mail, ROBINSON to All Cdrs/Dirs, 011644 Feb 92, subj: A week to Remember. (1 pg)
20. Event Program, Welcome to the 50th Anniversary of Army Aviation and Fort Rucker Honor Eagle Ceremony, 5 Jun 92.
21. Event Program, Honor Eagle Ceremony, 16 Jul 92.
22. Event Program, Honor Eagle Ceremony, 31 Jan 92.
23. Event Program, Honor Eagle Ceremony, 16 Jul 92.
24. Event Program, Operation Desert Shield/Storm Campaign Streamer Ceremony, 2-229th Attack Helicopter Regiment, 29 May 92.

25. Event Program, Welcome to the United States Army Aviation Center and Fort Rucker's Memorial Day Ceremony, 22 May 92.
26. E-Mail, MACKC to All Cdrs/Dirs, 241343 June 92, subj: Mr. Joe Cribbins Retirement Ceremony. (1 pg)
27. Article, "M-101 Howitzer fired for the Last Time at Rucker", Army Flier, 23 Oct 92.
28. E-Mail, CLARK B to All Cdrs/Dirs, 170843 Nov 92, subj: Congressman Dickinson. (1 pg)
29. E-Mail, SWANKD to All Cdrs/Dirs, 130759 Aug 92, subj: AAAA Nominations. (1 pg)
30. E-Mail, ROBINSON to All Cdrs/Dirs, 140713 Oct 92, subj: NG Unit of the Year. (1 pg)
31. E-Mail, DELASHAJ to All Cdrs/Dirs, 081128 Sep 92, subj: Award Ceremony. (1 pg)
32. Article, "Aviation Center Selects Top Enlisted Soldiers," Army Flier, 2 Apr 93.
33. Program, Noncommissioned Officer Review, 28 Feb 92.
34. E-Mail, LEIVAP to All Cdrs/Dirs, 141330 Jan 92, subj: Fort Rucker NCO/Soldier of the Year. (1 pg)
35. Program, 1992 AAAA Awards Luncheon, 10 Apr 92.
36. Article, "New Award Honors 'Father of Army Aviation'", Army Flier, 27 Mar 92.
37. E-Mail, LEIVAP to All Cdrs/Dirs, 131441 Jan 92, subj: TRADOC Retention NCO of the Year. (1 pg)
38. Program, African Roots Explore New World Pre-Columbus to the Space Age, Black History Month Luncheon, 14 Feb 92.
39. Memo, Col. Clarence L. Belinge to distr, 27 Jan 92, subj: Black History Month Training/Education Programs. (1 pg)
40. Memo, Maj. Gen. John D. Robinson to distr, 1 Oct 92, subj: National Disability Employment Awareness Month, 1-31 Oct 92. (1 pg)
41. Memo, Maj. Gen. John D. Robinson to distr, 25 Aug 92, subj: National Hispanic-American Heritage Month, 15 Sep-15 Oct 92. (1 pg)
42. E-Mail, PATTONW to All Cdrs/Dirs, 111719 Dec 92, subj: Visit of Major General James M. Hurley. (1 pg)
43. E-Mail, CLARKB to All Cdrs/Dirs, 121541 Nov 92, subj: Maj. Gen. Robinson's French Liaison Visit. (2 pgs)
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45. E-Mail, ROBINSON to All Cdrs/Dirs, 141419 Mar 92, subj: Staff Ride and Commanders Mtg. (2 pgs)
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47. E-Mail, ROBINSON to All Cdrs/Dirs, 272055 Oct 92, subj: Commander's Review. (2 pgs)

48. E-Mail, ROBINSON to All Cdrs/Dirs, 211456 Oct 92, subj: WAATS Visit. (2 pgs)
49. E-Mail, ROBINSON to All Cdrs/Dirs, 310747 Oct 92, subj: Cdrs' Review (27-28 Oct 92). (3 pgs)
50. E-Mail, ROBINSON to All Cdrs/Dirs, 310912 Oct 92, subj: Significant Activities Report. (2 pgs)

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2. Msg, Cdr USAAVNC to Cdr USACAC, 271330Z Jul 92, subj: Augmentation Observer/Controller Support. (3 pgs)
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5. Msg, Cdr USAAVNC to Cdr USACAC, 223200Z Aug 92, subj: Prepositioning of Aircraft at the Combat Training Center. (4 pgs)
6. Msg, Cdr 10th Mountain Division to Cdr USAAVNC, 201300Z Aug 92, subj: Aviation Maintenance Personnel Shortfalls. (1 pg)
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8. Msg, Cdr USAAVNC to PEO AVN, PM TRADE, 150800Z Jan 92, subj: Apache Combat Mission Simulator Training for Foreign Students. (2 pgs)
9. ATZQ-RPB/1 Nov 91 (95) 2nd End, Col. Patrick J. Bodelson to Cdr TRADOC (ATCS), subj: Flight Training. (2 pgs)
10. Msg, CS, Fort Bliss, J3/J5 to CINC, Fort McPherson (CARO-CD), 281630 Feb 91, subj: National Guard Flight Hours in Support of JTF-6 Operations. (1 pg)
11. Msg, Cdr USAAVNC (ATZQ-AC) to Cdr CINCUSAREUR (AEACG), 171505Z Mar 92, subj: Urgent Need for 93BW5 Aerial Observer Exportable Training Program. (2 pgs)
12. Msg, Cdr USAAVNC to Cdr USAITC (ATSH-DPT-T), 0721900Z Aug 92, subj: U.S. Army Aviation Center Training Aids, Devices, Simulators, and Simulations and Aircraft Survivability Equipment Training Management Point of Contact. (3 pgs)
13. Msg, Cdr USAAVNC (ATZQ-DAC) to AIG 898, 0711330Z Mar 92, subj: FAC 3 Implementation and Clarification. (3 pgs)
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15. Ltr, CG USAAVNC to Maj. Gen. Clark, 21 Jan 92, subj: AIRNET Facility. (2 pgs)
16. Ltr, CG USAAVNC to Mr. Thomas J. Edwards, 9 Jan 92: Transfer of Avionic Military Occupational Skills. (2 pgs)

