DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (10 Oct 69) FOR OT UT 693257 15 October 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 165th Aviation Group, Period Ending 31 July 1969

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

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UNCLASSIFIED REPORT
DISTRIBUTION NO FOREIGN WITHOUT APPROVAL OF ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT (ARMY) ATTN FOR OT UT. WASHINGTON, D.C. 20310

DEPARTMENT OF THE ARMY
HEADQUARTERS 165TH AVIATION GROUP (CBT)
APO San Francisco 96384

AVBACD-C 15 August 1969

SUBJECT: Operational Report of Headquarters, 165th Aviation Group (Cbt) for Period Ending 31 July 1969. RCS CSFOR-65 (R1)

SEE DISTRIBUTION

1. Section 1, Operations: Significant Activities.

a. (U) Command.

(1) Unit Mission. No changes. The group operations have been normal for the last 92 days.

(2) Organizational Changes. The 129th Medical Detachment was assigned to the 165th Aviation Group (Cbt), 25 May 1969 (see Inclosure 1, Organizational Chart, and Inclosure 2, Station List).

(3) Major unit activities.

(a) Air Traffic Control. There were 2,459,366 recorded operations at 36 Army controlled airfields. The Army flight following system averaged 5,779 flights per day for a total of 531,641 for the reporting period. Eleven ground controlled approach (GCA) facilities performed 13,529 approaches, of which 10,499 were for training and 3,030 were for operational flights under instrument flight rules.

(b) Joint Air Operations Group (JAOG). A new MACV Directive 95-15 (Joint Air Operations Group) became effective 1 May 1969, formalizing the JAOG as a MACV sponsored activity. This headquarters continued to participate in JAOG activities throughout the report period. Briefings by the JAOG briefing team during the period were as follows:

Dates	Commands/Activities
23 - 24 June 1969	Headquarters MAW, II MAF and III Corps.
30 Jun - 5 Jul 69	All four Corps areas - Ground and aviation commanders to include SF Camp commanders and advisors, senior advisors to ARVN units having airfield responsibilities.

FOR OT UT
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Inclosure

(c) Joint Vietnam - US Air Coordination Committee (ACC). The group continued to participate in the Joint Airfield Survey Subcommittee of the ACC during the period of this report. Joint airfield surveys were conducted at Quang Tri and Hue/Phu Bai on 13 June 1969, Ban Me Thuot City and Ban Me Thuot/Phung Duc on 3 July 1969. Discrepancies were essentially of the same type as were noted on the surveys and described in the ORLL, this headquarters, for the period ending 30 April 1969.

(d) Quarterly Commander's Conference. The quarterly commander's conference was held on 9 July 1969, in the USARV Auditorium. Attendees were briefed by the group commander and staff on internal group matters. Additionally, the Joint Air Operations Group briefing team presented the JAOG educational briefing (reference (3)(b) above).

(e) An ENSURE request was submitted for a radar target generator for use with the ground controlled approach (GCA) radar system, AR/TPN-18. The target generator is required to expedite facility rating of newly assigned GCA controllers and to assist in maintaining proficiency thereafter. The CONUS air traffic controller courses are providing controllers with minimal practical experience. Consequently, an extended training period (60-120 days) is required in RVN before controllers are fully capable of performing in their MOS. Once he is facility rated the number of actual IFR and practice approaches required and/or requested by pilots is insufficient for the controller to maintain the requisite level of proficiency. This problem was addressed in letter, AVBACD-G, this headquarters, subject: Evaluation of Army Ground Controlled Approach Facilities in Vietnam, dated 14 May 1969, which forwarded a report by Mr. Clarence Sproul, subject: Evaluation of GCA Sites in Vietnam, dated 1 March 1969. Mr. Sproul's report covered his initial assistance visit to the group, during the period 3 February to 3 March 1969. The target generator will decrease the length of the in-country training period and increase the proficiency of facility rated controllers by providing training without dependence on "live" approaches. Practice approaches using realistic, simulated aircraft targets can be conducted using the target generator at any time the radar is not required for other purpose.

(f) An air traffic controller training program was initiated at Qui Nhon AAF for seven Vietnamese controllers assigned to the Directorate of Civil Aviation (DCA). Initial training consisted of classroom instruction conducted by representatives of this headquarters and the 343rd Aviation Detachment (Div) during the period 26 May to 22 June 1969. On-the-job training is now in progress in the Qui Nhon control tower under the supervision of the 343rd Aviation Detachment (Div). The purpose of this training is to qualify and facility rate the DCA controllers. The ultimate objective is to turn control

of the Qui Nhon tower over to the DCA. This represents a new and potentially very important undertaking for the group. As the Vietnamese government assumes increasing control and responsibility over airfield operations throughout the country, the level of effort by the group in training Vietnamese controllers can be expected to reach significant proportions.

(g) As a result of a comprehensive reevaluation of the flight following functions and resources of the group, a new concept for an Army enroute radar system was developed during the period of this report (see Inclosure 3). The concept was submitted to Headquarters USARV on 22 May 1969 for approval as a basis for initiating ENSURE action for the requisite radar equipment and for subsequent development of an MTDA for the organization envisaged. Headquarters USARV granted concept approval and provided additional guidance. At the close of the period preparation of an ENSURE request for the AN/TPS-54 lightweight surveillance radar was nearing completion.

b. (U) S1 (Personnel).

