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**AUTHORITY**

AGO ltr 29 Apr 1980 ; AGO ltr 29 Apr 1980
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IN ACCORDANCE WITH
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SUBJECT: Operational Report - Lessons Learned, Headquarters, Americal Division Artillery, Period Ending 31 July 1968 (U)

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2. Information contained in this report is provided to insure that the Army realizes current benefits from lessons learned during recent operations.

3. To insure that the information provided through the Lessons Learned Program is readily available on a continuous basis, a cumulative Lessons Learned Index containing alphabetical listings of items appearing in the reports is compiled and distributed periodically. Recipients of the attached report are encouraged to recommend items from it for inclusion in the Index by completing and returning the self-addressed form provided at the end of this report.

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   Americal Division Artillery
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DEPARTMENT OF THE ARMY
HEADQUARTERS AMERICAN DIVISION ARTILLERY
APO San Francisco 96374

15 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS-CSPFR-65)

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1. Section 1 - Operations: Significant Activities

a. Command:

   (1) The Division Artillery commands the following assigned or attached units:

   3d Battalion, 16th Artillery (155T): assigned.
   3d Battalion, 18th Artillery (8"/175mm SP): assigned.
   1st Battalion, 82d Artillery (155T/8"SP): assigned.
   Battery G, 55th Artillery (MC): assigned.
   3d Platoon, Battery G, 29th Artillery (Searchlight): attached.
   251st Countermortar Radar Detachment: assigned.
   252d Countermortar Radar Detachment: assigned.

   (2) The Division Artillery also directs the activities of the three direct support battalions of the infantry brigades:

   1st Battalion, 14th Artillery: assigned 190th Infantry Brigade.
   3d Battalion, 82d Artillery: assigned 196th Infantry Brigade.

b. Operations:

   (1) The return of Battery C, 3d Battalion, 18th Artillery (8"/175) from the Phu Bai area on 14 June 68 enhanced the Division Artillery's capability to provide heavy artillery support throughout the division area of operations. In order to provide medium artillery support throughout the division area, the medium artillery battalion was split into six fire units. By placing these units in general support/reinforcing and reinforcing roles a quick fire channel was made available to the direct support battalions. One fire unit continued in a direct support role to the 1st Squadron, 1st Cavalry. Air displacement of the light artillery units to otherwise inaccessible forward fire support bases was the primary method used during the period. This method provided the direct support units the flexibility and response necessary to support an often rapidly changing tactical situation. The provisional fourth firing battery

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of the direct support battalions formed from existing assets, continued to provide the flexibility necessary to support operations and provide coverage for large brigades. During the period direct support artillery batteries from one brigade were placed under the operational control of other brigades to support operations in high enemy threat areas.

(2) On 10 May 68 Kham Due Special Forces Camp (ZC 006085) came under enemy attack. The 196th Infantry Brigade was tasked to provide reinforcement to the camp and sort the 2d Battalion, 1st Infantry along with Battery A, 3d Battalion, 82d Artillery to Kham Due on 10 May 68. Due to the heavy enemy pressure on the camp, the decision to evacuate personnel was made and on 12 May evacuation began. As insufficient time permitted evacuation of the five 105 howitzers of Battery A, battery personnel destroyed them. The battery was reconstituted at LZ Baldy with division float howitzers and in-country 105mm howitzer assets.

(3) Artillery ammunition expenditures and the per cent of observed fires by caliber for the period were as follows:

<table>
<thead>
<tr>
<th>CALIBER</th>
<th>EXPENDITURES</th>
<th>PER CENT OBSERVED</th>
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<tbody>
<tr>
<td>105mm</td>
<td>138337</td>
<td>65</td>
</tr>
<tr>
<td>155mm</td>
<td>74358</td>
<td>31</td>
</tr>
<tr>
<td>8 In</td>
<td>21324</td>
<td>17</td>
</tr>
<tr>
<td>175mm</td>
<td>9559</td>
<td>24</td>
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</tbody>
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(4) The Division Artillery provided supporting fires for the following major operations of the division:

- Operation WHEELER/WALLOWA
  - 11 Nov 67 to present
- Operation POCAHONTAS FOREST
  - 6 Jul 68 to present
- Operation BURLINGTON TRAIL
  - 3 Apr 68 to present
- Operation MUSCATINE
  - 19 Dec 67 - 10 Jun 68
- Operation VANCE CANYON
  - 21 Jun 68 - 2 Jul 68
- Operation CHICKEN COOPERS SWAMP
  - 19 Jun 68 - 29 Jun 68

(a) WHEELER/WALLOWA

- Operation WHEELER/WALLOWA continued during the reporting period with the 196th Infantry Brigade conducting operations in the Hiep Duc Que Son Valleys. On 14 May 68 the 196th Infantry Brigade ( - ) returned from the Phu Bai area and assumed control of the entire operation.

