



U.S. Army Aviation Training Library
Fort Rucker, Alabama 36360

U.S. ARMY
AVIATION CENTER
FORT RUCKER, ALABAMA
HOME OF THE UNITED STATES
ARMY
AVIATION SCHOOL



HISTORY
ANNUAL SUPPLEMENT - 1965

Prepared by:
Office of the Adjutant General
United States Army Aviation Center
Fort Rucker, Alabama
31 March 1966

428
A82
1965
C.4



MAJOR GENERAL JOHN J. TOLSON

COMMANDING GENERAL

9 MARCH 1965 —

PREFACE

This annual supplement is a resume of the historical events in which Headquarters, United States Army Aviation Center participated in during Calendar Year 1965. It provides accurate, objective accounts of the most important aspects of the activities of this headquarters during this period. The problems encountered, their solutions, results obtained, and lessons learned will be a basic source of knowledge to the headquarters staff in the development of future doctrine, plans, policies, organization, and training.

Information contained in this annual supplement was based on reports submitted by the various office chiefs of the headquarters. All material is presented in an impersonal and objective manner. Details, where possible, were omitted for the sake of brevity. Material statements of fact, which are not supported by a reference, can be supported by reports from office chiefs, which are filed in this headquarters.

This report was prepared in compliance with Headquarters USCONARC Regulation 870-2 and instructions contained in Style Manual for Use in the Preparation of US Army in World War II Histories - a publication of the Office of the Chief of Military History, Department of the Army.

INDEX

CHAPTER 1	UNITED STATES ARMY AVIATION CENTER	
	Office of the Secretary General Staff.	2
	Office of the Assistant Chief of Staff, G-1.	4
	Office of the Adjutant General	4
	Civilian Personnel Division.	6
	Manpower Control Division	7
	Army Exchange.	9
	Center Safety	9
	Special Services	9
	Dependents School	10
	Army Education Center.	10
	Office of the Assistant Chief of Staff, G-3	11
	Deputy Chief of Staff for Logistics.	12
	Comptroller	14
	Office of the Staff Judge Advocate	15
CHAPTER 2	SUPPORT UNITS	
	United States Army Hospital.	17
	Dental	18
	USAAVNC Troop Brigade (Provisional).	19
	5th Battalion, 31st Infantry	20
CHAPTER 3	UNITED STATES ARMY AVIATION SCHOOL	
	Director of Instruction.	22
	Department of School Support	27
	Department of Tactics	29
	Department of Publications and Nonresident Instruction	30
	Department of Maintenance.	31
	Department of Fixed Wing Training.	34
	Department of Rotary Wing Training	35
CHAPTER 4	CLASS I AND II ACTIVITIES	
	US Army Combat Developments Command Aviation Agency.	37
	US Army Aviation Human Research Unit	39
	US Army Aviation Test Board.	40
	US Army Aeromedical Research Unit.	43
	Appendix I - Command and Staff - 31 December 1965.	45

CHAPTER 1
UNITED STATES ARMY AVIATION CENTER

OFFICE OF THE SECRETARY GENERAL STAFF

Retirement of Major General Clifton F. von Kann. Twenty-seven years of service in the Army ended 28 February 1965 with the retirement of Major General Clifton F. von Kann, Commanding General of Fort Rucker since 23 August 1963.

Assumption of command by Brigadier General John J. Tolson. Ruffles, flourishes, and an 11-gun salute welcomed Brigadier General John J. Tolson to Fort Rucker 9 March 1965, as the one-star officer became Commanding General of the US Army Aviation Center and Commandant of the US Army Aviation School.

At Center Parade Ground in front of post headquarters, in nippy 38^o weather, General Tolson was greeted by an honor guard from the 5th Battalion, 31st Infantry, under command of Captain Ed Hale of Van Nuys, California. After inspecting the honor guard, General Tolson was introduced to staff officers, department directors of the USAAVNS, commanders of Class I and II Activities located at Fort Rucker, and liaison officers from other services.

General Tolson promoted. In a surprise ceremony held 1 May 1965, Fort Rucker's Commanding General received his second star. Pinning on his new insignia were the Commanding General of the Third US Army, Lieutenant General Charles W. G. Rich, and Mrs. Tolson.

General Rich commented that he was particularly happy to participate in the ceremony, since he had been present for two other promotions earlier in General Tolson's career - when the Fort Rucker commander was promoted to first lieutenant and to captain.

Appointment of Colonel Robert F. Cassidy Deputy Center Commander. One of the first actions taken by General Tolson was to appoint Colonel Robert F. Cassidy as Deputy Center Commander. This was a position unique to Fort Rucker, and placed Colonel Cassidy in a position to supervise troop units and support the USAAVNS.

Colonel Cassidy assumed his new duties 15 March 1965, after serving as Assistant Commandant of the USAAVNS since August 1963. He retired on 30 July 1965 and was succeeded by Colonel Lester F. Schockner on 4 August 1965.

Colonel George W. Putnam, Jr. On 7 May 1965, Colonel George W. Putnam, Jr. reported to Fort Rucker for duty as Assistant Commandant of the USAAVNS.

His previous assignment was in Washington, where he was Deputy Director of Army Aviation in the Office of the Assistant Chief of Staff for Force Development, Department of the Army.

USAAVNC/USAAVNS Staff Reorganization. A provisional reorganization of USAAVNC/USAAVNS staff structure became effective 1 February 1965. Changes approved by the Commandant were made to eliminate duplicative functions, promote greater responsiveness, establish a single coordinated staff, and effect manpower savings wherever possible.

Fourth Quadripartite Army Aviation Conference. Representatives of four nations met at Fort Rucker from 4 to 9 October 1965, for the Fourth Quadripartite Army Aviation Conference. Nations represented were the US, Great Britain, Canada, and Australia.

Heading the US delegation was General John J. Tolson. Other delegation leaders were Major General Napier Crookenden, Great Britain; Lieutenant Colonel D. L. Fromow, Canada; and Lieutenant Colonel W. W. Hatton, Australia. In addition, Brigadier Wilson Smith of Canada attended as representative of the Washington Standardization Officers. Another senior officer attending the conference was Brigadier Colin Kennedy, Commandant, British Army Air Corps Center.

The purpose of the week long conference was to review recent Army Aviation experiences of each nation "with a view toward achieving operational, material, and technical cooperation and collaboration in the field of Army Aviation." In addition to complete sessions

of the 35 delegates and observers, there were working groups studying detailed aspects of Army Aviation.

The conferees were not limited to conference rooms; the Department of Tactics of the USAAVNS demonstrated armed helicopters at Matteson Range, and a grand tour of the installation was conducted. General Tolson honored the foreign delegates at a buffet at the Officers' Lake Lodge, and the Commonwealth nations reciprocated at the Main Officers Open Mess.

US delegates and observers to the Quadripartite Conference included representatives from the following: all major activities at Fort Rucker, the Assistant Chief of Staff for Force Development at Department of the Army, the Army Materiel Command, the Combat Developments Command, and the Marine Corps.

Arrangements for the conference were coordinated by the Combat Developments Command Aviation Agency, and all of the business sessions were held in buildings occupied by the Agency.

OFFICE OF THE ASSISTANT CHIEF OF STAFF, G-1

On 1 February 1965, a provisional reorganization and consolidation of certain USAAVNC and USAAVNS activities was effected. Some of the functions of the Office of the Secretary, USAAVNS, were transferred to the Office of the Assistant Chief of Staff, G-1. These functions included the responsibility for USAAVNS personnel matters, the Registrar's Office, and the Foreign Liaison Office.

OFFICE OF THE ADJUTANT GENERAL

Publications Branch. The mission of the AG Publications Branch is to supply publications and blank forms to all elements of USAAVNC, USAAVNS, and other activities and organizations located at this installation.

The phasing in of the pinpoint distribution method has been established on Department of the Army administrative publications, supply manuals, technical publications of selected categories, Army Aviation publications, etc. Training publications remain on command distribution method. AG Publications Branch supplies blank forms and makes distribution of publications on command distribution method to all elements at this installation.

At the present time, along with AG Publications Branch, there are seven pinpoint accounts established with the US Army AG Publications Centers located in Baltimore, Maryland, and St. Louis, Missouri.

AG Publications Branch stocks and maintains 34,000 different publications and blank forms, services 50 command accounts, processing an average of 20,000 line items monthly. An average of 500 new and revised publications are received each month.

Postal Branch. Consolidated Mail Room Number 1 was opened on 2 February 1965 by the AG Postal Branch. Colonel Schockner, Commanding Officer of Troop Brigade (Prov), Fort Rucker, Alabama, officiated over the ribbon-cutting ceremony.

The Consolidated Mail Room serves 1,500 enlisted students, with each man having his own individual combination lockbox.

Consolidated Mail Room Number 2 was officially opened by Major General Tolson on 28 June 1965. This mail room serves Officer Student Company, Warrant Officer Candidate Company, and officers living in BOQs.

Two additional consolidated mail rooms were officially opened on 20 December 1965. Consolidated Mail Room Number 3, located in building 6114, serves the 5th and 6th Enlisted Student Companies, and the WAC Detachment. Consolidated Mail Room Number 4, located in building 3204, serves 1st and 4th Enlisted Student Companies.

Reenlistment. Fort Rucker placed first for the months of January and February 1965, with more reenlistments in the First Term RA and AUS categories than all other installations in Group III. Fort Rucker also placed first in comparison with all other installations and activities in the Third US Army.

Fort Rucker exceeded the DA and Third US Army objectives in all categories in the three quarters of Fiscal Year 1965 by a wide margin. The following is a comparison between DA and Third US Army objectives and Fort Rucker attainments:

CATEGORIES	DA & THIRD USA OBJECTIVES (per cent)	FT RUCKER ATTAINMENTS (per cent)	OVER OBJECTIVES (per cent)
RA First Term	33.33	40.40	7.07
RA Career	80.00	87.12	7.12
AUS (Draftee)	7.00	13.90	6.90
ER & NG	25.00	75.00	50.00

Fort Rucker won the Third US Army Reenlistment Award for the Third Quarter of Fiscal Year 1965 with the highest reenlistment rate as compared to all installations and activities in the Third US Army. The following is a comparison between the DA and Third US Army objectives for the Third Quarter of Fiscal Year 1965 and the Fort Rucker attainments:

CATEGORIES	DA & THIRD USA OBJECTIVES (per cent)	FT RUCKER ATTAINMENTS (per cent)
RA First Term	33.33	45.16
RA Career	80.00	82.35
AUS (Inductee)	7.00	22.64
Reserve & NG	25.00	50.00

During this period Fort Rucker exceeded all the established goals by a very wide margin. From the period 1 July 1964 through 31 May 1965, only 3 out of 15 installations achieved or exceeded the established goals in all 4 categories of reenlistment. These installations are- Fort Rucker, 1st; Fort McClellan, 2d; and Fort Stewart, 3d.

Fort Rucker was awarded the Third US Army Reenlistment Award for the Fourth Quarter of Fiscal Year 1965, which was the second reenlistment award received by Fort Rucker during Fiscal Year 1965.

For the period 1 July 1964 through 30 June 1965 (FY65), the Third US Army Intra-Agency Reenlistment Award Program Report showed a high percentage of reenlistments at Fort Rucker. Fort Rucker placed first in reenlistment of RA First Termers and third in the reenlistment of AUS personnel.

For the months of July and August 1965, Fort Rucker was the only installation in Third US Army to obtain or exceed DA and Third US Army percentage objectives in all categories. The following is a comparison between Fort Rucker attainments for the First Quarter Fiscal Year 1966 and DA and Third US Army objectives:

CATEGORIES	DA & THIRD USA OBJECTIVES (per cent)	FT RUCKER ATTAINMENTS (1 Jul 65 - 30 Sep 65) (per cent)
RA First Term	33.33	43.36
RA Career	80.00	89.19
AUS (Inductee)	7.00	11.32
Reserve & NG	25.00	100.00

OCS Processing Center. On 4 November 1965, the Office of the Adjutant General established an Officer Candidate Processing Section for the immediate purpose of completing 82 Officer Candidate School applications within 72 hours. Upon completion of this project, the processing section was organized following an assembly line pattern with the objective of completing 50 applications each week.

The Officer Candidate Processing Section is supervised by a lieutenant, with an NCO in charge. During the period 4 November 1965 through 1 January 1966, 299 OCS applications were processed.

Army Community Services Agency. The Army Community Services Agency, established at this installation in August 1965, was designed primarily to assist dependents of military personnel serving elsewhere. It has been expanded to the extent that assistance is now being rendered to both active and retired personnel of all military services; to their dependents; and also to certain DA civilians and their dependents, to the extent authorized by regulations.

As of 31 December 1965, 103 cases were processed, and approximately 500 telephone requests for assistance were received.

CIVILIAN PERSONNEL DIVISION

Reduction in Force. Civilian space reductions by higher headquarters during the entire Fiscal Year 1965, as well as reorganizations in some areas, resulted in a surplus of civilian employees at the US Army Aviation Center. Six civilian spaces at the US Army Aviation Test Board required reduction in force actions.