17. Ltr, CG USAAVNC to Deputy Chief of Staff for Training, TRADOC, 24 Apr 92, subj: Officer Advanced Course Small Group Instructor Exchange Programs. (2 pgs)
18. Memorandum of Agreement between the National Guard Bureau and USAAVNC, subj: Transition Training of UH-60 Aviators. (2 pgs)
19. Memo, Col. Patrick J. Bodelson to Assistant Commandant, USAALS, 10 Jan 92, subj: Review of Draft HSB MOU Between USAAVNC and USATCFE. (2 pgs)
20. Memo, Brig. Gen. Robert A. Goodbary to Program Executive Officer, Aviation, Office of the Assistant Secretary of the Army, 5 Mar 92, subj: OH-58D Kiowa Warrior Training Release. (1 pg)
21. Msg, USAAVNC to Cdr 1st MI Bde (AETV-MI-AE), 034150Z Feb 92, subj: Results of the Fixed Wing/Special Electronic Mission Aircraft Systems Program Review Council of Colonels. (5 pgs)
22. Msg, Cdr USAAVNC to AIG 898, 361600Z Jan 92, subj: Update of the TC 1-204 Night Flight Techniques and Procedures. (1 pg)
23. Msg, Cdr USAAVNC (ATZQ-AC) to Cdr TRADOC (ATTG-I/IA/TOMA), 1360930Z Jun 92, subj: OH-58D Warrior Aviator Qualification Supplemental Course, 2C-S1A3/152D. (3 pgs)
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26. Msg, Cdr USAAVNC (ATZQ-CG) to AIG 898, 1431930Z May 92, subj: Air Combat Maneuver Training. (3 pgs)
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28. Msg, Cdr USAAVNC (ATZQ-CS) to Cdr TRADOC (ATCS/ATTG-ZB), 1190930Z May 92, subj: FY 92 Flight Training Resources. (3 pgs)
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30. Msg, Cdr USAAVNC (ATZQ-CS) to Cdr NTC Ft. Irwin (ATXY-AV), 1281630Z May 92, subj: Aviation Prepositioned Fleet. (2 pgs)
31. Msg, Cdr USAAVNC (ATZQ-DPT-RT) to Cdr TRADOC (ATTG-IA), 1340830Z May 92, subj: UH-60 Aircraft for the Training Base. (2 pgs)
32. Msg, Cdr USAAVNC (ATZQ-ATC-MO) to ATG 8846, 1471300Z May 92, subj: Critical Task and Site Selection Board for MOS 93D, Air Traffic Control Equipment Repairer. (2 pgs)
33. Ltr, Maj. Gen. John D. Robinson to Mr. Robert E. Nokes, subj: Request for Duplicate Diploma. (2 pgs)
34. Memo, Hugh Weeks to CG, USAAVNC, 21 Jul 92, subj: Charter for Executive Steering Committee for Total Army Quality--ACTION MEMORANDUM. (4 pgs)
35. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr PERSCOM (TAPC-ZA), 271445Z Aug 92, subj: Aircraft Survivability Equipment and Electronic Warfare Readiness. (2 pgs)

