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AGO ltr 29 Apr 1980 ; AGO ltr 29 Apr 1980

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**DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310**

IN REPLY REFER TO  
**AGAM-P (M) (20 Apr 67) FOR OT**

**26 April 1967**

**SUBJECT: Operational Report - Lessons Learned, Headquarters,  
1st Howitzer Battalion (105mm)(SP) 40th Artillery (U)**

**AD393842**

**TO: SEE DISTRIBUTION**

**25 1968**

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 1st Howitzer Battalion (105mm)(SP) 40th Artillery for quarterly period ending 31 January 1967. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to the Commandants of the Service Schools 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**

**1 Incl**

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DEPARTMENT OF THE ARMY  
HEADQUARTERS 1ST HOWITZER BATTALION (105mm)(SP) 40TH ARTILLERY (1)  
APO San Francisco 96269

① 7 February 1967

SUBJECT: Operation Report for Quarterly Period Ending 31 January 1967.  
(RCS CSFAR-65)(U)

TO: See Distribution

① 18 CAS FCF

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**SECTION 1 SIGNIFICANT UNIT ACTIVITIES**

1. (S) General: This battalion was organized 21 February 1966 at Ft. Sill, Oklahoma as a school troop unit. In mid-May 1966 it was alerted for Vietnam. It began its eight week Intensified Combat Training Program on 23 June and completed the program with a battalion ATT in mid-August receiving a maximum rating. The following 30 day period was utilized for PCN of equipment and POR of personnel. The heavy equipment was shipped from Beaumont, Texas on 20 September. The main body sailed from San Francisco on the USNS Eltinge on 24 September and the advance party left Ft. Sill by C-130 on 30 September. The battalion was originally assigned to II Field Force. The advance party arrived at Tan Son Nhut Air Base on 2 October and proceeded to Ou Chi to prepare for the arrival of the main body. Prior to its arrival the destination of the battalion was diverted to I ARVN Corps area. The main body arrived at Da Nang on 15 October 1966 and the equipment arrived 19 October. The battalion was subsequently placed under operational control of III Marine Amphibious Force with assignment to I Field Force and attachment to I Field Force Artillery. OPCON was further transferred to 12th Marine Regiment, 3d Marine Division and the battalion was ordered to the Dong Ha Combat Base in the DMZ area. The movement was done over a nine day period using LCU boats to transport the heavy equipment and two separate motor marches for the 2 1/2 Ton trucks and smaller equipment. The three firing batteries arrived the evening of 26 October and fired their first mission 27 October. The battalion has the primary mission of general support with alternate missions of direct support and reinforcing on a separate battery basis. The battalion operates primarily in its base camp at Dong Ha although there are periodic operations by separate batteries away from the base camp.

2. (U) Intelligence: Necessary security clearances were obtained prior to departing CONUS. A basic load of maps was issued to the battalion at Fort Sill, Oklahoma. Maps were inventoried and broken down into basic loads for each battery for issue overseas; however, due to a change in the final destination of the battalion a new basic load of maps had to be issued to this unit at its overseas destination.

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Upon the battalion's arrival in Vietnam the battalion staff and battery commanders were briefed on the current enemy situation by AC of S G2, III MAF. The battalion S2 maintains a current enemy situation map with information received from intelligence resources of the 12th Marine Regiment and 3d Marine Division. Weather forecasts are obtained daily from the S2, 12th Marine Regiment. To date no problems have been encountered in the intelligence field that could not be solved locally.

**(3) Operations and Training activities**

**a. Plans. Current plans for the battalion are:**

- (1) To provide artillery support in defense of the Dong Ha Combat Base located at coordinates YD 226598.
- (2) To be prepared to move batteries and provide artillery support in the Quang Tri Province.
- (3) To provide one battery for an indefinite period in direct support of the 3d Battalion, 3d Regiment, 3d Marine Division located at coordinates XD 982 542.
- (4) Conduct training as outlined by USARV, I FFORCEV and I FFORCEV Artillery training directives, plus a detailed section training program.

