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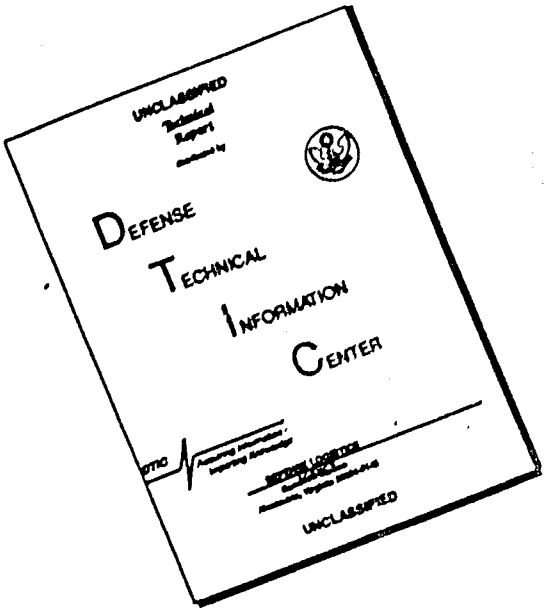

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IN REPLY REFER TO

AGAM-P (M) (11 Apr 69) FOR OT UT 691019 14 April 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 212th Combat Support Aviation Battalion, Period Ending 31 January 1969 (U)

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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.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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DEPARTMENT OF THE ARMY
Headquarters 212th Combat Support Aviation Battalion
"Wings of Freedom"
APO 96337

15 February 1969

AVGM-BC

SUBJECT: Operational Report of the 212th Combat Support Aviation Battalion for the Period Ending 31 January 1969, RCS CSFOR - 65 (RI)

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

a. The following mission changes occurred during this period:

(1) The 131st Surveillance Airplane Company began the use of camouflage detecting film on photo reconnaissance missions during this reporting period. The results were extremely valuable, and more missions of this type are being planned.

(2) The bombing halt on 1 November 1968 changed the mission of the first platoon, 220th Reconnaissance Airplane Company. Operation HIGHRISE, the counter-battery artillery mission in North Vietnam in support of the 108th Artillery Group was terminated. That platoon now concentrates their reconnaissance missions on the southern half of the DMZ, observing as far into North Vietnam as possible without actually flying there.

(3) The 282d Assault Helicopter Company incurred the additional mission on a day to day basis of providing overhead cover for an LOH which scouts the "rocket belt" around Da Nang. The overhead cover is provided to one UH-1B to render suppressive fire in case the LOH is taken under fire. The unit also sent a UH-1H and crew to Quang Tri to remain there on a permanent basis for the purpose of more efficient support of the 1st Arvn Battalion.

b. There were no additions or deletions to the organizational chart during the quarter. An organization chart and station list of all units assigned to the battalion is at inclosure 1. Incl 1 wd Hq DA

c. Personnel changes of command and principal staff positions within the battalion for the reporting period are at inclosure 2. Incl wd Hq DA

d. The 212th CSAB and its subordinate units authorized and present for duty strengths as of 31 January 1969 are at inclosure 3. Incl wd Hq DA

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e. The type aircraft which are authorized [illegible] for the battalion and its subordinate units is at inclosure 4. wd Hq DA

f. Results of operations conducted during this quarter by subordinate units in sorties flown, troops lifted, [illegible] enemy KBA, sampans and structures destroyed, aircraft [illegible] at inclosure 5.

g. During this reporting period the [illegible] in operations against the enemy on 92 consecutive days. [illegible] 43,019 sorties.

h. Events of historical significance:

(1) The following attacks on [illegible] took place during the reporting period:

(a) On 17 November 1968 at 0245 hours Dong Ngai received three rounds of 60mm mortar fire in the U.S. Army [illegible] occupied by elements of this command. The attack lasted approximately [illegible] minute and resulted in two personnel WIA and returned to duty.

(b) On 20 November 1968 at 0045 hours the U.S. Army area of Marble Mountain Air Facility received four rounds of 82mm mortar fire. The attack lasted approximately fifteen minutes and resulted in moderate damage to one OV-1B and light damage to two UH-1H aircraft. Casualties were one individual WIA and returned to duty.

(2) The following are significant activities which occurred during flying missions:

(a) On 12 November 1968 the gunships of the 282d AHC reached a milestone in their history. A light fire team on a medical evacuation escort was informed of enemy troops in a village about twenty miles southwest of Da Nang. The team attacked the target area and later thirteen enemy killed were confirmed. This put the total enemy killed by air since the inception of the platoon in April 1967 at over two thousand.