36. PROFFS Note, AARONR to ROBINSON, 22120721 July 92, subj: Mobile Aircrew Sustainment Trainers Briefing. (1 pg)
37. Ltr, Maj. Gen. John D. Robinson to Maj. Gen. Dennis Crumley, 10 Mar 92, subj: Tracked Vehicle Maneuver Training at Fort Rucker by the Alabama National Guard. (2 pgs)
38. Ltr, Maj. Gen. John D. Robinson to Maj. Gen. Fred Marty, 24 Mar 92, subj: Comments. (3 pgs)
39. Memo, Maj. Gen. John D. Robinson to Cdr U.S. Army Corps of Engineers (CESAM-RE-A), 31 Mar 92, subj: Land Acquisition for Helicopter Stagefields (Real Estate Directive 8699). (2 pgs)
40. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr Ft. Sill (ATSF-CG), 3451000Z Jan 92, subj: Loan of Battery Computer System (2 pgs)
41. Memorandum in Turn, Col. Ronald D. Thomas to Cdr USAAVNC (ATZQ-DEPT), 19 Oct 92, subj: Diver Training Memorandum of Understanding. (7 pgs)
42. Memo, Brig. Gen. Robert A. Goodbary to Cdr U.S. Army Infantry Center (ATZB-AC), 20 Oct 92, subj: Brigade Assistant S-3/S-3 Air. (2 pgs)
43. Memo, Brig. Gen. Robert A. Goodbary to Brig. Gen. William Nash, 10 Sep 92, subj: Joint Training Initiatives. (2 pgs)
44. Memo, Brig. Gen. Robert A. Goodbary to DCS, TRADOC (ATTG-ZO), 14 Aug 92, subj: Course Administrative Data for the AH-64 Aviation Qualification Course. (8 pgs)
45. Memo, Brig. Gen. Robert A. Goodbary to Maj. Gen. Dewitt T. Irby, 20 Jul 92, subj: OH-58D Aircrew Training Manual Tasks. (6 pgs)
46. Ltr, Maj. Gen. John D. Robinson to Maj. Gen. Dennis Malcor, 11 Aug 92, subj: Cost and Training Effectiveness Analysis (OH-58D CTEA). (2 pgs)
47. Memo, Maj. Gen. John D. Robinson to Maj. Gen. Dennis Malcor, 21 Jul 92, subj: Instructor Pilot Training at National Guard Aviation Training Sites. (1 pg)
48. Memo, Maj. Gen. John D. Robinson to Lt. Gen. Wilson Shoffner, 14 Jul 92, subj: Total Army Quality. (2 pgs)
49. Ltr, Maj. Gen. John D. Robinson to General Frederick M. Franks, 22 Jun 92, subj: Funds to Support Comanche AVTB. (1 pg)
50. Memo, Maj. Gen. John D. Robinson to Maj. Gen. Donald Lionetti, 2 Jun 92, subj: Southeastern Test and Training Area Membership. (2 pgs)
51. Ltr, Maj. Gen. John D. Robinson to Maj. Gen. Dennis Malcor, 18 May 92, subj: Update Computer Systems, AH-1 Flight and Weapons Simulators. (1 pg)
52. Memo, Maj. Gen. John D. Robinson to Maj. Gen. Jay M. Garner, 7 Apr 92, subj: Request HELLFIRE Modular Missile Systems for Quarterly Combined Arms Live Fire Exercise. (1 pg)
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54. Memo, Maj. Gen. John D. Robinson to Maj. Gen. Henry Hagwood, 2 Mar 92, subj: Helicopter School Battalion Concept Approval. (2 pgs)

55. Memo, Maj. Gen. John D. Robinson to Maj. Gen. Donald M. Lionetti, 2 Mar 92, subj: Assignment of TRADOC Mission for the Army National Guard Aviation Training Sites. (2 pgs)
56. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr TRADOC (ATCS), 121730Z Nov 92, subj: Reduction in Individual Mobilization Augmentee Allocation. (3 pgs)
57. Briefing Slides, Opening Remarks, TRADOC Senior Leader's Conference, Ft. McClellan, 27-28 Jul 92, subj: Assessment and Vision. (18 pgs)
58. Ltr, Maj. Gen. John D. Robinson to Lt. Gen. J. H. Binford Peay III, subj: Misleading Slide, (2 pgs)
59. Msg, Cmnt USAALS (ATSQ-TAC) to Cdr TRADOC (ATTG-ZA), 091423Z Oct 92, subj: Review of AIT Course Lengths. (1 pg)
60. Msg, Cdr TRADOC (ATCG) to Cdr XVIII ABN Corps (AFZA-CG), 072100Z Oct 92, subj: Aviation Maintenance Personnel Shortfalls. (1 pg)
61. Msg, Cdr TRADOC (ATCG) to Cdr USAAVNC (ATZQ-CG), 072000Z Oct 92, subj: Funding for Training in Aviation Test Bed. (1 pg)
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63. Msg, DA WashDC (DAMO-FDZY) to Cdr USAAVNC (ATZQ-CG), 201510Z Nov 92, subj: Training Strategy for OH-58D Kiowa Warrior Fleet. (1 pg)
64. PROFFS Note, FINCHF to All Cdrs/Dirs, 131634 Feb 92, subj: NCO Academy, TRADOC Accreditation. (1 pg.)
65. Memo, Col. Robert N. Seigle to Distr, 19 Oct 92, Subj: Attendance at Air Assault Training. (1 pg.)
66. PROFFS Note, ROBINSON to All Cdrs/Dirs, 202307 Sep 92, subj: WAATS Visit. (2 pgs)
67. PROFFS Note, ROBINSON to All Cdrs/Dirs, 081429 Mar 92, subj: Visit to JRTC. (1 pg)
68. Article, "New Simulator Strengthen Aviation Training Potential", Army Flier, 9 Oct 92.
69. Article, "Aviation Symposium Strengthens Branch", Army Flier, 9 Oct 92.
70. Article, "Trainers to Attend Vital Conference", Army Flier, 23 Oct 92.
71. PROFFS Note, ROBINSON to All Cdrs/Dirs, 011758 Nov 92, subj: Training Analysis. (1 pg)
72. PROFFS Note, ROBINSON to Avn Bde Cdrs, 052119 Jul 92, subj: IDF Visit. (1 pg)
73. PROFFS Note, ROBINSON to All Cdrs/Dirs, 051843 Jul 92, subj: Branch Visit, Hawaii. (2 pgs)
74. PROFFS Note, BALLC to All Cdrs/Dirs, 281741 Sep 92, subj: Air to Air Combat II Briefings. (1 pg)
75. PROFFS Note, ROBINSON to All Cdrs/Dirs, 011858 Feb 92, subj: Apache Trng Bde. (1 pg)
76. PROFFS Note, ROBINSON to All Cdrs/Dirs, 220715 May 92, subj: SITREP 3. (2 pgs)

