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AGO ltr 29 Apr 1980; AGO ltr 29 Apr 1980

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IN REPLY REFER TO
AGAM-P (M) (23 Aug 68) FOR OT RD 682185

6 September 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 307th Combat Aviation Battalion, Period Ending 30 April 1968 (U)

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2. Information contained in this report is provided to insure that the Army realizes current benefits from lessons learned during recent operations.

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KENNETH G. WICKHAM
Major General, USA
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1 Incl

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  307th Combat Aviation Battalion
AVBN-P

15 May 1968


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1. Section 1, Operations: Significant Activities.

   a. (U) Mission: To provide command, control, staff planning, administrative and pathfinder support for the 199th and 221st Reconnaissance Airplane Companies, the 235th Armed Helicopter Company, the 244th Surveillance Airplane Company and be prepared to exercise operational control for additional aviation units that may be assigned or attached. Specifically, the battalion must provide aerial fire support, aerial observation, reconnaissance, surveillance and target acquisition support for the Republic of Vietnam (ARVN) IV Corps.

   b. (U) Organization: During the reporting period, the 307th Combat Aviation Battalion consisted of the following units with attachments:

      (1) (U) Headquarters and Headquarters Company 307th Combat Aviation Battalion and the 52nd Quartermaster Detachment attached stationed at Soc Trang, RVN (APO San Francisco 96296).

      (2) (U) The 199th Reconnaissance Airplane Company (O-1) stationed at Vinh Long, RVN (APO San Francisco 96357).

      (3) (U) The 221st Reconnaissance Airplane Company (O-1) with the 325th Signal Detachment (RL) attached and stationed at Soc Trang, RVN (APO San Francisco 96296).

      (4) (U) The 235th Armed Helicopter Company with the 608th Transportation Detachment (KD) and the 190th Signal Detachment (RL) attached and stationed at Can Tho, RVN (APO San Francisco 96215).

      (5) (U) The 244th Surveillance Airplane Company with the 502nd Transportation Detachment (KD) and the 537th Signal Detachment (RL & RX) attached and stationed at Can Tho, RVN (APO San Francisco 96215).

      (See Organization and Stationing Chart, Incl 1)
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c. **Command Group Personnel:**

(1) (U) The 307th Combat Aviation Battalion had relatively few changes in the command group and the principal staff positions did not change during the reporting period. It is significant that the battalion had an executive officer for only 50 days of the reporting period and at present does not have an executive officer assigned. The battalion did not have an aviation maintenance officer for 41 days of the reporting period and does not have one assigned at the present time. This shortage of a special staff officer results in a severe handicap to this battalion in committing its resources because of the lack of proper evaluation of aircraft maintenance in the overall planning for operations. The frequent and short tenure of Aircraft Maintenance and Safety Officers precluded the development of adequate and viable maintenance and safety programs. The shortage of junior officers and warrant officers on the staff limited the primary staff capabilities to merely sustaining operations.

(2) (C) **Composition of Battalion Command Group:**

<table>
<thead>
<tr>
<th>Position</th>
<th>Rank</th>
<th>Name</th>
<th>SN</th>
<th>Assigned</th>
<th>Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commander</td>
<td>LTC</td>
<td>Charles F Hutchins</td>
<td>077053</td>
<td>21 Dec 67</td>
<td>N/A</td>
</tr>
<tr>
<td>Exec Off</td>
<td>LTC</td>
<td>Floyd O Eberhard</td>
<td>088666</td>
<td>29 Feb 68</td>
<td>19 Apr 68</td>
</tr>
<tr>
<td>S-1</td>
<td>MAJ</td>
<td>Cornell L Ullman</td>
<td>05704892</td>
<td>10 Nov 67</td>
<td>N/A</td>
</tr>
<tr>
<td>S-2</td>
<td>MAJ</td>
<td>Curtis J Herrick</td>
<td>090064</td>
<td>23 Jan 66</td>
<td>N/A</td>
</tr>
<tr>
<td>S-3</td>
<td>MAJ</td>
<td>Joe D Berry</td>
<td>OP106038</td>
<td>3 Dec 67</td>
<td>N/A</td>
</tr>
<tr>
<td>S-4</td>
<td>MAJ</td>
<td>Samuel P Morse</td>
<td>02014460</td>
<td>12 Dec 67</td>
<td>N/A</td>
</tr>
<tr>
<td>Signal</td>
<td>CPT</td>
<td>Walter G Hicks</td>
<td>05317127</td>
<td>14 Feb 68</td>
<td>N/A</td>
</tr>
<tr>
<td>A/C Maint</td>
<td>MAJ</td>
<td>Brooks R Homan</td>
<td>01941336</td>
<td>15 Jan 68</td>
<td>5 Mar 68</td>
</tr>
<tr>
<td></td>
<td>MAJ</td>
<td>Dale G Ruebman</td>
<td>01930234</td>
<td>5 Mar 68</td>
<td>6 Mar 68</td>
</tr>
<tr>
<td>Safety</td>
<td>MAJ</td>
<td>Ronald J Sprengeler</td>
<td>091517</td>
<td>18 Dec 67</td>
<td>7 May 68</td>
</tr>
<tr>
<td></td>
<td>MAJ</td>
<td>Willis B Anderson</td>
<td>0999030</td>
<td>6 Apr 68</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(3) (U) **Subordinate Unit Commanders:**