(b) What began as a normal "Fire Fly" mission on the 17th of November 1968 heralded the start of a battle in which the men of the 282d AHC greatly distinguished themselves. About [illegible] a "Fire Fly" team consisting of a lightship escorted by two gunships was called to the village of Dien Ban, ten miles southwest of Da Nang. An estimated NVA Battalion and a VC Company had attacked the town and adjacent compound. As the battle lines were drawn and daylight dawned, the "Fire Fly" team of Alleycat gunships attacked targets and Blackcat "slicks" landed amid the battle for medevac and resupply missions. Again the night of the 17th and morning of the 18th, enemy troops massed and attacked. [illegible] repulsed with the help of the "Fire Fly" team. Total results [illegible] of flying were one 75mm recoiless rifle, one 50mm anti-[illegible] 60mm mortar, one flame thrower, a large radio and over one [illegible] killed by air.

(c) The loss of 245th SAS [illegible] ber 1968 an OV-1C aircraft of the 245th Surveillance Air [illegible] shot down by hostile fire on a classified mission in [illegible] Both pilot and observer successfully ejected [illegible] picked up by rescue personnel.

Inclosure 2

(d) It is significant that since the start of Operation Taylor Common on 7 December 1968, the 282d AHC aircraft have taken hits on 27 different occasions. This operation being conducted by troops of the ARVN 1st Ranger Battalion is still in process in the An Hoa area and receives daily logistical support, C&C, gunship, and medevac support from the 282d Blackcats.

(e) On 17 December 1968 a Blackcat crew was the first on the scene of an Air Force C-123 crash which they had witnessed. The big fixed wing aircraft had 44 people on board as it hit the ground, exploded, and burst into flames at the south end of the runway at Chu Lai. The pilots and gunner loaded their aircraft with casualties and sped them to a nearby hospital pad while their crew chief and passengers remained to assist other victims. The crew chief Specialist Four James M. Gavin was single handedly responsible for saving the lives of many of the trapped, unconscious, and burning victims.

(f) On 28 December 1968 helicopters from the 282d Assault Helicopter Company conducted "people sniffer" missions near Quang Ngai, 80 miles south of Da Nang. The team, composed of a Blackcat lift ship equipped with "people sniffer" equipment and escorted by two Alleycat gunships, detected a suspected enemy position west of Quang Ngai city. The gunship went down for a closer look at the area and immediately engaged the target with 2.75 inch rockets, mini guns, and 40mm grenades. Later 17 enemy killed by air, 3 structures and 3 bunkers destroyed were confirmed.

(g) Loss of 220th RAC O-1: At 1830 hours 9 January 1969, a pilot in 220th RAC was asked to fly southwest of Khe Sanh to assist a recon team which had made heavy enemy contact. The pilot controlled two flights of air and assisted the team. While returning to Dong Ha the pilot became disoriented due to darkness and deteriorating weather. He apparently crashed in the mountains southwest of Dong Ha. Search and Rescue operations were conducted for three days without a trace of the aircraft or its occupants. Both the pilot and observer are listed as missing in action.

(h) Loss of Corps Aviation Company UH-1H: On 15 January 1969, a UH-1H of Corps Aviation Company (Prov) was downed by enemy ground fire while operating in the An Hoa area in support of the 3rd Marine Regiment. The aircraft was hit by ground fire and burst into flames while in the air and exploded on impact with a complete loss of crew and passengers.

(i) Loss of 282d AHC UH-1B: On 28 January 1969 while in support of an ARVN operation to move 920 troops, a UH-1B gunship of 282d AHC received ground fire, exploded just prior to contacting the ground and then burned. The crew managed to escape from the burning wreckage with minor injuries and were immediately picked up by another Blackcat aircraft.

(3) Significant administrative activities: None

2. (C) Section 2, Lessons Learned: Commanders' Observations, Evaluations, and Recommendations:

a. Personnel: E-7 Supply Sergeant.

(1) Observation: MTOE allowances for unit supply personnel are insufficient to meet the demands of a Surveillance Airplane Company.

(2) Evaluation: The supply function of a Surveillance Airplane Company encompasses a larger area and is more complex than most aviation companies and in certain cases some battalions. The aircraft and equipment of the company is valued at more than $30,000,000 and personal equipment is supplied for more than 333 men. The majority of the equipment is very expensive and is accounted for by approximately 20 hand receipts. The unit's priority mission often requires immediate and direct supply action with various support agencies throughout Vietnam. The work load plus the required experience level needed for the supply administration exceeds the present authorization. To properly administer normal supply activities and the special requirements inherent to the unit, the supply section should be expanded. The suggested revision is as indicated below. It is felt that this change would provide the necessary depth and experience.

