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7 August 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 2d Battalion, 94th Artillery, Period Ending 30 April 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
Major General, USA
The Adjutant General

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   2d Battalion, 94th Artillery
1. Section 1. Operations: Significant Activities: At the beginning of the reporting period the battalion was deployed at the following locations: Headquarters and Headquarters Battery at LZ Nancy (YD 434/400); Battery A (6") at LZ Sally (YD 635/274); Battery B (175mm) at C-1 (YD 2105/74); Battery C (3") at LZ Nancy (YD 434/400); and Service Battery remained at Dong Ha Combat Base (YD 239/98). The mission of the battalion was general support XXIV Corps, reinforcing the 12th Marine Regiment (Battery B), reinforcing the 101st Airborne Division Artillery (Airmobile) (Battery A), establish a quick fire channel to 101st Airborne Division Artillery (Airmobile) from Battery C. On 161800 February 1969 the battalion checked all fires for a 24 hour period in observance of the Vietnamese Tet holidays. Firing was resumed promptly at 171800 with a battalion TOT. Increased enemy activity along the DMZ prompted the deployment of Battery C to C-1 on 28 February 1969 with the mission of general support XXIV Corps, reinforcing the 12th Marine Regiment. During the one month period in that position the battery blasted enemy positions with its deadly 8" howitzers. 42 KIA's, 75 bunkers, 4 anti-aircraft positions and 19 secondary explosions were credited to the battery. The battery returned to LZ Nancy on 31 March 1969. The requirement for more heavy artillery to the south resulted in Battery B moving to Dong Ha on 12 April 69, rotating overnight to 8", and moving 65 miles south the following day to occupy Fire Base Boyd (YD 412/134). The battery assumed the mission of general support XXIV Corps, reinforcing the 101st Airborne Division Artillery (Airmobile). Concurrent with the rotating of Battery B, the unit became a pure 8" battalion for the first time since its arrival in Vietnam over two and one half years ago. The imminent closing of Fire Base Boyd precipitated Battery B's next move to Gia Le (YD 830/150) on 21 April 69. On 25 April 69 Battery A moved on very short notice from LZ Sally to Camp Evans (YD 543/11) to provide much needed supporting fires to landing zones to the west. During the reporting period the battalion fired 2,760 missions expending 3,484 rounds of 175mm and 11,786 rounds of 8" ammunition. Each fire base and LZ received intermittent incoming enemy rocket and mortar attacks. In addition, LZ Nancy sustained a ground attack supported by heavy RPG and mortar fire. The attack occurred on 15 March 69 and was unsuccessful. The battalion received no injuries as a result of enemy action during the reporting period. Increased emphasis was placed on the conduct of ICM missions and preventive maintenance. The frequency of moves during the latter portion of the reporting period emphasized the importance of keeping cargo carrying vehicles in excellent running order. The gun R&R program has materially contributed to the very high availability of artillery in the battalion. During the 356 days available the weapons were down only 23 days for an availability percentage of 94%. The civil affairs program was limited to weekly MEDCAP's to outlying villages. This conservative, but well received program, has been mutually beneficial for the patients...
and the battalion. The firing batteries were inspected by the XXIV Corps firing battery inspection team. All batteries received satisfactory ratings. The Corps CFT team conducted spot inspections of each battery. With the exception of Headquarters battery, all units passed the inspection. The battalion has fired 24,000 rounds since arriving in country.


(a) Observation. Terrain and climatic conditions require that heavy artillery be fired from gun pads.

(b) Evaluation. Due to high priority commitments, engineer units cannot quickly respond to this battalion's requirement for the construction of heavy gun pads. A field expedient gun pad, constructed of 8"x8" timbers and 2"x12" planks, has been designed that meets the immediate requirements of the battery. A octagonal frame 18' in diameter is constructed with 8"x8" timbers. The same size timber is used for the eight rail of the octagon. A inner, reinforcing octagon is laid four feet from the center to support the necessary additional support. 8"x8" timbers are also used for this purpose. Using chain saws, 3"x12" planks are then cut and the platform is covered. This platform easily supports the weight of the gun, provides a stable and dry firing platform, and can be disassembled and buried for future use. The width of the pad permits easy speed placement and sufficient room to relay the gun.

(c) Recommendation. That heavy artillery battalions consider the use of field expedient gun pads constructed in a similar fashion.

