UNCLASSIFIED

AD NUMBER

AD386889

CLASSIFICATION CHANGES

TO:

unclassified

FROM: confidential

LIMITATION CHANGES

TO:

Approved for public release, distribution unlimited

FROM:

DoD Controlling Organization: Department of the Army, Office of the Adjutant General, Washington, DC 20310.

AUTHORITY

14 Aug 1979 per DoDD 5200.10 document marking; Adjutant General's Office [Army] ltr dtd 29 Apr 1980

DEPARTMENT OF THE ARMY OFFICE OF THE ADJUTANT GENERAL WASHINGTON, D.C. 30310

IN REPLY REPER 175 AGAM-P (M) (29 Dec 67) FOR OT RD

11 January 1968

SUBJECT: Operational Report - Lessons Learned, Headuqarters, 17th Combat Aviation Group, Period Ending 31 July 1967

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT 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 ίţι. operations, and may be adapted for use in developing training material. any

BY ORDER OF THE SECRETARY OF THE ARMY:

nneth G. Mickham

KENNETH G. WICKHAM Major General, USA The Adjutant General

Wills document certains information affecting the Katlona. Muited States within the meaning of the Fille 18, U. S. C., Section 793 and 794, 8 or the revelation of its conterts in An Ŀ, Til Incl DISTRIBUTION: 5 Commanding Generals US Continental Army Command Cestod US Army Combat Developments Command Commandants US Army Command and General Scaff College unsuthorsied US Army War College US Army Air Defense School US Army Armor School US Army Artillery and Missile School US Army Aviation School Its transmistion Espiorate have, US Army Chemical School Defence of the US Army Civil Affairs School E **US Army Engineer School** ţ0 US Army Infantry School US Army Intelligence School TOTTON US Army Adjutant General School US Army Missile and Munitions School US Army Southeastern Signal School

6

TO:

• 1.BE.



REGRADED UNCLASSIFIED WHEN SEPARATED FROM CLASSIFIED INCLOSURES

- No. -

2

ŝ

DISTRIBUTION (Cont'd) US Army Medical Field Service School US Army Military Police School US Army Ordnance School US Army Quartermaster School US Army Security Agency School US Army Signal School US Army Special Warfare School US Army Transportation School Copies Furnished: Office, Chief of Staff, US Army Deputy Chiefs of Staff

Chief of Research and Development Assistant Chiefs of Staff Chief of Engineers The Surgeon General The Provost Marshal General Research Analysis Corporation (Library) Dr. Martin J. Bailey, OSD (SA) Defense Documentation Center Planning Research Corporation CO, 17th Combat Aviation Group

2

CONFIDENTIA

DEPARTMENT OF THE ARMY HEADQUARTERS, 17TH COMBAT AVIATION GROUP APO San Francisco 96240

AVGD-SC

14 August 1967

Š

SUBJECT: Operational Report forQuarterly Period Ending 31 July 1967 Ulc DCIAA RCS GSFOR-65 (U)

TO: See Distribution

Section 1: Significant Organizational Activities.

1. (C) General

a. Mission: The 17th Combat Aviation Group is to provide aviation support, as directed, to United States, Republic of Vietnam, and other Free World Military Assistance Forces for the conduct of combat, logistical or other counterinsurgency operations.

b. Organization and structure as of 31 July 1967.

HHC 17TH COMBAT AVIATION GROUP

HHC LOTH CAB 48th AHC 117th AHC 129th AHC 28lst AHC 180th ASHC	HHC 14TH CAB 71st AHC 161st AHC 174th AHC 176th AHC 178th ASHC	HHC 52D CAB 119th AHC 155th AHC 170th AHC 179th ASHC 189th AHC	196TH ASHC
HHC 212TH CSAB	HHC 223D CSAB 18th UAC 131st SAC 225th SAC 183d RAC 185th RAC 215th RAC 220th RAC 282d AHC	268TH CAB	
CAG = Combat Aviatio CAB = Combat Aviatio CSAB = Combat Support RAC = Reconnaissance	n Battalion	•	INGRADED AT 3 YEAR INTERVALS: ECLASSIFIED AFTER 12 YEARS DOD DIR 5200.10

AVGD-SC 14 August 1967 SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

UAC = Utility Airplane Company (U-lA) SAC = Surveillance Airplane Company (OV-l) AHC = Assault Helicopter Company (UH-l) ASHC = Assault Support Helicopter Company (CH-47)

c. Organizational changes.

(1) The 225th SAC personnel and equipment arrived in country 3 May 1967. This unit is assigned to the 223d CSAB and became operational on 9 June 1967.

(2) The 268th CAB personnel and equipment arrived in country 4 May 1967. The battalion is stationed at Phu Hiep and will become operational on 1 Sep 67.

(3) The 189th AHC, nicknamed "Ghost Riders", and stationed at Pleiku became operational on 15 June 1967.

(4) The 185th RAC personnel and aircraft arrived in country on 27 July 1967 and are stationed at Ban Me Thuot. The unit is assigned to the 223d CSAB and will become operational upon completion of in country orientation and training.

(5) The 212th CSAB personnel arrived in country 30 July 1967 and are stationed at Da Nang. A tentative date for the battalion to become operational is 1 September 1967.

2. (C) Intelligence.

a. Escape and Evasion: The 17th CAG has received 2320 Army light weight individual survival kits (leg holster kit). The priority of issue was O-1 RAC's, U-1A UAC, AHC's, and ASHC's in that order. To insure that each crew member has a survival kit on each mission the basis of issue for each type aircraft was as follows:

- (1) 0-1 2 ea
- (2) U-1A 3 ea
- (3) U-6 2 ea
- (4) UH-1 4 ea
- (5) CH-47 5 ea

CONFIDENTIAL

AVGD-SC SUBJECT:

5

14 August 1967

T: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

b. School quotas for E & E Survival School are received monthly by this Headquarbers from 1st Aviation Brigade and distributed among the battalions to insure aircrew members, E & E Officers and pilots the best of training. School quotas are received for the Navy FAETUP Jungle Environment School Training (JEST) Subic/Cubi Point NAS, Phillipines and the USAF Pacific Jungle Survival School at Clark AFB, Phillipines. Insufficient quotas are received to train the number of aviators who require training. These are primarily fixed with aviators flying single ship low-level visual and infra red reconnaissance in O-1 and OV-1 aircraft. This group requires as a minimum, fifty (50) quotas per month of which approximately twenty five (25) would be applied to fixed wing units.

c. An urgent requirement exists for quotas to a Navy sea survival school for OV-1 aviators who routinely operate 50 miles or more from shore.

d. Weather had a minor impact on operations during this period. With increase monsoon activity in the highlands, no tactical exercises were unacceptably delayed nor were any cancelled due to weather. On occasion low ceilings dictated the use of alternate flight routes and landing zones with negligible decrease in mission effectiveness.