E-7	Supply Sergeant	76K40
E-5	Ass't Supply Sergeant	76K20
E-5	Armorer	76K20
E-4	Supply Clerk/Typist	76K20
E-4	Supply Clerk	76K20
E-3	Driver	71A10

(3) Recommendation: That a staff study be initiated to evaluate the need for expanding the unit supply section of all Surveillance Airplane companies.

b. Operations:

(1) Photography to facilitate VR missions.

(a) Observation: Lack of photographic equipment to aid in performing VR missions of Reconnaissance Airplane Companies.

(b) Evaluation: If a camera were made available for use on every mission, the VR program would be enhanced immensely. This would curtail fragmenting another aircraft and a photographer to try and find the target. One time targets such as vehicles and personnel could be photographed. Pictures would provide accurate verification of BDA's as well as verification of sightings. A commercial 35mm camera would be easy to operate and maintain.

(c) Recommendation: A field photo lab, an operator and 35mm cameras with a 200mm lens be made available to Reconnaissance Airplane Companies.

(2) Rocket Jet Fittings, FSN 1670-572-9157.

(a) Observation: Rocket Jet fittings now being used in the OV-1 Mohawk can be a safety hazard.

(b) Evaluation: Members of the Air Force, Navy, and OV-1 personnel have found while attending Jungle Survival School, Sea Survival School, and training experiences, that the Rocket Jet fittings are hazardous and could easily be the direct cause of a pilot or crewmembers death.

1. It has been found that if one hand or arm is immobilized, due to an injury, that it is impossible to free oneself while hanging with full weight on the risers, as from a tree. Upon experiencing a water landing, gusting winds or a sinking parachute may make it impossible for the pilot or crewmember to separate from the chute due to the poorly designed Rocket Jet Fittings.

2. In Jungle and Sea Survival Schools, OV-1 aviators from this command have found that the Air Force type fitting, FSN 1670-803-2182, or the Navy fitting, FSN 1670-803-2182 is preferable to the Rocket Jet fittings. The ability of a pilot or crewmember to survive a tree or water landing and to make good his escape and evasion attempt would be greatly enhanced by the substitution of either the Air Force or Navy's time proven quick release fittings.

(c) Recommendation: That a study be initiated to evaluate the feasibility of changing the Rocket Jet fittings on the OV-1 Mohawk for the Air Force type fitting FSN 1670-803-2182 or the Navy fitting FSN 1670-803-2182.

(3) OV-1C Night Target Marking System.

(a) Observation: There is currently a need for equipping the OV-1C aircraft of this unit with a night target marking system.

(b) Evaluation: The OV-1C aircraft are fragged to run night infrared surveillance missions in support of US Air Force operations. These missions are designed to gather intelligence information on a "real time" basis and pass it directly to Air Force forward air controllers and strike aircraft for immediate attack. Experience has proven that the present method of target identification is inadequate. Targets are currently given to Air Force aircraft by means of UTM coordinates. Very often, the Air Force forward air controller has difficulty in locating the target by means available to him. On several occasions, pilots have been asked to physically mark the target for positive identification. On one such occasion, the pilot resorted to marking the target by shining his landing light vertically onto a road segment. If under similar circumstances, this pilot had been able to mark the target by some means without giving away his exact position, more effective strike results could have been obtained. The target marking system, if developed and incorporated into the OV-1 aircraft modification program, should be of a design which enables the pilot or the sensor operator to drop markers accurately while flying directly over the suspected target.

(c) Recommendation: That a night target marking system be developed for the OV-1C aircraft and incorporated as an MWO.

(4) OV-1A Mohawk Photo Reconnaissance Missions.

(a) Observation: It is not tactically sound to have both lead and trail aircraft shoot vertical photography of the same target on a photo reconnaissance mission.

(b) Evaluation: After the introduction of the 18-inch lens cone camera into the inventory of OV-1 units, it was determined thru experience that the targets photographed were very difficult to plot due to the small area of ground coverage. In an attempt to solve this problem, photo missions were run using an 18-inch lens cone camera in the lead aircraft and a 6-inch lens cone mapping camera in the rear aircraft. On specific targets, the trail aircraft would photograph the same target as the lead aircraft on a single pass. It was soon determined that the trail aircraft was drawing heavy and accurate anti-aircraft fire due to the fact that the lead aircraft alerted the gun crews. This procedure is no longer used on photo missions. When 6-inch mapping photography is required, it is now made on a separate run at a different time.

(c) Recommendation: That other OV-1 (Mohawk) units running photography missions over high anti-aircraft threat areas be informed of this tactical procedure.

(5) AN/AAS-14A IR Detecting Set.

(a) Observation: Occasional system failures of the IR film drive were experienced due to excessive moisture.

(b) Evaluation: Upon examination it was found that the film was sticking due to moisture caused by condensation. To alleviate the problem of unwanted condensation in the film magazine the following procedures were utilized: IR film is loaded at room temperature into a magazine 5 or 6 hours prior to flight time in the surveillance ready room. The magazines are not put into the aircraft until flight time.

