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<td>AGO ltr 29Apr 1980; Ago ltr 29 Apr 1980</td>
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MARKING

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Best Available Copy
1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-13. Evaluations and corrective actions should be reported to ACSFOR OT UT, 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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5th Battalion, 27th Artillery
CONFIDENTIAL

DEPARTMENT OF THE ARMY
HEADQUARTERS, 5TH BATTALION, 27TH ARTILLERY
APO SAN FRANCISCO 96321

AVK-AH-C 31 October 1969

SUBJECT: Operational Report of 5th Battalion, 27th Artillery for Period Ending 31 October 1969, RCS CSFOR-65 (R1)

SEE DISTRIBUTION

1. (C) Operations: Significant Activities.

a. General:

(1) The battalion's mission during the reporting period was general support United States Free World Military Armed Forces in AO Dan In/ Sheridan (Task Force South). The battalion was attached to I Field Force Provisional Artillery Group for the entire reporting period.

(2) This headquarters continues to maintain liaison elements in Lam Dong, Tuyen Duc, Minh Thuan and Binh Thuan Provinces, 2/1 Cav Sqdn, 44th ARVN Regt, and upon its entry into this AO in Aug 69 with the 1/50 Noch Inf Bn. Tac CFs are maintained in Song Mao and Phan Thiet for command and control of three assigned batteries; Battery B, 3D Battalion, 6TH Artillery (105mm SF) and Battery C, 5TH Battalion, 22D Artillery (8"/175) attached; Battery A, 5TH Battalion, 22D Artillery (8"/175) and Battery D, 2D Battalion, 320TH Artillery (CNOW). The TAC CFs also provide for coordinated fires of the ARVN Artillery located within the AO consisting of the 2318T and 233D Light Battalions, Battery B, 39TH Artillery (medium) and two 105mm howitzers assigned to VNMA. Total artillery tuboa in the AO consist of 36 US and 44 ARVN.

b. Operations:

(1) Operation Dan In/ Sheridan AO remains unchanged. Task Force South is comprised of 3D Battalion, 506TH Inf; 2D Squadron, 1ST Cavalry; 1ST Battalion, 50TH Mech Inf, in coordination with Republic of Vietnam 23D Inf Div (Light CF) consisting of 53D and 44TH ARVN Inf Regt. There are 90 Regional Force Companies within the AO. At the beginning of the reporting period, firing elements controlled on/or supported by this unit were located as follows:

- 5/27 (-) 3 Howitzers BN 124381
- 5/27 (PLT) 3 Howitzers AN 955206
- 5/27 AN 617162

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CONFIDENTIAL 31 October 1969

SUBJECT: Operational Report of 5th Battalion, 27th Artillery for Period Ending 31 October 1969, RCS CSPOR-65 (R1)

C/5/27 (-) 5 Howitzers DP 219192
C/5/27 1 Howitzer DP 147007
B/3/6 BN 522483
D/2/320 (-) 4 Howitzers AN 876067
D/2/320 (FLT) 2 Howitzers AN 849242
C/5/22 AN 849242

Total Missions Fired by Type

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<th>CONFIRMED</th>
<th>ACQUIRED</th>
<th>COUNTERBATTERY</th>
<th>PREPARATION</th>
<th>INTERDUXION</th>
<th>SPECIAL PURPOSE</th>
<th>OTHERS</th>
<th>TOTAL ROUNDS FIRED</th>
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<tr>
<td>786</td>
<td>10183</td>
<td>210</td>
<td>1042</td>
<td>1086</td>
<td>73</td>
<td></td>
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RESULTS

KIA (BC) 21 SECONDARY EXPLOSIONS 20
KIA (EST) 2 BUNKERS DAMAGED 11
BUNKERS DESTROYED 33 FOXHOLES DESTROYED 4
BUILDINGS DESTROYED 7 BUILDINGS DAMAGED 5

AIRCRAFT UTILIZATION

<table>
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<th>UH-1</th>
<th>OH-6</th>
<th>CH-47</th>
<th>CH-54</th>
<th>TOTAL</th>
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<td>76745</td>
<td>25654</td>
<td>6145</td>
<td>48815</td>
<td>42145</td>
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This unit has conducted 42 tactical moves, 21 by air and 21 by convoy, and of the 42 moves there were 2 artillery raids.

c. Mission Related Activities:

(1) This unit has been required to rely heavily upon aerial re-supply of all firebases due to the condition of Route QL 1 throughout Binh Thuan Province, which was impassable for most of the reporting period.