(1) Losses and gains maintained an operational balance during this reporting period. Authorized and present for duty strengths as of 31 July 1969 are as follows:

	Authorized	Present for Duty
Off	87	113
WO	72	81
EM	1480	1518
Am Civ		
USAASO Flt Facilities Rep		1
ECOM Rep		1
FSR (ITT Gilfillan)		6

(2) Principal personnel changes that have occurred during this period are as follows:

SUBJECT: Operational Report of Headquarters, 165th Aviation Group (Cbt) for Period Ending 31 July 1969. RCS CSFOR-65 (R1)

Assistant to Commander (Afld Opns). Date of change: 5 Jul 69

OUTGOING: SCULLY, Robert C., MAJ, 026-24-9706, IN
INCOMING: COX, James A., LTC, 372-30-3271, AD

S1. Date of change: 21 Jul 69

OUTGOING: NEUMIEN, Reginald A. JR., MAJ, 040-30-1139, AR
INCOMING: HERVEY, Albert E. JR., MAJ, 453-62-3119, FA

S2. Date of change: 7 Jun 69

OUTGOING: PARR, Arthur J. JR., CPT, 228-52-7884, MI
INCOMING: PORTER-SMITH, Richard O., CPT, 561-56-3953, IN

S3. Date of change: 5 Jul 69

OUTGOING: PARKER, Charles E. JR., MAJ, 224-40-5994, IN
INCOMING: WARREN, John O. SR., MAJ, 256-36-7008, SC

S4. Date of change: 28 Jul 69

OUTGOING: MANLEY, Jerry W. JR., MAJ, 226-58-4549, IN
INCOMING: PETERS, Roosevelt, CPT, 439-60-3416, FA

(3) Morale: Excellent. There were 112 six month extensions during this reporting period.

(a) Discipline: 6 Court-Martials and 27 Article 15's.

(b) Reenlistments:

Month	Eligible	Re Ups	% of Re Ups
May	20	6	30.0
Jun	10	0	0.0
Jul	16	7	43.7

(c) Mail: No significant problem areas.

(4) Awards and decorations: See Inclosure 4.

c. (U) S2 (Intelligence). The following are statistics pertaining to personnel security administration for this reporting period:

(1) Clearances granted - 29 CONFIDENTIAL and 75 SECRET.

(2) Clearances validated - 148 SECRET and 28 TOP SECRET.

(3) Total personnel security administrative actions - 280.

d. (U) S3 (Operations).

(1) Three Tactical Air Traffic Control Teams (TATCT) have been deployed during this period. These teams were deployed to LZ Buttons in support of the 1st Cav Div, LZ Baldy in support of Americal Div and Binh Duc in support of the 9th Inf Div. The TATCT at Castle and Tay Ninh (Apache) heliports continued on site in support of the 1st Cav Div and the 25th Inf Div respectively. (See Inclosure 6).

(2) Collocation of US Army flight following facilities with US Air Force traffic regulation centers (Commando Indian) has been completed. Collocation of Coastal Center with Port Call CRC on Hon Tre Island (reference ORLL, 58th Aviation Group (FFM)(PROV), for period ending 31 January 1969) has been re-evaluated. Inasmuch as this action would increase support and command/control problems for the 125th Aviation Company (Air Tfc Con) with no increase in operational capabilities, collocation will not be accomplished. (See Inclosure 6).

(3) During the reporting period, a total of 13 airspace letters of agreement (LOA) were finalized involving US Army facilities at 12 locations. Four of the LOA were between the US Army and the Directorate of Civil Aviation (DCA) concerning US Army facilities at Vung Tau, Tay Ninh, Duc Pho, and Oasis; eight were between the US Army and the US Air Force concerning US Army facilities at Spartan, Castle, Plantation, Phu Loi, Cu Chi, Phuoc Vinh, Lai Khe and Xuan Loc. Of particular note are the latter five which are within 40 nautical miles of Bien Hoa Air Force Base. The US Air Force is now providing IFR service to Army aircraft operating at these locations. These letters of agreement represent over 2½ years of planning and coordination.

(4) Implementation of the group GCA plan (Inclosure 7 to ORLL, 165th Aviation Group for period ending 30 April 1969) is continuing. All permanently sited GCA sections are in position except for Quan Loi. This site is awaiting erection of a tower for the antenna group. Seasonal GCA equipment has been placed at Lai Khe. There are currently no contingency requirements for GCAs.

e. (U) S3 (Training).

(1) Group operational capabilities continue to be hampered by personnel arriving from CONUS schools who require extensive additional training before they can be effective in their assigned duties. Skills of particular note are MOS 52B (Power generator mechanic), MOS 26D (radar repairman), MOS 93J (GCA controllers).

(a) The group diesel generator maintenance school was discontinued effective 30 June 1969 as a result of termination of contract generator technical assistance. Another school is being established at Long Binh by the 1st Logistical Command in response to group requirements. (See para 2d(3), below). The school will commence on 1 Sep 69 with five personnel per class and continue until all new generator mechanics (52B20) in the group have completed the course of instruction. The POI for the course consists of 60 hours of conference and practical work on the 30 KW generator, which is the primary source of power for group ATC facilities. The curriculum includes instruction on operator maintenance and prescribed load lists (PLL).

(b) A maintenance training school for radar repairmen (MOS 26D) is being established by the group. (See para 2d(2). The POI for a four week course has been written and approved and will cover the following areas:

1. Supply: Duties and functions of the repairman in management of prescribed load lists (PLL), to the extent which repairmen are involved in unit supply procedures.

2. System analysis: An orderly study of the data and control circuits used in the AN/TPN-18 radar system to enable the repairman to pinpoint faults and initiate corrective repair action.

3. Practical application: Repairman will perform supervised system(s) analysis to correct common equipment malfunctions.

(c) The 165th Aviation Group GCA school at Long Thanh has graduated 12 GCA controllers during the period 1 May 69 to 31 Jul 69. Of the 12 controllers graduated, 1 was from the 101st Abn Div, 2 were from the 1st Air Cav Div and the remainder were from group GCA sections.

(2) Training inspections were conducted at all aviation detachments (Div) during the reporting period. Of the minor discrepancies noted, slang words and improper phraseology were most common. These training inspections have served to reemphasize proper communications phraseology.

(3) Training assistance was provided to 11 aviation detachments with the following results:

(a) Facility training manuals have been completed and are in use at 27 of the 35 aviation detachments.

(b) There have been 83 controllers facility rated during the period, with a current total of 476 facility rated controllers within the group. The facility training manual and the group facility rating guide have proved to be invaluable tools in the facility rating program and are excellent references for increasing the proficiency of personnel already facility rated.

(c) Approach control classes (70 hours) were conducted on location for seven controllers at Tay Ninh. Each controller was subsequently administered a comprehensive test. Three were facility rated. Additionally, four approach controllers were tested and facility rated at Vung Tau.

f. (U) S4 (Logistics).

