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## CHAPTER 9

### COMBAT SERVICE SUPPORT

**This chapter discusses the aspects of CSS that affect battalion mortars and company mortars in infantry and mechanized infantry mortar platoons. CSS includes the areas of administration and logistics. Essentially, CSS keeps mortar men mobile, fed, armed, clothed, maintained, and supplied for combat operations. Supplies usually required by the mortar platoon are ammunition, rations, petroleum, oil, lubricants, and repair parts. Such supplies are distributed to mortar platoons through field and combat trains.**

#### Section I. TRAINS

*Trains are groupings of CSS vehicles, equipment, and personnel at battalion level and below. Battalion trains are normally echeloned to provide responsive support. The result of this echelonment divides the battalion's CSS assets into field trains and combat trains.*

##### 9-1. FIELD TRAINS

The field trains are where most of the battalion's bulk-loaded ammunition, fuel, food, and other supplies are kept until delivered forward by LOGPAC (Figure 9-1).

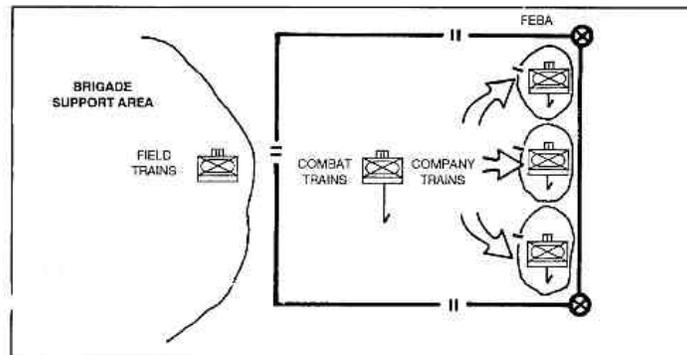


Figure 9-1. Field trains, combat trains, and company trains.

a. The field trains of a heavy task force consist of the battalion mess, maintenance platoon (minus), most of the fuel and ammunition vehicles from the support platoon, the

HHC CP, and the rifle company supply sections. The field trains of a light battalion consist of part of the support platoon, the HHC CP, and the rifle company supply sections.

b. The field trains are normally located about 20 to 30 km behind the FLOT, in the brigade support area (FM 7-20 or FM 71-2).

### **9-2. COMBAT TRAINS**

Combat trains consist of the battalion S1, S4, the battalion aid station, some maintenance personnel and equipment, and some support platoon trucks loaded with fuel and ammunition (Figure 9-1).

### **9-3. COMPANY TRAINS**

Company trains normally consist of the following:

- Company maintenance team/section (mechanized or armor).
- Company executive officer or first sergeant.
- Recovery vehicle (mechanized or armor).
- Company armorer.
- Company aidman with ambulance.

a. The first sergeant directly supervises the company trains. *The supply sergeant is the first sergeant's principal assistant and supervises the company's assets in the battalion field trains.*

b. The company trains are normally located between 1/2 and 1 km or one prominent terrain feature behind the company/team in a covered and concealed position (Figure 9-1). During MOUT, they may be as close as one block behind the forward positions.

c. The HHC trains must support the battalion mortars and the other HHC elements. They can be located anywhere within the battalion sector but normally not more than 5 km from the FLOT.

### **9-4. REQUESTS FOR SUPPORT AND ROUTINE SUPPLIES**

Requesting support and routine supplies is a simple matter for the mortar platoon. The mortar platoon sergeant requests to the HHC company CP. The company XO or the first sergeant transmits the mortar platoon's requirements through the supply sergeant to the battalion S4 who directs the support platoon leader to ship supplies.

a. Maintenance and recovery support are requested the same way as supplies. The XO or first sergeant directs the company's maintenance assets to the platoon.

b. Company mortars send all requests for resupply and support through the company XO and first sergeant.

**NOTE:** Under the J-series TOE, the mechanized infantry battalion has only one echelon of mortars. The mortar platoon is under the headquarters company, which has no organic or attached maintenance section.

c. During the battle, the support will be limited to medical and maintenance activities. Emergency resupply is performed by the first sergeant. During the battle (defensive or offensive), the first sergeant continuously monitors the company command net and sends medical and maintenance support forward to the mortar platoon. He informs the combat trains on a continuing basis by radio or messenger.

d. The supply sergeant is responsible for obtaining and delivering most supplies to the company. He delivers small items and depends on the assets of the support platoon to deliver bulky or high-expenditure items. Priorities for delivery are established by the company commander, but the demands of combat will dictate that Class III, V, and IX supplies are the most critical.