77. Memo, General Frederick M. Franks to distr, 1 May 92, subj: Operating and Support Cost Reduction. (10 pgs)
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79. PROFFS Note, ROBINSON to All Cdrs/Dirs, 101800 Jun 92, subj: SITREP 10 Jun 92. (2 pgs)
80. PROFFS Note, FRANKS to ROBINSON, Memorandum for the Record, subj: TRADOC Senior Leader Conference "Hotwash". (10 pgs)
81. Monograph, Aviation Training Aids, Devices, Simulations, and Simulators Modernization Plan, Jan 92. (247 pgs)
82. Memo, Lt. Col. Ralph Aaron to Post Historian, 8 May 92, Subj: Commanding General's Tasker for Video Update. (10 pgs)
83. PROFFS Note, TORRUCK to LEBSACK, 051737 May 92, subj: Information Paper -- Aviation Testbed. (2 pgs)
84. PROFFS Note, GOODBARRY to FINCHF, subj: JRTC Visit-- 14-15 Sep 92. (2 pgs)
85. Article, "Drawdown: Fort Rucker Agencies Outline Impact", Army Flier, 6 Jan 92.
86. Article, "AFD Created to Improve Flight Ops", Army Flier, 23 Oct 92.
87. PROFFS Note, ROBINSON to All Cdrs/Dirs, 262143 Sep 92, subj: ATD's In Battle Lab. (3 pgs)
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89. PROFFS Note, ROBINSON to All Cdrs/Dirs, 151712 Nov 92, subj: Visit to Germany (7-13 Nov). (6 pgs)
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94. PROFFS Note, ROBINSON to All Cdrs/Dirs, 010544 Oct 92, subj: TRADOC Cdrs Conf (29-30 Sep). (4 pgs)
95. PROFFS Note, ROBINSON to All Cdrs/Dirs, 242042 Oct 92, subj: Battle Lab SITREP 3-92. (7 pgs)
96. PROFFS Note, ROBINSON to Add Cdrs/Dirs, 140648 Oct 92, subj: SITREPS, Week of 9 Oct 92. (1 pg)
97. Article, "NCO Academy Integrates Small Group Concept", Army Flier 8 Apr 92.

98. Article, "Officer Advance Course Teaches Using Proactive Skill Approach", Army Flier 8 Apr 92.
99. PROFFS Note, ROBINSON to GOODBARRY, 211809 Feb 92, subj: Staff Notes Update. (9 pgs)
100. PROFFS Note, ROBINSON to All Cdrs/Dirs, 070906 Feb 92, subj: Depth and Simultaneous Attack Battle Lab Year End Report. (4 pgs)
101. Article, "Budget Reductions Hit Flight Training", Army Flier, 29 Jan 93.
102. PROFFS Note, ROBINSON to All Cdrs/Dirs, 071711 Jan 93, subj: Battle Lab Concept Development. (2 pgs)
103. PROFFS Note, CLARKB to XO/OPS Personnel, 061036 Jan 93, subj: CS Sends: FY 93 Reductions to Flight Training. (1 pg)
104. FY 92 Graduates. (2 pgs)

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2. Msg, Cdr USAAVNC to AIG 12530, 241200Z Jul 92, subj: User Flash 14 -- Apache Readiness Improvement Program Update # 25. (5 pgs)
3. Msg, Cdr USAAVNC (ATZQ-DPT) to Cdr TRADOC (ATTG-ATOMO-I/R), 241500Z Jul 92, subj: Suspension OH-58D Warrior Training. (3 pgs)
4. Msg, Cdr USAAVNC to HQDA WashDC (SARD-ZCS), 301455Z Jul 93, subj: Chemical Protective Undergarment Funding. (2 pgs)
5. Msg, Cdr USARSO to Cdr USAAVNC (ATZQ-CG), 291730Z Jul 92, subj: Cable Warning System for Army Helicopters. (1 pg)
6. Msg, CINC USAREUR to Cdr USAAVNC (ATZQ-CG), 060843Z Aug 92, subj: USAREUR Corps Avn Bde Command and Structure. (1 pg)
7. Msg, Cdr USAAVNC (ATZQ-CG) to CNGB WashDC (NGB-AVN), 271000Z Jul 92, subj: AH-64 Aircraft Redistribution for USAAVNC. (3 pgs)
8. Msg, Cdr USAAVNC (ATZQ-ESF) to AIG 898, 101200 Aug 92, subj: Preparation for Ungrounding of the OH-058D. (2 pgs)
9. Msg, Cdr ATCOM (AMSAV-TOA) to Cdr USAAVNC (ATZQ-LTD), 142000Z Aug 92, subj: Korean Apache Program. (1 pg)
10. Msg, APG MD (NGB-AVN) to Cdr USAAVNC (ATZQ-CG), 171521Z Aug 92, subj: AH-64 Aircraft Redistribution for USAAVNC. (1 pg)
11. Msg, Cdr TRADOC (ATAN-AP) to Cdr USAAVNC (ATZQ-CG), 161400Z Jan 92, subj: Longbow Stationary Target Identification Requirements Study. (2 pgs)
12. Msg, PEO AW (SEAE-AV-AAH-1) to Cdr USAAVNC (ATZQ-TPO-A/ATZQ-TD), 161900Z Jan 92, subj: Brief on Apache Front End Analysis. (2 pgs)