(c) Recommendation: Advise all units of the problem with condensation and to refrain from installing film magazines into aircraft until flight time.

(6) AN/APS-94 SLAR

(a) Observation: Missions have been delayed and aborted because the SLAR system will not remain in high voltage. When the system is placed in high voltage a receiver/transmitter unit is turned on and the recording process begins.

(b) Evaluation: The primary reasons for the loss of high voltage are an overload caused by an improperly connected receiver/transmitter unit or wave guides and cables which are loose or improperly connected. There may be numerous other causes for the loss of high voltage, but the ones listed above can be prevented by the technical observer. The receiver/transmitter unit, wave guides, and cables should be thoroughly inspected during the system preflight. If the high voltage loss occurs, the high voltage button should not be held down. This will cause the component or components causing the overload to burn out.

(c) Recommendations: All Surveillance Airplane Companies should be notified of this procedure.

(7) AN/APS-94 SLAR/RO-166 Inflight Data Processor

(a) Observation: The VSM and Radar control for the OV-1B had an unduly high failure rate. The primary cause of failure was that monobath and sand had fallen into the switches and recesses causing the switches to stick, fail to make contact or to make only partial contact.

(b) Evaluation: It is extremely difficult to avoid spilling monobath solution when installing the pumps and tank assembly, or changing the roller in the RO-166 or when removing the RO block and the pump and tank assembly from the RO-166. The only way to prevent the monobath solution from getting on the VSM and radar control is to cover them when they are not in use. By covering the VSM the Radar control with a pre-cut plastic bag when the system is not in use, failures in these components have been virtually sliminated.

(c) Recommendation: That all OV-1 units be informed of this procedure.

(8) Doppler Navigation Set AN/ASN 64.

(a) Observation: When the Doppler Navigation Set AN/ASN 64 is in operation and the AN/APS 94 Sidelooking Airborne Radar System is subsequently activated, fuses are often blown in the doppler electrical circuitry.

(b) Evaluation: After analyzing the characteristics of the equipment, it was determined that when activating the AN/APS 94 system a momentary change in inverter output sometimes occurs causing fuses to blow in the doppler circuitry. As a result of this analysis, this unit changed its operation procedure. The Doppler System now remains off until after the AN/APS 94 system is turned on. Avionics maintenance requirements have been reduced by using this technique.

(c) Recommendation: That other OV-1 aviation units be advised of this procedure.

(9) AN/APS 94 SLAR.

(a) Observation: A protective cover for the video signal monitor (VSM) and radar set control of the AN/APS 94 Side-Looking Airborne Radar is needed.

(b) Evaluation: A significant amount of damage to the Video Signal Monitor and Radar Set Control of the AN/APS 94 SLAR system has been experienced during ground maintenance operations while the set is installed in the aircraft. This damage has been attributed to three primary causes.

1. Circuitry and electrical damage as a result of the spillage of film processing chemical (monobath) during installation of the block and tank assembly prior to flight. These chemicals are corrosive in nature and can easily short out and cause deterioration of circuitry and wiring.

2. Damage as a result of sand and moisture in the Press-to-Operate lamps and switches. It is difficult in RVN to keep cockpits free of sand, particularly during engine run-up and other ground operations with the props turning.

3. Physical damage to switches and Press-to-Operate lamps caused by crewmembers, maintenance, avionics, and SLAR repair personnel inadvertently bumping or kicking the Radar Set Control while working in the cockpit or while entering the aircraft. Considerable difficulty has been encountered in obtaining Press-to-Operate lamps and switches in RVN. A protective cover of sheet aluminum can be easily fabricated for the VSM and Radar Set Control by the sheet metal repair personnel assigned to OV-1 units. Suitable covers have been fabricated by this unit.

(c) Recommendation: That other OV-1 units be notified of this modification.

(10) Photo Processing Lab, ES-38B Hoover Electric Motor (Squeegee).

(a) Observation: The squeegee motors in the ES-38B are designed for 110 volt operation, but the power going to them is 220 volt. Due to a manufacturing error, the wiring diagram indicates that 220 volts is correct. This condition results in the immediate burning of the squeegee motor.

(b) Evaluation: The Hoover electric motor (Squeegee) costs $13.00 and $35.00 to repair. In order to preserve the life of the squeegee motor the wires were disconnected from the 220 volt source and reconnected to a 110 volt wall socket until a modification work order is received.

(c) Recommendation: Advise all units utilizing the ES-38B Photo Processing Lab of this situation and solution.

(11) Transponders for O-1 Aircraft.

