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DEPARTMENT OF THE ARMY
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WASHINGTON, D.C. 20310



IN REPLY REFER TO
AGAM-R (15 May 68) FOR OT RD 691063

24 May 1968

AD390622

**SUBJECT: Operational Report - Lessons Learned, Headquarters, 223d
Combat Support Aviation Battalion, Period Ending 31 January
1968 (U)**

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1. 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 RD, 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.

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
223D COMBAT SUPPORT AVIATION BATTALION
APO San Francisco 96238

AVGD-DE

12 February 1968

SUBJECT: Operational Report for Quarterly Period 31 January 1968 (RCS-CSFOR-65)

TO: See Distribution

SECTION I. Significant Organizational Activities

1. (U) GENERAL:

a. During the reporting period, the 223d Combat Support Aviation Battalion continued to render support to counter-insurgency operations in the II Corps Tactical Zone, to the fullest extent possible. This support was rendered utilizing the assets of four reconnaissance airplane companies, one utility airplane company and one surveillance airplane company. On 27 November 1967, the 5th Aviation Detachment was assigned and further attached to Qui Nhon Sub Area Command less administration. The 5th Aviation Detachment was redesignated the 58th Aviation Detachment Support, effective 13 January 1968. Construction during the period was vigorously pursued resulting in the completion of a BOQ, dismantling of a condemned building and renovating the area to begin a recreational site containing a volleyball, tennis and basketball court. Parking area and access roads were landscaped and stone surfaced to eliminate some of the muddy conditions encountered during the seasonal rainy period.

Written directive for the employment of rockets from O-1 aircraft was established and is attached as inclosure 1. It is essential to have a stand-off target marking capability in the jungle covered mountainous terrain prevalent in II Corps. Discrete use of the rockets when no other fire was available to influence the actions has proved effective in neutralizing, routing and/or destroying the enemy resulting in a reduction of probable casualties and increasing the combat effectiveness of supported units.

b. (C) The 18th Aviation Company has continued to meet its mission requirements in all four corps areas of the Republic of Vietnam and MAAG TH.I, Thailand with aircraft located at Da Nang, Pleiku, Nha Trang, and Bangkok, Thailand.

The primary task of the Company Headquarters in Qui Nhon is maintenance support of the flight platoons. The aircraft availability rate was 77.6% for this quarter and represents a drop of 2.4% from last quarter. The decrease in availability is attributed to the radio retrofit program and corrosion problems encountered with the underside of the aircraft. Correction of corrosion has required removal of paint, applying a preservative, primer and fresh coat of paint. In severe cases sections of sheet metal required replacing.

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The Retrofit of company aircraft with new ARC-51EX and ARC-54 radios should be completed by 20 February 1968. Improvements in the company area included completion of the Orderly and Supply Room(s) renovations and the installation of hot water facilities.

The First Platoon at Da Nang has continued support of the 5th Special Forces Group and the 3rd Marine Amphibious Force. The 5th Special Forces Operation Delta terminated in mid November with the platoon aviators averaging over one hundred and twenty hours per month during the support of Delta. During this period the platoon completed construction of aircraft revetments to meet minimum protection criteria.

The Second Flight Platoon in Pleiku has continued support of II Corps Headquarters, 5th Special Forces Group, JUSPAO and MAG TAMI, in Bangkok. Located at Holloway ABF, the platoon has erected a new operations building with finishing touches to be completed in February 1968. At 0300 hrs 26 January 1968 the airfield was attacked by enemy rocket and mortar fire. Due to the protection of the revetments the aircraft were only slightly damaged but remained flyable.

The Third Flight Platoon (Prov) in Nha Trang has continued support to the 5th Special Forces Group Headquarters and JUSPAO.

c. (C) During the period the 183d Reconnaissance Airplane Company has continued to perform its visual reconnaissance mission in support of the II Corps visual reconnaissance program in the provinces of Khanh Hoa, Tuy An Duc, Ninh Thuan and Binh Thuan. These four provinces encompass jungle, coastal plains and mountainous terrain giving each aviator varied experience under continually changing flight conditions. Elements of the company are now operating from six permanent and two temporary locations. The four aircraft sections in support of the Americal Division will relinquish its mission and permanent base at Chu Lai to the 21st Aviation Company in the near future. These aircraft will be returned to the visual reconnaissance program in II Corps. The company provided general support to the US Special Forces Recon School at Nha Trang, the US Navy Coastal Surveillance Center for coastal surveillance between Tuy Hoa and Phan Thiet, US Special Forces Operation Delta and Radio Relay for MACSOG from Kontum.

Active participation by company aviators in combat operations within their supported province has been exemplary. Captain Jerry W. Ginn has been recommended for the Distinguished Flying Cross for routing a company of Viet Cong and subsequently destroying a base camp in Ninh Thuan Province. Major Richard H. Kammerling was cited for an Air Medal with "V" Device for assisting in that action. In the Americal Division, 1LT James R. Bazzell was recommended for the Silver Star for saving a US Force from a Viet Cong ambush. Even though the aircraft and his observer had been hit, Lt Bazzell, after taking his observer to medical facilities, returned to aid the friendly forces.

