

CHAPTER 5 DEPLOYMENT

TECHNIQUES

Food service and Class I operations are essential parts of any unit deployment. Commanders must ensure that deployment plans specify the earliest possible movement of personnel, equipment, and basic loads of rations. The deployment of the theater subsistence distribution activities and subsistence platoons must begin at the onset of theater operations. These personnel, their equipment and transportation assets must be in place to receive and forward the subsistence required to sustain the force. Their locations should be planned and coordinated for compatibility with the overall layout of the theater distribution system. The Class I manager, food advisor, and FOS should advise commanders (at each level) of any special requirements during initial planning phases. The AFFS permits food service operations in a variety of tactical situations, yet they must be curtailed in NBC environments. Specific deployment procedures discussed in this chapter are—

- Unit movement to the deployment site.
- Site selection (Class I and field kitchen) and layouts.
- Field feeding procedures including feeding doctrine.
- Remote site feeding.
- The LOGPAC subsistence distribution system.
- Accountability for rations in the field.
- Requesting rations.
- Receipts and issues.
- Cold weather feeding.
- Subsistence storage at field kitchens.
- Strength reporting.
- Force Provider.
- Camouflage.
- Records maintenance.
- Evaluating operations.

UNIT MOVEMENT

Movement information from the home station to the deployment location is vital. Food operations personnel may be required to serve meals or warming and cooling beverages for convoy rest halts, rail heads, and alert holding areas. The unit movement control officer and the division or corps transportation officer prepare the unit movement plan. They will provide detailed information on when units will deploy, how they will deploy (air or ground), unit movement timetables, and convoy routes. The commander must ensure that appropriate food service assets accompany the unit and are on hand at the reception site.

CLASS I SITE SELECTION

Each Class I point must be accessible to its supply sources and customer units. Depending on METT-T factors, division and brigade Class I distribution points may be co-located with water points. Select an area with good drainage and cover near the main supply route. Make use of any permanent buildings. Roads should be able to handle heavy traffic and be wide enough for the supply vehicles. They must also be able to support the weight of the vehicles in any weather. Ground where rations are to be positioned must be able to support the weight of the rations. Post directional signs inside Class I points to avoid traffic congestion and accidents.

Size

The site should be large enough to handle the estimated volume of Class I supplies and equipment. A GSU Class I supply point requires more storage space than a DSU. It also needs an area for greater vehicle traffic picking up and delivering Class I

supplies, as well as local MHE moving supplies. A parking area is needed for vehicles stopping at the checkpoint, loading and unloading supplies, bringing in and taking out refrigerated trailers, and MHE working the stacks. Class I sites in the TO must be large enough to afford some dispersion of supplies to lessen the chance of enemy destruction. Use dunnage to keep the supplies off the ground and tents and tarpaulins to provide protection when sufficient permanent buildings are not available. Make sure lighting is adequate for safety and security. Fence the perimeter and establish checkpoints at each exit and entrance, Figure 5-1, page 5-3 shows the suggested layout for a main Class I supply point (GSU). Figure 5-2, page 5-4, shows the suggested layout for a forward Class I supply point. When operating in TOs where TISAs exist, maximum use will be made of TISA facilities, equipment and personnel when the tactical scenario permits.

Theater storage. The area needed to store supplies can be determined by figuring the cubic feet needed per man per day for the menu being served and multiplying that figure by the number of troops supported. The A-Ration menu or UGR-A requires refrigerated space and more cubic feet than other rations. The B-Ration, UGR-B, or UGR-H&S does not normally require refrigerated space. Operational rations require less space than any others. Remember any perishable enhancements or components of the UGR will need refrigeration and increase storage requirements. You can compute the space required to support any menu using the issue factors from the menu and container dimensions in C 8900-SL.

Office. You will need space near the entrance and exit for an office. This may also be used for your checkpoint. When you are issuing commercial bread, store it here along with any open cases of condiments.

Concealment and Cover

Because of the large amounts of supplies stored at a Class I point, it is extremely difficult to camouflage or

conceal all of the subsistence. If trees are available, place the palletized rations under them. All trucks and MHE should be camouflaged with authorized netting. When possible, terrain features should be used to protect the Class I point from direct enemy fire.

Defense

When feasible, use three-strand concertina wire to define the site's perimeter. Interlace the concertina wire with sensors, trip flares, and antipersonnel mines to provide early warning of the enemy's approach. Have security patrols check the condition of the perimeter daily to ensure that no one tampered with or penetrated the concertina wire. Include fighting positions as part of the unit's overall defensive plan. Enforce light and noise discipline as required by METT-T. Coordinate your security plan with the MP battalion responsible for security in your sector.

FIELD KITCHEN SITE SELECTION

The unit commander or FSO specifies the general location of the field kitchen site. However, the FOS must consider the characteristics of a good field site, as shown in Table 5-1, page 5-5. The following should also be considered in selecting and setting up the field kitchen:

- Tactical or non-tactical operation.
- Extent of time area will be occupied.
- Use of individual mess kits or single service disposable eating flatware.
 - Method of solid waste disposal (burn, bury, backhaul).
 - Resupply operations. Availability and accessibility of roads (water for water trailer and sanitation centers; fuel; subsistence; nonfood supplies).
 - Use of MKTs, KCLFFs, tents, buildings.
 - Location of unit billeting area.
 - Available equipment and space for proper arrangement.
 - Natural cover to shield from the enemy and protect from the elements.

- High, dry ground near a protected slope for better drainage and protection from the wind.
- Convenient water source for purification when needed.

- Sandy loam or graveled soil to allow excess water to seep into ground to enable soakage pits and trenches to work correctly.
- Location away from latrines or any source of contaminants.