2. Division Artillery supported the operation as follows:

- Battery B, 3d Battalion, 82d Artillery provided direct supporting fires from Fire Support Base Center (BT 050250) and Battery C, 1st Battalion, 14th Artillery supported from LZ Baldy (BT 115266). On 11 May, Battery B, 6th Battalion, 11th Artillery moved to LZ Ross (BT 027314). On 13 May Battery C, 3d Battalion, 82d Artillery returned from the Thu Bai area and was positioned at Fire Support Base West (LT 990250). Battery D, 3d Battalion, 82d Artillery returned from Thu Bai on 16 May and provided direct supporting fires from LZ Colt (BT 115371). Battery A, after returning from the Kham Due Special Forces Camp (ZC 006085) on 12 May, supported from LZ Baldy. On 19 May Battery C, 1st Battalion, 14th
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Artillery moved to LZ Cacti (BT 053570) and on 2 June the battery displaced to LZ Clifford (BT 253701) to support Operation SHRINKOTE. On 6 June Battery D, 3d Battalion, 82d Artillery moved to LZ Eastern (BT 136202) and 17 July they displaced to LZ Saig. Battery B, 6th Battalion, 11th Artillery moved from LZ Ross to LZ Beady on 13 June and on 17 July they moved to LZ Thunder (BT 369379) in the Duc Pho area of operations. On 13 June Battery A, 3d Battalion, 82d Artillery displaced to LZ Free. Battery B, 3d Battalion, 82d Artillery moved to LZ O'Connor (AT 392232) on 11 July to support Operation POGHONTAS FORREST.

b. Battery A, 3d Battalion, 16th Artillery (155T) provided reinforcing fires for the operation from locations at LZ Ross and Hawk Hill (BT 224111). Battery B, 3d Battalion, 16th Artillery (8"/175) continued to provide general supporting fires from LZ Ross. On 5 July the Battery moved to LZ Xan (AT 971239) to provide general supporting fires to Operations POGHONTAS FORREST and MILLER/WILLOW.

c. Artillery organization for combat was as follows:

1st Battalion, 14th Artillery (-) (105T) - DS 198th Infantry Brigade
3d Battalion, 82d Artillery (105T) - DS 196th Infantry Brigade
3d Battalion, 16th Artillery (-) (155T) - Reinfi 1st Battalion, 14th Artillery
Reinfi 3d Battalion, 82d Artillery
3d Battalion, 18th Artillery (-) (8"/175) - GS

(b) POGHONTAS FORREST.

1. Elements of the Americal Division organized as Task Force Cooksey in conjunction with elements of the 1st Marine Division and the 2d Marine Division, conducted offensive operations to the west of Operation MILLER/WILLOW to destroy enemy units in the area and to interdict Highway 521. Operation POGHONTAS FORREST started on 6 July and continued through the reporting period.

2. Division artillery supported the operation as follows:

a. Batteries A and C, 6th Battalion, 11th Artillery moved from the Duc Pho Area of Operations to positions at LZ O'Connor (AT 932242) on 4 July and 5 July, respectively, and provided direct supporting fires to the operation. On 5 July Battery C, 6th Battalion, 11th Artillery displaced to LZ Polar Bear II (AT 939212), on 9 July unit moved to LZ Richards (AT 866214), on 15 July they moved to LZ Balcon (AT 805183), and on 21 July they displaced to LZ Buck (AT 803320). Battery A, 6th Battalion, 11th Artillery moved to LZ Richards on 16 July. Battery B, 3d Battalion, 82d Artillery moved to LZ O'Connor on 11 July.

b. The 3d Battalion, 16th Artillery (155T) provided reinforcing artillery fires to the operation with Battery B displacing to LZ Lurch (AT 925332) on 5 July and Battery C moving to LZ Sooner (AT 875335) on 11 July. A two howitzer platoon from Battery B moved to LZ Richards on 16 July and returned to LZ Lurch on 21 July. On 29 July Battery B moved to the Tien Phuoc Special Forces Camp (BT 104144).
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Battery B, 3d Battalion, 18th Artillery (8in/75S) moved to LZ Karen (AT 914239) on 5 July to provide general supporting fires to the operation.

