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<td>AGO ltr, 29 Apr 1980 AGO ltr, 29 Apr 1980</td>
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BY
Defense Documentation Center
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SUBJECT: Operational Report - Lessons Learned, Headquarters, 54th Artillery Group, Period Ending 31 January 1968 (U)

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
Major General, USA
The Adjutant General

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4th Brigade, 6th Infantry Division
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54th Artillery Group
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OPERATIONAL REPORT
LESSONS LEARNED
WA03-AA RCS-CS FOR-65

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FROM 1 NOV 67 TO 31 JAN 68
S U B J E C T: Operational Report for Quarterly Period Ending 31 January 1968,
Reports Control Symbol CSFOR-65

T H R U: Commanding General
II Field Force Vietnam Artillery
ATTN: AVFB-PAC

Commanding General
II Field Force Vietnam
APO 96266

Commanding General
United States Army Vietnam
ATTN: AVG-LF
APO 96370

Commander-In-Chief
United States Army Pacific
ATTN: GPO-P-C
APO 96558

T O: Department of the Army
ATTN: ACFOR, DA
Washington, D. C. 20310

S E C T I O N I


1. (C) Organization and Mission:

a. This headquarters remains assigned to United States Army Vietnam and operates as a major subordinate command of UsARV, Commanding General, II Field Force Vietnam Artillery retains operational control of the 54th Artillery Group.
b. Organizational Structure of the 54th Artillery Group effective Jan 68:

Legend:
- Assigned farther assigned Americal Division
- Attached for rations and quarters
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AVGA C

The mission of the 54th Artillery Group is: General Support II Field Force Vietnam, reinforcing the 18th ARVN Division Artillery, 9th US Infantry Division Artillery, 101st US Airborne Division Artillery, 2nd Howitzer Battalion, 40th Artillery, Howitzer Batteries 11th Armored Cavalry Regiment, and 4th Royal Australian Regiment of Artillery.

2. (C) Commander's Note: Command and Control.

a. The 54th Artillery Group mission as stated in para 1o above, has caused units within the Group to operate in areas in excess of 10,000 square kilometers. Distances between Group Headquarters, subordinate battalions, and dispersed firing batteries, complicate command control functions: Firing batteries are located on an average distance of 30 kilometers from their parent battalions, and in one case a firing battery was located a distance of 150 kilometers from battalion headquarters.

b. The 54th Artillery Group had no organic aviation section but was allocated two UHID Helicopters daily and one additional helicopter for one half day during 50% of the reporting period. Command and staff visits, liaison missions, personnel moves, mail delivery, DÉSOS, and R&R moves, critical repair parts shipments, all are typical daily missions required to properly manage a force of 2400 personnel scattered from Ham Tan on the coast of the South China Sea, to Dong Tam in the Mekong Delta. Helicopter support was and continues to be inadequate.

c. A program to improve and refine the artillery and gunnery procedures within the 54th Artillery Group was initiated during the reporting period. This will be accomplished by improved training, evaluation, and supervision.

d. Command Changes:

(1) Lieutenant Colonel Todd S. Marsh, assumed command of the 7th Bn, 8th Artillery from LTC William T. Price on 8 Dec 67.

(2) Lieutenant Colonel Robert M. Balhizer, assumed command of the 1st 3p, 83d Artillery from LTC Glenn W. Million on 19 Jan 68.

(3) Lieutenant Colonel Maxwell R. Thurmen, assumed command of the 2d Bn, 35th Artillery from LTC Alvin J. Gendron on 25 Jan 68.

3. (C) Administrative and Personnel Activities:

a. Personnel strength of the command as of 31 Jan 68 was:
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UNIT

<table>
<thead>
<tr>
<th>UNIT</th>
<th>AUTH</th>
<th>ASG</th>
</tr>
</thead>
<tbody>
<tr>
<td>54th Arty Op</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>8th Arty</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>9th Arty</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>35th Arty</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>83d Arty</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

b. Personnel changes within the command during this quarter were:

<table>
<thead>
<tr>
<th>GAINS</th>
<th>OFF</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18</td>
<td>1</td>
<td>364</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>LOSSES</th>
<th>OFF</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>0</td>
<td>395</td>
</tr>
</tbody>
</table>

c. Casualties within this command:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killed in Action</td>
<td>1</td>
</tr>
<tr>
<td>Wounded in Action</td>
<td>15</td>
</tr>
<tr>
<td>Non Battle Dead</td>
<td>2</td>
</tr>
</tbody>
</table>

d. Awards and decorations presented to members of this command:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Star</td>
<td>1</td>
</tr>
<tr>
<td>Legion of Merit</td>
<td>1</td>
</tr>
<tr>
<td>Soldiers Medal</td>
<td>1</td>
</tr>
<tr>
<td>Bronze Star</td>
<td>20</td>
</tr>
<tr>
<td>Air Medal</td>
<td>23</td>
</tr>
<tr>
<td>Army Commendation Medal</td>
<td>27</td>
</tr>
<tr>
<td>Purple Heart</td>
<td>16</td>
</tr>
</tbody>
</table>
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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
Reports Control Symbol GSPON-65

2 Feb 68

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
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2. (C) Intelligence Activities:

a. Visual Reconnaissance:

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(1) During the reporting period, support O-1 aircraft for the 54th Artillery Group was reduced from seven to five aircraft. Of the two aircraft lost, one supported the Group for 8 hrs each day; the other, 4-½ hrs daily. The table below indicates the effect of this reduction as compared to the last reporting period.

<table>
<thead>
<tr>
<th>REPORT PERIOD</th>
<th>VR MISSIONS</th>
<th>HRS</th>
<th>CONVOY MISSIONS</th>
<th>HRS</th>
<th>W/A</th>
<th>ROO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug - Oct</td>
<td>1125</td>
<td>2401</td>
<td>90</td>
<td>180</td>
<td>294</td>
<td>369</td>
</tr>
<tr>
<td>Nov - Jan</td>
<td>900</td>
<td>1847</td>
<td>130</td>
<td>311</td>
<td>162</td>
<td>271</td>
</tr>
</tbody>
</table>

(2) The 54th Artillery Group is in the process of setting up a three day Aerial Observers Orientation Course. The course is scheduled to start on 5 Feb 68 with an input of four students and continue until all AO's within the Group have attended. The course will then be given on a quarterly basis or as needed.

5. (c) Operations:

a. During the reporting period, units of the Group participated in operations in support of the 18th Airborne Division, 9th Infantry Division, 25th Infantry Division, 101st Airborne Division, 111th Armored Cavalry Regiment, and the 1st Australian Task Force. The operations were:

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>DATE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Fe</td>
<td>Nov 67</td>
<td>B/7/9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A/2/35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A/1/83</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Nov 67</td>
<td>B/2/35</td>
</tr>
<tr>
<td>Coronado</td>
<td>Nov 67</td>
<td>C/2/35</td>
</tr>
<tr>
<td>Forest</td>
<td>Nov 67</td>
<td>A/1/83</td>
</tr>
<tr>
<td>Atlanta</td>
<td>Nov 67</td>
<td>C/7/8</td>
</tr>
<tr>
<td>Gladstone</td>
<td>Dec 67</td>
<td>C/7/8</td>
</tr>
<tr>
<td>Camunga</td>
<td>Dec 67</td>
<td>A/1/83</td>
</tr>
<tr>
<td>Shopporton</td>
<td>Dec 67</td>
<td>A/1/83</td>
</tr>
<tr>
<td>Pimbuela</td>
<td>Dec 67</td>
<td>A/1/83</td>
</tr>
<tr>
<td>Milborn</td>
<td>Dec 67</td>
<td>A/1/83</td>
</tr>
</tbody>
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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
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<table>
<thead>
<tr>
<th>OPERATION</th>
<th>DATE</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewley</td>
<td>Dec 67</td>
<td>A/1/63</td>
</tr>
<tr>
<td>Burdortown</td>
<td>Jan 68</td>
<td>A/2/63</td>
</tr>
</tbody>
</table>

b. During the reporting period, the total rounds fired by this command was: 160,778.

c. Significant Movements:

On 20 Jan 68, "B" Btry, 1st Bn, 83d Arty, made an 85 mile road march from Ham Tan to Bien Hoa. The battery was given only 12 hrs notice for one of the longest moves made by heavy artillery in Vietnam. The road march from Ham Tan to Bien Hoa was made without incident.

6. (U) Training:

a. To achieve artillery excellence, a comprehensive training and evaluation program was initiated. In the area of training the program consisted of, but was not limited to the following:

(1) Indoctrination of newly assigned personnel as to the individual’s role in the accurate delivery of fire.