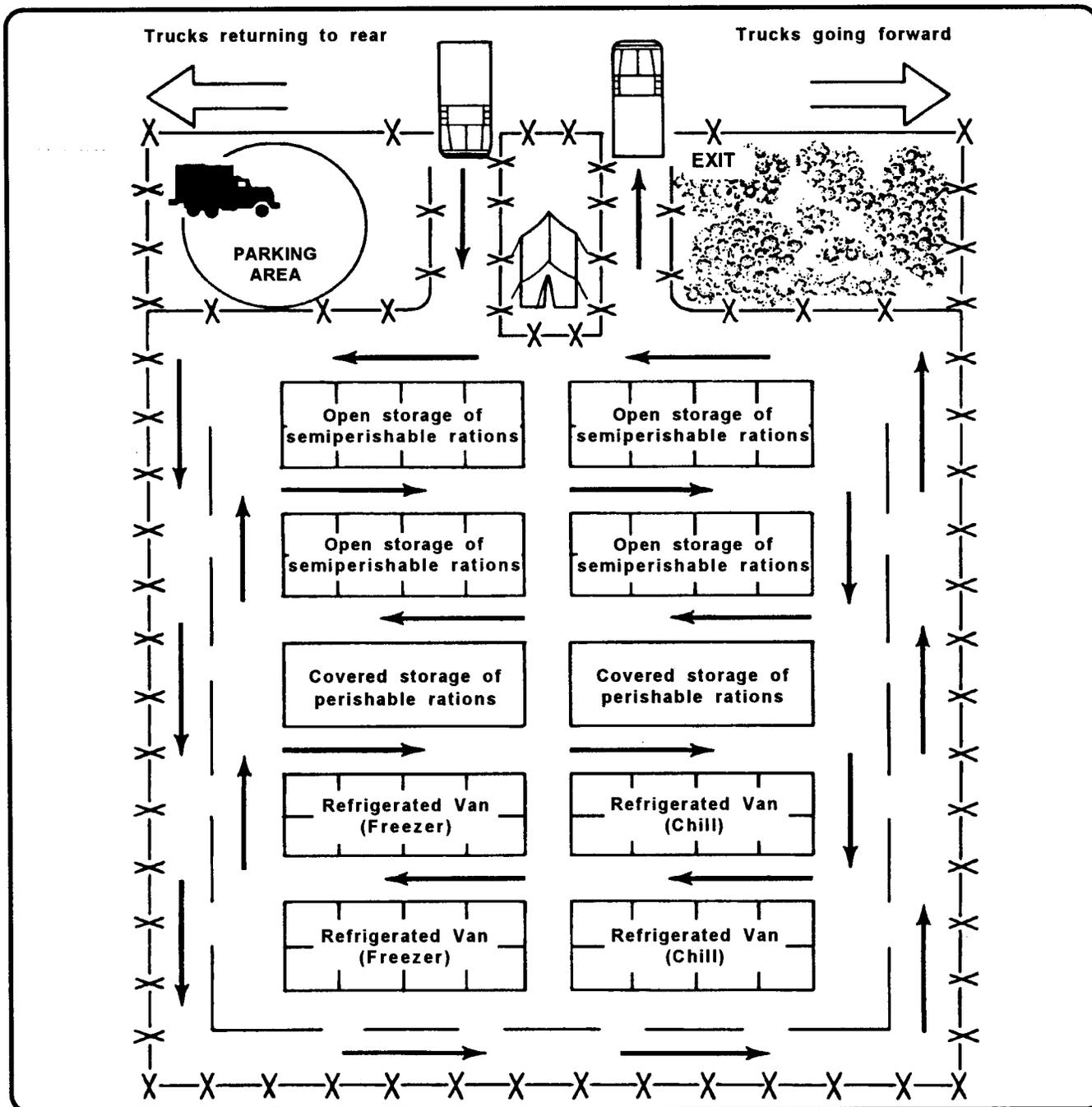


Figure 5-1. Suggested layout for a main Class I supply point

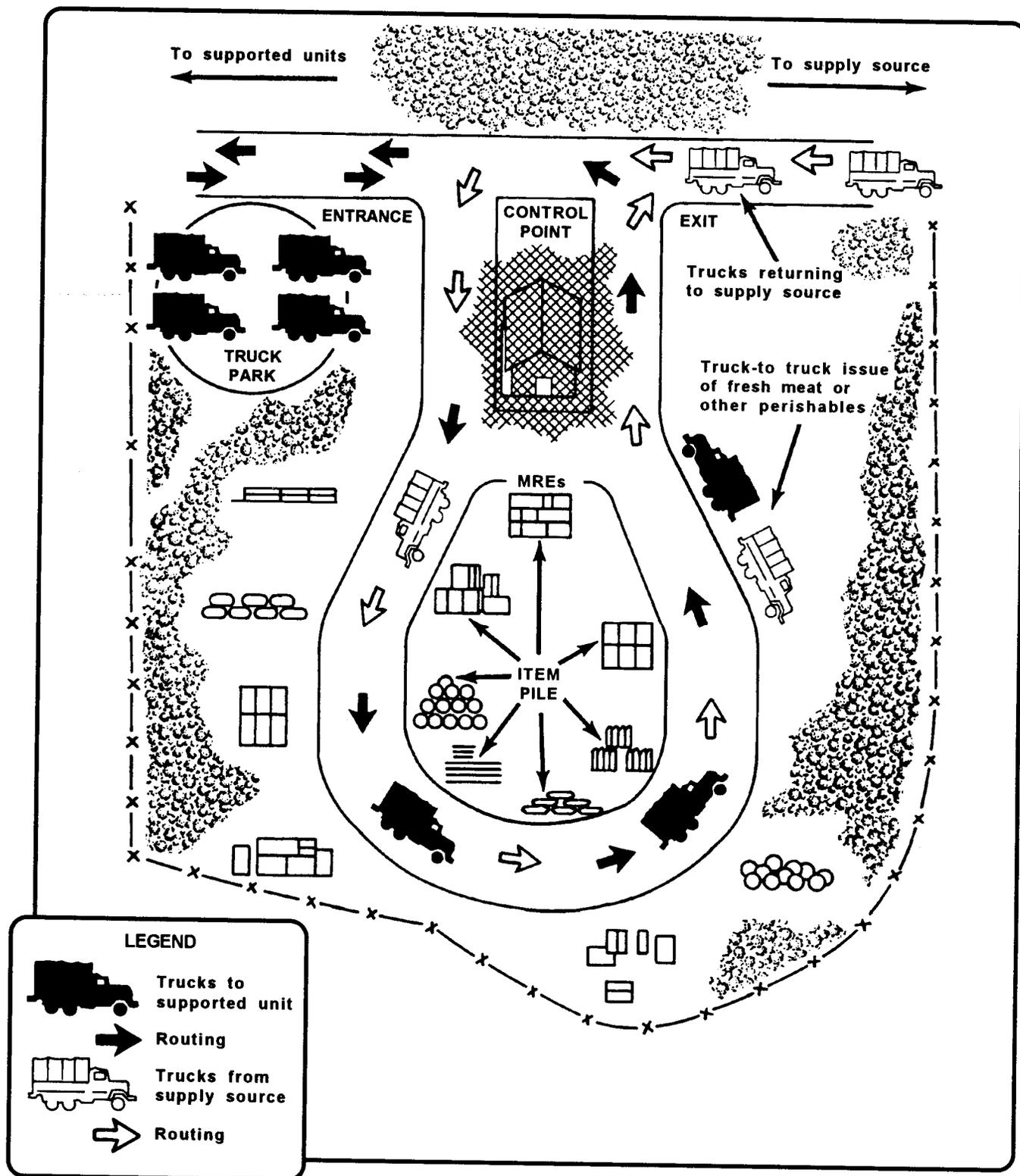


Figure 5-2. Suggested layout for a forward Class I supply point

Table 5-1. Characteristics of a good field kitchen site

CHARACTERISTIC	IMPORTANCE
Good natural cover	Shields troops from the enemy and protects them from sun, heat, and cold winds.
Good access roads	Lets supply trucks move freely.
High and dry ground near a protected slope	Ensures good drainage and protection from the wind.
Enough space	Eliminates crowding of the troops and facilitates spreading out the equipment so that personnel can work efficiently.
Near source of potable water	Used in preparation of foods and beverages.
Sandy loam or gravelly soil	Lets excess water seep away and helps soakage pits and trenches work well.

**FIELD KITCHEN SITE LAYOUT
(REAR AREA)**

Figure 5-3, page 5-6, and Figure 5-4, page 5-7, show where to place the different facilities required to operate a rear area field kitchen. The field kitchen area should be camouflaged to hinder detection by enemy aircraft, ground forces, or infrared sensors. Passive measures should include dispersion, camouflage, cover and concealment, light and noise discipline survivability moves, covering vehicle tracks into the field kitchen site, and staggering ration distribution to eliminate congestion of the site.

FIELD FEEDING PROCEDURES

Field feeding procedures are determined by the availability of equipment and personnel, capability of the logistics system, level of commitment, availability of rations, and total sanitation requirements. Other considerations include the number of soldiers to be fed, the feeding times, unit mission, and location. The AFFS can be tailored to meet the requirements of divisional and nondivisional units. For example, some nondivisional units in the corps or EAC may not require rapid mobility. Therefore, the commander may consolidate the MKTs or field kitchen operations near troop concentrations. Divisional

and nondivisional units which require a high degree of mobility and move often on short notice can distribute MKTs to operate in several locations. The AFFS provides the capability for commanders to assign cooks and the KCLFF forward to receive, prepare, and serve limited hot meals to company size or smaller units deployed forward in the combat zone.

Consolidated (Area) Feeding

Feeder units provide support to units in or passing through their area. Units with no authorized food operations personnel are attached to a feeder unit for subsistence support. These supporting units also prepare and ship meals to remote sites when required.

Delivery of Meals (KCLFF)

The AFFS provides the capability for limited food preparation at company level in the forward areas (METT-T dependent). In most cases, the majority of the food items will be prepared or cooked and packaged at the field kitchen and transported forward with the LOGPAC. Raw or

unprepared foods will be sent forward on the LOGPAC, page 5-8, for preparation or cooking by company food service teams to complete the meal. Examples of foods that could be prepared or cooked at forward locations include all heat and serve ration components, coffee or beverages,

soups, fresh or dehydrated eggs, pancakes, french toast, grilled meats, sauces, and gravies. The FOS must check to ensure that correct quantities of food and equipment are being packed or shipped or carried forward to support unit feeding requirements.

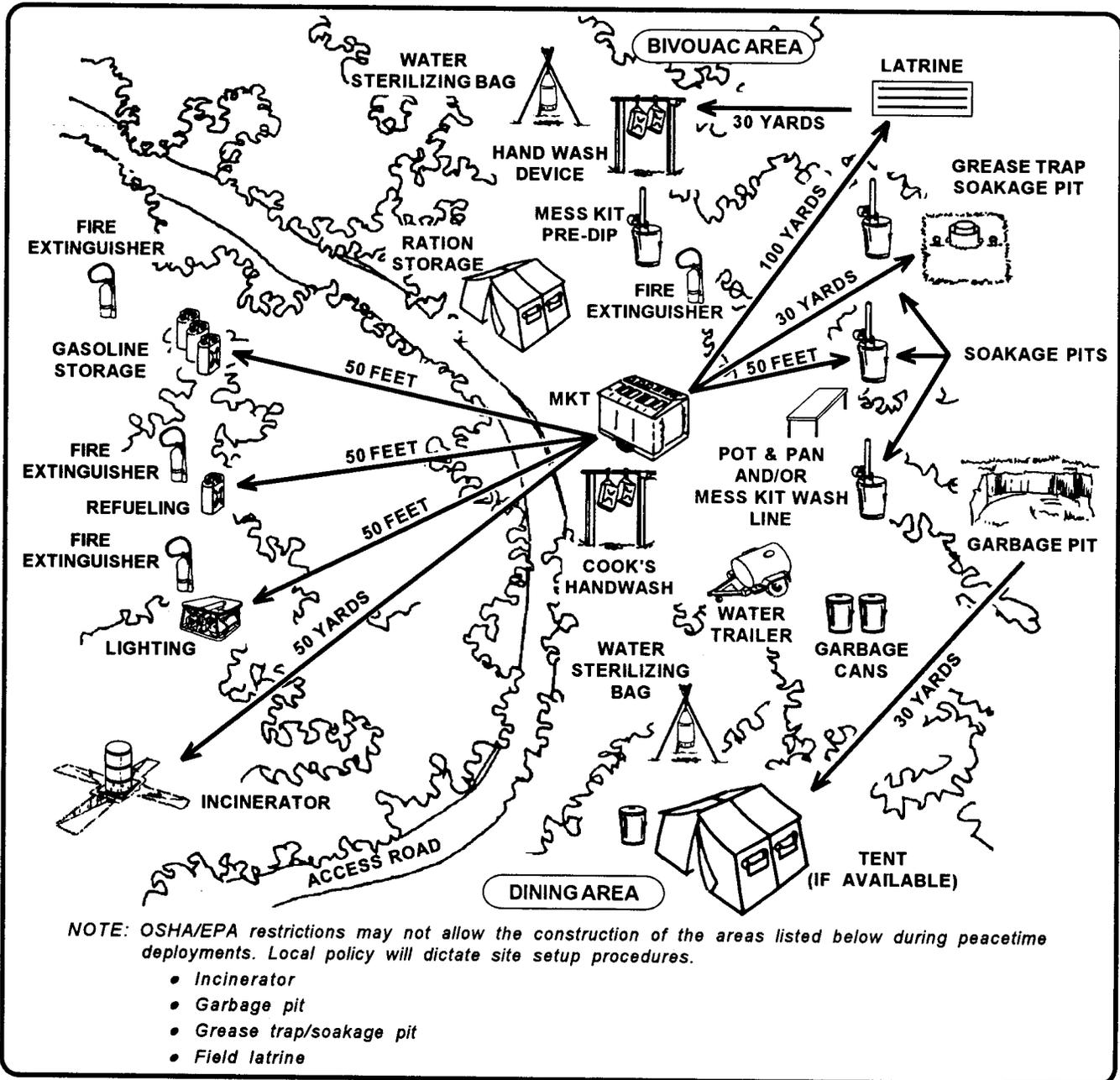


Figure 5-3. Recommended field kitchen site layout with the pot and pan and mess kit laundry line (rear area)

