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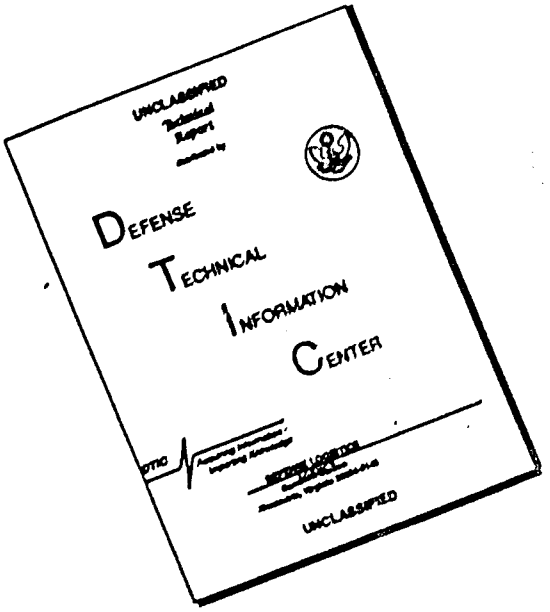

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SECRET

DEPARTMENT OF THE ARMY
HEADQUARTERS, 10TH AVIATION BATTALION
APO US Forces 96240

AVGP-AE

9 May 1966

SUBJECT: Operational Report on Lessons Learned, Period Ending 30 April 1966, Reports Control Symbol CSGPO-28(R1)(U)

(1) Operational rept. for quarterly period ending 30 Apr 66.

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

(11) 9 May 66 (12) 3p.

(18) OACSFOR

SECTION I: Significant Organization and Unit Activities

1. Mission: The mission of the 10th Aviation Battalion is to provide combat aviation support to US Forces, Republic of Vietnam Armed Forces (RVNAF) and Free World Military Assistance Force (FWMAF). In so doing, the battalion assists in the development and maintenance of an effective conventional and counterinsurgency military capability to search out and destroy the Viet Cong (VC) and extend the Government of Vietnam (GVN) control of the population.

(19) OT-RD-660020

2. Organization: The 10th Aviation Battalion consists of the following units as of 30 April 1966:

Headquarters and Headquarters Company, 10th Aviation Battalion
- 256th Signal Detachment
- 279th Signal Detachment
- 296th Signal Detachment

48th Aviation Company (Airmobile)(Light)
- 390th Transportation Detachment
- 286th Medical Detachment

117th Aviation Company (Airmobile)(Light)
- 140th Transportation Detachment
- 130th Medical Detachment

129th Aviation Company (Airmobile)(Light)
- 394th Transportation Detachment
- 433rd Medical Detachment

135th Aviation Company (Airmobile)(Fixed Wing)
- 258th Transportation Detachment

2nd Platoon, 171st Aviation Company (Airmobile)(Light)

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3. Command Relationships:

a. On 1 March 1966, the 10th Aviation Battalion, DONG BA THIN, RVN, was relieved from assignment to the 12th Aviation Group and assigned to the 17th Aviation Group by G.O. 1051, USARV, 15 February 1966. This reassignment has greatly reduced the distance to the battalion's next higher headquarters (15 NM by air to NHA TRANG vs 170 NM by air to SAIGON), thereby increasing operational efficiency through more responsive communications and coordination. The operation of the battalion has been principally confined to the II ARVN Corps area.

b. Lt. Col. Albert J. Fern Jr, Inf, assumed command of the 10th Aviation Battalion on 14 March 1966, relieving Lt. Col. Gregory L. Olney, Inf. The Change of Command Ceremony was attended by Major General Stanley R. Larsen, Commanding General, I FFORCEV, Colonel Gerald H. Shea, Commanding Officer, 17th Aviation Group, Colonel Raymond G. Jones, Commanding Officer, 12th Aviation Group and Colonel C.A. Deason, Commanding Officer, Nha Trang Support Command.

c. Changes of command within major subordinate units during this period were:

(1) On 1 March 1966, Major Harry J. Zellmer, Inf, replaced Major Harbin A. Constance, Arty, as Commanding Officer of the 117th Aviation Company.

(2) On 24 March 1966, Major William P. Griffin, Inf, replaced Major Kevin E. Murphy, CE, as Commanding Officer of the 2nd Platoon, 171st Aviation Company.

(3) On 4 April 1966, Major Harry Mck. Roper, Jr., CE, replaced Major Charles H. Drummond Jr., Arty, as Commanding Officer of the 48th Aviation Company.

4. Organizational Changes:

a. 135th Aviation Company: On 10 March 1966, the 135th Aviation Company (Airmobile)(FW) with its associated 258th TC Detachment (Acft Maint) was reassigned from the 14th Aviation Battalion to the 10th Aviation Battalion by G.O. No. 6, 17th Aviation Group, 9 March 1966. As the company was already located at DONG BA THIN, no physical movement was associated with this reassignment. The 135th Aviation Company remained under the operational control of Commanding General, I FFORCEV and has received its mission assignments directly from G4, that headquarters.

b. Second Platoon, 171st Aviation Company:

(1) Effective 1 February 1966, the 2nd Platoon, 171st Aviation Company (Airmobile)(Light) was released from the 12th Aviation Group and assigned to this battalion by G.O. No. 4, Hq, 12th Aviation Group, 25 January 1966.