## **Section II. RESUPPLY**

*This section covers LOGPACs, in and out of position supply techniques, supply priorities, and miscellaneous items.*

### **9-5. RESUPPLY OPERATIONS**

Resupply operations can be described as routine, emergency, and prestock. Each method is developed in the company SOP and rehearsed in training. The actual method selected will depend on the METT-T factors.

a. Routine resupply operations are the regular resupply of Classes I, III, V, and IX items; mail; and any other items requested. Routine resupply will take place at least daily. Periods of limited visibility are the best times to resupply. Class III should be resupplied at every opportunity. The LOGPAC technique is a simple, efficient way to accomplish routine resupply operations. The company team and battalion SOPs will specify the exact composition and march order of the LOGPAC. A LOGPAC is a centrally organized resupply convoy originating at task force field trains. The LOGPACs should contain all anticipated supplies required to sustain the mortar platoon for a specified time (usually 24 hours or until the next scheduled LOGPAC operation).

b. Company supply sergeants assemble the LOGPAC under the supervision of the support platoon leader or HHC commander in the battalion field trains. Replacements and soldiers released from the hospital are brought to the company on LOGPAC vehicles. Once the company LOGPAC is prepared for movement, the supply sergeant moves it as part of the task force resupply convoy led by the support platoon leader. In emergencies,

a LOGPAC can be dispatched individually to meet the first sergeant at a rendezvous point.

c. The task force LOGPAC convoy is met at the task force LRP by representatives from the combat trains and UMCP, company first sergeants, and the platoon sergeant from the mortar platoon. The first sergeant--

- Turns in routine reports to combat trains representatives.
- Turns in parts requisitions and the deadline status to the UMCP representative.
- Picks up routine correspondence.
- Awaits the LOGPAC.

d. The platoon sergeant or his representative meets the LOGPAC and guides the LOGPAC to the platoon resupply point.

#### **9-6. RESUPPLY TECHNIQUES**

The first sergeant establishes the mortar platoon's resupply point using the service-station (out-of-position) or tailgate (in-position) technique. The commander, or XO if delegated, decides on the technique to be employed and informs the first sergeant. The first sergeant briefs each LOGPAC vehicle driver on the resupply technique to be used. He also notifies the mortar platoon that it is ready. The commander directs the platoon to conduct resupply based on the tactical situation. Either of these techniques can be used for resupply, but the tailgate (in-position) technique is the most common.

#### **9-7. IN-POSITION RESUPPLY**

In-position resupply is a technique of bringing supplies directly to the mortar position. The resupply vehicle drives to each vehicle to refuel, or drops ammunition within the platoon's positions (Figure 9-2).

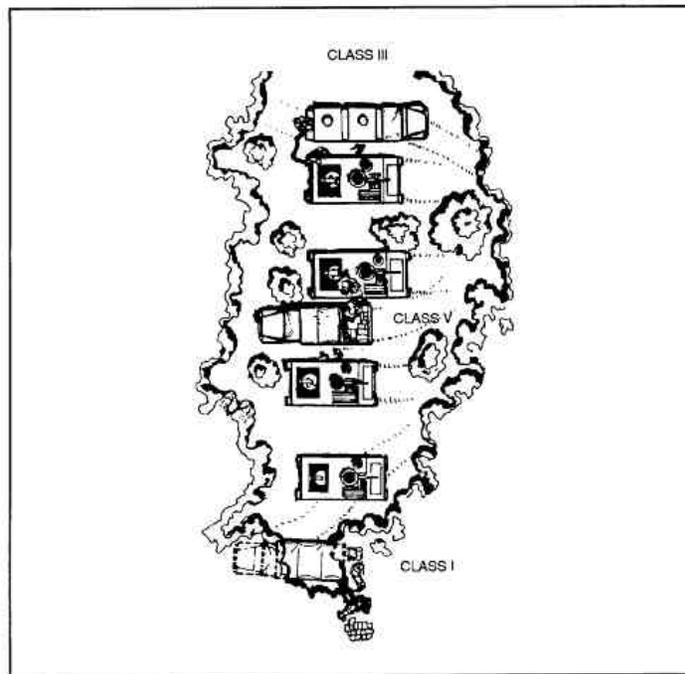


Figure 9-2. In-position resupply.