**b. Operations**

- (1) This battalion was in general support of Operation Prairie since occupying firing positions on 27 October 1966 for a total of 97 days. Operation Prairie conducted by the 3d Marine Division began on 3 August 1966 and ended 31 January 1967.
- (2) "C" Battery, this battalion, participated in Operation Lan Son 328 that ran from 9 November 1966 through 17 November 1966, a total of 9 days. This was an ARVN search and destroy operation to the south of Quang Tri City. Artillery support consisted of one 105mm (SP) battery from the US Army, one 155mm (SP) battery (minus one platoon) from the US Marines, one 105mm (towed) battery and one 155mm (towed) battery from the ARVN's. A joint tactical fire direction center with interpreters was employed and each of the batteries were required to compute their own technical data. This was a very successful operation and proved that US Army, US Marines and ARVN's could work jointly without major difficulties.
- (3) "A" Battery moved from base camp on 19 December 1966 in direct support of the 3d Battalion, 3d Regiment, 3d Marine Division and returned on 28 December 1966 for a total of 10 days. The battery was placed under the operational control of the 1st Battalion, 12th Regiment, 3d Marine Division during this period.

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(4) "C" Battery moved from base camp on 22 January 1967 in direct support of a search and destroy operation conducted by the 3d Battalion, 4th Regiment, 3d Marine Division for a period of one day.

(5) "A" Battery moved from base camp on 23 January 1967 in direct support of a search and destroy operation conducted by the 3d Battalion, 4th Regiment, 3d Marine Division for a period of one day.

(6) "B" Battery departed base camp on 13 January 1967 and is presently in direct support of the 3d Battalion, 3d Regiment, 3d Marine Division in vicinity of the "Rock Pile" (XD 9658) approximately 20 miles west of base camp. The battery has provided artillery support for 19 consecutive days. Terminal date of the operation has not yet been determined. Platoons of the battery have displaced a total of 4 times during this operation, often displacing before dawn, necessitating blackout movements. Two displacements were approximately 1000 meters to facilitate direct fire on NVA positions along the rear of the "Backpack" (XD 9658) using concrete piercing fuses on caves in the rock. Two other displacements were to Ca Lu (YD 0543) in the Ba Long Valley to provide direct support for a Marine Company. Plans originally called for Marine towed 105mm howitzers to support operations in Ba Long Valley. The bridges along the route to Ca Lu had been destroyed and bypasses were impassable to towed howitzers and heavy wheeled vehicles but were negotiable by the M108 105mm self propelled howitzers. While the platoons of Battery B were thus employed, the battery proper was augmented by platoons of Marine 105mm towed howitzers at their location near the Rock Pile. Since arrival in country, this is the first experience of the battalion in platoon employment, direct fire, and in blackout marches. The battery is under the operational control of the 1st Battalion, 12th Regiment, 3d Marine Division.

(7) "K" Battery, (155mm Howitzer Self Propelled), 4th Battalion, 12 Regiment, 3d Marine Division was placed under operational control of this battalion on 15 December 1966 and is still in that status. The battalion FDC has increased its charts to handle the greater range, had added a fourth set of computers and has obtained 155 HP FDC equipment. No problems have been encountered.

(8) The battalion has sent out squad sized patrols, almost on a daily basis, to search the area out to four or five thousand meters around the base camp for signs of enemy activity, and to disrupt any preparation for mortar attacks. The battalion has also participated in one night ambush patrol.

## c. Training

(1) This battalion conducted an intensified training program from 23 June 1966 to 20 August 1966 in preparation for movement overseas. Subjects taught were in accordance with pertinent Army subject schedules. Additionally, special RVN training was conducted. Sixty-seven days were required for packing, crating and movement overseas.

