SUBJECT: Operational Report on Lessons Learned for the Period Ending 30 April 1966

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96307

THRU: Commander in Chief, United States Army, Pacific, ATTN:: GPO-P-MH

APO 96558

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

1. This headquarters concurs with the 11th Aviation Battalion Operational Report on Lessons Learned as indorsed.

2. Attention is invited to page 9, paragraph 5, of this report concerning operational readiness of the 173rd Airmobile Company. A comparison of two sister units, 173rd and 175th Airmobile Company, shows the difference between departing CONUS with minimum TOE equipment and full TOE equipment. The 173rd was not operational at the end of 53 days while the 175th, which arrived in-country with full TOE equipment, was operational in 18 days.

FOR THE COMMANDER:

HENRY L. DENNEY
CWO USA
Assistant Adjutant General
OPERATIONAL REPORT OF LESSONS LEARNED

ELEVENTH AVIATION BATTALION

1 January 1966 - 30 April 1966

Operational report for period ending 30 Apr 66

Approved by

John W. Laube
Lt. Colonel, Infantry

headquarters
12th Aviation Group
United States Army, Vietnam

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Inclosures:

1. 11th Aviation Battalion Headquarters
   Organization.
2. Command Organization
3. Newspaper
4. Awards and Decorations
I. PERSONNEL

1. On 1 January 1966 the 11th Aviation Battalion at Phu Loi, Vietnam started its 5th month since activation at Fort Benning, Georgia and subsequent movement to Vietnam.

2. Key personnel of the Battalion command group were as follows:


   Battalion Executive Officer, Major Richard A. Humes, SigC, 01874501, effective 1 January 1966.

   Battalion S1: Capt Wallace M. Evans, Infantry, 097302.

   Battalion S2: Capt William J. Head, Armor, 067369.

   Battalion S3: Major William H. Lewis, TC, 084496.

   Battalion S4: Major James E. Pierce, Infantry, 071587, effective 1 Jan 66 thru 29 Mar 66.

   Battalion S4: Major Charles E. Drake, Infantry, 04026602, effective 30 Mar 66.

3. From the S1 standpoint the time frame of this reporting period was characterized by a rapid and almost complete transition from a combat atmosphere to one typical of garrison administration anywhere in the world.

4. Emphasis on PX, Tailor Shop, Barber Shop, Laundry facilities, libraries, theaters, Chapel and other facilities that were established in the first quarter was reduced in that
administrative personnel were occupied with improving administration of the command. These facilities remained adequate even though improvements were few.

5. Attached units of the 11th Aviation Battalion at the close of the reporting period and their authorized strengths are shown as inclosure 2.

6. In addition to authorized personnel, 72 security guards and 143 door gunners were assigned by the close of the period. The aggregate assigned strength as of 30 Apr 66 was 1,619 personnel. Neither the door gunners nor the security guards were authorized by TEM although an MTO was submitted for the door gunners. This resulted in a morale problem in that these personnel could expect no promotions.

7. The battalion had seven major subordinate units and a total of 22 morning report units. These were located at 4 separate locations: Phu Loi, Vung Tau, Lai Xe and Phuoc Vinh. Telephone communication circuits with subordinate units and higher headquarters were overloaded during daylight hours and were therefore inadequate. As a result, increased reliance on written correspondence and courier service was required. Due to the rapid organization and deployment of units, files of regulations and publications were incomplete. Detailed written guidance and instructions were necessitated thus increasing the administrative workload.
Emphasis has been exerted internally to improve publication requisitioning procedures as part of a major objective to improve overall administration within the battalion. Although considerably improved by a USARV account number system, filling of requisitions for local regulations is not considered adequate. A requisition for USARV regulations was submitted on 18 Feb 66. It requested 8 sets of "A" distribution regulations to supplement the 5 incomplete sets of regulations in the battalion headquarters and the 3 original aviation companies. To date 25% of the regulations have been received. In almost all cases only 4 copies were received when 8 were requested. These additional regulations were determined to be obsolete and 40 to 50 copies of each of the revised regulations have been received as they were published. Requisitions for USARV forms have been approximately 60% filled and 40% due out. Less than 30% of the due outs have been filled. Requisitions for AR's, DD and DA forms have been filled without difficulty.

8. The 11th Aviation Battalion became involved in an aviator infusion program with the 1st Cavalry Division during April 1966. Twenty-three (23) CH-47 aviators were exchanged. These personnel from the 1st Cavalry Division arrived with approximately 1/4 of a normal tour left to serve in Vietnam. The rotational hump in the 147th and 178th Aviation Companies was partially solved provided
replacements for the infused aviators arrive on schedule in July 1966. At the close of this period, the 11th Aviation Battalion was capable of solving its own hump problems in that its units departed CONUS over a 6½ month period. In no case did the battalion have known losses exceeding 25% in a given month. Subordinate units did and infusion, if required, could be applied at battalion level. Several one-time reports on known and unprogrammed losses were submitted but little firm data on replacement personnel forecasts was received. It was determined that internal infusion would be avoided as long as possible due to the adverse effect on the command of excessive personnel turbulence. It was felt that firm data must be known on the advanced requisitioning system and replacement forecast and develop an adequate plan to level the hump.

9. Casualties for the period included 21 wounded due to hostile action and 12 injured due to non-hostile causes. One died as a result of a self-inflicted wound and one died as a result of an aircraft accident.

10. On 1 A.M. 66 the APO of battalion units was changed. Units had been using the APO of the 1st Infantry Division which was in contravention with USARV postal regulations. The transition was smooth and little confusion resulted.

11. On 22 January 1966 a Chaplain was assigned to the battalion. In addition to the regular activities of counseling,
unit visits, religious services, contact was made with the Protestant mission in Phu Cuong and the Roman Catholic school orphanage and church. The 11th Aviation Battalion units have contributed through chapel offerings to the support and building of these civilian activities. Chapel offerings have also been taken in support of the Ben Sam Leprosarium. In January, services were held in the 128th mess tent. By February, services were moved to a medium GP tent erected near the 116th mess hall and on 13 March services were moved to the 116th mess hall building. Attendance at services has been growing especially when additional units came to the battalion area in March.

12. Regular monthly character guidance sessions were begun in February. In March, a consolidated Chaplains fund for the Phu Loi area was established to better serve our area needs. Plans for a battalion area chapel have been drawn awaiting construction material and labor availability.

13. The following awards and decorations were recommended and approved during the period: (See inclosure 4).

14. A battalion newspaper, the "RED DOG EXPRESS", was initiated late in the period to assist in keeping the troops informed. It was anticipated that this bi-weekly publication will help solve a previous problem of informing 1600 troops over an extensive area. A copy of the newspaper is attached as inclosure 3.
II. INTELLIGENCE

1. Activities of the Intelligence Section of the 11th Avn Bn from the period 1 January 1966 to 31 March 1966 consisted of the following:

   a. Obtained and briefed on intelligence information (weather, terrain, enemy, aerial photographs and maps) for all battalion size combat assaults. (See attached discussion on "Lessons Learned" pertaining to aerial photographs).

   b. Conducted in-country intelligence briefings for newly arrived units of the battalion.