13. Msg, Maj. Gen. John D. Robinson to Maj. Gen. McCaffrey, 3026142Z Mar 92, subj: Command Aviation Battalion, Heavy Division. (2 pgs)
14. Msg, Maj. Gen. John D. Robinson to Brig. Gen. Konitzer, 040730Z Mar 92, subj: Escort Jammer. (2 pgs)
15. Msg, Cdr TRADOC (ATCG) to Cdr USAAVNC (ATZQ-CG), 021700Z Mar 92, subj: AUSA Winter Symposium, Orlando. (1 pg)
16. Msg, HQDA (DAMO-EDZ) to Cdr USAAVNC, 021945Z Mar 92, subj: Battlefield Targeting Architecture. (1 pg)
17. Msg, Maj. Gen. John D. Robinson to Maj. Gen. Knudson, 131430Z Mar 92, subj: Army Command and Control System Review. (2 pgs)
18. Msg, Cdr USAAVNC (ATZQ-CG) to DA Washington (DAMO-EDV), 231330Z Mar 92, subj: USAAVNC Position on AH-64 Training Devices. (2 pgs)
19. Memo, Maj. Gen. Dewitt T. Irby to Mr. Conner, 11 Oct 92, subj: New Training Helicopter Training Effectiveness User Evaluation. (4 pgs)
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24. Memo, Col. Stephen MacWillie to CG, USAAVNC, 6 Nov 92, subj: Army Aviation Modernization Plan Weapons Annex - ACTION MEMO. (27 pgs)
25. Memo, Col. Stephen MacWillie to CG, USAAVNC, 6 Nov 92, subj: Avionics System Improvement Program Priorities -- ACTION MEMORANDUM. (26 pgs)
26. Briefing Slides, Maj. Gen. Dewitt T. Irby, subj: Aviation Safety Action Team -- OH-58D Grounding Rescission. (20 pgs)
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28. Msg, TAG OR SALEM OR (AASF) to FTSMC (DARP-ARO), 070915Z Feb 92, subj: Results of the Fixed Wing/Special Electronic Mission Aircraft Systems Program Review Council of Colonels. (5 pgs)
29. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr USACAC (ATZL-CG), 251445Z Jun 92, subj: Documentation Consolidation. (3 pgs)
30. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr 24th IN DIV (AFZP-ADC-S), 221350Z Jun 92, subj: Aviation Brigade Liaison Officers. (2 pgs)
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32. Msg, Cdr USAAVNC (ATZQ-DPT-RT) to Cdr TRADOC (ATTG-IA), 041400Z May 92, subj: Movement of CH-47D Aircraft. (2 pgs)
33. Msg, Cdr USAAVNC to Cdr V CORPS (AETV-SCS-VL), subj: Army Airborne Command and Control System. (3 pgs)
34. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr USAAVSCOM (AMSAV-G), 081200Z May 92, subj: Longbow Apache Retrofit and UH-1 Aircraft Retirement Program. (2 pgs)
35. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr TRADOC (ATCD-CG), 021615Z Apr 92, subj: Battle Space Command and Control. (3 pgs)
36. Msg, Cdr USAAVNC (ATZQ-CG) to Cdr TRADOC, 151310Z Apr 92, subj: Implementation of New Battlefield Dynamics. (2 pgs)
37. Memo, Maj. Gen. John D. Robinson to Brig. Gen Larry Lehowicz, 26 Aug 92, subj: Final Draft Operational Requirements Document for the Nap-of-the-Earth Communications. (24 pgs)
38. Memo, Maj. Gen. John D. Robinson to General Frederick M. Franks, 25 Aug 92, subj: Multi-role Self-Defense Weapon System (Quick Draw). (4 pgs)
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42. Briefing Slides, General Officer Steering Committee, subj: Fixed-Wing/SEMA. (10 pgs)
43. Memo, Col. Stephen MacWillie to CG, USAAVNC, 7 Aug 92, subj: Response to Commander's Inquiry (SEMA/Fixed Wing Conference). (24 pgs)
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45. Msg, Cdr USAAVNC to Cdr USAISC (ATZN-CM-F), subj: U.S. Army Aviation Center Training Aids, Devices, Simulators, and Simulations and Aircraft Survivability Equipment Training Management Point of Contact. (3 pgs)
46. Memo, Lt. Col. Harold Brecher to Maj. Gen. John D. Robinson, 10 Feb 92, subj: Management Decision Document for Contracted Study AirLand Operations Future Trends for Employing Aviation in the Global Environment. (3 pgs)
47. Memo, Maj. Gen. John D. Robinson to Maj. Gen Dewitt T. Irby, 14 Jan 92, subj: Air to Air Missile - the U.S. Army Aviation Center's Position. (2 pgs)
48. Memo, Col. Stephen MacWillie to CG, USAAVNC, 21 Jul 92, subj: Read Ahead, VECTOR Briefing. (4 pgs)
49. E-Mail, KINDRED to ELAMP, 201259 Nov 92, subj: Audit of Obsolete Aircraft. (1 pg)
50. Memo, Brig. Gen. Robert A. Goodbary to Brig. Gen. Edward Anderson, 21 Aug 92, subj: Post Cold War Command and Control Briefing, August 1992. (3 pgs)