3. (C) Operations and Training Activities.

a. Plans: Support of all major operations requiring aviation support within II CTZ less those conducted by 1st Air Cav Division and 4th Inf Division, was planned and supported by 17th CAG. COMUSMACV and CG, I FFORCE V initiated requests for the operations supported by 17th CAG.

b. Operations:

Operation	Avn Units	Operation Dates	Major Unit(s)
FRANCIS MARION	119th AHC 170th AHC 179th ASHC 189th AHC 196th ASHC	6 Apr - 31 Jul 67	4th Inf Div
GREELY	335th AHC (Atchd)	25 Jul - 31 Jul 67	4th Inf Div
PERSHING	196th ASHC	12 Feb - 31 Jul 67	lst Cav Div
OH JAK YO II	48th AHC 129th AHC	19 Apr - 31 Jul 67	WHRID

CONFOLDENTIAL

CONFIDENTIAL

	V • • •	a ser part a ser a s	••
	ational Report for Su CSFOR-65 (U)	arterly Period Ending 31	14 August 1967 July 1967
HONG KIL DONG	48th AHC 129th AHC 180th ASHC 188th AHC (Atchd)	9 Jul - 31 Jul 67	CRID WHRID
OREGON	14th CAB 71st AHC 161st AHC 174th AHC 176th AHC 178th ASHC	18 Apr - 31 Jul 67	TF Oregon
OMEGA	119th AHC 170th AHC	Recurring	5th SFG
PRAIRIE FIRE	119th AHC 170th AHC	Recurring	MACV

c. Training:

(1) Seventy-six (76) mechanics have attended A MTAP courses at Vung Tau during the reporting period.

(2) Fifty-six (56) personnel from all units completed the Escape and Evasion course in the Phillipines.

(3) There were no problems encountered during the transition of aviators into the newer series "Huey" (UH-1H) having the T-53-L-13 engine. One hour of instruction by the unit's IP on cockpit procedures and flight characteristics was given to each aviator.

(4) During the period ten (10) Republic of Korea Army helicopter co-pilots, who are fixed-wing rated, continued training with the two AHC's which are assigned general support to ROKA. Fight (8) USA Avn School trained ROK helicopter pilots also received training as did twelve (12) US: Avn School-trained helicopter mechanics. The program is progressing well and the unit should become operational during the month of November.

(5) New equipment training teams from USAECOM have conducted operator training for the AN/VSC-2 Radio Teletype and the AN/TRN-25 Radio Beacon to 17th CAG personnel. The team also conducted direct support maintenance training for avionics detachments for the following:

(a) AN/ARC-131

(b) AN/ARC-34

CONFIDENTIAL

14 August 1967

AVCD-SC 14 Aug SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967

7

RCS CSFOR-65 (U)

(c) AN/ARN-82

(d) AN/ARN-83

4. (C) Logistics.

a. During this quarter a large effort was directed toward the construction of revolments. Initially units were building revetments with 55 gallon drums filled with sand, or with PSP and sand bags. Later, M8Al matting and engineer steel stakes were released for revetment purposes. The M8Al type of revetment requires extensive welding, (this was very time consuming) and sand-filling between walls. Engineer support was requested. The program will continue until all necessary revetments are built to engineer standards.

b. The 10th Avn Bn, has received some components necessary to equip maintenance detachments for airmobility of their shop sets and parts. Received so far are 58 light weight conex containers for spare parts, 15 shelters for aircraft tool sets, and two 2½ ton wreckers. Remaining items still due in from CONUS.

c. Three (3) 225 GPM pumps were received and issued. These reduced base-camp aircraft refueling problems somewhat. However, these skid-mounted pumps are difficult to move and are not equipped with filterseparators. 1st Aviation Brigade has requested a study on all POL dispensing equipment, and this is being prepared.

d. During the reporting quarter units of this Group were involved in a total of 293 aircraft transfers or receipts. Transfers were the result of the changeover from UH-1D's to UH-1H's in the 52d Cbt Avn Bn, crash damage or combat damage, turn-ins for the modernization program and turn-ins required because of projected downtime for maintenance.

e. Number of aircraft gained or lost:

AIRCRAFT TYPE	GAINED	LOST
UH-1B	3	5
UH-1C	13	13
U4-1D	31	90
UH-1H	66	4

5

Ż

AVGD-SC SUBJECT:	Operational Report RCS CSFOR-65 (U)	for Quarterly	Period Ending 31	14 August July 1967	1967
CH-47		5	5		
OH-23		7	0		
0-1		21	17		
ov-1		4	. 5		
U-la		2	2		

5. (U) Civil Affairs.

a. Medical Services.

(1) One MEDCAP mission to the Rhade Montagnard village of Boun Eanao, in the Ban Me Thuot area, was performed, and approximately 300 villagers were immunized for Tetanus, Plague, Typhus, and Cholera.

(2) The dentist attached to the 17th Combat Aviation Group Surgeon's Office performed approximately 25 extractions of teeth on that visit.

(4) The flight surgeon at Phu Hiep (268th CAB) has established a weakly sick call in the village of Phu Hiep #2. Over twohundred forty (240) patients have been treated. At the same time he is teaching two Vietnamese nursing procedures to enable them to continue treatment betw en visits. Additionally, personnel assigned to the 268th CAB have donated tooth brushes, tooth paste, soap and towels in order to institute a program of personal hygiene in the village.

b. Religious Activities: Approximately \$250.00 were collected through Protestant Religious services conducted in the 17th CAO Chapel and given to the Servicemen Center and the Evangelical Bible Institute. Some 100 pounds of medical supplies were given to the Evangelical Clinic and the T.B. Hospital. These drugs were received from interested COMUS doctors.