2. Made provisions for disseminating anti-aircraft fire incidents and hit report information received from sources outside the battalion as well as reciprocating to other headquarters with like information received from within the battalion. In addition, anti-aircraft fire incidents and hit reports are posted to the battalion enemy situation map.

3. Normal administrative procedures relating to personnel security clearances, maintaining classified document register, and obtaining necessary blank forms and publications.

4. Published an informal type battalion intelligence summary primarily concerned with areas surrounding the hano
aimfield of the battalion headquarters.

5. Obtained and disseminated the information in intelligence summaries, bulletins, and reviews which were received from various sources.

6. Preparing a suitable map storage area and stocking it with appropriate map inventory for the battalion area of operations.

7. Preparing and conducting the intelligence portion of battalion briefings for visiting officials and dignitaries.

8. Making liaison visits to various agencies to facilitate the flow of intelligence information to and from higher, lower, and adjacent units.
III. OPERATIONS & TRAINING

A. OPERATIONS

1. With two airborne companies, one medium helicopter company and maintenance support units as assigned, the battalion was fully operational and responsive to operational requirements on 1 January 1966. Training of pilots and crew personnel was completed to include participation in combat assault operations in support of ground units. Operational procedures have been established as workable standards. A continuous study is being made to improve the procedures and operational efficiency of the battalion.

2. The battalion defense posture in the assigned sector of the "INNER PERIMETER" of Phu Loi Army Airfield has been completed to include construction of a concertina fence line, bunkers, communications established and fires coordinated with units manning the outer perimeter. The battalion continues to improve its defensive positions to present the best possible defense against VC destruction forces. The battalion requested and received a security platoon which is being used as the force to man and maintain the battalion sector of defense. The attachment of the security platoon reduced the requirement for maintenance personnel to be used as guards, therefore more man hours are available for aircraft maintenance.
3. Comments and recommendations to the battalion Tactical and administrative Standing Operating Procedures were received from assigned and adjacent units. These comments and recommendations were evaluated and where appropriate, applied to finalization of the battalion SOP's. These SOP's are revised as tactical and administrative operations reveal needed changes.

4. Prior to the beginning of this reporting period, the battalion was established under the operational control of the 1st Infantry Division. Selected personnel from this battalion were assigned as liaison officers to the division to assist and advise the division staff on the employment and utilization of the available aircraft assigned to the battalion.

5. The battalion lift capability was increased during the period by the arrival of two newly assigned airborne companies and one medium helicopter company. Prior to the arrival of these units, sponsor units were assigned to receive and assist the units in establishing the unit areas. Pilots and crew personnel of incoming units were required to fly operational missions with sponsor units as their in-country flight orientation and familiarization. The orientation and training proved invaluable once the unit became operational. One unit, 173rd Aircobile Company, arrived in-country on 9 March 1966 and is not operational this date, due to the non-availability of maintenance support equipment.
6. Difficulties were experienced initially with supported units operation and utilization of the CH-47 helicopter. A brochure was prepared and distributed to all using units describing the preparation of landing pads to be constructed, damage that could be caused by rotowash, and the proper utilization of the large cargo helicopter. This educational program has substantially increased the supported units' knowledge of the CH-47 helicopter and how it can best be used to support them.

7. Liaison was established with all artillery units within the III Corps area, and training conducted with each to standardize the loading and transporting of 105mm howitzer batteries and supporting equipment. Sling equipment was procured or fabricated and procedures established to expedite loading, and transporting weapons. The ultimate goal to place weapons in the desired firing position without further movement was obtained. This was accomplished by transporting the weapon externally and having the helicopter place the weapon in a firing position as directed by the pathfinder team and artillery reconnaissance party. The battalion is presently training and establishing procedures to displace a mobile 105 howitzer battery as a rapid reaction force. This force is being planned to include four 105 howitzers, section equipment and a basic load of ammunition for each weapon to be lifted at one time. A security force of sixty
ground troops lifted by UH-1D helicopters, is planned to precede the artillery battery by 30 minutes into the selected firing position. Pathfinders teams and the artillery reconnaissance party are airlifted into the selected site with the security force. One movement of the artillery mobile reaction force has been conducted. The force was lifted from Phu Loi Airfield to a firing position in the vicinity of Tanh Linh to support a Special Forces operation. The weapons were so well placed that the battery was able to commence firing within 5 minutes after landing. The battery supported the operation for twenty-four hours and was extracted in reverse order of the employment. Though the operation proved highly successful, many lessons were learned and changes have been made to the operational procedures. This force can react rapidly to any requirement within III Corps Zone.

8. Battalion troop lifts in support of combat assaults have been limited to daylight hour operations. A recent requirement was placed on the battalion to draft an SOP for night combat assault operations. The draft has been completed and a copy forwarded to higher headquarters. Once the procedures are established the battalion will initiate a training program to meet night operational requirements.

9. The battalion has provided aviation support within II, III & IV Corps. Single aircraft missions to
battalion augmented size operations have been conducted. Only major operations conducted by the battalion will be summarized in the report. During the conduct of these operations all assigned and supporting units were required to evaluate each phase of the operation and submit after action reports to include comments and recommended changes for future operations. These reports were compiled and evaluated, and when appropriate, recommended changes to procedures were adopted. A requirement for additional fire power to be employed as suppressive fires on the initial lift into selected landing zones was a primary concern to all units within the battalion. During the study of this problem, it was determined that more weapons could be placed in a position to suppress by changing the flight formation from the less desirable staggered trail to a heavy left or heavy right in trail. This formation places door gunners in four out of five aircraft in a position to suppress. It has also been determined that maneuverability is improved in this formation and can be changed rapidly if required. Landing direction and area to be suppressed dictates the heavy left or heavy right. This formation is used almost exclusively by this battalion on all combat assault operation.

10. The 11th Aviation Battalion conducted an air-mobile combat assault in conjunction with the 2nd Brigade, 1st Inf Div at 1800 hours, 28 January 1966, into two LZ's.
for operation MALLET, between Long Tan and Ba Ria. The
2nd objective was search and clear operation to open
Highway 15 between Bien Hoa and Vung Tau. Two staging areas
were used for this operation. Initial staging was conducted
east of Bien Hoa vic XT 003005. CH-47 helicopters repositioned
390 troops from a rear stagefield to the brigade forward
staging area vic YS 170860. Simultaneously, a heliborne
force of 280 troops departed the rear stagefield for a
combat assault in landing zone HAMMER, vic YS 103764. The
assault helicopters returned to the forward stagefield and
continued heliborne lifts into landing zones HAMMER and
SPIKE vic coord YS 082795. The operation was executed
against only incidental ground fire with no losses or in-
juries sustained.

11. The battalion participated in operation MASTIFF
on 21 February 1966 in support of 3rd Brigade, 1st Inf Div
and a Royal Australian Artillery Battery. The battalion was
organized with four airmobile companies and one medium heli-
copter company for this operation. The four airmobile com-
panies were utilized to lift the 3rd Inf Bde from Lai Khe
to landing zone HAL vic XT 5122 and landing zones RICK, vic
XT 5422. The medium helicopter company was used to position
a security elements of 1/4 Cav and the RAA Battery from
Phu Loi and Bien Hoa, respectively, into a firing position
at XT 5227 at H-Hour 40. This battery was positioned without
difficulty and was in position in time to prestrike landing zones HAL & RICK prior to the arrival of the first heliborne units of the 3rd Inf Bde. Five lifts with 40 UH-1D's were required to complete the heliborne assault. Gunships were utilized as enroute escort, and to pre-strike the LZ's. After completion of the heliborne assault the gunships were reverted to the support of ground elements and remained under control of ground units until completion of the operation on 27 Feb 1966.