Through the concerted efforts of company personnel many improvements have been made to provide efficient facilities, better security, better living conditions and area beautification. Projects that have been completed or are in progress are: A permanent, covered bunker with a capacity of 150 personnel equipped

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with telephonic and radio communications, a security perimeter lighting set consisting of thirty-four (34) 200 watt floodlights has been installed, extensions to the unit dayroom and mess hall completed, concrete floor poured for aircraft maintenance hangar, concrete floor completed for Tech Supply building, transient officers billets being converted to house general support section aviators and all buildings have been painted.

During the period the company conducted a Christmas program for the 68 children of the orphanage in the village of Ba Gnoi, Khanh Hoa Province. Aviators of the unit, called "Candy Bombers", dropped candy and other articles to the Vietnamese children. The candy was sent from the families of the men in the unit.

Indicative of the high state of morale is the fact that 37% of the enlisted personnel of the unit are serving on extensions in the Republic of Vietnam.

d. (C) During the period the 185th Reconnaissance Airplane Company has continued to meet its mission requirements in the II Corps area. Visual reconnaissance missions were flown in support of Phu Bon, Dar Loc, Quang Doc and Lam Dong Provinces, with eighteen of the company's 25 aircraft committed for this support. Utilizing the remainder of the aircraft, general support was provided to 101st Airborne Brigade, IRRP of E/20th, Special Forces project Delta and MACSOG. The First Section Second Flight Platoon was relieved in place at Tuy Hoa on 1 December 1967 by a section from the 203d RAC. The Second Section Second Flight Platoon provided general support to the 173d Airborne Brigade at Dak To during the period 7 November to 20 December 1967.

A concentrated effort towards improving living conditions and working facilities was rewarded by the presentation to the company of a plaque for the most improved cantonment area in the battalion for November. Improvements completed or in progress are: buildings painted, enlisted barracks divided into two man rooms, hot water showers installed, sidewalk poured and living quarters sandbagged. Aircraft revetments have been completed to minimum protection standards and are credited with reducing the damage that could have been caused during a 4 January 1968 mortar attack.

Throughout the period, the company has been responsible for a major sector of the airfield defensive perimeter at Ban Me Thout. Increased activity has required additional personnel manning defensive positions, which has had a detrimental affect on the operational capability of the unit.

During this period the company initiated its first civil affairs project which included building four swing sets and six see-saw sets for the children of the Ngu Yen Du Montagnard Elementary School in Ban Me Thout. In addition the company hosted fifty-three children and five Sisters from the Van Son Catholic Orphanage in Ban Me Thout to cake, cookies, candy and ice cream in the company mess on 24 December 1967. The children presented a short Christmas program in the Camp Coryell Theater for the officers and men.

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e. (C) The 203d Reconnaissance Airplane Company, having arrived in Vietnam in late October, completed in-country orientation and training on 15 November 67 by temporarily attaching aviators and crew chiefs to established reconnaissance airplane companies throughout the II Corps Tactical Zone. The company became operational on 1 December 1967 and assumed the missions of visual reconnaissance for Binh Dinh and Phu Yen Province and direct support of 41st Arty Gp, elements of the 173d Abn Bde and 51st Arty Gp.

The most significant action against the enemy occurred in the first two weeks of December and the first week of January. First, Captain Brian P. Mullady and 1LT Gregory P. Barlow were recommended for the Distinguished Flying Cross for assistance rendered to a besieged Regional Force Company. They directed artillery and were credited with twenty-six enemy KIA. Secondly, Captain Mullady directed "Spooky", artillery and helicopter gunships against an NVA Company during a night attack resulting in twenty-six NVA killed for which he has been awarded the Vietnamese Cross of Gallantry with Silver Star.

The headquarters and maintenance platoons are residing with the 225th Surveillance Airplane Company at Phu Hiep until completion of permanent type building construction. Through the "Self-Help" program the company has completed a mess hall, two showers, two latrines, supply, operations and one temporary maintenance hangar. Approval for permanent steel maintenance hangar has been granted and construction will begin later this year. The main aircraft parking ramp and taxiway was completed 12 January 1968. Subsequently twelve eight foot high aircraft revetments for O-1 aircraft have been erected in accordance with engineer specifications. Elements of the company at Tuy Hoa North, Qui Nhon, English and An Khe have made considerable improvements in renovation and/or initial construction of living and working facilities.

f. (C) During the reported period the 219th Reconnaissance Airplane Company continued its primary mission of visual reconnaissance of the northern portions of the II Corps Tactical Zone. On 1 December 1967 the company's assets were consolidated into Kontum and Pleiku Provinces, with occasional missions into Dar Loc and Phu Bon Provinces in support of the 4th Infantry Division. (General Support was provided for two Special Forces operations and missions were flown in direct support of 52nd Artillery Group). The most significant action against the enemy during this period occurred on 24 November 1967. Responding to a convoy ambush along Highway 19, ten miles east of Pleiku, Captain Joseph S. Davis and Lt Joseph E. Thornton took off in search of the enemy. After fixing the position of an estimated two company NVA Force, the two aviators vectored and controlled numerous helicopter gunships onto the enemy, aided in control of med-evac operations and briefed tactical aircraft prior to two airstrikes. On this same date in other areas of Pleiku Province, Captain Charles W. Barnes, Lt Hansford L. Bohanon and CW2 Bobby J. Gray engaged NVA Soldiers with artillery and rockets. Total enemy losses resulting from the company's supported engagements were 49 NVA KIA, 7 NVA CIA and 17 SA CIA.