Effective 1 March 1965, the Department of Defense Nation-Wide Priority Referral System became operative. This program was established to provide placement assistance for employees affected by base closures and other reduction in force actions. Under this program, employees being separated or furloughed by RIF are eligible for registration. Skills possessed by these employees are referred to Department of Defense (DOD) activities by weekly "stopper lists" and restrictions are placed on filling any vacancy for which a surplus employee qualifies and at a grade level acceptable to the employee. The first "stopper list" was received by Civilian Personnel Office 1 March 1965. No commitments have been made as a result of these lists due to the lack of needed skills and to restrictions placed on employment at this Center by necessity of local RIF. Two employees affected by RIF at Fort Rucker, Alabama, were registered under the above program during March 1965.

Recruitment. Because of space cuts and recruitment restrictions, the Board of US Civil Service Examiners, at their semiannual meeting 3 March 1965, instructed the Executive Secretary to suspend any further examining plans for the present. This is the first time since establishment of the Board of Examiners in August 1954 that the Board has imposed restrictions of this severity.

The Board of US Civil Service Examiners used revised ratings procedures for "blue collar" jobs for the first time during this quarter. The new procedures are aimed at securing a better quality of applicant for the specific job to be performed at this Center. They were developed by the US Civil Service Commission after several years of research, and were tested at selected installations prior to release for field use. They are not mandatory yet; however, operating officials at this Center have shown a keen interest, and expanded usage is expected in the event of the need for further examining for Wage Board jobs.

The Board of US Civil Service Examiners conducted its eighth annual high school testing program in April 1965. Three teams of examiners traveled a total of approximately 1,700 miles, giving the stenographer-typist test at 25 high schools and 1 state vocational trade school. Contact was originally made with the principals of all high schools in the nine counties serviced by the Board of US Civil Service Examiners. Results of this program were as follows:

High schools visited	32
Total tested	462
Total eligibles:	
Typist	139
Steno	12

Principals of all participating schools were furnished statistics on the results of the program.

In response to the President's announcement of a "Youth Opportunity Campaign" to provide temporary summer jobs for boys and girls from 16 to 21 years of age, the USAAVNC began employment of 123 summer aids. The President's aim was to employ at least 1 trainee for every 100 employees presently on the rolls. Accordingly, the Center was authorized to hire 18 trainees and tenant activities a total of 11. Since funds were available, the

Center requested and secured authority to hire an additional 105 trainees in a variety of jobs throughout departments of the School and Center, based on management's needs determined in conjunction with analysis by the local Manpower Control Office. Instructions by higher headquarters indicated that local State Employment Service Offices were to be the primary registration point from which referrals were to be made. Because it was expected that there would be more applicants than jobs, the Alabama State Employment Service was requested to screen and select these applicants.

A major increase in outside recruitment activity occurred during First Quarter Fiscal Year 1966. This activity resulted from a large increase in civilian personnel space authorizations for the USAAVNC due to an aviation expansion and additional recognized manpower requirements. A net increase of 570 new spaces was received. The necessity for filling the additional spaces as expeditiously as possible created an excessive workload. To cope with this workload, Civilian Personnel staff members having recruitment responsibility were required to work on an extended 12-hour day tour. Recruitment efforts were hampered due to an inadequate supply of eligible applicants in some categories, and restrictions imposed by Department of Defense Priority Placement Program. Exception was obtained from Headquarters, Third US Army, and Regional Coordinator for Department of Defense Priority Placement Program to effect career-conditional appointments to Classification Act positions provided surplus Department of Defense employees were not available. Wage Administration positions were restricted to temporary appointments not to exceed 1 year, except where such positions could be filled by surplus Department of Defense personnel. A total of 425 vacancies were filled during First Quarter Fiscal Year 1966 through all sources.

Registers maintained by the Board of US Civil Service Examiners were largely depleted at the time these space increases were received.

Incentive Awards. A Meritorious Service Award was approved for Malcolm F. Landrum, Civilian Flight Instructor, Department of Rotary Wing Training for distinguished service with the USAAVNS from 3 March 1943 through 30 September 1964, during the Fourth Quarter, Fiscal Year 1965. Mr. Landrum's successful completion in February 1964, of 10,000 hours of accident-free flying has never been equaled in Army Aviation history. This award is the second highest Department of the Army award for civilians and is the second one to be received at Fort Rucker.

Relationship with Employee Organizations. Two events of significant importance under Executive Order 10988, took place during Third Quarter, FY 1965, concerning relationships with employee organizations. Two employee organizations were granted recognition to represent certain groups of Department of the Army civilian employees on an "exclusive" basis, and cover employees as follows: (a) The Wiregrass Metal Trades Council (WMTC), AFL-CIO, Dothan, Alabama, was granted "exclusive" recognition on 11 May 1965 to represent all Wage Board nonsupervisory employees assigned to Engineer Division, DCSLOG; (b) Lodge Number 1815, American Federation of Government Employees (AFGE), Fort Rucker, Alabama, was granted "exclusive" recognition on 14 June 1965, to represent Class Act nonsupervisory employees assigned to the Department of Rotary Wing Training, USAAVNS; (c) Lodge Number 1815, AFGE, was granted "exclusive" recognition on 9 July 1965 to represent all Class Act nonsupervisory employees assigned to the Fire Prevention and Protection Branch, Engineer Division, DCSLOG; (d) Lodge Number 1815, AFGE, was granted "exclusive" recognition 29 July 1965 to represent all Class Act nonsupervisory Airplane Pilot employees, Department of Fixed Wing Training, USAAVNS; and (e) The WMTC, AFL-CIO, Dothan, Alabama, was granted "exclusive" recognition 12 August 1965 to represent all Wage Board nonsupervisory employees installation-wide excluding Engineer Division, DCSLOG, and tenant activities, Fort Rucker, Alabama. With this recognition, the WMTC now represents on an "exclusive" basis all Wage Board nonsupervisory employees installation-wide.

MANPOWER CONTROL DIVISION

Many events in the manpower program which occurred early in 1965 were directly or indirectly connected with the USCONARC Manpower Survey of Fort Rucker in November-December 1964. These events include -

Transfer of Airfield Operations from the US Army Garrison TD (3185) to the USAAVNS TD (3186). This action was taken in view of the nature of the Airfield Operations mission which includes direct support to the USAAVNS training mission.

Transfer of Training Aids Division from DOSS, USAAVNS, to the USAG TD. Training Aids mission (BP 2140) was the only portion of the School TD not in BP 2110. By moving Airfield Operations (BP 2110) to the School TD and removing Training Aids (BP 2140), the Budget Program 2110 is clearly identified for training purposes and bookkeeping operations are simplified.

The pilot course in Manpower Control Procedures was conducted during the period 17 to 21 May 1965. A total of 20 students were graduated from this course. Individual critique sheets were analyzed by Standards Division, DOI, to determine the values involved in this course. The overall result of this analysis was "above average." Future plans include the conduct of this course twice monthly. It is anticipated that a minimum of 20 students will complete each class.

Message, HQ TUSA AJAGP-M 324545, 24 September 1965, provided military and civilian spaces for support of the Army Aviation build up. Spaces were adequate in numbers but not in the right category (military versus civilian) and were in the wrong budget codes.

The reduction of the civilian manpower ceiling for the implementation of the build up program has seriously affected the civilian employment at this Center. Actions taken as a result of the reduction are outlined below:

The ceiling to support the build up program and normal activities of this USAAVNC, USAAVNS, USAH, and Dental Unit was reduced from 1,945 to 1,677. Employment had been authorized against the initial ceiling of 1,945. Review of the employment status was made on 27 October 1965 in view of the reduced ceiling of 1,677. This review reflected a current assigned strength of 1,732 and 33 outstanding commitments to new employees. Decision was made that all commitments would be honored. All other Requests for Personnel Action (SF 52) which would result in an addition to the civilian strength were withdrawn from the Civilian Personnel Division by the Assistant Chief of Staff, G-1 (ACofS, G-1). These requests and all others received subsequent to 27 October 1965 have been reviewed personally by the ACofS, G-1. Fifty requests for critical positions and "hard-to-find" skills have been released to the Civilian Personnel Division for recruitment since 27 October 1965. The remaining requests are being held without action pending receipt of additional space ceiling from higher echelon.

Based on the current strength, possible increase in strength and known separations to be effected, it is estimated that the maximum overstrength as of 31 December 1965 will be +69. However, it is probable the overstrength will be less (approximately +40) because of recruitment lags and entrance on duty dates of those personnel selected against the 50 requests which have been released to the Civilian Personnel Division since 27 October 1965.

The Dental Section was removed from the US Army Garrison Table of Distribution effective 1 September 1965. The US Army Dental Unit Table of Distribution Number 3A-3185-02 was established with an authorization of 16 officer, 10 enlisted, and 10 civilian spaces by Third US Army General Order Number 247, dated 12 August 1965.

The 1st Aviation Company was organized under Table of Distribution 3A-3186-00, USAAVNS, by USAAVNC General Order Number 73, 8 September 1965. The unit became effective 24 September 1965 and was assigned the primary mission of tactics field exercise support. Manpower resources of the USAAVNS, BP 2100, were increased 11 officers, 4 warrant officers, and 167 enlisted men to initially staff the unit. Organizational structure is Company Headquarters, Operations Section, Transportation Platoon (operations and motor maintenance), Communications Platoon, (operations, maintenance, and approach control), and General Support Platoon.

ARMY EXCHANGE

Sales, an excellent indication of service, reflected a large increase during 1965. Sales figures are listed below:

Total Direct Sales	FY 65	\$5,152,250.00
Per Capita Sales	FY 65	781.68
Concession Income	FY 65	140,888.00

Major Eugene Tracy, Exchange Officer, retired from the service 31 May 1965 and was replaced by Mr. William Emanuel.

CENTER SAFETY

Fort Rucker experienced 67 aircraft accidents during 1965, for a rate of 15.5 per 100,000 flying hours. In addition, there were 23 recordable Army motor vehicle accidents for a rate of .39 per 100,000 miles driven.

USAAVNC Pamphlet 385-1, "Off Duty Safety Program," was published 13 April 1965. This is a new publication designed to assist commanders in preventing off-duty accidents.

USAAVNC Regulation 385-4, "Remedial Driver Training Program," was published 10 May 1965. This regulation was designed to help reduce the traffic accidents by providing remedial driver training to those personnel determined to be poor drivers.

All vehicle drivers on post were encouraged to take part in an extraordinary television news broadcast entitled, "The National Driver Test," on 24 May 1965. Twenty thousand test forms were distributed to personnel on post.

USAAVNC Regulation 385-8, "Aviation Accident Prevention Programs," was published on 24 August 1965. This regulation establishes safety policies and procedures to be followed by all USAAVNC and USAAVNS units participating in the Army Aviation program at Fort Rucker to include the flying of aircraft, maintenance of aircraft, and airfield operations in setting up safety programs at unit level.

USAAVNC Regulation 385-12, "Safety Mission Safety - 70," was published on 1 December 1965. This regulation outlines policies and procedures to be followed in implementation of the President's "Mission Safety - 70" program.

USAAVNC Circular 385-1, "Christmas-New Year Safety Program," was published on 1 December 1965. This circular was published to assist commanders in preventing off-duty accidents during the 1965 Christmas-New Year holiday season.

SPECIAL SERVICES

During the first quarter of Fiscal Year 1966, Special Services initiated several new programs and expanded and improved on others. These are direct results of increased appropriated fund support.

The back nine holes of the Main Golf Course were made ready for play. The Commanding General of Fort Rucker officially opened the new nine on 4 September 1965, giving Fort Rucker a professional 18-hole course. A grant has been obtained for expansion of the club house to twice its existing size. In addition, on 15 September 1965, a golf professional was hired as supervisor and overseer of post golfing activities.

The plans for a new Auto Crafts Shop have been returned from Third Army and are now being revised. Monies to be used for construction have been approved by Third Army. Special Services now has a full-time Crafts Director hired through a NAF grant.

Large numbers of post and Third Army personnel utilized the Special Services Recreation Area at Valparaiso, Florida, throughout the seasonal months. A seawall was constructed in the bay below the area by Center Engineers to alleviate the problem of sand washing up into the boat basin and washing off the beach.

A major activity was the organization and conduct of group deer hunts. These hunts consisted of 100 to 150 hunters, 50 to 75 dog handlers, and 20 game wardens and deputy game wardens. Hunts were conducted on weekends through November and December. A total of 12 hunts were conducted. Approximately 107 deer were taken.

Crafts.

The Crafts Division of Special Services continued to make progress, with several noteworthy actions being accomplished during 1965. The leather shop operating hours were expanded 30 percent. The boat shop realized an enthusiastic reception and it has become a vital activity of Special Services.

DEPENDENTS SCHOOL

Budget. The proposed budget for the Fiscal Year 1966 school year was compiled, approved by the Commanding General, and submitted to the Department of Health, Education and Welfare on 5 March 1965 for final approval. The Fiscal Year 1966 budget reflects an increase in cost of operations per pupil of \$47.97 over the current Fiscal Year 1964 budget.

School Annex. The school annex, which was maintained in temporary buildings and housed the entire sixth grade, was closed and the buildings returned to Center Engineers. This annex was used for the 1965 school year due to a lack of space in the permanent facilities. With the completion of the new addition scheduled for 1 September 1965, the annex will not be needed.

Addition to the school building. The addition to the school plant facilities was completed and accepted for occupancy on 27 August 1965. This expansion included 10 additional classrooms, expansion of the existing cafeteria facilities, and additional provisions which allowed for an expansion of the art program.

ARMY EDUCATION CENTER

The Army Education Center's operation for 1965 was a bit unusual because graduate study (with the University of Southern California) was initiated at this installation for the first time; and, the small number of enlisted men enrolled in formal classes (only 17) to gain high school certification was the lowest. This small enrollment is attributed to the heavy levy the USAAVNC experienced in July and August.