(a) Observations: The only navigation aids presently installed in the O-1G aircraft are LF-MF, ADF and FM homing. These nav-aids are of only limited value in the I Corps area. The only continuously operating ground stations for the LF-MF, ADF in the southern half of I Corps are the NDB at Da Nang and the AFRS stations at Da Nang and Chu Lai. Additionally the signal reflection from the mountainous terrain makes the reliability of the LF-MF, ADF questionable. The FM homing has limited range and is also subject to signal reflection. I Corps has extensive radar coverage, but the "skin paint" signal reflected from an O-1 can only be detected by ground stations for a distance of approximately twenty miles. This distance is reduced considerally during periods of rain shower activity.

(b) Evaluation: The unpredictable weather during the monsoon season makes the possibility of inadvertent IFR flying a constant threat. Uncontrolled IFR flying is hazardous at best. The mountains and the high density air traffic make it even more so in this area. The extended radar pick-up range and reduced time required for positive identification provided by a transponder would reduce this hazard considerably. Additionally a

transponder would increase the mission capabilities for the O-1. It would provide a means of precise navigation and pinpoint target location at night when positive ground references are not visible. For radio relay missions where high altitude is required it would provide a means for controlled climb and descent through overcast conditions and navigation while VFR on top. The value of a transponder in an emergency is well known and it would be of tremendous value for this purpose.

(c) Recommendations: That transponders be installed in the O-1's operating in the Republic of Vietnam. If, because of weight limitations, some of the existing avionics must be sacrificed to accomodiate the transponder, that the LF-MF, ADF be removed.

c. Training: Survival, Escape and Evasion Schools.

(1) Observation: The current number of survival school allocations for the training of pilots and TO's of the OV-1 Mohawk in the SEA area falls far short of the Surveillance Airplane Company's requirements.

(2) Evaluation: The average number of allocations allotted for the PACAF Jungle Survival School, USN Jungle Environmental Survival School, and the 5th Air Force Sea Survival School, which are our primary training facilities, has been 2.0 per month per OV-1 unit.

(a) The current 1st Bde policy set on attendance of the mentioned schools stipulates that a person must have six months remaining in RVN to attend these schools. The Navy and Air Force survival schools in the South-east Asia area have become the primary, if not the only source of survival training and information available to the pilots and crewmembers of a Surveillance Airplane Company due to the lack of a suitably equipped Army school.

(b) The OV-1 Mohawk's ejection seat system and special survival gear needs, similar to those of the Air Force and Navy, makes it's survival training peculiar to only that of the Surveillance Airplane Company and no other type of Army aviation unit. Due to the shortage of quotas, approximately 25% of OV-1 SAC flight personnel are not afforded the opportunity to attend a survival school.

(3) Recommendation: That a study be immediately initiated to evaluate the need for an increase in the number of SEE school training slots allotted to the Surveillance Airplane Company.

d. Intelligence: SEAMORE AN/APS 94 Side-Looking Airborne Radar System.

(1) Observation: The accurate plotting of MTI (Moving Target Indicators) across the nadir of the SEAMORE AN/APS 94 SLAR system is not feasible. This is particularly true when inflight readout is required.

(2) Evaluation: The AN/APS 94 SLAR system develops film in flight. It is possible to plot the location of moving targets from this imagery by using proportional dividers in conjunction with a map. The imagery appears in two parallel strips depicting the areas covered by the right and left antennas. There is an area beneath the aircraft which is not painted and appears on the center of the film as a blank space. This space is called the nadir. Because the scale across the nadir closely approximates the actual scale of the area not painted on the ground, it is possible to plot a moving target on one side of the imagery from a known point on the other. The AN/APS 94 system in the SEAMORE modification displays a similar format on the film. The blank space however, is out of scale. In this case the gap between the strips of imagery accounts not only for the nadir but is also expanded to make room for doppler annotations on the film. This makes accurate across-the-nadir plotting impossible. The targets can be accurately plotted only from known points on the same strip of imagery.

(3) Recommendation: Appropriate Department of the Army agencies should be made aware of the difficulties involved in plotting with the SEAMORE system, so that improvements can be designed into the OV-1D aircraft.

e. Logistics:

(1) OV-1 Maintenance.

(a) Observation: Severe structural damage can occur on the OV-1 landing gear as the result of a blown tire on landing.