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Since arriving in country training has been conducted daily with emphasis placed on perimeter defense, infantry tactics, scouting and patrolling, communication procedures, firing battery techniques, safety, familiarization of small arms and crew served weapons, field sanitation, first aid operation and employment of claymore mines, use and function of the anti-personnel round (bee-hive), and section training for all sections. Portions of 157 days have been spent in some form of training since beginning the intensified training program.

d. Chemical: Chemical activities have not been employed in this area to date, however, chemical training was conducted prior to departing CONUS to include the gas chamber exercise. Chemical training is also programmed in the current annual training schedule.

e. Psywar: This unit has not been engaged in psywar, but has received an orientation class in this area.

4. (S) Logistics: The battalion departed Ft. Sill with approximately 92% of its TOE equipment and 94% of its PLL. The logistical support plan for the battalion in its present location is to draw Class I and III from Marine facilities on hand. Class V is an Army responsibility and 1st Log Command stocks Army ammunition in the Marine AHP at Dong Ha. Common items of Class II and IV are to be provided by Naval Support Activity, Da Nang, and Army peculiar items are provided by 1st Log Command. Equipment maintenance and support is provided by a 1st Log Command Forward Support Activity Team at Dong Ha. The major problem has been in the Class II and IV area. The battalion was advised to bring over a three months supply of expendables. It took about a six month supply and without these there could have been alarming results. The difficulty in obtaining supplies was primarily due to the fact that 1st Log Command had to establish supply facilities and procedures in an entirely new area and also the difficulty of transporting supplies to the DMZ area. In the last few weeks of the period covered by this report there has been a marked improvement in resupply and it is anticipated that problem areas will be resolved.

5. (G) Civil Affairs: After arriving in country this unit was assigned a hamlet, Bich Giang, to support under the Revolutionary Development Program. This has since been expanded to encompass 12 hamlets in the Cam Huo District, Quang Tri Province. To date we have distributed approximately 650 school supply packs to be utilized in the various schools in the district. The unit is also operating a MEDCAP program for the district. So far approximately 90 Vietnamese civilians have received medical treatment by the battalion Surgeon under the MEDCAP program.

6. (U) Personnel: This unit started POM on 17 August 1966 after an extensive POR readiness program and no personnel problems were encountered. Reorganization to the Echo Series TOE three weeks prior to deployment caused no personnel problems.

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Upon arrival in Vietnam the only major situation encountered was the conversion from the Army to the Marine Corps pay system which involved many changes in pay vouchers and records. This was done without any major problems. After being under the MPR system for 4 months, the unit was instructed to convert back to the Army Voucher System. This also was accomplished without encountering any major problems. In order to alleviate the problem of a mass rotation created by a unit movement to Vietnam, a personnel infusion plan was established immediately after arrival and execution of the plan began on 1 January. The plan called for in-country rotation of 10% of the battalion strength during each of 4 months, January through April. Another 25% was programmed for curtailment for up to 45 days. With an expected normal attrition of 10% due to sickness, discharges etc, only 25% of the original personnel remain to be rotated during September, 1967. Personnel replacements have been assigned direct from the replacement centers. There are no major personnel problems existing at this time.

7. (U) Artillery: The battalion is equipped with M108 Self Propelled 105mm howitzers with 1 each telescope panoramic M117 per tube. Battalion and battery FDC's are equipped with a total of 5 each personnel carriers M577. The M108 has been highly satisfactory in this area. Its cross country mobility has been beneficial many times (see part 1, Operations). The low load capacity of many of the bridges is sometimes a problem, but in most cases the streams can be readily forded. The armor protection for the crew and the rapid occupation and 6400 ft traverse capability are also ideal for this type warfare. With a Marine M109 battery under its OPCON, the battalion is also gaining experience on this weapon with equally satisfactory results. The M109 has greater range and a more destructive projectile. Counterbalancing this, the M108 carries more ammunition and has a greater rate of fire. Over a given period of time the M108 puts more metal on the target than a M109. Some problems with the hydraulic system of the M109 have been noted but these are infrequent. With the M108 the major problems have been sights (also the M109) and electrical continuity off the slip rings in the turret.