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Enlisted personnel facilities were greatly improved through the installation of a 600 gallon hot water heater in the enlisted latrine. On 23 December 1967, the company's enlisted men's club was opened and appropriately named "Headhunters Hangout". During the period the company maintained a high foreign service tour extension rate of 42%.

g.(C) During the reported period the 225th Surveillance Airplane Company has continued to provide day and night reconnaissance and surveillance throughout the II Corps Tactical Zone employing photographic, Infrared and Side-looking Airborne Radar systems. Seventy-five percent of all missions are during the hours of darkness. The unit participated in Operation Peacebird during the Christmas and New Year truce. During this operation the unit sustained radar coverage of the area within the II Corps Tactical Zone bordering on Cambodia and Laos, infrared surveillance of the known infiltration routes and visual reconnaissance of the II Corps coastline. Due to operational requirements the flying program has changed to the following:

- (1) VR/VP - from four to three flights every two days.
- (2) SLR - from four to five flights every two days.
- (3) IR - from eight to eleven flights every two days.

On 1 November 1967 the unit positioned a Receiving Set Radar Data (AN/TKQ-2) and an Infrared Surveillance Information Center (AN/TLQ1A) at Dragon Mountain, Pleiku RVN in support of the 4th Infantry Division. The Division assigned Imagery Intelligence personnel to the data site to work with the data station operations. This deployment provides for near real time information to the supported unit through data telemetry from the airborne station and has proven very successful.

2. (C) Intelligence and Counter Intelligence:

a. Personnel Security: A continuing problem exists wherein CONUS unit commanders are failing to comply with Department of The Army policy which requires a National Agency Check (NAC) be initiated for all enlisted personnel in pay grades E6, E7, E8 and E9 for whom a SECRET or higher security clearance has not been previously granted.

b. Escape and Evasion: Aircrow members are still arriving in-country without required Escape and Evasion photographs. This battalion does not have the equipment to take these photographs. The equipment has been requisitioned. Subordinate units have been using privately owned cameras to fulfill the requirement. This discrepancy has been brought to the attention of higher headquarters.

3. (C) Operations:

a. The 223d Combat Support Aviation Battalion flew a total of 22,421

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sorties totaling 28,222 hours in support of counter-insurgency operations in Vietnam from 1 November 1967 to 31 January 1968. The reconnaissance airplane companies flew 17,947 sorties totaling 23,764 hours in support of the visual reconnaissance program, direct and general support commitments throughout the II Corps Tactical Zone. The surveillance airplane company flew 644 sorties totaling 2,620 hours in support of IFFORCEV. During this period 10,272 passengers and 290 tons of cargo were airlifted by the 18th UAC.

b. During this period the battalion received a new O-1 allocation plan as follows:

<u>UNIT SUPPORTED</u>	<u>FUNCTIONS</u>	<u>NUMBER OF AIRCRAFTS</u>
G-2 IFFORCE V	VR Program	56
4th Inf Div	Gen Spt/Arty	10
173d Abn Bde	Gen Spt	3
IFFORCE V Arty	Gen Spt	14
(41st Arty Gp)	Gen Spt	(8)
(52nd Arty Gp)	Gen Spt	(6)
General Support	Radio Relay	10
MACSOG		
E/20th Inf		
DELTA		
4 RAC's	C/C & Tng	8
Americal Division	Gen Spt	4

The O-1 allocation to Americal Division is a temporary commitment. It is anticipated that the four aircraft will be returned to the II Corps VR Program approximately 12 February 1968. The VR assets were further allocated by Province as follows: Kontum 9, Pleiku 6, Binh Dinh 6, Darloc 6, Phu Bon 4, Quang Duc 4, Lam Dong 4, Phu Yen 4, Khanh Hoa 6, Tuyon Duc 3, Ninh Thuan 4, Binh Thuan 4. Based on this allocation a stationing plan was made effective 13 January 1968 as follows: 183d - VR of Ninh Thuan, Khanh Hoa, Tuyon Duc and Binh Thuan Province; General Support (Radio Relay) MACSOG, DELTA AND IFFV with aircraft stationed at Phan Rang, Nha Trang, Da Lat, Phan Thiet, Chu Lai, Kontum and Dong Ba Thin. 185th RAC - VR of Darloc, Lam Dong, Quang Duc and Phu Bon Provinces; General Support Radio Relay for MACSOG, E/20th Inf, and IFFV with aircraft stationed at Ban Ho Thout, Bao Loc, Gia Nghia and Cheo Roo. 203d RAC - VR of Phu Yen and Binh Dinh Provinces; General Support for 173d Abn Bde, Gen Spt/Arty for 41st and 52nd Arty Gp, with aircraft stationed at Tuy Hoa North, Qui Nhon, Phu Hiep, LZ English and An Kho. 219th RAC - VR of Kontum and Pleiku Provinces; General Support 4th Inf Div and 52nd Arty Gp, with aircraft stationed at Kontum and Pleiku Holloway.