(b) Commanding Officer 199th Reconnaissance Airplane Company: Major John S. Jacob, OP104822, 1 December 1967 to present.

(c) Commanding Officer 221st Reconnaissance Airplane Company: Major James R. Mallish, 071229, 1 December 1967 to present.

2

(e) Commanding Officer, 244th Surveillance Airplane Company: Major James A. Bond, 099556, 31 January 1968 to present.

d. (C) Unit Strength as of 30 April 1968 and Casualty Statistics for Quarter Ending 30 April 1968:

(1) (C) Military:

<table>
<thead>
<tr>
<th>Subordinate Unit</th>
<th>Officer Auth O/H</th>
<th>WO Auth O/H</th>
<th>EM Auth O/H</th>
<th>Total Auth O/H</th>
<th>WIA</th>
<th>KIA</th>
<th>MIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>199th RAC</td>
<td>22</td>
<td>30</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td>99</td>
<td>130</td>
</tr>
<tr>
<td>221st RAC</td>
<td>42</td>
<td>38</td>
<td>1</td>
<td>1</td>
<td>123</td>
<td>104</td>
<td>166</td>
</tr>
<tr>
<td>235th AHC</td>
<td>15</td>
<td>16</td>
<td>42</td>
<td>30</td>
<td>214</td>
<td>209</td>
<td>271</td>
</tr>
<tr>
<td>244th SAC</td>
<td>17</td>
<td>28</td>
<td>22</td>
<td>1</td>
<td>323</td>
<td>351</td>
<td>362</td>
</tr>
<tr>
<td>HHC 307 CAB</td>
<td>18</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>75</td>
<td>75</td>
<td>109</td>
</tr>
<tr>
<td>52d QM Det</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>307 CAB Total</td>
<td>124</td>
<td>122</td>
<td>69</td>
<td>36</td>
<td>853</td>
<td>859</td>
<td>1046</td>
</tr>
</tbody>
</table>

(2) (C) Civilians:

<table>
<thead>
<tr>
<th>Subordinate Unit</th>
<th>DAC Auth O/H</th>
<th>VN Auth O/H</th>
<th>3d Natl Auth O/H</th>
<th>Contractor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>221st RAC</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>307th CAB Total</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

e. (U) Decorations Received for Quarter Ending 30 April 1968:

(1) Distinguished Service Cross - 1
(2) Silver Star - 2
(3) Distinguished Flying Cross - 9
(4) Soldiers Medal - 2
(5) Bronze Star - 7
(6) Bronze Star with "V" - 3
(7) Air Medal - 60
(8) Air Medal with "V" - 16

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The reporting period began with units heavily committed in support of the IV Corps. The first of February was the third day of the VC initiated TET offensive. The three major airfields of Can Tho, Vinh Long and Soc Trang were attacked simultaneously on the night of 29 January 1968. Continuous pressure was applied to the airfields throughout the month of February 1968. The twelve stagefields, where this battalion has O-1 aircraft stationed (incl 4) in direct support of Province headquarters, were also attacked in much the same manner as the major airfields. The major attacks by the VC were normally initiated by mortar or recoilless rifle fire and followed by a ground attack. The VC did not attempt to follow through each attack with a ground assault but did follow through in enough instances with a ground probe so that considerable effort had to be expended to prevent the VC from finding a weakness in the defensive posture. The Viet Cong were fanatical in their attacks as was evident when documents captured during the attacks revealed that there were no plans for withdrawal and that popular support would be gained. The 235th Armed Helicopter Company was the deciding factor in silencing the indirect fire weapons employed against Can Tho City and Airfield. Armed Helicopters were the key to denying the three (3) major airfields in the Delta to the Viet Cong and immediately caused the cessation of the Viet Cong indirect fire weapons in every instance when an attack occurred. Fiercely fought ground attacks were repulsed by the 244th SAC and 235th AHC at Can Tho and the 199th RAC was instrumental in evicting an entrenched enemy from Vinh Long Airfield. Only light casualties were sustained. The month of March found pressure relieved upon the airfields and major population centers; however, harassing attacks with indirect fire weapons have occurred throughout the reporting period on an infrequent basis.