#### 9-8. PREPOSITIONING

Prepositioning is a method of in-position resupply where supplies are placed on an unoccupied position to be used at a future time (Figure 9-3).

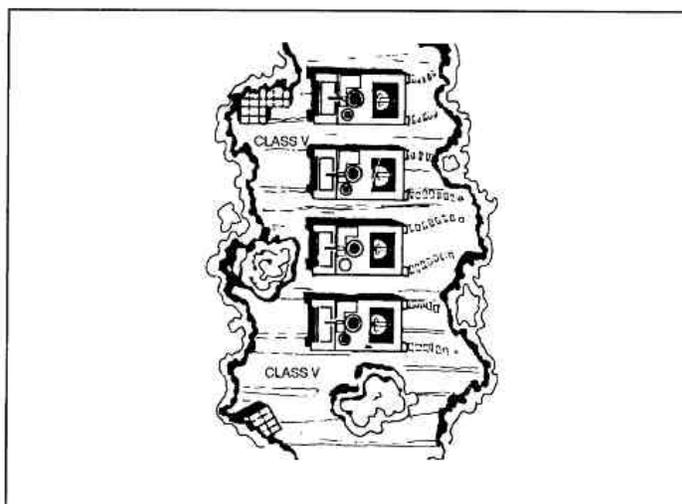


Figure 9-3. Prestocked ammunition.

a. Class V supplies are often prepositioned for the mortar platoon, especially in the defense. The location and amount of prepositioned ammunition must be carefully planned and each mortar squad leader informed. The platoon leader must verify the locations of the propositioning sites during his reconnaissance and rehearsals. When propositioning supplies, consider the following:

- (1) Covered and protected positions are needed for propositioned ammunition. If sufficient trailers are available, they can be used to preposition ammunition. The mortar carriers/prime movers can tow them from the preposition site to the next position.
- (2) Prepositioning frees cargo vehicles to return and bring more ammunition forward.
- (3) The mortar platoon cannot guard preposition sites and, therefore, risks the capture or destruction of propositioned ammunition.
- (4) Propositioned ammunition must be far enough away from vehicles and individual fighting positions so its destruction will not cause friendly vehicle damage or personnel casualties, yet close enough to be loaded by hand.
- (5) Propositioned ammunition must be removed from its protective packing before it can be loaded or fired. This takes time and creates large amounts of residue.

Prying and cutting tools are needed to quickly open large amounts of ammunition boxes.

b. Considerations, which determine if prestocked is used, are normally made at battalion level. When a position that has been prestocked is occupied, the prestocked supplies are to be used first. Depending on the situation, this means that the mortar platoon immediately tops off the vehicle fuel tanks and fills up the on-board ammunition racks. Any remaining ammunition from the prestock supply is fired before any of the on-board ammunition is fired.

#### **9-9. OUT OF POSITION**

This resupply technique is the least preferred method, but there are times when it is unavoidable. It is used when the enemy situation or the terrain prevents movement of thin-skinned supply vehicles forward to the platoon's position.

a. When this method is used, individual vehicles move back to, or through, a centrally located rearm and refuel point. Based on the enemy situation, one vehicle per platoon, section, or even an entire platoon pull out of their positions, resupply, and return to their position. In this method-

- (1) Mortar vehicles enter the resupply point following one-way traffic flow.
- (2) Only vehicles requiring immediate unit or higher maintenance stop in the maintenance holding area before conducting resupply.
- (3) If WIA, KIA, and EPW have not already been evacuated, they are removed from the platoon vehicles when the vehicles stop at the refuel or rearm point.
- (4) Vehicles rearm and refuel moving through each point.
- (5) Crews rotate individually to feed, pick up mail, pick up supplies, and refill or exchange water cans.
- (6) When all vehicles have completed resupply, they move to the holding area where the platoon leader or platoon sergeant conducts a precombat inspection (time permitting).