2. Artillery organization for combat was as follows:

3d Battalion, 82d Artillery (105T) - DS Task Force Cooksey
Batteries A and C, 6th Battalion, 11th Artillery (105T) - OIC CN 3d Battalion, 82d Artillery.
3d Battalion, 16th Artillery (-) (155T) - Reinf 3d Battalion, 82d Arty
3d Battalion, 18th Artillery (-) (8in/75S) - CS

(c) BURLINGTON TRAIL.

1. Operation BURLINGTON TRAIL continued during the reporting period with the 198th Infantry Brigade, and the 1st Squadron, 1st Cavalry conducting the operation.

2. Division Artillery supported the operation with Batteries B and D, 1st Battalion, 14th Artillery providing direct supporting fires from Hill 68 (BT 316131) and LZ Bowman (BT 237140), respectively, and two 155 howitzers from the 3d Battalion, 16th Artillery supporting from Tien Phuoc Special Forces camp. On 2 June Battery C, 1st Battalion, 14th Artillery moved to LZ Clifford (BT 259104) and two 155 howitzers from the 3d Battalion, 16th Artillery moved to LZ Bowman. On 8 June Battery C, 3d Battalion, 16th Artillery moved to Fire Support Base Young (BT 18815S). On 23 June Battery C, 1st Battalion, 14th Artillery displaced to LZ Gator (BS 571963). Battery D, 1st Battalion, 14th Artillery moved to FSB Young on 5 July after Battery C, 3d Battalion, 16th Artillery had displaced to support Operation FOCHOMNAS FOREST. Battery A, 3d Battalion, 18th Artillery provided general supporting fires from Hill 54 (BT 398143).

3. Artillery organization for combat was as follows:

1st Battalion, 14th Artillery (-) (105T) - DS 198th Infantry Brigade
3d Battalion, 16th Artillery (-) (155T) - Reinf 1st Battalion, 14th Arty
3d Battalion, 18th Artillery (-) (8in/175S) - CS

(d) MUSCATINE.

1. Operation MUSCATINE continued into the reporting period with the 11th Infantry Brigade conducting the operation. The operation terminated on 10 June.

2. Division Artillery supported the operation with Batteries B and D, 6th Battalion, 11th Artillery providing direct support from LZ Sue (BS 566877) and LZ Uptight (BS 728850), respectively. On 8 May Battery D displaced to LZ Buff (BS 538825). Two 155mm howitzers from the 3d Battalion, 16th Artillery provided reinforcing fires from LZ Dottie (BS 630856) and two 175mm guns from Battery A, 3d Battalion, 18th Artillery provided general support from LZ Dottie. On 31 May the two 175mm guns moved to Hill 54 to support Operation BURLINGTON TRAIL.

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2. Artillery organization for combat was as follows:

6th Battalion, 11th Artillery (-) (105T) - DS 11th Infantry Brigade
3d Battalion, 10th Artillery (-) (82/175G) - CSR 6th Battalion, 11th Artillery
Battery B (-). 3d Battalion, 16th Artillery (155T) - OIFCOM 3d Battalion, 18th Artillery

(c) VANCE CANYON

On 21 June elements of the 198th Infantry Brigade conducted offensive operations into the vicinity of enemy base areas 118 and 120 west of Quang Ngai City, to destroy enemy elements and extend GVN control in the areas. The operation terminated on 2 July.

2. Division Artillery supported the operation by moving a platoon of Battery C, 1st Battalion, 14th Artillery to Tra Dong Special Forces Camp (BS 302800) on 20 June and Battery A, 1st Battalion, 14th Artillery to LZ Manchester (BS 302810) on 22 June to provide direct supporting fires.

3. Artillery organization for combat was as follows:

1st Battalion, 14th Artillery (-) (105T) - DS 198th Infantry Brigade

(f) CHATTahoochee SWAMP.

Operation CHATTahoochee SWAMP began on 19 June with elements of the 11th Infantry Brigade and the 2d ARVN Division conducting offensive operations in enemy base area 121 west of Quang Ngai City to destroy enemy elements and extend GVN control in the area. The operation ended on 29 June.

2. Division Artillery supported the operation by displacing Battery C, 6th Battalion, 11th Artillery to LZ Patch (BS 436635) to provide direct support fires to the maneuver elements.

3. Artillery organization for combat was as follows:

6th Battalion, 11th Artillery (-) (105T) - DS 11th Infantry Brigade

(g) CHU LAI AREA OF OPERATIONS.

1. Task Force Roach, formed from elements of the 198th Infantry Brigade, continued operations in the Chu Lai Tactical Area of responsibility until 14 May 68 when the 198th Infantry Brigade assumed control of the TACR.