The regular Troy State College September term got underway with a total of 349 individuals enrolled in a total of 478 courses.

During the Second Quarter, Fiscal Year 1966, Troy State College converted its Fort Rucker operation into a degree-granting branch, thereby permitting local personnel to complete the requirements for a BS degree on an off-duty basis without the necessity of attending full time on a campus.

ASSISTANT CHIEF OF STAFF, G-3

A seminar for the presentation of the US Army Aviation Human Research Unit's proposed Fiscal Year 1966 work program was held on 18 January 1965. The seminar was attended by the Commanding General and representatives from all USAAVNC and USAAVNS agencies. Formal comments on the proposed program were forwarded to the USAAVNHRU on 29 January 1965. Also on 29 January 1965, the report of the quarterly review of the monitorship of the USAAVNHRU for Second Quarter Fiscal Year 1965 was completed and forwarded to USCONARC.

The flight safety conditions in the Fort Rucker airspace were improved by the action taken to concentrate all rotary wing test flight activities in one specified area. This action was completed by the designation of TAC 21 as the test flight area effective 1 March 1965.

Partial mobilization planning was completed and augmentation tables of distribution forwarded to Third US Army 26 March 1965. These tables of distribution will be used to augment the current operating garrison and hospital TDs in the event of partial mobilization of the armed forces if hostilities or world tensions warrant less than full mobilization of US Forces.

To further implement higher command directives, the Plans Division prepared and staffed a revision of USAAVNC Regulation 220-2 in an effort to thoroughly prescribe responsibilities and procedures for unit readiness reporting at this installation. The regulation was published on 8 March 1965 and used in preparation for the quarterly unit readiness report dated 31 March 1965. This regulation simplified preparation of the reports and increased the efficiency of routing the reports for installation command evaluation and comments.

Reserve Annual Field Training. The following units performed reserve annual field training at this installation during the period indicated:

3343d US Army Hospital	6-20 June 1965
77th Aviation Battalion (USAR)	26 June-10 July 1965
3399th Aviation Training Command	11-25 July 1965
HHD 814th Transportation Battalion	11-25 July 1965
345th Surgical Hospital	1-15 August 1965
129th Surgical Hospital	15-29 August 1965

USAR Command and General Staff Schools. The following USAR Command and General Staff Schools were held on this installation on dates indicated:

Atlanta USAR C&GS School	11-25 July 1965
Birmingham USAR C&GS School	15-29 August 1965

DEPUTY CHIEF OF STAFF FOR LOGISTICS

Engineer Division. During 1965 the Engineer Division realigned its organization and functions in accordance with AR 420-13. Actual costs for maintenance and management of facilities (R&U account 9030.0000) during this period amounted to \$5,894,515.

MCA projects completed in 1965 included a flight instructor building at Cairns AAF, complex of hangars and shops buildings at Hanchey AHP, three permanent-type BOQs on post, and a link training building at Shell AAF.

There were no large losses or serious injuries from fire during 1965. Fort Rucker received a special commendation from the National Fire Protection Association for fire prevention activities conducted during 1965.

Signal Division. The expansion project for additional navigational equipment consisting of installing one TVOR facility, one GCA radar facility, and remoting all communication transmitters to a remote transmitter site was installed at Shell AAF. Due to nonavailability of communications console equipment, it was necessary to design, fabricate, and install a communications control system for the GCA radar. Installation of the communications equipment at the remote site was completed on 1 June 1965. The Shell TVOR was installed during May and June 1965 and commissioned by the Federal Aviation Agency 7 July 1965. The communications console equipment was completed and placed into operation 1 September 1965. The Shell GCA facility was commissioned on 22 September 1965.

Purchasing and Contracting Division. Contract for aircraft maintenance with Page Maintenance, Incorporated, was extended for one month on 30 June 1965 at an estimated cost of \$1,776,996. Contract for the period 1 August 1965 to 30 June 1966 was negotiated 30 July 1965, with the same company, at an estimated total cost of \$12,280,837. Total estimated cost negotiated for Fiscal Year 1966 was \$13,057,843, compared to an estimated cost of \$11,787,976. The increase in cost can be attributed to greater use of more complex aircraft (OV-1, CV-2, UH-1, CH-34, CH-37, and CH-47) over the prior year.

Contract for rotary instrument training with Ross Aviation, Incorporated, was extended for the period 1 July 1965 through 30 June 1966 for a total sum of \$1,826,826.20. Original concept allowed for increase in program of 216 students in resident to 250 students in resident by 21 May 1966. Due to the buildup in Army Aviation training, the programed input for students was accelerated and the 250 in-resident load will be effective 26 February 1966. This acceleration of programed input increased contract cost by \$34,856.00 and required the addition of 9 instructor pilots, 2 academic instructors, 4 tower operators, and 1 operations clerk. In addition, the contractor is furnishing 24-hour control tower operations.

Contract for primary and instrument flight training with Ross Aviation, Incorporated, was extended for the period 1 July 1965 through 30 June 1966 in an amount of \$935,218.95. The training site was changed from Lowe AAF to Cairns AAF effective 15 October 1965. This resulted in a reduced requirement for personnel such as meteorologist and tower operators and reduced the cost of the contract by \$18,910.00 for the remainder of the fiscal year. Negotiations were begun for a multiengine qualification course to begin 28 January 1966.

Maintenance Division. In May 1965, the General Support Equipment and Supplies Section and Electronic and Communications Section were consolidated. As a result of this consolidation, approximately \$19,000 of excess equipment was turned in. This consolidation also eliminated the requirement for building 1306.

After receipt of DA Message 38068 on 28 October 1965, the Aircraft Maintenance Branch and the maintenance contractor intensified efforts to implement procedures to perform night functional check flights on USAAVNC and USAAVNS aircraft. The DA Message rescinded previous restrictions to night test flying. By mid-November the program was in full effect. Night functional check-flight performance increases daily aircraft availability by approximately 5 per cent.

During the last two weeks of October 1965, a study was conducted to determine the best method of improving lighting on airfield ramps. Emphasis was on improving performance of night maintenance on the ramps, but consideration was also given to balancing hazards/benefits to pilots using the ramp areas for night flying purposes. Results of this study have thus far been nominal, due primarily to funding considerations.

On 5 November 1965, Major A. H. Clow, Chief, Maintenance Section, CAM Branch, was appointed DA project officer for the purpose of conducting a test of the progressive maintenance concept for aircraft at Fort Rucker. The maintenance contractor is conducting this test, known locally as "Project 35," using 20 USAAVNC UH-1 helicopters. Purpose of the test is to determine feasibility of performing a portion of the periodic inspection at each of the intermediate inspections, thereby reducing the downtime of the aircraft for periodic inspection. Object of the test is to determine whether scheduled maintenance may, in fact, be completed during the night hours when the aircraft is not required for training and thereby increase availability rates during the period when the aircraft is required for training. The test is expected to be completed about 1 March 1966.

Services Division. Notification was received in November 1965 that the commissary building, which was approved in the Fiscal Year 1966 MCA Program, has been deferred as a part of the Department of Defense deferral of construction. A project to expand the existing facilities was immediately initiated with a target date for completion of 1 April 1966.

COMPTROLLER

Mechanized Projects. On 26 February 1965, a system for mechanizing family housing data was initiated. The purpose of this system is to maintain current data for the preparation of annual family housing survey and quarterly reporting of all Government personnel occupying Army quarters and those receiving BAQ, by grade.

Comptroller area responsibility includes systems design, conversion of data from forms to punched cards, maintenance of current status, and preparation of machine programs for reporting and analysis of the resultant data.

Personnel Record Data. On 22 March 1965, a mechanized Personnel Data Record System was put into operation. This system is designed to reduce workloads of Unit Personnel Offices in the screening of personnel records and DA Forms 2431 (Data Suspense Cards), and to improve reaction time in locating qualified personnel to fill critical USAAVNS/USAAVNC vacancies. The total mechanization of subject system is to take place in a series of steps, beginning with permanent party field grade officers.

Mechanization of Training Aids Utilization. On 2 February 1965, the mechanization of a training aids inventory and analysis system was initiated. The primary purpose of this system is to provide data which will assist the Training Aids Board in their planning requirements, for programing and budgeting, for accomplishing required training objectives and flying hours, for accomplishing flying hour savings, and for determining aircraft requirements. Additional justification includes the requirement to produce valid utilization criteria to support General Accounting Office inquiries, and to support future requests for additional training aids. The requirement exists to expand this system at some future date to business machines used at USAAVNC, to assist the PBAC in eliminating from budget requests "Non essential" requirements in this category.

Methods Improvements. On 12 March 1965, the Finance and Accounting Office initiated a procedure for paying all travel vouchers by check, with the exception of advances and foreign students. The purpose of the procedure is to allow more time for the actual examination and computation of vouchers as opposed to unproductive time spent in telephone usage and counter time with customers under the old combine check-cash system, and to also meet a Third US Army directed requirement to eliminate telephone calls to travellers. The improvement is serving its purpose and is expected to be even more effective as time goes by and travellers become better accustomed to its use.

On 11 March 1965, Management Analysis Division submitted a study of the cost of distributing civilian employee payroll checks and bonds. It was found that distribution by mailing would be more economical than the present method of using duly appointed representatives who are authorized in writing to obtain checks and bonds from the Finance and Accounting Office. The recommendation was made to adopt a mailing system for checks and bonds.

The Budget Division of the Comptroller was involved in a submission to determine course inputs to remain within the Fiscal Year 1966 aviation ceiling. This 9 April submission was a result of a CONARC TWX outlining the dollar ceiling for Fiscal Year 1966, and requesting information on inputs, flying hours, and aircraft requirements necessary to remain within the ceiling.

Systems Improvements. The Automatic Data Processing Service Center received a UNIVAC 1005 Computer on 18 November 1965. This new computer has several advantages over the present UNIVAC 1004s. The internal speed is faster and the system is expandable to include tape drives and large-scale random access memory and program modification. The basic computer has a 2 K (2,000 positions) memory, and will be expanded to 4 K in February. All applications are currently being programed for processing on the 1005.

OFFICE OF THE STAFF JUDGE ADVOCATE

Military Justice. The practice of including a JAG officer on every special court-martial convened by the USAAVNC Troop Brigade was initiated to give the court the benefit of professional advice.

During the past quarter there was one general court-martial at Fort Rucker, the first in 10 months. It is expected that the general court-martial rate will be increasing within the coming months because of the large increase in the number of personnel.

The general court-martial rate at Fort Rucker increased during the past quarter. Three general courts-martial were held. The total number of courts-martial at Fort Rucker also increased during the past two quarters. However, the court-martial rate remains significantly below the Third Army and Army world-wide averages.

Legal Assistance. The number of legal assistance cases handled in this office increased by more than 28 per cent during Fiscal Year 1965. There were a total of 14,451 cases during the year, of which 11,549 involved personal interviews. The most numerous single types of cases involved wills, powers of attorney, and notarizations.

The interest of this office in income tax extended beyond the customary 15 April deadline because of Federal and State provisions dealing with combat pay. Both Federal and Alabama authorities declared late in the spring that certain military pay was exempt from taxation, retroactive to 1 January 1964. Information on the procedures to be followed in applying for refunds was obtained as soon as possible and disseminated to all units. Members of this office then aided individuals in completing their applications for refunds.

Members of this office have been instrumental in obtaining local recognition of a recent amendment to the Soldiers' and Sailors' Civil Relief Act which provides that personal property owned by a serviceman who is stationed overseas and which is located in a State other than his domicile is not subject to taxation by the State wherein the property is located. This amendment has a significant effect upon the many wives and children living in the Fort Rucker area while their sponsors serve in Viet Nam.

During 1965 this office handled 20,714 legal assistance cases.

Law Day Activities. A dinner meeting was held Friday, 30 April 1965, to commemorate Law Day. The guest speaker was the Honorable Walter P. Gewin, Judge of the Fifth US Circuit Court of Appeals. Also attending the meeting were local attorneys, judges, and local city officials.

CHAPTER 2
SUPPORT UNITS

UNITED STATES ARMY HOSPITAL

Organization and Mission. The Post Surgeon activities and United States Army Hospital were reorganized in accordance with AR 40-4 dated 15 May 1965, effective 1 October 1964 with two deviations authorized by The Surgeon General, Department of the Army. A Department of Aviation Medicine was established in the Hospital and the Field Medical Support Division in the Surgeon activities. There were no changes in the mission during this report period. Reference General Order 43, USAH, Fort Rucker, Alabama, 1 October 1964.

Construction. Ground was broken for a new hospital on 23 July 1964 with a scheduled completion date of April 1966.

Accreditation of United States Army Hospital, Fort Rucker, Alabama. The hospital received full accreditation for the fourth three year period from the Joint Commission on Accreditation of Hospitals as a result of the evaluation of a survey of the hospital conducted on 15 January 1965 by Dr. Theodore J. Hughes, a field representative of the Commission. Reference letter from the Joint Commission on Accreditation of Hospitals, Chicago, Illinois, 12 February 1965.

Professional Services. During this reporting period authorization was granted by Surgeon, Third United States Army, for the utilization of a Dermatologist from Martin Army Hospital, Fort Benning, Georgia, as a consultant on a regular visit schedule once a month. Also on 9 February a Pathologist was assigned to the hospital for the first time. This eliminates the necessity of using the Third Army Medical Laboratory personnel at all times when the services of a pathologist is required. Reference Daily Diary.