The month of March, the battalion began the assumption of a supervisory role in the logistic management of the twelve (12) stagefields throughout the Delta. The 164th CAG delegated the management of the pre-stock at the stagefields which must be maintained to insure airmobile operations can be sustained. To implement this change, the 52nd Quartermaster Detachment (POL) was assigned to the 307th Combat Aviation Battalion on 9 March 1968. The personnel of this detachment were further assigned to the Reconnaisance Airplane Companies and placed at each stagefield under the senior army aviator located at the...
fields. This insures that the supervision of the stages field and management of the POL and dispensing equipment is adequately controlled.

(3) (C) The battalion, in the early part of March 1968, submitted to 6-2 IV Corps Advisor, a plan whereby the strike capability of the battalion could be married up with the vast surveillance and reconnaissance abilities in the battalion. Numerous sightings and indications found by the eyes of the Delta, the 244th SAC (OV-1) Delta Hawks, the 197th RAC (0-1) Swampfoxes and the 221st RAC (0-1) Shotguns were compiled by intelligence agencies and revealed a vast infiltration network through which supplies were flowing to the VC from the Cambodian border unchecked.

(a) (C) A night interdiction operation employing the concept of a light fire team of AH-1G (Cobras) and two (2) OV-1’s (Mohawks) was initially tested. Under this concept, a free fire zone, in which a curfew was enforced, was established and an IR (OV-1C) Mohawk was dispatched followed by a Mohawk equipped with flares and the fire team of AH-1G Cobras. Upon the IR aircrafts finding a target, the flare ship dropped flares and the target was immediately engaged by the armed helicopters. This concept was highly successful but required instantaneous clearance to fire to prevent the loss of surprise gained from using the electronic surveillance.

(b) (C) The outgrowth of this initial concept of night interdiction was a day and night search and destroy operation called the Delta Falcon. The results of this specific operation are as follows:

(Delta Falcon 5 March - 19 April 68)

| VC KBA       | 136 |
| VC KIA       |    43 |
| POW’S        |    37 |
| WIA          |     28 |
| Individual Weapons Captured (Incl Mi) | 281 |
| Ammunition Captured | 26,564 lbs |
| Crew Served Weapons Captured | 16 |
| Anti-Aircraft Weapons Captured | 16 |
| Food Captured | 11,600 lbs |
| Structures Destroyed/Damaged | 224/182 |
| Sampans Destroyed/Damaged | 420/100 |
| Oxen killed | 13 |

This Delta Falcon Concept utilized all of the different assets of the battalion to seek out the enemy on his infiltration and commando liaison routes and destroy him. The concept was employed in those provinces of the IV MVN Corps which bordered the Cambodian border. Bird dog (0-1) aircraft were sent out at first light to check known routes and areas where the night interdiction effort had been employed. The armed
helicopters were dispatched shortly afterward to check out the 0-1 sightings and confirm areas of probable activity by low level visual reconnaissance. On call at a staging area or an airborne check point were from 4 to 6 troop carrying helicopters with a ground element under the operational control of the Delta Falcon air mission commander. These troops were placed on the ground for very short periods of time at suspicious areas and areas engaged by the armed helicopters to search and evaluate the damage inflicted, capture supplies and gain all of the possible intelligence from these areas. The force was not to become engaged but was only to evaluate the situation for further exploitation by an airmobile force or ground attack. The ground element was made up of local Vietnamese troops thoroughly familiar with the area and normally the elite force of the provincial area. Because of the rapidity of the operation, numerous targets and sightings could be checked daily. The concept has evolved into a polished team of OV-1 and 0-1 daylight sightings receiving prompt action by a strike force and then night sightings of the electronic surveillance aircraft being engaged immediately and evaluated, or if necessary, during daylight by the strike force.

(c) (c) The success of the Delta Falcon concept has generated targets in excess of the strike capability of this battalion and the area of operation extended over distances which could not effectively be screened and the use of routes therein denied the enemy. Therefore, on 20 April 1968, "C" Troop, 7th of the 1st Air Cavalry Squadron was placed under the operational control of the Senior Advisor IV ARVN Corps to aid in the interdiction effort. The supervision of this OPCON unit has been delegated to the 307th Combat Aviation Battalion, and a gradual phase-in of the Cavalry Troop to assume the entire mission has been accomplished.

