<table>
<thead>
<tr>
<th>UNCLASSIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD NUMBER</td>
</tr>
<tr>
<td>AD378098</td>
</tr>
<tr>
<td>CLASSIFICATION CHANGES</td>
</tr>
<tr>
<td>TO: unclassified</td>
</tr>
<tr>
<td>FROM: confidential</td>
</tr>
<tr>
<td>LIMITATION CHANGES</td>
</tr>
<tr>
<td>TO: Approved for public release, distribution unlimited</td>
</tr>
<tr>
<td>FROM: Distribution authorized to U.S. Gov’t. agencies and their contractors; Administrative/Operational Use; 21 JUN 1966. Other requests shall be referred to Assistant Chief of Staff for Force Development [Army], Washington, DC.</td>
</tr>
<tr>
<td>AUTHORITY</td>
</tr>
<tr>
<td>OACSFOR, D/A ltr, 13 Sep 1973; OACSFOR, D/A ltr, 13 Sep 1973</td>
</tr>
</tbody>
</table>

THIS PAGE IS UNCLASSIFIED
SECURITY
MARKING

The classified or limited status of this report applies to each page, unless otherwise marked. Separate page printouts MUST be marked accordingly.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.
CONFIDENTIAL

ARMY CONCEPT TEAM IN VIETNAM
APO San Francisco 96243

ACTIV-AAD

SUBJECT: Informal Evaluation of the Aviation Medium Helicopter Company in Counterinsurgency Operations (U)

TO: See Distribution

1. (U) The attached report on ACTIV action is forwarded for your information.

2. (U) This report is a compilation of data collected prior to the cancellation of the formal project "Employment of the Aviation Medium Helicopter Company in Counterinsurgency Operations (U)".

3. (U) Conclusions and recommendations have been included for information only.

Merrill J. Hatch

Colonel, Artillery
Chief

DISTRIBUTION:
SPECIAL

Regraded Unclassified
When Separated From Classified Inclosure

CONFIDENTIAL
1. (U) REFERENCES


2. (U) AUTHORITY


3. (U) PURPOSE

The purpose of this report is to provide interested agencies with data concerning the operation of the 133d Assault Support Helicopter Company and the 228th Assault Support Helicopter Battalion during selected combat operations. Information is also provided on the 147th Aviation Medium Helicopter Company.
CONFIDENTIAL

4. (U) BACKGROUND

Late in 1956, the Department of the Army announced plans to replace its piston-powered transport helicopters with turbine-powered equipment and to develop a new multi-turbine medium transport helicopter. In June 1958, invitations to submit management proposals for a new Army medium transport helicopter were sent to industry.

In September 1958, the Joint Army/Air Force Source Selection Board recommended to the Army that the Boeing Corporation Vertol Division be selected to produce the Chinook. The total cost of this program was, however, in excess of available Army funds. Coordination between US Army and industry produced design requirement changes, and an initial contract for a test quantity of TH-1B and HC-1B helicopters resulted from these negotiations. This contract was followed by production contracts in fiscal year 1961 and subsequent years. As of 28 February 1966, 161 CH-47A helicopters had been delivered to the Army. Programmed production for March 1966 was 9 per month. Production will increase in April 1966 to 10, and in September 1966 to 15.

The 11th Air Assault Division now redesignated the 1st Cavalry Division (Airmobile), incorporated a medium helicopter battalion in its TOE. This unit of 3 lift companies with a total of 48 helicopters was tested extensively in CONUS prior to its deployment to RVN in July and August 1965.

A separate Aviation Medium Helicopter Company (AMHC), the 147th, arrived in RVN 29 November 1965 and was assigned to the 11th Aviation Battalion, 12th Aviation Group and given the mission of direct support of the 1st US Infantry Division.

A formal evaluation of the Medium Helicopter Company was programmed by ACTIV; however, in January 1966, a USARV study was initiated which included a study of the effectiveness of the Medium Helicopter Company (CH-47A), and in February 1966 it was determined that the completion of a formal study by ACTIV was not required. By this time data had already been compiled concerning the subject, and it was determined that data would be provided interested agencies for such use as they might desire.