(1) The diesel generator technical assistance portion of the Decca Navigator Systems, Inc. contract was not renewed and the contract terminated 30 June 1969. All generator repair is now being accomplished by the direct support units of the 1st Logistical Command. A request for 5 generator maintenance technical assistants has been forwarded to MECOM. These technical assistants will recommend changes to improve supply and maintenance operations, conduct on-the-job training for power equipment generator mechanics (MOS 523), coordinate with direct and general support units, and advise the CO, 165th Aviation Group on generator power matters.

(2) The turn-around time on repair of air conditioners for air traffic control equipment is excessive. Approximately fifty percent of the air conditioners for the TSQ-70A's of the group are in for repair. Impact on operations is evident in decreased performance of electronic components of the TSQ-70's and in increased failure rates.

(3) Aircraft status (headquarters only):

Type	Authorized	On hand
U-6A	1	1
U-1A	1	1
U-21A	2	0
UH-1D	1	1

g. (U) Flight Check.

(1) Aircraft availability to conduct service evaluations has increased significantly during this period. As a consequence, evaluations were conducted at 39 Army airfields/heliports. (See Inclosure 5).

(2) The service evaluation technical assistance team, consisting of a technical representative (FSR) from ITT Gilfillan, two service evaluation aviators and two air traffic control (ATC) examiners, has proved to be a highly effective means for total evaluation of GCA facilities. The team's comprehensive coverage includes operation and maintenance of the equipment and standards of proficiency of both operator and maintenance personnel. The use of this team has virtually eliminated specialized problems and allowed more productive time to be spent on actual facility evaluation. A team of similar composition, modified for equipment differences is used for tower and approach control facility service evaluations.

(3) During the period 13-30 June 1969, the group was for the second time visited by Mr. Clarence Sproul, United States Army Aeronautical Services Office (USAASO). The purpose of the visit was to assess progress on corrective actions initiated on GCA facility operations as a result of his first visit. The initial visit provided indoctrination and training of newly assigned flight check and ATC supervisory personnel. The standardized procedures adopted during Mr. Sproul's first visit have increased the reliability of Army GCA's as reflected in both US Air Force flight checks and group service evaluations. In his report on his latest visit, Mr. Sproul noted a "tenfold improvement" in the USARV GCA program as a whole.

(4) The Federal Aviation Agency appointed two military air traffic control personnel of the Flight Check Section as FAA examiners on 16 July 1969. This designation, under the provisions of AR 95-37, authorizes an individual to act as military air traffic control examiner for the purpose of certifying and rating air traffic control personnel in accordance with Federal Aviation Regulation Part 65. These Army ATC examiners will, in addition to the functions and procedures listed in FAA ATP 7220.6, issue GCA ratings, train prospective ATC examiners and administer the FAA seven-part examination required for basic certification. These two appointments are a significant step in formalizing the group quality control program for air traffic controller performance.

j. (U) Flight Information. No significant activities.

i. (U) Safety.

(1) The group experienced two aircraft accidents during the reporting period.

(2) Cumulative group accident rate for FY 1969 is 26.5. Command Airplane Company and HHC, 165th Aviation Group completed FY 1969 without accidents.

(3) In May the 3/17 Cav requested and received a briefing on ATC safety.

(4) Army airfield safety surveys were conducted at Long Thanh (N) and Sanford during June.

(5) Safety assistance visits were conducted at: Command Airplane Company, 120th Aviation Company, Vung Tau AAF and Tay Ninh AAF.

(6) During June and July, the aviation safety officer participated as a member of the JOAG working group to review all provisions of MACV Dir 95-13, Artillery Warning System.

(7) In July the aviation safety officer participated as a member of the joint US/VN airfield survey team at Ban Me Thuct East and City Airfields (see para 1a.(3)(c) above).

j. (U) Signal (Communications).

(1) The Command/NOTAM communications system, Phase I (reference CRLLs, this headquarters, for the periods ending 31 Jan and 30 Apr 69) will be established on 1 September 1969. This system will use two means for the transmission of command, administrative and NOTAM messages to thirty-four units of this group. A radio teletype system will serve fifteen units. 1st Aviation Brigade, combat group and battalion communications centers will provide over-the-counter service for nineteen units. The remaining four units will continue to use the High frequency voice radio net and courier service.

(2) The centralized management of all ATC frequencies in Vietnam, less those used by the two airmobile divisions, has proved extremely effective. Frequency interference incidents have decreased markedly. When interference has been experienced it has been quickly eliminated, thereby decreasing the number of frequency changes required.

(3) The 34th General Support Group will assume maintenance responsibility for the AN/GRN-6 non-directional beacons on 1 August 1969. Maintenance support for the AN/TRN-25 non-directional beacon is now available at two general support shops of the 34th General Support Group.

(4) The arrival of the AN/TSQ-71A radar sets has permitted the replacement of radar sets which have been in use in Vietnam for two years. The improvements engineered into the new sets are notable. However, there are several deficiencies which have also been noted. These deficiencies have been evaluated and equipment improvement recommendations (EIR's) have been submitted.

(5) The supply responsibility and float stock storage for the AN/TSQ-75 equipment has been transferred to AMMC and 34th General Support Group respectively from the 125th Air Traffic Company. Units of this command will be supported in these areas through their assigned direct support units rather than from the 125th Air Traffic Company as a result of this action.

(6) The ITT Gilfillan maintenance contract was not renewed for FY 70. This places a severe hardship on the maintenance program for the AN/TPN-18 radar systems. A stationing plan for the relocation of the six ITT Gilfillan Factory Service Representatives (FSR) has been approved by Headquarters, USARV. This plan locates technical assistance personnel throughout Vietnam in support of all units operating AN/TPN-18 systems, to include the two airmobile divisions, and allows assistance to be rendered to the 34th General Support maintenance shops.

k. (U) Headquarters Commandant.

(1) During this reporting period, SEA hut-type buildings were constructed to replace the canvas tent frames used for troop billets and company administration in Headquarters Company.

(2) Site location and funding has been approved for construction of a combination theater-dayroom for members of Headquarters Company.

2. Section 2, Lessons Learned: Commander's Observations, Evaluations, and Recommendations.

a. (U) S1 (Personnel). None.

b. (U) S2 (Intelligence). None.

c. (U) S3 (Operations). None.

d. (U) S3 (Training).