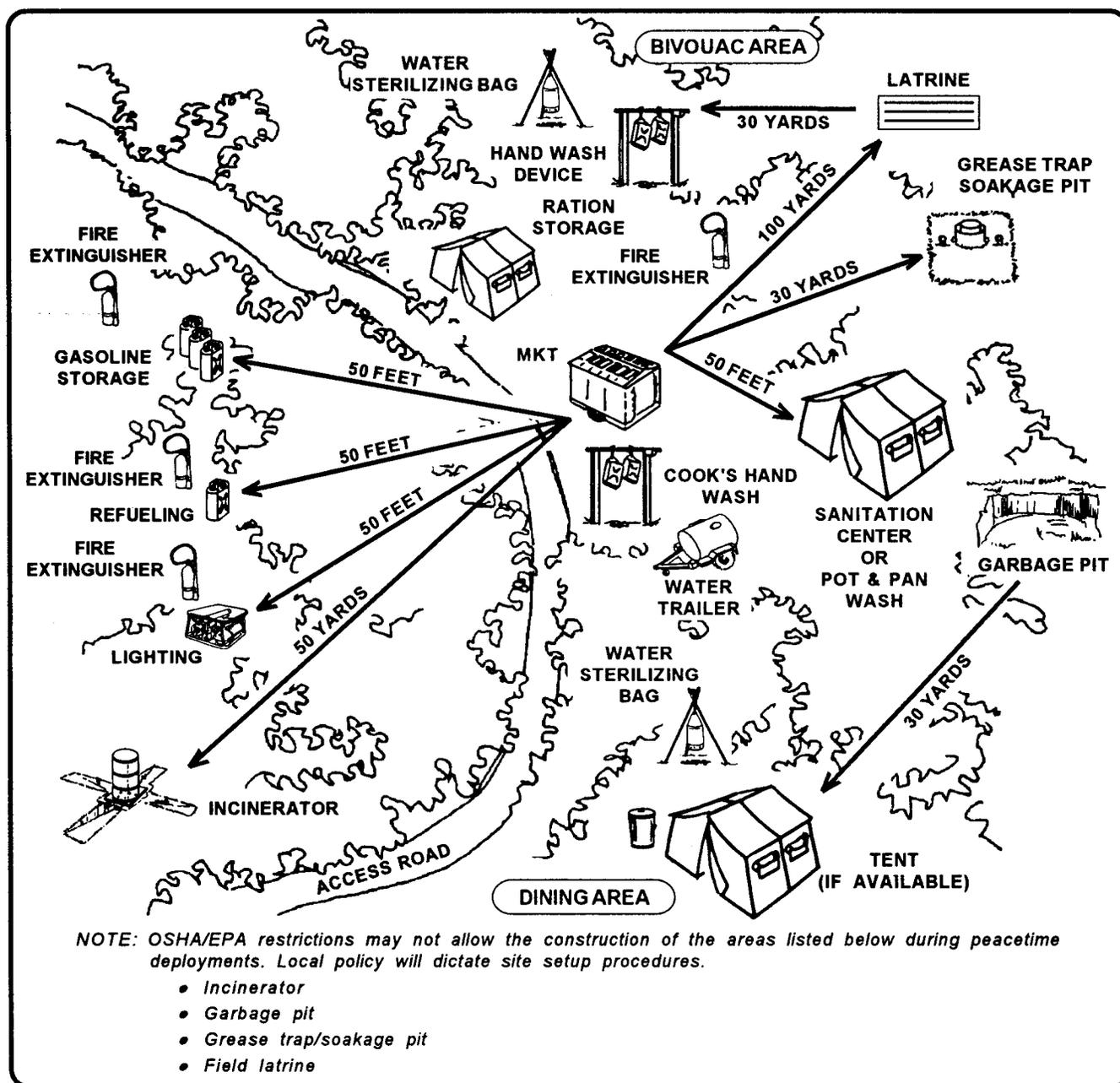


Figure 5-4. Recommended field kitchen site layout with the sanitation center (rear area)

Remote Feeding

Providing hot food to soldiers at remote sites (radar sites and small signal sites) requires intensive management by commanders and food service personnel. Remote feeding may be accomplished by various methods. Battalions may send hot meals forward to

remote units using insulated food containers. When feasible, the battalion may attach two cooks with HMMWV and the KCLFF to the remote unit for hot meal preparation. Figure 5-5, page 5-8, shows the load plan for the KCLFF-E on the HMMWV and

HMT. Depending on its strength, location, the duration of the mission, and other tactical, administrative, and logistical considerations, the remote unit may be administratively attached for rations to the nearest unit that is capable of preparing rations.

LOGPAC Subsistence Distribution to Forward Task Force

The LOGPAC method is when resupply elements are organized in the battalion field trains and moved forward daily for routine resupply. Figure 5-6, page 5-9, shows the LOGPAC method of feeding soldiers at forward locations. The LOGPAC moves along the MSR to the LRP. From the LRP, the company first sergeant controls the LOGPAC and conducts resupply. The unit supply truck normally

contains the prepared meals and MREs. However, special procedures may be required for resupply. For example, a scout platoon may have each truck individually pull off line and move to the pre-positioned LOGPAC or it may be resupplied as the platoon repositions between missions. Commanders must be aware of the feeding plan and know their equipment, time, and personnel limitations. The FOS must be included in all LOGPAC planning. Equipment and ration mix must be able to complete the cycle for resupply of the LOGPAC. If equipment cannot be returned in time for cleaning and to send the next meal out, the LOGPAC ration mix must be looked at critically. It is essential that prepared food placed in insulated food containers not be served after the annotated time limit (4 hours after preparation) to preclude foodborne illness outbreaks.

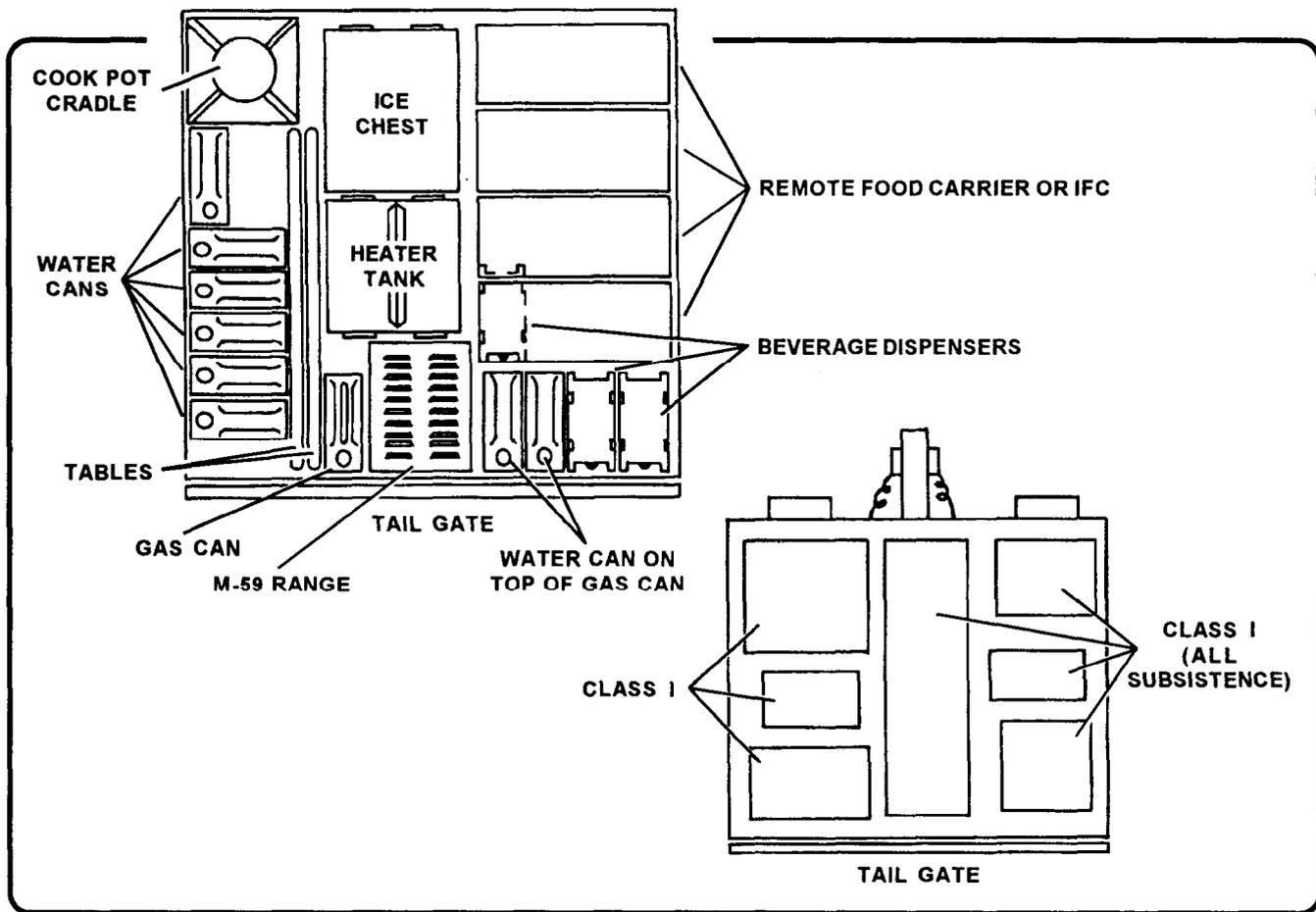


Figure 5-5. Load plans for the HMMWV and HMT

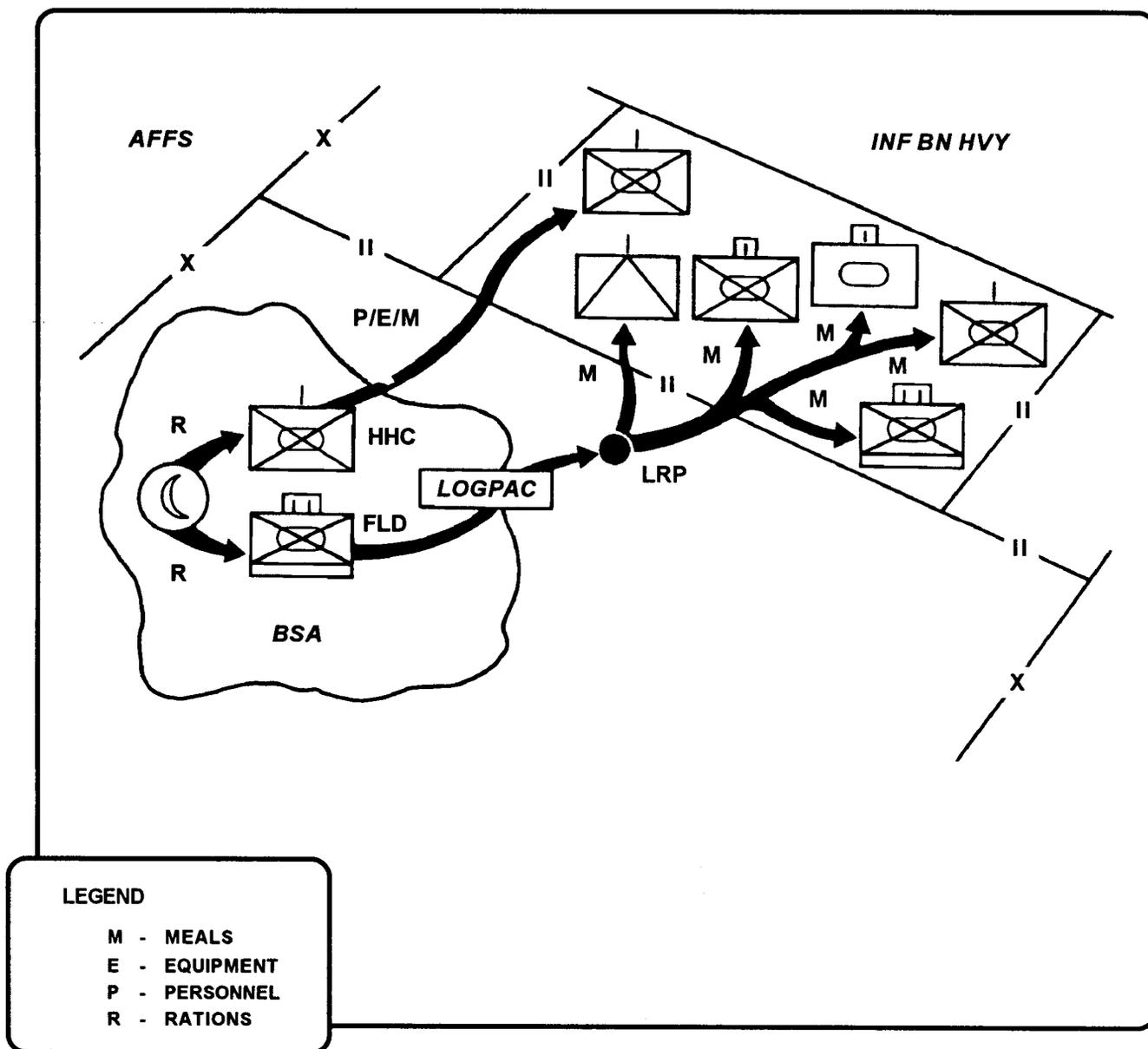


Figure 5-6. LOGPAC subsistence to forward forces

Serving Lines

You may establish a serving line as shown in Figure 5-7, page 5-10. When you are using an MKT, set up the serving line inside. You may serve cold foods on one side of the trailer and hot foods on the other side. Soldiers may enter the trailer from either end, but all soldiers should move through the serving line in the same direction. Use a