51. Ltr, Brig. Gen. Robert A. Goodbary to Brig. Gen. Larry Lehowicz, 27 Jul 92, subj: Critical Operational Issues and Criteria. (2 pgs)
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84. Article, "Comanche Engine Demonstrated in Huey," Army Flier, 28 Aug 92.
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103. Article, "2-229th Receives Two Improved Kiowas," Army Flier, 26 Mar 92.
104. Briefing Slides, Maj. Gen. John D. Robinson, subj: Aviation Branch Briefing. (18 pgs)
105. Flyer. The Comanche Courier, Feb 1993. (2 pgs)
106. Article. "Aviation Restructure Initiative Maps Aviation Road into Future," Army Flier, 15 Jan 93.
107. E-Mail, ROBINSON to All Cdrs/Dirs, 160635 Jan 93, subj: Meeting with VCSA on Force Structure.
108. E-Mail, ROBINSON to All Cdrs/Dirs, 191729 Dec 92, subj: Mounted B/L Session (17-19 Dec). (3 pgs)
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134. Article, "Cairns Army Airfield Gets A Facelift", Army Flier, 25 Nov 92.
135. Article, "WOCs Now Become WO1s After Candidate School", Army Flier, 8 Jan 92.
136. Article, "Warrant Officer Fives Debut at Ft. Rucker", Army Flier, 2 Oct 92.
137. Article, "WOCs to Become WO1s After Candidate School", Army Flier, 28 Aug 92.
138. Article, "Army Updates Warrant Officer Management", Army Flier, 29 Jan 92.
139. E-Mail, ROSENBEL to All Cdrs/Dirs, 181520 Sep 92, subj: Extending Temporary Employees. (1 pg)
140. E-Mail, MILBURNS to All Cdrs/Dirs, 081833 Oct 92, subj: FY93 Funding. (1 pg)
141. Memo, Col. Robert N. Seigle to distr, 1 Oct 92, subj: Department of Defense Program for Stability of Civilian Employment. (1 pg)
142. Article, "Board Seeks to Select Fixed-Wing Pilots", 4 Dec 92.
143. E-Mail, FLOWERSH to Center Directors, 011402 Dec 92, subj: Funds and People. (2 pgs)
144. Memo, Maj. Gen. John D. Robinson to distr, 25 Nov 92, subj: FY 93 Safety Goals and Objectives. (2 pgs)
145. Memo, Col. Robert N. Seigle to distr, 9 Nov 92, subj: Policy on Managing to Budget. (1 pg)
146. E-Mail, ROSENBEL to All Cdrs/Dirs, 141439 Dec 92, subj: Army Human Resource Management Strategy for the Future. (2 pgs)
147. E-Mail, SEIGLER to All Cdrs/Dirs, 060957 Jan 92, subj: 1)Freeze 2)Temp Restrictions. (2 pgs)
148. Article, "Fort Rucker Deploys Soldiers to Somalia", Army Flier, 18 Dec 92.
149. Article, "Somalia Sojourn", Army Flier, 18 Dec 92.
150. Memo, Howell L. Flowers to ATB, 15 Sep 92, subj: Provisional TDA #93-4. (2 pgs)
151. Msg, CJTF to Cdr USAAVNC, 281630Z Feb 91, subj: National Guard Flight Hours in support of JTF-6 operations. (2 pgs)
152. Memo, Maj. Gen. John D. Robinson to Col. Daniel Ferezan, 11 Aug 92, subj: Approval of the Operational Requirements Document for Tactical Terminal Control System. (29 pgs)
153. 1st End, Maj. Gen. John D. Robinson to Cdr Aviation Bde, 25th Inf. Div, 21 Jul 92, subj: Restructure of Aviation Resource Management Survey. (1 pg)
154. 1st End, Maj. Gen. John D. Robinson to Cdr TRADOC, 11 Aug 92), subj: Annual Safety and Occupational Health Program Evaluation. (1 pg)
155. Memo, Maj. Gen. John D. Robinson to distr, 4 Sep 92, subj: Accident Prevention Policy. (1 pg)

GGG. APPENDIX FILE

1. Article, "ATTC: More than Just an Acronym," Army Flier, 20 Mar 92.

2. Memo, Maj. Gen. John D. Robinson to distr, 14 Jul 92, subj: Commanding General's Policy on Utilization of EEO Counselors. (2 pgs)
3. E-Mail, VOTHW to All Cdrs/Dirs, 281550 Feb 92, subj: New DOTD. (1 pg)
4. E-Mail, LEBSACD to All Cdrs/Dirs, 271355 Feb 92, subj: Activation of Directorate of Simulation. (2 pgs)
5. E-Mail, LEBSACKD to All Cdrs/Dirs, 260937 Feb 92, subj: USAAVNC/USAALS Reorganization. (1 pg)
6. E-Mail, SWANKD to All Cdrs/Dirs, 040956 Aug 92, subj: New Director DPTMSEC. (1 pg)
7. E-Mail, DELASHAJ to All Cdrs/Dirs, 230919 Jun 92, subj: TSM Comanche. (1 pg)
8. E-Mail, DAWKINSL to All Cdrs/Dirs, 021400 Jun 92, subj: Col. Tom Garrett - Reporting FTR, 12 Jul. (1 pg)
9. E-Mail, LUDOWESJ to All Cdrs/Dirs, 121020 Jun 92, subj: New Protocol Officer. (1 pg)
10. E-Mail, HIATTR to All Cdrs/Dirs, 131510 Jul 92, subj: New Director, DPTMSEC. (1 pg)
11. E-Mail, SALYERSL to All Cdrs/Dirs, 141412 Jul 92, subj: New Director, DPTMSEC. (1 pg)
12. E-Mail, SUTHERLW to All Cdrs/Dirs, 140926 Jul 92, subj: New APG Chief. (1 pg)
13. E-Mail, DAWKINSL to All Cdrs/Dirs, 231613 Jul 92, subj: Col. Thomas W. Garrett, Deputy Assistant Commandant. (1 pg)
14. E-Mail, TERRILLM to All Cdrs/Dirs, 240644 Jul 92, subj: Chief of Staff. (1 pg)
15. E-Mail, ROBINSON to All Cdrs/Dirs, 111627 Jun 92, subj: New Director, Comanche Program. (1 pg)
16. E-Mail, CONLEYM to All Cdrs/Dirs, 101141 Aug 92, subj: New Director of Simulation. (1 pg)

