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5 August 1969

Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

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KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 incl
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  210th Combat Aviation Battalion
AVBCA-AC

11 May 1969


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1. (C) Section I, Operations: Significant Activities:

   a. Mission: The mission of the 210th Combat Aviation Battalion changed as indicated.

      (1) The mission of the 210th Combat Aviation Battalion to provide fixed wing aircraft (U-21) to Headquarters MACV and USARV was deleted on 16 April 1969 when the Command Airplane Company was reassigned to the 165th Aviation Group. (See par 1b(6)).

      (2) The mission of the 210th Combat Aviation Battalion to provide rotary wing aircraft (UH-1D, UH-1H and LOH) to Headquarters MACV, USARV and CMAC; and to provide Light Fire Teams (UH-1B) to CMAC Headquarters was deleted on 16 April 1969 when the 120th Aviation Company (Airmobile) was reassigned to the 165th Aviation Group. (See par 1b(7)).

   b. Organization:

      (1) The Battalion Headquarters and Headquarters Company and five subordinate units were reorganized under standardized MTOEs approved by USARPAC on 1 February 1969. The complete After Action Report is Incl 7.

      (2) The following detachments were inactivated on 1 February 1969 as a result of the Battalion reorganization. Authority for their inactivation was USARPAC General Order 771, dated 22 November 1968.

         98th Transportation Detachment
         213d Signal Detachment
         255th Transportation Detachment
         325th Signal Detachment
         563d Transportation Detachment
         622d Signal Detachment
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11 May 1969
SUBJECT: Operational Report of the 210th Combat Aviation Battalion for
the Period Ending 30 April 1969 (RCS CSFOR-65)(R1)(U)

(3) The 323d Aviation Support Detachment was attached to the Senior
Advisor III CTZ effective 12 September 1968 by USARV General Order 4261,
dated 10 September 1968. It was further attached to MACV Advisory Team 87
for rations, quarters, unit fund accounting, finance, health and dental and
all logistical support by the same general order.

(4) The attachment of the 312th Aviation Support Detachment was rescinded

(5) The 129th Medical Detachment was reassigned to the 12th Combat
Aviation Group effective 15 April 1969 by 1st Aviation Brigade General Order
1685, dated 15 April 1969.

(6) The Command Airplane Company was reassigned to the 165th Aviation
Group effective 16 April 1969 by 1st Aviation Brigade General Order 1668,
dated 16 April 1969.

(7) The 120th Aviation Company (Airmobile) was reassigned to the 12th Combat
Aviation Group effective 16 April 1969 by 1st Aviation Brigade General Order
1667, dated 16 April 1969.

(8) On 28 April 1969, USARPAC General Order 220 was received redesignating
the following units as indicated.

<table>
<thead>
<tr>
<th>OLD DESIGNATION</th>
<th>NEW DESIGNATION</th>
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<tbody>
<tr>
<td>HHD, 210th Avn Bn</td>
<td>HHC, 210th Avn Bn (Combat)</td>
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<tr>
<td>54th Avn Co FW (Lt Trans)</td>
<td>54th Avn Co (Util Airplane)</td>
</tr>
<tr>
<td>73d Avn Co Surv (0V-1)</td>
<td>73d Avn Co (Surv Airplane)</td>
</tr>
<tr>
<td>74th Avn Co Surv (O-1)</td>
<td>74th Avn Co (Util Airplane)</td>
</tr>
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<td>184th Avn Co Surv (O-1)</td>
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<td>316th Avn Det (Div)</td>
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<tr>
<td>365th Avn Spt Det</td>
<td>365th Avn Det (Div)</td>
</tr>
</tbody>
</table>

(9) The current organizational chart and station list is Incl 1.

c. Command and Staff: The following significant changes occurred in the
210th Combat Aviation Battalion command and staff structure during the report-
ing period. The current command and staff structure is Incl 2.

COMMAND

(a) On 15 March 1969, LTC Carl C. Johnson, 097139, assumed command of
the 210th Combat Aviation Battalion replacing LTC Billy R. Wright, 069838.
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STAFF

(b) On 6 April 1969, MAJ Ben L. Breedlove, O5031070, became the 210th Combat Aviation Battalion Executive Officer, replacing LTC Dewell L. Brown, O1878935.