5. (C) DISCUSSION

a. General

The Army Concept Team in Vietnam (ACTIV) monitored the employment of the CH-47A companies during Operation "Echo" by the 1st Cavalry Division (Airmobile) in Vietnam. The project officer participated with the 133rd Assault Support Helicopter Company (ASHC), 228th Assault Support Helicopter Battalion (ASHB) during AI combat
In the An Khe area, the base camp for the 1st Cavalry Division (Airmobile), the Chinook was limited in pay load to 7000 pounds when operating to the west and 8000 pounds when operating to the east. This 2000 to 3000 pound loss in payload as compared to CONUS operations was caused by high density altitudes, confined areas with tall jungle canopy barriers, an increased crew (pilot, co-pilot, flight engineer, crew chief, and gunner), and the addition of armor, armament, ammunition, survival gear, radios, and navigation equipment. Airspeeds were being reduced to 80 to 85 knots at elevations above 3000 feet when carrying maximum loads.

The reduction in airspeed was caused by an aerodynamic limitation in the rotor system which did not permit full use of the installed power. It has been stated by the 228th ASHB that it would be desirable to reconfigure the Chinook in order to make it power-limited, which would permit use of the total power available, and result in increased airspeeds at higher elevations and maximum gross weight (speeds up to 130 knots would be desirable).

Each company in the 1st Cavalry Division (Airmobile) maintained an operational-ready average of 8 to 9 of their assigned 16 helicopters. The availability rate for the 228th ASHB has averaged 58 percent since its arrival in Vietnam.

The Chinook was not used during the initial assault of an area. The area was first secured by infantry, the Chinooks brought in the artillery (105 mm), and placed the pieces with their crews and ammunition in designated firing positions. On one mission, when the helicopters were forced by weather to fly low and slow, six of seven in the flight were hit by small arms fire. One crashed but the exact cause has not been determined. There were six personnel killed in the crash.

b. 228th ASHB

The helicopters performed a variety of combat assault support missions, the most significant being the placing of artillery batteries in perilous mountain positions, inaccessible by any other means, and in keeping them resupplied solely by helicopter. The average 105 mm howitzer battery was lifted in eight to nine sorties over a distance of 25 kilometers, registered and ready for battery fire in 1 hour and 30 minutes from commencement of the helilift at base camp. The supported infantry brigade commander said of the operation, "The Chinooks have been completely responsive, have met my every planned requirement, and the unit is performing its mission in an outstanding professional manner."

In the An Khe area, the base camp for the 1st Cavalry Division (Airmobile), the Chinook was limited in pay load to 7000 pounds when operating to the west and 8000 pounds when operating to the east. This 2000 to 3000 pound loss in payload as compared to CONUS operations was caused by high density altitudes, confined areas with tall jungle canopy barriers, an increased crew (pilot, co-pilot, flight engineer, crew chief, and gunner), and the addition of armor, armament, ammunition, survival gear, radios, and navigation equipment. Airspeeds were being reduced to 80 to 85 knots at elevations above 3000 feet when carrying maximum loads.

The reduction in airspeed was caused by an aerodynamic limitation in the rotor system which did not permit full use of the installed power. It has been stated by the 228th ASHB that it would be desirable to reconfigure the Chinook in order to make it power-limited, which would permit use of the total power available, and result in increased airspeeds at higher elevations and maximum gross weight (speeds up to 130 knots would be desirable).

Each company in the 1st Cavalry Division (Airmobile) maintained an operational-ready average of 8 to 9 of their assigned 16 helicopters. The availability rate for the 228th ASHB has averaged 58 percent since its arrival in Vietnam.

The Chinook was not used during the initial assault of an area. The area was first secured by infantry, the Chinooks brought in the artillery (105 mm), and placed the pieces with their crews and ammunition in designated firing positions. On one mission, when the helicopters were forced by weather to fly low and slow, six of seven in the flight were hit by small arms fire. One crashed but the exact cause has not been determined. There were six personnel killed in the crash.
Combat assault and combat support missions were flown above 2000 feet (actual) with rapid climbs and steep approaches. Generally, external sling loads were preferred for cargo hauls because the exposure time was reduced in the landing zone and the load could be jettisoned in the event of an emergency.