(1) Approach controller training.

(a) OBSERVATION. There is a severe shortage of qualified air traffic controllers in MOS 93K (enroute/approach control).

(b) EVALUATION. This group currently operates approach control facilities at Vung Tau, Soc Trang, Tay Ninh, and An Khe Army airfields. Establiishment of an approach control at Can Tho is in the final planning stage. Implementation of the Army Enroute Radar System (see Inclosure 3) will generate a further requirement for enroute/approach controllers to man 12 additional facilities. Qualified personnel are practically non-existent, necessitating careful selection and intensive training of personnel to operate group approach control facilities. This is at best a marginal solution since the approach control function requires the highest level of skill in the air traffic control field. In this regard, it should be noted that the FAA counter-part in this field requires from 3 - 5 years training before he is considered qualified.

(c) RECOMMENDATION. By letter, AVBACD-C, subject: Revision of Air Traffic Control MOS and Grade Structure, dated 19 May 1969, this headquarters recommended extensive revision of the MOS and grade structure for air traffic controllers, as well as a new career progression pattern. Adoption of these recommendations is fundamental to any longer range, workable solution to the problems presented by the 93K shortage. It is recommended that action on this letter be expedited.

(d) COMMAND ACTION. The group has centralized control over selection, training and assignment of personnel for approach control positions. This action insures that only the best qualified personnel from group resources are applied to these requirements. The procedures adopted are an extension of the system of interviews given all newly assigned air traffic control personnel at the time they join the group.

(2) Training of radar repairman.

(a) OBSERVATION. Replacement radar repairmen arriving from CONUS are not sufficiently trained on the AN/TPN-18 radar set to be assigned to a field locations without additional training.

(b) EVALUATION. Although radar repairmen, MOS 26D20, are fairly well trained on the AN/TPN-8, they are not knowledgeable on the AN/TPN-44 system. In addition, their overall systems knowledge of the AN/TPN-18 is marginal and they are extremely weak on the practical area of trouble shooting.

(c) RECOMMENDATION. That the POI of the 26D course conducted by the Southeastern Signal School, Fort Gordon, Georgia, be revised and expanded to correct the shortcoming described.

(d) COMMAND ACTION. The group is establishing a radar repairman's school using ITT Gilfillan FSR's and selected military personnel. One AN/TSQ-71A radar set and various items of test equipment and tools have been made available and additional equipment has been requested from higher headquarters.

(3) Generator maintenance training.

(a) OBSERVATION. Power generator mechanics assigned to this organization are not sufficiently qualified to be effective.

(b) EVALUATION. The reliability and effectiveness of group air traffic control (ATC) systems depend on reliable power sources. Diesel and gasoline generators (10 to 30 KW) constitute the primary power source in most instances and the backup source in all cases. On-site repair of these generators is accomplished by TOE-authorized power generator mechanics (MOS 52B) in each unit. Due to the low experience level of these personnel, units are experiencing difficulty in maintaining generators in the operational status required to provide immediate and responsive power for ATC facilities. Direct support maintenance units cannot always provide responsive support because of their locations in relation to the ATC facilities. Moreover, direct support unit generator repairmen are themselves not able to diagnose generator problems in many cases.

(c) RECOMMENDATION. That the POI for power generator maintenance training at the Engineer School, Fort Belvoir, Virginia, be revised and expanded to provide generator repairmen with the increased skills and knowledge required to support ATC power equipment in use in RVN.

(d) COMMAND ACTION. A request to retain five civilian contractor diesel generator technicians was disapproved by Headquarters USARV. Subsequently, a request for technical assistance from the responsible commodity command (MECOM) was forwarded. As an interim measure a training program has been established at Long Binh Post by 1st Logistical Command, to provide organizational maintenance training for power generator repairmen assigned to this organization.

e. (U) Flight Check. None.

f. (U) Flight Information. None.

AVBACD-C 15 August 1969

SUBJECT: Operational Report of Headquarters, 165th Aviation Group (Cbt) for Period Ending 31 July 1969. RCS CSFOR-65 (R1)

g. (U) Safety. None.

h. (U) S4 (Logistics). None.

i. (U) Signal (Communications). None.

j. (U) Headquarters Commandant. None.

JAMES G. McFADDEN
Colonel, Infantry
Commanding

8 Incl
5 as
6. 125th Avn Co ORLL
~~7. 120th Avn Co ORLL~~
8. Command Airplane Co ORLL
Incls 2, 4, 5 and 7 wd HQ, DA

AVBAGC-O (15 Aug 69) 1st Ind
SUBJECT: Operational Report of Headquarters, 165th Aviation Group (Cbt) for Period Ending 31 July 1969. RCS CSFOR-65 (R1)

DA, HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96384 17 SEP 1969

THRU: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, APO 96375
Commander-in-Chief, United States Army Pacific, ATTN: GPOP-OT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

1. This headquarters has reviewed subject report and concurs with the contents.

2. The following additional comments are considered pertinent:

a. Paragraph 2d(1), page 11, concerns a shortage of Approach Controllers, MOS 93K. All personnel in USARV holding MOS 93K have been assigned to the 165th Aviation Group (Combat), except for 4 authorized in the 101st Airborne Division and the 1st Air Cavalry Division. Headquarters, USARV has been made aware of the situation and necessary personnel are on requisition. It is not within the resources of this command to resolve the shortage.

b. Paragraph 2d(2), page 11, addresses the problem of training radar repairmen. Concur with the recommendation to propose POI changes for CONUS training of radar repairmen, MOS 26D, and the command action which initiated an in country radar repairman school. The 165th Aviation Group (Combat) has been advised to submit proposed POI changes to the US Army Signal School, Fort Gordon, Georgia.

c. Inclosure 7, paragraph 2a, page 3, addresses personnel rotation and inadequate aviator experience for missions performed by the 120th Aviation Company (Assault Helicopter). August records, this headquarters, show three warrant officers departing in August, one officer and seven warrant officers departing in September, and three warrant officers departing in October. In August the 120th Aviation Company (Assault Helicopter) had 75 aviators assigned versus 78 authorized pilots. This is approximately 18.6% of their officers rotating during August, September and October. It can be assumed that the majority of the departing officers will be Aircraft Commanders since they have extensive experience when compared to newly assigned officers. The appointing of Aircraft Commanders is a unit responsibility. The 1st Aviation Brigade has a low overall aviator experience level. To preclude receipt of inexperienced pilots, G-1, this headquarters, has requested that the USARV Aviation Assignment Officer be selective when considering assignment of pilots to the 120th Aviation Company (Assault Helicopter). Requests for adequate replacement of the eight officers rotating in September have been made to the USARV Aviation Officer Assignment Branch.