(2) While the shortage of 105mm Illumination has not hampered operations to date, this unit has found it necessary to request a supplemental issue for each reporting period in order to fulfill operational commitments.

(3) A 30" searchlight was installed on Nui Ta Dom Mountain to provide illumination support for fire bases and maneuver units in southern Binh Thuan Province and has
proved to be a highly worthwhile project. Besides providing H&I and supporting contact missions, it was used on several occasions to guide dust-off aircraft during inclement weather. On yet another instance it was used in a pre-dawn sweep of an area of contact on the previous night, and when the light was turned on a wounded NVA Lieutenant sat up revealing himself which led to his immediate capture.

2. (C) Lessons Learned: Commanders Observations, Evaluations and Recommendations.
   a. Personnel
   b. Intelligence
   c. Operations

   (1) Observation: Due to the necessity of getting proper clearances and posting of air advisories prior to firing most missions, a tendency occasionally occurs wherein units do not put the urgency demanded on fire missions.

   (2) Evaluation: The permanency of the procedure in Vietnam can easily become an accepted fact of normal gunnery.

   (3) Recommendation: That units initiate a program to have observers preclear grids and have air advisories posted, calling the mission to a firing unit while in flight and evaluating the units capability to react. This procedure helps to overcome the aforementioned observation and puts more meaning into the words "FIRE MISSION".

   (4) Observation: The large amount of aerial resupply to the firing elements of this unit has resulted in excessive wear-out of air items.

   (5) Evaluation: Because of this it has become necessary to utilize those air items normally reserved for tactical air lifts in order to meet the large requirements of every day resupply.

   (6) Recommendation: Whenever possible units that encounter this problem area should increase by 50% the amount of air items normally required to insure a sufficient reserve in each firing element which will allow for rapid reaction for tactical air lifts.

   (7) Observation: During firing missions or attacks there exists a strong possibility of loss of internal communications within a fire base.

   (8) Evaluation: The loss of commo (with one artillery piece) can greatly hamper operations during the conduct of fire missions or during the reaction period to enemy attacks.

   (9) Recommendation: To enhance command and control of a fire base, and for use as a back up for loss of commo, a bull horn system should be utilized to enable all
elements to monitor the commands given.

(10) Observation: Occasionally circumstances present the problem of insufficient claymore mines for perimeter defense.

(11) Evaluation: When faced with such a predicament it is important to use field expedients to ensure adequate perimeter defense.

(12) Recommendation: That units use a roll of barbed wire affixed with a C-4 charge to get a beehive effect against enemy probes.

(13) Observation: Most US artillery units participate in the Battery Associate Program whenever possible and practical.

(14) Evaluation: Whenever US units or ARVN units participate in operations little, if any time is spent in this program due to operational commitments.

(15) Recommendation: That US artillery units give strong consideration to establishing joint (US-ARVN) fire bases to support operations. No loss in artillery support is suffered and such can be accomplished in enhancing ARVN artillery, both tactically and technically. This unit has used the joint fire base concept several times with considerable success. A side benefit is that the ARVN artillery unit gets trained in air lift techniques and is removed from the semi-garrison environment for training.

(16) Observation: Due to the wide distribution of US artillery units in Vietnam many units find themselves OIC ON to organizations far removed from their parent units.

(17) Evaluation: A problem exists in the administration of units widely separated from parent organizations both in communications and in breakdown of control.

(18) Recommendation: Normally an OIC ON status should be for short periods of time. When a unit falls into the category of prolonged OIC ON consideration should be given to attachment in order to offset administrative shortcomings and provide for positive control.

(19) Observation: Many units change artillery pieces far more frequently than normal due to excessive wear brought about by increased firing in Vietnam.