(2) Proficiency testing and certification of fire direction personnel prior to position assignment.

(3) Administration of the expert gunners test to selected firing battery personnel.

(4) Instruction of forward observers in jungle navigation, fire request procedures, and fire planning techniques prior to assignment in support of maneuver elements.

(5) Instruction of battery and battalion FDC personnel in target analysis, weapons selection, terminal effects, and ammunition selection for attack of targets.

(6) Fire direction training to include “double check” procedures, fire clearance channels, FADAC - check chart procedures, and fire command terminology.

(7) Indoctrination of all personnel in the fire delivery chain and standing rules of engagement of targets.

(8) Instruction in ammunition handling, inspection, and storage procedures.
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
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(9) Use of metro, survey, and calibration in the delivery of artillery fire.

b. In the area of evaluation, a three phase program was initiated. Prior to the first phase, a test and evaluation team was organized, consisting of two qualified gunnery officers: One to evaluate the firing battery and one to evaluate the fire direction and clearance procedures. An examination covering gunnery procedures and rules of engagement and a comprehensive checklist for the fire direction center and firing battery was compiled as the basis for the evaluation.

(1) During phase one, the test and evaluation team visited one battery from each battalion for approximately 24 hrs. A detailed report was presented to Group and battalion commander for action. In addition, a complete re-survey of all battery positions was accomplished to eliminate the possibility of error in survey control.

(2) Phase two consisted of a two hour seminar conducted by the test and evaluation team for the Group Commander, Group Executive Officer, and Battalion S-3's. Topics of discussion included: Observation of evaluations conducted thus far, specific problem areas, assistance necessary, and planning for phase three.

(3) Phase three is presently in progress and will continue for some time. It includes evaluating the remaining batteries within the Group and the organizing of test and evaluation teams at battalion level as a means of follow up.

c. This three phase program has met with enthusiasm, cooperation, and appreciation from all concerned. In addition to evaluating and testing, on the spot instruction has been presented and immediate corrective action has been initiated where required.

d. On 8 Jan 68, the 54th Artillery Group's new personnel arriving in Vietnam started attending replacement training at the Redcatcher Combat Training Center, of the 199th Light Infantry Brigade. Between 35 and 40 new personnel have attended each week during the month of January. Attendance at the training center has solved many of the problems involved in teaching mandatory training subjects to personnel in firing batteries located in field positions. All required replacement training subjects and most mandatory subjects required by AR 350-1 and USARV Reg 350-1 are taught at the Redcatcher Combat Training Center. In this way, most required training subjects are covered the first week a soldier is in Vietnam. The emphasis for the remainder of a soldier's tour will be on individual Proficiency and on-the-job training.

e. MTOE Approval: Approval for MTOE 6-456E, 457E, and 459E, 2d Bn, 35th Artillery was received during the reporting period. Principal personnel additions were: One (1) additional Assistant Executive Officer and two (2)
Operational Report for Quarterly Period Ending 31 January 1968,
Reports Control Symbol CSFOR-65

additional forward observer sections in the firing battery, an additional Liaison Officer and Assistant S-3 in Headquarters and Headquarters Btry. Also added was an aviation section consisting of two (2) warrant officers, one (1) crew chief, and one (1) light truck driver, and two (2) helicopters (OH-6A).

7. (c) Logistics:

a. Supplies:

(1) The supply of repair parts was generally good during the reporting period. One exception was an M-88 Engine, FSN 2305-705-9059, which was not available for 56 days.

(2) A review of artillery and automotive PLL (prescribed local list) for the past quarter indicates that approximately 50% of the authorized repair parts for these categories have not been filled. Although it cannot be determined at this time if the lack of these PLL parts materially affected the downtime of units, it can be stated that the administrative workload involved in maintenance of supply records was increased significantly.