AVBAGC-O 17 SEP 1969
SUBJECT: Operational Report of Headquarters, 165th Aviation Group (Cbt) for Period Ending 31 July 1969. RCS CSFOR-65 (R1)

d. Inclosure 8, paragraph 2a(1), page 2, discusses the feasibility of six months extensions for the purpose of U-21 transition. Requests for extension to transition into U-21's are being carefully screened to assure that only aviators with extensive fixed wing and multiengine experience are being accepted. Aviators with little or no experience and background in multiengine aircraft will not be extended if their request for extension is predicated on U-21 transition.

e. Inclosure 8, paragraph 2a(2), page 2, addresses the infusion program for U-21 pilots. A large percentage of the U-21 pilots assigned to USARV and consequently 1st Aviation Brigade are field grade aviators. These personnel, however, are counted against overall U-21 pilot authorization. Since it is not practical to assign field grade officers in excess of those authorized, the rotation of the remaining U-21 qualified aviators may produce DEROS peaks. The relatively small number of U-21 pilots available in the Brigade precludes any sizable infusion program. G-1, this headquarters, will coordinate with USARV to resolve any peak DEROS periods which may exist in the future.

FOR THE COMMANDER:

ARTHUR W. LITTLE
CPT AGC
Asst AG.

Cy of 1st Ind Furn:
CO, 165th Avn Gp (Cbt)

GPOP-DT (15 Aug 69) 2d Ind
SUBJECT: Operational Report of HQ, 165th Aviation Group (Combat) for Period Ending 31 July 1969, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 1 OCT 69

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

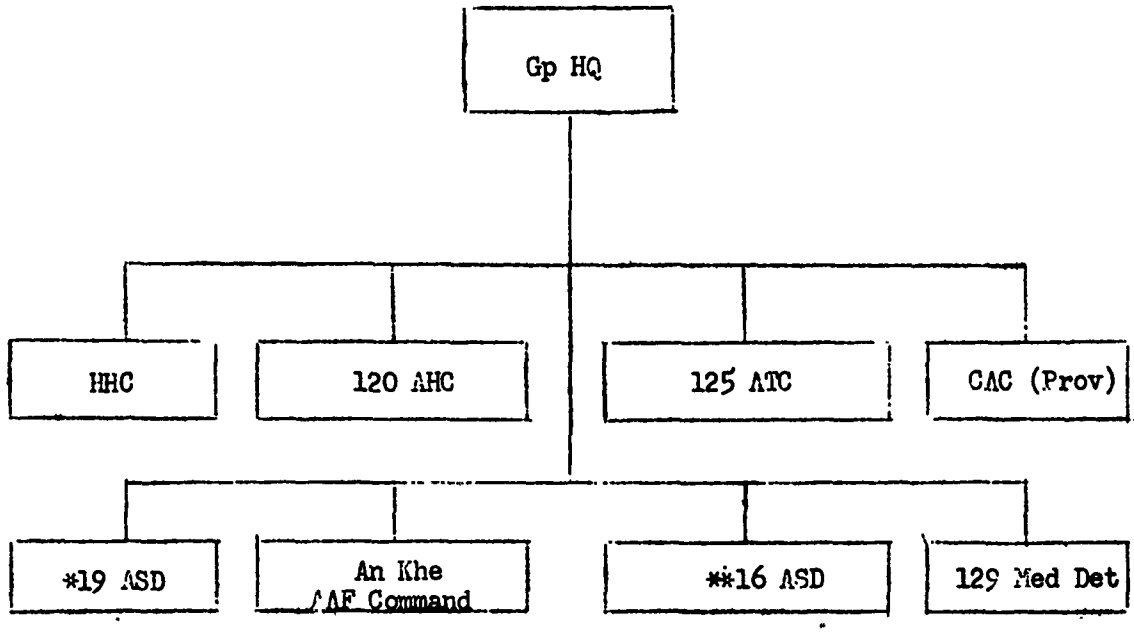
FOR THE COMMANDER IN CHIEF:

D. A. TUCKER
CPT. AGC
ASST AG

DEPARTMENT OF THE ARMY
HEADQUARTERS 165TH AVIATION GROUP (CBT)
APO San Francisco 96384

AVBACD-C 15 August 1969

SUBJECT: Organization of 165th Aviation Group (Cbt)



* "A" Detachments

-- "B" Detachments

Inclosure 1

ARMY ENROUTE RADAR SYSTEM

CONCEPT

1. Background

a. Except for an occasional field exercise of limited scope and duration, the Army has never operated a true enroute IFR air traffic control system. The reason for this is that the Army has never succeeded in acquiring the authority for the required airspace. In most cases the control of airspace has been retained either by the sovereign power in the case of foreign nations, or by the FAA in the case of US airspace. Further, joint doctrine gives the air component commander a practical control over airspace coordination. In virtually all cases where this doctrine has been put to test there has been a bias against relinquishing control of airspace to Army ATC authority for the purpose of enroute operations. Moreover, there has been a tendency to retain centralized control over all aviation operations in the interests of safety and various air defense considerations.

b. An Army consensus has never accepted the centralized control of airspace as an essential condition of joint combat operations. In the latest version of FM 1-60 "Army Air Traffic Operations", dated 12 Nov 68, the Army states a requirement for a block of airspace over the field army combat zone, in which the field army commander is vested responsibility for airspace coordination and air traffic control. However, the same publication portrays an enroute ATC system which is antiquated by today's standards and

is not likely to be feasible in most situations, including Vietnam. Based on non-directional, low frequency radio beacons the system is vulnerable, marginally reliable, and lacking flexibility. The manual must, of course, deal with existing capabilities and cannot be faulted for the lack of more suitable ATC equipment in the Army inventory.

c. Lacking authority to operate a full scale ATC system, the Army has used its existing, marginal enroute capabilities to establish and operate an elaborate flight following system in Vietnam. This system has well-defined and fairly serious limitations, particularly in light of the resources invested in it.