2. Division Artillery provided support as follows:

a. The 1st Battalion, 14th Artillery provided direct supporting fires to the 198th Infantry Brigade from positions at Fat City (BT 439075) and LZ Gator (BS 572965) with batteries B and A, respectively. On 23 June Battery C, 1st Battalion, 14th Artillery moved to LZ Gator and on 2 July Battery A displaced to LZ Dottie. Two howitzers from Battery A moved to
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LZ Buff (BS 538825) on 24 July.

b. The 3d Battalion, 16th Artillery, with Batteries A and B, 1st Battalion, 14th Artillery attached, provided direct supporting fires until 14 May and, thereafter, reinforced from positions at Hill 54 and LZ Gator. Battery A, 3d Battalion, 16th Artillery provided general support from Hill 54. On 19 June the 8 inch platoon from Battery C, 3d Battalion, 16th Artillery moved to LZ Gator to give heavy artillery support to the southern Chu Lai area. On 25 June the 155mm howitzer platoon displaced from LZ Gator to the WHEELER/WALLMA, AO.

3. Artillery organization for combat was as follows:

1st Battalion, 14th Artillery (-) (105T) - DS 198th Infantry Brigade
3d Battalion, 16th Artillery (-) (155T) - Reinf 1st Battalion, 14th Arty
3d Battalion, 16th Artillery (155T) - DS Task Force Reach Attached
Batteries A and B, 1st Battalion, 14th Artillery (105T)
3d Battalion, 18th Artillery (-) (105/175G) - GS

(h) DUC PHO AREA OF OPERATIONS.

1. The 11th Infantry Brigade continued operations in the Duc Pho area of operations.

2. Division Artillery provided support as follows:

a. The 6th Battalion, 11th Artillery provided direct supporting fires from LZ Liss (BS 753434) and LZ Thunder (BS 869321) with Batteries A and C, respectively. On 17 June Battery C moved to LZ Dragon (BS 731528) and on 19 June they displaced to LZ Patch to support Operation CHATTATHOO-CHEE SWAMP. On 17 June Battery B moved to LZ Thunder. On 18 June Battery A moved to the vicinity of BS 763277 to support operations to the west of the Duc Pho AO and on 24 June they displaced to the vicinity of BS 628340 to support the westward movement. On 29 June Battery A (-) moved to LZ Dragon with a 105mm howitzer platoon moving to LZ Liss. On 1 July Battery D moved to the Gia Vuc Special Forces Camp (BS 377265) to support operations in that area. On 18 July Battery D displaced to LZ Checker (BS 437337) to support the maneuver elements, returning to Gia Vuc on 19 July. On 25 July they moved to the RATE Special Forces Camp (BS 553325). On 4 July Battery A moved to LZ O'Connor to support Operation TIGER/HUNT S FOREST leaving two 105mm howitzers at LZ Dragon.

b. Two 155mm howitzers from the 3d Battalion, 16th Artillery provided reinforcing fires from LZ Dragon. On 21 May the 155 platoon moved to LZ Liss. On 17 June two 155mm guns from Battery C, 3d Battalion, 16th Artillery moved to LZ Dragon to provide general supporting fires in the AO.

3. Artillery organization for combat was as follows:

6th Battalion, 11th Artillery (-) (105T) - DS 11th Infantry Brigade
OPCON
Battery B (-), 3d Battalion, 16th Artillery (155T)
3d Battalion, 16th Artillery (-) (105/175G) - GS

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c. The 251st and 2524 Countermortar Radar Detachments arrived and became operational on 19 July 1968. The two detachments are positioned: 251st on Artillery Hill (LT 370303) and 2524 on Landing Zone West (BT 000249).

d. The 1st Battalion, 624 Artillery arrived and was assigned to the Americal Division on 22 July 1968. The battalion is expected to be completely operational by 9 August 1968. The battalion will be generally deployed in the southern portion of the Americal AO.
2. Section II, Lessons Learned

Personnel.

i. Shortage of Signal Corps Lieutenants and Captains.

(a) Observation: The lack of Signal Corps Lieutenants and Captains to fill TOE positions in direct and general support battalions as communications and assistant communications officers is considered critical.

(b) Evaluation: The communications mission could be greatly improved by filling these vacancies with trained Signal Corps officers. Each Direct and General Support Battalion is authorized one Lieutenant and one Captain as communication and assistant communications officer. Presently there are 4 captain and 2 lieutenant vacancies. Artillery Lieutenants are currently filling assistant communications officer positions in 2 battalions. If Signal Corps Lieutenants were available to fill these TOE positions, Artillery Lieutenants could be more effectively utilized in artillery related positions such as executive officers, assistant executive officers or forward observers.