2. Extended Range Graphical and Tabular Firing Tables.

(a) Observation. Non-standard conditions permit the 8" howitzer to fire beyond its normally accepted maximum range of 10,000 meters.

(b) Evaluation. The final range entry in the present graphical firing table is 16,000 meters. Net plus VE GFT settings derived from subsequent meteorological and registration corrections permit the firing of targets well in excess of the normally accepted maximum range. Targets 17,100 meters distant have been successfully engaged by firing units of this battalion. FADAC will compute the necessary data to engage these targets, however the computer is not always operational. In addition, the graphical sight table and the tabular firing tables only consider ranges up to 16,000
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11 May 1969


Measures and 10,000 meters respectively. Firing ranges were distant necessitating the availability of data at these ranges.

9. Observation. That the 8-5-5, graphical firing table be extended to include ranges in excess of the standard maximum range (up to 17,000) and that the tabular firing table (Table 3) and graphical data tables be revised to include the higher ranges achievable under non-standard conditions.

3) Construction of Azimuth Ring in Degrees on Firing Charts.

(a) Observation. The necessity of posting the angle of hazard of artillery firing for aviators requires a rapid conversion of miles to degrees.

(b) Evaluation. The air advisory posted for the purpose of various aviators of artillery firing includes the angle of hazard in degrees. Since the artillery deals with miles, a rapid and accurate system of deriving the angle of hazard in degrees is necessary. To alleviate the problem, an azimuth ring in degrees has been super-imposed on the firing charts of each battery. With the use of the range-angle-deflection protractor, the angle of hazard in degrees can be quickly determined graphically.

(c) Recommendation. That artillery units in Vietnam consider the use of azimuth rings in degrees to assist in deriving rapid and accurate air advisory data.

4) Remote Switch for Lighting the End of the Orienting Line (OL)

(a) Observation. A remote means of providing illumination to the end of the OL decreases the time necessary to relay during hours of darkness.

(b) Evaluation. The installation of a remote switch at the aiming circle permits the executive officer to illuminate the end of the OL without having to physically move to the lighting device. Night discipline and the possible confusion with aiming post lights prohibits the constant illumination of this area. The remote switch saves time and eliminates any confusion during the critical relay period.

(c) Recommendation. That artillery units consider the use of a remote switch at the aiming circle to light the end of the OL.

5) Avoidance of Patterns when Firing Interdiction Targets.

(a) Observation. Daily interdiction firing can become so repetitious as to cause a pattern in firing.

(b) Evaluation. The firing of interdiction targets tends to
Operational Report of 2d Battalion 94th Artillery for Period Ending 30 April 1969, RGS GSPB-66 (R)

become a routine matter for fire direction centers as well as the gun crews. The tendency to succumb to a set pattern of firing is unavoidable without the constant attention of the executive officer to insure that those targets are engaged in an imaginative and random manner. More effective results will be achieved if the enemy is not aware of when and where he may be struck.

(c) Recommendation. Realizing that the staggering of interdiction fire is not a new concept in artillery employment, recommend that artillery battalion's evaluate their interdiction programs to insure that surprise and effect on the enemy is maximized by the imaginative selection and firing of targets.

(6) Requirement for Long Range Antenna Systems in the Artillery Counter-Insurgency Role.

(a) Observation. The RC-292 antenna does not adequately meet the communication needs of a widely dispersed artillery battalion.

(b) Evaluation. The planning effective range of the presently authorized RC-292 antenna is thirty miles in rough terrain. This battalion, and others like it, are deployed over much longer distances. The AN-2235/URC, or leg periodic antenna, has a planning range of 100 miles. It is highly directional and ideally suited to provide cold communications to widely separated units. This antenna is organic to the Marine Corps and has enjoyed considerable success in this area. The FSN of this antenna is 5985-782-7633. A TOE change providing for the addition of fourteen of these antennas is being submitted by this battalion.

(c) Recommendation. That the AN-2235/URC antenna be procured by the US Army and made available through normal supply channels pending the necessary approval of the recommended change to the TOE.

(7) Requirement for Rectifiers in an Artillery Battalion.

(a) Observation. A means to convert AC electricity to DC is necessary to provide adequate power to the numerous radios and speech security devices inherent in an artillery battalion.