6. (C) Personnel.

a. Command relationship:

(1) 17th CAG was commanded by the following officers during the reporting period:

(a) Col John W. Marr, Infantry, 1 May - 28 May 1967

CONFIDENTIAL 16 August 1967

AVCD-SC SUBJECT:

Î

: Operational Report for Quartarly Period Ending 31 July 1967 RCS CSFOR-65 (U)

(b) Col Bill G. Smith, Infantry, 29 May - Present

(2) Change of Command.

(a) On 29 May 1967 Col Bill G. Smith assumed command of 17th CAG, vice Col John W. Marr.

(b) On 3 July 1967 LTC Henry J. Wilkins assumed command of the 10th CAB, vice LTC Benjamin L. Harrison.

(c) On 28 July 1967 LTC Eugene F. Crooks assumed command of the 10th CAB, vice LTC Henry J. Wilkins.

b. 17th CAG personnel strength as of 31 Jul 67:

STRENGTH AUTH/ASCD

Unit	Officer	Warrant Officer	Enlisted
Hq, 17th CAG	20/39	2/6	95/164
loth CAB	107/92	240/204	1113/1351
l4th CAB	106/102	245/189	1315/1283
52d CAB	111/102	240/197	1357/1443
223d CSAB	297/208	146/104	1716/1598
268th CAB	21/15	2/2	96/141
TOTAL	932/558	875/702	5682/5980

c. 17th CAG is authorized 90% manning level:

AVIATOR STRENGTH

Unit	90% Auth/Asgo
17th CAG	12/34
10th CAB	289/279
14th CAB	303/280
52d CAB	291/274
2×3d CSAB	335/289
265th CAB	17/8
268th CAB	<u>1778</u>
TOTAL	1247/1164

7. (C) Signal.

a. The aircraft avionics retrofit project (ZYR) initiated

AVGD-SC

14 August 1967 SUBJECT: Operational Report for Quarturly Period Ending 31 July 1967 RCS CSFOR-65 (U)

work at two additional sites during this period. Retrofit teams are now working on 17th Aviation Group aircraft at the following sites:

- (1) Nha Trang
- (2) Pleiku
- (3) Qui Nhon
- (4) Da Nang

b. Twenty four (24) percent of aircraft currently on hand in 17th Aviation Group have been through retrofit. This low percentage does not represent actual work done. All UH-1D's in the 52d Battalion have been replaced with UH-1H's most of which had not been retrofitted. Also, some aircraft that have been through retrofit were destroyed by crash damage and were replaced with aircraft that have not been modified.

8. (U) Aviation Medicine.

a. Facilities: The 17th Combat Aviation Group Dental Climic has been fully operational since 1 May 1967. This much needed facility is now providing dental support to all aviators in the Nha Trang area.

b. Personnel: As of the beginning of August the 17th CAG will have seven (7) vacancies out of sixteen (16) Flight Surgeon positions in the group. Additional Aviation Medical Officers are not programmed for assignment until October 1967.

c. The 519th Medical Detachment has been operational in Da Nang since 30 May 67, and is supporting the 282d Aviation Company, the 18th Aviation Company, and 504th Signal. The 268th Aviation Battalion Dispensary, in Phu Hiep, has been operational since the end of May 67, and is now supporting the 180th and 225th Aviation Companies.

9. (C) Aviation Safety.

a. Period 1 May - 31 July 1967

	Rotary Wing	Fixed Wing	Tot al
Major Accidents	28	7	35
Minor Accidents	3	1	4

CONFIDENTIAL

7

с. •

- 10 m.

÷

AVGD-SC SUBJECT:	Ope RCS	ratio CSFO	nal Rep R-65 (U)	ort for)	Quarterly	Period	Ending 31		ugust 6 7	1967
Combat Lo	5585	5			19		0			19
Incidents	5				23		4			27
Forced La	ndir	ngs			14			2		16
Precautio	mary	/ Land	lings		20		6			26
	b •	Aircr	aft Acc	idents.						
		RW	FW	TOTAL	:	RA	TE	1	TATALI	<u>ries</u>
May		11	3	14		36	.7	:	5	
June		13	2	15		37	.8	:	2	
July		7	3	10		24	•0		7	
	c.	Comba	at Attr:	ition.						
		RW	FW	TOTAL	2	FA	TALITIES		MISSIN	G
May		10	0	10		5			3	
June		7	0	7		0			0	
July		2	0	2		2			0	
	d.	Inci	dents.							
		RW		FW	RW	P/L	FW	RW	F/L	FW
May		8		l	7		5	5		1
June		8		2	9		1	5		1
July		7		1	4		0	4		0

e. Cumulative accident rate per 100,000 hours flying time during period: 32.8; Cumulative accident rate FY67: 34.8.

CONFIDENTIAL

CONFIDENTIAL 14 August 1967

12

AVGD-SC

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

Section II: Commander's Observations and Recommendations

Part 1. Observations (Lessons Learned)

1. (C) Personnel.

a. Item: Infusion

Discussion:

(1) A series of UH-1 aviator infusions were accomplished during this period. The greatest DEROS hump at the beginning of the period was among the UH-1 pilots during OCT-NOV-DEC. By exchanging aviators with the lst Cav, 4th Inf Div and 9th Inf Div, and 12th Aviation Group the hump has been reduced to manageable levels.

(2) Infusion exchanges among the CH-47 units has now resulted in the losses reasonably well spaced throughout the year.

(3) With the arrival of the 185th Avn Co, there is a pronounced hump in O-l aviators during MAY-JUN-JUL, a sutuation which also exists in the 12th Avn Gp and the 13th Avn Bn, the units with the largest pools of O-l pilots. With the existing shortage of dual qualified and fixed wing aviators, there is little flexibility in the infusion program.