(b) Evaluation: A recent incident involving a fatigue crack on an OV-1 main landing gear has resulted in an additional inspection of the landing gear. The incident occurred on a heavily loaded OV-1A which experienced a blown main gear tire on landing. The tire was changed, the landing gear visually inspected, and the aircraft returned to service. On the next flight, the pilot experienced a transient reading on the gear indicator when he retracted the landing gear. Lowering of the landing gear and retracting several times failed to correct the abnormal situation, so the pilot returned to base and aborted the mission. Inspection of the right main landing gear revealed a dangerous fatigue crack that had developed to the point of almost complete fatigue separation at the rear gear attaching point. Analysis of the fatigue crack indicated that the attaching point had been subjected to excessive lateral loads above the design criteria. It was concluded that a restraction test of the landing gear, following the blown tire incident, would probably have indicated misalignment of the landing gear and therefore revealed the damage. Revised maintenance procedures now require a retraction test following a blown tire on landing. This procedure should eliminate all possibilities of an accident due to structural damage caused by a blown tire on landing.

(c) Recommendation: That all OV-1 units be notified of this new maintenance procedure.

(2) Failure of Fuel Controls on the T53 L-7 Engine.

(a) Observation: High rate of fuel control failures on T53 L-7 engines in recent months.

(b) Evaluation: During the past quarter five fuel control failures have been experienced. Three months ago a fuel control failure was the prime reason for an aircraft crash which claimed one life. The cause of this failure was found to be lack of lubrication of the gear-shaft drive (P/N 1-080-252-01) in the accessory gear box and the external splines of the fuel control (P/N 73878). These parts were found to have an excessive amount of iron oxide and were worn to the point that no contact was being made.

(c) Recommendation: The fuel control should be pulled during every engine hot end inspection. At this time the fuel control drive spline and gearshaft can be lubricated. This will help prevent future failures of this type.

(3) AN/APS-94 SLAR.

(a) Observation: Failure of AN/APS-94 SLAR components.

(b) Evaluation: In an attempt to increase the reliability and availability of the APS-94 SLAR system, the following policies were initiated:

1. Allow no direct exchange of major components to correct SLAR failures.

2. Remove the entire system for bench tests and alignment checks during the periods the airframe is in periodic maintenance. After 45 days operation under this new policy the SLAR failure rate has been appreciably reduced and mission availability has increased 20%.

(c) Recommendation: That all OV-1 units be informed of this procedure.

(4) AN/APS-94 SLAR/RO-166 Inflight Data Processor.

(a) Observation: Missions have been delayed and aborted because the monobath solution would not process the film. The monobath solution is a chemical mixture used to develop SLAR recording film. The monobath comes in a kit containing two packages of powder and a processing liquid. These contents are mixed with distilled water daily.

(b) Evaluation: The primary reason for the monobath solution not processing film is oxidation that occurs in either of the packages of powder. A contaminated mixture cannot be detected by visual means after it has been prepared. To remedy this problem, after mixing the monobath, place a strip of exposed film in the solution and if the film turns black, it will process the film.

(c) Recommendation: That all OV-1 units be notified of this procedure.

(5) Survival Radio Repair ACR RT-10, FSN 5821-922-4480

(a) Observation: Lack of maintenance and repair facilities of the ARC RT-10 radio.

(b) Evaluation: The present MTOE does not include the provisions for maintenance and repair of the RT-10 radio in the organic communications platoon of Surveillance Airplane Companies. The direct support unit does not have the capability to support in the repair and maintenance of the ACR RT-10. Presently, the organic ACR RT-10 radios are being repaired or exchanged through USAF or Navy channels, thus enabling one of the battalion OV-1 units to maintain its survival radios as mission ready. However, these sources are maintained on a temporary basis and are nearing exhustion. A more direct route of repair and replacement must be sought.

(c) Recommendation: That a study be initiated to evaluate the need for third, fourth, and fifth echelon maintenance of the ACR RT-10 radio in-country.

(6) Surveillance Set AN/AAS 22

(a) Observation: The Surveillance Set AN/AAS 22 which is mounted in the fuselage belly blister of the JOV-1C (SEAMORE) aircraft can be damaged by electrical shorting and corrosion caused by water accumulation during heavy or prolonged rains.

(b) Evaluation: Experience has proven that if a JOV-1C aircraft is parked on the ramp during heavy or prolonged rains, water comes in thru leaks around the wing roots, top canopy jettison hatch, and fuselage skin seams, and collects in the lower housing assembly, gate sync preamplifier and recorder of the AN/AAS 22. These systems are located in the lower portions of the blister. On one occasion, system power was applied after a heavy rain, which caused electrical shorts in the gate sync preamplifier. During subsequent maintenance, one pint of water was drained from the system. In order to completely dry the system, the whole scanner recorder unit must be removed from the aircraft. To correct this problem a new SOP has been adopted which requires special preflight inspections of the affected area, greater maintenance support to prevent leaks into the forward baggage compartment and, when possible, parking the mission aircraft in the hanger during periods of heavy or prolonged rains.

(c) Recommendation: That appropriate Department of the Army agencies be appraised of the requirement to waterproof aircraft compartments which house sophisticated electronic systems.