This unit was to be organized into two sections, the first composed of 145th Aviation Platoon (AL) assets and the second composed of 6th Aviation Platoon (AL) assets. On this same date, the 2nd Section, 2nd Platoon, 171st Aviation Company was attached to the 145th Aviation Battalion, BIEN HOA. By this order the 1st section of this platoon was placed under operational control of the 5th Special Forces Group.

(2) Effective 15 March 1966, the 2nd Section of the Platoon was detached from the 145th Aviation Battalion and returned to its parent unit by G.O. No. 13, Hq, 12th Aviation Group, 28 February 1966. It was also placed under operational control of the 5th Special Forces Group effective 1 March 1966. The section rejoined its platoon at NHA TRANG on 23 March 1966.

c. Signal Detachments: On 26 January 1966, the three avionics repair detachments (256th, 279th and 296th Sig Det/Radio Rep Av) assigned to the battalion's airmobile companies were consolidated at battalion level. This consolidation was designed to overcome a shortage of personnel and test equipment within two of the three detachments. It provided one centralized capability for repair of all organic avionics equipment, plus the resources to dispatch teams in support of all field operations. The overall efficiency of avionics repair and maintenance within the battalion was improved through better utilization of available personnel and equipment.

5. Organization and Unit Activities:

a. Combat/Combat Support Operations:

(1) General: During the reporting period the 10th Aviation Battalion was committed to support elements of 1 Field Force Vietnam in seven major combat operations (Subparagraphs (2) through (8)). A minimum of two airmobile companies plus control elements of the battalion headquarters were committed to this support during the entire period. The remainder of the Battalion's resources were used to reinforce these operations as needed and support units in the II ARVN Corps area on a mission basis.

(2) OPERATION JEFFERSON. (31 December 1965 - 17 January 1966)

(a) This operation was conducted by the 2nd ROK Marine Brigade and the 47th ARVN Regiment to clear Route No. 1 in the area immediately south of TUY HOA. Opposition was expected because the Vung Ro Bay - Cape Varella area was a known Viet Cong sea infiltration area. Information also indicated the presence of VC logistical units and supply bases in the area.

(b) The mission of the 10th Aviation Battalion was to provide general aviation support to the operation, establish an Army Aviation Support Element (AASE) in the Combat Support Coordination Center (CSCC), and to be prepared to mass aviation support on order.

(c) The 10th Aviation Battalion supported the operation with the 117th Aviation Company and was reinforced by an attached element of 10 CH-34's from HMM 363, USMC. Cooperation and support rendered by the HMM 363 was outstanding.

(d) Statistical highlights for OPERATION JEFFERSON:

1. Airmobile assaults: 3
2. Troops airlifted: 7,880
3. Cargo airlifted: 519.4 Tons
4. Total sorties: 5,098
5. Flying hours: 114.5

(3) OPERATION TYLER. (13 - 16 January 1966)

(a) This was a search and destroy operation conducted against suspected VC units by 2/327 Infantry, 1st Brigade, 101st Airborne Division, in the vicinity of SONG MAO. This operation had the corollary effect of providing the supported unit with combat experience in airmobile assault operations.

(b) In support of OPERATION TYLER, the 10th Aviation Battalion provided the equivalent of one aviation company (Airmobile)(Lt). The 129th Aviation Company provided the mission commander and ten UH-1B/D helicopters. The 48th Aviation Company reinforced with five additional UH-1's.

(c) Statistical highlights for OPERATION TYLER:

1. Airmobile assaults: 6
2. Troops airlifted: 1100
3. Cargo airlifted: 3.5 Tons
4. Total sorties: 2,000
5. Flying hours: 200

(4) OPERATION VAN BUREN. (18 January 1966 - 20 February 1966)

(a) This operation was a continuation of OPERATION JEFFERSON and was conducted in the area southwest of TUY HOA. The purpose of the operation, conducted by the 2nd ROK Marine Brigade (-) and the 1st Brigade, 101st Airborne Division, was to clear Viet Cong from the area and protect the local rice harvest.

(b) The mission of the 10th Aviation Battalion was to provide general support to the two brigades. Two aviation companies (Airmobile)(Light) were employed continuously, with one in support of each brigade during normal conduct of the operation. This battalion also was to be prepared to mass aviation support as directed. All helicopter companies of the battalion were committed at various times during this operation.

(c) Two O-1F aircraft from the 219th Aerial Observation Company were attached to this battalion during the operation. The 155th Aviation Company (Airmobile)(Light) was attached during the period 8 - 10 February 1966.