(4) (C) The 0-1 units have continued to provide the visual reconnaissance and surveillance in direct support of the sixteen (16) Province Headquarters and ARVN 7th, 9th, 21st Divisions and 44th Special Zone. The assignment of aircraft, locations and unit exercising operational control is portrayed in inclosure 4. The OV-1 unit has contributed heavily to the overall intelligence gathering effort in IV Corps and fully supported the Corps surveillance plan. The unit operates with the data processing capabilities consolidated at Can Tho which is the center of the Delta and headquarters for IV Corps. The Corps G-2 Air then evaluates and forwards the information to VN channels, to higher headquarters and down to the user level. The following statistics show the number of missions accomplished by the eyes of the Delta:

**SORTIES FLOWN FROM 1 FEBRUARY TO 30 APRIL 1968**

<table>
<thead>
<tr>
<th>Type Aft</th>
<th>VR</th>
<th>Photo</th>
<th>IR</th>
<th>SLAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>10,623</td>
<td>21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OV-1</td>
<td>258</td>
<td>213</td>
<td>440</td>
<td>335</td>
</tr>
<tr>
<td>Total</td>
<td>10,881</td>
<td>234</td>
<td>440</td>
<td>335</td>
</tr>
</tbody>
</table>
(5) (U) The 275th Armed Helicopter Company became the U.S. Army's first complete Huey Cobra gun company in late February and comparison of the AH-1G capabilities and missions with previous gunships is being evaluated. At present the AH-1G has been able to assume all of the typical missions previously handled by the older UH-1B/C model gunships. The availability rate of the aircraft has been less than the older model aircraft, but this stems from a shallow build up of PLL/ASL items and a high EDP rate for the aircraft.

(6) (U) The Battalion has been successful in providing the necessary tactical combat support and direct combat support to IV ARVN Corps, the IV Corps MACV Advisory Group and U.S. Special Forces. The mission of the battalion is being accomplished daily. Statistics generated in support of these missions are in enclosure 3.

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

a. Personnel.

(1) (U) Project Fix Personnel.

(a) OBSERVATION. Personnel assigned to units on a 90 day TDY status greatly enhanced the maintenance effort of this battalion.

(b) EVALUATION. The personnel selected for the 90 day loan period from CONUS to in-country units provided the man hour difference that was needed to cope with the increased guard and maintenance hours created by the TET offensive. The majority of the personnel assigned were combat veterans of previous tours in Vietnam and the experience level far surpassed the normal replacement personnel. There was no morale or disciplinary problem involved with these enlisted men and the general military attitude of, "There is work to be done and we can do it," prevailed for the entire 90 day period. The only significant problem area associated with these personnel was that the battalion didn't know they were coming and initially a shortage of some items of organizational equipment were not available (e.g., rifles, steel helmets, flak vests, protective masks and cots).

(c) RECOMMENDATIONS. This technique should be retained as an adequate method of augmenting over committed units in any theater of operation. Should this method of augmentation be employed in the future, a means of outfitting individuals with necessary organizational equipment should be programmed in the planning phase.

b. Operations.

(1) (U) Evacuation of Aircraft.
(a) OBSERVATION. Prior planning of evacuation of aircraft because of weather or enemy action must be accomplished to insure safety of operation and control.

(b) EVALUATION. During the TET offensive aircraft were ordered to be evacuated numerous nights from base airfields to alternate airfields. Sometimes after arriving at the safe haven airfield, it was determined the threat was just as great there. Normally there would be inadequate facilities such as no revetments or POL pumps available. In addition to the evacuation of aircraft to other airfields, an alternate method of orbiting aircraft during periods of increased threat was accomplished. This latter method must involve very close coordination to insure all aircraft do not return at the same time and become vulnerable to attack while refueling or parking. The orbiting of aircraft is a poor solution in that an excessive amount of flying time is put on a fleet of aircraft when maintenance is at a critical point. An evaluation of the risk of damage that can be inflicted and repaired in a certain time frame versus the number of hours of maintenance to repair and maintain the extra flying hours established by orbiting must be made.

(c) RECOMMENDATION. That the planning for evacuation of aircraft be made at the highest level which can evaluate the total enemy threat and total facilities available. If the decision not to evacuate but orbit is made, the responsibility to plan and execute must rest with an installation or unit commander at a lower level to insure that the proper coordination of minute details are accomplished.

(2) (U) Flight Following.

(a) OBSERVATION. Specific flight following procedures must be adhered to for units that place aircraft under OPCON to activities and Army elements that operate independently in remote areas with no flight following facility.

(b) EVALUATION. This battalion lost an aircraft that was supporting a Special Forces operation and the fact that the aircraft was missing was not fully realized until 48 hours later. Immediate search and rescue operations were not conducted. The aircraft was not located, even though an extensive search was made for 72 hours of the alleged area. Forty seven days later, a member of the crew was able to escape from his captor and give the details of being shot down. The area that the aircraft was down in had been searched but had there been positive control or flight following, the whereabouts of the aircraft might possibly have been known sooner.