(4) In the 131st Avn Co the rotation date of OV-1 pilots and maintenance specialists is reasonably well spread. The 225th Avn Co, a newly-arrived OV-1 Avn Co. Accordingly, infusions between these two OV-1 companies are not deemed feasible because of the training requirement. It is anticipated that with the arrival of follow-an OV-1 companies, infusion can be accomplished with them.

<u>Observation</u>: Continuous study is required in this area. Further attempts will be made to exchange O-l pilots. With the programmed deployment of additional units further infusion efforts will have to be made upon their arrival.

b. Item: Personnel Shortages

Discussion:

(1) The most critical shortage in the command is the OV-1 qualified aviators. The 17th Avn Gp has continuously remained below the programmed manning level.

CONFIDENTIAL

13

CONFIDENTIAL

1000

14 August 1967 SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (\mathbf{J})

(2) The next most critical area is the shortage of O-1 qualified aviators. The strength level continues to remain below the manning level.

(3) CH-47 qualified aviators are also critically short. The strength has been continually below the manning level.

(4) Among the enlisted personnel shortages, the hard skill MOS in avionics and airframe repairmen are most evident. There is also a growing shortage of infantrymen, MOS 11.B. The shortage of NCO's remains critical in the grades E-5 and E-6.

Observation:

(1) The aviator strengths are continuing at slightly below manning level. As long as the level does not drop appreciably, all missions can be met.

(2) Enlisted strengths for hard skill MOS's continue to remain at an accpetable level.

c. Item: Command - directed reduction to 100% authorized strength

Discussion: With the information that all commands will be reduced to 100% authorized enlisted strength, certain problems are evident. The essential security forces are only partially covered by authorized spaces. If there is no action to provide security forces by some other means, the security of the helicopter base camps will be imperiled.

Observation: A study is currently underway to determine the essential forces required. The problem will be presented through command channels in an effort to retain the forces.

d. Item: Officer-Warrant Officer Ratio.

Discussion: The ratic of officer to WO continues a definite downward trend. At the end of the quarter the ratio for the 17th Avn Gp overall was 42% - 58% respectively. Within the assault helicopter companies the ratic was 26% - 74% respectively. The number of commissioned leaders in these units is barely adequate to cover the combat leaders' positions.

Observation: A continued trend will eventually have adverse effects in command and control. This will be perticularly critical in assault helicopter units.

e. Item: Personnel Assignments.

CONFIDENTIAL

14 August 1967

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

14

<u>Discussion</u>: The 17th CAG has never been able to adequately plan assignments of field grade officer personnel. This is due to the fact that almost no advance information is made known about inbound officers. Too frequently the first notice that an officer is inbound is when he walks in the front door. This frequently forces unnecessary changes and/or inappropriate assignments.

Observation: This is a continuing problem in view of the experienced shortage of commissioned officers in the 17th CAG. Personnel management is difficult to accomplish in an effective manner without advance knowledge of the qualifications, experience and personnel data on inbound officers.

2. (C) Operations.

a. Item: Phase-in of UH-1H Aircraft

Discussion: Since the recent phase-in of the UH-IH aircraft with the T-53-L-13 Engine, reports from the field indicate that there are materiel discrepancies involving the short shaft and N1 nozzles in this series. Maintenance personnel and factory technical representatives are studying these deficiencies and their impact on the USARV UH-IH floet. If a grounding condition should occur on the "H" series, because of a defective part, indications are that resources available would not meet the expected operational requirements.

Observation: Conversion of units to UH-IH aircraft may necessarily be slowed to build a pool of spare parts and aircraft to preclude units being made non-operationa as a result of extensive material failures.

b. Item: Passive Security.

Discussion: The passive security action by the 17th CAG has been primarily revetment construction for both aircraft and personnel protection. The increased threat of long range rockets is being met by hard revetment construction not only for aircraft on hand but for those of units.

Observation: The requirement exists for each company size aviation unit be authorized arc welding equipment in order to construct revetments with limited engineer support.

c. Item: Active Security.

Discussion: A security platoon, properly equipped, is

5

14 August 1967

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

required at each aviation base camp that is not adequately secured by combat troops. The problem of security is complicated by the required mobility of ground forces which changes the security of a base from adequately secured to unprotected with the move of combat elements.

Observation: A security force TOE should be added to the Avn Bn Hqs TOE's to insure an adequate force, provided with ground mobility and sufficient fire power for base defense. This TOE should be propared with the authorization to delete delegated to the Army Commander in order to tailor the unit to the location and to meet changing requirements.

3. (C) Training and Organization.

a. Item: Formation of Falcon Group.

<u>Discussion</u>: USARV directed 17th CAG to form a Provisional Aviation Group within its own resources to assist in the command and control of the rapidly expanding aviation element in I and II CTZ. This unit was activated by 1st Aviation Brigade General Order 3601, dated 1 August 1967 at Lane. AAF, 10 N.M. NW of Qui Nhon, RVN. Unit is expected to become operational on or about 15 Dec 67 and have three aviation battalions assigned for command and control.

Observation: The addition of he Falcon Combat Aviation Group (Prov) will enhance aviation support to the major combat maneuver units.

b. Item: Updating of 17th CAG Aviation Support and Stationing Plan.

Discussion: Continual chan es in IFFV tactical commitments and the addition of new aviation units has required a revision of the Group Support and Stationing Plan. Aviation support rationale has been developed to provide continual support to the combat maneuver units. IFFV rationale for utilization of assault and assault support helicopters is:

(1) US Divisions (3 l'des)

4 Assault Helicopter Companies 1.5 Assault Support Helicopter Companies

(2) Separate US Brigades

1 Assault Helicopter Company 0.5 Assault Support Helicopter Company

CONFIDENTIAL

AVGD-SC

14 August 1967

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

(3) Republic of Korea Divisions

3 Assault Helicopter Companies 1 Assault Support Helicopter Company

(4) II Corps (ARVN)

4 Assault Helicopter Companies 0.5 Assault Support Helicopter Companies

Stationing plans and use of aviation units are updated on a continual basis to provide for massing of aviation assets and economy of force in support of the counterinsurgency activities. Mobility of aviation units is stressed and continually improved to achieve the optimum results.