(c) On 18 March 1969, CPT Olen L. Earnest, O98686, became the 210th Combat Aviation Battalion SI, replacing CPT James J. Stovall, O52h20196.

(d) On 10 February 1969, CPT James T. Maher, O5023900, became the 210th Combat Aviation Battalion S2, replacing CPT Terry D. Williams, O52h3621.

(e) On 6 April 1969, MAJ Lawrence F. Beyer, O98320, became the 210th Combat Aviation Battalion S3, replacing MAJ Ben L. Breedlove, O1031070.

UNIT COMMANDERS


(h) On 26 April 1969, MAJ Wade W. Ladue, O5502h10, assumed command of the 74th Reconnaissance Airplane Company replacing MAJ Richard L. Cox, Jr., O90731.

d. Unit Strengths as of 30 April 1969:

(1) Military:

<table>
<thead>
<tr>
<th>Subordinate Unit</th>
<th>OFF</th>
<th>WO</th>
<th>EM</th>
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<td>HHC</td>
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<td>25th ACC</td>
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<td>73d SAC</td>
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<tr>
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<tr>
<td>18th RAC</td>
<td>32</td>
<td>21</td>
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<td>2</td>
</tr>
<tr>
<td>85th Med Det</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>316th ASD</td>
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<td>0</td>
</tr>
<tr>
<td>369th ASD</td>
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<td>71</td>
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11 May 1969

(2) Civilian:

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<tr>
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<th>O/H</th>
<th>VN Auth</th>
<th>O/H</th>
<th>3d Nat Auth</th>
<th>O/H</th>
<th>Tech Rep Auth</th>
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<td>25th ACC</td>
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<tr>
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<td>316th LSD</td>
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<tr>
<td>365th LSD</td>
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<td>54</td>
<td>0</td>
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</tr>
</tbody>
</table>

e. **Aircraft Status**: See Incl 3.
f. **Operational Results**: See Incl 4.
g. **Personnel Management**: See Incl 5.

h. **Intelligence and Security**: The following activities regarding security clearances were conducted during the reporting period.

1. Top Secret Clearances Validated: 2
2. Secret Clearances Validated: 119
3. Secret Clearances Granted: 16
4. Confidential Clearances Granted: 6
5. NAC Initiated: 3

1. **Operations**: The Deputy Commanding General, USARV Directed on 23 November 1968, that a concept of providing OV-1 Mohawk Aircraft in direct support to US Divisions be tested during December 1968 or January 1969. He further directed that the test would be conducted in the III CTZ and would involve the two US Divisions in RVN having organic ASTA Platoons, i.e. the 1st Cavalry Division (Airmobile) and 1st Infantry Division. The after action report is Incl 8.
11 May 1969


j. Logistics: Aircraft Availability (See Incl 6).

k. Aviation Safety:

<table>
<thead>
<tr>
<th></th>
<th>FIXED WING</th>
<th>ROTARY WING</th>
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</tr>
</thead>
<tbody>
<tr>
<td>(1) Major Accidents</td>
<td>6</td>
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<td>8</td>
</tr>
<tr>
<td>(2) Combat Damage</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>(3) Minor Accidents</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(4) Precautionary Landings</td>
<td>29</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>(5) Incidents</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

l. Signal:

(1) To reinforce the emergency HF-SSB Net with 12th Combat Aviation Group an alternate system was completed, and all O5C’s were given refresher training in Morse Code.

(2) The ZTR and ZTS program as of 30 April 1969 is as follows:

(a) 93% of the Aircraft eligible have received the ZTR program.
(b) 98% of the Aircraft eligible have received the ZTS program.

m. Installation Development: The following construction projects have been accomplished during the past quarter.

(1) Commercial power system has been completed.
(2) 12,135 square yards of asphalt parking ramp completed.
(3) Fourteen (14) O-1/O-2 parking revetments completed.
(4) 3537 square yards of asphalt taxi way completed.
(5) 18,400 square yards compacted and peni-primed maintenance ramp completed for "C" Company, 15th Transportation Battalion.