(c) RECOMMENDATION. Pilots on independent missions in support of special activities must follow the established flight following procedures and in addition have the activity that is being supported assume some
responsibility to check and insure they knew the ETI and ETA for all missions. This is a cardinal rule which aviators cannot ignore and is of paramount importance to insure search and rescue is activated promptly.

c. Training

(1) (U) Jungle Environmental Survival Training Course and PACAF Jungle Survival School.

(a) OBSERVATION. School quotas should be made available for crews of AH-1G helicopter to attend survival courses.

(b) EVALUATION. At the present time quotas for attendance at above listed schools are primarily for OV-1 and O-1 crews. This battalion has sent 30 personnel to these two courses in the last 90 days. The AH-1G operates independently here in the Delta and in many cases as a team with the OV-1. Because of the manner of operation, the AH-1G crews are as susceptible to being forced down in uninhabited areas and the jungle as the fixed wing aircraft in the battalion.

(c) RECOMMENDATION. That the quotas for the survival schools be increased to enable more personnel to attend from AH-1G units without decreasing the quotas for assigned fixed wing units.

d. Intelligence. None

e. Logistics.

(1) (U) Ammunition 7.62, Type A-165.

(a) OBSERVATION. Excessive number of stoppages for number of rounds fired occur when utilizing the 7.62 ammunition pre-linked in 200 round boxes and excessive ground time for loading.

(b) EVALUATION. The boxes of 7.62 ammo when linked by hand into 1000 round belts cause an unnecessary delay and waste in combat manpower. The solution to this problem is issuance of the type A-165, 7.62 ammunition which comes in longer belts. This is not the only problem with the standard M-60, 7.62 ammunition. The stoppage rate is greater with the M-60 ammunition when compared to the type A-165 ammunition. Even though USA WECOM personnel in CONUS state there is no manufacturing difference, the results indicate otherwise. The stoppage rate has been 1:11,150 rounds fired for the M-60 ammunition versus 1:23,230 rounds fired for type A-165 or double the stoppages when using the standard M-60 ammunition.

(c) RECOMMENDATION. Recommend the procurement of the Type A-165 ammunition be expedited. This is the second time this recommendation has
been forwarded through the use of an ORLL. This battalion is unable to expedite the movement or requisitioning procedures for this ammunition after the requirement for ammunition is processed.

(2) (U) Improper Oil in O-1 Aircraft.

(a) OBSERVATION. Recently two O-1's of this unit suddenly started to burn excessive oil with no prior indications of high oil consumption.

(b) EVALUATION. An extensive technical inspection of the aircraft indicated that both aircraft had been serviced with USAF high detergent oil, MIL-L-6082E with Cyclo Hexanone. The proper oil for the Army O-1 is LAD II, MIL-2851, Type II. The high detergent oil will cause excessive oil consumption in the O-1 aircraft after it has been using the proper oil. The marking on the drums as listed above is the only identifying characteristic to keep these oils separated. An education process in necessary for crewmen servicing O-1 aircraft and for POL personnel to keep the oils identified separately as detergent and non-detergent in the POL storage areas.

(c) RECOMMENDATION. That this information be republished for all users of the O-1 aircraft and that the minimum precautions taken by this battalion be required for users of the O-1 aircraft.

(3) (U) Additional Beacon Light for O-1 Aircraft.

(a) OBSERVATION. Flight tests show that the lower mounted beacon on the O-1 aircraft is not visible unless the intercepting aircraft is below a line 120 inches above the horizontal reference datum.

(b) EVALUATION. The obvious solution to the problem was the installation of an upper anti-collision beacon. Three types of beacons were tested and two proved to be satisfactory. The light, recognition, aircraft manufactured by Whelen Engineer Company was found to be unsatisfactory due to downward light patterns which flooded the cockpit with light. The "Low Drag" oscillating beacon and the "Twin Bulb" beacon, both manufactured by Grimes Incorporated, reflect upward patterns of light and are satisfactory to use as an upper anti-collision light. It should be noted that the present circuit breaker in the O-1 is capable of providing power for both beacons. The light should be installed between and directly to the rear of the two right front upper observation windows. One small piece of aluminum tape is required on the dome to prevent glare on the prop.

(c) RECOMMENDATION. That authority be granted to install this additional beacon and all O-1 aircraft and users be advised of the limitations of the present beacon.