Observation: The 17th CVG support plan must be continually reviewed and tailored to meet the tactical requirements of IFFV.

4. (C) Intelligence.

a. Item: Continued reduction of VR flying hours.

Discussion: During the reporting period there were 8031 hours flown exclusively for Visual Reconnaissance out of a total of 11,383 hours flown by 0-1 aircraft for all missions. The previous period showed 8324 hours flown for Visual Reconnaissance out of a total of 13,616 hours. This is a reduction of 293 hours for Visual Reconnaissance and continues a downward trend reported in the previous two reports. There was no reduction in the number of aircraft available daily for all missions, however, the number of aircraft available for Visual Reconnaissance continued to be reduced due to further diversion of 0-1 aircraft from Visual Reconnaissance to combat support missions.

<u>Observation</u>: Diversion of O-1 aircraft from the Visual Reconnaissance Program continues to reduce the effectiveness of this extremely important program.

5. (C) Logistics.

a. Item: Aircraft Revolments.

<u>Discussion</u>: The revetment program for *L*rmy Avlation Units throughout Vietnam was subject to many changes in design during its inception. These changes dealt primarily with type of material to be used and revetment dimensions to be utilized for the different type aircraft. All these changes added to an already confusing situation, especially at unit level.

7

14 August 1967

(TARAN CARL

â

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

Observation: That a standard revetment design using portable construction material be made universal throughout the Army for all aircraft in the current inventory. A lightweight, easily erected revetment kit such as is being utilized by the U.S. Air Force be made a standard item of issue for Army Aviation units throughout the world.

b. Item: Non-Recurring Reports in Supply and Maintenance Area.

Discussion:

(1) "One-time" reports requesting all manner of data and information in the Logistics Area have been received with steadily increasing frequency. In addition, most if not all of these reports have extremely short suspense dates. Necessarily, each intervening headquarters in the communications channel adjusts the original suspense date so that the final recipient who has to prepare or provide the basic report data is faced with a suspense date that is completely unrealistic. The resulting limited time available to prepare the reports has a tremendous impact upon an organization that has units located throughout I and II Corps in RVN. The result is a report that through hasty preparation lacks accuracy.

(2) Information required in planning for supply and maintenance of equipment could be obtained from data contained in present recurring reports. Although some reports are quarterly, or semi-annual, the data is timely enough for overall planning purposes, and considerably more accurate than most one-time reports. Part of the problem may be that certain staff sections are not aware of the existence or office of record, of many regular reports.

Observation: Each major headquarters should publish a listing of all reports, and the office of record. Any staff section requesting information in a special report should be required to justify the special report by showing that adequate information is not already available. Then if a special report is deemed necessary, assign a realistic suspense date. The result will be that units organized and staffed on a combat or support type basis will not be burdened with unnecessary administrative reports.

c. Item: Receipt of OH-23 Helicopters.

Discussion: Due to slippage on delivery of OH-6 helicopters, decision was made to issue two (2) OH-23 Helicopters to each CH-47 unit and to certain Battalion headquarters. Since OH-23's had been previously assigned to the theater, apparently, few support problems were anticipated by logistical planners. The units to which these aircraft were to be assigned, however, had no publications, spare parts, or special tools

CONFIDENTIAL

14 August 1967 SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

on hand to support the OH-23. Publications were received with the aircraft and PLL requisitions were submitted immediately. CH-47 units, which have transportation detachments attached to provide 3d echelon maintenance capability, anticipated that the TC Detachment would provide 3d echelon maintenance for their OH-23's but shortage of special tools and 3d eclelon parts made this method of support extremely difficult. Support plans which called for transportation maintenance companies (ADS) of the 14th Trans Bn (AM&S) to provide all 3d echelon OH-23 support to owning units was coordinated with that Battalion.

Observation: Transportation Companies (ADS) were equipped to perform 3d echelon maintenance due to their previous missions in support of various brigade flight sections which are largely equipped with OH-23 helicopters. Extending their mission to include the CH-47 units did not significantly increase their workload but did preclude the requirement to issue special tool sets to transportation detachments in direct support of CH-47 units.

6. (C) Signal.

a. Item: Aircraft Avionics Retrofit (Project ZYR)

Discussion: Project ZYR was initiated in-country during December 1966 to modify wiring of aircraft so they would accept a new family of radics compatible with the updated ground series. In July 1967 Aviation units are still receiving replacement aircraft from CONUS that must be retrofitted in-country.

Observation: Retrofit teams must modify at least 20% more aircraft than are assigned in RVN. This greatly increases the time to complete this project.

b. Item: Command Communications.

teletype circuit a battalion except th has shown that the to the requirement

Discussion: The 17th Aviation Group has a sole-user secure sele-user unsecure voice circuit to each subordinate ' CAB which is OPCON Task Force Oregon. Experience user communication system is not responsive mbat control and management of aviation assets.

Observ Sole-user point to point voice and teletype circuits must be mail ed for the aviation group commander to efficiently utilize aviation asse.

7. (U) Medical.

CONFIDENTIAL

CONFIDENTIAL

14 August 1967

AVGD-SC SUBJECT:

9

T: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

a. Item: Survival Kits.

<u>Discussion</u>: Individual, hot, wet climate survival kits, which are attached to web belt and wrap around leg of aviator, are being made available thru unit supply.

Observation: Although no reports of survival use of the new kits have been made to date, this new kit appears to be the most complete and probably the most convenient.

b. Item: Ballistic Helmets.

<u>Discussion</u>: Due to significant numbers of head injuries sustained by air crew members in Vietnam, research was begun several months ago on a new flight helmet that would afford ballistic protection as well as protection against blunt trauma. In early 1967, this new helmet was distributed to Army air crew members in country. However, shortly after distribution of the helmet was made, it was noted that many air crew members were still wearing the old APH-5. When questioned as to why they were not wearing the new ballistic helmet, many complaints were received. The most frequent complaint was that of discomfort.

Observations:

(1) After more than six months of trial, the greatest problem with the helmet seems to be in it's sizing which does not correspond with the sizing of the APH-5. Few air crew members are able to wear the medium-sized ballistic helmet, although, formerly they were the medium-sized APH-5 and found it comfortable. This problem has resulted in a near depletion of the stocks of large ballistic helmets with an abundance of the medium and small sizes.