TDY of Hospital Commander. The hospital commander visited Brooke Army Medical Center, Fort Sam Houston, Texas, 23-25 February 1965, for the purpose of attending the unveiling of a new concept of combat hospitalization called MUST (Medical Unit Self-Contained Transportable). MUST's promise of providing a major advance in medical care for Army combat units stems from its combination of full mobility and full facilities. It can operate anywhere in the world, under any conditions.

The hospital commander attended the annual meeting of the Aerospace Medical Association in New York City, New York, 25-29 April 1965. He was a member of the Scientific Exhibits Committee and also served on the Membership Committee, 1964-65.

Reserve Unit Training. The 3343d USA Hospital (100 Beds), composed of 13 officers and 63 enlisted men, commanded by Colonel Shepard Jerome, MC-USAR, from Mobile, Alabama, spent two weeks, 6-19 June 1965, at the United States Army Hospital, for their annual active duty training.

Aedes Aegypti Mosquito Eradication Program. Personnel of the 714th Preventive Medicine Unit, Fort Bragg, North Carolina, arrived 9 August 1965 to assist personnel of the USAAVNC Preventive Medicine Division, in conducting a survey of the entire post during the next two weeks, to determine the presence or absence of the Aedes Aegypti mosquitoes. Every installation in the Third Army area will be surveyed, Fort Rucker being the first one.

Reserve Unit Training. The 345th Surgical Hospital from Jacksonville, Florida, composed of 22 officers and 61 enlisted men and commanded by Lieutenant Colonel Samuel C. Atkison, MC, USAR, spent two weeks, 1-14 August 1965, at the United States Army Hospital, for their annual active duty training.

The 129th Surgical Hospital from Tuskegee, Alabama, commanded by Colonel Thomas M. Campbell, Jr, MC, and composed of 16 officers, 1 warrant officer and 64 enlisted men, spent two weeks, 15-21 August 1965, at the United States Army Hospital, for their annual active duty training.

Health of the Troops. The health of the troops of the USAAVNC, was considered high during 1965. The average number of daily outpatient treatments increased from 402 during the first quarter 1965 to 448.4 during the last quarter. However, the average number of beds occupied decreased from 54 to 48.

DENTAL UNIT

During the second quarter of FY 65 seven dental operating units were completely refurnished at the Atlanta General Depot and a Medical Equipment Maintenance team was dispatched from the Depot to install these units and other items of dental equipment in Buildings 8701 and 4107.

On 18-19 May 1965, the main clinical facility was moved from Building 303 to Building 4107.

On 10 June 1965, the Dental Corps officers attended the quarterly meeting of the Third District Dental Society of Alabama, held at the Country Club, Troy, Alabama.

Colonel Norbert S. Lang, DC, arrived from Fort Belvoir, Virginia on 6 September and replaced Colonel C. G. Hagerman, DC, as Center Dental Surgeon upon his retirement 30 November 1965.

General Orders Number 247, Headquarters, Third United States Army, dated 12 August 1965, directed the organization of the US Army Dental Unit, Fort Rucker, Alabama, under TD Number 3A-3185-02 effective 1 September 1965.

General Orders Number 69, USAAVNC, Fort Rucker, Alabama, dated 31 August 1965, directed the attachment of the US Army Dental Unit to the US Army Hospital for rations, quarters, and administration effective 1 September 1965.

During late summer, the dental requirements for qualifying personnel alerted for, or on orders to, the Military Assistance Command Viet Nam were considerably relaxed and a new approach to dental care was implemented in US Army Dental Clinic #2. Students entering the Basic Aviation Maintenance Course are brought to the clinic for one day prior to beginning classes. As a group (average 42 enlisted men) they first receive a fifteen minute lecture on oral hygiene, followed by a preventive dentistry treatment and then each individual receives as much definitive treatment as it is possible to give him during the day, with emphasis upon performing all treatment that might interfere with his performance of duty during a tour in Viet Nam.

With the purchase of another dental chair it was possible to place the endodontia chair back in the Elementary School, and funds were made available through the Parent-Teachers Association to hire a dental hygienist to operate the Preventive Dentistry Clinic established in the School.

USAAVNC TROOP BRIGADE (PROVISIONAL)

Consolidation of USAAVNS Regiment and USAAVNC Special Troops. The organization of the USAAVNC Troop Brigade (Provisional) was completed 15 January 1965. Colonel Lester F. Schockner was designated as the first commander. Lieutenant Colonels Laurence L. Dantzer and Lewis N. Shaffer, who previously commanded the USAAVNS Regiment and USAAVNC Special Troops respectively, were named as Deputy Commanders.

The Troop Brigade provides a common structure for approximately 90 per cent of the military people assigned to Fort Rucker. The Troop Brigade was designated to incorporate into one organization the functions formerly performed by the USAAVNS Regiment and USAAVNC Special Troops.

The staffs of the Regiment and Special Troops have been combined at Brigade Headquarters in building 4510. With the exception of the Enlisted Student Company, all the other organizations have remained substantially the same. The units that are assigned/attached to the Brigade are as follows:

Headquarters and Service Company	Officer Student Company
Headquarters and Headquarters Company	1st Warrant Officer Candidate Company
Casual Detachment	2d Warrant Officer Candidate Company
98th Army Band	3d Warrant Officer Candidate Company
WAC Detachment	4th Warrant Officer Candidate Company
Airfield Company	1st Enlisted Student Company
Technical Support Company	2d Enlisted Student Company
Student Detachment, Keesler AFB, Miss	3d Enlisted Student Company
123d Ordnance Detachment (ED)	4th Enlisted Student Company
141st Military Police Company	5th Enlisted Student Company
92d Military Police Detachment (CI)	6th Enlisted Student Company
	Student Casual Company

5TH BATTALION, 31ST INFANTRY

Inactivation of 21st Aviation Company and Organization of 1st Aviation Company. On 24 September 1965, the 21st Aviation Company was inactivated and redesignated as the 1st Aviation Company, under USAAVNC General Order 73, dated 24 September 1965, and attached to the 5th Battalion. The 1st Aviation Company was designated a priority TD unit in direct support of the Department of Tactics. Under this new organization, all of the aircraft were transferred to other agencies.

Reorganization of 5th Infantry Pathfinder Detachment. The Pathfinder Detachment was reorganized under Third US Army General Order 293, dated 20 September 1965, which added one officer slot and deleted one enlisted slot.

History of Company D, 92d Engineer Battalion. The 92d Engineer Battalion was first constituted into the regular Army on 1 October 1933 and designated the 51st Engineer Battalion on 1 January 1938. The unit was redesignated the 92d Engineer Battalion.

With the threat of World War II, the 92d Engineer Battalion was activated at Fort Leonard Wood, Missouri on 1 May 1941. While performing its mission in Italy, the unit was awarded four campaign streamers. Shortly after the end of World War II, it was inactivated in Italy on 20 April 1946.

Eight years later on 25 February 1954 the unit was reactivated. Pursuant to authority contained in General Order Number 17, Headquarters XVIII Airborne Corps, Fort Bragg, North Carolina, dated 8 February 1955, the 92d Engineer Battalion was once again activated on 9 February 1955 with its home station in Fort Bragg, N.C. The Battalion was attached to the XVIII Airborne Corps and further attached to the 20th Engineer Brigade.

With the deactivation of the 20th Engineer Brigade, the 92d Engineer Battalion was attached to the newly activated 159th Engineer Group effective 16 December 1958. After 10 years at Fort Bragg, Company D of the 92d Engineer Battalion left Fort Bragg and arrived at Fort Rucker on 17 June 1965. The unit was attached to the 5th Battalion, 31st Infantry.

Company D, 92d Engineer Battalion is composed of 3 officers and 139 enlisted men. The unit has 30 ordnance vehicles and 22 engineer vehicles.

The general mission of Company D is to execute, haul, compact, and grade earth and to provide stabilized earth for airfields, roads, railroads, levees, supply storage areas, and similar projects. The specific mission of the unit at Fort Rucker is to construct and maintain military and recreational facilities. Company D is mainly concerned with the maintenance of airstrips and dirt roads.

Major Joseph A. Josh assumed command of the 5th Battalion on 1 September 1965 replacing Lieutenant Colonel William D. Proctor. Lieutenant Colonel Archie W. Summers assumed command of the 5th Battalion on 1 November 1965 replacing Major Joseph A. Josh. Major Josh, who had been Battalion commander for 2 months, resumed his former position as Battalion executive officer.

CHAPTER 3
UNITED STATES ARMY AVIATION SCHOOL

DIRECTOR OF INSTRUCTION

Reorganization Activities. The Office of the Director of Instruction, effective 28 March 1965, was made a part of the staff organization of the USAAVNC/USAAVNS Headquarters at the General Staff level.

The Office of the Director of Instruction is the normal channel for communications with the Departments of the Aviation School with regard to aviation training, all actions relating thereto, and the use of School resources.

In September 1964, the Director of Instruction directed that a study be made to determine the capability of Standards Division, DOI, to monitor the effectiveness of all flight training conducted at USAAVNS. As a result of this study, Standards Division was redesignated Evaluation Division with the addition of a Flight Training Analysis Branch on 16 March 1965.

Spaces were reallocated within the DOI to staff this new branch with five officers and one civilian employee. Generally speaking, the function is to coordinate the implementation of "stated performance objectives" in flight syllabi, and to provide quality control of flight training.

Training. On 22 March 1965, inputs to the Fixed Wing Initial Entry Course 1-H-1980A/061B was reduced from 73 to 33 students per class. The first class affected by this reduction was Class 65-11. The Warrant Officer Candidate Class 65-12 of 40 students was cancelled.

On 25 March 1965, USAAVNS submitted to CONARC a revised initial entry fixed wing aviator qualification course developed on the level flight hour concept for increased utilization of instructor personnel and training aircraft. The program of instruction was approved by CONARC on 14 May 1965 for implementation in Fiscal Year 1966. This course constitutes a change to a 5-week training cycle with four training phases.

(Civ Contract)	Phase A - Primary	10 weeks 3½ days	63 flt hrs
(Military)	Phase B - Adv Contact	10 weeks	62 flt hrs
(Military)	Phase C - Tactics	5 weeks	32 flt hrs
(Civ Contract)	Phase D - Instruments	9 weeks 5 days	59 flt hrs

Approval of the above mentioned program of instruction for the initial entry fixed wing aviator qualification course for Fiscal Year 1966 required the submission of a major change to the Fixed Wing Instrument Qualification Course, 2B-F3, which is designed to flow concurrently with the instrument phase of OFWAC/WOFWAC. A revised program of instruction (POI) was forwarded to CONARC on 9 June 1965. The proposed revision extended the course to 10 weeks to permit in-processing of students. The course curriculum is the same as the approved Fiscal Year 1966 instrument phase for initial entry students. Later in the year this course was locally revised to reverse the positions of the tactics and instruments phases. Tactics is now the last phase of the course.

Third US Army U8-D Twin-Engine Qualification Course. This course was approved by CONARC 22 October 1965, with the first class commencing training 26 October 1965. Sixteen hours are flown in the T-42 airplane and 12 hours are flown in the U8-D. Previously, all flight instruction was given in the U8-D.

Twin-Engine Qualification Course. The course is 3 weeks and 2 days in length and will provide the student 23 flight hours and a basic twin-engine qualifications in the T-42A airplane prior to attending CV-2 transition at Fort Benning, Georgia. The first

class will commence 24 February 1966.

Initial Entry Rotary Wing Aviator Qualification Training Program. On 17 May 1965, USAAVNS submitted to CONARC a new concept for a 32-week initial entry (ORWAC/WORWAC) rotary wing aviator qualification training program. This proposed concept was necessitated by the introduction of an off-the-shelf helicopter instrument trainer (TH-13T), and the need to graduate a better qualified, tactically oriented rotary wing aviator. Referred to as the 16/16 concept, this proposal extended the primary phase, conducted by the US Army Primary Helicopter School, to 16 weeks with 110 flying hours. Training at USAAVNS will be 16 weeks in length with 100 flying hours, and will emphasize advanced tactical training in the UH-1 helicopter (to include transition and gunnery training) and tactical instrument training in the TH-13T helicopter. This concept was approved by CONARC on 3 June 1965 (Msg ATIT-SCH-OP-SS 408496), subject: Concept for 32-Week Initial Entry (ORWAC/WORWAC) RW Training Program. Development of programs of instruction to support this concept commenced on 7 June 1965 at USAAVNS with representatives from USAPHS. Implementation of this program is anticipated to begin at USAPHS in September 1965. Transition/tactics phase and instruments phase were reversed locally to provide continuous training in similar type helicopters (OH-23/TH-55A and OH-13T). This permits students to finish the course in the UH-1 helicopter, an operationally deployed helicopter. A tactical instrument card is awarded to the student upon completion of the course.

Rotary Wing Qualification Course. This course was transferred from the US Army Primary Helicopter School located at Fort Wolters to Fort Rucker in October 1965. The first class, consisting of 60 students, started the course on 25 October 1965 in the OH-13 helicopter.

OV-1 (Mohawk) Instructor Pilot Qualification Course. This course, 2B-F5, is designed to qualify selected commissioned officer Army aviators as instructor pilots for the conduct of standardization training in the OV-1 airplane. Program of Instruction (POI) constitutes 6 weeks 2½ days in length, with 45 flying hours. POI was submitted to CONARC on 12 April 1965 and approved on 1 June 1965.