(A) (U) Red Light For O-1 Instrument Panel.
(a) **OBSERVATION.** The present fluorescent light on the O-1 aircraft causes a diffusing of light on the plexi-glass windshield and prevents effective night visual reconnaissance.

(b) **EVALUATION.** During night operations in Vietnam, extreme black out conditions prevail and the bright glow from the fluorescent lights even when on the lowest intensity restricts outside vision. This glow is also very fatiguing on the eyes. Another fault this system has is the unsafe condition experienced when the throttle is moved forward (O-1D) and blocks the light from the airspeed indicator. A solution has been found by mounting the post type red instrument lights from salvaged UH-1 helicopters and wiring these in with the present rheostat for the O-1 radio switches. An EIR has been forwarded on this item.

(c) **RECOMMENDATION.** That the EIR preprinted Control Number, F-73747 be approved and an MWO be forwarded to O-1 units expeditiously.

(5) **(U) AH-1G Attitude Indicator.**

(a) **OBSERVATION.** The replacement attitude indicator for the AH-1G has proven as unsatisfactory as the original installed equipment.

(b) **EVALUATION.** The reliability of the new Bendix attitude indicator is unacceptable. The pilots of the unit cannot place full confidence in the attitude indicator and this hesitancy on the part of the pilots to fly what is alleged to be an all weather day and night helicopter detracts from mission performance. Flights at night without a visible horizon and target attacks at night with the resultant muzzle flash-back and momentary disorientation have forced the aircraft to maintain a higher altitude and restricts some night visual reconnaissance missions. Neither the old Bendix (Part Nr 209-C70-116-3) nor the new Bendix (FSN 1560-782-0063) Attitude Indicators are reliable.

(c) **RECOMMENDATION.** It is imperative that a reliable attitude indicator be provided for the AH-1G helicopter and tested prior to issuance to operational units.

(6) **(4) Excessive NORS Rate for AH-1G's.**

(a) **OBSERVATION.** This unit averages 50% of its assigned AH-1G helicopters in an (EDP) NORS status.

(b) **EVALUATION.** This battalion has one armed helicopter company of 22 assigned AH-1G helicopters on hand. The present EDP rate is unacceptable for performance of assigned missions. The supply system has not been able to cope with the demands of this unit even though the aircraft flying hours are below the USARV flying hour program. The aviation tech supply of this company has 1700 separate demands in an open reconciled
status with its Direct Support Maintenance facility. Continued delay in providing parts presently on requisition will only increase the EDP rate.

(c) RECOMMENDATION. That immediate action be taken to provide the necessary supply of AH-1G helicopter parts and that stockage of the items be maintained at all echelons to support combat mission requirements.

(7) (U) Test Stand, Hydraulic.

(a) OBSERVATION. The current Aircraft Field Maintenance tool set of the 235th Armed Helicopter Company does not provide the necessary equipment to properly maintain the AH-1G helicopter.

(b) EVALUATION. There is no item of equipment in the present TO&E tool sets which would enable the maintenance personnel to calibrate and test the Stabilization Augmentation System or the Armament Subsystem on the AH-1G. At the present time testing and trouble shooting on the subsystems can only be performed when the aircraft is run up. When the aircraft cannot be run up a work stoppage occurs when otherwise a complete check of the subsystem could have been made, and the aircraft would be mission ready when the first run up is accomplished.

(c) RECOMMENDATION. That immediate procurement of a Test Stand, Hydraulic (FSN 4920-141-8801) be authorized units maintaining the SAS and Armament Subsystems on the AH-1G helicopters. (Voucher Number of Requisitioned Item is AT 8152-8046-4172 906 with the 49Cth Gen Spt Company, Vung Tau, RVN.)

f. Organization.

(1) (U) Armed Helicopter TO&E.

(a) OBSERVATION. The present TO&E (1-77) with MTOE does not provide for the personnel or equipment to support an armed helicopter company.

(b) EVALUATION. There are no ammunition handlers and storage personnel (55B) assigned to aid in the tremendous volume of ammunition used by the AH-1G helicopters. The unit TO&E does not provide for an adequate number of personnel to maintain and repair the armament subsystems on the AH-1G. At present there are only three TO&E positions authorized under the MTOE for TO&E 1-77 in the armament repair MOS of 45022. Vehicles to transport the ammunition to the aircraft for actual loading are lacking and at present only one 3/4 ton truck with trailer is authorized per flight platoon. The authorization of six 1/2 ton (Army Mule) trucks platform, utility, M-27485 (FSN 2320-931976), two per platoon, would provide the capability to move ammunition from unit storage areas to the aircraft. Ammunition can be fed into the systems.
direct from the platform of these trucks. In addition this vehicle can be moved to forward staging areas by the helicopter transporting the ground element, thus giving the ground element a transporter for ammunition without having to rely on aid from the support unit. These major areas of the TOE for an armed helicopter company have been submitted for revision through appropriate channels along with other changes.