12. The 11th Aviation Battalion was notified by the 1st Inf DIV aircraft control center on 27 Feb 66 of Operation BATTIESBURG to be conducted on 1 March 1966. Immediate coordination was conducted with the 2nd Bde, 1st Inf Div, the ground unit to be lifted. The lift was planned in four phases. The first phase was to deploy all UH-1D helicopters from Phu Loi to Dau Tieng (XT 4947). Phase II was an airlift of troops from Dau Tieng to the first LZ ERNIE (XT 200386), at 0800 hours. This LZ was then secured by the infantry prior to injecting the artillery by CH-47 helicopters. In Phase III, the artillery was transported by CH-47's from Dau Tieng and Cu Chi to LZ ERNIE (XT 200386). In Phase IV, the UH-1D's returned to Dau Tieng and conducted two separate lifts into LZ's, DUNCAN (XT 134385) and CALHOUN (XT 125349). The last UH-1D lift was completed into LZ CALHOUN at 010914 March 1966. One hundred and
fifteen UH-1's and CH-47 helicopters were utilized on this operation. The operation was completed on 5 March 1966. All elements were airlifted from the brigade field location to Tay Ninh airstrip. Air Force aircraft returned the brigade to its home base, Bien Hoa.

13. The 11th Aviation Battalion was notified on 1 March 1966 of a pending heliborne operation with the 2nd Bde, 25th Inf Div to commence on 4 March 1966. Liaison and coordination were made with the brigade on 2 March 1966. This was the first lift to be conducted by the brigade since its arrival in-country, and it was determined at the initial coordination meeting that some training by the two units should be conducted prior to the mission. Training was conducted early morning 3 March 1966, which included line up, loading, unloading and a detailed briefing on troop conduct upon arrival in the landing zone. The operation, WAIKIKI, commenced at 040815 March 1966 and was executed with 25 UH-1D's in three lifts. The first lift over-flew the selected landing zone due to poor visibility caused by smoke, haze and landing into the sun. An excessive amount of smoke was used in the landing zone by the ARVN Ranger Battalion which secured the LZ. The two succeeding lifts landed in the pre-selected landing zone. Gunships were utilized as enroute escort and suppressed small arms fire received by troop carriers. A critique was conducted on 8 Mar 66, with both ground and air
elements attending. Problem areas were discussed and recommendations made to improve the efficiency and speed of helicopter operations. Succeeding operations were conducted with the brigade with noticeable improvement.

14. The battalion provided airlift support during the introduction of the 1st Inf Div into operation ABILENE which commenced on 30 Mar 1966. One infantry battalion was introduced by combat assault into LZ SCOTT, vic YS 352947. Once the landing zone was secured, the battalion's organic CH-47's lifted one artillery battery from Bear Cat range, vic KT 150980, into the LZ. The artillery battery conducted pre-strike fires and support for succeeding landing zones. Combat assaults were conducted into two additional landing zones, which completed the airlift of the 2nd Bde, 1st Inf Div. Upon completion of the initial combat assaults, one company, the 128th Airmobile Company, was placed in a direct support role of the 2nd Inf Bde for the duration of the operation. The battalion CH-47's continued to support with resupply sorties. On 2 Apr 1966 the battalion conducted repositioning operations in conjunction with 2nd Inf Bde and elements of the Royal Australian Regiment. This mission was accomplished by extracting elements from pick-up zones and executing combat assaults into five separate landing zones. The time phasing for this operation was the most critical with which the battalion had been associated. All extractions and
combat assaults were extracted with only minor delays caused by a delay in lifting supporting fires at the prescribed time. The battalion CH-47 helicopters airlifted the 2/33 Arty from Vung Tau into a firing position vic YS 370743. A total of 64 sorties were required on an additional move made by the unit. A continuous flow of all classes of supplies were airlifted to support the battalion. An excessive amount of 3/4 ton vehicles and equipment were lifted for this artillery battalion. In some instances, the 3/4 ton vehicles were loaded with filled sand bags. The battalion organic aircraft, less the CH-47's, were in general support of the 1st Avn Bn for the extraction of troops from the ABILENE operation on 13 Apr 66. The CH-47's, under battalion control, extracted the 2/33 Arty from Yo 675845 to an Loc landing strip. One infantry battalion, and "C" Battery, 1st 7th Arty, were lifted from COURTHENAY landing strip to Bear Cat Range. One firing battery of the 2/13 Arty was lifted from An Loc to Phu Loi.

15. Operation BIRMINGHAM was initiated on 24 Apr 66. The 11th Aviation Battalion proposed a concept of direct support for the 1st InfDiv for this operation. The proposed concept was accepted and the Battalion was placed in direct support for the duration of the operation. Initial study and planning for the operation indicated that the battalion could best support the operation with tactical and logistical airlift from a forward location in the area of operation. The
battalion (-) moved to Tay Ninh Airfield on D-1 and established the battalion forward Cr in preparation to support the division on D-Day, 24 Apr 66. The division elements were repositioned to two forward staging areas, Tay Ninh and Dau Tieng by Air Force C-130 and C-123 Aircraft. On D-Day, the 11th Aviation Battalion, with six airmobile companies attached, provided 90 UH-1D's, 18 UH-1B's and 12 CH-47's to airlift the division elements and supporting artillery from the forward base area into multiple landing zones in the BIRMINGHAM area of operation. The total assets used on the initial phase of this operation were the largest for this battalion to date. The battalion continues to support the division with its airlift capabilities for the operation which is scheduled to end with the extraction of all elements on or about the 7 May 1966.
B. TRAINING

1. The training accomplished by this unit during the quarter was restricted to aircraft qualifications, minimum flying requirements, instrument helicopter training, and artillery CH-47 helicopter orientation.

2. Two airmobile light companies, the 162nd and 173rd, and one airmobile medium company, the 178th, arrived during the quarter. Training for the pilots and crews of the airmobile light companies was accomplished in UH-1 type aircraft from the 116th and 128th Aviation Companies. The newly arrived airmobile medium company has trained their personnel with the 147th Aviation Company in CH-47 helicopters.

