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SUBJECT: Trip Report - 1st Infantry Division, 13 January 1968

1. Undesignated visited 1st Infantry Division Artillery and 1st Battalion 16th Infantry on 13 January 1968 to secure information on artillery and mortar organization and employment. Principal persons contacted were:

   MAJ Lackey      Div Arty, S3
   MAJ Sullivan    1/16 Inf, S3

   This is a report of
   the following comments received concerning artillery command and control:

   a. Artillery battalion headquarters do not normally conduct technical fire direction, though they may maintain a check chart. Technical fire direction is performed by batteries, permitting DS battalions to exercise tactical control of up to six batteries without difficulty, and more for short periods when necessary. Limiting factors on the number of batteries controlled are the capability of the staff and overloading of communications. If more than five or six batteries are employed, a reinforcing battalion headquarters is usually employed also. Presence of a fifth battalion in 1st Division Artillery (an additional 105 towed battalion replacing the Honest John) has provided sufficient control headquarters in Division Artillery.

   b. Artillery batteries are disposed to give coverage over the division area. When a brigade is conducting operations its DS battalion is given control of these batteries in position to provide support, although they may be assigned to other battalions or positioned in other brigade areas. Normally, an infantry battalion should have a light battery in direct support and one more battery reinforcing. Batteries may be attached to the nearest artillery battalion for logistical support, although their tactical mission may be under a different battalion.

   c. Wire or VHF radio relay communication is usually available.
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only where a brigade headquarters is employed. Artillery relies almost entirely on FM radio communication. As more units enter the area, crowding of the FM spectrum is beginning to be a problem. Provision of four-channel VHF relays at battalion level may be a solution to this.

d. because batteries are normally employed in mutually supporting positions the weapon capability, rather than communication range, determines control distance. In some cases, however, individual batteries have been controlled at a distance of 15-20 miles from battalion. A battalion tactical CP element may be put with the battery in such cases.

e. Survey personnel are being used to augment FDC's to provide 24 hour capability. Very little use is made of survey. Only base camp positions and some semi-permanent fire support bases are surveyed. Most fire support bases are located by map inspection. It was felt that little use would be made of survey even if additional fire direction personnel were provided because of the amount of infantry security required for survey operations, the limit capability for massing fire because of dispersion of artillery, and the lack of accurate target location. It was also felt that provision of additional air OP's would contribute more to effectiveness of artillery than restoration of survey capability. Division Artillery currently gets 1/2 O-l's daily for AOP.

f. FADAC is not yet in use in 1st Division.

3. All infantry battalion 4.2 inch mortars are employed by Division Artillery. The mechanized infantry battalion has and uses its organic mortar platoon. The cavalry squadron uses its mortar carriers as additional Armored Cavalry Assault Vehicles and does not use the 4.2 inch mortar. The following comments were received on Division Artillery employment of 4.2 inch mortars:

a. 16 tubes are used for base camp defense and 16 for mobile employment. Currently, two platoon of 4 tubes are located in one base camp and one platoon of 4 tubes in each of two other base camps. The base camp FSCC, usually provided by a DS battalion headquarters, controls the mortar platoons. Technical fire direction is performed by platoon FDC's. The 4.2 mortar is used mainly for firing prearranged counter-mortar plans and for illumination. Communication is by wire, backed up by radio. No mortar FO's are used; rather, artillery FO's with infantry base camp defense units adjust mortar fire as well as artillery.
b. A provisional battery, the Light Horse Assault Artillery (LHAA) Battery, provides 4.2 inch mortar support for field operations. It is commanded by a major furnished by Division Artillery and has three Platoons, two with 3 tubes and one with 4 tubes. Platoons are normally employed individually in fire support bases under control of DS artillery battalions. They perform technical fire direction in platoon FDC’s. As in the case of base camp mortars, forward observation is provided by artillery FO’s.

c. LHAA Battery mortars are used for countermortar fire, illumination, and fire on targets of opportunity in close support of night defense positions. The 4.2 inch mortar has a minimum range of 900 meters. Division Artillery considers the minimum indirect fire range of the 105 howitzer to be 1500-2000 meters, giving the 4.2 a better indirect fire capability in defense of the fire support base in which it is located. The howitzer, however, has a direct fire capability down to point-blank range. When a six-tube mortar platoon is placed in a fire support base the stockage objective is 1,500 HE and 200 illuminating rounds. For a four-tube platoon the objective is 1,200 HE and 200 illuminating. Ammunition expenditure averages 50 rounds per tube-day.

d. LHAA Battery platoons have 3/4 ton trucks for ground movement and are also capable of being lifted by UH-1 or CH-47. A four tube platoon with FDC, one 3/4 ton and initial ammunition can be lifted in three CH-47’s. A platoon normally takes a 1/4 or 3/4 ton on air-mobile operations, but can operate without it if necessary. Although UH-1 movement is possible, CH-47 is preferred because of the weight of ammunition. A CH-47 can move 200 rounds of 4.2 ammunition in A22 containers.

e. One problem in employment of the 4.2 inch mortar in close support of troops is excessive dispersion. This is particularly true during wet weather, due to absorption of moisture by exposed propellant increments. Recently, there have been several tubes deadlined by gas leaks at the base cap.

4. At least one battalion, 1st Battalion, 2d Infantry, has centralized its 81mm mortars under battalion control; non-availability of aircraft due to VIP visitors to the division precluded visiting this unit. Apparently more typical of 81mm mortar employment in the division is 1st Battalion, 10th Infantry. Comments based on discussion with this unit are:
a. Each rifle company has two 81mm mortars in the weapons platoon for employment in field operations. The remaining is to be used by base camp defense elements. The 106mm recoilless rifles of the platoon are also left in base camp. Platoon strength in the field is 10-15 men.

b. Battalion operations are normally begun by air assault and the establishment of a night defensive position (NDP) from which company search and destroy operations are conducted. Companies return to the NDP nightly, leaving only ambushes outside the NDP.

c. In the air assault phase, one mortar and 18 rounds of ammunition accompany each company. The other tube and sufficient ammunition to reach a level of 100 HE and 15 illuminating rounds per tube are inserted in the resupply mission about one hour later. Mortars are employed within the NDP and do not accompany the troops operating from the NDP.

d. Mortar fire is controlled by the artillery FO with the company. The platoon operates on FDC. All fires, including 81mm, are coordinated by the artillery liaison officer with the battalion.

e. Mortars fire close support missions for the company, when in range, and defensive missions in support of the NDP. About 30-55 rounds per day are fired by the mortars in the battalion.

f. The only problem in use of 81mm mortars mentioned was obtaining clearance to fire.

THEODORE S. RIGGS, Jr
LTC GS (Armor)
Acting Sr Liaison Officer
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