(c) RECOMMENDATION. Recommend that a specifically tailored TOE for an armed helicopter company be established or an adequate MTOE be implemented at the earliest practicable date. This is the second time this recommendation has been made on an ORLL.

6. Other.

(1) (U) Additional Protection for Wounded Aviators.

(a) OBSERVATION. By placing two ammonia aromatic ampuls in a standard U.S. Army pill bottle affixed to the instrument panel of an O-1, the pilot has easy access to the stimulant.

(b) EVALUATION. Two wounded O-1 pilots found that they nearly passed out from pain and the sight of their own blood after being wounded. Neither pilot had an observer and both pilot's wounds were in such a position as to preclude their getting to the aircraft's first aid kit. Neither pilot fainted, but both stated they were very weak. By placing two of the ammonia inhalents where the pilot has easy access to them, he can break one and provide himself with the necessary stimulant to revive himself sufficiently to make a satisfactory landing.

(c) RECOMMENDATION. That the above lesson learned be passed to other aviation units as a means of increasing the chance of pilot survival.

Charles F. Hutchins
ITC, Armor
Commanding
AVGR (15 May 1968) 1st Ind

SUBJECT: Operational Report of 307th Combat Aviation Battalion for the Period Ending 30 April 1968, RCS CSFOR-65 (RI) (U)

Commanding Officer, 16th Aviation Group, APO San Francisco 96215, 28 May 68

TO: Commanding General, 1st Aviation Brigade, ATTN: AVBA-C, APO 96384

1. (U) The attached 307th CAB ORLL for the period ending 30 April 68 has been evaluated as required by USARV Reg 525-15.

2. (U) The following comments on Section 2, Lessons Learned: Commanders Observations, Evaluations and Recommendations, are submitted.

   a. Project Fix Personnel: Project fix personnel were a marked asset to the entire command. Sufficient organizational equipment to equip each individual was available within the group. This equipment was quickly redistributed. Each individual was equipped with the necessary items within three days after attachment.

   b. Evacuation of Aircraft: The evacuation of aircraft during the Tet Offensive was successful. Concur with the requirement for adequate planning.

   c. Flight Following: Current flight following procedures are considered adequate when utilized. Proper flight following is a subject of continuing emphasis in this command.

   d. Jungle Survival Training: It is recognized that jungle survival training is beneficial to all aviators flying in Vietnam. Priority for attendance should remain with OV-1 and O-1 crews. The AH-1G normally operates in a team of more than one aircraft. An AH-1G crew is more likely to be recovered quickly than O-1 or OV-1 crews.

   e. Ammunition 7.62 type A-165: This item has been submitted in a previous ORLL, and was improperly included in this report.

   f. Improper Oil in O-1 Aircraft: This is not a new problem. Current publications specify the correct oil to be used in all engines. Segregated storing procedures are habitually employed in most aviation units. No further dissemination is considered necessary.

   g. Additional Beacon Light for O-1 Aircraft: Concur with the recommendation. Additional rotating beacon will contribute to safer operations.

   h. Red Light for O-1 Instrument Panel: Concur. This has proved to be a satisfactory solution to the inadequate night lighting for the O-1 instrument panel.
AVON

28 May 1963

SUBJECT: Operational Report of 307th Combat Aviation Battalion for the Period Ending 30 April 1963 RCS CSFOR-65 (HI) (U)

1. **AH-1G Attitude Indicator**: Concur with the recommendation. An EIR has been submitted.

2. **Test Stand Hydraulic**: Concur with the recommendation. A requisition and a letter requesting authorization for the test stand have been submitted.

3. **Armed Helicopter TO&E**: Concur with the recommendation. An MTOE for the 235th Armed Helicopter Company has been submitted. The 235th AHC is now augmented with vehicles and personnel from other group assets.

4. **Additional Protection for Wounded Aviators**: Concur with the recommendation.

5. **(C) Excessive NORS Rate for AH-1G's**: Concur with the recommendation as stated. Appropriate follow-up action on requisitions has been initiated at all levels within this command.

ROBERT L. McDAVIEL
Colonel, Infantry
Commanding
CONFIDENTIAL

AVBA G (15 May 68) 2d Ind


DA, HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96384 JUN 27 1968

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

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

1. (U) This Headquarters has reviewed this report, considers it to be adequate, and concurs with the contents as indorsed.