(c) Recommendation: That Signal Corps Captains and Lieutenants be made available to fill artillery communications positions.

ii. Non-promotable Lieutenants.

(a) Observation: Newly assigned Lieutenants arrive without DA Form 68.

(b) Evaluation: On four different occasions in the past sixty days, promotable 2d Lieutenants have reported for duty and could not be promoted on their date of eligibility because the losing command had failed to initiate DA Form 78. On one occasion the officer should have been promoted in December 1967; the officer was promoted on 24 May 68 with DOA of 23 March 68.

(c) Recommendation:

1. That the widest possible dissemination of the provisions of AR 642-100 be initiated.

2. That the FOR processing checklist DA Form 2970 contain a special statement on promotable second lieutenants that the officer's promotion eligibility date had been reviewed and, if applicable, the provisions of para 27 AR 624-100 have been implemented.

(3) Shortage of School Trained Personnel.

(a) Observation: Additional school trained MOS's authorized by the modification of the current TOE's have not been received. During the last quarter losses were also incurred in school trained personnel by infusion and rotation. Replacements have not arrived to fill the vacancies created. Specific examples where MOS's are authorized but no personnel are assigned: four (4) 76S20's authorized, four (4) 76K30's authorized, four (4) 71220's
seventeen (17) 63B's and 63C's (vehicle mechanics) authorized.

(b) Evaluation: The present system of requisitioning replacements does not adequately provide essential school trained personnel in a timely manner.

(c) Recommendation: That the system of requisitioning replacements insure that school trained MOS's have a higher priority than nonschool trained MOS's.

(4) Rating Officers for Artillery Forward Observers.

(a) Observation: Due to tactical requirements, a direct support artillery battery seldom supports habitually the same infantry battalion. The forward observers remain with the infantry companies to which they were originally attached and do not necessarily operate with the artillery batteries to which they are assigned.

(b) Evaluation: The battery commander is not able to give an accurate evaluation of his assigned forward observers since the observers seldom operate with the same artillery battery.

(c) Recommendation: That the artillery liaison officer attached to the infantry battalion be the rating officer for forward observers attached to the infantry companies of that battalion. This system has been adopted within this division and has proven effective.

(5) Administrative Problems of a Fourth Firing Battery.

(a) Observation: With the organization of a provisional fourth firing battery, significant administrative problems have arisen.

(b) Evaluation: Personnel working in positions essential to the mission and deserving promotion, are not always carried in TOE promotable positions. As an example, a survey rodman-tapeman authorized and assigned to HHSS in an E-3 position is actually serving as a fire direction computer in an E-5 position in Battery D; yet the man cannot be promoted. Moreover, the authority to administer UCMJ is not authorized for the fourth Battery Commander and he must request such action from another unit commander, thereby causing delays that sometimes nullify the charges.

(c) Recommendations: None. MTOE's are presently being processed to authorize the fourth battery.

b. Operations:

(1) 6400 mil firing chart.

(r) Observation: When moving to a new position area, much time is wasted in the preparation of the 6400 mil firing chart and subsequently, additional time is lost in checking indices with Battalion FDC.

(b) Evaluation: When occupying a new position area the HCO and VCO must wait until the coordinates of Battery Center are determined before
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constructing the firing chart. The construction of the chart is a slow and meticulous process consuming valuable time. The graphical relationship of the deflection and azimuth indices remains the same regardless of the physical grid location of battery center. Using a preconstructed template underneath the transparent grid sheet, the chart may be reoriented for any new firing position in a matter of minutes. The indices are already constructed in relation to a tick mark on the template. The tick mark may be oriented under the grid sheet to coincide with the grid of the new battery center. Once the template is oriented properly and the grid sheet secured over it, the proper indices will be displayed in relation to battery center. Such a template may be constructed permanently on the chart table with a permanent battery center. Upon arriving in a new position and the new grid of battery center determined, a new grid sheet may be oriented over the permanent and arbitrary Battery Center on the chart table. When properly oriented the indices will be properly displayed.

(c) Recommendation: Firing batteries consider the adaptation of such chart tables to facilitate the rapidity of FDC operations during moves. If all battery charts are not set up in this manner, one "jump" chart table could be constructed for use until actual firing charts are ready for operation in the new position.

(2) Short life of Artillery Graphical Firing and Site Tables.