8. Other: None

## SECTION 2 (S) COMMANDER'S OBSERVATIONS AND RECOMMENDATIONS

### Part I Observations (Lessons Learned)

#### 1. (U) Personnel

- a. Item: Rotation Hump for arriving units.

Discussion: USARV Reg 614-9 directs that timely action will be taken by commanders of units, company size and above, to prevent an excess of 25 percent of unit strength rotation in any one month.

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Observation: Units should be made aware of this and guidelines furnished prior to deployment or immediately upon arrival in country. Commanders should finalized infusion and curtailment plans within the first month after arrival in country. Infusion should be spread over a three or four month period beginning with the third month and should include approximately 40 percent of assigned personnel. If 25 percent are curtailed for up to 45 days as authorized by USA RV and 25 percent remain to serve a full tour with the unit, the remaining 10 percent should take care of itself through normal attrition.

b. Item: Additional fire directional center personnel are required.

Discussion: Fire support in this area has taken the form of a large number of missions during the hours of darkness. Registrations, preparations and preplanned fires occur mainly during daylight hours, and calls for emergency fire missions happen at any time of the day or night in response to the actions of an elusive enemy. The variety of missions and the possibility that complex fire missions can come at any time requires that battalion and battery FDC's be fully manned 24 hours a day.

Observation: Survey personnel have been cross-trained and used in FDC with excellent results. This provides a solution as long as no more than two survey teams are required for survey operations. When batteries move out of the battalion area on separate missions the battalion FDC computer for that battery is made available to the battery FDC.

## 2. (U) Operations

a. Item: Blind spots in M-117 panoramic telescope.

Discussion: In this environment a 6400 mil firing capability is a necessity. With one set of aiming posts, the tube causes a blind spot at certain quadrant elevations. Also, the machinegun mount and the supporting post for the ballistic cover over the panoramic telescope hatch cause blind spots at certain deflections. The elevation and deflection combinations resulting in blind spots caused by the tube are known by the howitzer sections and the tube is not elevated until the deflection has been set off. The other blind spots are corrected by removing the ballistic cover or changing the positions of the machinegun mount.

Observation: All the solutions mentioned to the problem cause a certain delay which could be avoided by the use of a second set of aiming posts. Only one set of aiming posts is authorized by TOE.

b. Item: Effectiveness of M142 aiming post reflectors.

Discussion: During the monsoon season difficulty has been experienced by gunners being unable to see the light reflectors from the aiming post reflectors when driving rain causes poor visibility.

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The batteries have utilized flashlights mounted on aiming posts, distant aiming points in lieu of aiming posts, or light bulbs FSN 6240-019-30903 mounted on aiming posts and powered by the M108's batteries through commo wire.

Observation: A dependable source of illumination is required to effectively use the M1A2 aiming posts during rainy weather.

c. Item: Requirement for additional telephone sets  
TA-312/PT

Discussion: All telephone sets TA-312/PT authorized the battalion are presently employed with TO&E sections. The requirement for a 24 hour operation to fulfill the primary combat mission does not allow enough phones for use on the outposts. When a firing battery is committed for an operation away from base camp, they often require more perimeter posts and at the same time there is a continuing need for telephones on the base camp perimeter. Headquarters and Service Batteries also require additional phones for their sections on the perimeter.

Observation: Forty additional telephones are needed to augment existing TO&E authorization in order to provide adequate communication for tactical missions and perimeter defense.

d. Item: Additional radio for S-3

Discussion: Firing batteries from this battalion are periodically employed away from base camp in support of Marine and ARVN units. The battalion S-3 is often on the road and must have the capability of monitoring at least the battalion command frequency and an additional frequency of the supported unit. At present he must depend on borrowing a radio vehicle equipped with an AN/VRC-47 or -49 from within the battalion, thus diminishing the capability of the section lending the vehicle to perform its mission.

Observation: The battalion S-3 requires an additional radio receiver.

e. Item: Radios for M108 howitzers

Discussion: During movement of a firing battery there is no communication other than visual between the howitzer section chiefs and other elements of the convoy. This is especially dangerous in counter insurgency operations where ambush is an ever-present threat. The ability to react quickly to an ambush and follow up aggressively on enemy weaknesses is of primary importance.