The established priority of missions for the 228th ASHB was:

1) Movement of direct support artillery
2) Logistical airlift missions
3) Other tactical airlift
4) Recovery of downed aircraft (on-call at all times)

For a detailed description of the command and control procedures used in the initial 10 days of Operation Mashar, see annex A. For command reports covering the period see annexes B and C.

The 1st Cavalry Division (Airmobile) was in the process of preparing an extensive study of TOE 1-167T (tentative), 22 June 1965 w/C-1, 1 November 1965, Assault Support Helicopter Company, Assault Support Helicopter Battalion, Airmobile Division and TOE 1-166T (tentative), 22 June 1965 w/C-1, 1 November 1965, Headquarters and Headquarters Company, Assault Support Helicopter Battalion, Airmobile Division, and will submit recommended changes. The major change already decided upon will be the addition of another company to the battalion. Each company has been locally augmented by 16 gunners, MOS 11B10, on the basis on one per helicopter.

c. 147th Aviation Medium Helicopter Company (AMHC)

Even though the mission assigned the 147th AMHC was direct support to the 1st Infantry Division, its first priority mission was recovery of downed aircraft in the III and IV ARVN Corps areas. Otherwise their priority of missions was the same as the 228th ASHB and there was very little difference in the method of employment.

Because the 147th conducted most of their operations in lowland areas in the Delta, they reduced their maximum cargo gross weight to 9500 pounds. (Their home base, Vung Tau, in Phuoc Tuy Province, is located on the South China Sea.) There were at least two incidents or minor accidents during February and March 1966 associated with dust clouds and high gross weight. As a result, the company commander began to study the problem of maximum weights with the thought of reducing the cargo below the 9500 pound limit.

The 147th's operational helicopter availability rate has averaged 74 percent. One contributing factor to this improvement.

CONFIDENTIAL
CONFIDENTIAL

over the availability rate of the 228th ASHB was that a transporta-
tion corps maintenance detachment was attached (2 officers and SO
EM) and located at the general and depot maintenance area.

The following is an extract of activities of the 147th
AMHC during the months indicated:

<table>
<thead>
<tr>
<th>Month</th>
<th>Tons of Cargo</th>
<th>Personnel</th>
<th>Sorties</th>
<th>Flight Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1965</td>
<td>845.2</td>
<td>5,271</td>
<td>1,054</td>
<td>517.0</td>
</tr>
<tr>
<td>January 1966</td>
<td>2,275.4</td>
<td>10,959</td>
<td>2,127</td>
<td>908.0</td>
</tr>
<tr>
<td>February 1966</td>
<td>2,548.2</td>
<td>9,436</td>
<td>1,928</td>
<td>831.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,668.8</td>
<td>25,766</td>
<td>5,119</td>
<td>2,256.5</td>
</tr>
</tbody>
</table>

The long standing major problem of "customer education"
still occasionally presented itself in the 1st Cavalry Division (Air-
mobile); sling loads were not properly prepared, or a gunner's sight
was left on an artillery piece. In the units supported by the 147th
AMHC, however, improper loading was an even greater problem. There
was a shortage of sling equipment, a lack of understanding of responsi-
bilities, and in some cases reluctance on the part of commanders to
permit their equipment to be carried by sling load. Unfortunately,
there were a few incidents of loss of a load because of sling failure
and inadvertent hook release and, in some cases, improper releasing
of the load in the landing zone (LZ). However, these incidents de-
clined with standardization of sling equipment and procedures and in-
creased crew proficiency. Supported units other than US had an even
greater lack of understanding of the use of the medium helicopter.

The 147th AMHC was organized under TOE 1-258F, 16 February
1965, and had attached the 171st Transportation Detachment, which pro-
vided direct support maintenance. The company was augmented by one
EM in the personnel section and one armorer. Recommended changes have
been submitted, the most significant of which is replacing the OH-13S
(two each) with the UH-1D for use of liaison parties. The most ap-
parent difference between this company's TOE and that of an ASHC is
that the 147th has more vehicles and water trailers and is generally
better prepared to support itself administratively.