U-shaped serving line as shown in Figure 5-8, page 5-10 or set up two serving lines, one on each side of the trailer, as shown in Figure 5-9, page 5-11. Troops pass through at 5-meter (17-foot) intervals. Once the troops are served, they spread out to reduce the chance of casualties in case of enemy attack.

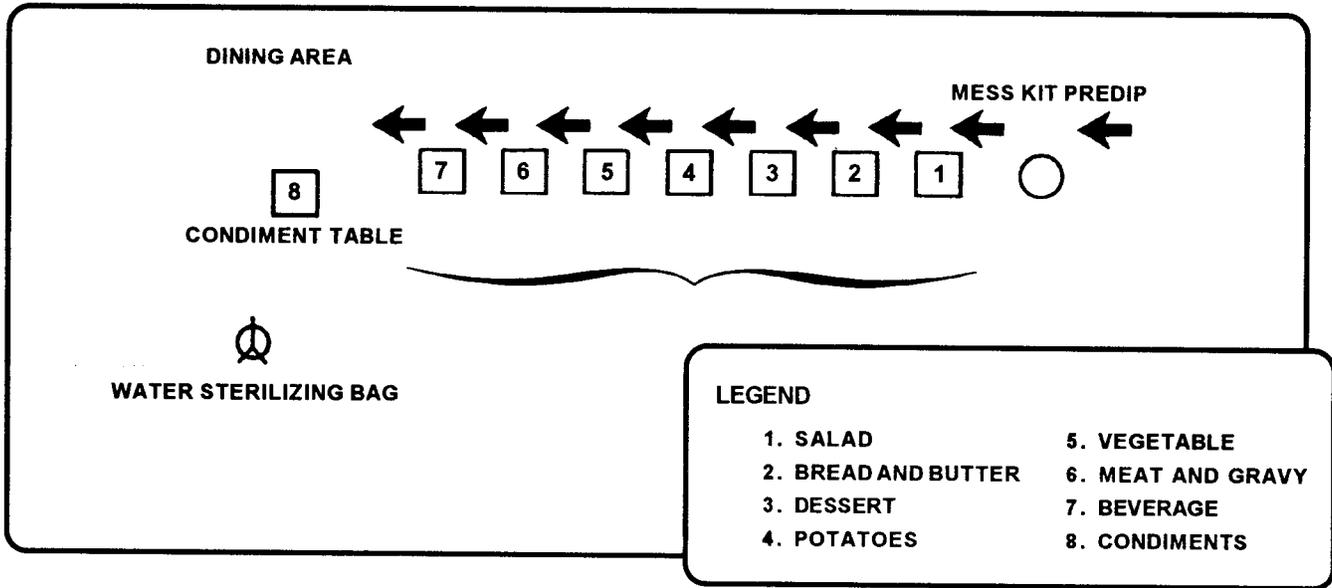


Figure 5-7. Serving line when attack is unlikely

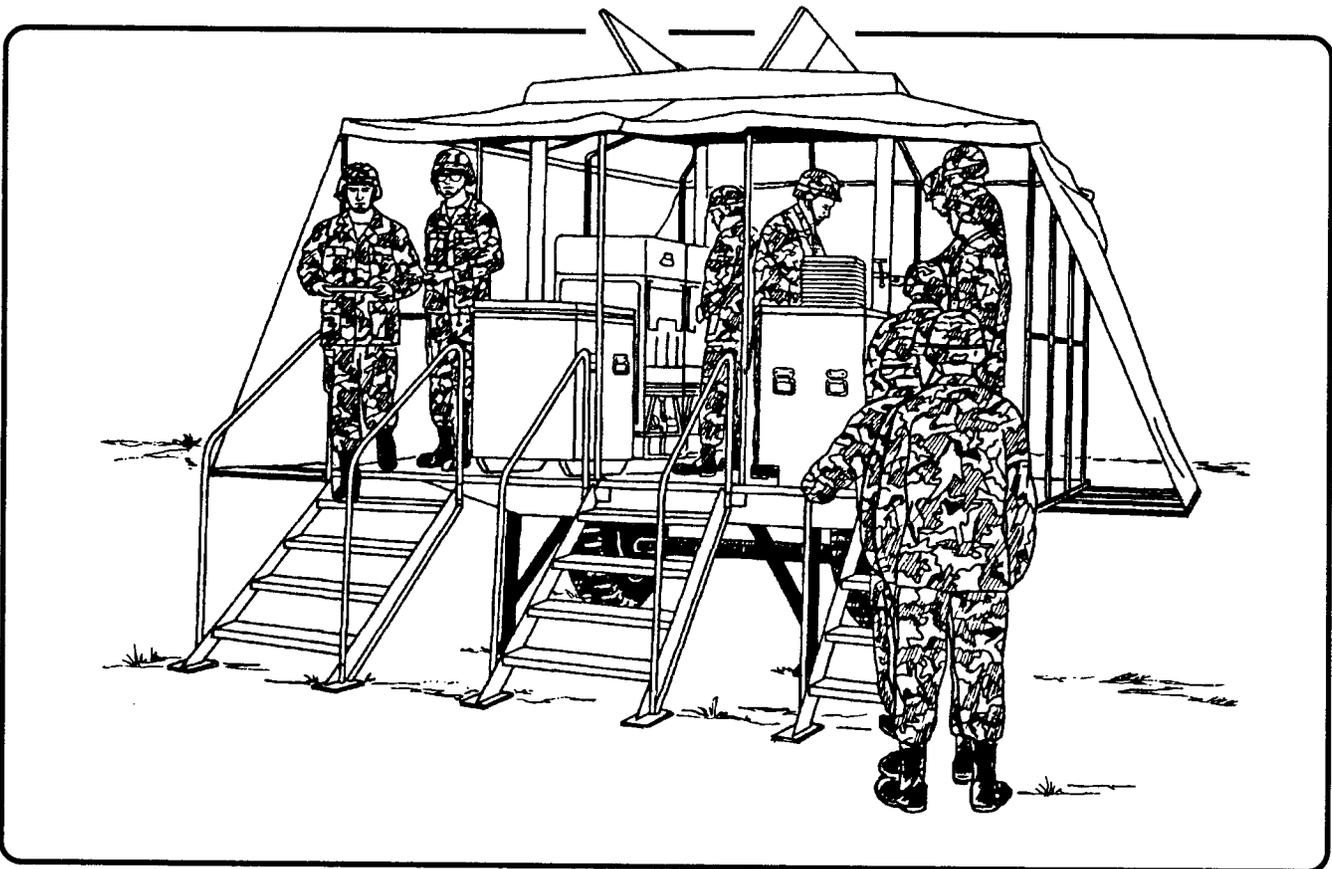


Figure 5-8. Trailer-mounted field kitchen with U-shaped serving line

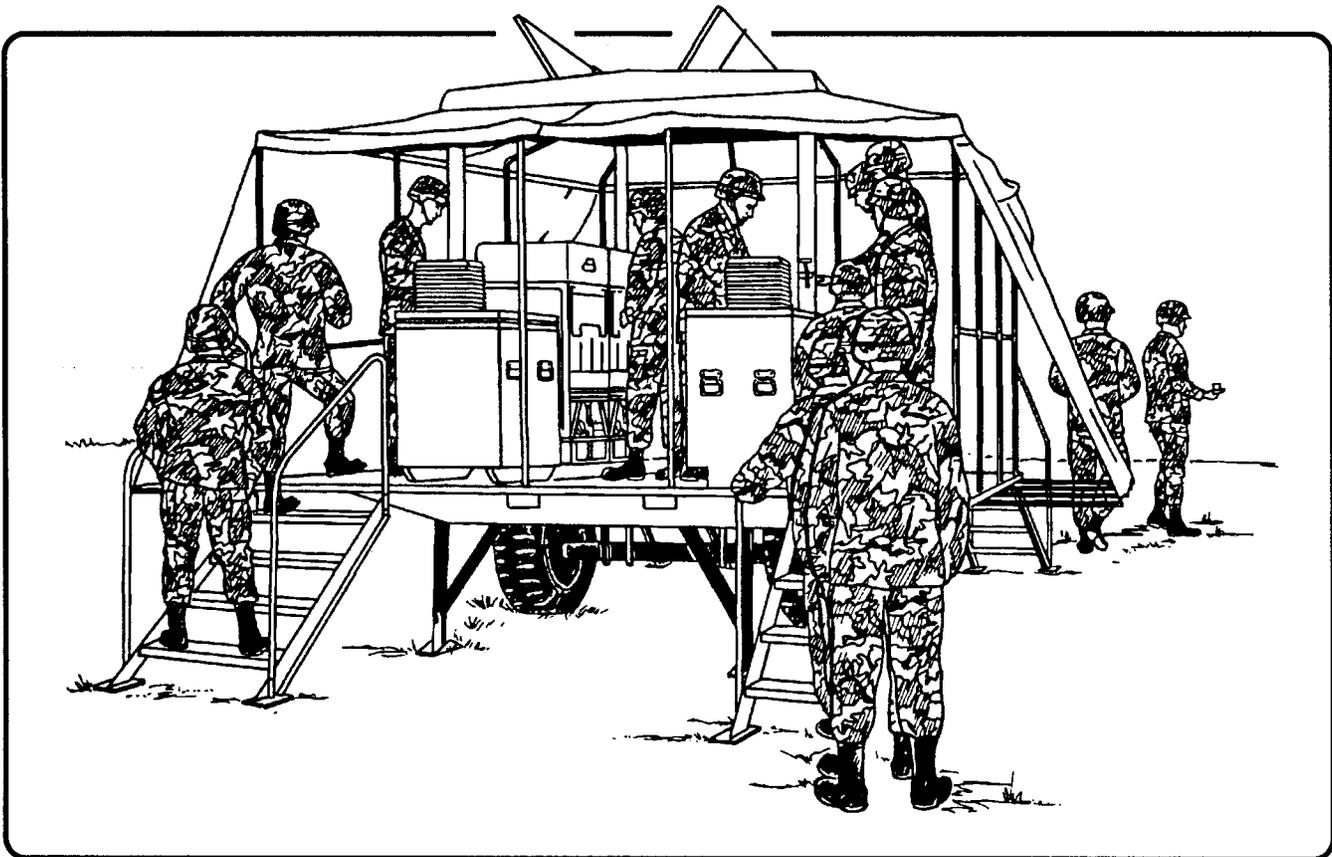


Figure 5-9. Trailer-mounted field kitchen with two serving lines

AFFS ACCOUNTABILITY

The AFFS establishes a single system to account for all field rations. Rations must be accounted for at all times as they move through the supply system. The audit trail for all except individual rations (MREs, RLW) is maintained by main entree only. The audit trail for individual rations is maintained by individual meal package. Medical B-Ration items used for simulated or actual patient feeding are accounted for on the Medical Field Production Schedule. DA Form 3294-R (Figure 5-10, page 5-12) has been designated as a multiuse form used to request, receive, transfer, and turn-in unopened T-Ration and UGR modules, boxes of MREs and loose, undamaged semiperishable A-, B-, and H&S-Ration components. A DA Form 3294-R facsimile may also be used when an automated ordering system is available. Audit trails for ration components

are established through recording items received and disposition data on DA Form 5914-R. Complete accountability requirements, procedures and instructions for the AFFS are in AR 30-21.

Managing Supplies

Class I and food operations personnel must manage supplies so that only quantities required are consumed. All residuals are to be returned to the supply point or transferred to another field kitchen. Both the receiver and the issuer sign the DA Form 3294-R or the automated issue document. The MMC can audit the DSU Class I supply point anytime during the deployment. During peacetime training, an audit of the DSU at the end of the operation by the MMC is mandatory.

RATION REQUEST/ISSUE/TURN-IN SLIP
 For the use of this form, see AFM 20-21; the procuring agency is ODCS/LOG

To: 1st FSC A McCoy
 From: HHC 1/63 Inf Bn
 Date: 1 Feb 95

Consumption date(s):
 Number of meal(s) requested

Items	U			B			L			D			Total	Supply action	Unit price	Dollar value
	U	B	L	B	L	D	B	L	D	B	L	D				
8970-01-220																
T-Ration Bkft #4	Mod	22											22			
8970-01-220																
T-Ration L/D #4	Mod		23										23			
A-Ration	ME															
UHT Milk, White	CO	662		362									1024			
UHT Milk, Choc	CO	100		400									500			
Bread, White	SV	508		508									1016			
Bread, Whole Wheat	SV	254		254									508			
Apples, Fresh	EA			762									762			
Oranges, Fresh	EA	762											762			
Cereal, Assorted	EA	200											200			
8970-00-149-1094																
Meal, Ready to Eat	BX		64										64			
Requested by: 570 Tim Montan			Issued by:										Total dollar			
Received by:			Received by:										Control no.			
Page no.	No. of pages	Remarks:														

DA FORM 3294-R, JUN 80
 REPLACES EDITION OF MAY 84, WHICH IS OBSOLETE

Figure 5-10. Sample DA Form 3294-R

Class I Inventories

The rapid movement of subsistence through the theater reduces the need for scheduled inventories at DSU or RBP levels. The concept of operations is to maintain only minimal stocks at these levels to meet emergency requirements. Rations received from the theater subsistence distribution activity are issued on the same day to using units and stocks are not maintained at RBPs. Inventories at the COSCOM and theater subsistence distribution activity levels will be conducted at the direction of the theater Class I manager. Cyclic inventories are recommended to assist in maintaining asset visibility and to reduce excess stocks at these levels.

ORDERING RATIONS

Ration requests must be submitted in accordance with the established request and issue schedule for theater or supporting Class I point. This will normally be a minimum of 36 to 48 hours prior to the issue. Present-for-duty strength and unit remote feeding requirements provide the basis for the ration request. Commanders must estimate their unit status and direct the FOS as to the type of ration mix to request. While commanders may select the ration type desired for each meal period, the theater Class I manager will determine the menu number which will be supplied for that ration type. The RBP

will make every effort to maintain uniformity with the established issue schedules and the approved feeding plan for each day. Figure 5-11 is an example of an approved feeding plan ration cycle.

Asset Visibility

The intermediate MMCs will have asset visibility for all Class I items in their area and the stocks that are en route to them. The TAMMC (or highest available) Class I manager will be responsible for receiving the requirements, determining the availability of components, making substitutions where required, providing instructions to the subsistence platoon at the GS and DS RBPs, and requesting the transportation to ensure that the rations are delivered in a timely manner.

Cross Leveling

The division and brigade food advisor will have to be aware of the operational status of the units, the feeding cycle, and the status of rations that are within and flowing into his operational area. He must monitor incoming rations and assist in cross leveling to accommodate meal schedule changes that result from METT-T and other operational changes.

DAY OF EXERCISE/MEAL	IF THE UNIT SELECTS	THE MENU RECEIVED
1/Breakfast	UGR H&S	UGR H&S Menu 4
	UGR B	UGR B Menu 2
	UGR A	UGR A Menu 1
1/Dinner	UGR H&S	UGR H&S Menu 5
	UGR B	UGR B Menu 4
	UGR A	UGR A Menu 1

Figure 5-11. Example of an exercise ration cycle

Ration Requests