**NOTE:** The medical evacuation vehicle is positioned an equal distance away from the refuel and rearm points. This decreases the distance traveled by litter teams and provides safety from fire or explosion for the casualties.

b. Before sending vehicles for resupply, mortars are ground mounted. If the platoon is required to displace before the return of the vehicles, the ground-mounted mortars and partial crews are cross loaded on the remaining vehicles and moved to the next position. The personnel sent back for resupply are briefed on the most likely contingency. They

must be able to use the platoon displacement plan to determine the location of the next position.

c. Transload is a modified version of out-of-position resupply (Figure 9-4). With this method, the platoon sends a portion of its vehicles back to the supply point, loads them up, and then returns to resupply the rest of the platoon.

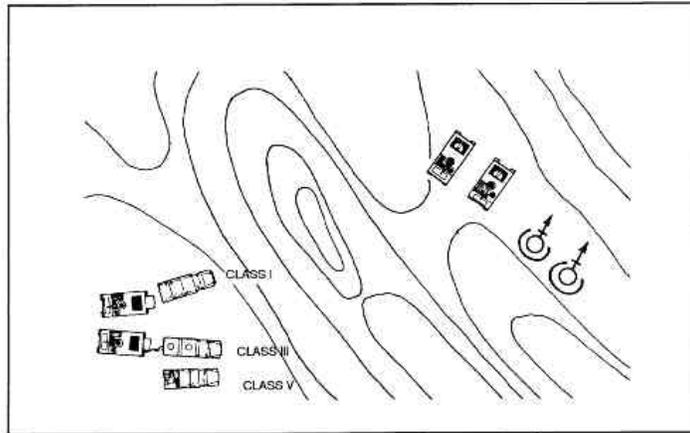


Figure 9-4. Transloading.

d. When transloading is the desired method, the platoon ground mounts its mortars (if mounted), and sends a man or two from each mortar with the empty carrier. With this method, all mortars can still fire with only minimum degradation due to missing personnel.

#### 9-10. EMERGENCY RESUPPLY

Occasionally, the mortar platoon may have an urgent need for resupply that it cannot wait for a routine LOGPAC (normally a result of combat). Emergency resupply can involve any type of supplies, but ammunition and fuel are the most common. The support platoon normally keeps some mortar ammunition up-loaded and ready to move to the mortar platoon. Emergency resupply is often conducted while in contact with the enemy. Heavy combat may generate a need for ammunition several times in the course of a day.

#### 9-11. BASIC LOADS

The commander normally prescribes a standard amount of supplies to be kept on hand. This is called a basic load. It is the amount of supplies he feels are necessary to sustain operations until initial resupply. It depends on the RSR and the length of time before resupply. It is limited by what can be transported, but not necessarily in a single lift.

Basic loads for the mortar platoon should be examined in detail by the platoon leader, reviewed by the S3 and S4, and approved by the battalion commander. Basic loads are divided into the combat load (carried on the mortar platoon's vehicles) and the bulk load (carried on support platoon trucks).

- a. The most common basic loads are Class I, Class II and IV, and Class III, batteries, and Class V.
- b. The Class V combat load is ammunition actually carried on board the mortar platoon's vehicles.
- c. The composition of a particular Class V basic load is METT-T dependent. Class V basic loads for mortars are constantly modified by the battalion commander based on that battalion's situation. (A sample basic load for mortars is shown in Table 9-1. It shows the load capability of both the combat vehicles and support assets. The basic load column lists an example of number and types of rounds. The combat load and bulk load columns only indicate total round capability since the actual ammunition mix in the combat load is situation dependent.)

<b>Mechanized Infantry Mortars</b>	<b>Combat Load (rounds)</b>	<b>Bulk Load (rounds)</b>	<b>Basic Load (2) (rounds)</b>
M125A2 Carrier (81-mm)	114 (1)	42	156
HE	--	--	110
WP with Fuze, PD	--	--	30
Illum with Fuze, MT	--	--	16
M106A2 Carrier (107-mm)	88 (1)	100	188
HE without Fuze	--	--	64
HE with Fuze	--	--	68
WP with Fuze, PD	--	--	40
Illum with Fuze, MT	--	--	16
Fuze, Proximity	--	--	68
Fuze, PD	--	--	5
Truck, Cargo, M998, HMMWV (120-mm)	39	121	160
HE with MOF	--	--	116
Smoke	--	--	30
Illum	--	--	14
<b>Infantry Mortars</b>	<b>Combat Load (rounds)</b>	<b>Bulk Load (rounds)</b>	<b>Basic Load (rounds)</b>
81-mm Mortar (3)	80 (1)	40	120
HE without Fuze	--	--	24
HE with Fuze	--	--	81
WP with Fuze	--	--	9
Illum with Fuze	--	--	6
Fuze, Proximity	--	--	25
Fuze, PD	--	--	5
107-mm Mortar (3)	50 (1)	110	160
HE without Fuze	--	--	54
HE with Fuze	--	--	60
WP with Fuze	--	--	30
Illum with Fuze	--	--	16

Table 9-1. Example of a Class V basic load for mortars.