6. (c) FINDINGS

a. The aviation medium helicopter companies were successfully
accomplishing various missions in Vietnam. These missions included, but
were not limited to, combat support airlift of artillery, ammunition,
troops, casualties, downed aircraft, equipment, and supplies.
b. The loads which had the most significant impact on accomplishment of the ground mission were artillery moves and emergency resupply.

c. In the An Khe area the Chinook carried a maximum cargo of 7000 to 8000 pounds. In the delta and coastal plains it carried up to 9,500 pound loads. (This was in the full fuel flight configuration.)

d. The sustained operational availability rate for the companies in the 228th ASHB, 1st Cavalry Division (Airmobile) was 8 to 9 helicopters (58 percent). The 147th Aviation Medium Helicopter Company, from December 1965 through February 1966, had 11 to 12 helicopters (74 percent) operationally available. These availability rates could be increased for short periods of time by allowing a planned reduction in operations.

e. During an airmobile assault the Chinook normally delivered artillery into forward firing positions after the landing zone had been secured by infantry. All landings were normally made in secure areas.

f. Troop training was inadequate in the preparation of vehicles and equipment for sling load operations.

g. Recommended TOE changes were being submitted by all CH-47A units. The major changes included the addition of one company to the 228th ASHB and replacing the CH-13S with the UH-1D in the 147th Aviation Medium Helicopter Company.

7. (C) CONCLUSIONS

It is concluded that:

a. The Aviation Medium Helicopter Companies equipped with the CH-47A helicopter are suitable to perform their tactical and logistical airlift mission in the counterinsurgency environment of the Republic of Vietnam and provide responsive combat support.

b. It would be desirable for all US divisions and separate brigades in RVN to have medium helicopter support available to enhance their airlift capabilities.

c. The sustained operational availability rate is adequate to perform responsive medium helicopter support over an extended period of time.

d. Additional troop training is required in the preparation of vehicles and equipment for sling load operations.

e. Recommended changes in the TOE should enhance the capabilities of the medium helicopter companies in the performance of
their mission.

f. An increased capability of airspeed and load is desirable at higher elevations.

3. (C) RECOMMENDATIONS

It is recommended that:

a. Additional companies be formed to give all US divisions responsive medium helicopter support equal to that available to the 1st Cavalry Division (Airmobile), with priority of assignment to Vietnam.

b. Table of Organization and Equipment 1-166T, with changes recommended by the 1st Cavalry Division (Airmobile) be followed for airmobile divisions.

c. Table of Organization and Equipment 1-258P, with changes recommended by the 147th AMHC, be followed for divisions other than airmobile.

d. Slings be included in the TOE of all 105 mm artillery units and remain with the pieces as OEM.

e. Tactical units supported by the CH-47A have appropriate webbing immediately available in the event of medium helicopter support.

f. The CH-47A be modified in orvis to increase its load and airspeed capability at higher elevations.

ANNEXES

Annex A - Operation Masher
Annex B - Command Report, 133d ASHC
Annex C - Command Report, 228th ASHB
Annex D - Distribution
CONFIDENTIAL

(C) ANNEX A

OPERATION MASHER

The purpose of this annex is to document the command and control methods employed by the 228th ASHB during Operation Masher. The 228th commands and controls the 132d, 133d, and 202d Assault Support Helicopter Companies (ASHC) known locally as Companies A, B, and C.

Masher was conducted in the vicinity of Bong Son, Binh Dinh Province, RVN, commencing 24 January 1966 (D day was 28 January 1966) with the 3d Brigade (1/7 Cavalry, 2/7 Cavalry, 1/12 Cavalry, and 2/12 Cavalry with 1/21 Artillery (reinforced)) given the mission, "conducted atk vic hill mass south of Bong Son and east of Hwy 1 as a diversion for div main effort and as a recon force to enhance loc sec, ... atks north from vic Bong Son to loc and dest all enemy forces in area bounded roughly on the east by Hwy 1 and on the west by the crest of the hill mass overlooking the coastal plain ..."