3. A mandatory training program for newly arrived units was prescribed and executed. D-Day was the date the unit arrived in-country. Subjects are listed according to the appropriate training phase:

   a. Phase I (D-Day through D+7)

      (1) Physical security and defense plan. 2 hours

      (2) Practice alert and defense plan. 2 hours

      (3) Organization and mission and local orientation (RVNAF, MACV, USARV, 11th div Bn) 2 hours

      (4) Enemy weapons. 2 hours
(5) Intelligence briefing (An S2), 1 hour.
(6) Awards and Decorations (An S1). 1 hour
(7) Flight time logging (An S3). 1 hour
(8) Rules of engagement (An S2). 1 hour
(9) Escape, evasion, and survival (An S3). 1 hour
(10) Flight following system (An S3). 1 hour
(11) Flight Safety (An Safety Officer). 1 hour
(12) Navigation in Vietnam preferred flight routes. 1 hour
(13) Combat support flight techniques. 2 hours
(14) Medical evacuation flights. 1 hour
(15) UH-1B and UH-1D transition training. as required

b. Phase II (D+8 through D+13)
(1) Practice alerts and defense plans 2 hours
(2) UH-1B and UH-1D transition training as required
(3) Crash rescue and other emergency. 1 hour

(4) Equipment maintenance and operation training. as required

(5) Night flight. 2 hours

(6) Aerial gunnery techniques and armament familiarization.

(7) Aviation Operations, platoon and section level. 16 hours

C. Phase III (D+14 through D+30)

(1) Airmobile operation training. 40 hours
   (a) Air landed assault.
   (b) Troop extraction.
   (c) Troop placement.
   (d) Agile flight.

(2) Command inspection. 4 hours

(3) Mission readiness ceremony. 1 hour

4. During the quarter the following training was
   to artillery 105mm Howitzers units.

   a. The procedures for:
      (1) 105 sling and rigging.
      (2) Safety around the CH-47.
      (3) Unloading.
      (4) Sling hook-up procedures.
(6) Internal loading and unloading of personnel, ammo and section equipment.

(7) Loading and Unloading 1/4 ton and 3/4 ton trucks.

b. This instruction required the use of a wrecker to test the sling load rigged for external lifting and a CH-47 to demonstrate internal loading.

c. All batteries seemed very responsive to the training and all batteries that were moved following this training were moved quickly and efficiently.

d. A logistical liaison visit by a member of the 147th Avn Co, to the 3rd Bde, 1st Inf Div revealed the following:

(1) The methods of extracting ammo by tilting the aircraft and letting the ammo slide out was dangerous as well as damaging to the ammo casing. A more gentle method of extracting the ammo must be used.

(2) A method of loading and unloading must be devised other than hand carrying individual pieces. Loads must be bundled or palletized for quick handling.

(3) The proper size load for the CH-47 is approximately 8,500 lbs, loaded internally or externally with density altitude conditions. Sling loading is generally the most desirable method of lifting loads with the CH-47; due to the long loading time generally experienced in internal loading.
e. Handouts and training pamphlets were distributed at every briefing. These written guides assist the commander in conducting operations with the CH-47 helicopter.

f. All batteries were briefed that the CH-47 helicopter can carry 12,500 pounds of cargo. Although, for normal operation 8,500 pounds should be used as a planning figure. Loads must be broken down by the ground troops accordingly.
C. PATHFINDERS

1. During this period, the Pathfinder Detachment was utilized in all types of operations. In conjunction with slick operations, Pathfinders were used to control traffic and loading of troops at all pick-up zones, including troop extractions from insecure areas. On combat assaults, the Pathfinders were delivered into LZ's thirty minutes prior to the lift with a recon and security party. Their responsibilities in this type operation were recon of the LZ, choosing landing areas, clearing the area, and marking of obstacles. Radio communications was established with inbound flights, and landing directions given. In addition, Pathfinders directed gunship fire in the case of enemy activity around the LZ. On several combat assaults, Pathfinders were delivered into the LZ on the lead aircraft of the first flight to control subsequent flights coming into the LZ. Pathfinders were delivered to extraction sites approximately an hour before the extraction to coordinate with the ground units as to disposition of loads. Inbound flights were then controlled by radio with the Pathfinders leaving the site on the last aircraft.

2. The Pathfinder Detachment was also utilized in CH-47 operations during this period. During movement
of artillery units, the Pathfinders were utilized in pick-up sites and landing zones. During operations of this nature, Pathfinders and liaison personnel coordinated closely as to loading in pick-up sites and position of guns in LZ's. On several operations, Pathfinders and artillery recon teams entered LZ's on the combat assaults for movement of artillery immediately after the troops secured the LZ.

3. The Pathfinder Detachment used several new items of equipment during operations during this period. The HRT-2 Honing Rotor was used with limited results. A Glide Slope Indicator was used to a limited extent on night operations and results were satisfactory.

4. During Operation ABILENE, a pathfinder team was placed in direct support of the 128th Aviation Company and the 2nd Bde, 1st Inf Div. This was found to be highly desirable, and resulted in outstanding support of ground units. Pathfinders were also used extensively during the first phase of Operation BIRMINGHAM in Tri Ninh province.

5. In January 1966, an LTOE was submitted and to date no answer has been received. Also a letter, dated 25 April 1966, was submitted to higher headquarters requesting additional personnel to augment the detachment's resources.
IV. SUPPLY & MAINTENANCE

A. AIRCRAFT MAINTENANCE

1. The month of January 1966 was one of becoming fully operational through institution of standard practices in both maintenance and aircraft technical supply, as well as establishing firm reporting procedures for all units. A battalion inspection was initiated in conjunction with the Safety Section. All units were found to be progressing satisfactorily after deployment from CONUS. (116th Avn Co, 128th Avn Co and the 147th Avn Co.)

2. On 9 January a limited number of Decoe navigational sets were made available for installation in aircraft of the 116th Avn Co, and 128th Avn Co.

3. On 19 January the direct support for aircraft repair parts was transferred from the 611th Trans Co DS to the 55th Trans Co DS for companies located in the Phu Loi area. This reduced the distance between DSU and units supported and opened vehicle pickup capability. Through direct contact with the 34th General Support Group, LINKP quotes were established for future schools.

4. During February 1966 many visits were made to the Army Aircraft Supply Point (AASP) to coordinate the handling of support packages for units scheduled for the 11th Aviation Battalion. The AASP was provided with unit designations, project codes, and locations.
5. A major problem developed in the unprecedented failure of a quill shaft on a CH-47 aircraft and the loss of all control capability. Visits of personnel from the 147th Avn Co to Boeing Vertol with the failed shaft and transmission proved helpful in that it was determined that this particular shaft failure will always be preceded by dual alternator shaft failure on either the start up or shut down of the APU.

6. Weekly maintenance and supply officers meetings were initiated to give lateral exchange of problem cross and solutions.

7. The decision was made to remove all cargo hooks from UH-1B aircraft while retaining them on UH-1D aircraft.

8. The 162nd Avn Co arrived in the command and was established at Phuoc Vinh. Slow arrival of aircraft support packages and special tools has reduced their maintenance capability.

9. During March 1966 the technical representative assigned at Bien Hoa for Bell Helicopter Corporation, and Iwoaming were given the additional mission of covering those units assigned to the 11th Avn Bn. Direct contact indicated a minimum of weekly visits and immediate response upon request. Difficulty in making contact for requested visits proved this arrangement to be unsatisfactory.
10. The continued shortage of 44 individual tool boxes within the 116th Avn Co required the relocation of assets of the 147th Avn Co to alleviate the hardships imposed on the 116th Avn Co.

11. During March 1966 a test was conducted on the assignment of additional aircraft to a standard armament company.

12. Mr. Cherry of Dynaclectron Corporation made initial contact for battle damage survey. His ability to accomplish his mission is dependent upon his being immediately available to a unit when aircraft receive battle damage as aircraft are normally repaired prior to elapsed time of contacting him and his arrival on site.