(d) Statistical highlights for OPERATION VAN BUREN:

1. Airmobile assaults: 36
2. Troops airlifted: 19,977
3. Cargo airlifted: 1,271 Tons
4. Total sorties: 11,421
5. Flying hours: 3,520

(5) OPERATION HARRISON. (21 February 1966 - 24 March 1966)

(a) This operation was a continuation of OPERATION VAN BUREN and was conducted in the same general area west of TUY HOA. Supported forces remained essentially the same, as did the mission of the 10th Aviation Battalion.

(b) Attachments to the battalion during the operation were:

1. A Company, 101st Aviation Battalion 22 February to 3 March 1966.
2. 161st Aviation Company (Airmobile)(Light) 5-6 March 1966 and 12 - 13 March 1966.
3. 1st Platoon, Company A, 228th Aslt Hel Bn 24 February to 6 March 1966.

(c) During this operation, successful night airmobile assaults were conducted with platoon and battalion size elements of the 1st Brigade, 101st Airborne Division. These actions pointed up the need for additional aviation and ground unit training and experience in night operations to improve execution precision. On one night operation, artificial illumination was provided by aircraft and artillery flares. This simplified the problem of flying in mountainous terrain and selecting unimproved landing areas. Continuous lighting and proper placement of flares are prime considerations in such operations.

(d) Statistical highlights for OPERATION HARRISON:

1. Airmobile assaults: 15
2. Troops airlifted: 15,939
3. Cargo airlifted: 1,360 Tons
4. Total sorties: 5,552
5. Flying hours: 2,712

(6) ARVN Airmobile Assault (24 March 1966)

(a) This operation involved a battalion size combat airmobile assault against suspected VC units 20 kilometers north of PHAN THIET.

(b) A Company, 501st Aviation Battalion was attached to the 10th Aviation Battalion for this operation. Direct aviation support to the ARVN commander was provided by the 48th Aviation Company reinforced by A/501st.

(c) To reduce the time between staging and arrival in the landing zone, two separate staging areas were used. At the last minute, however, the troops enroute to one staging area were prevented from reaching it by four blown brigade. As an expedient solution, the helicopters were diverted from the planned staging area and picked up the troops alongside the road. The objective area was seized by the ARVN troops and proved to be a VC training camp.

(d) Statistical highlights for the operation:

1. Airmobile assaults: 1
2. Troops airlifted: 420
3. Cargo airlifted: 2.8 Tons
4. Total sorties: 155
5. Flying hours: 51.5

(7) OPERATION FILLMORE. (25 March 1966 - 30 April 1966)

(a) The mission of OPERATION FILLMORE, a continuation of OPERATION HARRISON, was to seek and destroy enemy units and installations and protect the April rice harvest in the TUY HOA area for the GVN. Intelligence indicated a VC Regimental Headquarters and two VC Battalions operating northwest of TUY HOA. Initially, the 1st Brigade, 101st Airborne Division and 2 battalions of the 2nd ROK Marine Brigade were committed to the operation with the 117th and 129th Aviation Companies from this battalion in a general support.

(b) On 10 April 1966, Headquarters 1st Brigade, 101st Airborne Division with two Infantry Battalions was committed to OPERATION AUSTIN at PHAN THIET. At that time, the 48th and 117th Aviation Companies were moved from TUY HOA to PHAN THIET. One airlift platoon and one heavy gun team from the 129th Aviation Company remained committed to OPERATION FILLMORE at TUY HOA.

(c) Continued emphasis has been placed on night training for airmobile operations during OPERATION FILLMORE. Training has been progressive, starting with single ships and continuing through company size formations.

(d) There have been no significant problems encountered during this operation. Continuous association and close coordination with supported units have resulted in mutual understanding and resolution of problems experienced in earlier operations.

(e) Statistical highlights for OPERATION FILLMORE:

1. Airmobile assaults: 9
2. Troops airlifted: 9,774
3. Cargo airlifted: 512.9 Tons
4. Total sorties: 7,211
5. Flying hours: 1,928

(8) OPERATION AUSTIN (12 April 1966 -)

(a) OPERATION AUSTIN is a search and destroy operation conducted along the II and III ARVN Corps boundary. The operation is to be conducted in six phases beginning at PHAN THIET, RVN, hence to NHON CO, RVN and then south along the corps boundary. Participating units are the 1st Brigade, 101st Airborne Division (-) and the 44th ARVN Regiment.

(b) OPERATION AUSTIN II (12 April 1966 - 26 April 1966)

1. OPERATION AUSTIN II was the first phase of OPERATION AUSTIN. It was conducted in the vicinity of PHAN THIET, RVN. General aviation support was provided by the 10th Aviation Battalion with the 48th and 117th Aviation Companies.

2. At 172215 April 1966, the airfield at PHAN THIET, RVN, location of the 10th Aviation Battalion (-), was attacked by VC small arms and mortars. Seven mortar rounds impacted on or near the airfield, one of which was in the 117th Aviation Company's helicopter parking area. This represented the first ground action experienced by this battalion. Ground defense plans were effective and adequate.