CV-2 (Caribou) Instructor Pilot Qualification Course. This course, 2B-F6, is designed to qualify selected commissioned and warrant officer Army aviators as instructor pilots for the conduct of transition training in the CV-2 airplane. Program of Instruction constitutes 6 weeks and 2½ days in length, with 45 flying hours. Program of Instruction was submitted to CONARC on 12 April 1965 and approved 1 June 1965.

OV-1 Suppressive Fire Course. This course, 2B-F7, is designed to provide selected OV-1 aviators with a working knowledge of the techniques of fixed wing air-to-ground machine gun and rocket firing. Program of Instruction constitutes 3 weeks 3½ days in length, with 32 flying hours of 2.75" FFAR, 5" HVAR, and .50 Cal MG firing. Program of Instruction was submitted to CONARC on 10 March 1965 and was approved 11 June 1965.

M22 Gunnery Qualification Training Course. This course, 2C-F9, is designed to qualify Army aviators in UH-1/ATGM-22 aerial gunnery, to include advanced tactical employment of UH-1 helicopter with the M22 aerial gunnery subsystem. Program of Instruction constitutes 3 weeks and ½ day in length, with 2:30 flying hours and 40 hours of practical exercise in the M22 simulators (S-55, DX-43, DX-44). Program of Instruction was submitted to CONARC on 31 March 1965 and was approved 20 May 1965.

CH-47 (Chinook) Instructor Pilot Qualification Course. This course is designed to qualify selected commissioned and warrant officer Army aviators as instructor pilots for the conduct of standardization training in the CH-47 helicopter and for conduct of transition training of selected CH-37 qualified aviators in the CH-47 helicopters. Program of Instruction constitutes 6 weeks and 2½ days in length, with 40 flying hours; 15 hours of this course consists of basic MOI training in the UH-1 helicopter. Program of Instruction was submitted to CONARC on 19 April 1965.

UH-1 Transition/Gunnery Instructor Pilot Qualification Course. This course, 2C-F3,

is designed to qualify selected commissioned officer and warrant officer Army aviators as instructor pilots to conduct transition training in the UH-1 helicopter and training in the XM3, M6, and M5 weapons systems to include tactical flight maneuvers and day and night range firing. POI constitutes 6 weeks 2½ days in length, with 25 flying hours of UH-1 MOI training for instructor pilot training and 18 flying hours of gunnery tactics. Program of Instruction was submitted to CONARC on 2 June 1965.

Army Aviation Medical Officers' Orientation Course. A major revision to the 6A-F1 was forwarded to CONARC on 7 June 1965, for approval and implementation in Fiscal Year 1966. The Program of Instruction revision reduces the course length from the approved 3 weeks to 2 weeks and 1 day as a result of analysis of training requirements and in view of current training provided by Navy and Air Force during qualification as flight surgeons. Program of Instruction revision is pending CONARC approval.

Army Aviation Medicine (Basic) Course. A major revision to this course, 6A-3160, was forwarded CONARC on 7 June 1965, for approval and implementation in Fiscal Year 1966. The Program of Instruction revision extends the course length from the approved 4 weeks, and 1 day to 4 weeks and 5 days as a result of analysis of training requirements, course critiques over the past year, and feedback information from former graduates. Thirty additional hours of academic subjects were added to the curriculum. Program of Instruction revision is pending CONARC approval.

Army Aviation Medicine (Basic) Course. This course was revised as a result of a detailed annual review. The revision will more closely align the subject material with current aviation medicine practices and procedures. The changes incorporated in the course caused an increase of the course length to 4 weeks and 5 days (peacetime). The revision received CONARC approval on 21 September 1965.

Army Aviation Medical Officers' Orientation Course. This course was revised to preclude the duplication of material offered by the Navy and Air Force. The elimination of unnecessary instruction permits the USAAVNS to reduce the present course length from 3 weeks to 2 weeks and 1 day (peacetime). CONARC approved this proposal on 15 September 1965.

Rotary Wing Tactical Instrument Ticket. USAAVNS submitted AR changes to permit implementation of the tactical instrument qualification. These revisions were forwarded to CONARC on 26 August 1965 for implementation. In conjunction with the proposed AR changes which are required to implement the rotary wing tactical instrument qualification training, USCONARC directed that USAAVNS revise the Helicopter Instrument Flight Course tactical instrument qualification training. Subject Programs of Instruction were revised and submitted to HQ, USCONARC, on 20 August 1965. The major changes to the HIFC were a reduction of the course length and a resultant reduction of 16 assigned aircraft, and inclusion of a tactical instrument qualification.

The RWIFEC was changed to include tactical instrument instruction which will enable the graduate to be given initial and renewal tactical instrument flight examination.

Programed Learning. Programed learning is a concept which allows for self-teaching. A Programed Learning Workshop was established to provide selected personnel with the knowledge and skills required for programing subjects at departmental level. The Department of Fixed Wing has programed three courses of instruction (ADF, VOR, and Individual Flight Records) under this concept. A plan to program an entire course (Helicopter Instrument Flight Course) was submitted to CONARC. The program was endorsed by CONARC and funds were allocated to USAAVNS on 15 March 1965. This concept may result in a new approach to flight training.

Equipment. The USAAVNS has completed action leading to the input and/or programed input of Off-the-Shelf (OTS) trainers for use in the fixed and rotary wing instrument courses conducted by the USAAVNS. The primary purpose behind use of the OTS trainer is to utilize a less expensive aircraft for the conduct of those aviation skills that are

essentially divorced of tactically oriented missions. This then allows the release of tactical-type aircraft employed in training roles to field aviation units. Two OTS trainer aircraft will be used by the USAAVNS.

TH-13T Helicopter Instrument Trainer. USAAVNS accepted the first five of 103 TH-13T (off-the-shelf) basic instrument trainer helicopters during Fiscal Year 1965. The aircraft are used in the instrument phase (Phase III) of the ORWAC/WORWAC initial entry rotary wing course. The Department of Rotary Wing is currently conducting an evaluation of the TH-13T helicopter to determine the extent of applicability to other rotary wing instrument training courses. The aircraft is being evaluated within the helicopter instrument flight program.

Beech Baron. A light twin-engine aircraft (Beech Baron) was approved for use in the fixed wing instrument qualification course for initial entry fixed wing students at USAAVNS. The aircraft will also be used as a primary trainer for the Instrument Flight Examiner Course taught at USAAVNS. The contract was awarded to Beech Aircraft Corporation in February 1965. The contract provides for 55 twin-engine trainers with an option to provide an additional 10 aircraft if required. The programed delivery schedule provides for the acceptance of 5 of the aircraft per month until the inventory reaches 55.

Joint Planning. In response to a stated requirement to train personnel in the CH-54A, factory training courses were established at Sikorsky Aircraft, Stratford, Connecticut. Factory training was necessitated because of a shortage of trainer aircraft and allied training support. Factory training courses were designed to train user/support maintenance personnel, component repair specialists, and aviator personnel. Maintenance training commenced 15 November 1965 and the first aviator class will start 10 January 1966. CH-54A personnel requirements will continue to be filled using factory training courses through June 1966.

Pure Fleet Concept. The USAAVNS has submitted a proposal to purify the utility helicopter training fleet by phasing out the UH-19 assets. The USAAVNS has requested UH-1B aircraft for use in the advanced contact and tactics phases (Phase II) of the ORWAC/WORWAC initial entry rotary wing course. The primary goal of the pure fleet concept is to reduce the present mixed fleet of rotary wing aircraft to the absolute minimum, consistent with Army functional requirements, and to provide meaningful training to aviator students in a currently deployed tactical aircraft.

Maintenance. On 19 July 1965, Department of the Army directed the establishment of MOS 67N20 (UH-1, OH-6) maintenance to combine the user/support level of maintenance under one MOS. USCONARC directed USAAVNS and USATSCH to develop a common program of instruction (POI) which would produce a mechanic capable of being assigned to an organizational, direct, general support, or depot facility. USAAVNS/USATSCH developed the UH-1 combined POI and allied requirements to support its implementation during a series of meetings at Fort Eustis, Virginia in September 1965. Both schools concurred on the POI and recommended implementation of the new POI on 2 January 1966, dependent upon the receipt of requested equipment. Maintenance training in the OH-6 will be included in this concept upon its integration into the Army inventory. This is the initial program of the combined user/support maintenance concept. Informal comments from DA indicate that all other aircraft maintenance MOSs will be changed to the user/support concept within the next year.

Aviation Training Evaluation - Supervisors Course. This program was initiated to insure that all supervisors fully understand aspects of performance objectives and methods to improve academic and flight instruction. The first students were the Assistant Commandant and Department Directors. It is anticipated that a minimum of one course each month will be conducted until all supervisors at USAAVNS have attended.

Flight Training Analysis. USAAVNS was appointed the prime coordinating authority for the flight procedural and technique portions of all aircraft operator manuals, to include the pilot checklist. Several conferences between AVCOM and USAAVNS have resulted in a smooth implementation of this most important standardization mission.

UH-1B Operators Manual (-10). The Flight Training Analysis Branch (DOI) is presently coordinating the compilation of input data to be included in Chapters 3, 4, and 10 of the UH-1A and UH-1B Operator's Manual (-10). The revised manual is scheduled to be published August 1966. This project is on a continuing basis.

USAAVNS Pamphlet 310-1 (Guide to Preparation of Lesson Plans). This pamphlet has been revised and includes the recommendations found in the HUMRRO study, "Critical Evaluation of USAAVNS Academic Examination System," August 1965. The pamphlet establishes guidelines to assist supervisors and instructors in determining terminal objectives for a course, preparing performance objectives to cover essential knowledges and skills, and writing standardized lesson plans to include all necessary information. The revised pamphlet was distributed to the instructional departments in January 1966.

Methods of Instruction Course. The increase in the number of students attending courses in the Aviation School has created a demand for a greater number of qualified instructors in all departments. As a result, the input of students for the Methods of Instruction Course has grown from an average of 25 students per month to an average of 70 per month. To meet the requirement, the schedule for the MOI Course has been adjusted so that two classes may be conducted simultaneously.

TV Workshop. A representative of the Evaluation Division attended the CONARC TV Workshop conducted at Fort Benning, Georgia, December 1965. The purpose of attending the workshop was to learn of the techniques of planning and preparing TV scripts, methods of presenting instructional material via TV, and the problem areas that are frequently encountered in instructional TV. A lesson on instructional TV is presently being taught in the MOI Course and this information will be used to update the existing lesson plan. TV education programing is to be expanded at the USAAVNS in the near future.

DEPARTMENT OF SCHOOL SUPPORT

Background. On 17 July 1964, Supply Division, USAAVNS Regiment, submitted a letter to the assistant commandant requesting the creation of a supply division on a departmental level. Secretary, USAAVNS, forwarded recommendations to the assistant commandant, who concurred that a separate school department for logistics presented definite advantages.

In August 1964, the Secretary, USAAVNS, chaired a meeting of USAAVNS departmental directors who met to review functions and recommend those TD spaces and personnel which could be transferred from their departments to Department of School Support.

On 20 April 1964, the assistant commandant established an ad hoc committee to determine the feasibility of establishing an office of the Director of School Support. On 7 May 1964 the following recommendations were submitted to the assistant commandant:

a. The School supply function be divorced from School Regiment and together with the Publications Issue Branch, Department of P&NRI, be formed into a Supply Division;

b. Training Aids Division could be transferred from DOI;

c. Facilities Section of Plans Division, DOI, with functions of a support planning nature, be incorporated into a Plans and Operations Division. This division would also supervise the instructional support requirements and operations of the permanent classrooms.

The recommendations were approved by the commandant on 22 June 1964.

Activation. Department of School Support was officially activated by General Order 60 on 17 August 1964, with an effective date of 1 September 1964. The authorized strength on 1 September 1964 was 12 officers, 2 warrant officers, 64 enlisted and 44 civilians, for a total strength of 122. The personnel assigned from spaces within the resources of the USAAVNS resulted in the following assigned strength - 9 officers, 2 warrant officers, 49 enlisted and 45 civilians, for a total of 105.

Staff Organization. Effective 28 March 1965, the Office of the Director, Director of School Support, was made a staff organization of the Center/School headquarters at the general staff level.

As the result of the USCONARC manpower survey conducted in November 1964, the following changes were made:

a. Authorized manpower for DOSS was reduced to 5 officers, 39 enlisted and 26 civilians, less Training Aids Division.

b. Transfer of Airfield Operations from USAG to USAAVNS TD. Airfield Operations was assigned to the School TD but remained under operational control of G3.

c. Transfer of Training Aids activities of USAAVNS to USAG TD and become a part of the G-3 activity. Training Aids Division was transferred to the garrison TD but remained under operational control of DOSS.

On 8 August 1965, a new TD was issued to DOSS based on Cause of Action #1 with the following authorizations - 5 officers, 47 enlisted and 26 civilians.

Based on Cause of Action #3, a new TD dated 30 August 1965, was published with the following additions - 1 officer, 2 enlisted and 2 civilians.

In August 1965, the assistant commandant directed DOSS to review the entire area of USAAVNS support. Two options were submitted to the assistant commandant for concept approval. Option #1 initiated a Facilities Division having a Service, Project, and TV/Film

Branch. Option #1 proposed an increase of 18 officers, 19 enlisted men and 22 civilians. Option #2 proposed a Facilities Division and an Instructional Support Division, comprised respectively of a Project and Service Branch, a Stagefield Tactical Support Branch and a TV/Film Branch, along with an Aviation Company. Option #2 proposed an increase of 18 officers, 23 enlisted men and 26 civilians, excluding the Aviation Company.