(20) Evaluation: These weapons usually are returned to the states for rebuilding and subsequent reissue to units in Vietnam. The weapons normally are stored for quite some time before reissue and are subjected to adverse weather conditions and rough handling. As was the case with this unit, 7 of 17 such weapons issued were in need of repair, 2 of which had to be evacuated as non-repairable.

(21) Recommendation: That prior to issue to field units all weapons be completely and thoroughly technically inspected and test fired by appropriate support units.
(22) Observation: It has been noted that on several occasions, 19 round registrations are required to obtain a valid registration with the 175mm gun.

(23) Evaluation: This expenditure normally occurs when the first round in fire for effect is spotted as over 20 M or less. The FDO, following standard procedure, drops one full fork to establish the bracket. The full fork is normally three times the amount of the "C" factor at the fire for effect elevation. The next round fired will land considerably short of the registration point. The FDOs then add a half fork and receive three shorts. Following procedure, the FDO will add another half fork, obtaining the initial fire for effect quadrant. The two rounds fired at this quadrant will normally land short because of tube heat. With a five and one now existing, the FDO adds a half fork in order to verify and fires one round which will also fall short. Two more rounds are fired at this QE and the spotting obtained is usually short. The FDO must now re-establish the fork bracket. It has been construed that this situation is caused by the tube heating up which results in a decrease in muzzle velocity. It is also confirmed that this problem is only encountered when the initial round is sensed as a small amount over.

(24) Recommendation: This battalion has tried a modification which has proven to be highly successful. When the FDO receives a spotting of over (20 meters or less), he applies one half fork in order to obtain the fork bracket. The same basic procedure is then followed for obtaining six usable rounds as outlined in FM 6-40. By using a half fork as opposed to a full fork, six to nine rounds are saved, not to mention the time savings. The adjusted data has been applied to observed transfers, and the rounds landed in proximity to the target. The adjusted data determined by firing the normal FM 6-40 registration did not prove to be accurate when fired as a transfer. 90% of the time the rounds would land an excessive amount over, due to the excessive tube heat at the time of registration. If the transfer was fired immediately after registering, while the tube was hot, the adjusted data was valid. However, if the tube had sufficient time to cool, the adjusted data was usually invalid.

(25) Observation: Guidelines are not outlined in FM 6-40 regarding situations that arise when employing an air observer during registrations.

(26) Evaluation: Since the air observer can obtain an accurate gun-target relationship, he makes spottings on the gun-target line during a registration. It is possible for him to spot line shots from his vantage point. Provisions are not taken in to account for line shots, during the FFE phase of a registration in FM 6-40.

(27) Recommendations: If the air observer spots a round plus a plus, and a subsequent round is spotted in the opposite sense, the deflection should be considered correct. The requirement would be, the two rounds considered would be within a fork apart in range. Thus, by obtaining an over line then dropping a full fork and obtaining a short line, the deflection fired would cause the trajectory to pass through the target. Tests have been conducted using the above method. The results were compared to results obtained by standard procedure. The largest difference that has been determined was 1 mil. The air observer must be instructed to spot the rounds accurately in reference to line shots.
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AVGK-AH-C

SUBJECT: Operational Report of 5th Battalion, 27th Artillery for Period
Ending 31 October 1969, RCS CSFOR-65 (Rt)

d. Organization:

e. Training:

f. Logistics:

(1) Observation: Attached units do not always have separate property book and
unit identification code.

(2) Evaluation: This causes unnecessary hardship on gaining organization for
normal resupply items and PLL item replacement.

(3) Recommendation: That prior to attachment the unit be provided with a sepa-
rate property book and unit identification code.

g. Communications:

h. Material:

i. Other:

(1) Observation: Due to loose sandy soil excessive displacement can occur caus-
ing a delay in firing and inaccuracies on the M101A1 Howitzer.

(2) Evaluation: Many times this problem can be resolved by use of materials
really available to the field.

(3) Recommendation: The use of discarded tank tracks sunk in the ground in a
circular pattern at the trail grade distance, will greatly assist in preventing dis-
placement due to loose soil and also prevent wash away by heavy rains. The track
should be installed vertically with one edge flush with the soil surface.