T-Rations are requested by module. UGRs (A-, B-, and H&S), A-Rations and Standard B-Rations are requested by the FOS by meal. Class I personnel calculate the number of modules required. B-Ration and medical unique B-Ration components are requested by item. B-Rations also may be modularized if prior coordination has been affected by the MACOM with DPSC. MREs are requested by box (12 per box). The FOS prepares a Class I spreadsheet (see Figure 5-12) or DA Form 3294-R to identify the rations needed.

Computing T-Ration requirements. T-Ration requirements are determined by the total number of soldiers to be fed at each site divided by 18. Any resulting fraction must be rounded up to the next higher module. Remote site feeding must be considered when determining T-Ration requirements. For example, if the FOS knows that one remote site has eight soldiers, a second remote site has 11 soldiers, and a third remote site has nine soldiers, and the entree size is nine, there are two entree pans in the modules. However, three modules are still required since each module has only one starch,

vegetable and dessert pan. The T-Ration calculator is designed to assist the FOS in preparing requests for T-Ration modules. The calculator wheel is constructed of heavy flexible plastic stock and fits in the pocket of the battledress uniform. It may be obtained from your supporting TASC by ordering GTA 10-1-12, T-Ration Calculator.

Supplemental and enhancement items for T-Rations. The T-Ration must be supplemented by bread and milk to make the meal nutritionally complete. See Chapter 3 for authorized supplements and enhancements. While supplemental items are required to make the T-Ration nutritionally adequate, enhancement items provide a more acceptable and complete meal.

Warming and cooling beverages. Warming and cooling beverages are in addition to the daily authorized beverage allowances in the field menu. Normally, the unit requests this allowance through the installation food advisor. It is not automatic and must be an integral part of the feeding and deployment plan.

UNIT	DAY OF EXERCISE				
	N	N+1	N+2	N+3	N+4 N+5
HHC 1st Bde *PFD	MRE/MRE/MRE (50/50/50)	MRE/MRE/MRE (100/100/100)	UGR H&S/MRE/UGR H&S (100/200/200)	UGR H&S/MRE/UGR A (200/200/150)	
361st MP *PFD	MRE/MRE/MRE (10/10/10)	MRE/MRE/MRE (10/50/50)	UGR H&S/MRE/UGR H&S (50/100/100)	UGR H&S/MRE/UGR B (100/75/50)	
21st Sig Co *PFD	MRE/MRE/MRE (10/10/10)	MRE/MRE/MRE (10/25/25)	UGR H&S/MRE/UGR H&S (25/50/90)	UGR H&S/MRE/UGR A (90/90/90)	

* Present-for-duty strength. Any remote feeding must be included in your computations.

Figure 5-12. Example of a Class I spreadsheet

Substitutions and deletions. Changes may be made to the prescribed field menu. However, through effective predeployment Class I planning, substitutions and deletions can be kept to a minimum. The TISO and/or Class I officer must keep supported units advised of substitutions or deletions on a timely basis.

Submission of Requests

The FOS (or unit personnel) uses voice communications to request rations from the supporting RBP. If voice communications capability is not located in the proximity of the field kitchen or are disrupted, handwritten information can be hand-carried to the supporting RBP for entry into the automated system. During peacetime operations and until this concept has been evaluated, tested, approved, and fielded, existing procedures using DA Forms 3294-R (Figure 5-10, page 5-12) may be used if voice communication links are not available.

RBP (DSU)

The RBP forwards all customer requests to the Class I manager with information copies going to the supporting COSCOM MMC, DMMC, DMMO, and SMO. This will be the initial entry point into the automated Class I system. Once the action request leaves the ULLS entry point and enters SARSS-O at the FSB, MSB, or CSB, it becomes a requisition.

Theater Subsistence Distribution Activity

The MMC converts ration requests to line item requisitions using the standard Army field menu or theater menu as a guide for the required issue factors. The theater Class I manager determines whether on-hand plus due-in stocks are sufficient to fill new requirements. When required, requisitions are released to the NICP for resupply.

RECEIPTS AND ISSUES

MMCs generate MROs (automated Pull System list for each unit), which are attached to the subsistence when it is shipped forward to the RBP by

the subsistence platoon. The senior person on duty at the RBP must inventory the subsistence received and acknowledge receipt by signing and dating the automated form provided. Part two of the form is signed by the individual picking up subsistence for the unit from the RBP. Once the RBP has issued the subsistence to the field kitchen, the item is considered consumed. When the DA Form 3294-R is used as the request and issue document, two copies are kept by the RBP. The RBP balances its DA Form 3294-R receipts against its DA Form 3294-R issues to ensure accountability. Units that do not normally order directly from an MMC or TISA must be prepared to do so if the intermediate support elements are not participating in the operation.

Field Kitchen Receipts

All quantities of subsistence listed on the automated issue document or DA Form 3294-R must be verified and signed for in the next available "Received By" block. Check the amount issued by counting the items. When you receive less than you ordered, enter only the amount received on the issue document. Let the Class I personnel know at once so they can make up the shortage before you need the food. All rations must be inspected for condition before the issue documents are signed. Food service personnel must also inspect subsistence when cans are opened and when food items are in their preparation phase. Whether food is picked up or delivered, check its shape, color, and odor. If you believe that the food is not safe to eat, make a note on the issue document and ask veterinary personnel to check the items. Do not throw out or destroy food until instructed to do so by veterinary personnel or the TISO.