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c. Mandatory training requirements were met covering subjects required by current directives. The 17th CAG assisted by establishing a program for conducting most mandatory training prior to assigning individuals to the battalions. Mandatory training not covered at 17th CAG is conducted at company, platoon or section level as necessitated by tactical employment.

4. (U) Logistics: (See paragraph 5, Part I)
5. (U) Civil Affairs: None
6. (U) Personnel:

a. Casualties: During the period 1 November 1967 to 31 January 1968 this battalion suffered only eight casualties with one resulting death, a decrease over twenty-one casualties with six deaths for last reporting quarter.

b. Command Changes:

(1) Major Thomas E. Cote assumed command of the 225th Surveillance Airplane Company on 1 December 1967 vice Major John A. Kooglor who assumed duties as the battalion S3, vice LTC Jeremiah B. Hawkins.

(2) Major Robin G. Speiser Jr. assumed command of the 183d Reconnaissance Airplane Company on 19 December 1967 vice Major William R. Bonoit who was reassigned to Navy Test Facility, Norfolk, Virginia.

(3) LTC Jeremiah B. Hawkins assumed duties as Deputy Commanding Officer of the battalion on 4 December 1967 vice LTC Richard K. Mulacoda who was reassigned to Sixth US Army.

(4) Major Elborg F. Calkin Jr. assumed command of the 256th Transportation Detachment on 10 December 1967 vice Major George R. McNutt who was transferred to Fort Eustis, Virginia.

(5) Captain William E. Atleo Jr. assumed command of the 163d Medical Detachment on 25 October 1967 vice Captain Ronald D. Crown who was transferred to Hunter AFB, Savannah, Georgia.

(6) The 58th Aviation Detachment (Support) with LTC Virgil L. Danielson commanding was assigned to this battalion for administration on 27 November 1967.

c. Strength: The authorized, assigned and present for duty strengths of the units assigned to the battalion as of 31 January 1968 follows

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d. Awards: Awards recommended and awarded for the months of November December and January are as follows:

AWARD	NOV		DEC		JAN		TOTAL	
	REC	AWD	REC	AWD	REC	AWD	REC	AWD
SILVER STAR	0	0	2	0	0	0	2	0
LEGION OF MERIT	0	0	0	0	1	0	1	0
DIST FLYING CROSS	11	7	5	4	8	0	24	11
SOLDIERS MEDAL	0	0	4	0	0	0	4	0
BRONZE STAR (S)	14	7	11	11	15	0	40	18
BRONZE STAR (A)	2	2	0	2	0	0	2	4
BRONZE STAR (V)	0	0	0	0	1	0	1	0
AIR MEDAL	38	16	50	62	50	0	138	78
AIR MEDAL CLUSTERS	128	24	94	93	159	0	381	117
AIR MEDAL (V)	0	0	2	1	7	0	9	1
ARCCM (V)	10	2	14	30	23	0	47	32
ARCOM (S)	18	1	2	3	2	0	22	4
ARCOM (A)	5	0	0	0	3	0	8	0
PURPLE HEART	1	4	0	0	2	0	3	4
TOTAL:	228	63	185	206	271	0	584	269

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e. Infusion: During the reporting period the battalion vigorously pursued an infusion program to coincide with the stationing plan to reduce the rotation hump in the various companies and keep personnel turmoil to a minimum. Personnel from the O-1 units were infused with each other and the 13th Battalion at Can Tho. The OV-1 unit personnel were infused with the 244th SAC at Can Tho and the 245th SAC at Marble Mountain, DaNang.

7. (U) Signal: The VSC-2 issued to this battalion has increased the capability to communicate with Group and separate companies. The VSC-2 has operated with minimal component failures. Outstanding results have been obtained using a doublet antenna. The RWI Capability has been used extensively to provide timely communications with subordinate units. The most distant usage of this capability was approximately 500 miles from an airborne ARC 102. The month of December saw the switch over to dial circuits in Qui Nhon. This provided much needed improvements in the telephone communications within the Qui Nhon area as well as long distance capability.

SECTION II. Commander's Observation and Recommendations:

Part I: Observations (Lessons Learned)

1. (U) Personnel:

a. Item: Requirement for additional Flight Operations Specialists
MOS: 71P20.

Discussion: Reconnaissance Airplane Companies have flight platoons operating independently great distances from their company headquarters location. To adequately flight follow, provide necessary administrative assistance and be responsive to emergencies one additional flight operations specialist is needed for each flight platoon in these companies.

Observation: Future MTOE's devised for RAC's operating in Vietnam should reflect this requirement.

b. Item: Personnel Levy for Guard Requirements.