(6) Four (4) fly in and twenty (20) maintenance revetments completed for "C" Company, 15th Transportation Battalion.
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(7) 20,000 square yards compacted and peni-primed open storage area completed for "C" Company, 15th Transportation Battalion.

(8) Eleven (11) bunkers and two (2) towers were completed around the defensive berm.

(9) Post Dispensary was completed.

(10) 146th Aviation Company (RR) Messhall was completed.

(11) Long Thanh North NCO/EM Club was completed.

(12) 224th Aviation Battalion Cantonment Area is approximately 85% completed.

(13) One 20 X 92 DOQ has been constructed for the 210th Combat Aviation Battalion.

(14) 11,000 meters single apron, double concertina wire was strung along defensive positions.

n. Medical:

(1) Flight Physcials: One Hundred and Twelve (112) Flight Physcials were given.

(2) Immunizations:

(a) Plague: 735
(b) Cholera: 352
(c) Malaria: 412
(d) Tetanus Toxoid: 84

(3) Medical Evacuation: One Hundred and Nineteen (119) Medical Evacuations were made to the 214th and 93d Evacuation Hospitals.

2. (C) Lessons Learned: Commander's Observations, Evaluations and Recommendations:

a. Personnel:
Operational Report of the 210th Combat Aviation Battalion for the Period Ending 30 April 1969

Intelligence School Training of Replacement Personnel (MOS 96D)

(1) OBSERVATION: Personnel assigned to the Imagery Interpretation Section are well trained in plotting and interpreting SLAR and photographic imagery, but are not well trained in plotting infrared imagery.

(2) EVALUATION: This lack of training in plotting infrared imagery has required that an on-the-job training program be established to develop the required skill. One month is normally required before the individual has attained the required skill level.

(3) RECOMMENDATION: That the Intelligence School at Fort Holabird, Maryland, conduct a survey of field units to determine if this problem exists within other like units; if so, a greater emphasis should be placed on the plotting of infrared imagery at the school.

(4) COMMAND ACTION: An on-the-job training program has been established to train replacement personnel in plotting infrared imagery.

b. Operations:

(1) Anscopan Film

(a) OBSERVATION: It has been noted that Anscopan Film is very susceptible to heat and humidity causing unnecessary jamming of the film. On several occasions the film in the KA-76 camera cassette has pleated within the camera resulting in a jamming of the film and causing the fuses to blow.

(b) EVALUATION: When Anscopan Film is subjected to excessive heat and humidity it has a tendency to sweat and swell which can result in the jamming of the film. In addition, this tends to soften the film which can lead to excessive coating of the metering roller with emulsion. If the metering roller is coated with emulsion it will become non-effective in its function of pulling the film through. Anscopan Film is supplied on reels that are made of a thicker material than what appears to be ideal for the KA-76 cassette. When this reel is used in the take-up cassette, there are sufficient forces applied to the sides of the cassette by the reel to exceed the torque limits of the take-up clutch. Even though the take-up reel has stopped turning, film is still being pulled through the camera by the metering roller. This causes the film to pleat, ultimately resulting in blown fuses.

(c) RECOMMENDATION: This problem can be partially alleviated if refrigerators are issued for proper storage of film in torrid temperature areas. Care should be taken to assure that only small size reels are used in the take-up cassette. Do not use Anscopan reels.
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(d) COMMAND ACTION: A reefer has been obtained for storage of Anscopan Film. Care is being taken to ensure that only small size reels are used in the take up cassette. Anscopan reels are not used.

(2) Frequency Adjustment of FM Radios:

(a) OBSERVATION: In the past few months there have been FM radios requiring frequency adjustments. The reason is the frequency alignment, which is off from its MC and KC points.

(b) EVALUATION: The reason for this problem is the radios are kept on one frequency without being tuned for a long period of time. This causes the contacts to freeze as a result of corrosion built up due to the high humidity. When the operator tunes the radio he forces the tuning and causes the frequency points to come off alignment.