(1) It is essentially a manual enroute system which accepts flight plans and requires progress reports but neither offers nor is capable of providing IFR separation.

(2) The system is not linked to established airfields, thus requiring flight plans to be filed and closed from the air by the pilot. In this regard, the system fails to provide the communication links which would result in an integrated Army ATC system in Vietnam.

(3) Because of the quantity of traffic handled, the occasional forgetfulness of pilots to make position reports and/or close flight plans, and the frequest inability to make radio contacts for these purposes, the reliability of the system is somewhat questionable. There have been no incidents in the past year for which the Army flight following system can be attributed the sole credit for a "save".

(4) In the final analysis, flight following is not a true ATC function, although it is a by-product of enroute control. Accordingly, pure flight following operations are in the domain of flight operations specialists and are not a proper function for air traffic controllers. The critical point in this regard is that flight following is not a medium by which enroute controllers can acquire or maintain either terminal or enroute ATC proficiency.

2. Requirement

a. The Army requires the capability to conduct enroute type air traffic operations under IFR or marginal VFR conditions (including night) in the tactical environment. The requirement in Vietnam is not one of great weight in terms of quantitiy of traffic. However, if a relatively simple, reliable and responsive system were in being, its use would almost certainly expand as its value is proven in practice.

b. The Army requires a more efficient and reliable flight following system in Vietnam. The current system has not proved sufficiently valuable to warrant the investment in resources. Admittedly, the value of such an intangible product as that of flight following is not susceptible of precise quantification. However, the record is devoid of examples of the ultimate worth of the Army flight following system in Vietnam, i.e., number of crew saves resulting from timely discovery that an aircraft is overdue.

c. Development of an improved flight following system should begin from the premise that it also provide a standby enroute IFR control capability.

d. The only medium which is immediately available and which can provide both improved flight following and a standby enroute IFR capability, to include establishment and retention of an acceptable level of air traffic controller proficiency is radar.

3. Concept

a. This concept envisages the use of light-weight surveillance radars deployed throughout Vietnam in areas of heavier Army air traffic, integrated into the ATC system as a whole.

b. The primary airspace involved for radar coverage would be that below 5000 feet above ground level except in mountainous areas, where it would be something less, depending on the amount of Army traffic and the coverage available from Air Force radars.

c. To the extent feasible, the radars would be sited so as to provide IFR terminal area control (approach control) for Army airfields.

d. In addition to IFR terminal area control in applicable areas, the services provided would be:

(1) Positive radar monitoring.

(2) Flight following.

(3) Radar advisories for collision and weather avoidance.

(4) Navigational assistance.

(5) Centralized area artillery warning.

In some areas not covered by radar, current flight following procedures would remain in effect.

e. Approach/enroute air traffic controllers (MOS 93K) would be used for all radar air traffic operations and flight operations specialists (MOS 71P) would be used for the manual flight following functions, where required.

A continuous program of training would be instituted whereby the air traffic controllers would be capable of providing traffic separation in the event of a requirement for operation in an IFR mode.

f. Communications would be provided to effect radar handoff in a manner similar to the current system of passing flight plan data between flight following stations. In the event of a gap in radar coverage between two stations, a flight operations specialist would monitor at each station until the gaining center had acquired positive radar contact. The volume of flight following communications traffic could be considerably reduced by the fact that during the period in which the aircraft traversed the area coverd by a single radar no position reports would be required. Further, with judicious siting of radars, it is expected that a large percentage of flights would be completed under the same controller, thereby obviating the need for both radar handoff and forwarding of flight plan data.

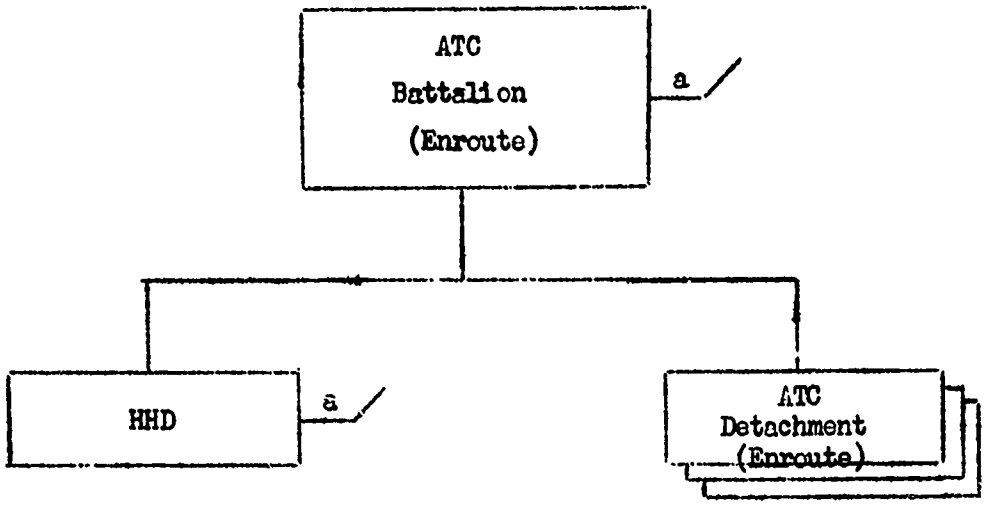
g. Organizationally, a structure similar to that of the flight operations platoons of the 125th ATC Company would be appropriate, except that the platoons would become small, separate detachments controlled by a battalion headquarters or directly by the 165th Avn Gp. The surveillance radar would be the primary tool of these units. In some cases, flight following stations (FFS) would continue to be required as fillers where sizable gaps exist between radar coverage areas. All elements would be mobile. Radar coverage would be shifted as required to conform to the major areas of Army aviation operations, in accordance with changing tactical situations. The collocation of flight following elements with Air Force CRC's would then take on the complexion of liaison teams.