Jack L. Mullen

JACK L. MULLEN
LTC, FA
Commanding

5 Incl
~~1. Organizational Chart~~
~~2. Personnel Changes~~
~~3. Present for Duty Strength~~
~~4. Aircraft Status~~
~~5. Quarterly Statistics~~
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1 - each company

AVBAGC-O (15 Feb 69) 1st Ind
SUBJECT: Operational Report of the 212th Combat Support Aviation Battalion for the Period Ending 31 January 1969, RCS CSFOR - 65 (RI)

DA, HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96384 5 MAR 1969

THRU: Commanding General, United States Army Vietnam, ATTN: AVHGC-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

This Headquarters has reviewed this report, considers it to be adequate, and concurs with the contents, except as noted below:

a. Paragraph 2a(1), page 4. On 12 February 1969, 1st Aviation Brigade letter, Subject: Standardized MTOE Comments, was sent to all groups and the 212th Combat Support Aviation Battalion requesting comments concerning errors and discrepancies of unit standardized MTOEs. When all comments are returned and evaluated, appropriate MTOE changes will be initiated. If all Surveillance Airplane Companies are experiencing similar problems in the supply area, any MTOE changes initiated will include appropriate changes in supply personnel. Current TOE/MTOE authorizations provide the Surveillance Airplane Company with the spaces requested by the 212th Combat Support Aviation Battalion except for the Assistant Supply Sergeant position. Pending possible future MTOE action a letter can be sent to this Headquarters requesting that the unit in question be temporarily authorized an Assistant Supply Sergeant E5 76Y30. This letter request must also identify a space that can be eliminated in order to finance the supply space. Personnel requested by the 212th Combat Support Aviation Battalion for supply activities of the Surveillance Airplane Company (SAC) are listed below with appropriate comments:

(1) E7 Supply Sergeant 76K40: The 76K MOS no longer exists. A 76Y MOS is correct. Even though an E7 is desired, AR 611-201 authorizes an E6 as the highest grade for a supply Sergeant in a company size unit. An E6 Supply Sergeant, 76Y40, is currently authorized.

(2) E5 Assistant Supply Sergeant 76K20: The 76K MOS no longer exists. 76Y is now correct. AR 310-32 provides a total of 4 personnel in supply positions for a company size unit. However, additional supply positions may be authorized when justified on the basis of complexity of organization, operations or area. The Assistant Supply Sergeant position could be requested on the next MTOE based on the complexity of organization and operations of the Surveillance Airplane Company.

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(3) E5 Armorer 76K20: MOS no longer exists. An E5 is not authorized by AR 611-201. Authorized by current MTOE is one Armorer E4, 76Y40.

(4) E4 Supply Clerk/Typist 76K20: The 76K MOS no longer exists. Authorized by current MTOE is one E4 Supply Specialist 76Y20.

(5) E4 Supply Clerk 76K20: 76K MOS no longer exists. Authorized by current MTOE is one E3 Supply Clerk 76A10.

(6) Driver 71A10: 71A MOS no longer exists. Authorized by current TOE is one E3 Light Truck Driver 70A10.

b. Paragraph 2b(1), page 4. Nonconcur. This O-1 unit has on hand at present, 3 KA 39A cameras to accomplish this mission. If the development of film is beyond the capability of the unit, it can be developed by the 131st Surveillance Airplane Company which is located with the 220th Reconnaissance Airplane Company at Hue Phu Bai.

c. Paragraph 2b(4), page 5. Nonconcur with recommendation. The basic observation is valid however, no other Surveillance Airplane Company units in this Brigade employ two ships on photo missions.

d. Paragraph 2b(5), page 6. Nonconcur with recommendation. Comments noted in this paragraph are valid and are SOP in all Surveillance Airplane Company units.

e. Paragraph 2b(6), page 6. Nonconcur with recommendation. Comments noted in this paragraph are valid and are SOP in all Surveillance Airplane Company units and also clearly stated in the standard check list for the AN/APS-94 system.

f. Paragraph 2b(11), page 8. Concur. A request for authorization for the installation of IFF Interrogation equipment, Transponder AM/APX-72, in the O-1 aircraft was forwarded to USAMV, ATTN: AVHGC-O on 1 December 1968.

g. Paragraph 2c(1), page 9. Nonconcur. This Headquarters conducts a continuing study to evaluate proper utilization of E&E training quotas. Survival training quotas are allocated to groups at a ratio commensurate with OV-1 and O-1 pilots assigned with instructions and guidance for further allocations to unit level in accordance with current established priorities. Careful consideration is required at all levels to ensure that this training is received by crew members according to these established priorities. The availability of quotas is not sufficient to meet all requirements. Second priority is therefore given to group, battalion and unit E&E Officers

