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SUBJECT: Operational Report - Lessons Learned, Headquarters, 9th Infantry Division Artillery, Period Ending 31 July 1968 (U)

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 9TH INFANTRY DIVISION ARTILLERY
APO San Francisco 96370

AVDE-AO 31 July 1968
SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 (RCS CSFOR-65) (R1) (U)

Commanding General
9th Infantry Division
ATTN: AVDE-MH
APO San Francisco 96370

Commanding General
United States Army Vietnam
ATTN: AVHGC-DST
APO San Francisco 96375

Commander-in-Chief
United States Army Pacific
ATTN: GPOP-DT
APO San Francisco 96558

Section 1: Operations: Significant Activities

1. (C) Introduction:

a. During this reporting period, 1 May - 31 July 1968, the 9th Infantry Division Artillery has been engaged in the defense of Saigon and in stability operations in the Mekong Delta region. Assigned, attached and OPCON artillery units have supported four major operations from fire support bases and mobile riverine firing positions in GIA DINH, LONG AN, GO CONG, DINH TUONG, KIEN HOA, VINH BINH, VINH LONG, PHUOC DINH, BIEN HOA, SA DEC, KIEN PHUONG and LONG KAHN Provinces. Major operations have included operation KUDZU, which replaced Operation HOPTAC on 1 May and continues, Operation TOAN THANG, Operation TRUONG CONG DINH, and Operation DUONG CUA DAN (Peoples' Road). In support of each of these operations, the artillery has continued to furnish close and continuous fire support from bases located from the outskirts of Saigon to the inundated rice paddies of the lower Mekong Delta. Frequent displacements of all classes of artillery have required road march, airlift, and riverine movement. Fires have been delivered from roadways, barges, landing craft, airmobile artillery platforms and semi-permanent fire support/patrol bases (FSPB). The remarkable flexibility made possible by the organization and equipment of the 9th Infantry Division Artillery has permitted immediate reaction to any extreme of employment.
b. The task organization of the 9th Infantry Division underwent a major change on 23 June when the 1st Brigade and the 3d Brigade exchanged missions and areas of responsibility. Because of the familiarity of the observers and liaison personnel of the direct support battalions with their respective areas of operations, it was decided that the two artillery battalions affected would remain in place and assist the infantry battalions in the transition period. Therefore, the close of the reporting period finds the 2d Battalion, 4th Artillery, in direct support of the 1st "Recondo" Brigade in Long An Province, while the 1st Battalion, 11th Artillery, is in direct support of the 3d Brigade, scheduled to become part of the second Mobile Riverine Force of the 9th Infantry Division. The 1st Brigade is organized with three infantry battalions and two mechanized infantry battalions, making the attachment of additional fire units to the 2d Battalion, 4th Artillery, necessary in order to provide immediately responsive fire support to the maneuver units.

c. The start of the reporting period found the batteries of the artillery disposed in their post-TET positions, with the 1st Battalion, 11th Artillery in fire support/patrol bases along highway QL-4 and in Dong Tom Base, from where they supported activities of the 1st Brigade in Operation THUONG CONG DINH and Operation DUONG CUA DAN. The 3d Battalion, 34th Artillery remained with the 2d Brigade, furnishing two barge mounted batteries to the Mobile Riverine Force and one land based battery in Operation THUONG CONG DINH and Operation KUZU. The 2d Battalion, 4th Artillery continued to operate from semi-permanent fire support bases in Long An Province in direct support of the 3d Brigade in Operation TOAN THANG. As aggressive action by the Viet Cong/North Vietnamese Army decreased, a corresponding increase in activity by the brigades developed in order to make and maintain contact. This activity resulted in intermingling and cross-attachment of division elements, with the Mobile Riverine Force operating with the 1st Brigade in Operation THUONG CONG DINH and with the 3d Brigade in Operation TOAN THANG. Additional infantry battalions and companies attached to the brigades in the Saigon defense role also caused the attachment of non-divisional artillery batteries and displacement of organic artillery to become commonplace. The Division Artillery displaced a forward element and the AR/TPS-25 radar to the South Saigon area in order to coordinate and control the activities of these artillery units. Because most of the attempts to infiltrate were made at night, the radar became the source of information on which much of the division's operations were based. Sightings made during the night were evaluated and became planning guidance for the next day's operations. These ground operations, based on radar sightings, met with varying degrees of success, due largely to the ability of the VC to disperse before daylight and to reassemble after darkness. Where clearances to fire could be rapidly obtained, many of these sightings were taken under fire by the artillery. Again, significant evaluation of the effectiveness of this action is difficult to obtain because casualties are removed before first light, when a visual recon can be made. However, questioning of prisoners of war has revealed that the effect is devastating and morale shattering when fires are timely. It is clearly indicated that employment of artillery in this fashion, rather than in the
sometimes haphazard "harassing and interdiction" fires, has been instrument-
al in denying hostile forces the freedom of mass and movement during the
hours of darkness that they had been accustomed to. Because of the rela-
tively certain success of this method of employment, an AN/TPS-33 replaced
the AN/TPS-25 south of Saigon city limits and the AN/TPS-25 moved to Can
Cuoc, then to Rach Kien further south in the infiltration lanes to Saigon.
In one night's operation, over 1,290 personnel sightings were obtained, show-
ing the extensive pattern of movement in this area. The value of the per-
sonnel detection radars is unquestioned; all that remains is further refine-
ment of procedures and methods of attack.