Observation: A radio such as the AN/VRC-53 is needed in each howitzer.

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f. Item: Communications system to insure that more than one person hears all fire commands.

Discussion: In order to eliminate possible errors due to miscopying of commands and mishearing of readbacks, more than one person should be able to hear all fire commands at the FDC, executive post, and each of the howitzers. We have tried a variety of solutions, installing AN/GRC-39 remote sets in the FDC and executive post and hooking the howitzer phones to the AN/VIC-1 intercommunication sets mounted in each howitzer. The section chiefs can use the telephone handset and designate another section member to wear a headset connected to the intercom, or attach a headset or combat vehicle crewman's helmet to the intercom and turn the volume all the way up so that everyone can hear the command. The use of headsets or helmets with the telephones hooked to the intercom system is only marginally satisfactory. A better solution has been to use a loudspeaker (FSN 5965-876-2375), designed for use with the auxiliary receiver of the AN/VRC-47, connected to the intercom.

Observation: The chance of firing errors can be reduced if some means is employed to ensure that more personnel hear all commands.

g. Item: Interpreter to accompany batteries on operational missions.

Discussion: In several operations which required batteries to move to positions near villages, a problem was experienced with Vietnamese personnel, especially children coming into the area to beg for candy, ammo boxes and, in fact, anything the troops discarded. Villagers have also entered the area apparently anxious about the graves that are scattered in the fields around most villages. This complicated the job of the perimeter guards tremendously. It has been found that not even concertina wire discourages these visitors or keeps them out of the area. Also credentials of natives acting suspiciously in the vicinity of field positions cannot be checked out without an interpreter.

Observation: In future operations, an interpreter should be requested to assist in keeping the villagers outside the perimeter.

### 3. (U) Training and Organization

a. Item: 6400  $\mu$  fire capability

Discussion: The requirement to fire in all four quadrants of the compass has been almost a daily occurrence with this battalion.

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Observation: During the training in CONUS this battalion was aware of the requirement and did some training on it but never actually fired with large shifts on the order of 1600 or 3200  $\mu$ . In my opinion this is one of the salient features of the employment of artillery in Vietnam and training for it cannot be overemphasized. It would be highly desirable to include 6400  $\mu$  firing in service practice and ATT's, although it is recognized that safety requirements and range limitations may well preclude such procedures with live ammunition.

b. Item: FDC capability at battery and battalion level.

Discussion: In the base camp area the battalion FDC operates on a 24 hour basis controlling the fires of batteries in this area. Battery FDC's are employed as checks. Firing batteries on separate missions out of base camp operate as primary FDC's and in many cases have to decentralize to support artillery platoon operations.

Observation: This is not presented as a problem area but is mentioned so that units in training can be fully aware that FDC's at battery and battalion level must be fully staffed and trained. As an example Kilo Battery presently has one of its platoons in its base camp area, another platoon is located about six miles to the west, and the third platoon is temporarily in a position 2 miles to the northeast of base camp. As a further example Bravo Battery, presently DS to a Marine infantry battalion, a few days ago had five separate fire missions going on concurrently. Two were unobserved, two were "Will Adjust" and the fifth was illumination of one of the adjust missions.

c. Item: Registrations

Discussion: Nearly all registrations by this battalion have been high burst registrations.

Observation: This battalion has never had a ground observed base point registration since arriving in Vietnam. This is due to such factors as unsuitable observation posts, lack of suitable base points or target area survey, and observation difficulties caused by poor weather or ground haze. Some air observed registrations have been tried but have not been too satisfactory since terrain features such as trail intersections have been used as the base point and there is always a suspicion as to whether the observer has properly identified the target. High burst registrations have been by far the most reliable and satisfactory means of registration and no difficulty has been encountered in establishing flash bases and operating them.

d. Item: Organisation (see incl 1)

4. (U) Intelligence: None
5. (U) Logistics

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a. Item: Panoramic telescopes M-117 for operational backup.