(a) Observation: Due to climatic effect on wood and paper, replacement of GFT's and GST's is a constant problem in Vietnam.

(b) Evaluation: The present wood and paper GFT's and GST's are unsatisfactory in tropical climate. Wood swells and slides stick. The paper scales deteriorate rapidly and become difficult to read. Replacement is a constant problem.

(c) Recommendation: That GFT's and GST's be constructed of aluminum and enameled such as the Pickett Military Slide Rule.

(5) Difficulty in following the present Hat and VE computation form (DA Form 6-15).

(a) The present DA Form 6-15 is difficult to follow and does not lend itself to abbreviated solutions.

(b) Evaluation: Because the present DA Form 6-15 does not follow a chronological sequence it is difficult to train new personnel in the computation of mets, VE's and Hat fuze corrections. In those instances where mets are computed daily at the same location the present form does not lend itself to abbreviated computation. The present High Burst/MPI form (DA Form 6-55) is easy to follow and easy for new personnel to learn.

(c) Recommendation:

1. That the present DA Form 6-15 be revised to permit personnel with minimum training to use it.
2. That an abbreviated form be devised for day to day computations from the same location.

(a) Problems encountered in the control of nine firing batteries.

(c) Observation: Due to the tactical situation battalions have had to control as many as 6 firing units with little augmentation.

(b) Problems: One of the major problems encountered in the control of nine firing batteries was the shortage of trained Battalion Fire Direction Center Computers for checking technical firing data. This obstacle was overcome by the employment of two computers. Although a battalion is authorized the personnel for the control of nine firing units for sustained operations, the battalion can accomplish the task by designating two computers to check the technical data of nine firing units. The effectiveness of this method is dependent upon the degree of training and experience of the fire direction personnel.

(c) Recommendations: None

(6) Field Artillery

(a) General: When an artillery battery occupies a position, immediate construction of overhead cover must commence.

(b) When an artillery battery is required to occupy a position in an area with a high probability of encountering enemy resistance immediately, it is imperative that parapets and overhead cover for the troops be constructed within a minimum time delay. Immediately upon their arrival in the Kham Duc River Battery A, 3d Battalion, 62d Artillery began receiving enemy mortar and small arms fire. Time did not permit the construction of this protection due to the requirement to deliver retaliatory fires immediately upon occupation of position. As the action progressed the personnel manning the guns were provided with little or no protection from mortar fragments and small arms fire.

(c) Recommendations: None

(6) FADG Program Tapes

(a) Additional calibrations of program tapes for Computer, Gun Direction HIC (FADG) were issued. The new series of program tapes are not adequate since sufficient calibrations of weapon systems do not exist. The following additional program tapes are needed:

175mm (M507) 8 inch (M107) 102mm (M52, M52A1, M51A1) 105mm (M52, M52A1, M101A1) 8 inch (M10) 105mm (M52, M52A1, M101A1) 155mm (M114A1, M14, M4A1) 155mm (M114A1, M14, M4A1) 155mm (M114A1, M14, M4A1)
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(c) Recommendation: That a new series of programs be developed with a greater variety of combinations.

(2) Logistics.

(1) Care and Maintenance of Sling Equipment.

(a) Observation: On 1 July 1963 a 105mm howitzer was being airlifted from one fire base to another in support of a tactical operation. The helicopter experienced turbulence, causing the load to jerk. The sling sheared in two, resulting in a total loss of the 105mm howitzer, equipment, and other miscellaneous equipment.

(b) Evaluation: Sling equipment is rated for a specific maximum load for a specified number of lifts. This rating is predicated on the assumption that the equipment receives proper care and maintenance from Depot to using unit. Sling equipment is occasionally received from Depot which had deteriorated due to improper storage. Sling equipment allowed to get wet or oily, and then improperly stored in the open will rot. Moreover, without a standard means of logging the number of lifts for which an item of sling equipment has been used, it is difficult to determine its remaining life.

(c) Recommendation: Each sling should be load tested upon issue; this test would constitute one lift. A standard method should be devised to plainly mark the sling each time it is used. This will determine when slings should be replaced. Slings must be stored in such a way that they can dry out quickly, but not in direct sunlight.

(2) Long Distance Overland Moves.

(a) Observation: Long distance overland moves through remote territory have pointed up the need for detailed logistical planning.