(c) RECOMMENDATION: The operator should frequently tune his radio from the low to the high end of the band. This will keep the frequency points free and clean and will not allow corrosion to accumulate.

(d) COMMAND ACTION: Operators have been instructed to tune their radios from the low to the high end of the band on a daily basis.

c. Training: None
d. Intelligence: None
e. Logistics:

(1) AN/ASW-12 Auto Pilot:

(a) OBSERVATION: A high failure rate has occurred with the rotary actuators TG-76, TG-79 and TG-80, which are part of the AN/ASW-12 Auto Pilot.

(b) EVALUATION: Actuator failure resulted from oscillation of the actuators, which generated heat and caused component failure. Final test procedures were determined not to be in compliance with the applicable Technical Manual.

(c) RECOMMENDATION: Repair personnel must conduct final test only in accordance with applicable TM to determine if actuator oscillation is present.

(d) COMMAND ACTION: Avionics maintenance personnel have been briefed and supervisory personnel are carefully monitoring to ensure that the final test is conducted in accordance with the applicable TM to determine if actuator oscillation is present.

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(2) FM (AN/ARC-54) Problems:

(a) OBSERVATION: The new and retrofitted Mohawks were received with the FM Radio (AN/ARC-54) inoperative.

(b) EVALUATION: It was noted after extensive maintenance trouble shooting that the Antenna Coupler CU-912/ARC-54 was the primary cause of the malfunction.

(c) RECOMMENDATION: Recheck all CU-912/ARC-54 Couplers in new and retrofitted Mohawks to insure serviceable condition, and submit EIR on all faulty components.

(d) COMMAND ACTION: Procedures have been established to check all CU-912/ARC-54 Antenna Couplers in new and retrofitted Mohawks to ensure serviceable condition.

(3) Modification of Support Mount for Receiver Transmitter RT-520:

(a) OBSERVATION: During routine removal, handling and replacement while performing normal trouble shooting and periodic maintenance, it was observed that the support mount was failing and becoming unusable. Care is being taken to not cause further damage while performing maintenance.

(b) EVALUATION: With the maintenance personnel being especially careful while performing their duties, we have observed the support mounts are still damaged. We firmly believe that a stronger mount is necessary. We received assistance from the 330th Transportation Company in rebuilding and modifying four support mounts and heat treating them. These modified mounts are stronger and should increase the life expectancy of the mount. We are still awaiting the final results of the EIR, until a field investigation is completed on the project.

(c) RECOMMENDATION: Consideration be given to redesigning the support mount for strength to lengthen the life of this part of the receiver-transmitter.

(d) COMMAND ACTION: An EIR was submitted through channels to modify the support mount. A program to inspect the support mounts was established to detect impending failure.

(4) IF Cables:

(a) OBSERVATION: Frequent problems have been encountered with the Doppler System going into the memory mode rendering the doppler system useless.
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(b) EVALUATION: After rechecking the antenna crystals, wave guide, RT and tracker it was discovered, the IF Cables (FSW 6145-722-5932) when moved caused the voltage to drop to the proper level and the system to lock on. It was noted that the connectors of the IF Cables (FSW 6145-722-5932) employ a spring tension contact. This spring contact develops metal fatigue at a faster than normal rate which results in insufficient tension and a poor contact. Repeated checks of the RT and Tracker found them to be operational, however, the IF voltage would read at the proper level on the test bench but high in the aircraft.

(c) RECOMMENDATION: That a better and stronger spring be used for the contact and more frequent inspections should be conducted with periodic replacement of the contact spring.

(d) COMMAND ACTION: Frequent inspections of the spring tension contact are conducted and the springs replaced as necessary.

(5) R-13U0-61 Engine Failures:

(a) OBSERVATION: During the period 15 November 1968 to 30 April 1969 this unit performed 12 engine changes on assigned aircraft (U-1A). The time on these R-13U0-61 engines ranged from a high of 500 hours to a low of 33 hours with the average being 285 hours for a utilization of 22% of the normal TBO of 1300 hours.