Discussion: During the quarter, an increase in personnel levy to fulfill guard requirements has created an undue hardship and more than normal personnel turbulence. These levies require diverting highly skilled personnel from critical positions because this battalion, unlike a helicopter battalion, has no door gunners or 11B MOS personnel authorized. An aviation unit is ill equipped to provide for its own security. When security can not be provided by the supported unit the aviation unit should be augmented with appropriate security forces.

Observation: Timely and appropriate augmentation of security personnel would eliminate the diversion of skilled personnel and prevent personnel turbulence.

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2. (C) Operations:

a. Item: Difficulty in maintaining visual contact with the low O-1 aircraft on Dual Ship Missions:

Discussion: Dual ship missions are employed over areas of hazardous terrain with one higher than the other. The high cover ship must maintain visual contact with the low ship to adequately plot targets and pinpoint his location in event of an emergency. White paint on the top surface is not sufficient.

Observation: OD colored aircraft are not easily identified against the background of the highlands and jungle.

b. Item: Positioning of Aircraft in Revetments:

Discussion: Aircraft parked tail first in revetments have suffered considerable damage to windcreens from mortar attack. The battalion is testing the effectiveness of closing a portion of the entrance so that only sufficient space is available to provide minimum clearance during manual placement of aircraft within revetments.

Observation: Most vulnerable part of aircraft is exposed.

c. Item: Viet Cong Decoy Techniques:

Discussion: The VC have been known to displace one or more small size units approximately 300 to 500 meters from their main force to act as decoys by permitting observation or intentionally firing on aircraft to prevent observation of the main force.

Observation: All aviators and observers must be made aware of this technique.

d. Item: Use of Rockets on Advance and Withdrawal Routes of Friendly Forces:

Discussion: Helicopter gunships firing rockets are being used to clear advance and withdrawal routes for ground elements. This allows the VC to sight along rocket bursts and direct his mortars on the route being used.

Observation: A change of tactics is required to prevent exposure of routes to be used.

e. Item: Need for Additional Instructor Pilots:

Discussion: Units have arrived in-country with only one qualified Instructor Pilot. A requirement exists to complete Flight Standardization rides regularly to ensure safe and efficient operations. With units dispersed at eighteen separate locations a requirement exists for four qualified Instructor Pilots for each fixed wing company. This situation has been adversely influenced by the fact that practically all replacement aviators for the O-1 companies have been recent aviation school graduates who have insufficient experience to be designated instructor pilots.

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Observation: Sufficient Instructor Pilots should be assigned or time allotted for their training prior to deployment.

f. Item: UHF Homing Capability:

Discussion: Aircraft of this battalion are frequently used in search and rescue operations for downed aviators. All aviators have the URC-10 survival radio pretuned to UHF emergency frequency 243.0MC. The aircraft are equipped with the LN/ARC 51 BX UHF radio with a control panel indicator for UHF Homing but do not have the homing capability.

Observation: UHF Homing Capability is needed to rapidly locate downed aviators.

g. Item: Affect of density altitude on Fixed Wing Aircraft:

Discussion: Aviators commonly associate high density altitude problems with rotary wing aircraft. However, in mountainous terrain and at airfields located at high elevations, high density altitude has contributed to dangerous flying conditions. At airfields with elevations of 4500 feet and above, density altitudes of 7000 to 9000 Ft are common and some O-1 aircraft have been unable to execute a go around with flap settings in excess of 30°.

Observation: Fixed Wing aviators should be alert to and compensate for limitations caused by high density altitudes.

h. Item: Use of Survival Radio URC-10:

Discussion: Although loss of all radios in flight is a rarity, it has happened. Use of the URC-10 with its emergency UHF frequency from the aircraft is very effective.

Observation: All aviators should be aware of this capability.

i. Item: Use of KA 60 Panoramic Camera:

Discussion: Through experimentations the optimum altitude, for detailed intelligence and terrain analysis using the KA 60, is 500 feet absolute considering film footage used and ground gained forward. The system should be set up in the "pulse" mode, one frame every three seconds. This camera has proven very effective in locating targets in areas with little or no prominent terrain features when used in conjunction with the KA 30 in the vortical mode. The KA 60 automatic light meter was designed for vortical photography, consequently when in the forward mounted position the meter is subject to reflected sunlight from clouds causing an underexposed film. Best results were obtained by taping the top 3/4 of the light meter aperture thereby reducing the amount of light entering the sensing element, resulting in an acceptable exposure level. The window on the aircraft nose section will fog during rapid descents from altitude.

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Observation:

- (1) K4 60 Camera increases surveillance capability.
- (2) K4 60 camera aids in locating and plotting K4 30 imagery.
- (3) Normal operation of K4 60 in oblique position produces under-exposed film.

j. Item: Use of 12 and 18 inch lens cone with K4 30 Camera:

Discussion: The 12 and 18 inch lens cone for the K4 30 camera provide flexibility necessary to fly photographic missions at the highest possible altitude commensurate with weather conditions and produce the desired scale. This is particularly helpful in high threat areas in obtaining distant oblique coverage when it is impossible for political or tactical reasons to overfly the area.