13. Insufficient instructions were enclosed in original 540 Maintenance manuals. Certain torque valves, and service bulletins were provided by Captain Weinstein, AMP 540 representative, and Mr. Bernard, Bell 540 representative.

14. The 173rd Avn Co and 178th Avn Co arrived in-country on 10 Mar 66. Assistance was requested from AASP in locating support packages for 162nd Avn Co, 173rd Avn Co and the 178th Avn Co, without success. Trips to other units in attempting to locate miss-shipped support packages proved unsuccessful in that only one convoy was
found, this one had been opened and some parts used. The leak of these support problems caused undue delay in units becoming operational after arrival in-country.

15. On 15 April the 605th Trans Co DS assumed supply support responsibility for all units of this battalion except the 147th Avn Co.

16. On 19 April a Bell Helicopter Technical representative was assigned to the 605th Trans Co DS and assumed duties in support of all Airmobile companies of the 11th Avn Bn.

17. The statistics listed below indicate the operational vs maintenance capabilities of units assigned to the 11th Avn Bn.

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B. MOTOR MAINTENANCE

1. Beginning 1 January 1966 a system of inspecting assigned units was initiated whereby each unit would be inspected by the battalion once during each quarter.

2. Circulars were published as guide lines for motor operations in order to standardize procedures within the battalion.

3. Upon assignment of the 178th Avn Co to the battalion additional vehicle parking area was required. Motor pools were relocated to the rear of each company area. Concurrently, dispatching of equipment was resumed at company level.

4. Due to the vehicle requirements, vehicles were not available for maintenance during daylight hours. Therefore a night shift was initiated in the battalion maintenance section.

5. When the 162nd Avn Co and the 173rd Avn Co were assigned to this battalion. The problem arose as to which support unit would furnish direct support of these units. Liaison visits were conducted with the 60th Ordnance Group, 85th Ordnance Company and the 701st Maintenance Battalion. Previously the 85th Ordnance Company had furnished repair parts support for automotive and engineer type equipment and all other repair parts support was furnished by units of the 1st Logistical Command. As a result of the above
mentioned visits, the 701st Maintenance Battalion now furnishes all ordnance, engineer, signal and quartermaster support for units co-located with the 1st Inf Div. For those units located at Phu Loi, ordnance and signal repair is accomplished by the 4th DS Platoon, 65th Ordnance Company, attached to the 701st Maintenance Battalion. Engineer and quartermaster repair and all repair parts support were furnished by a Company, 701st Maintenance Battalion, located at Di An.
C. SUPPLY

1. During the month of January, the companies of this Battalion continued to receive major items of equipment as well as spare parts. Supply procedures within Vietnam were constantly being changed and improved during this period. However, these changes caused many valid requisitions to be cancelled for no apparent reason and it became almost a necessity for each company to have daily liaison in Saigon to insure receipt of supplies.

2. On 4 January 1966, a liaison visit was made to the 159th Engineer Group to coordinate the construction of the airfield facilities at Lai Khe, Phuoc Vinh and Phu Loi. Construction of the facilities at all locations began during January and are in various degrees of completion at this time.

3. Coordination was made with various supply points to provide supply codes and equipment issuance for the inbound 162nd Aviation Company. The 116th Aviation Company was appointed as the host company for the 162nd Avn Co. Many of the problems which plagued the first companies were eliminated by the host company prior to the arrival of the 162nd Avn Co on 7 Feb 66. Throughout the months of February and March, equipment for the 162nd Avn Co was received and transported to Phuoc Vinh by elements of the Battalion. The 162nd Avn Co presently has 77% of authorized equipment.
4. Concurrently with the arrival of the 162nd Aviation Company, plans were made to accommodate the arrival of 2 additional companies to the Battalion. The 173rd Avn Co and 178th Avn Co arrived in-country on 10 March 1966. The 128th Avn Co and the 147th Avn Co had previously been assigned as host companies and greatly assisted the new companies in establishing supply accounts and providing necessary transportation. Numerous problems were encountered in securing equipment for the 173rd Avn Co since they were directed to depart CONUS with only minimum essential equipment. The company has approximately 21% of its authorized equipment. The 178th Avn Co has no major equipment shortage since they departed CONUS with all TO&E available shipped to Vietnam. The 178th Avn Co has 85% of its authorized equipment on hand.

5. Throughout the reporting period all companies have continued to improve their base camp through the self-help program. The availability of engineer support and construction materials in the individual company locations is directly proportionate to the improvement of their facilities.

6. Purchases made from the battalions impress fund was approximately $3470.00 for this period.

7. The month of March brought in a new era of supply economy and accountability within Vietnam when the 1st Log Command assumed the responsibilities of the Saigon
Log Area. Due to this reorganization of the supply system, many delays, cancellations and due outs were received by units of this battalion. The supply system has slowly continued to improve throughout the period.

8. The critical shortage of m-60 machine guns for the door gunners of the UH-1D aircraft was solved when a sufficient number to equip each aircraft was located in the supply system.
V. COMMUNICATIONS

1. During the period from 1 January 1966 to 30 April 66, the communications section performed routine tasks and made gradual improvements to existing facilities. Continuous operation of the telephone, radio and power generating systems was maintained.

2. On 16 January 1966, a UHF radio was installed to provide back-up for the FM Command Net during Combat assault operations. The equipment required was hand received from one of the subordinate units. A priority requisition has been submitted for the authorized AN/VRC-24, but has not been filled at this date.

3. Recommendations for a change of the battalion TOE were submitted during the week of 23-29 January 1966. The substitution of an SB-86 switchboard for the presently authorized SB-22 was requested. The addition of UHF equipment was requested for the pathfinders to use for aircraft control of large staging areas during major operations.

4. On 7 Feb 1966, an updated requirement of frequencies and call-words for units scheduled to join the battalion in February, March and April were requested. Assignments were not received until after the units had arrived and were operational, due largely to an impending change to the III Corps area frequency allocation plan.

5. Necessary FM radio and power equipment was hand
received to the 162nd Aviation Company in early February and to the 173rd Aviation Company in early March. This made possible a battalion FM net with contact to all units not co-located with the battalion. The 178th Aviation Company arrived with the old type FM radios and the 162nd and 173rd Aviation Companies had deployed less all FM radio equipment. Requirements for the New Series radios had been submitted in November 1965.

6. Plans for the organization of a general support avionics company were announced by higher headquarters during early February. Initial plans proposed taking one of the two in-country avionic teams of the battalion as resources in forming the general support company. The two teams were operating jointly with one set of avionics test equipment on hand receipt and comprised the entire battalion capability at the time. After several battalions objected to the loss of organic avionics capabilities, a revised plan was devised so that no organization would be adversely affected.

7. During March and April 1966, additional SUI material was obtained for the newly arrived units. New accounts were established with the 173rd Airborne Brigade and the 25th Inf Div.

8. A new frequency assignment change was put into effect on 1 April 1966. There was a substantial reduction in duplicated frequencies and interference. One exception was the
assignment of the same frequency to the battalion Pathfinders and the Phu Loi Tower.