(b) Evaluation: Prior to beginning an overland move with a large complement of vehicles careful consideration should be given to recovery of vehicles that become inoperable along the route of march. A minimum of one recovery vehicle is a necessity for each march column. Numerous other vehicles, 21/2 ton or larger, should be equipped with a tow bar to assist in the recovery effort. By providing this additional towing capability the greatest amount of the inoperable equipment can be recovered and can proceed with the convoy to the overnight larger area. It was further noted the 1/4 ton and 3/4 ton vehicles use an excessive amount of fuel.

(c) Recommendation: It is recommended that each unit planning for an overland move give close attention to the stockage of the high mortality rate items for support of the move.

(3) F.D.A.C Maintenance.

(a) Observation: Through a program of intensified daily maintenance the operational readiness of F.D.A.C's has been increased to more than 85 percent.
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(b) A continued review of the F.D.C preventive maintenance program has resulted in procedures which significantly increased the division wide operational readiness. The results of this review are attached as Enclosure 1. The preventive maintenance program applies to both the F.D.C and the generator. Use of the attached checklist plus constant training and retraining of supervisors, operators and maintenance personnel have been the primary reasons for these results. Careful installation in a ventilated, dust free area is equally important.

(c) Recommendations: None

1 Enc

LAWRENCE M. JONES, JR.
Colonel, Artillery
Commanding
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AVDSC (2 Sep 68) 1st Ind
SUBJECT: Operational Report-Lessons Learned, Division Artillery

DA, HQ, Americal Division, APO San Francisco 96374 11 SEP 68

TO: Commanding General, United States Army Vietnam, AVNGC-FO, APO 96375

1. Forwarded herewith is the subject report of the Americal Division Artillery for the period ending 31 July 1968.

2. This headquarters concurs with the observations and recommendations contained in the basic communication except as noted below.

a. Reference para 2a(1), Section 2: The Division Adjutant General and Signal Officer are aware of the shortages of Signal Corps Officers. Publicity has been and will continue to be given to the recent change in policy which encourages officers qualified in the communications field to apply for branch transfer.

b. Authorized and assigned strength of company grade Signal Corps officers is shown below. The increased authorization is due to the recent assignment of the 1st Battalion, 62d Artillery.

<table>
<thead>
<tr>
<th>10 Aug</th>
<th>2 Jan</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH/SEQ</td>
<td>AUTH/SEQ</td>
</tr>
<tr>
<td>CPT</td>
<td>21/18</td>
</tr>
<tr>
<td>LT</td>
<td>25/34</td>
</tr>
</tbody>
</table>

c. Reference para 2a(3), Section 2: This headquarters informs the garrison of the plan for qualified personnel. At the same time it is recognized that MOS 763 and 71T are relatively new and that the demand for school trained personnel (MOS 763 and 71T) exceeds the supply. The current status within the division is as follows:

(1) 71T | 70%
(2) 76J | 75%
(3) 76I | 90%
(4) 63 series | 99%
AVDR-66 (2 Jun 69) 1st Inf 11 SEP 68

SUBJECT: Operation Report-Lessons Learned, Division Artillery

\( c. \) Para 3c(1), Section 2: This headquarters has recently published and disseminated guidance criteria for the use of sling equipment, based on the guidance set forth in USARV message AVDR-LOG 40132, 12 Mar 69, and AVDR-36 55-30, 25 June 1967, P: TR 55-450-11.

FOR THE COMMANDER:

\[
\text{James M. Cox III}
\]

LT. AGC
ASST ADJ GEN
1. This headquarters has reviewed the Operational Report - Lessons Learned for the quarterly period ending 31 July 1965 from Headquarters, American Division, Artillery.

2. Reference Item concerning shortage of school trained personnel, page 2, paragraph 2a(3) and 1st Indorsement, paragraph 2c. Nonconcurrence. The urgent and continuing need for combat ROE in this command does not support this recommendation. The reasons for the shortage of school trained personnel in ROE 751 and 753 are adequately covered in paragraph 2c, 1st Indorsement. A recent increase in authorization has caused American Division strength in ROE 751 (ROE 751K is obsolete) and 3 series ROE to fall below authorized levels.

FOR THE COMMANDER:

W. C. ARNTZ
CAPTAGC
Assistant Adjutant General

For: C. G.飲


CC: American Div

American Div Art.
GPOP-DT (15 Aug 68)  3d Ind (U)
SUBJECT: Operational Report of HQ, Americal Div Arty for Period
Ending 31 July 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558  16 OCT 68

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

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

FOR THE COMMANDER IN CHIEF:

[Signature]

C.L. SHORTY
CPT, AGC
Aust AG
SUBJECT: Artillery Items for Command Emphasis

1. Some artillery battalions of the Division are experiencing high deadline rates for FADECs and FADEC generators. Recently, one battalion had as many as four out of five FADECs down at one time for various causes.