(2) While many condemn the new helmet, there are those
 who praise it. Several cases are on record in which serious injury or death was prevented because of protection against ballistic missiles or severe trauma by this helmet.

(3) It has been found that individual modification can be made that may improve the fit and result in better wearability. By cutting out a portion of the polystyrene liner so that the earphones may recess fully, removing a coil or two of spring in the headphones, tying the headphones fully cut, and using the older sizing pads, a more comfortable fit is possible in many cases. One may also try storing the helmet in a stretched position by putting a block of wood between the ear guards that is slightly larger than the unstretched distance.

CONFIDENTIAL

AVGD-SC SUBJECT:

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS CSFOR-65 (U)

14 August 1967 ly 1967

20

(4) It should be fully understood that a helmet affording ballistic and crash protection is going to exact some price in discomfort.

c. Item: Medical Personnel Shortages.

Discussion: There has been an increasing shortage of qualified flight surgeons during the past quarter.

Observations: A general medical officer is serving in country who applied for flight surgeon training on two occasions while in CONUS and was turned down twice. Yet he is filling a flight surgeon slot in the 52d CAB. He even agreed to extend his tour in Vietnam 1f sent TDY to Ft Rucker for medical training. This request was also denied.

Part II. Recommendations:

1. (C) Personnel.

a. Ref: Section II, Part I, para le.

b. Recommend that USARV provide this headquarters more complete guidance and infor tion on programmed inbound officers.

2. (C) Operations.

a. Ref: Section II, Part I, para 2a.

b. Recommend that new aircraft and/or equipment undergo extensive research, engineering, testing, and evaluating phases and then be given to operational units within CONUS for further evaluation before the item is sent to a combat tactical zone.

3. (U) Training and Organizations.

a. No recommendations.

b. No recommendations.

4. (U) Intelligence.

a. No recommendations.

b. No recommendations.

CONFIDENTIAL

AVGD-SC

Ì

14 August 1967 SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967 RCS-CSFOR-65 (U)

5. (C) Logistics.

a. Ref: Section II, Part I, para 5c.

b. Recommend that maintenance support plan be decided and disseminated prior to issue of new aircraft to any unit. Where small quantities of aircraft will go to several units strong consideration should be given to centralizing third echelon responsibility at TC Company (ADS) level. Further recommend that issue of new tyr. of aircraft be preceded by forced issue of publications covering level of maintenance which owning unit is expected to perform as well as parts breakdown. Suggested PLL/ASL should be provided to permit rapid requisitioning, or support parts package should be force issue.

6. (C) Signal.

a. Ref: Section II, Part I, para 6a.

b. Recommend that a retrofit team be established at CONUS shipping points to modify aircraft being shipped to RVN until production line aircraft arrive from the manufacturers with latest configurations.

7. (U) Medical.

a. Ref: Section II, Part I, para 7b.

b. Recommend that research be conducted on modifying the design of the ballistic helmet which would afford overall acceptable comfort and utility. Also recommend that individual modifications be made on the present ballistic helmets (as mentioned in observations) which may improve the fit during the interim.

c. Ref: Section II, Pari I, para 7c.

d. Recommend that more advanced planning and coordination be established for anticipating future needs of flight surgeons so that adequate numbers of physicians be trained.

9 Incl as

BILL G. SMITH

Incl #9, withdrawn, Hqs, DA

Colonel, Infantry Commanding

CONFIDENTIAL 19

AVFA-GC-OT (14 Aug 67) 1st Ind SUBJECT: Operational Report - Lessons Learned for Quarterly Period Ending 31 July 1967 (U)

HEADQUARTERS, I FIELD FORCE VIETNAM, APO 96350 14 Sep 67

3

TO: Commanding General, United States Army Vietnam, APO 96375 Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

(C) This headquarters has reviewed the 17th Combat Aviation Group Operational Report of Lessons Learned for the quarterly period ending 31 July 1967, and pertinent comments are as follows.

a. Reference paragraph 1b(1), Section II, Part I (page 10), Personnel Shortages: Concur. Shortages of OV 1, Ol and CH 47 qualified aviators, did not, however, require cancellation or delay of any missions during the reporting period.

b. Reference Section II, Part I (page 12), Operations:

(1) Paragraph 2a: Concur. Supply action should be taken to secure necessary replacements parts to expedite phase-on of UH-1H air-craft.

(2) Paragraph 2b: Concur. Welding equipment for company size units is desirable. However, parallel action will be required to authorize trained personnel to use this equipment.

(3) Paragraph 2c: Non-concur. A security force should not be added to the TO&E of the Aviation Battalion Headquarters. While security of bases presents a particular problem in Vietnam, the additional infantry MOS personnel required to man such a force could be more effective employed in combat units within the command. Security of airfields does require close attention of combat units supported by Army aviation and must be included in operational planning.

(4) Reference paragraph 4a, Section II, Part I (page 14), Intelligence: Concur. There have been no drawdowns on VR forces since 7 July when three 0-1 aircraft were placed on TDY to IFFORCEV Artillery. The weekly activities reports submitted by the 183d and 219th RAC reflect a growing list of aircraft uses, seemingly unrelated to VR, and an increasing number of hours spent weekly in support of these missions. Among the more common, consuming the highest number of hours, are artillery adjustment and administrative liaison. A close investigation of the proper use of 0-1 aircraft in the VR program seems to be in order since there has been no further drawdown on VR assets since 7 July.

20

CONFIDENTIAL

Downgraded at 3 year Intervals Declassified after 12 years DOD DIR 5200.10 ŧ

ż

AVFA-GC-OT (14 Aug 67) SUBJECT: Operational Report of Lessons Learned for Quarterly Period Ending 31 July 1967 (U)

c. Reference Section II, Part I (page 16), Signal:

(1) Reference paragraph 6a: Concur. Aircraft retrofitted in CONUS will reduce maintenance workload in RVN.