On 22 September 1965, a new TD was authorized giving DOSS an additional 14 officers, 23 enlisted men, and 12 civilian spaces. Although the new TD was along the organizational lines of Option #1, an approved organization for DOSS was not obtained.

Television Activities. In October 1964, it was learned that USCONARC planned to implement a small instructional television activity at USAAVNS. In November, the Film Branch advocated the consolidation of future television functions with the training film program because of the similarity of the missions. In December, an officer with a background in educational television was assigned to the division. By February 1965, an operating budget for the first year of approximately \$42,000.00 was submitted and given a priority unfinanced classification. Television classes were begun in the instructor training program in February 1965 for a 2-hour period to every MOI class taught by USAAVNS. In June, a television production team conducted a 6-weeks test of high mobility television equipment and techniques in connection with aviation flight training. Conclusions were reached on the types of equipment necessary and the place in the flight training program for future USAAVNS television.

DEPARTMENT OF TACTICS

Change in Organization and Functions. The Studies Branch was organized and combined with the existing Research and Analysis Branch to form a new division - the Studies Research and Analysis (SRA) Division. It is the primary instrument of the commandant and assistant commandant for formulating and establishing USAAVNS positions on subjects having a direct influence on Army aviation. The SRA Division provides USAAVNS with an immediately responsive organization to conduct studies when required or directed. This new division has two primary missions:

To initiate and conduct studies in all areas of Army aviation training, doctrine, employment, and organization. The purpose is to provide timely inputs to Combat Developments Command proposals pertaining to aviation.

To prepare, review, and revise aviation training literature so that aviation students will be taught current doctrine as well as proposed concepts.

Aviation Developments. The Aviation Armament Division conducted a series of night firing tests to research the feasibility of using the M6, M3, and M22 suppressive fire weapons mounted on a UH-1B helicopter for training during the hours of darkness. Some of the conclusions are -

- (1) It is feasible to conduct night firing exercises.
- (2) It is possible to place fire on area target with minimum illumination.
- (3) Use of artillery will result in minimum loss of time on range.

(4) Aircraft can operate at 200 feet absolute altitude over known terrain under blackout conditions and 100 feet absolute altitude over illuminated terrain.

Student Training Developments. Because of a shortage of aircraft and a need to economize in student training, the Department of Tactics concurred in the proposal to change the student aircraft ratio from two students per one aircraft to four students per one aircraft. The concept was successfully implemented in January 1965 for all rotary wing and fixed wing basic entry tactical field problems.

A field artillery demonstration was added to the course of instruction for the rotary wing and fixed wing basic entry course to replace the live fire mission practice which was deleted from the fiscal year 1965 Program of Instruction due to Project Trim. The demonstration portrays the duties and coordination required of a field artillery gunnery team.

Observer I training which includes visual search, target recognition, geographic orientation, and target location was implemented in March 1965 as a temporary replacement for the M6 gunnery training in the 1-H-1981/1-H-062B POI and is taught by the Command & Staff Division, Department of Tactics.

A special M6 gunnery qualification course was conducted from 18 to 20 January 1965 by the Aviation Armament Division, Department of Tactics, for 12 officers and 6 enlisted men from the 11th Air Assault Division (AAD).

VIP Demonstration and Maneuver Participation. The Aviation Armament Division, Department of Tactics, participated in Red Chip IV from 20 to 26 January 1965 and Blue Chip V from 27 March to 2 April 1965 at Fort Bragg, North Carolina. The maneuvers involved transporting two UH-1Bs with M6 subsystems, one UH-1B with the M3 subsystem, and one UH-1B with the M22 subsystem, and crews for each helicopter TDY to Fort Bragg, North Carolina. On both occasions, the crews participated in firepower demonstrations with other ground units.

DEPARTMENT OF PUBLICATIONS AND NONRESIDENT INSTRUCTION

Change of Command. On 7 June 1965, Lieutenant Colonel Gordon L. Kinley assumed the duty of Director, Publications and Nonresident Instruction (P&NRI), from Lieutenant Colonel John R. Riddle who was transferred to Headquarters, Joint US Military Mission for Aid to Turkey. Prior to reporting to P&NRI, Colonel Kinley was Secretary of the USAAVNS.

US Army Aviation Digest. Beginning with the June 1965 issue, the US Army Aviation Digest was printed with a new title piece - a warrior astride Pegasus and a much bolder typographical presentation of the name "Aviation Digest." The new format, which replaces the static wings headpiece, was okayed on 17 April 1965 by the Acting Assistant Commandant for use on a trial basis.

A warrior astride Pegasus was picked for the new headpiece because it had many Army and aviation connotations including cavalry, support of the ground soldier, mobility, etc. Also, it provides a symbol with which enlisted personnel can identify themselves, whereas the previous title piece restricted such identification to rated personnel.

Literature Division. The following new field manual was completed: FM 1-105, Army Aviation Techniques and Procedures. This manual was started in April 1964 and completed 9 September 1965. It is now being printed. The manual offers Army personnel a pocket-sized handbook to assist in the performance of all Army Aviation combat missions. FM 1-105 was originated in August 1961 and was completed as a major supplement to FM 1-100, Army Aviation. It was then completed through Field review in April 1962, but stalled when the US Army Combat Developments Command (CDC) was created. The latter assumed pro-pendency for it through its Fort Rucker agency - US Army Combat Developments Command Aviation Agency. It was then completely rewritten, the field review completed and, with USAAVNS concurrence, submitted through CDC headquarters to Headquarters, USCONARC. It was subsequently reassigned to USAAVNS to redesign content, purpose, and scope; it was then given a new title and completed.

The following new training circulars were completed during the year:

(1) TC 1-23, Transition Training in the CH-47 Helicopter. This circular was started in May 1963, completed 14 January 1964, and printed 29 June 1965.

(2) TC 1-26, Training on the MK-J5 Martin-Baker Ejection Seat. This circular was started in October 1963, completed 16 March 1965, and printed 25 June 1965.

(3) TC 1-27, Low-Level Navigation. This circular was started in November 1964, completed 20 May 1965, and printed 30 June 1965.

US Army Field Printing Plant. A new production high was established in October with the printing of 8,202,127 units (printed sheets of paper). The previous high occurred in October 1963 when 6,073,006 units were printed.

In December 1965, the Department of Publications and Nonresident Instruction, USAAVNS, was granted permission by the Joint Congressional Committee on Printing to purchase \$65,000 worth of printing equipment.

DEPARTMENT OF MAINTENANCE

The year 1965 opened with a tremendous surge in requirements for enlisted mechanics. With Viet Nam adding the impetus, the Department became the center of attention in providing sufficient men to maintain the Army's armada of aircraft. The Department reached a peak inresident load of 2,055 students in December 1965, and graduated approximately 12,000 men during the year. An interesting note is that the Department awarded three of every four graduation diplomas presented at Fort Rucker. The authorized strength of the Department reached 834 persons, the largest at Fort Rucker.

The Department taught courses on all aircraft in the Army's inventory with the exception of the "Flying Crane." To accomplish this mission required 37 programs of instruction for a total 2649 hours of instruction.

A course in 'door gunnery' was initiated in order to give certain mechanics destined for Viet Nam a small amount of environmental training.

The Department's fleet of maintenance training aircraft (both flyable and nonflyable) reached a total of 131.

The first mechanic Add-On arrived at Department of Maintenance (DOM) on 6 July 1965. This was an overall increase in training which caused DOM to have a tremendous peak load of students in 3d and 4th Quarters Fiscal Year 1966. The student flows were changed on 28 July and the new student load gave DOM another huge peak in training in the last half of the year. Finally on 28 August, DOM received the student load for Fiscal Year 1966 which took out the peak load and evened out the student load.

By October DOM was training the full buildup. This continued in force till 1 December when it received what was called the 4th Maintenance Add-On. DOM responded immediately; accepted and started training an increased load.

Besides the primary maintenance Add-Ons, DOM received a total of 15 minor mission changes during 1965 as follows:

FY66 White Book Revisions (900 additional students).

175/25 + Maintenance Add-On 28 July 1965 (4,881 additional students).

290/25 ORWAC/WORWAC, OFWAC/WOFWAC.

Maintenance Add-On 28 July 1965 (2,805 additional students).

Revision of UH-1 Mechanics Course from 13 weeks to 10 weeks.

OFWAC/WOFWAC - U-6, T-42 (60 hours).

User/Support training of UH-1 Mechanics (67N20).

RW Qualification Course.

Multi-Engine Qualification Course (T-42 - U-8).

CH-37 Active Army Pilot Training Course.

Maintenance Add-On, 27 August 1965 (1,044 additional students).

TH-13T incorporation in ORWAC/WORWAC.

Maintenance Add-On, 29 September 1965 (707 additional UH-1)

T-42/CV-2 training (to commence 25 February 1966)

1 December Maintenance Add-On (2,000 additional students).

The Primary Maintenance Division (PMD) of the Department of Maintenance directs its effort toward training the soldier who has just completed basic training in basic aviation mechanical skills. He receives thorough training in power plants, aircraft systems, and forms and records. In the power plants course he studies basic principles of reciprocating engine operation. In aircraft systems course he studies basic systems such as electrical, hydraulic and control functions. In the forms and records course, he studies how to work with forms and records used in The Army Equipment Records System (TAERS).

With the buildup in aviation requirements throughout the Army, "expansion" was the key word in PMD during 1965.

Planning during the latter part of 1964 indicated the need for more classroom space, training aids, and instructors. Thus, in January 1965, part of the Forms and Records branch instruction and Power Plants branch instruction were moved to building 6022 - the only modern classroom building assigned to DOM. The building was named Braman Hall in honor of Specialist Donald L. Braman, the first aviation mechanic killed as a result of hostile action in Viet Nam.

Planning for expansion continued and in July 1965 the Primary Maintenance Division was directed to increase its flow from one class per week to three classes per week, and then in August to one class per day. This also included an increase in class size. The buildup continued until by the end of 1965, the student output had doubled.

Requirements for more instructor personnel brought about increases in the Table of Distribution in August 1965. Also the Tank Hill area buildings were austere renovated for classroom use. Other innovations included a new Program of Instruction based on the experiences of personnel who had returned from Viet Nam. The new Program of Instruction included all echelons of maintenance. This new Program of Instruction was implemented on 21 October 1965.

One of the most important studies that began in 1965 concerned the use of closed circuit television for classroom instruction. When implemented, this system will make the Primary Maintenance Division one of the most modern instructional units in the US Army.

The Intermediate Maintenance Division receives most of its students from the Primary Maintenance Division where they are taught the "basic" skills of an aircraft mechanic and are graduated as an aircraft mechanic helper. It provides instruction on the O-1 "Bird Dog," the U-6 "Beaver," the U-1 "Otter," the OH-13 "Sioux," and the OH-23 "Raven."

Advanced individual training for enlisted students graduating from the basic aircraft mechanics course was conducted by the Intermediate Maintenance Division. This was done as supplemental training for those students who were on orders to overseas assignments as an aircraft mechanic helper. The training consisted of three weeks instruction on the OH-13 helicopter and proved to be an excellent means of utilizing the additional time required before a soldier could be sent to an overseas assignment.

The Intermediate Maintenance Division was by-passed by many students who were destined for the greatly expanded UH-1 program resulting from Republic of Viet Nam and other world wide commitments.

During 1965, the division assumed the responsibility for training OFWAC students in maintenance on the U-6 "Beaver." It also resumed the teaching of the maintenance portion of the RWQC which was transferred to Fort Rucker from Fort Wolters, Texas.

The Advanced Maintenance Division is responsible for the training of aviators and mechanics in the more sophisticated aircraft in the Army inventory. The Advanced

Maintenance Division is divided into three basic branches: the Fixed Wing Branch (U-8 Seminole, OV-1 Mohawk, CV-2 Caribou), the Utility Branch (UH-1 Iroquois), and the Cargo Branch (CH-34 Choctaw, CH-21 Shawnee, CH-37 Mojave).

The Fixed Wing Branch, AMD, incorporated a major change during 1965 by adding a maintenance course on the Army's new instrument trainer, the T-42 (Beechcraft Baron) to its Program of Instructions. Also, with increasing demands for mechanics came the necessity to acquire two CV-2 Caribous, two OV-1 Mohawks, and one U-8 Seminole for mechanic training.

The Cargo Branch, AMD, increased its training load over 100 per cent during 1965. Though not officially a branch, in July 1965, the cargo section began to organize for the increased student loads. By 1 November 1965, the cargo section became a branch of Advanced Maintenance Division and was operating under increased student loads. During this period the Cargo Branch acquired two additional flyable CH-37 Mojave and one CH-21 Shawnee. Other developments included a new program of instruction for the new CH-54 Sikorsky.

The Utilities Branch, Advanced Maintenance Division, was formed under the same circumstances as the Cargo Branch. The Utility Branch trains officer and warrant officer classes in UH-1 Iroquois systems and enlisted graduates of the Basic Aircraft Mechanic Course (67A10) in UH-1 maintenance. The direct flow system from the Basic Aircraft Mechanic Course to the UH-1 maintenance course was the major change in 1965.