Semiperishables. Once cans have been opened, inspect the contents for signs of deterioration or spoilage before serving. Segregate for veterinary inspection tray packs or other canned items with any of the following defects:

- Items that show any evidence of leaks, foam or product stains on the exterior. Items

with any pin holes, seam fractures or incomplete seals.

- Rust that actually penetrates the tray pack or can, causing leakage or excessive end seam rust that cannot be removed with a soft cloth and which enter the product when it is opened.

- Dents that are so severe that they cause leakage or that make it impossible to open the product safely.

- Swollen or outwardly distended tray lids bulging from internal pressure or swells caused by physical damage such as dents or over heating.

- Buckles or bends in the top and extending into the end seam of the tray pack.

Dry stores. Check dry stores, such as cereal, flour, and sugar for signs of exposure to grease or moisture or contamination from insects or rodents. Do not accept open containers unless it is clear they were opened during ration breakdown operations. If a container is discolored, open it and make sure the food is not damaged or spoiled.

Perishables. Check the condition of all perishables received. Inspect foods as discussed below.

Fresh fruits and vegetables. Check fresh fruits and vegetables for mold, wilt, rot, and other defects. Remove the bad items and store the rest.

Meats and poultry. Inspect meats and poultry for color, odor, damage, and slime. Unfrozen meat should be firm and elastic to the touch. No meat should feel slimy, sticky, or dry. There should be no blotches or evidence of slime or sour smell. Check poultry and cuts of meat to see if they are the same as those listed on the issue slip and menu.

Frozen foods. Check frozen foods for firmness and for signs of thawing and refreezing. If the package of food has ice on the inside, this is a sign that the food has thawed and been refrozen. Do not accept this food.

Issues

When the FOS issues rations for preparation, they must be posted to DA Form 5914-R. Accountability for the UGR or T-Rations is based

on the number of main entree servings per module or T-Ration pan. Posting and accounting for A-Rations is based on the number of main entrees received from the supply activity. For rations issued by the kitchen for airlift, post the number issued, the date and the aircraft tail number on the DA Form 5914-R.

Unopened Rations

All unopened modules, boxes of MREs, and loose semiperishable and B-Ration items are turned in by supply distribution channels until they are returned to the supporting TISA, per the turn-in schedule established by the TISA. DA Form 3294-R is used to turn in subsistence. When rations are turned in, the main entree or meal amount is posted to the unit's DA Form 5914-R. In active theaters, each level of distribution attempts to cross level supplies and reissue them to consuming units before turning them into their supporting Class I activity.

Forced and Mandatory Issues

During inspections, VSP may discover items in stock that must be issued at once to prevent loss to the government. Normally, these items are perishable and are forced- or mandatory-issued for immediate use (AR 30-18, Chapter 11, Section IV explains forced- or mandatory-issued items). They must be accepted, but only in the amounts that may be used before the next issue. Before forced- or mandatory-issued perishables are stored, remove and discard any visibly spoiled or damaged items. Use any forced- or mandatory-issued item as soon as possible.

Reheated T-Rations

Subsistence to be discarded after three beatings (two reheats, T-Ration only) or when determined by the FOS to be unfit for consumption will be entered on the DA Form 5914-R as shown in Figure 5-13, page 5-17.

STRENGTH REPORTING

Each day, each supported unit submits a DA Form 5913-R to its supporting field kitchen, see Figure 5-14, page 5-20. The supporting field kitchen consolidates all unit ration requests and submits a consolidated ration request to the supporting RBP, see Figure 5-15, page 5-21. DA Form 5913-R identifies by service component, the number of soldiers present-for-duty each day and the number of personnel paying by cash. Every third day, the FOS prepares a consolidated DA Form 5913-R and submits it to his RBP, see Figure 5-16, page 5-22. The RBP consolidates the DA Forms 5913-R from the supported units to show the consolidated service component data and meals sold for cash, see Figure 5-17, page 5-23. The FOS prepares an end-of-training report to the RBP at the conclusion of the exercise/deployment, see Figure 5-18, page 5-24. Complete instructions for use of the DA Form 5913-R are in AR 30-21.

SUBSISTENCE STORAGE AT FIELD KITCHENS

Subsistence storage actually begins with transporting rations. Requirements for vehicles used to transport rations are explained in the sanitation section of this manual and in more detail in TB MED 530. Improper storage causes loss from rodent or insect infestation or from deterioration because of excessive heat or moisture. The ISU-96 refrigerated container, Figure 5-19, page 5-25, is available in CTA 50-909. It provides the capability for transport and storage of perishable subsistence (frozen and/or chilled) and dry goods on the same trailer to brigade level and below. The ISU-96 offers the capability to not only maintain cool temperatures for perishables in hot environments, but to keep subsistence and other items warm to 70 degrees Fahrenheit in extreme cold weather environments. The ISU-96 is currently available through DLA contract DLA-413-93-D-8037 which became effective 17 Sep 93. Adding these refrigerated containers to CTA 50-909 will

make this critically needed system immediately available to users.

Transportation

Vehicles used to transport subsistence should be clean, free of moisture, and have pallets to keep subsistence off the bed of the truck. The front and rear flaps must be lowered and secured during transport. Subsistence vehicles are not to be used to transport garbage or petroleum products while transporting subsistence. The bed of the truck should be free of harmful protrusions such as nails that could puncture food containers. Ice chests or other insulated containers should be used to transport perishables when time, distance and outside temperature could cause the temperature to rise above required safe levels for refrigerated items and frozen items.

Storage

Proper storage procedures must be adhered to at the field kitchen site to prevent possible spoilage and contamination of rations. Follow the recommendations listed below for storage of perishables, semiperishables, and prepared foods.

Perishables. Units are authorized ice chests in accordance with CTA 50-909. Every effort must be made to keep the temperature of food in the ice chest below 41 degrees Fahrenheit (5 degrees Centigrade). The MKT and the KCLFF are equipped with ice chests as parts of the system. These are discussed in Chapter 9.

Semiperishables. Semiperishable foods last longer than perishable foods, but you must still store them properly. They can be affected by heat, humidity, insects and rodents. Storage racks or containers must be at least six inches from the ground. The following are some considerations for safe storage:

- Cover bulk food items to prevent contamination from dust and other debris.
- Store items like flour, sugar, and rice in their original containers and place them in metal

containers with tightly fitted lids to protect them from excessive heat, moisture, and infestation.

- Store hardy fruits and vegetables, such as potatoes and onions, in a dry place on dunnage to permit air to circulate around them to retard decay and spoilage. Highly perishable vegetables, such as bagged salad or lettuce, should be placed in an ice chest if possible. Only what can be used in a short time should be requisitioned.

Prepared foods. Store prepared food in preheated or prechilled insulated containers. Instructions for heating or chilling the containers are in Chapter 9 of this manual.

COLD-WEATHER FIELD FEEDING

Commanders at all levels must plan for extreme cold-weather operations. The three basic components of CWFF are equipment, rations, and procedures.

Equipment

Restrict the use of the MKT in CWFF to temperatures above 32 degrees Fahrenheit. Commanders must do a risk assessment when deploying the MKT in temperatures below 32 degrees Fahrenheit. These areas must be considered when assessing the situation: poor heat distribution with the MKT; condensation inside the MKT and mobility problems in transporting the MKT. Use tents to support the KCLFF. Some examples of suitable tents are the GP small tent and the GP medium tent. The unit provides assigned tents to the food service section. Other types of equipment and things to remember are discussed below.

Specially designed water trailers (trailer, NSN 2510-01-091-5167, and frame, NSN 2330-01-108-7767) are required. Each water trailer is equipped with swing-fire heaters.

Preventive maintenance and adequate pre-deployment testing is critical and must not be neglected.

The failure rate of equipment increases in extreme cold environments. This causes a need for more repair parts.

The current dining or sleeping tent authorized for zones 6 and 7 is the 10-man tent.

The Yukon stove (M-1950) is used to heat sleeping and work areas. Special safety considerations are necessary (for example, fire guards and positioning within the tent).

Rations

Soldiers' needs are greater in CWFF. Rations for CWFF are discussed below.

Soldiers are authorized 4,500 calories per day in extreme cold weather.

Units operating in extreme cold-weather may use the arctic T-Ration supplement.

Soldiers may be authorized a 900-calorie supplement on days when no arctic T-Rations or other hot supplemented meals are used.

Warming beverages are included in the dinner module of the arctic T-Ration module. Warming beverages (soup and coffee) may be authorized separately when arctic T-Ration supplements are not available.

Commanders are reminded that water is a nutrient and that soldiers need sufficient quantities. Soldiers' water requirements increase in extreme cold climates. For a more detailed discussion on individual and unit water requirements refer to FM 10-52.

MREs freeze at temperatures below 32 degrees Fahrenheit. Store rations to prevent freezing when possible. Use procedures in Chapter 6 of this manual for handling of MREs in freezing temperatures.

Personnel

Food service personnel require additional time and assistance in preparing rations in extreme cold-weather environments. KPs are needed to assist in sanitation at field sites.