Observation: Large focal length lens cones provide a stand-off capability thereby reducing aircraft exposure to groundfire.

3. (U) Training and Organization:

a. Item: Need for additional training for Airborne Sensor Operations
MOS: 26E20:

Discussion: Newly assigned airborne sensor operators require an excessive amount of instruction and practice on map reading prior to becoming operational.

Observation: Operators need additional school training in tactical map reading.

4. (U) Intelligence: None

5. (U) Logistics:

a. Item: Cylinder Separation FSN 2810-086-7746:

Discussion: There have been at least eleven occasions of cylinder assembly separation between front and rear baffles. Leaks caused by the separation have been corrected by changing the cylinder assembly. Emergency AIR's have been submitted.

Observation: Cylinder separation is causing excessive unscheduled maintenance.

b. Item: Analyzer, Ignition and Vibration FSN 4910-474-4099:

Discussion: This analyzer is an Air Force issue item that has

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proven very effective in trouble shooting ignition problems on O-1 aircraft.

Observation: Aircraft downtime is reduced by using this piece of equipment. Every O-1 aircraft unit should have this item issued to their organic direct support personnel. Future O-1 MTOE's should reflect this requirement.

c. Item: Spark Plug (Massive Electrode) FSN 2925-720-3162:

Discussion: Operating life of Army issue spark plug (platinum electrode) FSN 2925-056-7054 has been 50-100 hours less than US Air Force spark plug (massive electrode) FSN 2925-720-3162 which is used for the same O-1 aircraft.

Observation: Use of US Air Force spark plug decreases downtime on O-1 aircraft.

d. Item: Special Management Items (SMI):

Discussion: Requisitions for SMI such as engines, propellers, propeller controls and hydraulic pumps are submitted based on forecast replacement date from operating time before overhaul. These items are not being received by the required delivery date (RDD) causing the aircraft to be grounded and an LDP requisitions submitted. If these items were propositioned at supporting DSU's, maintenance downtime and transportation problems would be reduced.

Observation: Reduction in delivery time of SMI is necessary to increase aircraft availability.

6. (U) Other: None

Part II. Recommendations:

1. (U) Personnel:

a. Item: Reference Section II, Part I, paragraph 1a, requirement for additional flight operations specialists, MOS: 71P20.

Recommendation: MTOE's for Reconnaissance Airplane Companies be changed to authorize three additional 71P20's per unit.

b. Item: Reference Section II, Part I, paragraph 1b, Personnel levy for Guard Requirements.

Recommendation: Augment aviation units with qualified personnel for the additional guard burden.

2. (C) Operations:

a. Item: Reference Section II, Part I, paragraph 2a, Difficulty in maintaining visual contact with the low O-1 aircraft on a Dual Ship Mission:

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Recommendation: Additional Grimes light should be installed or move existing one to top center of fuselage on O-1 aircraft.

b. Item: Reference Section II, Part I, paragraph 2b, Positioning of Aircraft in Revetments:

Recommendation: Where possible park aircraft in revetments nose first.

c. Item: Reference Section II, Part I, paragraph 2c, Viet Cong Decoy Techniques:

Recommendation: Disseminate to all aviators and insure if small groups are observed, an intensive search is conducted of the immediate surrounding area for possible larger forces.

d. Item: Reference Section II, Part I, paragraph 2d, Use of Rockets on Advance and ~~Withdrawal~~ Route of Friendly Force:

Recommendation: Gunships should use Miniguns or Machine Guns instead of rockets until a definite target is developed to prevent enemy from observing routes.

e. Item: Reference Section II, Part I, paragraph 2e, Need for Additional Instructor Pilots:

Recommendation: Insure Instructor Pilot personnel are on hand prior to units leaving CONUS.

f. Item: Reference Section II, Part I, paragraph 2f, UHF Homing Capability:

Recommendation: Modify aircraft radios to provide a UHF Homing capability.

g. Item: Reference Section II, Part I, paragraph 2g, Effect of Density Altitude on Fixed Wing Aircraft:

Recommendation:

- (1) Reemphasize effect of density altitude on fixed wing aircraft.
- (2) Responsible CONUS agency determine landing configuration limitations of O-1 aircraft and disseminate same.

h. Item: Reference Section II, Part I, paragraph 2h, Use of Survival Radio URC-10:

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Recommendation:

- (1) Disseminate to all aviators.
- (2) Incorporate into - 10 emergency procedures.

i. Item: Reference Section II, Part I, paragraph 2i, Use of KA 60 Panoramic Camera:

Recommendation:

- (1) Incorporate in surveillance school classes the technique of using KA 60 capabilities with KA 30 missions to assist in plotting of KA 30 Imagery.
- (2) Change - 10 on OV-1 to incorporate use of aircraft camera window defrost system while making rapid descents if they are going to use KA 60 camera.

j. Item: Reference Section II, Part I, paragraph 2j, Use of 12 and 18 inch lens cones with KA 30 camera:

Recommendation: When possible, OV-1 units should use the larger lens cone to insure minimum low level exposure to ground fire.