3. Three CH-47 Helicopters from the 147th Assault Helicopter Company were attached to the 10th Aviation Battalion for this operation. They proved invaluable for: prepositioning fuel and ammunition in areas inaccessable to fixed wing aircraft; heavy resupply; evacuation of casualties from jungle areas by winch; and the movement of artillery in jungle areas.

4. There were no significant problems encountered during this operation. Typical missions performed included both day and night airmobile assaults, resupply, troop lifts for redistribution of forces, reconnaissance, command and control and medical evacuation.

5. Statistical highlights for OPERATION AUSTIN II:

a. Airmobile assaults: 26
b. Troops airlifted: 7,329
c. Cargo airlifted: 140.17 Tons
d. Total sorties: 11,168
e. Flying hours: 1,280.7

(9) Operations of the 135th Aviation Company.

(a) The 135th Aviation Company (Airmobile)(Fixed Wing) arrived in Vietnam on 23 January 1966 and was stationed at Dong Ba Thin Army Airfield, its current location. It became fully operational on 15 February 1966, and provides daily support to I FIELD FORCE V. Also the II ARVN Corps is supported at PLEIKU with a daily average of two aircraft.

(b) Deployment to Vietnam was accomplished via the Pacific route (Ft Benning-Hamilton AFB-Hickam AFB-Johnston I-Wake I-Guam-Clark AFB-Vietnam), requiring 68 hours total flight time.

(c) Since 10 March 1966, the 135th Aviation Company has provided combat aviation support by transporting 21,446 troops and 2,555.9 tons of cargo while flying 3,395 sorties in 2,150.8 hours.

(10) Combat Support Summary:

(a) During the period, the 10th Aviation Battalion provided a wide variety of aviation support to United States, FWMAF and Vietnamese units. Typical missions have included: reconnaissance; command and control; medical evacuation; troop and cargo lift; and placement and extraction of long range reconnaissance patrols.

(b) A statistical summary of rotary wing support provided by this battalion during the period follows:

1. Hours flown: 17,441
2. Troops transported: 93,314
3. Cargo lifted: 7,200.5 Tons
4. Helicopter sorties: 74,020

b. Base Camp Activities:

(1) During this quarter, the battalion was not only involved in the combat activities outlined above, but also was faced with the major task of developing its base of operations at DONG BA THIN.

(2) The Dong Ba Thin Military Complex is designed to house the following units:

(a) An aviation battalion composed of three Aviation Companies (Airmobile)(Light), one Aviation Company (Airmobile)(Medium), one Aviation Company (Airmobile)(Fixed Wing), and one Aviation Company (Fixed Wing)(Observation).

(b) One Engineer Battalion (Combat) reinforced with one Light Equipment Company and one Dump Truck Company.

(c) One Transportation Aircraft Maintenance Company (Direct Support).

(d) One Transportation Aircraft Maintenance Company (General Support).

(e) One Transportation Company (Aircraft Depot Supply).

(f) One Security Company.

Proposed troop strength for the complex is 3550 by September 1966. As Installation Coordinator for DONG BA THIN, the Commanding Officer, 10th Aviation Battalion has base development planning responsibility for this complex and is responsible for coordination of the construction effort.

(3) The supporting construction unit is the 20th Engineer Battalion (Combat), a subordinate unit of the 35th Engineer Group (Construction). The major section of the engineer effort has been to provide a sand base over the entire area. Because of the high water table in the area and the swampy nature of the ground, three to six feet of sand fill is required to provide a suitable base for vertical construction or hardstand. Basic Standard 2 construction is being provided for the using units with some common use facilities such as mess halls and dispensary. An estimated 30% of the complex is completed to Standard 2 at the end of this reporting period, with 50% of the sand fill complete.

(4) The 10th Aviation Battalion is building all of the troop housing and facilities other than those listed above through a "self help" program. Framed tents for quarters and offices have been erected by all units. In this secondary mission of building a base camp, this battalion has succeded in overcoming extremely difficult terrain and environmental problems.

(5) In recognition of the enemy threat to aviation complexes, the 10th Aviation Battalion has expended major effort in establishing local security of the base camp area. Again acting as Installation Coordinator, this unit has developed an integrated defense plan incorporating all United States, Korean, and Vietnamese forces in the area. Supporting fire plans and contingency plans are complete and barrier planning and construction is continuous as the complex develops. Repeated rehearsals have been conducted at all hours of the day and night and plans have been significantly improved as a result of the experience gained from such practice exercises.

(6) In all activities of the Battalion in the DONG BA THIN area, relations with Korean and Vietnamese military forces and with Vietnamese civil authorities have been excellent. Close coordination is effected on both civil and military matters and the highest degree of cooperation and best possible relations are enjoyed by this unit with all concerned.