9. On 10 April 1966, sufficient wire and cable were received to wire the headquarters area and to install the main power distribution lines within the battalion headquarters and the 176th Aviation Company areas. Concrete poles were procured from the 1st Inf Div, but were not erected, because of an impending move of the headquarters on "Operation BIRMINHAM". A generator shed was partially completed, and holes were dug for the concrete poles.

10. On 20 April 1966, an electrical storm hit in the battalion area. Three communications personnel received substantial shocks and one 10 KW generator, one 30 KW generator, two rectifier power supplies, and numerous telephone lines were rendered inoperative.

11. On 22 April 1966, the shipment of new series FM radios arrived. Essential sets were issued and installed for the three units involved in "Operation BIRMINHAM". The remaining equipment will be issued and installed upon return of the battalion from the field location.

12. On 24 April 1966, the forward element of the communications section, established radio communications with battalion rear and the 1st Inf Div forward. The battalion has a combined battalion/company operations center with communications provided by battalion. No major communications difficulties have developed.
VI. AVIATION SAFETY

1. During the third quarter of fiscal year 1966, the 11th Aviation Battalion's combat flying hours exceeded the hours flown in the previous quarter by five times. This marked increase was due to the arrival of three new Aviation Companies organic to this battalion and to the intensified requirements for airlift support of ground elements.

2. This continuous increase in combat flying placed aircraft at peak performances and subjected aviators and crew members to extended combat exposure under tactical conditions. In February 1966, an aircraft of this organization was shot down by hostile small arms fire while participating in a resupply mission. The aircraft was totally destroyed, but the crew escaped with only minor injuries. Two other accidents were investigated under the provisions of AR 385-40 and found to have been caused and damaged as a direct result of hostile ground action and later reclassified as combat losses.

3. In April 1966, the conduct of combat operations by the battalion was greatly increased. During this period, this organization experienced two major accidents. One of these accidents occurred on 9 April 1966 and resulted in six fatalities, the first for this organization. Both accidents are presently under investigation by aircraft accident Investigation Board and their final reports have not, to date,
been completed. However, tentative findings in both cases indicated that the pilots experienced a loss of rotor RPM. Although no common factor could be determined to establish a definite trend, this battalion required that each aviator assigned or attached be given instructions in the proper use of the Go-No-Go placard and hot weather operations.

4. The bulk of the aviators assigned to this battalion reached the mid-point of their Vietnam tours in April. The physiological and psychological effects associated with high flying hours and the thought of having reached the halfway point appeared to have an adverse effect on the safety consciousness of the aviator. As a result, some aviators were more prone to rush their activities in the unconscious hope of being able to complete the second half of their tours a little faster. Continuing command emphasis is placed on educating our aviators on the reality of time and the continual need for caution in all activities.
VII. MEDICAL SECTION

1. During this reporting period, medical sections of units of the 11th Aviation Battalion bent their efforts toward improving existing facilities, keeping immunizations up to date, and providing primary medical care to the battalion.

2. The 758th Medical Detachment (0a), 162nd Avn Co arrived in-country on 8 Feb 1966 and were further assigned to Phuoc Vinh. The detachment was visited by the battalion medical section and briefed on recurring reports, current USA RV regulations and problems areas peculiar to RVN. This detachment became operational on 6 March 1966 and instituted weekly and monthly reporting on 9 March 66.

3. The 759th Medical Detachment (0a), 173rd Avn Co arrived in-country on 14 March 1966 and was further assigned to Lai Khe. The battalion medical section visited this unit and conducted a similar informal briefing. This detachment became operational on 15 April 1966 and instituted their reporting on 1 May 1966.

4. The 774th Medical Detachment (0a), 178th Avn Co arrived in-country on 14 March 1966 and were further assigned to Phu Loi. The 774th had not yet become operational when the detachment was re-assigned, on 3 April 1966, to the 145th Avn bn in Bien Hoa. Since the 178th Aviation Company was located in the same area as the battalion.
headquarters, primary medical care for this unit was taken over by the battalion headquarters medical section.

5. The 605th Transportation Company, which was assigned to support the 11th Aviation Battalion at Phu Lai, has also been attached to this headquarters medical section for primary medical care as of 25 Apr 66.

6. On 25 March 1966, Captain John D. Carrico was replaced by Captain Paul S. Hill. Captain Carrico was transferred to the 93rd Evacuation Hospital in Bien Hoa. This change was effected in order that a flight surgeon (MOS 3160) could be assigned as the battalion surgeon and so that Captain Carrico (MOS 3100) could be assigned where he could practice ophthalmology, his primary area of interest.

7. MedCap has been engaged in by all medical units within the battalion. At each of the locations, all of the medical units hold sick call for Vietnamese nationals using medical supplies obtained through MedCap. Most of the patients seen are young children or elderly people. Many respiratory infections are seen, but probably the largest group of patients have skin problems: either infected, neglected cuts and scratches or a whole host of eczematosus skin problems, most of which are secondarily infected. Occasionally there are a few suspected cases of tuberculosis, malaria, or various other diseases. Average number of patients seen is about 35 per visit. Approximately four (4) visits are conducted per month by this battalion medical personnel.
VIII. LESSONS LEARNED

PUBLICATIONS/ADMINISTRATION

Item: Shortage of blank forms and publications for units deploying from CONUS.

Discussion: All units assigned to this battalion were organized, trained and deployed to Vietnam on relatively short notice. In all cases units did not have complete sets of Da regulations and blank forms. This includes the battalion headquarters. Units received few personnel knowledgeable on requisitioning procedures and several months elapsed before effective sets of publications could be requisitioned. This battalion brought a conex container full of forms to Vietnam. Few have been used. Most required forms were shortly exhausted or not brought at all. Little or no information on required forms was available to units prior to deployment.

Observation: That future deploying units receive up to date sets of publications upon arrival in Vietnam. This includes DD, Da, USARPAC, MCV and USARV publications. The same should apply to forms.

REPORTS/ADMINISTRATION

Item: Excessive requirements for reports in the Republic of Vietnam.

Discussion: The number of required reports are considered excessive for a combat situation. It is felt that more time
should be spent in doing and less in telling about it.

Reference is made to USARV Regulation 335-5 and 12th Aviation Group Regulation 335-5.

Observation: That an effort be made at all levels to omit as many of the reports as possible.

UNSuitABLE AND UNDESIRABLE PERSONNEL PERSONNEL MANAGEMENT

Item: Large number of unsuitable and undesirable personnel in Vietnam.

Discussion: Procedures for administrative elimination of personnel in Vietnam are considered to be extremely efficient.

What is alarming is the number of personnel that get to Vietnam that require such handling. It is felt that more thorough final screening of personnel records by CONUS POR Boards could preclude most of these administrative actions in Vietnam.

Observation: That personnel in country reassignments be scrutinized to preclude constant movement of undersirables for purposes other than rehabilitation. CONUS Commanders and POR Boards should screen out more potential problems prior to final deployment to Vietnam.

DA FORM 20 PERSONNEL MANAGEMENT

Item: Personnel reporting for duty in Vietnam with obsolete and incomplete records.