Initially the 133d ASHC was in general support (GS) with priority to the 3d Brigade. For 10 days this remained a company operation and was the time frame for this evaluation. With the employment of additional ground troops (the 2d Brigade) the requirement for airlift increased and the Chinook operational control was assumed by battalion.

The Commanding Officer, 3d Brigade determined the CH-47A lift requirement to support his mission during Operation Masher to be 16 helicopters. The 11th Aviation Group assigned the 228th ASHB the mission of GS with priority to the 3d Brigade and directed that one ASHC (16 CH-47's) be displaced to the vicinity of Phu Cat not later than 251800 January 1966 and to be prepared to support the operation for a period of 14 to 21 days. The battalion in turn assigned a lift mission by oral orders to Company B (133d ASHC) (reinforced). At that time Company B had 11 to 12 flyable helicopters and operating crews, but could only provide 8 on a sustained basis. The other two companies were directed daily to attach to Company B the required number of operational crews and helicopters to maintain a minimum of 16 available to Phu Cat. The forward party from Company B consisted of the company commander, operations officer, complete flight crews for eight helicopters, (a flight crew consists of a pilot, co-pilot, flight engineer, crew chief, and an aerial gunner), maintenance officer, and four to five specialists (electronics, avionics, technical inspectors, general mechanics) and four personnel from the Service Platoon to operate POL and a field mess. The company rear remained in place at An Khe (the division base) under control of the executive officer. (A local augmentation; no executive officer is authorized.)

A coordination briefing was held at the 3d Brigade CP at An Khe on D minus 5. In attendance were the brigade CO, his staff, the
battalion commanders of the four assigned cavalry battalions, commanding officers of the 15 artillery and the 3d Forward Support Element (FSE), Commanding Officer, 228th ASHB, members of his staff and the Company Commander, Company B. The conference included briefings by each of the brigade staff officers, the brigade commander, and each battalion commander. Covered in detail were the ground tactical plan, the intelligence requirements, the assault landing plan, the air movement plan, supporting plans, and operational and logistics requirements. The area of primary interest to CO, Company B was the detailed coordination for subsequent troop and artillery lifts.

A battalion liaison officer and a company liaison officer (a flight leader) were dispatched to the 3d Brigade Headquarters to establish liaison at the tactical operations center (TOC). An additional company liaison officer was dispatched to the 3d FSE. Lift missions received by the liaison officers were monitored by battalion and accomplished by the company. Flights of helicopters were dispatched in two groupings. One flight executed specific planned missions for the brigade headquarters (called the tactical flight) and the other operated routinely for the FSE (the support flight). Detailed briefings were held each morning at the company forward area (Phu Cat) in which flight leaders and crews were assigned by helicopter tail number to each of the operating flights. Specific details included the supported unit, type of loads, communications, weather, artillery information and control measures, time intervals, enemy situation, and codes.

The major accomplishments of the company were movement of the brigade advance CP and two 15 artillery batteries to position Dog on D minus 1, movement of the 2/21 Artillery (-) to LZ Mike, and resupply of 105 mm ammunition (2500 to 3000 rounds). Because of heavy action, night resupply of ammunition was required. Ground searchlights and pathfinders (called Black Hats) directed the Chinooks through minimum operational weather conditions to the LZ's in order to deliver an additional 1200 rounds in 7 loads. Artillery was relocated at position Brass and resupplied. During this mission low ceilings and poor visibility dictated that the Chinooks be operated at low altitude and slow airspeed and six of the seven committed helicopters were hit by enemy ground fire. One other Chinook crashed (six KIA). On D plus 1 and D plus 2 emergency resupply of the FSE was required, downed OH-1 and OH-13S helicopters were recovered, 60 to 70 refugees were evacuated, and several medical evacuation missions were required. On an evacuation of an armed scout OH-13S, the company commander was killed by enemy ground fire.