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so that they may be trained and then conduct E&E instruction within their units for personnel who do not receive this training.

h. Paragraph 2e(1), page 10. Concur. On the first inspection after the incident this deficiency would have been detected if the inspection criteria on the OV-1 for a hard landing was used. TM 55-1510-204-20, Chapter 3, Section II, page 3-20.

i. Paragraph 2e(2), page 10. Concur. Per fonecon with 34th General Support Group Lycoming Technical Representative, Mr Lennons. He stated this procedure is highly recommended. He will discuss this recommendation further with 34th General Support Group maintenance to make this procedure an added item or entry on every T53-L-7 engine hot end inspection.

j. Paragraph 2e(3), page 11. All units in this command will be notified.

k. Paragraph 2e(4), page 11. All units in this command will be notified.

l. Paragraph 2e(5), page 12. The RT-10 and URC-10 Emergency Radios are a repair and to return to stock item. Units should turn-in items needing repair to their nearest 34th General Support Group AVEL platoon and then requisition from stock. Introduction of the URC-68 in the immediate future will reduce supply problems now encountered.

FOR THE COMMANDER:

DAVID R. ANDERSON
Capt, AGC
Asst. AG

AVHGC-DST (15 Feb 69) 2d Ind
SUBJECT: Operational Report of the 212th Combat Support Aviation Battalion for the Period Ending 31 January 1969, RCS CSFOR-65 (R1)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 963752 1 MAR 1969

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

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1969 from Headquarters, 212th Combat Support Aviation Battalion.

2. (C) Comments follow:

a. (C) Reference item concerning Rocket Jet Fittings, FSN 1670-572-9157, page 4, paragraph 2b(2); concur. Recommend a study on the feasibility of using the cited Air Force or Navy fittings be initiated by the OV-1 Project Manager.

b. (C) Reference item concerning OV-1C Night Target Marking System, page 5, paragraph 2b(3); concur. Recommend the OV-1 Project Manager be tasked to determine the feasibility of equipping the OV-1C with a night marking capability.

c. (C) Reference item concerning Photo Processing Lab, ES-38B, Hoover Electric Motor (Squeegee), page 8, paragraph 2b(10); concur. All using units have been informed of this discrepancy through ECOM channels. Instructions to change appropriate wiring diagrams have been issued by ECOM.

d. (C) Reference item concerning Transponders for O-1 Aircraft, page 8, paragraph 2b(11) and 1st Indorsement, page 16, paragraph f; concur. Action is being taken by 34th General Support Group to provide transponders for twenty O-1 aircraft. Upon determination of weight and balance criteria, plus availability of the APX-72, the 34th General Support Group will coordinate installation.

e. (C) Reference item concerning Intelligence: SEAMORE AN/APS 94 Side-Looking Airborne Radar System, page 9, paragraph 2d(1); concur. This problem was recognized during the SEAMORE evaluation and improvements will be incorporated in OV-1D systems. The OV-1 Project Manager will be informed of this specific comment to assure resolution of this problem.

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SUBJECT: Operational Report of the 212th Combat Support Aviation Battalion for the Period Ending 31 January 1969, RCS CSFOR-65 (R1)

f. (C) Reference item concerning Surveillance Set AN/AAS 22, page 12, paragraph 2e(6); concur. ECOM and the OV-1 Project Manager are aware of this problem. Only two JOV-1C aircraft are configured with blisters. This configuration will not be employed in future OV-1 aircraft.

FOR THE COMMANDER:

C. D. Wilson

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

Cy furn:
212th CSAB
1st Avn Bde

GPOP-DT (15 Feb 69) 3d Ind (U)
SUBJECT: Operational Report of HQ, 212th Cbt Spt Avn Bn for Period Ending 31 January 1969, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 26 Mar 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:

G. E. HOLEYFIELD
MAJ, AGC
Asst AG

UNCLASSIFIED CONFIDENTIAL

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) HQ, OACSFOR, DA, Washington, D.C. 20310	2a. REPORT SECURITY CLASSIFICATION Confidential 2b. GROUP 4

3. REPORT TITLE

Operational Report - Lessons Learned, Hq, 212th Combat Support Aviation Battalion

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

Experiences of unit engaged in counterinsurgency operations, 1 Nov 68 to 31 Jan 69

5. AUTHOR(S) (First name, middle initial, last name)

CO, 212th Combat Support Aviation Battalion

6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
15 February 1969	22	

8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S)
b. PROJECT NO.	691019
c. N/A	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)
d.	

10. DISTRIBUTION STATEMENT

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY
N/A	OACSFOR, DA, Washington, D.C. 20310

13. ABSTRACT

DD FORM 1 NOV 68 1473

UNCLASSIFIED

Security Classification