Discussion: An estimated 25% of all enlisted personnel in this command arrived in Vietnam with obsolete Form 20's.
have been made over under field conditions. This involves some 500 forms in 3rd quarters FY 66. This effort was obviously made at the expense of some other administrative requirements.

Observe that CONUS FOR boards require replacement processing stations to take care of this type administration.

SPECIAL SERVICES EQUIPMENT/PERSONNEL MANAGEMENT

Item: No control over issuance of special services equipment.

Discussion: The present system for acquiring special services equipment requires battalion to sign for it and then break it down to units. This battalion headquarters has no property book function nor is it authorized one.

Observation: Company accounts should be established at warehousing facilities.

OFFICER INFUSION/PERSONNEL MANAGEMENT

Item: Battalion officers rotational hump.

Discussion: Numerous proposals have been advanced on the method for eliminating the rotational hump. At least three one time reports on programmed and unprogrammed losses have been submitted by this headquarters. This battalion is capable of solving its own hump problem through a combination of internal infusion and advanced replacements. Although increments of requisitions were advanced, no firm data on replacements forecasts has been received and therefore plans for eliminating the hump cannot be finalized.
Requirements for aviators necessary to level the hump have been submitted to 12th Aviation Group and USA RV. Requirements include number of aviators and required arrival dates.

Observation: That a system of forecasting known gains, especially aviators, be developed. This battalion's first hump problem occurs in September/October 1966. Firm facts are required not later than 90 days prior to mid September.
AERIAL PHOTOGRAPHY/INTELLIGENCE

Discussion: It has proved difficult to obtain timely aerial photographs from either Army or Air Force channels of proposed helicopter landing sites.

These photographs are particularly useful for pilot orientation of combat assault landing zones.

The rule, rather than the exception, is to receive notification of combat assault landing zones 15 to 20 hours, and sometimes less, ahead of the assault.

An absolute minimum lead time for aerial photographs has been 24 hours and to be reasonably sure of getting coverage a 3 to 5 day lead time is more realistic. This amount of required lead time is unacceptable.

The use of a polaroid type camera for use at battalion level has been proposed to alleviate this problem. A polaroid type camera is on requisition but has not yet been received.

Observation: Present lead time for obtaining aerial photographs coverage is unsatisfactory. A polaroid type camera, at battalion or company level would probably alleviate this problem area.
AIRCRAFT LOADING/OPERATIONS

Item: Overloading vehicles to be airlifted.

Discussion: It has been habitually noted on recent operations from the CH-47 companies that 3/4 ton trucks to be loaded in CH-47's are loaded with filled sand bags and other heavy equipment. The cable cutter mounted on the front of these trucks has to be removed before aircraft loading. Trucks with filled sand bags or cable cutters cannot be loaded in the Chinook. Consequently, much time and effort is spent removing this equipment prior to loading these vehicles on the CH-47.

Observation: Educating all units that utilize the CH-47 for transporting 3/4 ton trucks that all filled sand bags, excess heavy equipment and wire hooks must be removed prior to the arrival of the CH-47's for internal loading.

ARTILLERY RECONNAISSANCE PARTY/OPERATIONS

Item: Artillery recon elements will precede the artillery into the landing zone.

Discussion: Artillery reconnaissance party and a Pathfinder team must precede the batteries into the selected landing zone. The recon party must select the position for each weapon and advise the pathfinders who will guide the helicopters to the preselected position.

Observation: The artillery reconnaissance party and pathfinder detachment must be manifested on the troop carriers airlifting
the security forces into the landing zone. The time span between the arrival of the security or combat assault troops and arrival of the airlifted artillery battery is normally 15 minutes which allows enough time for the weapon positions to be selected. Pathfinders using radios, smoke, and panels to mark each position guide the helicopters into position and place the weapon on the panel. A detailed briefing must be conducted for the reconnaissance party, pathfinders and pilots on the procedures to be followed.

**SLING CONSTRUCTION/OPERATIONS**

**Item:** Sling Construction.

**Discussion:** Many of the fabricated slings for lifting the 105mm howitzer are not long enough to allow safe cargo hook-up. Fabricated slings must be constructed long enough to give the pilot ample room to achieve a hook-up without damaging the aircraft or the equipment to be slung under the aircraft.

**Observation:** All artillery batteries operating in the III Corps area have been notified of the exact dimensions of these slings. Slings in service that do not meet this standard will be taken out of service and slings that are to be constructed will meet the minimum length requirement.

**CH-47 USAGE/OPERATIONS**

**Item:** Electric shock from CH-47 cargo hooks.

**Discussion:** A number of personnel have received electric shocks from the cargo hook on the CH-47. One individual
hooking a howitzer to the cargo hook was knocked 20 feet and was not breathing when he hit the ground. Quick thinking by another individual from this battalion in administering artificial resuscitation saved his life.

Observation: The grounding rod should be used when making these hook-ups. If the "rod" is grounded and aligned against the hook, any electric charge will run to ground and the nylon doughnut can safely be engaged to the hook without shocking the individual executing the hook-up. Extreme care will be taken while making these hook-ups to discharge all hooks before the doughnut is placed on the hook.

**CARGO REQUIREMENTS/OPERATIONS**

**Item:** Incorrect cargo weight being called in by the using units.

**Discussion:** Requests for cargo to be lifted by helicopters are called in from the using units. These requests often do not reflect the correct weight to be lifted.

Observation: All using units have been advised to be extremely careful when estimating helicopter loads. The exact weight is extremely difficult to obtain. However, close estimates are mandatory when estimating loads. All weights will be given in pounds and not tons. Rice bags, etc., have the weight stamped on the bag and these weights will be given when requesting a cargo lift. The number of bags is only important when determining the bulk amount of cargo.
CH-47 ROOR WASH/OPERATIONS

Item: The CH-47 produces 60 to 80 knot winds on approaches and take-offs.

Discussion: The CH-47 helicopter is a relatively new aircraft in the III Corps area. Most using units are not familiar with the "Chinook". The CH-47 cannot be landed near any tents or loose equipment due to the tremendous rotor wash this helicopter produces. Tents and other equipment have been blown over or destroyed when utilizing the "Chinook" CH-47 helicopter near such equipment.

Observation: A guide to the use of the CH-47 "Chinook" has been published by the 11th Aviation Battalion and distributed to all using units in the III Corps area. This guide shows a diagram of the size of a landing zone required and gives special instruction on the use of this helicopter.

COMBAT ASSAULT/OPERATIONS

Item: Door gunners are not needed during combat assaults when pre-planned artillery and TAC air strikes are continued during the assault.

Discussion: This battalion has pre-planned combat assaults to include artillery and TAC air pre-strikes with artillery and TAC air strikes continuing during the combat assault. This continuous fire has kept the VC down and has eliminated the need for the gunner. The heavy left or heavy right formation used by the lift helicopters has been such that the
the crew chief has control of the door gun on the side of
the aircraft where the enemy has the most concealment. This
type of operation requires close prior coordination with the
artillery and TAC Air to move the LZ pre-strike fires to a
position just off of the LZ and provide a corridor for the
helicopter to approach and depart the LZ.

Observation: The gunner is eliminated during this type of
assault allowing the lift helicopter to carry an additional
passenger; however, the gunner is required on any other type
mission in the combat zone.
PILOT TRAINING/TRAINING

Item: Training in a combat zone.