d. A recent refinement of this denial of the protection of darkness has
been developed by the 2d Battalion of the 4th Artillery. Discussed in grea-
ter detail in Section II, Lessons Learned, this method is called the "Cobra
Flash" and involves the use of gunships of the Air Cavalry and illumination
provided by the Artillery. When combined with "hard" intelligence of enemy
locations, it provides a positive method of identification coupled with an
immediate and destructive attack of the target. It is particularly effec-
tive against clandestine sampan traffic, which is a principle method of
transportation of supplies for hostile forces. Further tests of this pro-
cedure will be made during the coming quarter, and may develop a new basic
technique for employment of fire support in a primary combat role.

e. With the decrease in hostile ground action has come a wave of low-
level "hit and run" attacks on civilian settlements and lightly protected
RF/PF towns. To counteract this and to assist in development of an effective
and responsive countermortar program, the artillery has expanded its target
acquisition plan in this area also. In the DINH TUONG sector, the AN/MPQ-4A
countermortar radars have been practicing for rapid reaction. A counterfire
net has been established and all ARVN, RF and PF locations have been furnished
a simplified procedure for requesting countermortar radar support. The
radar sites monitor this net continuously and will respond rapidly to a call
for support. This system is exercised by frequent test messages origina-
ting at Division Artillery FDC or in the various district headquarters.
As a further aid, observation towers at My Tho, Dong Tam and Vinh Kim have
been erected and are manned by US artillery personnel. These observation
towers serve as flash bases, with the capability of furnishing an immediate
azimuth to a suspect position. The countermortar radar lays on this position
and fire is also brought on it as soon as required clearances are obtained.
An added benefit of the tower is the increased field of observation as a
deterrent to ground attack. By such means, the frequency and effectiveness
of hostile mortar attacks against US/GVN locations has been substantially
reduced.

f. The employment of the self-propelled twin 40-mm automatic weapons
and of the truck-mounted quad .50 cal machine guns has also been the subject
of considerable study. Battery C, 5th Battalion (AW)(SP), 2d Artillery
has been attached to the 9th Division Artillery since mid-year 1967. For-
merely restricted to convoy escort and security of fire support bases, these versatile weapons are proving their capability in the indirect fire role. On 28 May 1968, tests were conducted of the feasibility of joining the twin 40mm "Dusters" with the Mobile Riverine Force. One M-42 gun carriage was loaded aboard an LCM-8 boat and deployed along the My Tho River south of Dong Tam. Tests were made by firing from the stationary (anchored or beached) position and while on the move. No loss of accuracy was noted from the stationary position. Some initial loss of accuracy was evident while moving, but this could be compensated for by the observer. In June the tests were extended to include several "Artillery raids" by the "Dusters," firing from LCM boats at suspect locations along the My Tho River. Following the successful completion of these tests, the weapons were displaced with 8-inch and 155mm howitzers to Can Tho where they provided security for Mobile Riverine fire support bases deep in the Mekong Delta. By removing these gun carriages from the restrictions forced on them by the mud inundated terrain of the monsoon season, their awesome fire power is more fully utilized. Using long range ammunition, an artillery plotting board for fire direction, and an aiming circle for direction of lay, the Dusters have been successfully employed in indirect fire at ranges up to seven kilometers. The principal difficulty in this type of mission is the adjustment of fire since, without the self-destruction feature of conventional ammunition, it is difficult to see the small burst of the 40mm round in wet vegetation or in mud. Prior planning, aerial reconnaissance and aerial observation are essential for best results. Employment in this manner in the vicinity of the Ben Luc bridge resulted in the destruction of 100 B-40 rounds, 4 VC KIA (BC) and the surrender of 3 VC who were frightened into submission by the volume and accuracy of the 40mm fire.