Upon commitment of the 2d Brigade by the division commander, the 228th ASHB assumed control of the Chinook lift operation.
SUBJECT: Command Report for 1-31 January 1966

TO: Commanding Officer
    228th Assault Support Helicopter Battalion
    ATTN: S-3
    1st Cavalry Division (Air Mobile)

1. UNIT ACTIVITIES

   a. During January, one (1) Warrant Officer became a morning
      report loss due to being hospitalized in November 1965. Eight (8) EM
      became morning report losses due to ETS and hospitalized. Only one
      (1) newly assigned EM was received during the month.

   b. The Company Commander, Major Taylor D. Johnson, was killed
      in action on 28 January 1966. In addition, two (2) EM were wounded
      in action the same day. On 29 January 1966, two (2) Officers and four
      (4) EM were killed in an aircraft crash cause unknown. The crew was
      Capt Hardin, CWO Roop, SP6 Bair, SP5 Turner, C., SP4 Arnold, and SP4
      Luna.

2. OPERATIONS

   a. During the month of January 1966, this unit was assigned
      or in support of 130 missions. All of these missions were completed
      except for the following:

      (1) Weather 3

      (2) Cancelled by requestor 3

   b. For the period 1 January thru 31 January 1966, sixteen
      CH-47's assigned to this unit flew 526 hours, 805 useful sorties,
      transferred 3212 passengers, and 1608.8 tons of cargo. Included in
      this data were an average of eight (8) aircraft in support of 3rd
      FSE and 3rd Bde operations at Bong Son.

   c. Statistical data for operation MASHER in area Bong Son
      for 24 January thru 31 January 1966 were:
CONFIDENTIAL

AWCAV-AS-RR

SUBJECT: Command Report for 1-31 January 1966

3 February 1966

(1) Total Sorties: 443
   (a) 3rd Bde—231
   (b) 3rd FSE—212

(2) Total Useful Sorties: 222
   (a) 3rd Bde—116
   (b) 3rd FSE—106

(3) Total Hours Flown: 175+25
   (a) 3rd Bde—81+35
   (b) 3rd FSE—93+50

(4) Total Passengers Flown: 1600
   (a) 3rd Bde—1252
   (b) 3rd FSE—348

(5) Total Tons Cargo Transported: 630.0
   (a) 3rd Bde—259.0
   (b) 3rd FSE—371.0

d. Two aircraft received intensive small arms hits on 28
   January 1966. Helicopter 6413124 received nine (9) 30 caliber hits
   at stations 50A, 48A, 242, 220, 164, 80, 75, 170, and 545 at coordinates
   860073. Due to the damage inflicted, the crew, CWO Henderson,
   CWO Givelawski, SP6 Reigan, SP6 Johnson and PFC Suiga were forced
   to land in an unsecured area, one (1) crew member was wounded. Helio-
   copter 6413109 received seven (7) 30 caliber hits at stations
   520, 240, 80, 480, 139, 355, and 500 at coordinates 870065. The
   crew, CWO Fitch, Capt Smitherman, SP6 Roberts, SP5 Falls, and PFC
   Corbin flew the helicopter back to LZ "Dog". Both A/C were flown
   back to Phu Cat.

e. On 28 January 1966, aircraft 6413134 received twenty 30
   caliber hits in fuselage and blades between stations 21 to 575 while flying
   a H-13 recovery mission at coordinates 885072. One (1) crew member
   was killed. A/C was flown back to Phu Cat.

f. On 29 January 1966, aircraft 637913, while on a POL re-
   supply mission crashed. Six (6) crew members were killed.

g. Fifty-three maintenance and functional test flights were
   performed in 30+05 hours during this reporting period.

ANNEX B

CONFIDENTIAL
3. PROBLEMS ENCOUNTERED

a. Due to the distance and terrain involved between the helicopter operations area and the 3rd Bde Command Post, communications was a problem. HF was not reliable due to incessant interference; therefore, FM was the primary source of communication. The problem was finally rectified by utilizing a relay. Response for placing, maintaining and supporting a relay station should be more definite.

b. Artillery firing information is not timely or functional. Information generally was outdated or if put over the ATC control net, they utilized predetermined lettered squares. This system is not desirable as each aviator would be required to have a acetate sheet larger that cockpit area with the squares plotted. Recommend a circular system which is utilized at Golf Course, be utilized from each IZ.