(7) As of 30 April 1966, two major problem areas exist in the military complex area:

(a) There is no available central electric power supply for operation of mess hall refrigeration, perimeter lighting and general support of the units in the area. TOE generators are not adequate to satisfy this requirement and are needed to support operational missions. A command letter has been written to Headquarters, United States Army, Vietnam, requesting assistance in the procurement of four 100 KW generators to fulfill this need.

(b) A critical water shortage is expected to develop in the DONG BA THIN area during the dry season. A water survey by the Officer in Charge of Construction, Republic of Vietnam has forecast this shortage and recommended solutions to Headquarters, United States Army, Vietnam. A command letter has been written by this unit to United States Army Support Command, Nha Trang requesting immediate action to develop additional water resources.

c. Personnel:

(1) Attached as Inclosure 1 is Personnel Status of assigned units.

(2) During the reporting period, the 10th Aviation Battalion has forwarded recommendations for 1,183 decorations in recognition of individual accomplishments. Included were 3 Silver Stars, 10 Distinguished Flying Crosses, 5 Bronze Stars, 6 Air Medals (V), 8 Army Commendation Medals and 21 Purple Hearts. The remaining recommendations were for Air Medals for sustained combat operations.

(3) The following is a list of critical MOS shortages within this Battalion:

MOS	TITLE	AUTH	SHORT
63B20	Wheel Vehicle Mechanic	22	3
63B40	Senior Wheel Vehicle Mechanic	6	4
67F20	F/W Tech Inspector	5	2
67Q20	Helicopter Mechanic	78	17
71A10	Shop Clerk	13	9
71B30	Clerk Typist	25	18
76H20	Parts Specialist	23	9
94A10	Cooks Helper	4	2
94B20	Cook	27	3

d. Aviation Accident Experience:

(1) During the reporting period, assigned units of this battalion flew a total of 22,058 hours. The resultant accident experience is summarized below:

Category	R/W	F/W	Total
Incidents	8	1	9

Category	R/W	F/W	Total
Major Accident	4 (4 Total Loss)	2	6
Combat Loss	11 (7 Total Loss)	0	11
Forced Landing	3	1	4
Precautionary Landing	4	0	4

(2) Cumulative Accident rates based on 100,000 flying hours were:

(a) Rotary Wing: 22.9
(b) Fixed Wing: 53.3
(c) Combined: 38.1

e. Aircraft Maintenance:

(1) The following statistics reflect the maintenance experience during the period (percentages are quarterly averages):

Unit	Type	Avail	EDP	NDM	Hours Flown
48th Avn Co	UH-1B	86.1%	2.8%	11.1%	2021
	UH-1D	85.9%	1.8%	12.3%	4356
117th Avn Co	UH-1B	74.3%	11.2%	14.5%	1629
	UH-1D	74.5%	11.2%	14.3%	2730
129th Avn Co	UH-1B	78.5%	4.2%	17.3%	1781
	UH-1D	75.2%	7.7%	17.1%	3121
2nd Plat/171st Avn Co	UH-1B	78.5%	4.8%	16.7%	1803
135th Avn Co	CV-2B	82.5%	1.6%	15.6%	4617
Bn Avg (R/W)	UH-1B/D	79.0%	6.2%	14.8%	
Total R/W hours: 17,441					

(2) The battalion EDP rate for the quarter of 6.2% is a significant improvement over the rate experienced in January (9.2%), but is still excessive. Assumption of aircraft supply responsibility by the 335th Transportation Aircraft S&M Company at DONG BA THIN has improved the situation and further improvement is anticipated.

f. Signal:

(1) Organizational and Unit Activities: On 26 December 1965 the 10th Aviation Battalion moved to Tuy Hoa in support of combat operations. It soon became apparent that TOE authorized radio equipment was not sufficient to support the battalion in this type of tactical environment.

The only reliable means of communications has proven to be the high frequency single side band (HF SSB). The area communications system has not been able to provide reliable circuits for battalion command and control. The battalion was issued one HF SSB radio set prior to departing CONUS (TSC-59). This set was used at the forward locations in conjunction with a fabricated (ARC-102) located at battalion base. This provided voice communications from radio terminal to radio terminal.

(2) The battalion moved from Tuy Hoa to Phan Thiet on 9 April 1966 in support of tactical operations. The need for command control radios and crypto became apparent. A 3/4 ton shelter was procured and the following equipment installed:

(a) Radio Set AN/VRC-46 (FM)
(b) Radio Set AN/VRC-24 (AM UHF)
(c) HF SSB ARC-102 (fabricated)
(d) Teletype reperforator TT-76
(e) Teletypewriter TT-4
(f) Telegraph terminal TH-5
(g) Crypto equipment KW-7
(h) Radio control AN/GRA-39 (FM remote)
(i) Radio Control AN/GRA-6 (UHF remote)
(j) Generator set 3 KW DC (in 3/4 ton trailer)

(3) The fabricated HF SSB radios were wired to accept the telegraph terminal TH-5. Provisions were also made so that the KW-7 could be installed as soon as one became available.