g. Significant changes in enemy tactics noted during the period included the increased use of 120mm mortars, 107 and 122mm rockets and B-40 rockets. The enemy also has become more proficient in the use of booby-traps, emplacing them in military vehicles as well as his customary use of them to deny the terrain. In one case, he was successful in concealing an explosive device in an artillery ammunition truck. Although it cannot positively be determined from the evidence remaining, it appears likely that the device was placed in an ammunition box or fuze box where it would not arouse suspicion. Detonation of the device resulted in one US KIA and two US WIA. No secondary explosion of the ammunition resulted; some 155mm rounds simply fell through the hole blasted in the bed of the truck. In another case, a grenade was placed in a trash truck returning from the sanitary fill. The grenade was wedged between the trash drums and the pin removed. The drums did not shift enough to release the arming spoon on the return trip and the grenade was not discovered until the drums were being removed in the battery area when it rolled free into the bed of the truck. Due to the quick reactions of a member of the trash detail, who seized the grenade and threw it toward a vacant area where it exploded in mid-air, no casualties resulted. Some evidence of another new technique was discovered at fire support/patrol base (FSPB) Moore when a crater analysis team investigating a crater three
feet in diameter by two feet deep caused by an "incoming round," were unable to find shell fragments, fuze or tail fins. A search of the entire FSPB after daylight revealed three unexploded satchel type charges. Approximately one cubic foot in volume, wrapped in burlap, each had two time fuzes attached which had failed to function. The charges were secured with nylon cord and wire and had not broken up on impact. The infantry made a sweep of the area outside FSPB Moore and discovered two burned areas, four meters in diameter, ten meters apart. No evidence of the device used to propel the charges has been found and the system utilized is a matter of speculation.

h. Unit activities:

(1) In providing combat support for the division and RVN forces, assigned and attached units of the division artillery fired 19,168 missions and expended 290,139 rounds, further broken down as follows:

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<tr>
<th>CALIBER</th>
<th>MISSIONS</th>
<th>ROUNDS</th>
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<td>6,919</td>
<td>191,426</td>
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<tr>
<td>155mm</td>
<td>4,018</td>
<td>46,691</td>
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<td>8-inch</td>
<td>1,459</td>
<td>7,779</td>
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<td><strong>NON-DIVISIONAL ARTILLERY</strong></td>
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<td>105mm</td>
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<tr>
<td>155mm</td>
<td>369</td>
<td>7,223</td>
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<tr>
<td><strong>SUPPORT OF RVN TROOPS</strong></td>
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<td></td>
</tr>
<tr>
<td>105mm</td>
<td>608</td>
<td>18,345</td>
</tr>
<tr>
<td>155mm</td>
<td>270</td>
<td>2,341</td>
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(2) 2d Battalion, 4th Artillery (105mm towed):

(a) During the reporting period the battalion provided direct support to the 3d Brigade (1 May - 22 June) and the 1st Brigade (23 June to date) in Operation TOAN THANG. In this role of the primary supporting artillery unit in the defense of South Saigon, the battalion has made many displacements to include displacement of a forward FDC, received the support of several additional firing batteries in the reinforcing role and has acted as the principal fire control agency for sighting of personnel radar. The opening of the reporting period found all organic batteries in their semi-permanent fire support bases at Hoch Kien, Binh Phuoc and Tan Tru. Heavy mortar attacks at Binh Phuoc, Hoch Kien, Ben Luc, FSPB Smoke and Tan An airdrop signalled the presence of numerous hostile forces in the vicinity. On 7 May Battery A (-) displaced to FSPB Smoke to support brigade operations,
remaining overnight and returning to Rach Kien on 8 May. On that date
Battery B displaced three tubes to Ben Lao. On 9 May the developing
situation caused an additional tube of Battery 3 to link up with these
three and the four tubes, together with Battery C from Tan Tra, displaced
to Saigon to support a heavy contact south of that city. On 13 May Battery
B displaced to Binh Chanh while Battery C occupied FSPB Smoke. On 21 May
Battery B again dislocated to Saigon at the "Y" bridge where it remained
until 7 June. On 25 May Battery C was emplaced into position near
Luong Rca in the Plain of Reeds. During the report period the ARTPS-25
remained occupied positions at Tan An, Thu Thua, Ben Lao, FSPB Smoke, Con
Gino, Saigon and Rach Kien, with elements of the battalion supporting the
attack of targets detected.

(b) During the three month period the battalion fired 106,
645 rounds in support of US and allied operations.

(3) 1st Battalion, 11th Artillery (105mm towed):