h. This system would operate much as the approach control facilities do in CONUS. Hand-offs would be from approach control to approach control

in IFR conditions regardless of the controlling agency (Air Force, Army or civilian). Hand-offs would not be required under VFR conditions but would be accomplished as a part of the flight following service. This would increase the work load of the controllers but would eliminate many flight following stations. During the period that acceptance by the other services is being gained the system would be used for flight following, VFR navigational assistance and approach control.

i. This concept is compatible with the latest version of FM 1-60. In addition, the communications required for the radar approach control/radar flight following concept is essentially identical to that required for air traffic control in the Army block of airspace.

j. A proposed organization with approximate personnel requirements is at Inclosure 1. It is estimated that a total of 330 personnel are required exclusive of command and control requirements. A total of 12 lightweight surveillance radars are required. The type equipment envisaged is the AN/TPS-54, with modifications generally as set forth in the Tactical Air Traffic Control Equipment (TATCE) study made by the US Army Aeronautical Services Office in October, 1968. Certain additional modifications principally pertaining to number and size of indicators and in shelter requirements will also be necessary.

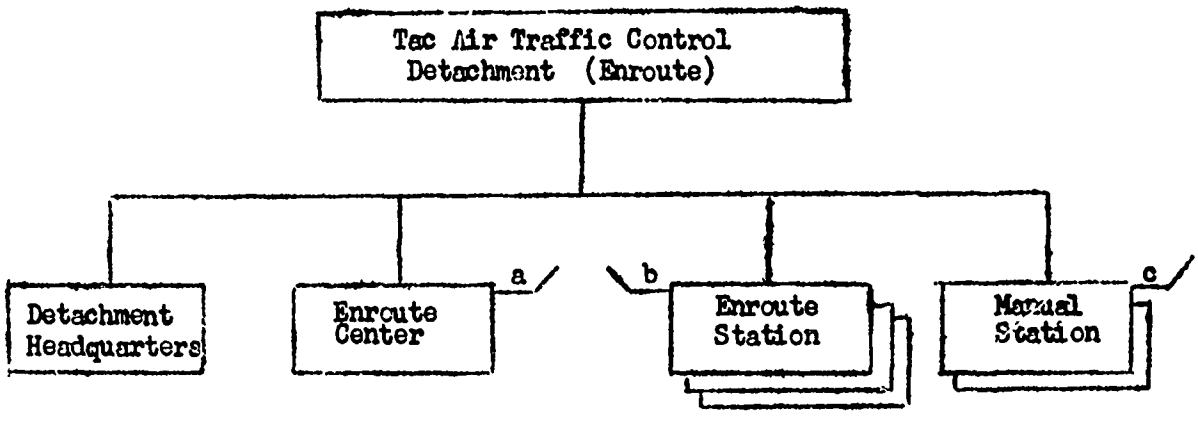


Notes:

a/ Desired structure. Could be eliminated and detachments placed directly under group, with some augmentation of group HHC.

Inclosures
Tabs A thru F

Incl 1 to Incl 3



Notes:

a / Equipped with one 4-position surveillance radar facility.

b / Equipped with one 2-position surveillance radar facility.

c / Equipped with one 2-position manual flight coordination control (enroute/terminal area control)

Tab A to Incl 1 to Incl 3

Detachment Headquarters

Detachment Commander	1
Executive Officer	1
Radar Technician	1
Detachment Sergeant	1
Cook	1
Commo Chief	1
Radio Operator	3
Wireman	1
Avionics Repairman	1
Powerman	1
Supply Sergeant	1
Supply Clerk	1
Signal Parts Specialist	1
Detachment Clerk	1
Clerk Typist	1
Helicopter Pilot	1
Vehicle Mechanics	3
Crew Chief	1
Total	22

Enroute Center a/

	24 hrs	16 hrs
Facility Chief	1	1
Assistant Facility Chief	1	-
Watch Chief	3	2
Controller	10	7
Flight Operations Specialist	6	4
Radio Operators (RTT)	3	2
Radar Repairman	2	1
Avionics Repairman	1	1
Powerman	1	1
Totals	28	19

Notes:

a/ 4-controller positions in facility

Tab C to Incl 1 to Incl 3

Enroute Station a/

	24 hrs	16 hrs
Facility Chief	1	1
Watch Supervisor	2	2
Controller	5	3
Flight Operations Specialist	3	2
Radio Operator (RTT)	3	2
Radar Repairman	2	1
Avionics Repairman	1	1
Powerman	1	1
Totals-	18	13

Notes:

a/ 2-controller positions in facility

Tab D to Incl 1 to Incl 3

Manual Station a/

	24 hrs	16 hrs
Facility Chief b/	1	1
Watch Chief b/	2	1
Controller b/	3	2
Radio Operator (RTT)	3	2
Avionics Repairman	1	1
Powerman	1	1
Totals	11	8

Notes:

a/ 2-position facility

b/ Air traffic controllers (93K and 93L) for manual operations. Flight operations specialists if flight following only.

Tab E to Incl 1 to Incl 3

RECAP a/

Detachment Headquarters			22
Enroute Center	(24 hours)		28
Enroute Station	(24 hours)		18
Enroute Station	(16 hours)	(2)	26
Manual Station	(16 hours)	(2)	16
		Total	110

Notes:

a/ Based on a type configuration for Vietnam

30 July 1969

SUBJECT: Operational Report of the 125th Aviation Company for Period Ending 31 July 1969

2. Section 2, Lessons Learned: Commander's Observations, Evaluations, and Recommendations

.....

k. 125th Aviation Company

(1) Equipment required for GCA Tactical Air Traffic Control Teams (TATCT's):

(a) Observation: Frequent and extensive periods of down time have been experienced at the outset of GCA TATCT operations.

(b) Evaluation: Experience gained from previous GCA TATCT deployments, using the AN/TSQ-71 and 71A type radars, indicates that the period of greatest down time usually occurs during the first thirty days after arrival on site. The RT-211 section of the AN/TPX-44 IFF set and the RT section of the antenna group are evidently so sensitive that their movement to sites, even by airlift, renders them either inoperative or unreliable. However, it is during this shakedown interval that it is most important for the GCA to be continuously operative, since the radar must be flight checked, operators trained, and confidence instilled in the aviators using the system. Both the RT-211 and the antenna group are comprised of parts which are largely direct exchange items; therefore, if spares for each are deployed with the radar, they can be quickly installed in the event of failure and the inoperative parts exchanged immediately.