(4) After the above equipment was installed and tested (with the exception of the KW-7) the van was flown to Phan Thiet for testing in the field. Communications were immediately established over HF SSB. The UHF and FM radios were remoted to battalion operations. The crypto equipment was not available for test until the battalion moved to Nhon Co. After relocation to Nhon Co, the crypto was installed and has proven to be very satisfactory and reliable. Advantages and capabilities of this radio teletype unit are:

(a) Provides simple, easy, and timely installation.
(b) All radios use one power source (100 amp vehicle or 28V DC generator.
(c) One radio teletype operator can operate all radios and teletype equipment.
(d) Phone patches can be provided.
(e) On line crypto utilizing SSB can be provided.
(f) Command and control by means of FM and UHF is provided.

g. Supply:

(1) During the period 1 January through 30 April, at least two aviation companies (Airmobile)(Lt) operated continuously in forward field positions approximately one hundred miles from base camp.

It became necessary to pre-stock all classes of supplies in these forward areas. Nha Trang Support Command maintained a forward support element at Tuy Hoa, Phan Thiet and Nhon Co, RVN. These areas stocked all classes of supply which were moved by US Air Force cargo aircraft. An additional requirement for pre-stock of POL at other forward locations, was accomplished by medium helicopters and CV-2 aircraft of the supporting Army Aviation elements. This forward pre-stock was transported in 500 gallon collapsible fuel cells and 55 gallon drums. POL consumption rates during the entire report period averaged 12,000 gallons of JP4 per day for two airmobile helicopter companies.

(2) The majority of all equipment other than organic aircraft, was moved by the US Air Force C-130 aircraft. All major moves included the equipment of two airmobile companies and the forward element of Battalion Headquarters. Tonnage requirements of the three major moves averaged 114.5 tons per move.

(3) During each major move, the individual helicopter companies carried a pre-determined three day load for aircraft weapons systems. This was necessary because of a lag in pre-positioning stock at the forward support command areas. Such lags were experienced on each major move.

h. Summary:

(1) The 10th Aviation Battalion became operational in the Republic of Vietnam on 15 December 1965. During the four month period covered by this report, the battalion has been continuously engaged in combat operations in the field, primarily in support of the 1st Brigade, 101st Airborne Division. Geographically, the operational environment has varied from the coastal plains of Tuy Hoa and Phan Thiet to the central highlands area surrounding Nhon Co. Close working relationships and outstanding rapport have been developed with the supported combat forces of the US, ROK, and RVN. This is attributable to the fact that the battalion has supported the same ground units for an extended period of time, which is mutually advantageous. The experience gained from tactical operations during this period has molded the battalion into a professionally functioning team. The battalion remains fully prepared and capable of performing its assigned mission.

(2) In its secondary mission of constructing a permanent base of operations, the 10th Aviation Battalion has provided troop housing and common use facilities for its units through an active and aggressive "self help" program.

The battalion has coordinated and supervised the planning and construction of a military complex at Dong Ba Thin which will eventually house over 3500 troops. At the installation level, sound working relations were established with local Vietnamese and Korean military forces in the area, and with Vietnamese civil authorities. All military forces in the area have been incorporated into an effective security plan for protection of the Dong Ba Thin military area.

SECTION II: Lessons Learned and Commanders Recommendations

Subsection I: Lessons Learned.

Combat Support

Item: Combat Support Coordination Center (CSCC)

Discussion: Operation Jefferson and Operation Van Buren were conducted by elements of United States, Korean and Vietnamese military forces. Language barriers presented substantial problems in combat support coordination, particularly in the area of aviation support. The establishment of a CSCC, consisting of combat support elements of all three countries, provided immediate personal contact between all elements for coordination and exchange of information.

Observation: A Combat Support Coordination Center is essential to combined or multi-national operations.

Item: Mission Planning

Discussion: During the first two months of the reporting period the operations section of the 10th Aviation Battalion experienced difficulty with aircraft mission planning for the supported ground units. This was caused primarily by the supported unit requesting missions for resupply and reconnaissance as the requirement arose rather than planning the aircraft needs in advance. As a result, all helicopters were committed on resupply and small troop movements when a requirement arose for lifting a fast reaction force. A system was devised that required the supported unit's S3 and S4 to coordinate routine aircraft requirements not later than 1800 hours of the evening prior to the day the mission was planned. The missions were then coordinated with the 10th Aviation Battalion's operations section and aircraft requirements were scheduled so as to allow standby aircraft for a fast reaction force of at least platoon size.

Observation: Whenever possible, ground units requiring aviation support in combat should plan their routine requirements in advance in order to efficiently utilize aircraft for resupply and at the same time maintain a reaction capability.

Item: In the conduct of airmobile operations in jungle areas or other areas inaccessable by road, a need exists for the task organization to include medium cargo helicopters.