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Discussion: Due to the high humidity and bronching rain experienced in Vietnam, sight malfunctions have been caused by moisture accumulation in the optical and electrical portions of the panoramic telescope M-117 and to a lesser extent in the direct fire scope M-118. Sights are rotated to a hot box frequently, but this results in a loss of fire power as a howitzer must be called out of action to dry out the sight.

Observation: The use of sight modules stocked and replaceable at battery level would improve the electrical system, and authorization for a backup sight per battery would allow for rotation of sights into the hot box, or the sending of a sight to maintenance without loss of firepower.

b. Item: Model DC 4.2-Ord/28 gasoline driven generator set for operational backup.

Discussion: 4.2 KW generators are used on all five of the battalion's M577 command post carriers to power radios and lights. The generators run continuously, except for short periods when the carrier engine is operated. It is impractical to idle the carrier engines for extended periods and consequently an increased maintenance problem with the generators is anticipated. Experience indicates that at least one generator is deadlined for parts at all times.

Observation: With only one 4.2 KW generator per M577 CP carrier, and the limited availability of spare parts, the deadline of a generator usually requires the almost continual operation of the M577 engine in order to operate radios and light sets for the fire direction centers. An additional generator per battalion would allow for maintenance rotation of the primary generators, provide an operational backup in the event one is deadlined, and would reduce the wear and tear on the M577 engines.

c. Item: Tripod, Aiming Circle

Discussion: The prevalent wet weather has an adverse effect on various items of equipment especially those items which use wood in their construction. Continuous exposure to rain such as is experienced during the monsoon season in RVN causes swelling of wooden components of various items.

Observation: In the case of the aiming circle tripod it has been observed that the prolonged exposure to the dampness of a monsoon season causes a swelling of the wooden legs to such an extent that the telescoping action of the legs was hindered and in some instances completely blocked.

d. Item: Banding, Pallets, and cardboard containers

Discussion: TOE equipment that was packed in boxes or cardboard containers (conex inserts) for overseas shipment was banded to wooden pallets.

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Observation: Two types of banding material were used- 5/8 inch and 1 1/4 inch. On arrival it was noted that much of the 5/8 inch banding material had snapped from the stresses of hard handling. None of the 1 1/4 inch material had parted. Several types of wooden pallets were used for shipment and it was noted that only the strongest pallets held up against hard handling. Cardboard containers (conex inserts) proved to be a poor substitute for wooden packing boxes. Exposure to the rain weakened the cardboard causing it to give way with loss or damage to items inside.

e. Item: Conex containers

Discussion: A considerable amount of the battalion equipment was shipped in conex containers.

Observation: These were by far the best means of shipment for security, ease of handling and protection of equipment. It is important that loading of the containers be held to a maximum of 3 tons as this is the handling capacity of most of the fork lift trucks employed in Vietnam.

f. Item: Damaged battery cables and terminal posts

Discussion: Battery cables were disconnected on all vehicles prior to shipment of the vehicles to port of embarkation. This was done on instructions from transportation authorities in order to reduce chances of fire enroute and to prevent drainage of batteries. The battalion maintenance party that accompanied the vehicle shipment traveled with the last increment of vehicles to the port. On arrival they discovered that the vehicles already loaded had burned battery cables and terminals due to improper connections made by the port loading crew. On arrival at destination the cables could not be fitted to the terminals and the batteries and cables had to be replaced from PLL stocks.

Observation: A maintenance party should travel with the first increment of vehicles and assist the port loading crews by properly attaching battery cables to terminals.

g. Item: Tontage

Discussion: TOE and WABTOC tentage is insufficient for establishing mess hall, office areas, and billets as required in a base camp area.

Observation: Approximately 60 percent of tontage requirements are met by TOE and WABTOC. Batteries have obtained additional tontage by contacting units with excess tents.

h. Item: WABTOC camp construction kit

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Discussion: Pre-cut lumber packs sufficient for 16 hard back tent frames with screening plus miscellaneous structures and items were shipped from CONUS for each battery.