Infantry Mortars	Combat Load (rounds)	Bulk Load (rounds)	Basic Load (rounds)
Fuze, Proximity	--	--	50
Fuze, PD	--	--	4
60-mm Mortar	240 (4) (1)	109	350 (2)
HE with MOF	156	72	228
WP	48	22	70
Illum	36	16	52

(1) Adapted from FM 101-10-1.  
(2) Figures indicate number of rounds per mortar system.  
(3) M988, Truck, Cargo, HMMWV.  
(4) The light infantry company has no dedicated mortar vehicles. See Appendix F for considerations on carrying 60-mm mortar ammunition.

**NOTE:** Each 3/4-ton trailer can carry about 35 120-mm mortar rounds. The towed 120-mm has space to carry six additional rounds on the mortar trailer.

Table 9-1. Example of a Class V basic load for mortars (continued.)

d. Combat experiences in World War II and Korea have shown that an on-board mix of 70 percent HE, 20 percent WP or smoke, and 10 percent illumination ammunition is the most flexible. These percentages must be modified by the commander based on the ASR and the mission.

e. There may be times when amounts of ammunition delivered to the mortars will be controlled. This is called controlled supply rate (CSR). The CSR is designed to limit rounds per weapon per day. CSRs are imposed for two reasons: to conserve ammunition and to avoid an ammunition shortage for a designated tactical operation.

f. During fire support planning, consideration is given to ammunition requirements. This makes it essential for the mortar platoon leader or platoon sergeant to be present to advise what types and amounts of ammunition will be required. For example, if the mission is to be an illuminated attack at night, then additional illumination rounds must be brought forward to the mortar sites. If the mission is defense (day or night), sufficient HE and WP rounds must be on site. In either situation, the mortar platoon leader contacts the supported commanders and advises them of any ammunition constraints.

## 9-12. COMMON SUPPLIES

The HHC commander is responsible for ensuring that the mortar platoon has ample supplies of common use items. These are normally requested in bulk and divided into platoon-sized shipments.

a. The company XO or first sergeant orders rations (Class I) for the mortar platoon based on the strength of the platoon. Hot meals are prepared at a central location (battalion field trains) and trucked forward to the logistical release point. The mortar platoon sergeant or a platoon representative meets the vehicle and guides it to the feeding location. Field feeding of hot meals and the delivery of MREs can be accomplished in two ways:

(1) The food can be brought to the soldiers at their position. To maintain readiness, a feeding plan is necessary. Usually, half of the soldiers eat while the other half maintains security and preparedness to fire.

(2) The crews can be moved some distance away, usually several hundred meters, to where the food is served. In such cases, the feeding plan is critical to provide continuous support. Normally, no more than a third to one-half of the crews should be away from their positions at one time.

b. Crew-replaceable items are requested through the company XO or first sergeant for company and battalion mortar platoons.

(1) Repair parts are usually brought forward with Class I, III, and V resupply. Other repair parts required by company and battalion maintenance are either on hand, in the company's PLL, or requested as required.

(2) Mortar platoons can carry some of the repair parts in their carriers (for example, light bulbs, firing pins, and other crew-replaceable, expendable parts).

c. Petroleum, oil, lubricants (Class III) are delivered to the mortar platoon by battalion fuel trucks. The trucks are part of the battalion support platoon. The trucks deliver both fuel and required package products, such as engine oil, grease, and antifreeze. As with other supplies, fuel trucks resupply platoons as follows:

(1) ***In position.*** The fuel trucks drive up to the vehicle while it is in position and refuel it, going from one vehicle to the next.

(2) ***Out of position.*** This procedure requires the platoon's vehicles to travel to a fuel dispensing point and top off each vehicle, and then return to position. When this is done, the mortars, with ammunition, should be ground mounted or the platoon must accept the loss of firepower. The driver and vehicle commander should accompany the vehicle to the refuel point. The rest of the crew will man the firing positions.

d. When displacing, the platoon should be able to top off their vehicles from the manned LRP while en route to a new firing position (Figure 9-5).