(b) EVALUATION: It is the opinion of the tech inspectors and maintenance personnel of the using unit that the majority of the low time engine failures were due to insufficient quality control at the overhaul/rebuild facility. It was determined that several engine failures were the result of deficiencies which could have been detected by a more thorough inspection and corrected prior to the installation on the aircraft. Some of the deficiencies found by this unit on Spartan rebuilt engines are:

1. Pushrods with improper amount of spacers installed.
2. Valve clearance improperly adjusted.
3. Pushrods with no oil holes.
5. Magnets timed 180° out.

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(c) RECOMMENDATION: That AVSCOM, St Louis insure that all new and/or rebuilt engines be thoroughly inspected prior to build up and installation to determine if any deficiencies exist which could lead to premature failure of the engine.

(d) COMMAND ACTION: Using the inspection guidelines and standards contained in Chapter 5, TM 55-1510-205-20, an engine conditioning program has been established by this unit on all engines prior to installation on the aircraft and at each periodic inspection.

(6) Aircraft Survival Weapons:

(a) OBSERVATION: There are no adequate individual weapons, suitable for survival in a combat environment, provided for aviators in present authorizations (TOEs, MTOEs or Special Letters of Authorization).

(b) EVALUATION: At present the .38 cal revolver is the authorized individual weapon for all aviators. This weapon while an excellent side arm, does not provide the individual aircrew member with enough fire power for a combat survival situation. Aviators often arm themselves with M16s or M14s from their unit's TOE equipment. Because of their size neither of these weapons can be conveniently and safely carried in the aircraft cockpit. Also there are rarely enough extra weapons within a unit to provide a second weapon to every aviator. Because of this, some aviators have been known to obtain unauthorized weapons (M1 Carbines, M2 Submachineguns).

(c) RECOMMENDATION: That MTOEs be changed to authorize CAR 15s, a weapon specifically designed for aircraft and vehicle crewmembers, in addition to .38 cal revolvers for all aviators in Vietnam with the exception of OV-1 Pilots.

(d) COMMAND ACTION: This headquarters is preparing MTOEs to implement the above recommendation.

8 Incl
as
Incl 1, 2, 5, 7 w/d HQ, DA

CARL C. JOHNSON
LTC, ADA
Commanding

DISTRIBUTION:
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CG, Ist Avn Bde, ATTN: AVBACA, APO 96384 (2)
CO, Hq, 12th Avn Gp (Cbt), ATTN: AVBACA-SC, APO 96266 (5)
CO, Hq, 210th Avn Bn (Cbt), APO 96530 (3)
AVBACA-SC (11 May 69) 1st Ind


DA, HEADQUARTERS, 12TH COMBAT AVIATION GROUP, APO 96266 22 May 1969

TO: Commanding General, II Field Force Vietnam, APO 96266

In accordance with USA RV Reg 525-15, the Operational Report - Lessons Learned of the 210th Combat Aviation Battalion, for the period ending 30 April 1969, is forwarded.

FOR THE COMMANDER:

[Signature]
DAVID L. FORTE
MAJ, INF
Adjutant
AVFDC-RE-H (11 May 69) 2nd Ind


DA, HQ II FORCEN, APO San Francisco 96266 4 JUN 1969

THRU: Commanding General, 1st Aviation Brigade, ATTN: AVBA-C, APO 96307
Commanding General, US Army Vietnam, ATTN: AVHGC(DST), APO 96375
Commander-In-Chief, US Army Pacific, ATTN: GPOP-DT, APO 96558

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

This headquarters has reviewed and concurs with the Operational Report - Lessons Learned of the 210th Combat Aviation Battalion for the period ending 30 April 1969.