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

   a. Paragraph 2c(1), page 9. Quotas for attendance to the survival schools are allocated from Brigade to Groups on as equitable a basis as possible. Brigade policy places priority of allocation to the units with the most cogent need for survival training, therefore the OV-1 and O-1 companies are given first priority due to the type single ship missions they perform. Priorities then go to the Assault Helicopter Companies and Assault Support Helicopter Companies. There is nothing to preclude Groups and Battalions from allocating quotas to lower priority units as the need exists. The Brigade goal is to provide a school trained Escape and Evasion Officer to each unit in order to pass on to others the benefits of his formal training. On 12 June 1968, USARV allocated additional quotas to the Air Force Sea Survival School. It is anticipated that Sea Survival School quotas will go to OV-1 units, thus providing Jungle Survival School quotas to other units with lower priority.

   b. Paragraph 2a(1), page 9. It is accepted as a general fact that the A165 is superior to the A131 7.62mm linked ammunition. A165 will possibly be removed from control by allocation on an ASR by the end of June 68 which will make it more readily available to the unit.

   c. Paragraph 2a(3), page 10. Concur with observation. The recommendation that authority be granted to modify the aircraft should be considered by USAACOM. 1st Aviation Brigade Headquarters will recommend that units with O-1 aircraft submit Equipment Improvement Recommendations if they consider this to be a serious problem.
d. Paragraph 2f(1), page 12. This Headquarters has initiated action to prepare a standardized MTOS for the Armed Helicopter Company which should resolve the problems as stated in this CRLL.

FOR THE COMMANDER:

JOHN D. MIXSELL, JR.
CPT., AGC
Assistant Adjutant General
TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report—Lessons Learned for the quarterly period ending 30 April 1968 from Headquarters, 307th Combat Aviation (Phantom) Battalion.

2. Concur with report as submitted.

FOR THE COMMANDER:

C. S. MATSUKASA
Captain, AGC
Assistant Adjutant General

Copies furnished:
HQ, 1st Avn Bde
HQ, 307th Cmbt Avn Bn
GPOP-DT (15 May 68) 4th Ind (C)
SUBJECT: Operational Report of HQ, 307th Cbt Avn (Phantom) for Period
Ending 30 April 1968, RCS CSPFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 23 AUG 1968

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

1. (U) This headquarters has evaluated subject report and forwarding
endorsements and concurs in the report as indorsed.

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

a. Reference (page 10) paragraph 2e(3): Additional beacon light
is justified for 0-1 aircraft in the interest of flying safety. Since
it appears that this modification can be made without extensive recon-
fuguration of the aircraft or aircraft components, it should be
authorized without delay. 0-1 aircraft in Vietnam frequently operate
at night in areas of high traffic density. The cost of this proposed
modification compared to the cost in equipment and lives resulting
from mid-air collisions is negligible.

b. Reference (page 12) paragraph 2f(1): The KTOE for the Armed
Helicopter Company is adequate when the company is equipped with
UH-1B/C aircraft. When the aircraft authorized these companies is
changed to the AH-1G, a change in support, personnel, and equipment
should be effected. This has not been the case in units in Vietnam.
Consequently, the effectiveness of these units is seriously impaired.
Future conversions of Armed Helicopter companies should include such
consideration.

c. Reference 2d Indorsement, paragraph 2b: Increased production
has allowed A-165 to be be removed from control by allocation on ASR.
Therefore, the stated problem no longer exists.

FOR THE COMMANDER IN CHIEF:

[Signature]
C.A. SHORTT
CPT, AGC
Aus AG

Cy furn;
CG USARV

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23
Operational Report - Lessons Learned, Headquarters, 307th Combat Aviation Battalion

Experiences of unit engaged in counterinsurgency operations, 1 Feb - 30 Apr 1968

CO, 307th Combat Aviation Battalion

12. SPONSORING MILITARY ACTIVITY

OACSFOR, DA, Washington, D.C. 20310

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The following items are recommended for inclusion in the Lessons Learned Index:

ITEM 1
* SUBJECT TITLE _____________________________________________
** FOR OT RD # _____________________________________________
***PAGE # _________________________________________________

ITEM 2
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PAGE # _____________________________________________________

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SUBJECT TITLE ______________________________________________
FOR OT RD # _______________________________________________
PAGE # _____________________________________________________

ITEM 4
SUBJECT TITLE ______________________________________________
FOR OT RD # _______________________________________________
PAGE # _____________________________________________________

ITEM 5
SUBJECT TITLE ______________________________________________
FOR OT RD # _______________________________________________
PAGE # _____________________________________________________

* Subject Title: A short (one sentence or phrase) description of the item of interest.

** FOR OT RD #: Appears in the Reply Reference line of the Letter of Transmittal. This number must be accurately stated.

***Page #: That page on which the item of interest is located.
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