(c) Recommendation: A spare RT-211 and antenna group should be deployed with AN/TSQ-71A GCA TATCT's.

(d) Command Action: Lai Khe GCA and Can Tho GCA were both deployed in the above configuration.

(2) Sling Loading GCA TATCT's:

(a) Observation: This unit has experienced several problems in determining the proper method of sling-loading AN/TSQ-71A radar sets.

(b) Evaluation: In order to reduce the number of CH-47 missions required to move a GCA TATCT and to deploy the team as rapidly as possible, this unit has attempted sling-loading two antenna groups, trailer mounted, one beneath the other using a common sling assembly; however, the spreader used in the sling assembly which is part of the radar, is not strong enough to support two antenna groups and bends easily.

Extract from Incl 6, Operational Report of 125th Aviation Company for Period Ending 31 July 1969.

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(c) Recommendation: Two CH-47's are required to transport a GCA TATCT. Using two aircraft allows for loading the 3/4 ton truck with gear on one, and the radar van on the other, while sling-loading an antenna group from each.

(d) Command Action:

1 An investigation of methods for loading the radar van inside a CH 47 is being conducted.

2 Two CH-47's are presently being requested each time a GCA TATCT is deployed.

JOSEPH H. ERWIN
MAJ, FA
Commanding

DEPARTMENT OF THE ARMY
COMMAND AIRPLANE COMPANY (PROVISIONAL)
APO San Francisco 96530

1 August 1969

SUBJECT: Operational Report of CAC for Period Ending 31 Jul 69

Commanding Officer
165th Avn Gp
ATTN: AVBACD-C
APO 96384

1. Section 1, Operations: Significant Activities.

a. In accomplishing its mission of providing priority air transportation for Headquarters MACV and Headquarters USARV, this unit flew 7952 sorties, transported 220 tons of cargo and 16,208 passengers. Of the passengers flown 2353 were code 7 or higher.

b. The unit was engaged in operational mission support and aviator training during the entire reporting period. Included in the training conducted was the transition of three (3) non U-21 qualified aviators.

c. Unit strength at the start of period, 1 May 1969.

(1) Military:

OFFICER	WO	EM	TOTAL
43	6	86	135

(2) Civilian (American): 22

(3) Civilian (Vietnamese): 1

d. Unit strength at the end of period, 31 July 1969.

(1) Military:

OFFICER	WO	EM	TOTAL
27	15	102	142

(2) Civilian (American): 18

(3) Civilian (Vietnamese): 1

Incl 8

SUBJECT: Operational Report of CAC for Period Ending 31 July 1969

e. This unit has 42 aviators of the following grades assigned:

LTC:	1	CPT:	14	CW3:	1	WO1:	3
MAJ:	6	1LT:	6	CW2:	11		

f. Aircraft status:

Type: U-21A

Auth: 26

OH: 26

In addition to the twenty-six (26) aircraft on hand, this unit provides maintenance support for two additional aircraft.

2. Section 2, Lessons Learned: Commanders Observations, Evaluations and Recommendations.

a. Personnel:

(1) Observations: Six (6) month extension of Foreign Service Tour for the purpose of receiving U-21 qualification.

Evaluation: Past experience within this unit indicates that this practice, while beneficial to the individual, is detrimental to the unit mission. In the six month period, it has normally taken from 3 to 4 months for these individuals to become fully operational. Utilization of instructor pilots and aircraft to support this additional mission detracts from the primary mission. The two to three month period of full utilization is not considered rewarding to the unit.

Solution: Emphasis be placed upon assigning school trained aviators: six month extensions for the purpose of U-21 qualification should be discouraged.

(2) Observation: Inadequate infusion program for U-21 units.

Evaluation: The absence of an equal distribution of aviators throughout the year produces personnel turbulence that is considered unnecessary. During June and July of this year, the unit lost 16 aviators and received nine, four of these having been received in the last two weeks of the quarter.

SUBJECT: Operational Report of CAC for Period Ending 31 Jul 69

Solution: An adequate infusion program be established for all U-21 units within the 1st Aviation Brigade to prevent large fluctuation in aviator strength.

b. Operations:

(1) Observation: Failure of USARV SGS and passengers to adhere to the weight limitations of the aircraft.

Evaluation: Passengers continue to arrive at pick-up points with baggage that is either unscheduled or in excess of that indicated on the manifest. Personal visits to USARV SGS have failed to correct this dangerous situation. Aircraft commanders have been forced to arbitrarily reduce the weight by removing passengers and/or baggage.

Solution: Unit commander has reduced by one seat per aircraft the number of spaces available to Hq, USARV for daily requirements.

c. Maintenance:

Observation: Attempts to have U-21 aircraft repainted because of badly deteriorating paint have been unsuccessful.

Evaluation: The U-21A aircraft of this unit have the primary mission of providing priority (VIP) transportation throughout Vietnam. Since their arrival in Vietnam, the aircraft have been heavily used and subjected to extremely hot weather and very dusty conditions. The deterioration of paint combined with necessary spot painting present a very poor outward appearance. An initial attempt to have the aircraft painted through Army maintenance channels was halted when it became obvious that the aircraft were receiving a substandard painting. Attempts to have the aircraft painted by contract were unsuccessful due to budget limitations.

Solution: The aircraft are being thoroughly cleaned and exhaust accumulation removed and then waxed. After two or three applications, oxidation is removed and the existing paint begins to take on a more acceptable luster.

d. Training: None

e. Intelligence: None

f. Logistics: None

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3. Organization: This unit was designated USARV Flight Detachment by General Order 298, USARPAC, dated 30 November 1967. The unit was redesignated, for in-country communications only, Command Airplane Company by message from CG, 1st Aviation Brigade, dated 17 July 1968. On 10 June 1969, this unit received a message from USARPAC stating that a General Order for designation as Command Airplane Company was shortly forthcoming.

HAZEN C. SCHUMAN
LTC, FA
Commanding

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