FOR THE COMMANDER:

B. G. Macdonald
ILT, AGC
Ass/AG
SUUtCTl    Operational Report of the 210th Combat Aviation Battalion for
the Period Ending 30 April 1969  (RCä
C3H)R-65)   (RI)  (U)

DA, HEADQUARTERS, 1ST AVUTIOfi

THRU: Commanding General, United States Army Vietnam, ATTN: AVHEG-DST,
APO 96375
Commander-in-Chief, United States Army Pacific, ATTN: GTOF-COT,
APO 96558

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

1. This headquarters has reviewed this report, considers it to be adequate
and concurs with the contents.

2. The following additional comments are considered pertinent:

   a. Paragraph 1k (1), page 5. Entry should read:

<table>
<thead>
<tr>
<th>MIXED</th>
<th>ROTARY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

   b. Paragraph 2e (5), page 10. It appears that there has been enough
   experience at this time to warrant a close investigation into the matter
   of engine failures in ULA Otter aircraft. This headquarters has asked
   the unit to provide information and historical data for examination and
   evaluation to include engine serial numbers, time since overhaul, rebuild
   facility, reason for failure and EIR number. This data, if significant
   or definitive, will be forwarded to USARV AVHAV-LOG with recommendations
   for action leading to product improvement.

   c. Paragraph 2e (6), page 11. Nonconcur with the recommendation to
   authorize CAR-15s in addition to the .38 cal revolvers, for all aviators
   in Vietnam. The CAR-15 was not specifically designed for aircraft and
   vehicle crewmembers as stated, but as a replacement weapon for side arms
   now carried by infantry company commanders. A limited number of the
   CAR-15s were issued to selected units in this command as ENSURE items.
   AN 310-34 provides the basis for aircrewmen to be armed with an adequate
   weapon. A review of past aircraft downings reveals that in most cases
   if a shoulder weapon was aboard the aircraft it was either lost or de-
   stroyed upon impact. Additionally, the CAR-15 is not a standard item;
AVGRGC-0 (11 May 69) 3d Ind 10 JUN 1969

SUBJECT: Operational Report of the 210th Combat Aviation Battalion for the Period Ending 30 April 1969 (HCS CORPS-65) (RI) (R)

therefore until such time as it is accepted as a standard weapon inclusion on authorization documents is not practical.

FOR THE COMMANDER:

[Signature]

DAVID R. ANDERSON
AG
Asst. AG

CONFIDENTIAL
TO: Commander in Chief, United States Army, Pacific, ATTN: GPOF-DT, APO 96558

1. (U) This headquarters has reviewed the Operational Report—Lessons Learned for the quarterly period ending 30 April 1969 from the 210th Combat Aviation Battalion.

2. (C) Comments follow:

   a. (C) Reference item concerning IF Cables, section XI, page 9, paragraph 2e(4); concur. Unit will be notified to submit equipment improvement report's (EIR's).

   b. (C) Reference item concerning Aircraft Survival Weapons, section XI, page 11, paragraph 2e(6); nonconcur with the recommendation to authorize CAK-15's for all aviators in Vietnam. However, USAV has already forwarded ATOE actions requesting CAK-15 authorization for units with the AH-1G aircraft. Unit will be advised.

For This Command:

C. D. WILSON
1LT, AGC
Assistant Adjutant General

Cy form:
210th CAB
1st Avn Bde
SUBJECT: Operational Report of HQ, 210th Cbt Avn Bn for Period Ending 30 April 1969, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 11 JUL 69

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

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

FOR THE COMMANDER IN CHIEF:

[Signature]

C. L. Wright
CPT, AGC
Arm AG
<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Date</th>
<th>Aircraft Type</th>
<th>Unit</th>
<th>Supporting Unit</th>
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<tbody>
<tr>
<td>2128-1</td>
<td>19/09/92</td>
<td>HHC</td>
<td>12-10-92</td>
<td>09-6-92</td>
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<tr>
<td>2128-2</td>
<td>19/09/92</td>
<td>HHC</td>
<td>12-10-92</td>
<td>09-6-92</td>
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<td>19/09/92</td>
<td>HHC</td>
<td>12-10-92</td>
<td>09-6-92</td>
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<td>19/09/92</td>
<td>HHC</td>
<td>12-10-92</td>
<td>09-6-92</td>
</tr>
</tbody>
</table>