(a) During the reporting period the battalion provided
direct support to the 1st Brigade (1 May - 22 July) and the 3d Brigade
(23 July to date) in Operation DUONG CUU DAN (People's Road) and in Opera-
tion TRUNG CUU DIEN. In addition batteries of the battalion fired
in support of Operation KUEZU, Special Forces and CIDG operations and
conducted several artillery raids. These raids were conducted for the
purpose of supporting operations outside the normal range of semi-permanen
FSPB Moore and FSPB Lambert and employed not only the organic batteries
of the battalion but also the 155mm and 8-inch elements of the general
support battalion in the reinforcing role. In support of Operation
DUONG CUU DAN, which was designed to open and secure highway QL-4 from
My Tho to the junction of highway QL-4 and LZ 6a west of Can Lay, the
battalion tested the concept of using the 105mm towed howitzer with bee-
hive ammunition to prevent interdiction of the highway by sapper squads
in the area. In one such test starlight scopes and searchlights in
the infra-red mode were used for target detection. An FO party was placed
in a PF outpost for coordination and a command and control party was sent
to the district CP to insure that no friendly elements were in the kill
zone. The howitzer was emplaced in an indirect fire position at the out-
post for deception, moving out after dark to a direct fire position on
the highway. Difficulty was experienced with visibility due to reflection
from the road surface which limited visual surveillance to 300 to 400
meters. Two rounds were fired on a possible sighting with the fuse set-
ing on muzzle action. Flechettes were found as far away as 800 meters,
indicating a far greater range than the 300 meters indicated in the firing
tables. This technique is discussed in greater detail in Section II,
Lessons Learned. Operation TRUNG CUU DIEN tested the ability of the
battalion and its reinforcing units to the utmost during the first nine
days of June. On 1 June the 1st Brigade established contact with the
261A and 261B VC Battalions and pursued them to the Iron Triangle area
(vicinity XS 250575) where the 514B Main Force Battalion was waiting to
rondovac-e. Encirclement was completed about midnight on the 3rd of June, after heavy artillery support and many air strikes. Once the cordon was closed intensive artillery and air strikes were placed on the target. A body count of 233 was officially reported, with a Chinese flag, a Regimental C-1 Captain, taken on 8 June, reporting in excess of 475 enemy dead in the three battalions. On 8 June contact was regained and rapid insertions by infantry units began on the pattern of encirclement. Before the encirclement could be completed the 266th and 267th Battalions slipped through the cordon, leaving the 267th Battalion to bear the brunt of twelve hours of artillery pounding and air strikes. On 9 June a sweep of the battlefield revealed a 67 VC body count.

(b) In support of operations of the maneuver units, the battalions fired 2,124 missions and expended 55,057 rounds.

(4) 3d Battalion, 24th Artillery (105mm towed. One land based battery equipped with airmobile firing platforms, two riverine batteries barge mounted):

(a) During the reporting period the battalion remained in support of the 2d Brigade, the Army element of the Mobile Riverine Force. In this role, the battalion participated in Operations TRANAS, CONG, and TOAN THANG, ranging from the South China Sea to near the Gulf of Siam. Operations were conducted in KIEN HOA, LONG AN, DIEN THUONG, VUNG LONG, SA DEC, GO CONG, VINH BINH, PHUOC DIEN and KIEN THUONG Provinces, employing riverine, road marches and airlifts to occupy 30 different firing positions. In the flooded rice paddies areas of Long An Province the airmobile artillery platforms again demonstrated their versatility. Battery A was deployed on the platforms in the vicinity of Can Gio on the night of 20 July when the battery position received approximately ten 82mm rounds. Although one platform received moderate damage, its usefulness was not impaired and no personnel were injured. Changes in riverine technique became necessary as the enemy developed his pattern of canal interdiction. Reconnaissance by fire of suspected enemy positions or known ambush sites, where such fires are permitted, the installation of the Tactical CS Dispenser (E8) on river assault craft and the installation of M132 flame turrets on the Armored Troop Carrier (Zippo) form an effective counter-ambush combination. However, the enemy has increased the use of stand-off attacks of the fire support bases, using B-40 rockets and mortars to harass and destroy the vulnerable landing craft and barges. One such attack occurred in the vicinity of WS 787038 on 20 June 1968 when the barge carrying two tubes of Battery B was struck by a B-40 rocket. The round impacted near the breech and started ammo burning. The barge was beached and personnel evacuated until the fire was brought under control. No personnel were injured, one howitzer was heavily damaged, one was unharmed and the barge was severely damaged.

(b) During the reporting period the battalion fired 2,395 missions, expending 68,744 rounds.
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(5) 1st Battalion, 84th Artillery (one battery 155mm SP, two batteries 155mm towed, one battery 8-inch SP):