HHH. HISTORIAN NOTE FILE

1. Commanders and Staff Meeting, 4 Feb 92. (7 pgs)
2. Commanders and Staff Meeting, 1 May 92. (2 pgs)
3. E-Mail, BODELSOP to All Cdrs/Dirs, 181112 Feb 92, subj: Commanders and Staff Meeting, Commanding General Comments. (5 pgs)

III. 1992 AVIATION BRIGADE COMMANDERS' CONFERENCE FILE

1. 1992 Aviation Brigade Commander Fact Book Index. (1 pg)
2. USAAVNC Doctrinal Literature Program -- Field Manuals. (8 pgs)
3. Information Paper, ATZQ0TDI-L, Mr. Baldwin, 2 Nov 92, subj: Doctrine Update. (6 pgs)
4. Briefing Slides, Aviation Trainers, "Aviation at the National Training Center," Eagle Team. (17 pgs)

5. Fact Sheet, ATZQ-TDI-OU, 17 Nov 92, subj: Standard Army Training System. (2 pgs)
6. Fact Sheet, Operational Support Airlift Command, subj: The Operational Support Airlift Command. (3 pgs)
7. Information Paper, ATZQ-TDI-A, 27 Oct 92, subj: Flexibility of Aircrew Training Program Requirements. (1 pg)
8. Information Paper, ATZQ-TDI, Col. Charles M. Burke, 23 Nov 92, subj: Implementation of Battle Rostering on Short Tours. (1 pg)
9. Information Paper, ATZQ-AP, 23 Nov 92, subj: Career Management and Progression for MOS 93B (Aeroscout Observer). (1 pg)
10. Information Paper, ATZQ-TD, 30 Nov 92, subj: AH-64 FAC 3 Aviator Simulator Requirements. (1 pg)
11. Fact Sheet, ATZQ-TDI-E, 20 Nov 92, subj: Total Force Integration Aviation Management Program. (1 pg)
12. Msg, Cdr USAAVNC (ATZQ-ESF) to AIG, 312330Z Oct 92, subj: Streamlining/Simplifying of Aviation Standardization, Training, and Safety Requirements. (2 pgs)
13. Ltr (1st End), Francis N. Anderson to Dir DOTD (ATZQ-TDA), 5 Nov 92, subj: Issues for the Aviation Brigade Commander's Conference 1992. (10 pgs)
14. Memo, Col. Ted D. Cordrey to DCD (ATZQ-CDI), 13 Nov 92, subj: AVCOM '92 Issues Response. (12 pgs)
15. Briefing Slides, Aviation Battle Lab -- Support Team. (30 pgs)
16. Report, General Franks Message to Battle Labs, subj: Commanders Intent: Battle Labs. (3 pgs)
17. Report, Early Entry Battle Dynamic. (13 pgs)
18. Fact Sheet, ATSQ-LTD-P, 24 Nov 92, subj: MOS 67T Not Trained to Perform Minimum MOS Tasks. (1 pg)
19. Fact Sheet, ATSQ-LTD-P, 30 Nov 92, subj: Aviation Life Support Equipment Training. (1 pg)
20. Article, "NDI, Non-Destructive Inspection -- A Maintenance Multiplier", USAALS Newsletter, Special Edition/Dec 92. (2 pgs)
21. Briefing Slides, Warfighting. (9 pgs)
22. Briefing Slides, Helicopter Gunnery. (10 pgs)
23. Briefing Slides, Warrant Officer Division, PERSCOM. (10 pgs)
24. Briefing Slides, Early Entry Lethality and Survivability Battle Lab. (7 pgs)
25. Briefing Slides, 93B Transition. (9 pgs)
26. Information Paper, ATSQ-LAC, 25 Nov 92, subj: 15B/90. (15 pgs)
27. Information Paper, ATZQ-TDM-A, 20 Nov 92, subj: Air Combat Operations. (24 pgs)