Other innovations included the phasing out of the UH-19 maintenance course, and an increase in length from three weeks to four weeks in the UH-1 course. Also, added to this course was one week of environmental training to better prepare the man for duty in Viet Nam.

The Instructional Support Division has the responsibility for maintaining assigned aircraft and supporting the department's entire logistical requirements.

In April of 1965, the supply accounting system for the department was directed to be transferred to Department of School Support in an effort to simplify the supply channels. Later on, Southport, the airfield utilized by the department, was renamed Guthrie Field in honor of Specialist Harold L. Guthrie, a mechanic trained at Fort Rucker who was killed in Viet Nam.

Student Add-Ons brought about an increase in personnel assigned to the division, bringing the total to 98.

The maintenance system in the division was modified to establish a production and quality control branch. This, along with the maintenance branch, was responsible for maintaining all of the department's 131 aircraft, support equipment, and training aids.

The Supply Branch was saddled with the support of 70 classrooms being used by the department. Its budgetary requirements increased \$217,733. over the previous year.

The year ended with indications of further increases in all areas, to include build-ups in personnel, aircraft, training aids, and a substitution of civilian employees for many of the authorized military positions.

The Department of Maintenance has an important mission in the Army Aviation Program and a proud record of achievement. It will continue to provide the Army with men well trained and motivated toward becoming the "best aviation mechanics in the world."

DEPARTMENT OF FIXED WING TRAINING

Change in Organization and Functions. Due to a reduction in the training of fixed wing aviators at USAAVNS, the Department of Fixed Wing Training underwent a major re-organization in order to accomplish its training mission more efficiently. The reorganization was accomplished by the following actions:

(1) Reduced the total number of divisions from six to four by consolidating the functions of the various divisions.

(2) Established a central Quality Control Branch under Department Headquarters to monitor students in all courses conducted by the Department and all instructors assigned to the Department. The results achieved have been most favorable in that a weak student or instructor can be identified much more readily and corrective action taken.

(3) Relocated all fixed wing flight training to one location in a new building at Cairns Army Airfield.

Student Training Developments. The OFWAC/WOFWAC Initial Entry course was completely revamped to include the following phases (with phase length and flight hours received in each phase shown):

(1) "A" Phase - Primary, 10 weeks, 62 flight hours

(2) "B" Phase - Advanced Contact, 10 weeks, 62 flight hours

(3) "C" Phase - Instruments, 10 weeks, 60 flight hours. Ross Aviation Incorporated began training this phase in March with OFWAC 65-2.

(4) "D" Phase - Tactics, 5 weeks, 32 flight hours.

In August the Department received the first five of sixty-five twin-engine T-42 "Barons" from Beech Aircraft Corporation to be used as instrument trainers at USAAVNS, replacing the U-6 aircraft. The T-42 was scheduled to be used commencing with OFWAC 66-2, beginning "C" Phase in January 1966. Students are to be graduated as Army aviators with a standard instrument qualification and a multi-engine qualification.

Also in August two new flight courses were instituted, and are conducted by the Standardization Flight Division:

(1) The OV-1 Instructor Pilot Qualification Course - designed to train qualified aviators as instructor pilots in this aircraft. Upon completion of this course, their mission would be to standardize other OV-1 pilots at unit level.

(2) The CV-2 Instructor Pilot Qualification Course - this course has the same scope as the OV-1 Instructor Pilot Qualification Course except that the CV-2 instructor pilots are to conduct transition of aviators into the CV-2 aircraft at unit level.

DEPARTMENT OF ROTARY WING TRAINING

In July 1965, this department was instructed to prepare for an increase to 175 students per class (ORWAC-WORWAC). This has resulted in a planned increase in Methods of Instruction course, personnel, additional aircraft, requests for additional off-post leased facilities and additional permanent party personnel. Immediately following completion of preparations for this directive, the US Army Aviation School was instructed to prepare for 290 students per class.

Effective 7 September 1965, the Department of Rotary Wing Training was reorganized. The Operations Branch and the Projects Branch were combined as Operations and Plans Division. Purpose of this was consolidation of similar duties under one supervisor and better utilization of Rotary Wing Safety Officer and the civilian Education Specialist previously located in Projects Branch.

Department of Rotary Wing headquarters was directed to move to the Main Post area. During the months of August and September 1965, plans were developed for this impending move. Reasons for the move were centered about the future division of the Department. Instrument and Methods of Instruction training will remain at Hanchey Field. Contact divisions will move to Lowe Field and the Contract Instrument and Rotary Wing qualification courses will be at Shell Field. Central control can be better effected by the Director from the Main Post than from Hanchey because of the centralized location and closer proximity to Post Headquarters and the Director of Instruction. The move was completed on 20 December 1965. At the same time, subordinate elements of the department were moving also.

A decision was made in July 1965 by Post Headquarters to convert Lowe AAF, which was utilized by Department of Fixed Wing, to a Rotary Wing facility. Branches II and III, Contact Division, with supporting equipment moved to Lowe AAF on 22 October and Branch I on 19 November 1965. Lowe AAF will be utilized only by the Contact Division for the contact portion of Rotary Wing Training. To help support the Contact Division in its mission of training Rotary Wing aviators, 107 UH-1s were drawn from Shell AAF and Hanchey AHP as of 31 December 1965. Hanchey AHP will be utilized exclusively by the Standards Division and Instrument Division (composite).

On 19 December 1965, this Department was instructed by DCSLOG to study and submit their requirements concerning facilities and support for a proposal to increase initial entry students to the 330 and 375 level per class.

The Rotary Wing Qualification Course was moved from Fort Wolters, Texas, to Fort Rucker, Alabama, and was put under the command of Department of Rotary Wing Training. It was assigned to operate from Shell AAF and started Rotary Wing qualifying past fixed wing aviators on 25 October 1965. The Qualification Courses Fiscal Year 1966 output of 520 Rotary Wing qualified aviators will greatly supplement the initial entry student output.

Another first was accomplished in November 1965 for the Department of Rotary Wing Training. Due to the ever increasing importance and emphasis placed upon aviation safety, the Department flew 19,338 hours without a single major or minor accident.

Five sites were leased for construction of pinnacle training areas. Each site contained ten acres. Also leased were three 12-acre sites for installation of nondirectional beacons to support the new Tactical Instrument Training Course. Although rates for lease have been increased from seven dollars to \$12.50 per acre, resistance from local owners still hamper leasing progress. Much of the desired area is under government contract under the Soil Bank or Feed Grain Program. USA Aviation School cannot compete as rental for this type land is as high as thirty-dollars per acre. In this case, alternate sites must be selected.

CHAPTER 4
CLASS I AND II ACTIVITIES

UNITED STATES ARMY COMBAT DEVELOPMENTS COMMAND AVIATION AGENCY

In December 1964, the Tactical Air Mobility initiated a CDC directed study "Army Aviation Support for the Armored, Infantry and Mechanized Division, 1965-1970." This study will determine the organizational and operational concepts and new material requirements for all aviation elements in support of the armored, infantry, and mechanized divisions for the time frame 1965-1970. The first in-process review was conducted at the United States Army Combat Developments Command Combined Arms Group, Fort Leavenworth, Kansas, in March 1965. Work on this study was suspended in May 1965, pending re-evaluation of requirements for the project subsequent to the next in-process review of continuing work being done on the RODAC-70 Fiscal Year 66 Revision.

This agency initiated preparation of a qualitative materiel requirement for a heavy lift helicopter. The requirement for a helicopter to provide heavy lift in support of tactical and logistical operations will be described. Experience of the 10th Air Transport Brigade with the CH-54A during the Air Assault Division tests at Fort Benning, Georgia will be combined with input from all USACDC Agencies concerned and with results of Aviation Materiel Laboratory studies to evolve characteristics of an optimum system.

Individual and Vehicular Firepower. Based on recommendation by this Agency, the Department of the Army approved the revolver, caliber .38 police special, 4 inch barrel, as the standard individual weapon for Army aviation crewmembers.

Fire Support. From 1 November 1964 to 9 February 1965, personnel from this Agency, including the deputy commander, participated in the operational evaluation of contractor proposals for an Advanced Aerial Fire Support System (AAFSS). This evaluation required 3500 man-hours of professional effort by this Agency. The total operational evaluation required about 23,000 man-hours. Some 60 additional evaluators and administrative personnel were provided by Headquarters, US Continental Army Command, USAAVNS, US Army Board for Aviation Accident Research, US Army Human Research Unit, Ballistics Research Laboratories, US Army Combat Developments Experimentation Command. The Deputy Commander of the Aviation Agency was responsible for the overall operational evaluation. Funding for this evaluation was provided through the Advanced Aerial Fire Support System Project Manager's Office of the US Army Materiel Command.

In December 1964, personnel of this Agency revised the basis of issue (BOI) for Army aircraft and armament systems for all TOE authorizing Army aircraft. The revised BOI have been refined and approved by USACDCAVNA and forwarded to Department of the Army.

The Agency completed an evaluation of the M60C machine gun in April 1965. The purpose of the evaluation was to determine whether the M60C was suitable for use both as a helicopter-mounted weapon and as a ground weapon. The evaluation was forwarded to USACDC in April 1965.

A conference was held at this Agency in January 1965 to establish the need and obtain input for a qualitative materiel requirement for a large warhead armament subsystem. Representatives from USAAVNS, US Army Materiel Command, and USACDC organizations concerned with aircraft weaponization attended.

A small development requirement for a high-rate-of-fire machine gun with increased reliability was submitted in February 1965. This 7.62mm machine gun is to replace the M60C machine guns presently used with UH-1B subsystems and Advanced Aerial Fire Support System.

Weapons characteristics and standards for evaluation of helicopter-mounted candidate systems were prepared and forwarded to the Infantry Agency (proponent agency for Small Arms Weapons Systems) for inclusion in the overall Small Arms Weapons Systems plan of evaluation in February 1965. The XM-134 multibarrel, high-rate gun was used as the standard weapon in determining the characteristics and standards for evaluation.

A conference of US Army Materiel Command, USAAVNS, and USACDC personnel was held at this Agency in March 1965 to review present target marking capabilities and establish requirements for target marking and flare dispenser systems. As a result of this conference, a letter for target marking requirements was submitted to USACDC Combined Arms Group on 16 April 1965.

A small development requirement which has progressed through the field review stage and will be forwarded for approval in early July has been prepared which justifies a dispenser for Army aircraft employment of drop flares and will eliminate the present hazardous hand ejection of flares. The dispenser will mount on the bomb shackle of the XM-16/XM-21 or other aircraft having the standard 14-inch bomb shackle.

Electronic Warfare. No direct input.

Psychological Warfare. No direct input.

Air Defense. During Fiscal Year 65, personnel of this Agency maintained close and continual coordination with the USACDC Air Defense Agency through participation in studies and conferences relating to the utilization of airspace.

Fourth Quadripartite Army Aviation Conference. This agency hosted the Fourth Quadripartite Army Aviation Conference held at Fort Rucker from 4-9 October 1965. (See page 1)

US ARMY AVIATION HUMAN RESEARCH UNIT

General. The Fiscal Year 1966 Work Program was developed during this period. Briefings on the research proposed were conducted at the USAAVNC for the Commanding General and his staff and for the Commanding Officer, US Army Combat Developments Command Aviation Agency. Comments on the work program developed by the USAAVNS and by the US Army Combat Developments Command Aviation Agency as a result of these briefings were forwarded to CG, USCONARC, for use by the Training Research Advisory Committee. CG, USCONARC subsequently recommended the work program for approval as proposed. In June 1965, the Army Human Factors Research Advisory Committee (AHFRAC) approved without change that portion of the HumRRO Fiscal Year 66 work program which pertains to Division No. 6 (Aviation). Major efforts approved for Fiscal Year 66 were Subtasks HELFIRE III, ECHO III, IV, and V, and Exploratory Studies 35 (Proficiency Based Graduation in Army Aviation) and 38 (Warrant Officer Aviator).

Task Helfire. The objective of this task is to improve overall mission performance and training in Army aerial firepower systems. Based on a series of field tests conducted at Fort Polk, Louisiana, in June 1964 to assess aviator performance when nap-of-the-earth flight is combined with target acquisition and engagement functions (HELFIRE III), it was determined that the main weakness in overall mission performance was the aviator's lack of ability to remain oriented. Consequently, the extent to which target acquisition and engagement can be improved by introducing additional human operators into the aerial firepower systems was selected as the most fruitful area of investigation for follow-on research. Planning for this subtask, HELFIRE III, commenced during the period.

Task ECHO. The objective of this task is to establish guidance for the development and effective utilization of flight training devices in present and future aviation training curricula. Planning for subtasks ECHO III, IV, and V was commenced, and the Subtask Research Proposal for ECHO III was submitted to the USAAVNC for preliminary coordination. As Phase I of ECHO III, USAAVNS Courses were surveyed to determine the course of instruction most suitable as a vehicle for research designed to establish training device proficiency and training time baselines. Representatives of the USAAVNC were briefed on the pros and cons of the only two courses deemed suitable, and a summary of points to be considered was forwarded to assist the USAAVNC in selecting the course to be used as a research vehicle.

Additional Activities. Normal planning and data gathering activities were continued in connection with Exploratory Studies 35 (Proficiency Based Graduation) and 38 (Warrant Officer Aviator). Large scale Technical Advisory Service was undertaken for the USAAVNS in the form of a detailed study of the School's academic examination system and test scaling procedures; results of this study were being finalized at the end of the reporting period.