STRENGTH AND FEEDER REPORT <small>For use of this form, see AF 30-21; the proponent agency is ODCALOG</small>		Unit/Organization: HHC, 1/63 Inf	To: 725 FSB	Date: 6 Feb 95
Report date	11 Feb 95	12 Feb 95	13 Feb 95	Total
Service component	Personnel present for duty			
U.S. Army (active)	425	425	425	1275
U.S. Air Force (active)				
U.S. Navy (active)				
U.S. Marines (active)	20	20	20	60
ARNG				
USAR				
Meals sold for cash				
Remarks:	B - MRE L - MRE D - UGR H&S	B - UGR A-Rat L - MRE D - UGR H&S	B - UGR H&S L - MRE D - UGR A-Rat	
Signature/grade: <i>Mike Francis, Cpt. Inf. Commanding</i>				Date: <i>6 Feb 95</i>

Figure 5-15. DA Form 5913-R completed as a consolidated ration request to the RBP

STRENGTH AND FEEDER REPORT For use of this form, see AR 30-21; the proponent agency is ODCSLOG		Unit/Organization:	To:	Date:
Report date:	11 Feb 95	HHC, 1/63 Inf	725 FSB	14 Feb 95
Service component	Personnel present for duty			
	11 Feb 95	12 Feb 95	13 Feb 95	Total
U.S. Army (active)	390	385	405	1180
U.S. Air Force (active)				
U.S. Navy (active)				
U.S. Marines (active)	15	15	12	42
ARNG				
USAR				
Meals sold for cash	4		2	6
Remarks:				

Signature/grade: *Mike Francis, Cpt, Inf, Commanding* Date: *14 Feb 95*

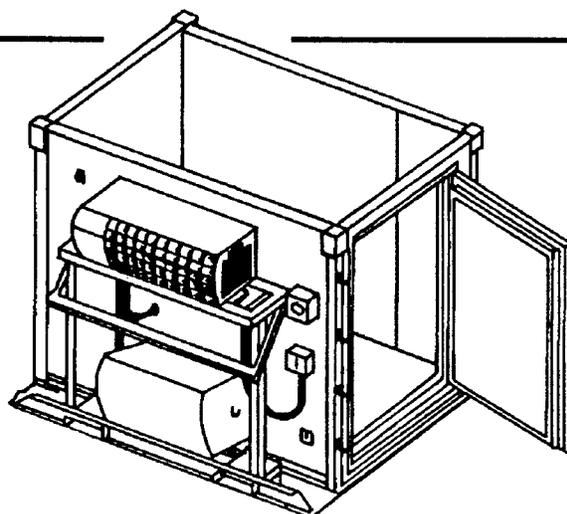
DA FORM 5913-R, JUN 90

Figure 5-16. DA Form 5913-R completed as a consolidated report to the RBP

STRENGTH AND FEEDER REPORT <small>For use of this form, see AR 30-21; the proponent agency is ODCSLOG</small>		Unit/Organization:	To:	Date:
Report dates	11 Feb 95	725 FSB	DMMC 25th Inf Div	17 Feb 95
Service component	Personal present for duty			
U.S. Army (active)	1565	1565	1565	4695
U.S. Air Force (active)	20	20	20	60
U.S. Navy (active)				
U.S. Marines (active)	35	35	35	105
ARNG	50	50	50	150
USAR				
Meals sold for cash	10	10	10	30
Remarks:				

Signature/grade: *Tim Alden, Cpt. Inf. Commanding* Date: *17 Feb 95*
 DA FORM 5913-R, JUN 90

Figure 5-17. DA Form 5913-R completed as a consolidated report from the RBP to a higher supply activity



CAPABILITIES

- Provides storage and transport of temperature-sensitive materials and perishable items.
- Completely intermodal.
- Two-way forkliftable with standard 10,000-lb fork trucks.
- Certified for external helicopter lift.
- Maintains temperature in sub-zero environments through the integral heating unit.
- Reduces total airlift requirement.
- Eliminates dry ice in aircraft.
- Maintains constant temperature during transport for several hours.
- Operates with diesel fuel or electrical power.
- Temperature range is -30° F to +70° F.
- Security provisions for high value items.

Figure 5-19. ISU-96, refrigerated container

Maintenance

Maintaining mechanical equipment is exceptionally difficult in the field during cold weather. Additional time is required to perform tasks. This time lag cannot be over emphasized and must be included in all planning. Bulky and clumsy clothing that soldiers must wear in extremely cold areas reduces personal efficiency. At temperatures below -20 degrees Fahrenheit, maintenance requires up to five times the normal amount of time. Several requirements that affect maintenance directly and require planning and preparation before a cold weather operation are:

- Site clearance is difficult. More man-hours and engineer support may be required.
- Work productivity is reduced about 50 percent when temperatures go below 20 degrees Fahrenheit.

- Daylight is limited in extreme cold-weather climates. Lighting and maintenance tents are recommended.
- Shelter is needed for equipment requiring maintenance.
- Proper clothing and tools are required for mechanics.
- Adequate portable heaters must be available.
- Suitable methods must be in place to store and issue antifreeze, fuels, hydraulic fluids, and lubricants.
- Adequate supplies of repair parts must be maintained.
- Sufficient equipment for snow and ice removal must be available.

Safety

Safety is as important in CWFF as it is in any other area. The following are additional considerations for CWFF safety:

- Because MRE towelettes have an alcohol base, they may stick to your skin or may cause frostbite when used in extreme cold climates.

- Metal objects should not come in direct contact with your skin.

- Bulky clothing, fatigue, and cold hands and fingers add to the risk of accidents. Safety must be stressed and personnel must be aware of the limitations and hazards of working in extreme cold conditions.

FORCE PROVIDER ORGANIZATION AND DEPLOYMENT

The Force Provider is assigned to a TAACOM or a COSCOM with further detachment to an appropriate support battalion headquarters. The company may be detached to operate separately in an austere environment. The Force Provider cadre unit, augmented with military or civilian personnel, will be the primary operator of the Force Provider. Currently under development is the TM for direct support and general maintenance of the Force Provider System. It will provide detailed information for the operators of Force Provider. Figure 5-20, page 5-27 gives the layout of a 550 soldier module of a Force Provider unit.

Organization

The Force Provider company is a TOE unit organized under the "TYPE B" alternate. The requirement for US military personnel is thereby significantly reduced. The number and type of military personnel allocated are based on minimally acceptable levels for supervisory functions. Vacancies existing in the B-TOE are indicative of the types of positions which can be filled by US civilians and/or non-US personnel. The number of non-US personnel will be determined by the MACOM commander to which the unit is assigned

and will depend upon capacity of available personnel to produce, number of shifts required, and other local factors and conditions. The Force Provider Company consists of nine major elements which include:

- Company Headquarters.
- Support Operations Section.
- Maintenance Section.
- Provider Platoon Headquarters (x6).
- Food Service Section (x6).
- Laundry and Shower Section (x6).
- Water Distribution Section (x6).
- Facilities Support Section (x6).
- Petroleum Distribution Section (x6).

Employment

The Force Provider offers a vast range of capability across the spectrum of military operations. It can be deployed early into a bare base area and used to supplement staging or reception facilities and for acclimation purposes. As the theater begins to mature, it could be used as a part of a vehicle rest stop in support of troop movements over long distances. As the combat forces are deployed forward, Force Provider will be used for its primary purpose of supporting the front line soldier.

Force Provider may be employed in direct support of a brigade or battalion size element. It may also be employed to provide support on an area basis, servicing all soldiers in a given geographical area. The modular configuration of Force Provider allows the flexibility needed to provide support based on the strength of the supported organization.

This system also provides support to intermediate support bases, noncombatant evacuation operations, reconstitution efforts, and during redeployment staging.

Force Provider may also be used to support US civil authorities in non-military operations such as disaster relief, interagency support, and humanitarian aid.

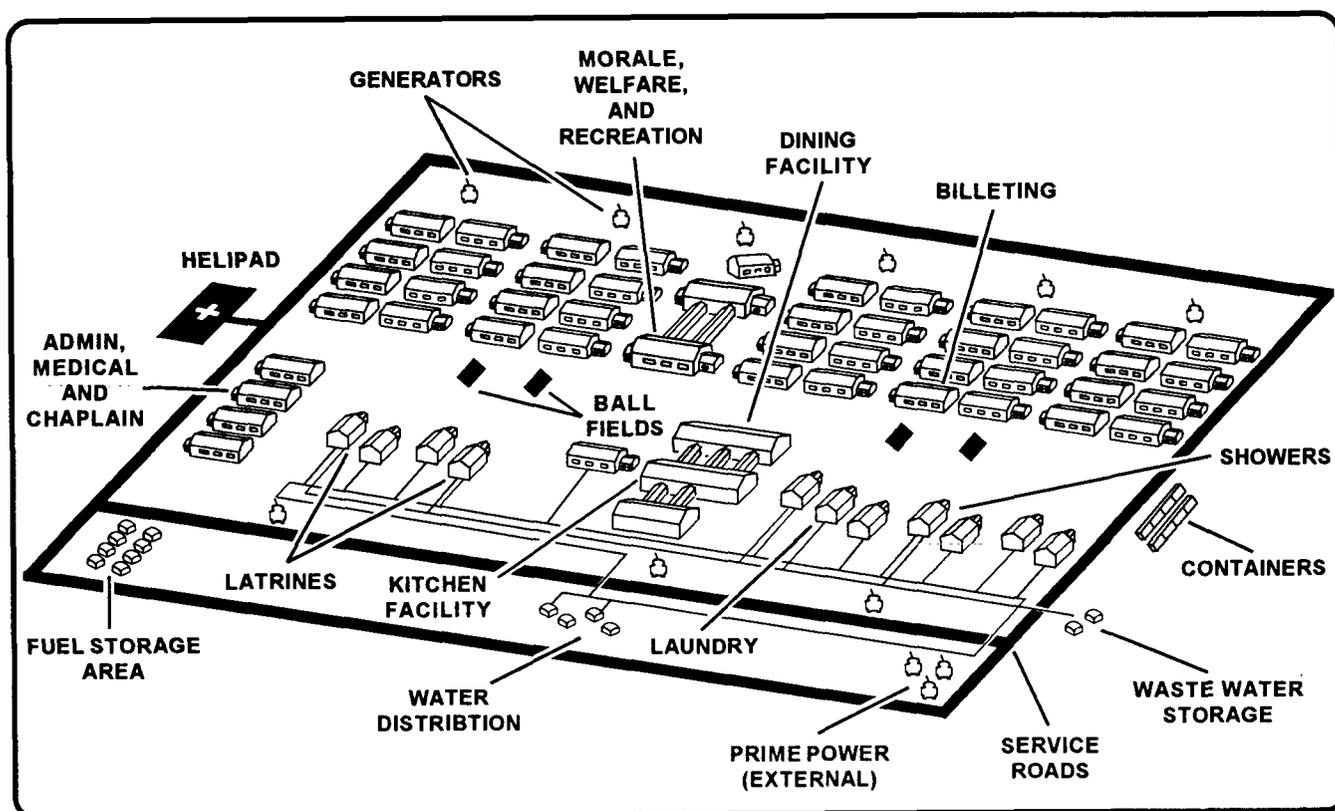


Figure 5-20. Force Provider

Force Provider Food Service Operations

Food service operations employed by Force Provider differ from other tactical food service operations. The mission of the food service section is to provide the capability to prepare and serve three cook prepared meals per day. A brief description of the Force Provider Food Service elements are discussed below.

Feeding standard. To provide soldiers with three cook prepared meals each day. The primary rations used will be the A- and B-Ration components.

Personnel. US military personnel staffing requirements shown in the type B TOE may be used for staffing only when authorized by the Department of the Army. However, staffing of food service personnel to perform the food service operation will primarily come from contractor personnel, local nationals,

or US military personnel borrowed from other military units. Current type B TOE Force Provider staffing requirements for the six Food Service Sections under strength level one when authorized by the Department of the Army are shown in Table 5-2.