Discussion: During Operations Harrison and Austin II, the task organization of the 10th Aviation Battalion included attached CH-47 aircraft. These aircraft proved invaluable in four major areas:

1. Positioning of Artillery: Lack of an adequate road network severly limits ground mobility of artillery. This in turn has restricted ground operations to those areas within which the artillery was capable of firing. Use of the CH-47 helicopter to position artillery in otherwise inaccessable areas has provided an artillery support capability in remote areas.

2. Logistical Support: Tactical operations frequently are conducted at considerable distances from the forward logistical base. Use of the cargo capacity of the CH-47 helicopter to preposition fuel at forward refueling points greatly increases available flying time in the operational area and correspondingly decreases reaction time.

3. Resupply: The lack of road networks and adverse terrain conditions of the operational areas have required almost 100% of the supported unit's supplies to be carried by helicopter. Use of the UH-1D helicopters for this resupply detracts materially from the available tactical troop lift capability. The CH-47 helicopter is ideal for heavy resupply and its use on such missions releases the UH-1D for tactical troop lift.

4. Casualty Evacuation: Supported combat units operating in remote jungle areas frequently find themselves several hours distant from any suitable landing zone for evacuation of casualties. To carry casualties to the nearest landing zone by litter causes delayed evacuation and reduces the combat power of the unit. The CH-47 helicopter is capable of hovering above any small opening in the jungle and extracting casualties by use of it's winch, with a resulting savings to the supported units in both time and manpower.

Observation: Airmobile task organization for operations in jungle and remote areas should include medium cargo helicopters.

Item: Night Airmobile Operations

Discussion: During the reporting period, the 10th Aviation Battalion has conducted 7 night airmobile operations. The following lessons have been learned from this experience:

1. Extensive aviation unit training is required.

2. Detailed planning and coordination with all combat support elements is essential. Every contingency must be considered in the planning phase.

3. Artificial illumination is effective and appreciably increases the probability of success. When artificial illumination is used, the following factors are prime considerations:

a. Once begun, illumination must be continuous.

b. Illumination should begin two minutes prior to LZ time and continue two minutes after landing of the last wave.

c. Illumination should be placed 3 kilometers past the LZ and 45° to the approach heading on the side opposite the direction the helicopters turn in leaving the LZ.

Observation: When the tactical situation dictates and with sufficient training, night airmobile operations can be conducted safely and efficiently.

Maintenance

Item: Improvement of tactical helipads

Discussion: Throughout the reporting period, elements of this Battalion have operated from forward areas in support of combat operations. Helipads and maintenance areas have consisted of bare stretches of sandy soil. Extended operation in this environment substantially reduces the life expectancy of major aircraft components. Because of sand damage during the reporting period, the following has been required:

1. Replacement of five turbine engines at an average of 486 hours. Normal life expectancy is 1200 hours.

2. Replacement of 10 rotor blades at an average of 360 hours. Normal life expectancy is 1000 hours.

3. Replacement of 5 main rotor hubs at an average of 434 hours. Normal life expectancy is 1100 hours.

4. Replacement of numerous main rotor pitch change links at an average of 200 hours. Normal life expectancy is indefinite.

This battalion is presently testing T-17 membrane at Tuy Hoa, RVN. This membrane is considered an interim measure, however. The material is heavy and bulky, and requires engineer support to emplace.

Observation: A need exists for a light weight, durable material for hasty construction of dust and sand free heliports. Ideally the material would be transportable by the using unit and easily installed.

Signal

Item: Insufficient Radio Equipment Within the Aviation Battalion

Discussion: Area communications systems have not been able to provide reliable communications between the battalion base and forward areas. TOE authorized radio equipment is not sufficient to support the battalion in tactical operations.

High frequency single side band (HF SSB) has proven to be the only reliable means of communications. This battalion is authorized one (1) of these radios, which is not sufficient to establish communications between the battalion base and forward areas.

Observation: Sufficient HF SSB radios (capable of radio teletype and crypto operation), and personnel to operate them should be authorized to provide the aviation battalion with a communications capability between its base camp and forward operating areas.

Item: Portable Tower

Discussion: The presently authorized portable tower TSQ-66 (fabricated at Lexington Signal Depot) is too large to be air transported unless it is dismounted from its vehicle.

Observation: A portable tower capable of being air transported while mounted on a 3/4 ton truck should be issued to Aviation Battalions.

Item: Air transportable avionics van

Discussion: Avionics support must be located near the supported aircraft to provide immediate support. Issued avionic vans are too large to be air transported. Ground movement of vehicles to forward support areas is impossible in the type combat operations the battalion is now conducting. Removing test equipment from the avionics vans and operating it in a tent in the forward area has not been an acceptable solution.

Observation: A need exists for an air transportable avionics van capable of repairing, as a minimum, aircraft command radios.

SUBSECTION II: Commanders Recommendations

1. Organization:

a. Problem: Reference Section II, Subsection I.

b. Recommendation: That medium cargo helicopters habitually be made a part of airmobile task organizations that are to operate in jungle and other remote areas.

