2. Lessons Learned: Commander's Observations, Evaluations and Recommendations.

a. Personnel

(1) Casualty reports.

(a) Observation: Timely and accurate casualty reports from forward observer parties are difficult to obtain.

(b) Evaluation: Frequent, prolonged separation of forward observer parties from their parent units and limited or non-existant communications with the parent unit make these reports difficult to obtain.

(c) Recommendation: Require the supported unit to identify and report artillery casualties through artillery channels.

(2) Pay for artillery liaison and forward observer personnel.

(a) Observation: Due to the nature of artillery liaison and forward observer personnel duties, they are usually far from their parent unit on pay day.

(b) Evaluation: This creates a need for additional transportation for pay officers to pay these personnel. It also causes poor pay service to these personnel. The supported units are interested in the welfare of these personnel and are willing to help relieve the problem.

(c) Recommendation: It has proven satisfactory to place liaison and forward observer personnel on the pay roll of the supported unit. This requires additional checking to keep up with personnel changes but results in better pay service and reduced transportation requirements.

b. Operations

(1) Radio traffic on fire direction (FD) nets

(a) Observation: Personnel other than liaison officer (LNO/forward observer (FO), firing battery fire direction center (FDC) and controlling battalion FDC are using FD nets. This is most prevalent when a unit comes in contact.

(b) Evaluation: At times it becomes impossible for LNOs/FOs and FDCs to communicate with each other because of other traffic on their FD net.

(c) Recommendation: Personnel other than the LNO/FOs who have traffic for the FDCs should use their command or other freqency. Personnel or units having only one radio can switch to another frequency. This leaves the FD net free of all traffic except fire direction for which it was set aside.

(2) Protection of medium and heavy artillery

(a) Observation: Medium and heavy artillery with their larger silhouettes are very vulnerable to enemy direct fire weapons.

(b) Evaluation: Protection can be provided by constructing shields of earth using a bulldozer and chain link fence. The chain link fence detonates enemy projectiles before they strike the hull of the weapon.

(c) Recommendation: Erect these shields on the side(s) of the weapon nearest the perimeter or most likely avenue of approach.

(3) Secondary explosions in M109 Howitzers

(a) Observation: Secondary explosions of ammunition stored in the interior ready racks of M109 Howitzers are more hazardous to howitzer sections than the effects of enemy fires alone.

(b) Evaluation: Direct fire shields (see (2) above) should be erected when possible. The M109 can take a direct hit and remain operational if there are no secondary explosions. When the possibility of a direct fire attack exists, the battery commander may decide to follow the recommendation below.

(c) Recommendation: When the situation warrants, ammunition in the interior ready racks may be removed to preclude secondary explosions should the howitzer receive a direct hit.

(4) Location of medium and heavy artillery in fire support bases.

(a) Observation: Occasionally medium and heavy artillery are placed on the perimeter of a FSPB.

(b) Evaluation: Medium and heavy artillery are improperly used when placed in a position on a FSPB perimeter, since these weapons are intended for long range heavy fires. The high explosive ammunition employed is not as effective as the Beehive ammunition used by the light artillery in perimeter defense. The large silhouette causes medium and heavy artillery to be an almost certain loss on the perimeter.

(c) Recommendation: Medium and heavy artillery are best employed in a central location in the fire support base with the crew compartment open to the interior of the position for east of mevement during an attack.

(5) Construction of perimeter defense bunkers

(a) Observation: Some perimeter defense bunkers do not have sufficient gun ports to the flanks.

(b) Evaluation: The lack of flank gun ports does not permit close-in interlocking fires. It also prevents fire along the perimeter line in the event the perimeter is broken.

(c) Recommendation: Perimeter bunkers should be constructed with gun ports on the flanks.

c. Training. Battery training programs.

(a) Observation: The continually changing tactical situation and the very frequent detachment of batteries from their parent unit make a battalion training schedule impractical.

(b) Evaluation: The battery commander can best adjust training requirements, available time and facilities to the situation. The battery commander is the individual responsible for the performance of his unit and for making or recommending promotions; therefore, he is most conerned with the training achievement of his unit. A very flexible training program is necessary in a fast changing tactical situation.

(c) Recommendation: Establish battalion training programs which give the battery commanders wide latitude, authority, and responsibility for planning, conducting and supervising training in their batteries.

d. Intelligence. None

e. Logistics.

(1) Class V transportation.

(a) Observation: It is often impossible for a battery to move a minimal basic load of 1000 HE. 90 BH, 60 WP, 60 HC, 120 Ill, small arms ammo, and fuzes without seriously overloading its organic vehicles.

(b) Evaluation: In order to provide the fire support required, the battery must be adequately stocked with Class V. The battery also has to be ready to move at a moment's notice. With the bunker material and PSP required to build up a position area (as must be done at most fire support bases each time they are occupied), it is impossible for the battery to move its basic load. In some cases, overloading of 2½-ton trucks has resulted in dead-lining practically every 2½-ton truck in a battery. The replacement of organic 2½-ton trucks with 5-ton trucks would allow sufficient class V to be moved to support the maneuver elements and prevent overloading of vehicles.

(c) Recommendation: Organic 2½-ton trucks should be replaced by 5-ton trucks.

(2) Insect control in forward areas.

(a) Observation: It was noted that aerosal type insecticides in open areas and ventilated bunkers are at best moderately effective for a very short period.

(b) Evaluation: A #10 can filled 3/4 full with a mixture of diesal fuel and liquid insecticide, when placed upwind of the battery area and ignited, results in smoke being carried across the battery area ridding it of mosquitoes, flies, etc. The smoke is not hazardous to the health of the troops and it does not interfere with their duties.