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The packs arrived in good shape although there was an overall loss of about 10% of the items in shipment. The kits were easy to assemble although a minor error was noted in the assembly plans enclosed with the kits, i.e., the plans called for the floor joists to be 16" apart while the kits and list of materials provided only enough lumber for them to be 24" apart. A crew of six men could assemble a tent kit in about six hours. The kits were shipped short the refrigerator and 10 KW generator per battery. Both items are highly desirable.

Observation: The WABTOC kits have been very satisfactory. They are essential to proper establishment of a camp for a new unit and should be continued without deletions if at all possible. Consideration should be given to the inclusion of rough timbers for construction of 30 each 12' X 12' X 8' bunkers for use on the perimeter and as CP and FDC bunkers.

6. (U) Medical

a. Item: Healing of lacerations

Discussion: The normal healing time for clean, uninfected lacerations of the face is approximately five days, and approximately seven days for similar lacerations of the extremities. Sutures are normally removed at these time intervals. When sutures were removed here at those time interval the wounds immediately reopened. It has been necessary to leave sutures in place ten to fourteen days to effect adequate healing. The Battalion Surgeon has no satisfactory physiological explanation for this apparent increase in healing time.

Observation: That healing of clean uninfected lacerations is delayed in Vietnam.

b. Item: Poisonous insects and reptiles

Discussion: Upon arrival in a new area, tents were pitched upon the ground and later were improved with improvised flooring prior to receipt of WABTOC lumber kits. During this period many instances of bites by centipedes and scorpions were treated. In addition many snakes both venomous and non-venomous were observed. Centipedes and scorpions, up to 8 inches in length, tended to hide during the day time in such places as sleeping bags, gloves, boots etc, resulting in painful stings to personnel.

Observation: After occupation of an area for several weeks the number of insects and reptiles decreases considerably. Until that time the men need to be indoctrinated to examine their clothing and sleeping gear before using it.

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**PART II RECOMMENDATIONS**

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1. (U) Personnel: Recommend one additional fire direction computer be authorized each firing battery of this battalion. A MTOB is being prepared.

2. (U) Operations:

a. Recommend that aiming post light sets be authorized for all aiming post sets to provide visibility during inclement weather. USARV Form 47 has been submitted with requisition number 6353-001.

b. Recommend that 40 each telephone sets TA-312/PT be authorized this battalion to provide communications with perimeter defense positions. USARV Form 47 has been submitted with requisition number 6350-002.

c. Recommend that one additional set of aiming posts be authorized each howitzer section to compensate for blind spots in the field of view of the M117 panoramic telescope when mounted on the M108 howitzer. USARV Form 47 has been submitted with requisition number 6353-002.

d. Recommend that a radio set AN/VRC-47 be authorized the battalion S-3. USARV Form 47 is being prepared.

e. Recommend that one each radio set AN/VRC-53 be authorized for each howitzer. USARV Form 47 has been submitted with requisition number 7002-001.

f. Recommend that one headset/microphone 144/U be authorized per battery fire direction center. USARV Form 47 has been submitted with requisition number 7002-001.

g. Recommend that a loudspeaker (FSN 5965-876-2373) be authorized each howitzer for use with the installed intercommunication system. USARV Form 47 has been submitted with requisition number 7002-002.

3. (U) Training and Organization: None

4. (U) Intelligence: None

5. (U) Logistics:

a. Recommend that one additional panoramic telescope M117 be authorized each firing battery as an operational backup. USARV Form 47 has been submitted with requisition number 6350-001.

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b. Recommend that one additional 4.2 KW generator set be authorized per battalion as an operational backup. USARV Form 47 has been submitted with requisition number 6353-003.

c. Recommend that tripods for aiming circles be fabricated from metal or synthetics resistant to wet weather.

d. Recommend that metal pallets be used for deploying units.

e. Recommend that 1½ inch banding be used in preparing pallets for shipment.