Discussion: Pilot training is extremely difficult to accomplish when combat requirements utilize more than 100% of the programmed flying hours on available aircraft.

a. Training must be accomplished prior to entering the combat zone.

b. Pilots must be qualified and proficient in the aircraft they will be flying in Vietnam prior to arrival in Vietnam.

c. Training within the combat zone is extremely limited, due to heavy operational commitments.

Observation: Almost all pilots are proficient in daylight contact flying; however, there are many deficiencies in night flying and instrument flying. The majority of flying executed in-country is contact, daylight flying; however, every effort must be made to keep pilots proficient in all aspects of flying. There is a need for more training in night for night instrument, and formation flights. Aviator training should include maximum gross loads in formation with approaches to the ground. Use of minimum navigational aids should be stressed. Effects of density altitude must be understood by all aviators.
PERSONNEL SHORTAGE/PATHFINDERS

Item: Shortage of qualified personnel in the pathfinder detachment.

Discussion: This unit has experienced serious shortage of qualified personnel to accomplish its missions. Continuous support of four airborne companies and two UH-47 companies, necessitates that more than one detachment be assigned to this battalion. In addition, personnel assigned to this detachment should be school trained pathfinders to minimize the requirements for training in this theater.

Observation: This battalion should be authorized another pathfinder detachment to support its operations. All replacements to the existing detachment should be school trained pathfinders.

EQUIPMENT SHORTAGE/PATHFINDERS

Item: Shortage of essential equipment.

Discussion: Serious shortages in equipment have been experienced by this unit. An NTOE was submitted in January to alleviate these shortages but no reply has been received to date. Items such as HAT-2 Housing Beacon, Glide Slope Indicator and MX-290 lights will be essential for periods of decreased visibility and night operations.

Observation: All equipment requested by NTOE should be issued without delay.
Item: Utilization of technical representatives.

Discussion: Due to the lack of experienced maintenance personnel within units of this headquarters, it has been found that a definite need exists for factory technical representatives, on site, to assist in the establishment of maintenance procedures and in the further instruction and training of assigned personnel. Without the utilization of the technical representative from Lycoming, it is felt that the 116th Arm Co and the 126th Arm Co would have removed from service at least double the number of engines which have been replaced.

Observation: This headquarters has requested that a Lycoming technical representative be assigned to the Phu Loi Airfield. A Lycoming technical representative is presently assigned to Bien Hoa and is not always available when needed by this battalion.
**REFRIGERATION/SUPPLY**

**Item:** Authorization of refrigeration units to all company size units and medical detachments.

**Discussion:** Authorization for refrigeration for company size units and medical detachments now requires an approval of a USARV Form 47 (authorization for excess of TO&E). Units are normally authorized refrigerators for mess halls and medical supplies as station property with no special authorization required. Submission of a USARV Form 47 is considered to be unnecessary for this type of requirement.

**Observation:** In order for mess halls and medical detachments to be fully operational on arrival in-country, refrigerators must be either issued prior to departure from CONUS or issued automatically on arrival in-country upon presentation of a properly prepared requisition.

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**GENERATORS/SUPPLY**

**Item:** Increase number of generators for units in Vietnam.

**Discussion:** The continued increase of electrical equipment and special tools, plus comfort items (refrigerators, fans, ice machines, radios, tape recorders) and the required 24 hour use of the TO&E generators has proved to be unsatisfactory for the forward air mobile company. In an effort to provide adequate aircraft for airborne operations, aviation companies have been directed to perform aircraft maintenance 24 hour a day. This requires the TO&E generators to operate on a continual
Item: Frequency of electrical storms.

Discussion: The hazards caused by heavy rains and electrical storms can become costly in the communications and power generating area. Danger to personnel and equipment is substantiated by recent storms.

Observation: Grounding of all electrical and communications equipment has been re-emphasized. Operation of the switchboard is suspended during periods of electric storm activity.
GO-NO-GO PLACARDS/SAFETY

Item: Installation and knowledge of Go-No-Go placards.

Discussion:

a. Each UH-1 aircraft should have installed a Go-No-Go placard which is current and valid.

b. The data on the Go-No-Go placard should be checked during each periodic inspection and brought up to date.

c. Each aviator should receive at least a one hour class in the use of the Go-No-Go placard.

Observation: All aviators should use the Go-No-Go placard for each take-off when the tactical situation permits. In doing this, the aviator will have some idea how much reserve power he has available during the critical period of take-off from hovering out of ground effect until reaching transitional lift.
MOSQUITO CONTROL/MEDEICAL SECTION

Item: Mosquitoes breeding in profusion in areas near Phu Loi.

Discussion: There have been no new cases of malaria in this battalion during the period. This is because of the continued medical and command emphasis on mosquito control. Low land areas, swamps, and stagnant water surround Phu Loi airfield, however, all stagnant water has had oil placed on it and a fogging machine has been fabricated and has been used in the sleeping areas nightly. Normally 55 gallons of oil base DDT has been dispensed during one spraying.

Observation: Spraying and placing oil on all standing water does cut down on the number of insects in an area.
COMMAND ORGANIZATION

HK, 11th Avn
Br - TOE
1-76E

AUTH - 0-1 WO-0 En-9
ASG - 0-1 WO-0 En-9

AUTH - 0-18 WO-2 En-64
ASG - 0-21 WO-5 En-15?
(Includes 7? Security Guards)

AUTH - 0-2 WO-0 En-13
ASG - 0-2 WO-0 En-13

116th Avn Co
(Airmob)
TOE 1-77E

AUTH - 0-14 WO-1 En-115
ASG - 0-20 WO-33 En-148*

128th Avn Co
(Airmob)
TOE 1-77E

0-14 WO-1 En-115
0-24 WO-25 En-146*

162nd Avn Co
(Airmob)
TOE 1-77E

0-14 WO-1 En-115
0-44 WO-9 En-121*

173rd Avn Co
(Med Hel)
TOE 1-258F

174th Avn Co
(Med Hel)
TOE 1-258F

176th Avn Co
(Med Hel)
TOE 1-258F

178th Avn Co
(Med Hel)
TOE 1-258F

392nd TC DET
TOE 55-500R

AUTH - 0-1 WO-1 En-70
ASG - 0-1 WO-1 En-61

393rd TC DET
TOE 55-500R

0-1 WO-1 En-70
0-1 WO-1 En-66

407th TC DET
TOE 55-500R

0-1 WO-1 En-70
0-1 WO-1 En-57

408th TC DET
TOE 55-500R

0-1 WO-1 En-80
0-1 WO-1 En-77

410th TC DET
TOE 55-510T

772nd Med DET
TOE 8-500D

AUTH - 0-1 WO-0 En-8
ASG - 0-1 WO-1 En-9

431st Medical
Det
TOE 8-500D

0-1 WO-0 En-8
0-1 WO-0 En-10

432nd Medical
Det
TOE 8-500D

0-1 WO-0 En-8
0-1 WO-0 En-9

56th Medical
Det
TOE 8-500D

759th Medical
Det
TOE 8-500D

*Includes Door Gunner Platoon
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