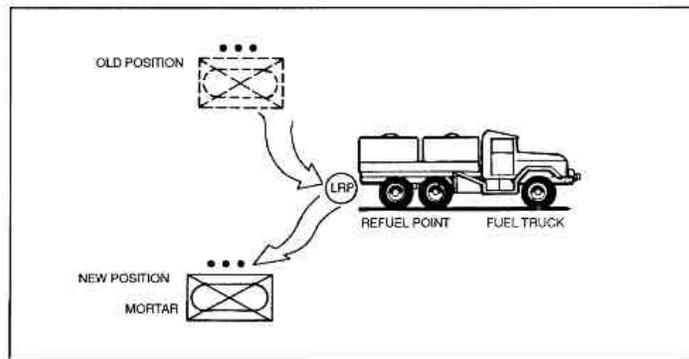


Figure 9-5. En route refueling at LRP.

### 9-13. MISCELLANEOUS SUPPLIES

Ordering the correct amount of needed supplies at the right time is a difficult task for the mortar leader and NCO. They must think ahead and not allow the platoon to run short of critical supplies that could effect mission accomplishment.

a. Batteries, other than vehicle batteries and rechargeable batteries, are controlled by the company communications section. Like ammunition, each platoon keeps a basic load of batteries, by type, on hand. Replacement batteries are requested and are delivered along with other supplies. The stockage, use, and reordering of batteries has become most important with the fielding of more modern devices such as NBC agent alarms and night vision devices.

b. Maps are requested the same as other supplies. Unclassified maps are obtained by the battalion S4 based on requirements established by the S2. They are distributed either through battalion supply channels or from the S2 to the company headquarters.

c. Sandbags and other barrier material fall into supply Class IV and are issued as needed or as required.

### Section III. MAINTENANCE

*Each company has a maintenance section assigned to it. This organization provides responsive, flexible support to the mortar platoon.*

### 9-14. VEHICLES

When a vehicle is damaged or disabled, the platoon leader, platoon sergeant, or section sergeant requests maintenance support from the company XO or first sergeant.

a. When the request has been made, he tells the XO the problem and the location of the down vehicle. The XO or first sergeant will then ensure that the required support is dispatched. In some cases, particularly if there are a large number of disabled vehicles, the platoon may have to recover a vehicle with another like vehicle.

b. Each line company maintenance section (H-Series TOE), except the headquarters company's, has a recovery vehicle. Recovery support for the company mortars is provided by the battalion maintenance and service section or the recovery section of the battalion maintenance platoon (Figure 9-6).

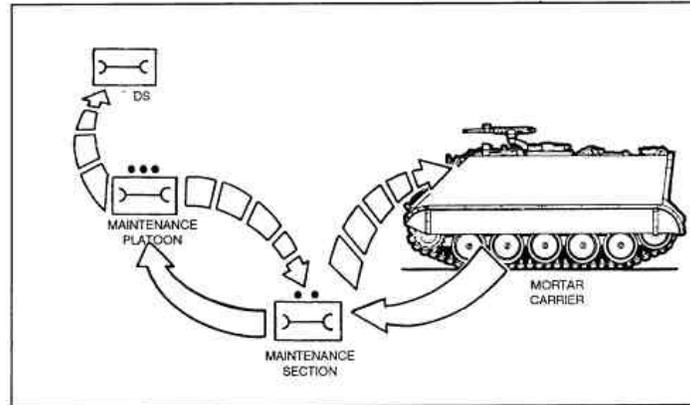


Figure 9-6. Maintenance flow.

### 9-15. WEAPONS

Damaged weapons are sent to the company armorer who is located in the company trains. Weapons are carried on platoon vehicles or on a returning supply vehicle.

The armorer can replace some parts on weapons, but major problems are handled by a DS maintenance unit. The DS unit maintains a weapons maintenance support team capable of going forward to the battalion and making some on-the-spot repairs. If the damaged weapon cannot be repaired by the support team, it will be evacuated to a GS unit.