2. Addressees are encouraged to review their FADEC maintenance procedures with a view toward improving operational readiness of FADEC. The following are suggested measures to improve maintenance programs:

   a. Each unit should use a preventive maintenance checklist for each FADEC assigned (Example at Inclosure 1). This should be checked periodically by the battalion commander and/or the members of his staff on visits to the battery FDC's.

   b. Maintenance requirements should be doubled during the dry season because of the large amount of dust. One artillery battalion requires the oil to be changed in FADEC generators every two or three days. Their deadline rate for generators is very low. Other periodic maintenance such as cleaning of filters should be done more frequently than indicated in the associated maintenance manuals.

   c. When a FADEC must be evacuated to 723d Maintenance Battalion, at least one of the artillery battalion FADEC maintenance personnel should accompany it. This individual can assist 723d Maintenance personnel in determining and eliminating the cause of deadline. The most important benefit of this program would be the experience gained by the artillery battalion FADEC maintenance personnel. Many of the problems found by 723d Maintenance Battalion could possibly be eliminated at the organizational maintenance level. Liaison with the 723d Maintenance Battalion has been effected in order to support this program.

3. The following are some of the results experienced by one artillery battalion with an aggressive FADEC preventive maintenance program:

   a. The four FADECs assigned to the battalion logged 724 hours of operation in the month of June.
b. The battalion FDC FADAC has logged 2,207 hours of operation with only 30 minutes of down time since issue in August 1967.

4. This letter is required to be on file in each battery and battalion FDC together with previously published "Artillery Items for Command Emphasis".

/s/Lawrence M. Jones, Jr.
/t/LAWRENCE M. JONES, JR.
Colonel, Artillery
Commanding

A TRUE COPY:

ROBERT L. DUBOIS
Maj, Artillery
Adjutant
<table>
<thead>
<tr>
<th></th>
<th>Air intake set on &quot;Summer&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Any unusual noise or vibration during operation</td>
</tr>
<tr>
<td></td>
<td>Instruments reading properly as per TM 5-6115-271-14 (Voltage and cycles)</td>
</tr>
<tr>
<td></td>
<td>Is the white lead cable attached to the top load terminal?</td>
</tr>
<tr>
<td></td>
<td>Log book present?</td>
</tr>
<tr>
<td></td>
<td>Daily 24/04 completed?</td>
</tr>
<tr>
<td>k</td>
<td>TM 5-6115-221-14 present?</td>
</tr>
<tr>
<td>l</td>
<td>LO 5-2805-203-14 present?</td>
</tr>
<tr>
<td>3</td>
<td>PERIODIC CHECKS</td>
</tr>
<tr>
<td>a</td>
<td>Hour meter reading (daily) Generator #1</td>
</tr>
<tr>
<td>b</td>
<td>Hour meter reading (daily) Generator #2</td>
</tr>
<tr>
<td>c</td>
<td>Clean fuel strainer (weekly)</td>
</tr>
<tr>
<td>d</td>
<td>Clean air filter (every 25 hrs)</td>
</tr>
<tr>
<td>e</td>
<td>Change oil (every 100 hrs)</td>
</tr>
</tbody>
</table>
2. If the guide order is not followed, the generator is equipped with a sealed bearing.


<table>
<thead>
<tr>
<th>HOURS OF USE</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-300</td>
<td>Exchange or replace gear 3.</td>
</tr>
</tbody>
</table>
**Title:** Operational Report - Lessons Learned, HQ, Americal Division Artillery (U)

**Descriptive Notes:** Experiences of unit engaged in counterinsurgency operations, 1 May - 31 Jul 68

**Author:** CO, Americal Division Artillery

**Report Date:** 15 August 1968

**Contract or Grant No.:**

**Project No.:** N/A

**Originator's Report Number(s):** 683082

**Distribution Statement:** N/A

**Sponsoring Military Activity:** OACSFOR, DA, Washington, D.C. 20310

**Abstract:**

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**Notes:**

- **Security Classification:** Confidential
- **Group:** 4

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**Form:** DD Form 1473

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The following items are recommended for inclusion in the Lessons Learned Index:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SUBJECT TITLE</th>
<th>FOR OT RD #</th>
<th>PAGE #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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* Subject Title: A short (one sentence or phrase) description of the item of interest.

** FOR OT RD #: Appears in the Reply Reference line of the Letter of Transmittal. This number must be accurately stated.

***Page #: That page on which the item of interest is located.
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