(a) During the reporting period the battalion remained in general support of the 9th Infantry Division, reinforcing the fires of the direct support battalions throughout the Division TAQI. As of 1 May 1968 Battery A (155mm SP) was located at Camp Martin Cox in a general support role. Battery B (155mm towed) was split between FSB Moore on Highway QL-4 (4 tubes) and French Fort (2 tubes) on the South China Sea. Battery C (155mm towed) was split with two Platoons (4 tubes) at Tan An South and one platoon (2 tubes) at FSB Smoke. Battery D (8-inch SP) was split with one platoon (2 tubes) at Long Thanh and one platoon (2 tubes) at Dong Tam. On 3 May the scattered elements of the battalion began to reassemble as Battery C closed into Tan An South. The platoon of Battery D displaced from Long Thanh to Dong Tam, closing on 7 May. Battery A rejoined the parent headquarters at Dong Tam on 23 May after firing support missions from Camp Martin Cox to Binh Son to Binh Chanh to FSB Smoke to Con Guoc to Ben Luc to Dong Tam. This "move and shoot" employment was typical of the battalion operations throughout the reporting period. The platoon of Battery B from French Fort also closed Dong Tam on 23 May, reuniting their battery for the first time since 10 February 1968. After closing Dong Tam, Battery A began training in the employment of the M109's as a reinforcement medium artillery battery for the Mobile Riverine Force, practicing loading and unloading from the Landing Craft, LCM-8. The battery also practiced delivery of fires while on the move and at anchor. Battery B began the first of nine airlifts that took them to Ben Tre, Kien Hoa Province; Giao Duc, Binh Tuong Province; My Phuoc, Dinh Tuong Province; and Can Cau, Long Vinh Binh Province. Battery C also took to the air, making trips to My Phuoc, Binh Tuong Province and Gia Long, Kien Hoa Province. Battery D and Battery A became amphibious as they traveled from Dong Tam to Con Dao by landing craft to reinforce the fires of the 3d Battalion, 34th Artillery. In spite of mud, maintenance problems and persistent mortar attacks in all firing positions, the battalion fulfilled the mission of delivering medium and heavy fires anytime, anywhere for anyone.

(b) During the reporting period the battalion fired 5,444 missions and expended a total of 53,938 rounds; breakdown by caliber is as follows:

<table>
<thead>
<tr>
<th>CALIBER</th>
<th>MISSIONS</th>
<th>ROUNDS</th>
</tr>
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<tbody>
<tr>
<td>Organic Batteries</td>
<td>155mm</td>
<td>4,018</td>
</tr>
<tr>
<td></td>
<td>8&quot;</td>
<td>1426</td>
</tr>
<tr>
<td>Attached (battery P, 1st Bn, 27th Arty, 1-25 May)</td>
<td>155mm</td>
<td>369</td>
</tr>
</tbody>
</table>

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SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 (RCS GSFCW-65) (R-1) (U)

2. (C) Organization:

   a. Other than the task reorganization discussed in paragraph 1a (2) which involved the artillery to the extent that two direct support battalions were supporting different brigades after the transfer was completed, no significant changes in organization occurred during the reporting period.

   b. Headquarters of the Artillery, as of the close of the reporting period, are as follows:

   **HEADQUARTERS** | **LOCATION** | **MISSION**
   --- | --- | ---
   Division Artillery | XS 4145 | DS, 1st Bde
   2d Bn, 4th Arty | XS 5964 | DS, 1st Bde
   1st Bn, 11th Arty | XS 4143 | DS, 3d Bde
   3d Bn, 34th Arty | XS 4143 | DS, 3d Bde
   1st Bn, 84th Arty | XS 4143 | GS, 9th Div

   c. Attached as Inclosure 1 is a roster of Commanders of the Artillery.

3. (U) Personnel and Administration: None.

4. (U) Intelligence: None.

5. (C) Operations:

   a. Because of the frequent displacement of artillery units required to provide fire support to the maneuver elements, artillery coverage of the TMD fluctuates from day to day; at the close of the period it was approximately 35%.

   b. For the same reason, coverage available to HF/FF outposts varies depending on the emplacement of the artillery at the moment. When the artillery occupies a fire support base within close support range of an outpost, continuous coverage and support is available, dependent only on the tactical situation. A quick fire channel is established upon occupation of the position, and is used to request fire for outposts under attack. All such requests are immediately honored, provided proper clearances can be obtained.

   c. The division artillery has continued to expand its target acquisition program, to include the use of SLAR (Side Looking Airborne Radar), infra-red detection and photography, personnel sniffer missions and increased use of personnel radars. The AN/TPS-35 of the infantry brigade, the FPS-5 and FPS-4 of the infantry battalion and the AN/TPS-29 of the division artillery are all effectively tied into a surveillance net which can detect and develop a pattern of activity on which the plan of fire and maneuver is based.
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AVD-40

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31 July 1968 (RCS GSPOR-62) (R-1) (U)

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Jul, 1968

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A "Big Brother" program to foster mutual respect and camaraderie
between ARVN Division Artillery commanders and their advisors and US
Artillery battalion commanders has been inaugurated. An Artillery Seminar
has been held to acquaint all concerned with the objectives of the program
and to introduce the participants to their counterparts. A follow-up
program of seminars, exchange programs and implementation of improved
training programs is scheduled for the coming quarter and will be reported
in detail in the next Operational Report.

6. (C) Training: Artillery training continues to concentrate on the
problems of training replacement personnel in the techniques of fire in
the Vietnam environment. Emphasis is on training of FADAC operators,
computers and short operators, with safety and use of the double-check
system stressed in all phases of training. The current shortage of how-
tizer section chiefs has forced the employment of junior noncommissioned
officers in these positions with a consequent lack of experience and
professional expertise. This, in turn, requires a greater degree of
supervision on the part of the XO and Chief of Firing Battery, degrading
the rapid response capability of the firing battery. No short cut
method of achieving experience and reliability is acceptable; only time
and training can solve this problem. Frequent practice drills, with all
operations closely monitored by available senior personnel, are bringing
about a gradual upgrading.