(b) Evaluation. Present TOE's only provide for small tactical DC generators. Experience has shown that these generators do not have the capacity nor the staying power to provide adequate power for long term operations. Large AC generators have been made available, and authorized, for semi-permanent fire bases. A rectifier is necessary to capitalize on this reliable source of power and to convert the AC current to DC. The PP1451, 50 amp rectifier (FSN 6130-985-8157) is ideally suited for this purpose. By converting the readily available AC current, the overworked tactical generators can be maintained and stored for emergency backup, or for use in
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AD-16-6

S-1743

Operational Report of 2d Battalion 94th Artillery for Period
Ending 30 April 1969, PEO 5908-63 (RT).

Areas where AC current is not available. A recommended change to the
TOF is being submitted requesting the addition of five PPI/51 rectifiers.

(c) Recommendation: That PPI/51 rectifiers be made available
through normal supply channels pending the approval of the TOG change.

a. Training - None
b. Intelligence - None
c. Logistics - None
d. Organization - None
e. Survival, Escape and Resistant: None

THOMAS E. CUNLiffe
LIEUTENANT COLONEL, FA
COMMISSIONING

5

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AVGL-CO (11 May 69) 1st Inf


TO: Commanding General, XXIV Corps Artillery, ATTN: AVII-C, APO 96308

Concur with the recommendations made in Section 2.

[Signature]

ROBERT V. LEE JR.
Colonel, Field Artillery
Commanding
AVII-ATC (11 May 69) 2d Inf

Conjunction report of 2d Battalion, 29th Artillery, for period ending 30 April 1969 - CONUS-P (21) (6)

Headquarters, XXIV Corps Artillery, ATTN: AVII-ATC, APO San Francisco 96300, 3 June 1969

FOR Commanding General, XXIV Corps, ATTN: AVII-ATG, APO San Francisco 96300

(a) Concur with the recommendations in section 2 with the following exception.

Reference paragraph 2a(2), extended range graphical and tabular firing tables. Recommendation is based on fact and has merit. However, it would be uncoordinated to redesign all tabular and graphical firing tables and graphical site tables for this small bonus effect. It is recommended therefore that extended range be considered when new equipment is designed and issued. This phenomenon normally applies only to those weapon systems which have a positive velocity error or a small negative velocity error.

FOR THE CPT's Aids

[Signature]

Major, ADA

Adjutant
SUBJECT: Operational Report of 2nd Battalion, 94th Artillery for Period Ending 30 April 1969, RCS CSPOR-65 (R) (B)

DA, HQ, XXIV Corps, APO 96308 13 JUN 1969

TO: Commanding General, United States Army, Vietnam, APO 96375

1. The ORLL of the 2d Battalion, 94th Artillery has been reviewed at HQ, XXIV Corps and is forwarded in accordance with USARV Reg 525-16.

2. Concur with Commander's recommendations as indorsed by XXIV Corps Artillery.

FOR THE COMMANDER:

[Signature]

H.R. TAYLOR
CPT, AGC
ABST AG
TO: Commander in Chief, United States Army, Pacific, ATTN: G-POP-DT, APO 96558

1. This headquarters has reviewed the Operational Report—Lessons Learned for the quarterly period ending 30 April 1969 from Headquarters, 2d Battalion 94th Artillery.

2. Comments follow:

   a. Reference item concerning "Requirements for Long Range Antenna Systems in the Artillery Counter-Insurgency Role," section II, page 4, paragraph b(6); concur. Electronics Command (ECON) is currently studying the possibilities of a limited procurement of Antenna AS-2236; however, it will not be a replacement for the Antenna RC-292 since the AS-2236 is a highly directional antenna while RC-292 is omnidirectional. Further supply action is dependent on the TOE change the unit says it will submit. Unit will be advised of above comment.

   b. Reference item concerning "Requirement for Rectifiers in an Artillery Battalion," section II, page 4, paragraph b(7); concur. At present the PP 1451 charger battery is available in stock. There are no problems in obtaining this item. The FSN for the PP 1451 is 6130-985-6157 and not 6130-585-8157 as stated in the GRL. Unit will be advised of above comment.

FOR THE COMMANDER:

C. D. Wilson
1LT, AG
Assistant Adjutant General

Cy fornt:
2d Bn 94th Arty
XXIV Corps
SUBJECT: Operational Report of HQ, 2d Battalion, 94th Artillery for Period Ending 30 April 1969, RCS CSPOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558

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: D. A. TUCKER
CPT, AGC

[Signature]
Operational Report - Lessons Learned, Hq, 2d Battalion, 94th Artillery

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

CO, 2d Battalion, 94th Artillery

11 May 1969

N/A

N/A