**AIRCRAFT STATUS AS OF 30 APRIL 1996**
<table>
<thead>
<tr>
<th>Week</th>
<th>Aircraft Damage</th>
<th>Aircraft Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-01</td>
<td>T</td>
<td>4</td>
</tr>
<tr>
<td>2-01</td>
<td>I</td>
<td>1</td>
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<tr>
<td>3-01</td>
<td>I</td>
<td>6</td>
</tr>
<tr>
<td>4-01</td>
<td>I</td>
<td>6</td>
</tr>
</tbody>
</table>

**Note:**

- The employment of artillery.
- Bumpy RKF, structure, and spanner results listed by the 7th and 11th RKF's were inferred by.
- Confident data.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troops</td>
<td>356</td>
</tr>
<tr>
<td>HULCD</td>
<td>1621</td>
</tr>
<tr>
<td>16/21</td>
<td>957</td>
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<tr>
<td>1761</td>
<td>47</td>
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<tr>
<td>792</td>
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<td>39</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Operation result for period 2 February thru 30 April 1969.
CONFIDENTIAL

AIRCRAFT AVAILABILITY
1 February thru 30 April 1969

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Average Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>88%</td>
</tr>
<tr>
<td>U-6A</td>
<td>69%</td>
</tr>
<tr>
<td>U-1A</td>
<td>75%</td>
</tr>
<tr>
<td>U-21A</td>
<td>81%</td>
</tr>
<tr>
<td>OV-1A</td>
<td>62%</td>
</tr>
<tr>
<td>OV-1B</td>
<td>79%</td>
</tr>
<tr>
<td>OV-1C</td>
<td>80%</td>
</tr>
<tr>
<td>OH-6A</td>
<td>72%</td>
</tr>
<tr>
<td>UH-1B</td>
<td>82%</td>
</tr>
<tr>
<td>UH-1D</td>
<td>79%</td>
</tr>
<tr>
<td>UH-1H</td>
<td>83%</td>
</tr>
</tbody>
</table>

Average Availability: 77%
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AFTER ACTION REPORT
MOHAWK DIRECT SUPPORT CONCEPT TEST (U)

1. (U) General: The Deputy Commanding General, USARV directed on 23 November 1968 that subject to the concurrence of major commanders involved a test of the concept of a consolidated Mohawk company providing OV-1 Mohawk aircraft in direct support to divisions be accomplished during December 1968 or January 1969. He further directed that the test be conducted in II CTZ and involve the two divisions in SVN with organic ASTA Platoons, (1st Cav Div and 1st Inf Div), the 9th Inf Div, the 25th Inf Div and 73d SAC.

2. (U) G2 Air II FFV became the action agency for the test and issued the OV-1 Mohawk Direct Support Concept Evaluation Plan on 23 December 1968.

3. (U) Prior to the start of the test the ASTA Platoon of the 1st Cav was located at Vung Tau. The ASTA Platoon of the 1st Inf Div was located at Phu Loi.

4. (C) Phase I:
   
   a. The purpose of Phase I was to accumulate test data concerning employment of the OV-1 in general support to II FFV and direct support to the 1st Inf and 1st Cav Div's, prior to consolidation. This data was collected by the Mohawk units participating in the test. The data collected during Phase I by the ASTA Platoons of the 1st Inf Div and the 1st Cav Div was not available to this battalion and is not included in the report. The data collected by the 73d SAC is reflected in paragraph ic.
   
   b. During Phase I all units involved in the test continued with their normal missions. Ground Sensor Terminals (GST) were not available prior to the test. During Phase I ground sensor terminals were being acquired but were not used until Phase III. All units involved in the test continued with normal maintenance during this period.
   
   c. Test data compiled by the 73d SAC during Phase I.

<table>
<thead>
<tr>
<th>NO DAYS</th>
<th>MISSION READY</th>
<th>MISSIONS REQUIRED</th>
<th>MISSIONS FLOWN</th>
<th>FLIGHT TIME (HOURS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>293</td>
<td>1115</td>
<td>1212</td>
<td>1016.30</td>
</tr>
</tbody>
</table>

5. (C) Phase II:

   a. Phase II was conducted during the period 5 January 1969 thru 18 January 1969. This phase was established to provide a specified time frame that would allow the attachment of the 1st Cavalry Division ASTA Platoon and the 1st Infantry Division ASTA Platoon to the 73d SAC. This time was also to be used for movement of personnel and equipment involved to Vung Tau and for gradual transfer of mission responsibility from the Platoons to the 73d SAC. The 73d SAC assumed the mission of the 1st Inf Div ASTA Platoon during its move to Vung Tau. The 1st Cav Div ASTA Platoon continued its normal support role.