7. (U) Logistics: None.

Section 2: Lazonga Lamed: Commander's Observations, Evaluations and
Recommendations.

a. (U) Personnel: None.

b. (C) Operations:

(1) (C) Coordinated Illumination and Gunship Strikes.

EVALUATION: Coordinated use of artillery and Army Aviation gunships can
interdict enemy movement at night.

EVALUATION: The AN/TPS-25 radar is capable of detecting enemy movement
at night, particularly the movement of supply sampan convoys. However,
since this is a moving target on which clearance to fire is extremely
difficult to obtain, artillery fires are often ineffective. To counter
this problem, the 2d Battalion, 4th Artillery, has developed the "Cobra
Flash" technique. A howitzer battery fires illumination with special

corrections applied to each tube so that rounds burst about 500 meters

apart along the canal. Thus, the six-gun battery can provide illumination

of approximately three kilometers on the canal where the suspected sampan

traffic has been detected. Rounds are timed and fired to burst simultane-

ously. Cobra gunships orbit near the battery position and follow the direc-

tion of fire after all howitzers have fired, timing their flight to arrive

after the rounds have burst and thus avoiding any danger from
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falling cannisters. By flying under the illumination the aircraft are able to observe and engage any traffic moving on the canal, either destroying it or forcing it to beach where artillery may be called in.

As a variant, used either in conjunction with the gunships or as a substitute when they are not available, an aerial observer goes in under the illumination to adjust artillery on a pre-cleared grid. If the initial rounds are close the sampans will usually beach where they can be effectively destroyed by artillery.

RECOMMENDATION: That artillery battalions and air cavalry units work in coordination to execute and perfect this technique.

(2) (U) Short Life of Wooden Sideboards for Ammunition Trucks.

OBSERVATION: Wooden sideboards and end boards as issued with the 2½-ton cargo truck are easily broken when the vehicle is used to load and carry ammunition, particularly in pallet lots or A-22 bags.

EVALUATION: Because of the non-availability of repair items for splintered sideboards, units of the division artillery fabricated sideboards by using steel engineer stakes welded to solid steel planking of the type used for airfield runways. This provides a substantial sideboard which will withstand the shock of ammo loaded by forklift or loaded and unloaded in the A-22 bags by Chinook. As an added benefit, when the vehicle is used to transport troops, the SSP provides protection from Claymore type mines and small arms fire.

RECOMMENDATION: That ammunition trucks be equipped with SSP sideboards and that wooden racks be stored for use if the vehicle is converted to troop use solely.

(3) (U) Selection of Medium and Heavy Artillery Firing Positions.

OBSERVATION: In areas where terrain is largely inundated, firing positions for medium and heavy artillery must be selected with extreme care.

EVALUATION: With the advent of the monsoon season in the Delta Area, suitable firing positions for medium and heavy artillery have become increasingly scarce. On several occasions, positions have been selected by personnel from the reinforced direct support battalion who are not familiar with position area requirements for the heavier weapons. Many of these positions were untenable for the heavier artillery, particularly from a soil flotation standpoint. Attempts to occupy these positions have resulted in unnecessary delays in fire support and mired vehicles. Additionally, the heavy recovery aspects must be considered in the case of self-propelled artillery, since the M88 recovery vehicle is too heavy to cross most bridges in the area.
RECOMMENDATION: That position areas for medium and heavy artillery be selected only by the general support battalion commander, S3 or battery commander.

4 (C) Employment of Firing Batteries by Platoon.

OBSERVATION: Employment of artillery firing batteries in platoon elements reduced the overall effectiveness of the artillery because of insufficient personnel and equipment resources.

EVALUATION: When a firing battery is employed in a split configuration for extended periods of time, the overall capability of the battery to deliver accurate and timely fire is degraded. Manning levels do not provide sufficient officer personnel for 24-hour operation of an XO post at two or more locations, nor are sufficient senior enlisted personnel provided to furnish a Chief of Firing Battery at each positions. Further, insufficient radios are authorized to support an efficient operation in the split configuration for extended periods of time. Batteries augmented with one officer and additional radio assets can operate effectively for periods of up to three or four days. After that period, a corresponding loss in efficiency and lowered levels of maintenance, morale and appearance are inevitable.

RECOMMENDATIONS: That plans to employ artillery batteries in a split configuration be carefully evaluated in view of the undesirable effects on efficiency, morale and maintenance.

5 (C) Use of Towed Artillery to Support Mechanized Infantry Operations.