(2) Reference paragraph 6b: Concur. IFFORCEV will continue to program cummunications circuit requirements with USARV.

d. Reference paragraph lb, Section II, Part II (page 18), Recommendations: Concur. More complete information should be provided on fill action of in-bound officers. USARV AG, officer replacement division, effective 1 Aug 67, started a system of providing, on a monthly basis, each major subordinate aviation unit with fill information on in-bound officer assignment. With this information available, aviation units will be able to adequately plan for and program in-bound aviator assets.

FOR THE COMMANDER:

s/ B. L. Chenault
t/B. L. CHENAULT
2LT, AGC
Asst Adjutant General

CONFIDENTIAL

AVBA-C (14 Aug 67) 2nd Ind SUBJECT: Operational Report for Quarterly Feriod Ending 31 July 1967 UIC MDC1AA RCS CSFCR-65 (U)

2 5 HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96384

- ThEU: Commanding General, U.S. Army Vietnam, ATTN: AVHCC-LH, AFO 96375 Commander in Chief, U.S. Army Pacific, ATTN: GPCF-2H, AFO 96558
- R: Assistant Chief of staff for Force Development, Department of the Army, (ACSFOR DA), Sashington, D.C. 20310

1. (U) This headquarters has reviewed the subject report of the 17th Combat Aviation Group, considers it to be adequate and concurs with the contents as indersed.

2. (C) The following additional comments are considered pertinent:

a. Reference Sec I, par 2b, pg 3. Non-concur: Fifty quotas per month cannot be provided to the 17th CAG. All Army quotas to the US Air Force Jungle Survival School have been cancelled. Quotas are still being received for the Navy school at the rate of approximately twenty-five per month. These quotas must be divided between two groups and two separate battalions.

b. Reference Sec I, par 2c, pg 3. Concur: Quotas are currently being received for the US Air Force Sea Survival School at Naha, Ckinawa. Priority of attendance is OV-1 crew members and ELE officers of CV-1 units.

c. Reference Sec II, Part I, par 1B, pg 10. Concur: Constant coordination with Headquarters USANV is done in an attempt to balance incountry assets consistent with individual aircraft qualifications. Current tendencies to utilize personalities as opposed to aircraft qualifications has created some imbalance in unit level assignments.

d. Reference Sec II, Part I, par 1d, pg 11. Non-concur: The officer/warrant officer ratio within the 17th Cbt Avn Gp is consistent with DA goal of 25/75% officer/warrant officer ratio. The officer/warrant officer ratios will continue to reverse until the desired DA ratio is reached. This will not adversely affect the accomplishment of unit missions.

e. Reference Sec II, Part I, par 1e, pg 11. Concur: Attempts by USARV to assign inbound officers prior to their arrival in-country is presently underway. This procedure will have a favorable reaction to this problem.

f. Reference Sec II, Part I, par 2a, pg 12. Concur: The problem of L-13 engines has been recognized and requires action by A+C to correct deficiencies. Delivery of UH-1H aircraft has been slowed to make L-13 engines available, in limited quantities, as replacementations for incountry resources.

Downgraded at 3 year Intervals Declassified after 12 years DOD DIR 5200.10

ζ.

1.00.00

26

t

AVBA-C SUBJECT: CRLL

g. Reference Sec II, Part I, par 5a, pg 14. Concur: The confusion as to the type of revetments has not yet been resolved and stems from irresolution at USANV level. As an interim, this headquarters has directed that where possible, parallel revetments will be built.

h. Reference Sec II, Part I, par 5b, pg 15. Non-concur: Most, if not all recurring reports are a result of command requirements due to the exigencies of combat, and require information not contained in recurring quarterly or semi-annual reports. Short suspense dates are usually a result of operational requirements. Non recurring reports generated at this headquarters are carefully screened to ascertain that the information is not available elsewhere. Concur that some reports are late and reflect hasty preparation. It is believed that this is due to inadequate communications rather than unrealistic suspense dates. If adequate telephonic communications were available, many one time administrative reports would be unnecessary.

i. Reference Sec II, Part I, par 5c, pg 15. Concur: This headquarters has planned to withdraw OH-23 helicopters from the CH-47 units as soon as possible.

j. Reference Sec II, Part II, par 7d, pg 19. Concur: Planning and coordination for flight surgeon requirements in RVN are adequate. The Surgeon General's office is informed of these requirements on a monthly basis, herever, resources are insufficient to satisfy demand.

FOR THE COMMANDER:

9 Incl as JANES M. GOLIMANN

23

AVHGC-DST (14 Aug 67) 3d Ind SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 July 1967 (RCS CSFOR-65) (U)

.7

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375 \$ 4 NOV 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT, APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 July 1967 from Headquarters, 17th Combat Aviation Group (DCIA) as indersed.

2. (C) Pertinent comments follow:

a. Reference item concerning Personnel: Section II, part II, page 18, paragraph la and lb and 1st Indorsement, paragraph d. Concur. Subsequent to the reporting period covered in the ORLL, this headquarters instituted a system whereby a roster of validated requisitions and available fill data is being provided the 17th Aviation Group on a monthly basis. DA Forms 66 will continue to be distributed to the units as they are made available to the headquarters. This procedure will continue until December 1967; after which date the forms will be distributed 60 days prior to the arrival month. This headquarters provides an information copy monthly to the 17th Combat Aviation Group regarding all known in-bound ligutenant colonel aviators.

b. Reference item concerning aircraft avionics retrofit (Project ZYR), page 16, paragraph 6a; page 19, paragraph 6b and 1st Indorsement, paragraph c(1).

(1) Retrofit teams have been established in CONUS to install the new family of radios in most aircraft being rebuilt and returned to RVN. There will continue to be some rebuilt aircraft returned to RVN that will require retrofit in RVN. DA, USARPAC and USAMC are trying to insure that as many aircraft as can be retrofitted in CONUS will be retrofitted prior to shipment to RVN. USARV will, however, continue to receive some aircraft from CONUS through FY 68 that will require retrofit in RVN.

(2) The retrofit program is scheduled for completion 30 June 1968, at which time all RVN aircraft should have the standard electronics configuration. All production and rebuilt aircraft shipped to RVN after this date are scheduled to have the standard configuration.