Incl 8

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b. During this phase 02 Air II FFV received missions from the 1st Inf Div and the 1st Cav Div for the first time. These missions were approved and then sent to the 73d SAC. The two divisions having been accustomed to dealing directly with the flying unit noted several coordination problems which evolved when dealing with an intermediate agency. There were isolated incidents where certain information was not clearly relayed from the requestor, through II FFV to the 73d SAC.

e. Maintenance personnel during Phase II were integrated into one unit and a maintenance flow for all aircraft was established. At the end of this period pilots and aircraft were scheduled without regard for unit integrity. The only unit integrity retained was the assignment of Crew Chiefs to aircraft.

6. (c) Phase III:

a. Phase III was scheduled for the period 19 January 1969 thru 17 February 1969 but subsequently extended until 19 March 1969, for additional testing of the Ground Sensor Terminals. During this phase test data was compiled concerning the employment of the OV-1 in direct support of the divisions involved in the test after consolidation. Initially the support missions were determined by the number of missions each division had previously required from their ASTA Platoons. Later in this phase these missions were expanded to include the 9th Inf Div and an increase of one aircraft sortie per night for the 1st Cav Div. Data compiled by the 73d SAC consolidated with the ASTA Platoons of the 1st Inf Div and the 1st Cav Div is shown in par 6e.

b. Early in Phase III Ground Sensor Terminals were deployed to the 1st Inf Div, 1st Cav Div, 25th Inf Div and the 9th Inf Div. The ground sensor terminals provided the test units with an immediate presentation of the imagery by data links with the aircraft. This provided immediate intelligence results while the mission was still being flown. Prior to the employment of the GST, units had to wait until the aircraft returned to process and interpret the imagery.

c. Initially in Phase III the supported units forwarded their mission requests to II FFV 02 Air where they were consolidated and relayed to the 73d SAC Ops. This system was not completely satisfactory because accuracy was lost in the relay of the information. Direct voice circuits were established with each of the four supported divisions. With the installation of these circuits, coordination between support and supported units was improved.

d. During Phase III maintenance improved due to the consolidation of equipment and personnel. This proved to be one of the biggest advantages of the consolidation. Aircraft availability increased during Phase III. Total OV-1 flight time for Phase III was 5755 hours and 30 minutes.

Incl 8 (Contd) 22
e. Test data compiled by 73d SAC and attached FSTA Platoons during Phase III.

<table>
<thead>
<tr>
<th>NUMBER DAYS</th>
<th>MISSION READY AIRCRAFT</th>
<th>MISSIONS REQUIRED</th>
<th>MISSIONS FLOWN</th>
<th>FLIGHT TIME (HOURS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>1317</td>
<td>4239</td>
<td>5401</td>
<td>5176</td>
</tr>
</tbody>
</table>

7. (C) Advantages of consolidation:
   a. There was an increase in the number of mission hours flown.
   b. There was an increase in the number of Mohawk sorties.
   c. Aircraft availability increased due to consolidation of the maintenance personnel and equipment from the three test units.

8. (C) Disadvantages of consolidation:
   a. Up to 20 minutes enroute flight time was lost in commuting to and from the consolidated base airfield.
   b. The aircraft were more vulnerable to an indirect fire attack due to the large parking area required.

9. (U) No recommendations are made pending completion of the USARV evaluation of the final test results.

Incl 8 (Contd)
Operational Report - Lessons Learned, Hq, 210th Combat Aviation Battalion, Period Ending 30 April 1969 (U)

Experiences of unit engaged in counterinsurgency operations, 1 Feb to 30 Apr 69.

CO, 210th Combat Aviation Battalion

11 May 1969

692162

N/A

N/A

OACSFOR, DA, Washington, D.C 20310