Table 5-2. Force Provider staffing requirements

TITLE	MOS	GRADE	NUMBER
Food Operations Sergeant	92G40	E-7	6
First Cook	92G30	E-6	6
Cook	92G20	E-5	18
Cook	92G10	E-4	36
Cook	92G10	E-3	36

Equipment. Kitchen equipment used for Force Provider will consist of standard TOE field kitchen equipment supplemented with additional required kitchen equipment. The major kitchen components of the Force Provider include:

- Field kitchen modular.
- Extendible modular kitchen tents.
- Kitchen, company level field feeding.
- M-59 field range outfits with M-2 burner units.
- Range outfit/oven assembly field gasoline.
- Ice making machine.
- Mechanical refrigeration.
- Water chiller.
- Sanitation center (includes Temper tent).

Training for Force Provider. The initial training base for the subsystems of the Force Provider has been established in TRADOC proponent schools. The skills and knowledge required to operate and maintain the Force Provider are currently taught in resident courses for each individual subsystem.

CAMOUFLAGE

Camouflage is one of the basic weapons of war. Correctly used, it can mean the difference between a successful campaign and defeat. To the individual, it can mean the difference between life and death. Regardless of the type of warfare— all-out nuclear or internal defense operations— camouflage remains important. Small semi-independent units must furnish their own security, reconnaissance, and surveillance. They must be able to exist for long periods of time with minimum control and support from higher headquarters. As a result, their success will depend largely on their ability to remain concealed from the enemy. This, in turn, will depend on their knowledge and proper execution of the camouflage principles.

Responsibilities

The Class I point and field kitchen area must be camouflaged to keep enemy aircraft, ground

forces, or infrared sensors from finding it. The following are some precautions to take:

- Do not let the troops gather in large groups to eat.
- Make sure the area and equipment cannot be seen from the air.
- Screen the dining area from ground observation if it is set up near the front lines.
- Bury or retrograde disposable dishes and utensils, tin cans, and litter from packaged rations. Camouflage the area where refuse is buried. Class I personnel must be aware of policy on retrograde or disposal of condemned rations. **NOTE: In some cases, arrangements are made to backhaul garbage. Make sure food service and Class I personnel are aware of the policy on garbage disposal in their area of operations.**
- Camouflage equipment and other things that might reflect light and keep them out of sunlight. Specifics about using camouflage are in FM 5-20.

Blackout Procedures

Use light discipline when required. If the kitchen has to black out completely, stop cooking. Since kitchens are hot, infrared sensors could find the kitchen area. Eat MREs during these periods. Ensure the RBPs use appropriate lighting during night operations.

RECORDS MAINTENANCE

All records of field operations must be maintained per requirements of the MARKS. Refer to ARs 30-21 and 25-400-2 for guidance on the establishment, maintenance, and destruction of files. Class I personnel and FOSs must ensure that account close-out procedures are followed and that accountability and audit trails are complete. Records of field operations provide a basis for forecasting requirements on future operations.

EVALUATING OPERATIONS

Commanders, Class I managers, FSOs, food advisors, and FOSs all have responsibilities related to

evaluating field food service and Class I operations. An evaluation checklist or SOP is needed to assist in evaluating operational effectiveness. Figure 5-21 may be used but should be modified to meet unit

requirements. No single checklist can cover all aspects of every field operation, but an established checklist or SOP is helpful in standardizing the evaluation process.

ADMINISTRATION

- Effective use of personnel (Class I, Food Service, KPs).
- Current regulations and manuals on hand (book set).
- Current and appropriate SOPs on hand.
- Subsistence estimate and strength reporting procedures current.
- AFFS accountability forms completed and maintained correctly.
- Cash and cash meal payment sheets secured (if applicable).
- Inventory records maintained (as required).
- Vehicle loading plans available and used.
- Subsistence residuals properly disposed of.
- Excess subsistence levels managed properly.

FIELD KITCHEN SITE (GENERAL)

- Appropriate fire extinguishers on hand and serviceable.
- Refueling and preheating areas are clearly marked and located at least 50 feet from stored fuels and kitchen operating area (tent, MKT, KCLFF).
- No smoking signs posted.
- Gasoline storage site at least 50 feet from the kitchen and from where burner units are lit.
- Mess kit laundry line/sanitation center at least 50 feet from the kitchen.
- Soakage pit clearly marked and at least 90 feet from the kitchen.
- Garbage pit clearly marked and at least 90 feet from the kitchen and 100 feet from water source.
- Incinerators at least 150 feet downwind from the kitchen.
- Good cover and drainage available for the water trailer.
- Water trailer treated and checked for chlorine levels in accordance with FM 21-10 (unit field sanitation team).
- Water trailers cleaned and inspected in accordance with TB MED 577.
- Kitchen site camouflaged (if applicable). Camouflage netting secured to within 6 inches of the ground.
- Handwashing site available for diners and kitchen personnel.
- Soap and brushes available at handwashing site. Towels are optional.
- Burning or burying used for trash disposal in accordance with FM 21-10 or hauling trash and garbage out of field site in accordance with local guidelines.
- Sanitation center properly established (if available).

CLASS I POINT

- Accessible to customers. Traffic flow established to enhance ration transfer and reduce time on site for customers.
- Roads sufficient to handle traffic volume.
- Directional signs posted.

Figure 5-21. Checklist for evaluating Army field feeding and Class I procedures

- Security measures in place and enforced.
- Quantity and identity verified when subsistence received at class I point.
- Condition and quality checked.
- First in/first out inventory control used.
- Rations stored on pallets or shelving.
- Semiperishables kept dry, stored out of direct sunlight, and in a manner to protect against pests and rain.
- Adequate refrigeration available, set up, and operable for perishable subsistence storage.
- Only potable ice used.
- Temperature logs maintained for all refrigeration.
- Pesticides and cleaning products maintained separately from food.
- Pest control measures adequate.
- Proper administrative procedures in place to provide accountability for subsistence. Requisitions, receipts, issues properly documented.
- Co-located with water point operations if possible.

PERSONNEL

- Uniforms clean.
- Hair properly cut and covered.
- Hands clean, fingernails clean and cut short.
- No jewelry worn except plain wedding band or medical alert ID.
- Personnel appear to maintain adequate personal hygiene.
- Food service personnel inspected at the start of work by supervisor for infected cuts, sores, burns, and signs of respiratory illness.
- No evidence of smoking in food preparation areas.
- Servers are courteous.
- Proper food handling techniques evident.
- All personnel demonstrate operator's knowledge of each piece of food service equipment, field expedients, field sanitation, and trash and garbage procedures.

FOOD PREPARATION AND SERVICE

- Adequate supervision (Supervisors visible during meal preparation and service).
- Meal hours adequate.
- Safety and tactical standards followed.
- Production schedule prepared correctly (if applicable).
- Appropriate recipes available and followed (if applicable).
- Appropriate and sufficient serving utensils available and used.
- Leftovers disposed of correctly.
- Food held and served at appropriate temperature (Correct temperatures maintained throughout the meal service).
- Food prepared in the correct quantities, palatable, and served on time.
- Correct portion control evident.
- Hot foods served last in cold weather.
- Serving line under protective cover (when available).

Figure 5-21. Checklist for evaluating Army field feeding and Class I procedures (continued)

- Serving line allows smooth flow of traffic.
- Staggered serving lines used for tactical situations.
- One-way, straight-serving line used for nontactical situations.
- Prompt replenishment of serving line items.
- Sanitation practices maintained in accordance with this manual, TB MED 530, and FM 21-10.
- Cooking utensils and equipment cleaned and stored to preclude contamination in accordance with TB MED 530.

KITCHEN AND KITCHEN EQUIPMENT/KITCHEN TENT/SHELTER (IF APPLICABLE)

- Located near good natural cover.
- Located on level ground which is free of projecting roots and rocks.
- Located on high, dry ground for good drainage of tent.
- Protected from wind.
- Adequate, nonabsorbent work tables available.
- Tables placed to avoid overcrowding.
- Orderly and efficient equipment arrangement.
- Available shelving clean.
- Appropriate liners (screening) for shelters available.
- Appropriate fire extinguishers available, visible, and serviceable.
- Replacement parts available for kitchen equipment, as appropriate.

MKT (IF APPLICABLE)

- Positioned on firm, level ground.
- Positioned free of large rocks and trees.
- Good water drainage available.
- Minimum operating area of 30 feet by 30 feet.
- Minimum overhead clearance of 11 feet.
- Trailer entrance turned away from windward side.
- Appropriate fire extinguishers available, visible and serviceable.

INSULATED FOOD CONTAINERS

- Adequate number of insulated food containers on hand to support feeding mission.
- All components serviceable.
- Containers tempered correctly (hot or cold).
- Time and temperature rules for potentially hazardous foods followed in use of insulated food containers (Four hours maximum time for holding PHF).
- Menu items labeled on containers.
- Containers used only with inserts.
- Containers sealed when not serving.
- Gaskets replaced after cleaning.
- Containers cleaned, dried, and stored properly between uses.

FIELD RANGE M59

- Accessory outfit complete.

Figure 5-21. Checklist for evaluating Army field feeding and Class I procedures (continued)

- Positioned on firm, level ground or on noncombustible material.
- Adequate ventilation available.
- All hinges serviceable.
- Ranges cleaned and maintained properly.

M2 BURNER UNIT

- No damaged generators in use.
- Pressure gauge serviceable and unit operated within acceptable limits.
- No cracked or threadworn filler caps in use.
- Gasket fits tightly.
- Leakproof fuel tank.
- Generator and preheater valves turned on and off.
- Stored under cover when not in use.
- Safety procedures used during lighting, transporting, operation, and maintenance.
- Burners cleaned and maintained daily.
- Knobs, handles and gauges present on all burner units.
- Heat protective gloves used when preheating and transporting units.

IMMERSION HEATERS (IF APPLICABLE)

- Combustion chamber free of gas, rust, and damage.
- Flue component free of rust or damage.
- Flue preheated for 1 minute prior to lighting.
- Heating pipes (four per heater) serviceable and free of soot.
- Leakproof fuel tank.
- Mounting clamps serviceable.
- Heat protective gloves used when igniting gasoline.
- Fuel valve adjusted until fuel flows in rapid drops but not in a fine stream.
- Soldier's face shielded from burner compartment during lighting or adjustments.

SANITATION AREA, MESS KIT LAUNDRY LINE/POT AND PAN WASHING AREA

- Site is sheltered and on level sandy or gravel ground.
- Good ventilation available.
- Scrap can is first can in mess kit laundry line.
- Three thirty-two gallon cans with immersion heaters placed on soakage pits.
- Proper water temperatures maintained.
 - Wash, hot soapy water 120° F to 150° F .
 - First and second rinse 170° F or higher.
- Mess kit laundry line rotated and cleaned at least every 80 mess kits, or more frequently as necessary.
- Brushes available for cleaning.
- Washed pots and pans allowed to dry properly before storage.

DINING AREA

- Handwashing device for diners available and maintained properly.

Figure 5-21. Checklist for evaluating Army field feeding and Class I procedures (continued)