24

Downgraded at 3 year Intervals Declassified after 12 years DOD DIR 520019

AVHGC-DST (14 Aug 67) 3d Ind SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 July 1967 (RCS CSFOR-65) (U)

c. Reference item concerning logistics, page 15, paragraph 5c. Support problems for the OH-23's were anticipated. Units were notified they would be receiving OH-23's. Special tools and repair parts were requisitioned by the 58th Transportation Battalion (AMMC). Requisition objectives were adjusted to support increase in fleet IAW AR 700-70. Mission support plans have been accomplished by USARV for all new aircraft scheduled for deployment into RVN. This places the requirement on CONUS agencies to supply publications, special tools and repair parts packages. Where there has been a shortage of parts or tools, the primary reason has been that the production capability of civilian agencies was unable to keep up with the demand. USARV and the 34th General Sup rt Group continuously monitor the status of support packages and unit requirements.

d. Reference item concerning ballistic helmets, page 19, paragraph 7 and section II, part I, paragraph 7b. Concur in the recommendation to modify the ballistic helmet. This problem area was identified shortly after initial issue of subject helmet in early 1967. At this time a team from the Natick Laboratories is in RVN to modify some helmets and to better identify the problem area for further work at Natick Laboratories. Plans are being developed to issue a larger helmet than is now in service and identify it as size extra large. This extra large will coincide with size large in the APH-5 series and will provide a full range of sizes in order to accommodate all aviators and crew members.

3. (U) Unit will be notified of recommended actions, comments, and actions by this headquarters by a copy of this indorsement which will be furnished, through channels, to the preparing organization.

FOR THE COMMANDER:

9 Incl

1 Stakatoukast C. S. NAKATSUKASA

Captain, AGC Assistant Adjutant General

Copies furnished:

HQ, 17th Combat Avn Gp HQ, 1st Avn Bde Downgraded at 3 year Intervals Declassified after 12 years DOD DIR 5200.10

CONFIDENTIAL

25

28

GPOP-DT(14 Aug 67)4th Ind (U)SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967
from HQ, 17th Cbt Avn Gp (UIC: WDCIAA) (RCS CSFOR-65) (U)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 20 DEC 1967

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

This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

Talkhour

بردوبية والمتحد

9 Incl nc

9

K. F. OSBOURN MAJ, AGC Asst AG

26

PERSONNEL STATISTICS

	AUTHORIZED	ASSIGNED	KIA	WIA	MIA
Hq, 17th Cbt Avn Gp					
May	117	200	0	0	0
Jun	117	176	0	0	0
Jul	117	212	0	0	0
10th Cb+ Avn Br					
May	1644	1819	0	0	0
Jun	1644	1807	0	1	1
Jul	1644	1663	0	0	0
14th Cbt Avn Bn					
May	1007	1131	0	0	0
Jun	1460	1125	2	35	0
Jul	1666	1548	0	3	0
52d Cbt Avn Bn					
May	1763	2027	7	1	4
Jun	1763	1907	0	6	0
Jul	1763	1792	0	4	0
223d Cot Spt Avn Bn					
May	2022	2062	0	0	0
Jun	2022	2020	0	0	0
Jul	2022	2061	0	3 3	0
268th Cbt Avn Bn					
May	109	144	0	0	0
Jun	109	152	0	0	0
Jul	109	154	l	0	o
Incl 1	CONFID	ENTIA	4		

Ĵ



í

1

PERCENTAGE OF PRESENT FOR DUTY STRENGTH OF AUTHORIZED AVIATORS

Incl 2



ų,

Incl 3



ROTARY WING

CONFIDENTIAL

30

Incl 4



AVTRAGE FLYING HOURS BY TYPE AIRCRAFT

FIXE WING

INCL 5



CONFIDENTIAL

AIRCHAFT AVAILABILITY

Ine aver	ave arrelate averability	during me peri	100 WAS 819 10	TTOM
AIRCRAFT TYPE	AVAILABILITY	EDP	EDM	
UH-1B	80, 3	6.3	١	
UH-1C	74.0	11.9	14.1	
UH-1D	81.0	5.6	13.4	
UH-lH	93.9	.7	5.4	
CH-47	70.8	10.8	18.4	
0-1	87.8	4.5	7.7	
ov-l	71.3	8.3	20.4	
U-la	60.4	15.8	23,8	
U-6	77.9	1.3	20.8	

The average aircraft availability during the period was as follows:

Incl 7

CONFIDENTIAL



NOTE: All circuits secured with Crypographic Equipment.

Incl 8

٠,

ŧ

CONFIDENTIAL 34

Security Classification	AENT CONTROL DATA - R & D	
	it and indexing mnotation must be ontered when the overall	eport is classified)
. ORIGINATING ACTIVITY (Corporate author)	24. REPORT SECURIT	CLASSIFICATION
OACSFOR, DA, Washington, D. C.	20310 Confidential	
	4	
REPORT TITLE		
Operational Report - Lessons	Learned, Headquarters, 17th Combat Av	viation Group
4. DESCRIPTIVE NOTES (Type of report and inclusive of Experiences of unit engaged in co	ates) unterinsurgency operations, 1 May -	31 July 1967
AUTHOR(S) (First name, middle inilial, last name)		51 5025 1507
CO, 17th Combat Aviation Grou	2	
REPORT DATE	78. TOTAL NO. OF PAGES 75, NO	OF REFS
14 August 1967	35	
N. CONTRACT OR GRANT NO.	DA. ORIGINATOR'S REPORT NUMBER(\$)	
5. PROJECT NO.	670692	
c. N/A	9b. OTHER REPORT NO(3) (Any other num this report)	bere thet may be seeig
d.		
0. DISTRIBUTION STATEMENT		
11. SUPPLEMENTARY NOTES N/A	12. SPONSORING MILITARY ACTIVITY OACSFOR, DA, Washington,	D. C. 20310
N/A		D. C. 20310
		D. C. 20310
N/A		D. C. 2031D
N/A		D. C. 2031D
N/A		D. C. 20310
N/A		D. C. 20310
N/A		D. C. 20310

•