### 9-16. COMMUNICATIONS EQUIPMENT

The FDC is the control center for company and battalion mortars. It should never be without reliable communications. Platoons leaders and sergeants replace inoperative radios in the FDC vehicle, or their own vehicles, with radios from the mortar carriers. The mortars can be directed by other means but not having communications with the parent or supported unit is unacceptable.

- a. Radios and other communications equipment that does not function are turned over to the battalion communications platoon. This equipment is either repaired or forwarded to the forward support battalion for repair. The mortar platoon can be issued another radio from the operational ready float, if one is available.
- b. Night vision equipment is also turned in to the battalion communications platoon for repair as are all items that require calibration (such as GPS, radiacmeters, or dosimeters) are turned in to the battalion maintenance platoon.
- c. When items are turned in to either the maintenance or communications platoon, a receipt (DA Form 2402, Exchange Tag) is used to show that the platoon turned in an item for repair or calibration. When the repaired item is returned, the exchange tag receipt is given back to the maintenance platoon (Figure 9-7).

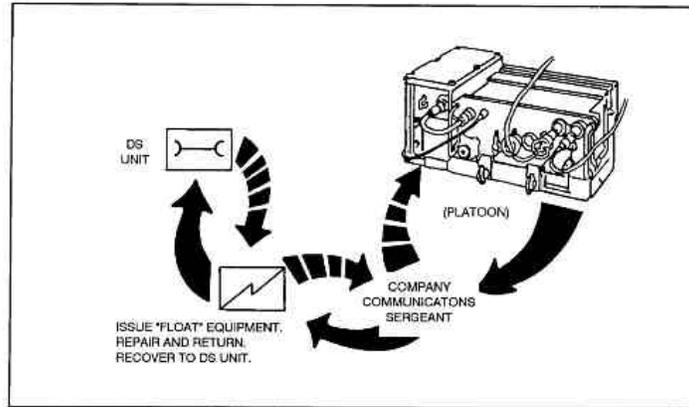


Figure 9-7. Communications equipment flow diagram.

#### 9-17. MORTAR EQUIPMENT

For mortars, borescoping and pullover gaging is accomplished by DS maintenance. In combat, a weapons maintenance support team from the DS unit performs required checks. It can also replace worn or broken parts and has one spare mortar that can be issued for one that needs repair (Figure 9-8).

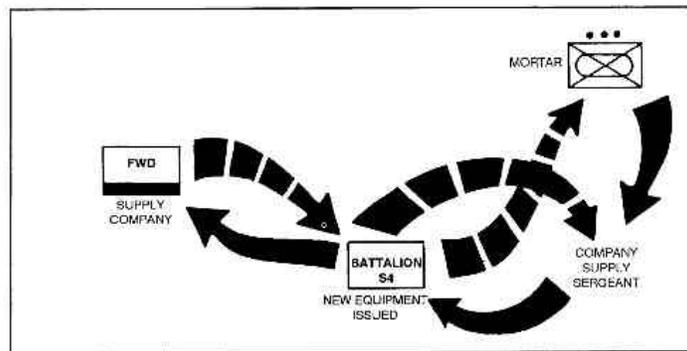


Figure 9-8. Equipment turn-in flow chart.

- a. When an aiming circle is damaged, it is turned in to the company supply sergeant and placed into maintenance channels to be repaired or a new one is requisitioned.
- b. Unserviceable mortar sights, plotting boards, and mortar ballistic computers are turned in to the the company supply sergeant who requests a replacement and issues it to the platoon.

#### 9-18 RECOVERY OF DAMAGED EQUIPMENT

There are several ways that damaged or disabled equipment can be recovered.

- Using organic transportation.
- Using the supply truck on a return run.
- Requesting transportation from the battalion.

The most desirable method is to send damaged equipment back in an empty supply vehicle on its return run (for efficient use of assets).

### Section IV. MORTAR MEDICAL SUPPORT

*This section covers medical support for company and battalion mortar platoons, evacuation of casualties, priority of evacuation, and reporting casualties.*

#### 9-19. COMPANY MORTARS

Infantry companies are provided aidmen on the basis of one per rifle platoon and one senior aidman for each company headquarters. An evacuation section with an ambulance may be attached. Company mortar platoons receive medical support from the company headquarters or from a rifle platoon, depending on the situation. Casualties are

transported in empty supply vehicles or by requesting ambulance support from the company headquarters (Figure 9-9).