(3) Two new M109/107 howitzers were received under the exchange program (closed loop) during this period. The M115, panoramic telescope, was missing from the OEM of both vehicles and one M16, elbow telescope, had the reticle inverted and installed backwards.

b. Maintenance: Artillery downtime for units assigned to the 54th Artillery Group is shown below:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>UNIT</th>
<th>AVAILABLE DAYS</th>
<th>% DOWNTIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Arty Bn</td>
<td>1656</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Medium Arty Bn</td>
<td>1656</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Heavy Arty Bn</td>
<td>2208</td>
<td>7.9</td>
<td></td>
</tr>
</tbody>
</table>

c. Technical Assistance:

A Maintenance Specialist/Technical Representative from the US Army Weapons Command has been assigned to the 54th Arty Group. The individual assigned to this position has provided immeasurable service to the United States Army. He organized maintenance classes for inexperienced personnel, conducted technical inspection of weapons, participated in CMMI’s, expedited the location and distribution of repair parts, and has provided the Group Commander with valuable advice on maintenance management procedures. This individual is a key man in the Group maintenance effort. In addition to this individual, the material readiness posture of the command would be enhanced if a United States Army Tank and Automotive Command (USATAC) representative was available to advise and assist on automotive problem areas.
d. Maintenance Training:

The proficiency of M101A1 howitzer personnel was increased and the problem of insufficient maintenance personnel was solved when the 7th Bn, 9th Artillery and the 79th Maint Bn (GS) agreed to use crewmen from the firing batteries to assist maintenance personnel in the retrofit program of the M101A1 howitzer. To date, five weapons have been completed and the results of the program have been outstanding.

9. (C) Communications:

See Annex A.

9. (C) Civil Affairs:

a. The 54th Artillery Group has supported the Medical Civic Action Program (MEDCAPS) throughout the Group area. There were 51 MEDCAPS, treating 2,537 patients.

b. The 16th Civil Affairs Platoon, attached to the 54th Artillery Group assisted the hamlet of Phu Binh in the construction of a water system in a village which previously had no such system.

c. Christmas kits were distributed to the families of the 181st and 182d Artillery Battalions of the 16th ARVN Division.

d. The Group S-5 in conjunction with the 16th CA Platoon planned and coordinated a Christmas party for 55 orphans in the Xuan Loc area. Many members of the Headquarters and Headquarters Battery, 54th Artillery Group participated in the party on 24 Dec 67.

e. English classes are being conducted for about 150 students by Group Headquarters Battery Personnel. An average of 40 hrs of instruction per month is being presented.
12 Feb 68
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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
Reports Control Symbol CSFOR-65

SECTION II

PART I, OBSERVATIONS (C)

1. (C) Personnel and Administration

ITEM: Critical MOS Placement:

(1) DISCUSSION: The assignment of 11BAC (Howitzer Section Chief) and 63B20 (Tracked/Wheeled Vehicle Mechanic) has been of constant interest to this command. To take full advantage of past experience, personal interviews are conducted to place section chiefs and mechanics in a unit with the type of weapons system or vehicle they are most familiar with.

(2) OBSERVATION: Personal interviews have assisted this command in taking full advantage of past training and experience.

2. (C) Intelligence:

a. ITEM: Control of 0-1 aircraft:

(1) DISCUSSION: To insure adequate control, security, and quick recovery of downed aircraft, a flight following system has been initiated for control of 0-1 aircraft which support the 54th Arty Gp. The system provides the 54th Arty Gp Operation Center the location of 0-1 aircraft at all times. The system is simple and has proven effective. A 1:250,000 map has been divided into lettered sections along prominent terrain features and road networks. The pilot informs the Operation Center when he enters or leaves a particular section.

(2) OBSERVATION: If an aircraft is forced down, the Operational Control Center can immediately notify all aircraft in the vicinity to proceed to the designated section and begin search operations. This system provides immediate response and limits searching to a relatively small area.

b. ITEM: Use of Aerial Observers:

DISCUSSION: The 54th Arty Gp aerial observers have provided several types of air support. They have been used to inspect suspect enemy locations, adjust artillery fire, and to guide friendly ground forces to their objective. When guiding friendly forces through terrain that is thick jungle, it is very difficult to keep friendly forces in view. In the past the most successful method of locating friendly forces was the use of smoke grenades. At times the objectives were only a short distance from friendly elements and could not be located by the ground commander without aid from an aerial observer.
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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968,
Reports Control Symbol OSFOR-65

(2) OBSERVATION: The most effective means of directing friendly
ground forces to their objectives, was to have them mark their position with
smoke and have repair observers announce a bearing and estimated distance from
friendly location to the objective. This enables the ground element to maneu-
ver to its objective utilizing the shortest route, thus reducing loss of com-
bat effectiveness.

a. ITEM: Location of Friendly Hamlets and Villages:

(1) DISCUSSION: In order to preclude artillery accidents and
incidents, friendly hamlets and village locations are kept current by using
as a supplement the Hamlet Evaluation System Survey which is published by MAOV
each month.