OBSERVATION: During recent operations in support of a mechanized infantry battalion in and around Saigon, 2½-ton trucks proved ineffective as prime movers and ammunition vehicles.

EVALUATION: In order to provide close and continuous support to the maneuver unit, it is axiomatic that the artillery must be able to accompany the infantry. In the soft and muddy rice paddy terrain surrounding Saigon, it was often necessary to borrow M113 and M548 tracked vehicles in order to emplace the towed M101 105mm howitzers. These tracked vehicles negotiated the marshy terrain with no difficulty. One M548 per howitzer with ammunition and section equipment would serve as the prime mover, one M577 command vehicle would serve as the CP/FDC and would enable the direct support artillery battery to keep up with the infantry scheme of fire and maneuver.

RECOMMENDATION: That the towed artillery battery normally employed to support a mechanized infantry battalion be equipped with six M548 prime movers and one M577 Command Vehicle.
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(6) (C) Combining Direct Fire with Beehive Ammunition and the Infra-red Searchlights.

OBSERVATION: Under suitable conditions of terrain and employment, the 105mm howitzer in the direct fire role, and firing beehive ammunition against targets illuminated by the vehicular mounted searchlight in the infra-red mode, can prevent enemy interdiction or infiltration.

EVALUATION: In support of Operation PHONG CAU DAN (Peoples' Road), the 1st Battalion, 11th Arty experimented with the use of beehive ammunition in the role described. Two howitzers were used in each of the two tests conducted, emplaced to fire in opposite directions along the highway. The howitzers and searchlights were secured by two M42A1 twin 40mm gun carriages (Dusters) and a platoon of RF/PF infantry. The mechanics of occupation are described in paragraph 2(b)(1) of Section 1. Such occupation is not the optimum condition for tests because of the minor damage to the road surface caused by the trail spades, the reflectivity of the road surface which limits the range of the infra-red searchlight and the exposed nature of the position. A better situation might be in guarding a bridge approach or an access road with dirt surface which would not reflect the infra-red rays so severely.

RECOMMENDATIONS: That the concept of employment of beehive with infra-red searchlights be tested by the appropriate development agency and the results published for the use of artillerymen world wide.

(7) (C) Aircraft Warning Procedures in Joint Operations.

OBSERVATION: Although US Artillery has clear-cut procedures for warning aircraft of friendly artillery fires, this warning is not always provided by ARVN arty firing in the vicinity. Further, in many joint operations, arty of both forces is quite often occupied with fires into the same general area in support of maneuver elements of the respective force.

EVALUATION: A mutual exchange of information concerning artillery fires in support of ground operations, location of maneuver units and broadcast of air warning data is essential to safety and an orderly conduct of operations.

RECOMMENDATION: That, whenever possible, a liaison officer be provided to the ARVN artillery in a joint operation to furnish both US and ARVN forces with a knowledge of troop operations and dispositions, air warning and an exchange of information of lucrative targets for possible coordinated attack.

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SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 (RCS CSFOR-65)(R1) (U)

Section 3: DA Survey Information: None.

FOR THE COMMANDER

2 Inc 1

1- Reserves-of-Artillery-Commanders
2 ANNEX C (VC Flying Mines) to 9th Inf Div INTSUM 224-68

Withdrawn, HQ, DA

KENNETH R. DOLSON
CPT, Artillery
Asst Adjutant
AVDE-MH (31 July 68) 1st Ind

SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 RCS CSFOR-65 (R-1) (U)

Headquarters, 9th Infantry Division, APO San Francisco 96370 27 August 68

TO: Commanding General, II Field Force, Vietnam, ATTN: AVIBC-RE-C, APO 96222

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

1. This headquarters has reviewed and concurs with the Operational Report Lessons Learned from Headquarters 9th Infantry Division Artillery for the period ending 31 July 1968.

2. Added as enclosure 2 is Annex C to 5th Inf Div INJUN 224-68 which suggests an answer to the propelling problem mentioned in section 1, para 1(g).

FOR THE COLLECTOR:

JOHN L. TOWER
LG, GS
Acting Chief of Staff
AVJCG-H (31 Jul 68) 2nd Ind

SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 (RCS CSFOR-65) (R1) (U)

DA, HQ II FFORCEN, APO San Francisco 96266 9 SEP 1968

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

Commander-In-Chief, US Army Pacific, ATTN: GROF-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 headquarters has reviewed and concurs with the Operational Report—Lessons Learned of the 9th Infantry Division Artillery for the period ending 31 July 1968, as indorsed.

FOR THE COMMANDER:

O. B. Fory

Lt. AG
Com AG

16
AVHGC-DST (31 Jul 68) 3d Ind (U) KAJ Klingman/hga/LBN 4433

SUBJECT: Operational Report of 9th Infantry Division Artillery for Period Ending 31 July 1968 (RCS CSFOR-65) (R1) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375 22 SEP 1968

TO: Commander in Chief, United States Army, Pacific, ATTN: CPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 July 1968 from Headquarters, 9th Infantry Division Artillery.