3. (U) Training and Organization:

a. Item: Reference Section II, Part I, paragraph 3a, Need for Additional Training for Airborne Sensor Operators - MOS: 26E20:

Recommendation: Fort Huachuca Aerial Surveillance School should emphasize and if necessary increase instruction on tactical map reading for aerial sensor operators - MOS: 26E20.

4. (U) Intelligence: None

5. (U) Logistics:

a. Item: Reference Section II, Part I, paragraph 5a, Cylinder Separation - FSN 2810-086-7746:

Recommendation: Responsible stateside agency should insure quality control during assembly of subject part.

b. Item: Reference Section II, Part I, paragraph 5b, Analyzer, Ignition and Vibration - FSN 4910-474-4099:

Recommendation: TOE's for Reconnaissance Airplane Companies should be modified to authorize one each per company.

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c. Item: Reference Section II, Part I, paragraph 5c, Spark Plug (massive electrode) - FSN 2925-720-3162:

Recommendation: This item be made standard US Army issue in lieu of Spark Plug (platinum electrode) - FSN 2925-056-7054.

d. Item: Reference Section II, Part I, paragraph 5d, Special Management Items (SMI):

Recommendation: Pro position demand supported SMI at DSU but main-issue control at depots.

6. (U) Other: None

1 Incl
as

Leslie H. Gilbert

LESLIE H. GILBERT
LTC, CE
Commanding

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AVGD-SC (14 Feb 68) 1st Ind
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968

HEADQUARTERS, 17th Combat Aviation Group, APO 96240, 23 February 1968

TO: Commanding General 1st Field Forces Vietnam, APO 96240

1. (U) The 223d Combat Support Aviation Battalion Operational Report for Quarterly Period Ending 31 January 1968 is forwarded for your information and action as necessary.
2. (U) This Headquarters has reviewed this ORLL and concurs with the report as modified here in.
3. (C) Reference Section II Part I paragraph 2b. Item concerning positioning of aircraft in revetments. Concur with proposal of closing a portion of the open end of the revetment. Additionally recommend parking aircraft nose first into the revetment.

FOR THE COMMANDER:

Oraville A. Day
ORAVILLE A. DAY
Captain, AGC
Adjutant

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AVFA-GC-OT (14 Feb 68)

2d Ind

SUBJECT: Operational Report-Lessons Learned for Quarterly Period Ending
31 January 1968 RCS CSFOR-65 UIC DKLAAA 223d CSAB (U)

HEADQUARTERS, I FIELD FORCE VIETNAM, APO 96350

TO: Commanding General, 1st Aviation Brigade, APO 96375

Concur.

FOR THE COMMANDER:



ROBERT C. GABBARD

ILT, AGC

ASST ADJUTANT GENERAL

Copy Furnished:
223d CSAB

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AVBA-C (12 Feb 68) 3d Ind
SUBJECT: Operational Report for Quarterly Period 31 January 1968
(RCS-CSFOR-65)(UIC: WDLKTO)(U)

HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96384 **MAR 29 1968**

THRU: Commanding General, US Army Vietnam, ATTN: AVHGC-DST, APC 96375
Commander in Chief, US Army Pacific, ATTN: GPOP-CT, APO 96558

TO: Assistant Chief of Staff for Force Development, DA (ACSFOR DA),
Washington, D.C. 20310

1. This headquarters has reviewed subject report of the 223d Combat Support Aviation Battalion, considers it to be adequate, and concurs with the contents as indorsed.

2. The following additional comments are considered pertinent:

a. Sec I, para 2b, page 5: Separate action will be taken by this headquarters to alleviate the problem of aircrew members arriving in-country without required escape and evasion photographs.

b. Sec I, para 2a, page 5: Separate action will be taken by this headquarters to alleviate the problem of enlisted personnel arriving in-country without the required National Agency Check.

c. Sec II, para 1a, page 10: A proposed MiOE, 1-257F, reorganizing the reconnaissance airplane companies has been submitted to DA for approval. One assistant operations officer was added, but due to personnel space limitations, additional flight operations specialists were not proposed.

d. Sec II, para 5b, page 13 and 14: This is not a standard item of issue and cannot be included on an MiOE until the item has been adopted by the Army as a standard item of issue.

3. The correct unit identification code for this unit is WDLKTO.

FOR THE COMMANDER:

A. D. Van Horn, Jr
A. D. VAN HORN, JR
WO1, USA
Assistant Adjutant General

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AVHGC-DST (12 Feb 68) 4th Ind (C) CPT Arnold/ms/Lbn 4485
SUBJECT: Operational Report for Quarterly Period 31 January 1968
(RCS CSFOR-65)

HEADQUARTERS, US ARMY VIETNAM, APO San Francisco 96375 7 APR 1968

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 1968 from Headquarters, 223d Combat Support Aviation Battalion as indorsed.