(2) OBSERVATION: From the Hamlet Evaluation System Survey the
54th Artillery Group was able to obtain data on friendly hamlets and villages
throughout our area of operation.

3. (C) Operations:

a. ITEM: Helicopter Support:

(1) DISCUSSION: On 27 Nov 67, the 54th Artillery Group had
attached to it three LOH 23's for reconnaissance, supervision of artillery
movements, and command and control visits by the Group Commander, Battalion
Commander's and their staffs. After only nine days, two of these aircraft
were reassigned to another unit. At the present time, the one remaining heli-
copter is declined and has been declined since 3 Jan 68. Although the Group
receives two UH1D Helicopters on a daily mission basis and an additional one
every other half day, the Group does not have adequate helicopter support for
command and control of four assigned battalions which are tactically employed
throughout an area of 10,000 square kilometers.

(2) OBSERVATION: Because of the wide dispersal of units,
additional helicopter support is required to insure that proper command and
control at Group and Battalion level is more effectively exercised. As a min-
imum, an aviation section of four observation helicopters and two utility heli-
copters is required.

b. ITEM: Survey of Base Camps:

(1) DISCUSSION: Because of the 6400 Mi requirement with the
8"/175 weapons, the executive officer must relay his weapon when the direction
of fire changes outside the traversing limitations of his weapons. In order
to achieve the 6400 Mi capability, additional orienting stations are required
so that the lay of the weapon can be checked by two independent aiming circles.
As many as six to eight orienting stations may be required because of berms,
built up areas, and other objects which interrupt the line of sight between
the aiming circle and sight.
2 OBSERVATION: The 54th Artillery Group has instituted a program of surveying in all base camps so as to provide each unit with the best possible data in their base camp. This program began in Dec 67 and was completed in Jan 68. This survey program was performed by the battalion survey sections to insure that all batteries when in base camps are located on correct survey data.

c. ITEM: Velocity Error and Deflection Correction Records:

(1) DISCUSSION: With the mobile role of the artillery battery in Vietnam, it is often impossible to register for all charges upon the occupation of a new position. Corrections still must be applied prior to firing because of the heavily populated areas and the need for close support of friendly elements.

(2) OBSERVATION: By keeping an adequate record system for the recording of VE's and deflection corrections determined concurrently with previous registrations, an experience factor for corrections in the absence of a registration can be provided. The following format is suggested:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DATE</th>
<th>CHG</th>
<th>VE</th>
<th>DF CORR</th>
<th>GFT SETTING</th>
</tr>
</thead>
</table>

4. (C) Training:

ITEM: Road marching of heavy artillery units.

(1) DISCUSSION: Experience has shown that heavy artillery batteries must be exercised regularly to keep track equipment in a high state of readiness.

(2) OBSERVATION: By requiring M107/M110 vehicles to be exercised regularly, the ability of heavy batteries to move on short notice has greatly increased. One 8"/175mm battery completed an 85 mile road march without incident, after occupying a static position for over six months.

5. (C) Logistics:

a. ITEM: Failure of track pads:

(1) DISCUSSION: Heavy artillery units are experiencing a high rate of failure with the pad assembly T132E1, FSN 2530-780-5216. The pads are not worn out but pulled loose from the metal plate to which they are vulcanized.

(2) OBSERVATION: One battery moved 14 miles with two SP howitzers and lost 80 pads per vehicle. The pads had been used less than 100 road miles. A contributing factor may be the requirement to fire the weapon 6400 miles which requires the weapon to power shift from 10 - 20 times per day to perform fire missions.

b. ITEM: Fan Belts, M107/M110:
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968

Reports Control Symbol CSFOR-65

(1) DISCUSSION: Failure of the fan belt set FSN 3030-780-7001, has caused significant downtime for heavy artillery weapons. As the old fan belt set, FSN 3030-526-6795, became defective, it was replaced by the new fan belt set. When the old set is requisitioned it is normally filled with a new fan belt set due to nonavailability of the old fan belt set.