2. Reference item concerning combining direct fire with beehive ammunition and the infrared searchlight, page 13, paragraph 2b(6): Concur in both observation and evaluation. Certainly the pairing of searchlight and howitzer is an effective defensive expedient. Nonconcur, however, with the recommendation that the employment concept "be tested by the appropriate development agency". Combat is the ultimate test of a weapons combination and it appears that the expedient was successfully utilized by the 1/11 Artillery.

FOR THE COMMANDER:

W. C. ARNZ
ILT, AGC
Assistant Adjutant General

Cy furn:
HQ II FW
HQ 9th Inf Div Arty
GPOP-DT (31 Jul 68) 4th Ind (U)
SUBJECT: Operational Report of HQ, 9th Inf Div Arty for Period Ending
31 July 1968, RCS CSPOR-65 (RL)

HQ, US Army, Pacific, APO San Francisco 96558 30 SEP 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. L. SHORTT
CPT, AGC
AGC AG
1. (C) At 040125H August, an unknown number of VC fired 82mm mortar, 57mm RR, and 75mm RR rounds into Cao Lanh vic WS 7056. Initial analysis of the attack revealed that an unusual type of round landed at the B-43 Special Forces air boat compound located vic WS 695556. It caused extensive damage by tremendous concussion, yet there appeared to be no shrapnel. A crater caused by this round measured six feet across and four feet deep. A package wrapped in burlap and bound by wire and rope was found in the debris, and it appeared to have been catapulted into the area.

2. (C) Subsequent analysis of the attack and a search of the area revealed that the weapon used at Cao Lanh, and probably at My An, was what has been described as a VC "flying mine." Components to this system include a wooden template for aiming, a propelling charge composed of 12 lbs of TNT, ignition wire, ignition box, a 2x4-inch wooden piece, a wood board and the mine composed of 30 lbs of TNT. These components are set as follows. The mine is placed in a hole about one foot deep and with front and rear sides slanting at about 45 degrees to the surface of the ground. The propellant is placed in another hole located to the rear and beneath the mine hole. The 2x4-inch piece is driven through the earth between the propellant charge and the wooden board on which the mine rests. Wires connect the propellant to the ignition box, and when the propellant is detonated, it propels the mine by means of the wood piece and wooden board up and forward at a 45-degree angle toward the target area. Estimated range of this weapon is 200-300 meters, and the expected standoff distance from the target area would be 250 meters. The mine is believed to detonate on impact, but technical details on its detonation are not currently available. (See attached sketch).

3. (C) The use of "flying mines" reportedly dates back 16 years to the French/Viet Minh conflict. However, while it is not a new system, there currently appears to be a re-emphasis of its employment by VC/NVA forces in South Vietnam. A PW captured in Quang Ngai Province on 24 June 1968 stated during interrogation that he and 240 other men were given a 20-day familiarization course on the employment of "flying mines" in early October 1967. Source was told by the instructors that his class was the first to receive this type of training and the course terminated with the actual firing of the mine during a field exercise. (Source: CMIC report US 2107-68). In late 1967, a similar system was used in Tay Ninh Province in III CTZ to fire a CS package into a friendly FSPB.

4. (C) The use of "flying mines" in the Delta represents an increased VC indirect fire capability and is especially effective against fixed installations with no standoff defenses.

9th Inf Div G2 Opns comment:

On 16 July, vic XS 250500, C-3-39 Inf at FSPB Mohawk came under a mortar attack. During the mortaring, 10 satchel charges were catapulted into the FSPB. The satchel charges were 1'x1'x1' square and were covered with burlap with wire mesh wrapped around them. Each satchel charge had two fuses. The firing sites for these "flying mines" were not located.
DIAGRAM OF FIRING POSITION AND EXPLOSIVE PROPELLANT USED AGAINST CAO LANH ON THE NIGHT OF 04 AUGUST 1968.

IMPACT FUZE UNK TYPE

FIRE DIRECTION

ELECTRICAL FIRING WIRE

WOOD BOARD

2"x4" WOOD PIECE

30 lbs TNT

GROUND LEVEL

12 lbs Ti:. PROPELLANT CHARGE

LARGE CRATER LEFT FROM PROPELLANT CHARGE EXPLOSION
Operational Report - Lessons Learned, HQ, 9th Infantry Division Artillery (U)

Experiences of unit engaged in counterinsurgency operations, 1 May - 31 Jul 68

CO, 9th Infantry Division Artillery

31 July 1968

683204

N/A

N/A

9th Infantry Division Artillery

OACSFOR, DA, Washington, D.C. 20310
The following items are recommended for inclusion in the Lessons Learned Index:

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** FOR OT RD # _____________________________________________
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ITEM 5

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FOR OT RD # _____________________________________________
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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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