JAMES J. SUTHERS
LTC, MN
Commanding

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CO, 1st ARNG (1st Regiment) (3)
Artillery Group ATTN: AVGK-AH-C
SUBJECT: Operational report of 5th Battalion, 27th Artillery for Period Ending 31 October 1969, RCS CSFOR-65 (R1)

TO: Commanding General, I Field Force Vietnam, APO 96350

(\textbf{\textit{1}}) This headquarters has evaluated basic report and concurs.

FOR THE COMMANDER:

copy furnished: 

DA, ACSFOR (2) 

[Signature]

Lieutenant Colonel, FA 
Adjutant
SUBJECT: Operational Report of 5th battalion, 27th Artillery for Period Ending 31 October 1969, RCS C3FOR-65 (R2)

1. (U) This headquarters has evaluated subject draft and forwarding endorsement and concurs except as indicated below.

2. (U) Reference para 2f(3): Nonconcur. The time required to administratively complete this recommendation precludes its accomplishment prior to attachment. Experience gained from a recent action such as this has shown that it takes approximately 45-60 days for completion.

For the CSEHLDR:

[Signature]

CF:
1 - CO, 1 st Cav Arty
1 - CO, 3rd Bn, 27th Arty
1 - CO, Prov Art/Grp

(Authorized)
1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1969 from Headquarters, 5th Battalion, 27th Artillery and comments of indorsing headquarters.

2. Comments follow:

   a. Reference item concerning an excessive wear out of air items, page 3, paragraph 2c(6); nonconcur. The air items required by a tactical unit must be considered in the unit SOP. Since this will vary between units, an established standard is not practical.

   b. Reference item concerning the use of a bull horn as a back up firing battery communications system, page 3, paragraph 2c(9); nonconcur. While a secondary means of communications is mandatory, the type should be the prerogative of the unit commander.

   c. Reference item concerning field expedient anti-personnel mines, page 4, paragraph 2c(12); nonconcur. This expedient is wasteful of supplies. There is no shortage of claymore mines in USARV.

   d. Reference item concerning joint US/ARVN fire bases, page 4, paragraph 2c(15); concur. Training programs must be consistent with mission requirements and equipment TOE to ARVN units.

   e. Reference item concerning inspecting and test firing artillery weapons prior to issue to field units, page 4, paragraph 2c(21); concur. Recommendation covers the recurring problems encountered in off-shore overhauls due to careless handling at ports and during movement. Under current procedures, artillery weapons which are repaired off-shore are shipped to Long Binh Depot where they are picked up by the designated customer units' support unit (DS or GS), deprocessed, inspected (to include functional tests), and issued to the customer unit. Discrepancies should be brought to the attention of the support unit for correction. The above procedures, which are considered adequate, have been related to the applicable unit.

   f. Reference item concerning abbreviated registration procedures, page 5, paragraph 2c(24). The application of the fork is a timely procedure provided the observer's range sensing is accurate. Recommend the item concerning problems encountered when normal registration data was fired as a transfer be forwarded to the US Army Field Artillery School for evaluation.
AVBQG-UT (31 Oct 69) 3d Ind

SUBJECT: Operational Report of 5th Battalion, 27th Artillery for Period Ending 31 October 1969, ROE G0F0M-65 (R2) (U)

g. Reference item concerning separate property books, page 6, paragraph 2f and 2d Indorsement, paragraph 2; nonconcur. Property books are normally consolidated at battalion level. Further subdivision is at the discretion of the parent unit commander, subject to approval of USARPAC, based on the tactical situation, distance factors and operational requirements.

FOR THE COMMANDER:

Cy Furn:
5th Bn, 27th Arty
I PFORGEY
SUBJECT: Operational Report of HQ, 5th Battalion, 27th Artillery for Period Ending 31 October 1969, RCS GFORD-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 26 JAN 1970

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

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

C. L. Short
CPF, AOC
Army AG
Operational Report - Lessons Learned, HQ, 5th Battalion, 27th Artillery

Experience of unit engaged in counterinsurgency operations, 1 Aug 69 to 31 Oct 69.

CO, 5th Battalion, 27th Artillery

31 October 1969

N/A

N/A

N/A

OACSFOR, DA, Washington, D.C. 20310