(2) OBSERVATION: On the older models of the M107/M110, the fan and axle vane pulley and magnetic clutch is flat and the old fan belt set is also flat. The new model M107/M110 fan axle vane pulley and magnetic clutch pulley are grooved and the new fan belts are "V" shaped to fit. The new type fan belts "roll off" of the older howitzers/guns within hrs after installation. Maintenance procedures require that the fan and axle vane pulley be in perfect alignment with the magnetic clutch pulley. Yet even with great care, the belt continues to be a major source of trouble in keeping the M107/M110 operational.

c. ITEM: Special tool kits for heavy firing batteries:

(1) DISCUSSION: Deployment of heavy batteries in Vietnam requires that battery maintenance personnel perform maintenance operations which are normally functions of the battalion maintenance section. To increase the maintenance capability of the battery maintenance personnel, USArtV recently approved the addition of Special Kit B, FSN 4901-606-8693 to the Special Kit A, FSN 4910-606-8692 at battery level.

(2) OBSERVATION: The authorization of Special Kit B, should greatly increase the maintenance capability of firing batteries which are separated from their battalions maintenance support by long distances.

d. ITEM: M109 Bore Evacuator Key and Screw Failure:

(1) DISCUSSION: Experience shows a high failure rate on the M109 Bore Evacuator Key, FSN 5315-826-5399 and screw FSN 5306-087-3748. Units have received and installed the new key and screw but are still experiencing shear failure of the screw and subsequent loss of the key beneath the dust shield. This condition occurs aft r firing several rounds of charge seven.

(2) OBSERVATION: The bore evacuator key and screw failure can cause scoring of the tube bearing surface when pieces of the defective component fall under the dust shield. Units of this command have removed the screw and key without noticeable effect on the functioning of the weapon.

e. ITEM: Identification of parts:

(1) DISCUSSION: Modification kits are being placed on M107 weapons on an in-country improvement program. Many of the component parts of these new kits are not listed by FSN in parts lists accompanying the kits.

(2) OBSERVATION: Problems in re-supply are experienced because the supply request must be handled manually and at times the DSU does not have the capability to locate the required part by the part number.
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6. (C) Medical:

ITEM: OJT for Medics:

(1) DISCUSSION: 54th Artillery Group units have recently received several aidmen with minimum training. In an effort to provide better medical care, especially to batteries in field positions, an OJT program has been established with the largest evacuation hospitals in Long Binh. Training includes some classroom type instruction, but is centered in the emergency area of the hospital under close supervision of qualified medical personnel.

(2) OBSERVATION: The program is proving effective and will be continued.

SECTION II

PART II, RECOMMENDATIONS (C)

1. (U) Personnel and Administration:

To simplify assignment of personnel with common MOS but a different specialty, recommend a code system be established so that in addition to the MOS, a code designator would accompany the MOS. This code designator would establish the individual's specific area of proficiency. Assignments would be greatly speeded up using such a system.

2. (C) Operations:

a. Whenever new base camps are programmed, survey of gun positions and orienting stations by a target acquisition battalion should be included in the plan for the new base camp. By including survey in the plan accurate survey data can be applied to fire direction procedures so that very accurate artillery fire can be delivered as soon as the base camp is occupied. Battalion survey sections would be utilized to update or check the survey data as the situation demands.

b. By keeping an adequate record of VE's and deflection corrections determined from previous registrations, the Fire Direction Officer is provided with an experience factor which can be used to analyze the new registration corrections against the established trend. Large differences in VE or deflection correction could point out possible errors in (1) Misplotting of battery location or the registration point on the chart; (2) Survey errors; (3) Computation of the adjusted or met data; and (4) The met data received from the met station.

3. (C) Logistics:

a. Recommend that the vulcanizing process used to affix the pad to the metal plate be reevaluated to improve the strength of the pad to withstand the rotational torque of power shifting the gun carriage.

b. Recommend that sufficient quantities of old fan belts be returned to depot stocks to support old model M107/M110 vehicles until the vehicles are phased out of the system.

c. Recommend that every effort be made to assign FSN to component parts of modification kits prior to release to the field.
AVFP-FAC (12 Feb 68) 1st Ind
SUBJECT: Operational Report - Lessons Learned (U)

DA, H4, II FFORCEN ARMY, APO 96266 5 MAR 1968

THRU: Commanding General, II Field Force Vietnam, APO 96266
Commanding General, United States Army Vietnam, ATTN: AVHEG-DH, APO 96307
Commander-In-Chief, United States Army Pacific, ATTN: GPOP-OT, APO 96558

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

1. (U) The quarterly report for 54th Artillery Group (UIC: WAO5AA) adequately reflects the operations and lessons learned during the reporting period.