2. Night Operations.

a. Problem: Although several successful night operations have been conducted, night airmobile operations are still handicapped by inadequate lighting systems for marking landing zones during periods of low visibility. A need exists for a lighting system which is light enough in weight to be carried in by troops, durable enough to be air dropped and with adjustable intensity sufficient to provide identification from 3 miles out.

b. Recommendations: That a light set with the above characteristics be developed, tested and made available to combat support aviation units.

3. Night Training for Helicopter Pilots.

a. Problem: Reference Section II, Subsection I.

b. Recommendation: That increased emphasis be placed on night helicopter flying techniques as a part of the regular course of instruction at the Army Aviation School. Such training is needed to better prepare Army Aviators for night helicopter operations which are becoming more prevalent in the Republic of Vietnam.

4. Hasty Heliports.

a. Problem: Reference Section II, Subsection 1.

b. Recommendation: That a material be developed and procured which will serve as a hasty dust and sand free parking and maintenance area for helicopters.

5. Airmobile Training for Ground Tactical Units.

a. Problem: Some ground tactical units newly deployed to Vietnam lack sufficient prior training in airmobile operations. These units have been required to gain the necessary experience on a trial and error basis after arrival in a combat environment.

b. Recommendation: That ground tactical units being deployed to Vietnam receive extensive training in airmobile operations, capitalizing on the lessons learned by those combat units now in country.

A. J. FERN JR.
Lt Col Inf
Commanding

Personnel Status
10th Aviation Battalion

1. The following is a breakdown by unit of authorized and assigned personnel within the 10th Aviation Battalion as of 30 April 1966:

	Authorized			Assigned		
	OFF	WO	EM	OFF	WO	EM
HHC	21	2	86	28	5	127
48th Aviation Company	16	42	219	30	22	208
117th Aviation Company	16	42	219	24	29	242
129th Aviation Company	16	42	219	22	24	202
135th Aviation Company	12	30	204	31	8	192
2d/17lst Aviation Company	15	29	77	23	14	87
279th Signal Det (Consolidated)	3	0	27	2	0	21
TOTAL	99	187	1051	160	102	1079

2. The above figures include: the 390th Transportation Detachment and 286th Medical Detachment assigned to the 48th Aviation Company; the 140th Transportation Detachment and 130th Medical Detachment assigned to the 117th Aviation Company; the 394th Transportation Detachment and 433rd Medical Detachment assigned to the 129th Aviation Company; and the 258th Transportation Detachment assigned to the 135th Aviation Company.

3. The above figures also include 119 personnel assigned as the Battalion Security force. The personnel were assigned to the Battalion by the 12th Aviation Group and USARV without an authorization or grade structure. The only authorization to date has been the individual's orders assigning him to the Battalion for duty as a security guard. Several written requests have been submitted through channels requesting authorization, with no results to date. Presently an MTOE is being prepared by this headquarters for a security force. This MTOE is for a rifle company, with five rifle platoons, plus a Ground Surveillance Radar Section, Heavy Mortar Platoon, and a Maintenance Section.

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RD

AVGP-SC 1st Ind
SUBJECT: Operational Report on Lessons Learned, RCS CSGPO-28(R1)(U)

HEADQUARTERS, 17TH AVIATION GROUP, APO San Francisco 96240 24 May 1966

TO: ACofS for Force Development, Department of the Army, Washington, D.C. 20310

Forwarded in compliance with USARV Circular 870-1 dated 11 Nov 65.

FOR THE COMMANDER:

Douglas Schneeman

DOUGLAS SCHNEEMAN
Major, Infantry
Adjutant

Copy Furnished:
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Regraded UNCLASSIFIED when separated from CLASSIFIED Document.

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AVF-GC-TNG (9 May 66) 2d Ind
SUBJECT: Operational Report on Lessons Learned, Period Ending 30 April 1966, RCS CSGPO-28 (R1) (U)

Headquarters, I Field Force Vietnam, APO US Forces 96240 28 MAY 1966

THRU: Commanding Officer, United States Army Aviation Brigade (Prov), APO US Forces 96307

TO: Commanding General, United States Army Vietnam, APO US Forces 96307

Concur with the comments and recommendations in the basic report except that:

a. Reference para 5a(2) basic report, Operation Jefferson was conducted from 010430 Jan to 161400 Jan rather than 31 Dec 65 - 17 Jan 66.

b. Reference para 5a(4) basic report, Operation Van Buren was conducted from 190600 Jan to 211800 Feb rather than 18 Jan - 20 Feb 66.

c. Reference para 5a(5) basic report, Operation Harrison was conducted from 261000 Feb to 242400 Mar rather than 21 Feb - 24 Mar 66.

FOR THE COMMANDER:

1 Incl
nc

R. C. BALDWIN
Captain AGC
Asst AG

SECRET

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G4-S-66- 1801

G1-66-2454

ARV-C-66-S- 3994

S-66- 3609

Sig Nr. 66 1768

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