UNITED STATES ARMY AVIATION TEST BOARD

Test activities within all of the Test Directorate during this period have been at a maximum consistent with the number of personnel assigned. A total of 64 test projects are in progress or have been completed. One significant project currently in progress is the Limited Logistical Evaluation (600 flying hours) of the CV-7A Buffalo in Viet Nam. Two CV-7A airplanes were self-deployed to the Republic of Viet Nam (RVN) to conduct a limited logistical evaluation on a tactical environment. The airplanes flew from Travis AFB, California, to Saigon in 37:30 hours flying time and 44:05 hours total elapsed time. This established a new Army Aviation Self-Deployment Record for transport aircraft. The two airplanes entered immediately into the combat support role now fulfilled by CV-2 airplanes.

Listed below are some of the more notable projects conducted during 1965:

Service Test, CV-7A Tactical Transport Airplane, USATECOM Project No 4-3-1170-02. The service test of the CV-7A tactical transport airplane began on 26 April 1965. This test consisted of 312 flying hours on two prototype CV-7A airplanes. The CV-7A is a twin-engine, turbine-powered, short takeoff and landing (STOL) transport airplane. It is powered by General Electric T-65-GE-10 turbine engines (2850 shaft horsepower each) driving Hamilton Standard reversible-pitch propellers. The first test airplane was delivered to the Aviation Test Board on 22 April 1965 and the second test airplane arrived on 29 May 1965. The purpose of this test was to determine the suitability of the CV-7A tactical Transport airplane for Army use by conducting a service test under temperate, desert, and high elevation climatic conditions. The service test was completed on 30 September 1965 and the report of test delivered to USATECOM on 5 November 1965.

Military Potential Test, YCH-54A Helicopter, USATECOM Project No 4-4-0230-04/05. This 500-flying-hour test was begun on 20 January 1965 to determine the military potential and application of the YCH-54A to the Army heavy-lift concepts under temperate environmental conditions. Two hundred fifty-eight flying hours of training and testing have been accomplished. Physical and qualitative flight characteristics portions of the test were completed. Adequacy of the maintenance package was evaluated and logistical support data was collected. This helicopter and a second one were taken to test activities at seven other posts to gather additional mission suitability data. The report of test was delivered to USATECOM on 30 November 1965. It was concluded that the YCH-54A has sufficient military potential for Army use; however, its complete military potential cannot be determined until testing is completed using a production CH-54A.

Product Improvement Test, CH-47A (Amphibious) Helicopter, USATECOM Project No 4-3-0200-11. This test was conducted to explore and substantiate the amphibious capabilities of the CH-47A helicopter. The test began on 11 January 1965 and was suspended on 23 February 1965 so that the test helicopter could be used in support of the CH-47A TBO program.

Phase I of the test was completed utilizing a fresh water lake in Sea State I conditions or less. Test results to date indicate that with minor modifications the CH-47A helicopter is capable of limited amphibious operations. An interim report of test for this project was forwarded to Headquarters, USATECOM on 11 June 1965.

Product Improvement Test, CH-47A/C-130E Airspeed and Proximity Test, USATECOM Project No 4-3-0200-21. The test was conducted to determine airspeed compatibility and close proximity characteristics that would permit fuel transfer from a C-130E at gross weight with 22,000 pounds of fuel for transfer to the CH-47A. The flight testing was performed on 8 June 1965 in the vicinity of Eglin AFB, Florida. It was determined that the most compatible airspeed for aerial refueling was 105 KIAS. This indicates that the C-130E and CH-47A are compatible when in level flight at 105 knots airspeed and above. The report of test was submitted on 30 July 1965.

Military Potential Test, AMC Remote Area Mobility Study, USATECOM Project No 7-5-0582-01. The purpose of this test was to investigate methods to increase the Army's

ground mobility in remote areas by utilizing the CH-47A and CH-54A helicopters to transport amphibious vehicles and airboats. Demonstrations were conducted at Aberdeen Proving Ground on 15 and 19 July 1965. Vehicle ramp egress and ingress from a floating CH-47A helicopter were not investigated because of non-availability of aircraft. The test was completed on 20 July 1965 and the final report was submitted on 9 September 1965.

Product Improvement Test, UH-1D Barrier Filter, Particle Separator, USATECOM Project No 4-3-0150-16. The Barrier Filter, Particle Separator Test was initiated on 14 July 1965 utilizing three UH-1D helicopters. One helicopter was left in a production configuration, one was fitted with a Lycoming particle separator, and the third was fitted with a Bell barrier filter. The three helicopters were hovered in formation at a prepared test site at Fort Rucker which presented an extreme sand environment. The unprotected engine surged after 3 hours and 40 minutes of sand time. The grass test was conducted with the filtered engines. Both helicopters flew in cut grass for 2 hours and 15 minutes with no apparent power loss. The test was continued with two helicopters at the test site with the same sand environment. The filtered engines both failed after a total of 5 hours and 50 minutes of sand exposure. Subsequent to the failure of the engines, it was discovered that the particle separator had failed at an unknown time. This made the test results inconclusive and USAMC directed a retest with two helicopters equipped with new engines and the protective devices. The retest began 24 November 1965 and is expected to be concluded in January 1966.

Product Improvement Test, UH-1B Helicopter with the Model 540 Rotor System, USATECOM Project No 4-4-0108-04. Product improvement testing of the UH-1B/540 began on 2 August 1965. The purpose of the test was to verify that essential military characteristics have not been adversely affected, and to establish the durability, operational capability, and maintainability of the UH-1B with ECP-UH-1B-160 and 161 (540 rotor system and increased fuel) installed. High elevation testing in the vicinity of Fort Carson, Colorado, and desert testing at Yuma Proving Ground, Arizona, was conducted during August. Desert testing ended on 25 August because of repeated failure of the main-rotor-hub pitch change bearings. The helicopter was without a main rotor hub until 8 October, at which time a hub with the original dust shields was received and installed. The test helicopter was used for air-transportability and grass ingestion testing during October; then it was returned to the manufacturer for armament modification and installation of a modified rotor hub during November and December. Subsequent to armament testing at Yuma Proving Ground during December, temperate testing will continue at Fort Rucker. The report of test will be submitted in March 1966.

Integrated Engineering/Service Test (Desert Environment) Light Observation Helicopter (LOH), USATECOM Project No 4-3-0250-73. Desert environmental testing of the YOH-6A was conducted during the period 5 October through 22 October 1965 at Yuma Proving Ground, Arizona. Service testing was suspended by the Project Manager on 22 October 1965 for installation of a functionally equivalent production engine and additional engineering tests at Edwards Air Force Base, California. A date for continuation of service testing has not been determined.

Product Improvement Test, T53-L-11 Engine, USATECOM Project No 4-5-0101-06. A specific portion of this test requires an evaluation of the operational suitability of the modified manual acceleration control installed on the test engine. This fuel control is to allow a pilot to change from the "normal" to "emergency" mode without an immediate and abrupt throttle movement. The test was begun on 6 December 1965, pending installation of the modified engine in the test vehicle, and will require approximately 20 hours of flight time. Test results will determine pilot technique and operating procedures required in various flight conditions.

Service Test, Bulk Fuel Delivery System for the CV-2 Airplane, USATECOM Project No 7-3-0149-19. A limited service test of a bulk fuel delivery system for the CV-2 airplane was conducted from 9 to 22 December 1965 to determine its suitability as a bulk fuel delivery system for Army use when installed in the CV-2B airplane and as a range extension system for the CV-2B airplane. The system consisted of three individual collapsible

aluminum bulk-fuel containers manifolded together by a 4-inch main line and a 2-inch branch line to each container. Each unit was designed for a capacity of 340 gallons. The test item was received at the US Army Aviation Test Board 9 December 1965. The letter report of test will be submitted to Headquarters, USATECOM in January 1966.

UNITED STATES ARMY AEROMEDICAL RESEARCH UNIT

The mission of the Aeromedical Research Unit is to--

Conduct fundamental research on medical aspects of Army Aviation and Airborne Activities as they apply to the selected population of Army personnel using present and planned equipment.

Gather information of importance to Army Aviation medicine by close contact with Army Aviation and Airborne Units, and by liaison with aviation and medical activities of other military, governmental, and civilian agencies.

Provide a focal point of information on problems of aviation medicine and a central repository for periodicals, books, reports, research project case files, and medical statistics on aviation medicine for the Army.

Inspections other than the Annual Inspectors General and Command Visits were not made.

Lieutenant Colonel Robert W. Bailey, MSC, assumed command 1 February 1965 vice Lieutenant Colonel Harold R. Chappell, MC.

The authorized and actual strength at the close of the report period were as follows:

	<u>Authorized</u>	<u>Actual</u>
Officer	8 (3 MC)	4
Enlisted	3	2
Civilian	6	6

Unit research activities. Nine separate armament systems found in Army Aviation were studied in reference to impulse noise; results were reported.

At least eight new aircraft being considered for inclusion into the Army inventory were subjects for sound pressure level analysis and reports furnished the US Army Aviation Test Board to complete field testing and evaluation.

Noise attenuations of new model APH-5 helmet were made in the field employing a temporary threshold shift technique subsequent to impulse noise from one of the armament systems.

Instrument illumination and cockpit in-flight visibility studies were completed on three LOH aircraft to include both day and night conditions.

Similar studies have been completed on proposed off-the-shelf trainers. Data was reported in letter report form to assist the Aviation Test Board in suitability evaluation tests.

Initial studies were performed to evaluate the feasibility of parachute delivery of whole blood, delivered by helicopter. The major concern was whether vibration and "G" force of ground impact would fractionate red cells to the extent that subsequent transfusion would be dangerous. Air drops were followed by a laboratory study of the plasma hemoglobin.

A study was performed on one thousand Army aviators to determine the incidence of defective color vision. The results indicated a sufficient number of anomalous trichromats to continue research planned in this area.

Electroencephalographic data were collected on two subjects in-flight as a preliminary venture to evaluate the effects of photic driving of the EEG by helicopters. No report was written but this preliminary data sustained the need for further research in this area.

Research activities. The following projects were completed during the quarter--

USAARU Report No 65-2, "Color Vision Deficiencies in Army Fliers."

USAARU Report No 65-3, "Noise Spectra of the Bell OH-13-T Helicopter."

USAARU Report No 65-4, "Noise Spectra of the Turbo-Beaver."

APPENDIX I

COMMAND AND STAFF - 31 December 1965

COMMANDING GENERAL/COMMANDANT:	MAJOR GENERAL JOHN J. TOLSON
DEPUTY CENTER COMMANDER:	Colonel L. F. Schockner
ASSISTANT COMMANDANT:	Colonel G. W. Putnam
SECRETARY, USAAVNS:	Lieutenant Colonel A. F. Almquist
CHIEF OF STAFF:	Colonel M. H. Parson
DEPUTY CHIEF OF STAFF:	Lieutenant Colonel W. D. Proctor
SECRETARY OF THE GENERAL STAFF:	Lieutenant Colonel M. P. Cherne'
COMPTRROLLER:	Lieutenant Colonel W. B. Andresen
ASSISTANT CHIEF OF STAFF, G-1,-2:	Colonel E. J. Fulsang, Jr
ASSISTANT CHIEF OF STAFF, G-3:	Colonel W. C. Edler
DEPUTY CHIEF OF STAFF FOR LOGISTICS:	Colonel G. F. Lilly
SURGEON:	Colonel R. B. Austin III
DENTAL:	Colonel N. S. Lang
INFORMATION:	Major J. M. Pruden
JUDGE ADVOCATE:	Lieutenant Colonel H. V. Martin
INSPECTOR GENERAL:	Lieutenant Colonel J. J. Clark
ADJUTANT GENERAL:	Lieutenant Colonel M. J. Steele
PROVOST MARSHAL:	Lieutenant Colonel D. T. Miller
CHAPLAIN:	Lieutenant Colonel E. L. Shirey
DIRECTOR OF INSTRUCTION:	Colonel R. E. McGraw
DIRECTOR OF SCHOOL SUPPORT:	Colonel H. A. Tidmarsh
DEPARTMENT OF ROTARY WING TRAINING:	Colonel J. R. Burton
DEPARTMENT OF FIXED WING TRAINING:	Colonel D. H. Boardman, Jr
DEPARTMENT OF AEROMEDICAL EDUCATION & TNG:	Colonel R. B. Austin III
DEPARTMENT OF TACTICS:	Colonel R. E. Creek
DEPARTMENT OF MAINTENANCE:	Colonel F. M. McCullar
DEPARTMENT OF PUBLICATIONS & NRI:	Lieutenant Colonel G. L. Kinley

CO, US ARMY HOSPITAL:	Colonel R. B. Austin III
CO, 5TH BATTALION, 31ST INFANTRY:	Lieutenant Colonel A. W. Summers
CO, USAAVNC TROOP BRIGADE (PROV):	Colonel H. S. Campbell, Jr

TENANT ACTIVITIES

USA AVIATION TEST BOARD:	Colonel R. E. Johnson
USA COMBAT DEVELOPMENT COMMAND AVIATION AGENCY:	Colonel C. L. Shepard, Jr
USA BOARD FOR AVIATION ACCIDENT RESEARCH:	Colonel W. R. Williams
USA AEROMEDICAL RESEARCH UNIT:	Lieutenant Colonel R. W. Bailey
USA AVIATION HUMAN RESEARCH UNIT:	Lieutenant Colonel B. D. More