2. (C) Reference Section II, Part I, paragraph 3. A proposed MTOS 6-4016 for a Headquarters and Headquarters Battery of an Artillery Group was submitted to H4 USARV on 20 October 1967. This proposed MTOS requested four (4) OH-6A and two (2) UH-1D helicopters for the Group Headquarters.


4. (C) Reference Section II, Part II, paragraph 2. Concur. Survey for permanent base camps is included in the programming and construction plans.

5. (C) Reference Section II, Part II, paragraph 3a. Concur. Units will be advised to submit an EIR through appropriate channels.

6. (C) Reference Section II, Part II, paragraph 3b. Concur. Appropriate action should be initiated at maintenance technical supply activities to insure that Belt Set, FSN 3030-528-6795, and that stockage levels of both type belt sets are adequate to satisfy demands.

7. (C) Reference Section II, Part II, paragraph 3c. Concur. Action recommended will facilitate acquisitioning procedures.

Raymond P. Murphy
Brigadier General, USA
Commanding
2nd Ind


DA, HQ II PPORGSH, APO San Francisco 96256 18 MAR 1968

THRU: Commanding General, US Army Vietnam, ATTN: AVHGC(DST), APO 96375

Commander, US Army Pacific, ATTN: GPOP-OT, APO 96558

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

1. Subject report is forwarded.

2. This command has reviewed the attached OELL of the 54th Artillery Group and concur with the report with the following comment:
Page 3, para 2b. There are insufficient aviation assets available to provide each commander the aviation assets he feels he needs.

FOR THE COMMANDER:

E. M. McCURRY
CPT. AGC
Army AG

Reports Control Symbol GSPOR-65

HEADQUARTERS, US ARMY VIETNAM, APO San Francisco 96375

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, 54th Artillery Group as indorsed.

2. (C) Pertinent comments follow:

   a. Reference item concerning critical KOS placement, page 11, paragraph 1; page 15, paragraph 1; and 1st indorsement, paragraph 3. The recommendation contained in page 15, paragraph 1 has already been implemented by Department of the Army through the use of the Additional Skill Identifier (ASI). AR 611-201 describes the use of the ASI and advises commanders on the procedures for requesting the establishment of new ASI.

   b. Reference item concerning helicopter support, page 12, paragraph 3a; and 1st indorsement, paragraph 2. The requirement for helicopter support is recognized; however, current DA policy expressed in DA CONFIDENTIAL msg 763149, ASCFOR Aviation, Subject: Aviation Units for RVN, establishes a moratorium on providing aircraft and aviators to CS and CSS units deploying to RVN with authorized aviation sections, but with zero fill. Requests for additional aviation support should be forwarded to CG II FFORCEV.

   c. Reference item concerning fan belts, page 13, paragraph 3b; page 16, paragraph 3b; and 1st Indorsement, paragraph 6: Concur. There is a technical misunderstanding. The pulley on both items are "V" type as are both types of belts. The difference between the FSN's, is that FSN 3030-528-6795 is a single "V" belt and FSN 3030-780-7001 is a matched set of four "V" belts. The user should refrain from using the single "V" belt FSN 3030-528-6795 and requisition the matched set of four "V" belts using the new FSN 3030-780-7001. It has been determined by MACOM that the single "V" belt FSN 3030-528-6795 should be removed from the supply system and personnel are encouraged to assure that appropriate disposition is made of this item.

   d. Reference item concerning identification of parts, page 14, paragraph 5c; page 16, paragraph 3c; and 1st Indorsement, paragraph 7: Concur. Modification kit parts lists were made approximately two years ago prior to assignment of FSN for some items. Customer Assistance has the capability to identify all items listed on the parts list and is currently working with the organizations conducting Ad Hoc modification to supply FSN's and other technical assistance required for accomplishment of MWO.
AVHGC-DST (12 Feb 68) 3d Ind (c)

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968, Reports Control Symbol CSFOR-65

3. (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

Copy furnished:
HQ II FFORCEV
HQ 54th Arty Gp
GPOP-DT (12 Feb 68) (U) 4th Ind
SUBJECT: Operational Report of HQ, 54th Arty Gp for Period Ending
31 January 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 23 APR 1968

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

This headquarters has evaluated subject report and forwarding indorse-
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

C. I. SHORTT
CPT, AGC
Asst AG

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ANNEX A

Communication: Secure Mode Voice Communication

1. (C) As of 27 Oct 67, there was limited secure mode voice communications operational in the 54th Artillery Group. The KY-8 speech scramblers were available within HQ, 54th Artillery Group and all battalion headquarters but they could only be used over very short distances. All classified messages were either encoded or sent by RTT.