28. Briefing Slides, Depth and Simultaneous Attack. (6 pgs)
29. Memo, Lt. Col. Errol C. Pratt to distr, 1 Dec 92, subj: Display of Unit Emblems in the Fort Rucker Officers' Club. (1 pg)
30. Briefing Slides, Warfighting -- Battlespace. (5 pgs)
31. Briefing Slides, Aviation Initiatives. (12 pgs)
32. Briefing Slides, Mission (CAC). (9 pgs)
33. Briefing Slides, Mounted Warfighting Battlespace -- Lab/Aviation Support Team. (10 pgs)
34. Briefing Slides, RAH-66, 1992 Aviation Brigade Commander's Conference. (55 pgs)
35. Briefing Slides, Army Aviation in the Changing Strategic Environment. (25 pgs)
36. Memo, Maj. Gen. John D. Robinson to General Frederick M. Franks, 30 Oct 92, subj: Preliminary Draft to FM 100-5. (7 pgs)
37. Preliminary Draft, FM 100-5 Operations. (190 pgs)
38. Briefing Sheet, subj: AVCOM 92, Material. (1 pg)
39. Information Paper, ATZQ-TD, 30 Nov 92, subj: APART Adjustment for Aviators Grounded or TDY. (1 pg)
40. Briefing Slides, Reshaping Army Aviation, U.S. Army Aviation Warfighting Center. (34 pgs)
41. Army Aviation Warfighting Center Newsletter, Dec 92. (5 pgs)
42. Briefing Slides, Army Aviation -- The Current Plan, HQDA, ODCSOPS Force Development. (31 pgs)
43. Fact Sheet, ATZQ-DSA, 2 Dec 92, subj: Aircraft Survivability Equipment Trainer II. (2 pgs)
44. Fact Sheet, ATZT-DSA, 2 Dec 92, subj: Aircraft Survivability Equipment Trainer IV. (1 pg)
45. Fact Sheet, ATZQ-DSA, 2 Dec 92, subj: Aircraft Survivability Equipment/Electronic Warfare Officer Course. (1 pg)
46. Briefing Slides, Combat Service Support, Battle Lab, USAALS. (12 pgs)
47. Briefing Slides, Personnel Reduction Strategy, PERSCOM. (25 pgs)
48. Briefing Slides, PEO/PM -- Supporting Soldiers, 3 Dec 92. (33 pgs)
49. Brigade Commander's Conference '92, Point of Contact Roster. (22 pgs)
50. Partial Transcripts, Aviation Brigade Commanders' Conference 1992. (87 pgs)
51. Briefing Slides, U.S. Army Safety Center Briefing. (25 pgs)
52. Final Draft, Aviation Commanders Maintenance Detractor Survey, ATCOM Operations Center, Nov 92. (34 pgs)

APPENDIX V

LIST OF ACRONYMS

ABSO	Aviation Branch Safety Office
ACAP	Army Career and Alumni Program
AMC LAO	Army Materiel Command Logistic Assistance Office
APO	Aviation Proponency Office
ARCSA	Aviation Requirements for the Combat Structure of the Army
ARIARDA	U.S. Army Research Institute Aviation Research and Development
ARNG	U.S. Army National Guard
ATAWS	Airborne Target Acquisition and Weapon System
ATAS PMO	Air-to-Air Stinger, Program Management Office
ATB	Aviation Training Brigade
ATCOM	U.S. Army Aviation and Training Command
ATTC	U.S. Army Aviation Technical Test Center
AVSCOM	U.S. Army Aviation Systems Command
CAC	U.S. Army Combined Arms Center
CASCOM	Combined Arms Support Command
CG	commanding general
CY	calendar year
DA	Department of the Army
DAALT	Department of Advanced Aviation Logistics Training
DAC	deputy assistant commandant
DAHT	Department of Attack Helicopter Training
DARPA	Defense Advanced Research Projects Agency
DAST	Department of Aviation Systems Training
DATT	Department of Aviation Trades Training
DCA	Directorate of Community Activities
DCD	Directorate of Combat Developments
DCP	Directorate of Civilian Personnel
DCSOPS	deputy chief of staff for operations
DCSPER	deputy chief of staff for personnel
DEH	Directorate of Engineering and Housing
DENTAC	U.S. Army Dental Activity
DES	Directorate of Evaluation and Standardization
DOC	Directorate of Contracting
DOD	Department of Defense
DOE	Department of Energy
DOES	Directorate of Evaluation and Standardization
DOET	Department of Enlisted Training
DOIM	Directorate of Information Management
DOL	Directorate of Logistics
DOS	Directorate of Simulation
DOTD	Directorate of Training and Doctrine
DOTS	Department of Tactics and Simulation

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
EEO	Equal Employment Opportunity
FAA	Federal Aviation Administration
FORSCOM	U.S. Army Forces Command
FTS	Flying Training Squadron
FY	fiscal year
HMD	helmet mounted display
HQDA	Headquarters, Department of the Army
IG	Office of the Inspector General
IRAC	Internal Review and Audit Compliance
JTF-B	Joint Task Force - Bravo
LD/PPO	Leader Development/Personnel Proponency Office
MOS	military occupation specialty
MPA	Military Police Activity
NATO	North Atlantic Treaty Organization
NCOA	Noncommissioned Officer Academy
OMP/AG	Office of Military Personnel/Adjutant General
OPTEC	U.S. Army Operational Test and Evaluation Command
PAO	Public Affairs Office
PAT	process action team
PERSCOM	U.S. Army Total Personnel Command
PM AEC	Program Manager, Aviation Electronics Combat
PMO	Program Management Office
PM TRADE	Program Manager, Training Devices
PPP	priority placement plan
RAH	reconnaissance attack helicopter
RIF	reduction-in-force
SETTA	Southeastern Test and Training Area
SJA	Office of the Staff Judge Advocate
STRATA	simulator training research advanced test bed
STRICOM	Simulation, Training, and Instrumentation Command
TECO	Test and Evaluation Coordination Office

TPO	TRADOC Project Office
TPD	Training Plans Division
TRADOC	U.S. Army Training and Doctrine Command
TSM	TRADOC Systems Manager
USAALS	U.S. Army Aviation Logistics School
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
USACAC	U.S. Army Combined Arms Center
USACASCOM	U.S. Army Combined Arms Support Command
USACMLS	U.S. Army Chemical School
USAICS	U.S. Army Intelligence Center and School
USAR	U.S. Army Reserve
USAREUR	U.S. Army Europe
USASC	U.S. Army Safety Center
USASOC	U.S. Army Special Operations Command
WOCC	Warrant Officer Career Center

APPENDIX VI

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