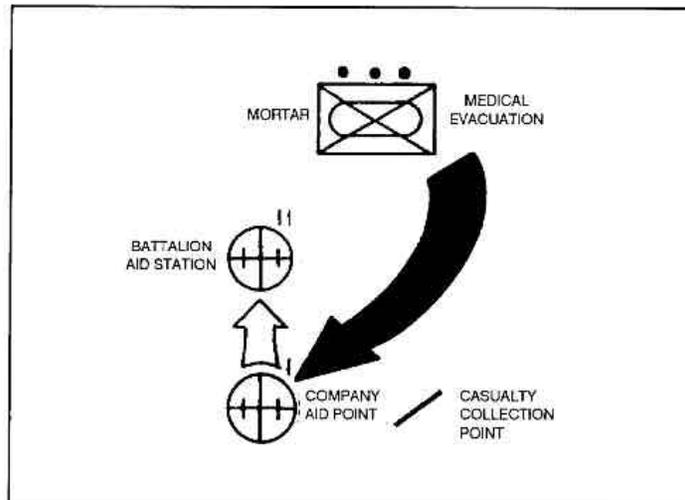
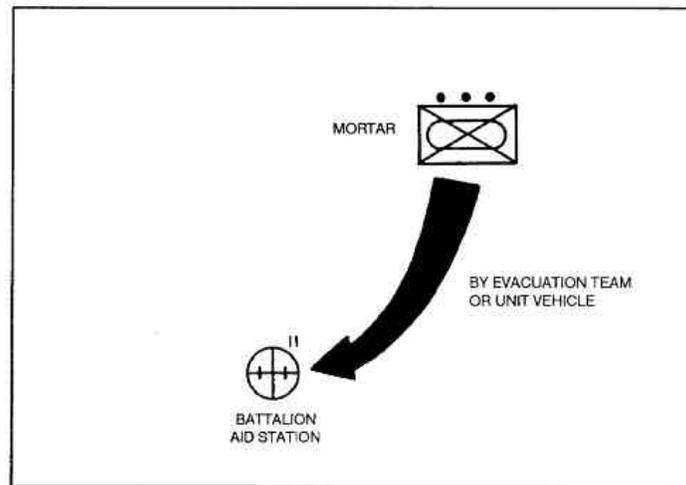


Figure 9-9. Medical flow diagram—company mortars.

### 9-20. BATTALION MORTARS

The battalion mortar platoon receives one medical aidman. Since CSC has no company aid station, the mortar platoon requests evacuation, on the administrative/logistics net, directly from the battalion aid station, located with the combat trains. Casualties can be backhauled on returning supply vehicles (Figure 9-10).



**Figure 9-10. Medical flow diagram—battalion mortars.**

**NOTE:** Battalion mortar platoons, organized under the J-series TOE, will receive no medical aidman. Casualties are given first aid by combat lifesavers from within the mortar platoon and evacuated to the battalion aid station.

#### **9-21. EVACUATION**

This paragraph complies with STANAG 3204.

When a casualty must be evacuated, and the only alternative is to request assistance, the evacuation request is made using the categories of precedence. The following categories of medical evacuation precedence conform to STANAG 3204. A patient's category of precedent is determined by the senior aidman or, if there is no aidman, by the senior officer or NCO present.

- a. **Priority I - Urgent.** Used for emergency cases that should be evacuated as soon as possible, and with a maximum of two hours, to save life, limb, or eyesight.
- b. **Priority IA - Urgent-Surgical.** Used for patients who must have surgical intervention to save their life and to stabilize them.
- c. **Priority II - Priority.** Used when the patient should be evacuated within four hours or his medical condition will deteriorate to an URGENT precedence.

d. **Priority III - Routine.** Requires evacuation, but condition is not expected to deteriorate seriously within 24 hours.

e. **Priority IV - Convenience.** Used when evacuation is a matter of medical convenience rather than necessity.

#### **9-22. CASUALTY AND STRENGTH REPORTING**

Casualty and strength reporting begins at squad level. Casualty reporting occurs as soon as possible after the event and is initiated by the squad leader verbally to the platoon sergeant. The platoon sergeant forwards the information to the first sergeant who collects the reports and forwards them to the administrative/logistic center. As the situation permits, the platoon sergeant completes a DA Form 1156, and DA Form 1155 for each casualty sustained. These are collected by the first sergeant who forwards them to the administrative/logistics center.