2. (C) Actions taken to make secure mode voice communication available throughout the 54th Arty Gp and with higher headquarters were as follows:

a. Antennas:

(1) The RC 292 Antenna is a required item due to the long distances between units within the 54th Arty Gp.

(2) The erection of 65 foot poles to give the additional benefit of the elevated RC 292 Antennas is the key to success. Sixty-five (65) foot poles have been erected or are programmed throughout the Group as follows:

(a) HQ, 54th Arty Gp        19 Dec 67
(b) HQ, 7th Bn, 8th Arty      4 Jan 68
(c) HQ, 7th Bn, 9th Arty      1 Nov 67
(d) HQ, 2d Bn, 35th Arty     18 Dec 67
(e) HQ, 1st Bn, 83rd Arty     Programmed

b. Power Sources:

(1) The power source is critical to the satisfactory operation of the KY-8. The working voltage is between 24 and 28 volts but the ideal voltage is 27.5. To achieve this, it is imperative that the batteries and rectifier being used in a fixed station be checked daily and proper maintenance performed.

(2) A minimum of two 12 volt batteries should be connected in a series across the rectifier terminal. But it is also recommended that an auxiliary power source be used. This should consist of two or more 12 volt batteries connected in parallels with the two primary batteries. (See Tab A to Annex A)

(c) Maintenance:

(1) Daily maintenance consists of keeping the matrix box free
from all traces of dust, grease, and fingerprints. The "X-Mode" cable must be checked to insure that it is free of tension especially at the ends. There cannot be any sharp tight bends.

(2) The power supply must be checked for correct output. The batteries must be checked for correct level of electrolyte. The battery terminal must be free from all dust and corrosion.

d. Training:

(1) The training required to operate the KY-8 is minimal providing the personnel are already qualified RTO's.

(2) The matrix setting should be done by the duty officer or a competent NCO who must have a secret clearance. This setting should be double checked for exact position within the setting of the daily "Key List".

3. Continuing Action:

a. Daily Checks:

(1) The matrix box settings are changed daily at 0800H (local time). Communication checks between units of this headquarters are made daily at 0830, 1230, 1630, and 2130. This check is made between the 54th Artillery Group, 23d Artillery Group, and II FFORC Sv Art's at 0800, 1200, 1600, and 2100. Additional checks are made as traffic requirements dictate before passing traffic in the secure mode.

(2) The operator performs routine checks each time the equipment is used, such as cable communications, sorting of the matrix box, position check on the KY-8, old squelch off, and switch in the green position.

b. Weekly checks: The weekly checks include all those checks outlined in the daily checks but all are accomplished by communications personnel in detail.

c. Maintenance Procedures: The maintenance procedures for the KY-8 are similar to all other equipment with respect to organizational and support maintenance except crypto equipment is not evacuated through support maintenance. Crypto equipment goes direct to the Crypto Custodian at Tan San Nut Airbase for exchange or repair.

4. Equipment shortages: The equipment shortages are being corrected through redistribution within the Group.

5. Conclusion:

a. The Ky-8 is an extremely valuable piece of equipment which is adequate for distances involved (See Tab B to Annex A) when operated under proper conditions with elevated antennas.
b. The reliability of the KY-8's now in operation within the Group is better than 80% with respect to being operational for passing classified tactical traffic. The Group now has communications established with II FEORCEV Arty, 23 Arty Group, 7th Bn, 8th Arty, 7th Bn, 9th Arty, 2d Bn, 35th Arty, 1st Bn, 83d Arty, and other outlying batteries utilizing the KY-8. The increased efficiency for the Group Operations Center as a result of the KY-8 is immeasurable.
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POWER SOURCE FOR RADIOS AND XY-8

RECTIFIER

PRIMARY BATTERIES

AUXILIARY BATTERIES

To Radios and to XY-8

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Operational Report - Lessons Learned, Hqs, 54th Artillery Group (U)

Experiences of unit engaged in counterinsurgency operations, 1 Nov 67-31 Jan 1968

CO, 54th Artillery Group.
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