2. (C) Pertinent comments follow:

a. Reference item concerning personnel levy for guard requirements, page 10, paragraph 1b; and page 14, paragraph 1b: Concur. The requirement for additional security personnel is recognized. This headquarters is awaiting USARPAC approval on manpower survey conducted in December 1967. Until such time, no additional personnel can be made available. Recommend early approval of USARPAC manpower survey recommendations.

b. Reference item concerning difficulty in maintaining visual contact with the low O-1 aircraft on dual ship missions, page 11, paragraph 2a; and page 14, paragraph 2a: Nonconcur. The desirability of mounting the Grimes light on top center of the aircraft is questionable for the following reasons:

(1) The beam of the Grimes light is directed horizontally and not vertically. Therefore, for proper identification purposes, using the light, the high aircraft must fly at an altitude very close to that of the low aircraft.

(2) The amount of light deflected into the cockpit during night flight or periods of reduced visibility will tend to cause vertigo or to have other disturbing effects on the pilot.

c. Reference item concerning need for additional instructor pilots, page 11, paragraph 2e; and page 15, paragraph 2e. This matter is now being studied by the 1st Aviation Brigade.

d. Reference item concerning UHF homing capability, page 12, paragraph 2f; and page 15, paragraph 2f: Nonconcur. All URC-10 survival radios in the command are scheduled to be replaced with the URC-68 within the next fiscal year. The URC-68 has both UHF and FM capability and therefore meets the requirement for rapid location of downed aircrafts.

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AVHGC-DST (12 Feb 68) 4th Ind (C)
SUBJECT: Operational Report for Quarterly Period 31 January 1968
(RCS CSFOR-65)

e. Reference item concerning Analyser, Ignition and Vibration, page 13, paragraph 5b; and page 16, paragraph 5b. This headquarters will query the 34th General Support Group as to the possibility of procuring and issuing this item.

f. Reference item concerning spark plug (massive electrode), page 14, paragraph 5c; and page 17, paragraph 5c. 17th CAG has requested information as to the feasibility of utilization of this spark plug by Army aircraft. This headquarters is following up on the inquiry.

g. Reference item concerning special management items (SMI) now termed Aviation Intensive Managed Items (AIMI), page 14, paragraph 5d; and page 17, paragraph 5d: Concur. Shortages of these items at present preclude the prepositioning of AIMI at DSU level.

3. (U) The correct unit identification code for this unit is WDLKAA.

4. (U) A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER


G. S. NAKATSUKASA
Captain, AGC
Assistant Adjutant General

Copies furnished:
HQ 223d Cbt Sup Avn Bn
HQ 1st Avn Bde

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GPOP-DT (12 Feb 68) (U) 5th Ind
SUBJECT: Operational Report of HQ, 223d Cbt Spt Avn Bn for Period
Ending 31 January 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 2 MAY 1968

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

1. This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed.
2. Reference 4th Indorsement, paragraph 2a. The Manpower Survey-USARV Security Forces, conducted during December 1967, was approved by: 1st Indorsement, GPOP-FD (23 January 1968), subject: Manpower Survey-USARV Security Forces (TDA P5-WIZJAA-00). Although this survey encompassed many combat Aviation Support Battalions, there is no direct tie-in with the 223d Combat Support Aviation Battalion.

FOR THE COMMANDER IN CHIEF:



C.L. SHORTE
CPT, AGC
Asst AG

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DEPARTMENT OF THE ARMY
223D COMBAT SUPPORT AVIATION BATTALION
APO San Francisco 96238

AVGD-DE

25 January 1968

SUBJECT: Employment of Rockets from O-1 Aircraft

TO: SEE DISTRIBUTION

1. The purpose of this letter is to establish policy within this bat-
talion on the employment of rockets from O-1 aircraft.

2. Normally, O-1 Aircraft will be equipped with four 2.75 inch rockets
for employment against the enemy as prescribed herein and in accordance with
the rules of engagement as outlined in inclosure # 1. Rockets will be em-
ployed:

a. Primarily to mark targets for attack by artillery, naval gun-
fire, strike aircraft, gunships and ground forces.

b. Secondly in a suppressive fire or blocking force role to
assist the supported unit in gaining and/or sustaining a tactical advantage.
(see para 3 below).

c. Thirdly to engage personnel targets as a final protective and
safety measure for friendly forces. (see para 3 below).

3. The employment of rockets in other than the primary role (para 2a)
will be accomplished with discretion and as a last resort when no other re-
action force is available to influence the action.

1 Incl
as

LESLIE H. GILBERT
LTC, CE
Commanding

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Incl # 1 to ORLL

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RULES OF ENGAGEMENT

1. PURPOSE: To establish rules of engagement applicable to O-1 aircraft equipped with 2.75 inch rockets.
2. RULES OF ENGAGEMENT: When a potential target has been selected utilizing the criteria cited in the basic letter, the aviator will prior to firing rockets at the target, insure that:
 - a. Targets are positively identified as hostile.
 - b. Exact positions of friendly personnel are known and identified.
 - c. The local fire control agency has approved firing upon the specific target at that time.
 - d. Ordnance will not endanger civilians or friendly troops.

Incl 1 to Incl 1

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CO, 223d Cbt Spt Avn Bn
⁽⁹⁾ Operational rept. for quarterly period ending 31 Jan 68

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13. ABSTRACT

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