1 Incl  
as

*Robert E. Lenzner*  
ROBERT E. LENZNER  
LTC, Arty  
Commanding

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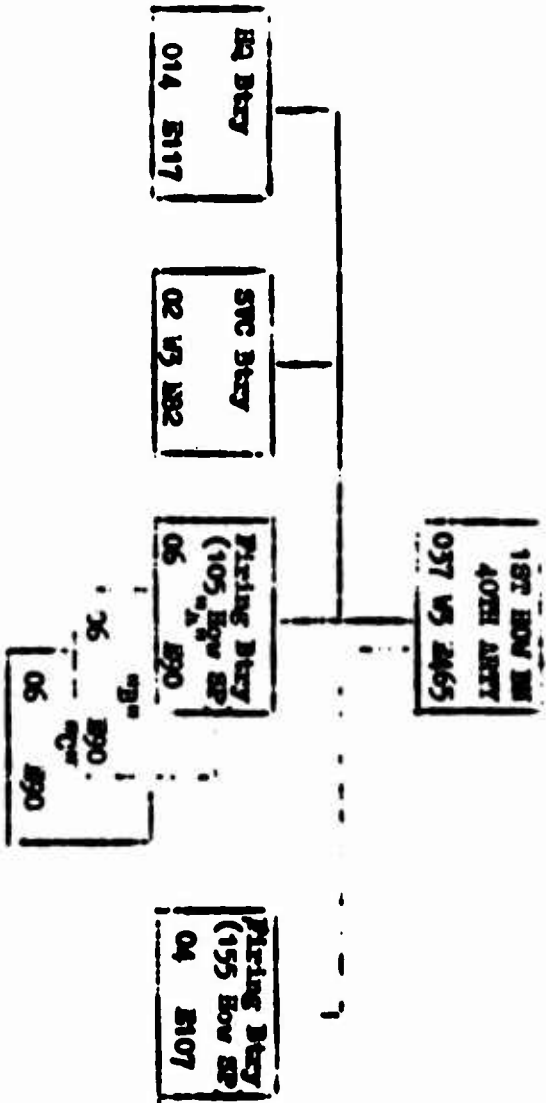
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Denotes operational control under this headquarters.

Denotes operational control under 1st Bn, 12th Mar Bn, 3d Mar Div

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RD

AVPA-AT-D (7 Feb 67) 1st Ind  
SUBJECT: Operational Report of Lessons Learned for Quarterly Period  
Ending 31 January 1967 (RCS CSFOR-65)(1st Bn, 40th Arty)(U)

HEADQUARTERS, I FIELD FORCE VIETNAM ARTILLERY, APO 96350 16 Feb 67

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, DC 30210

1. Concur in observation and recommendations contained in basic  
communication.

2. The following additional comments are submitted:

a. Reference Section 2, Part I, para 5a: Information will be in-  
cluded in "helpful hints" letters to incoming units.

b. Reference Section 2, Part I, para 5b: The unit has received  
its refrigeration from in-country stocks. A generator is on requisition  
and will be issued by the USASC, QUI NHON when available.

c. Reference Section 2, Part II, para 2: Requests for items  
listed in paragraph 2a, 2b, 2c, 2e, and 2g have been approved and forwarded.

d. Reference Section 2, Part II, para 5a: Each M108 and M109  
self propelled howitzer battalion should be authorized spare M117 Panoramic  
Telescopes on a basis of two per firing battery, and each DBU should be  
authorized a minimum of one float sight for each battalion supported. Unit  
request was approved and forwarded 20 Dec 66.

e. Reference Section 2, Part II, para 5b: Request approved and  
forwarded 20 Dec 67.

f. Reference Section 2, Part II, para 5d: Information will be  
included in "helpful hints" letters to incoming units.

FOR THE COMMANDER:

*Leo E. Ellis*

LEO E. ELLIS  
LTC, Arty  
Adjutant

1 Incl  
no

Regraded **UNCLASSIFIED**  
after separation from classified  
enclosure

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