c. Current tactical overlays and situation charts are not available in the field. The aviators should have this information in case of going down in an A/C for escape and evasion purposes as well as personal knowledge of the situation.

d. Supported units are still not allowing sufficient maintenance time in the morning after intensive night operations.

e. Shortage of ten (10) rotary wing aviators have created grave difficulties in providing flight crews.

f. Shortage of nine (9) plus EM has crippled aircraft maintenance. We are short three (3) gunners, Six (6) personnel out of the service platoon and are carrying additional slots in maintenance as filled; however, these men are not here and their status is unknown.

g. "Taylor Snake Pit" — Fill became almost impossible to obtain to fill up the rice paddy which covers approximately 1/3 of this unit's area.

4. RECOMMENDATIONS

a. On all operations which require long distance communications over mountainous terrain, that a radio relay be established as early in the operation as possible. This should provide a greater communications reliability.

B-3

CONFIDENTIAL
CONFIDENTIAL

AVGAV-AS-888

SUBJECT: Command Report for 1-31 January 1966

b. Some sort of easy, quick, reference artillery firing information system which doesn't over burden the aviators, be established.

c. Supported units be advised of maintenance requirements during daylight hours.

d. That continued efforts be made to obtain TO&E personnel shortage.

/s/William H. Lewandowski

WILLIAM H. LEMANDOWSKI
Major, Arty
Commanding

"A TRUS COPY"

/s/DAVID H. MONEY

DAVID H. MONEY
Lt Colonel, Inf
Project Officer

ANNEX B

B-4

CONFIDENTIAL
CONFIDENTIAL

HEADQUARTERS
228TH ASSAULT SUPPORT HELICOPTER BATTALION
35TH CAVALRY DIVISION (AIRMOBILE)
APO San Francisco, California 96490

AVCAV-AS-L

SUBJECT: Command Report (1-31 January 1966)

TO: Commanding Officer
11th Aviation Group (Airmobile)
1st Cavalry Division (Airmobile)
APO US Forces 96490

4 February 1966

1. (C) Significant Headquarters and Unit Activities:

The activities that this battalion and its subordinate units were primarily engaged in during this period are as follows:

a. ........................................

b. ........................................

c. During the period 24 January continuing through the end of the month the 133rd Assault Support Helicopter Company, reinforced by the 132nd and 202nd Assault Support Helicopter Companies was in support of Operation "Masher". This operation encompasses the Phu Cat - Bong Son area. Units primarily supported are Headquarters 3d Brigade, 1/7 Cavalry, 2/7 Cavalry, 1/12 Cavalry, 2/12 Cavalry, 1/21 Artillery (+), and the 3d Forward Support Element. The 133rd Assault Support Helicopter Company (+) with 16 CH-47's moved to coordinates BR901518 and established a forward base of operations. On 28 January 5 CH-47's received multiple hits from small arms. The Commanding Officer, 133rd Assault Support Helicopter Company sustained a fatal wound, while recovering a 1/9 Cavalry OH-13 helicopter. Three persons were wounded in action that day. All 5 CH-47's were recovered and are under repair at "B" level maintenance. ................

d. ........................................

e. During the period 1-31 January the battalion accomplished the following:

(1) Persons lifted .................................. 15,896
(2) Cargo transported .................................. 6,484.1 T

C-1

ANNEX C

CONFIDENTIAL
CONFIDENTIAL

(3) Sorties Flown 5,275
(4) Total OH-13 Hours Flown 101.00
(5) Total CH-47 Hours Flown 2,072.00
(6) Total Hours Flown 2,173.00
(7) CH-47 Availability 58%

f. ........................
g. ........................

h. There still is an urgent need for shock absorbers, engine transmissions, flight boost pumps and auxiliary power units.

i. ........................

j. The PIL for the CH-47 presently stands at 71% of authorized line items on hand. ........................

........................

s/Max A. Clark
/t/MAx A. CLARK
Lt Col, Inf
Commanding

"A TRUE EXTRACT COPY"

DAVID H. MONE
Lt Col, Inf
Project Officer

ANNEX C

C-2

CONFIDENTIAL