**Field Kitchen Equipment**

This chapter provides an overview of unit MTOE and CTA field kitchen equipment. The Army's inventory of field food equipment ranges from heating devices used by the Soldier to heat individual rations to major end items of equipment used to operate mobile field kitchens capable of feeding hundreds of meals daily. Army hospital units use the same kitchen equipment sets that are described in this chapter. This assemblage and variety of equipment provides food operation team members the ability to prepare and serve quality meals to unit members and hospital in-patients during both training exercises and operational deployments.

Mobile Kitchen Trailer

5-2.       The MKT is a complete kitchen unit mounted on a trailer chassis that can be towed by a standard 2½-ton truck, Light Medium Tactical Vehicle (LMTV), 5-ton truck, or Medium Tactical Vehicle (MTV). Currently, there are eight models of the MKT in use. They are the MKT-75, MKT-75A, MKT-82, MKT-85, MKT-85S, MKT-90, MKT 95, and MKT 99. The MKT is normally issued to those Army units with an expeditionary mission including BCTs, support brigades, sustainment, and selected mobile surgical hospital units.

***Note.*** The Army has established a reset program for all versions of the MKT. Once the MKT has been upgraded through the reset program, it will then equal the capability of the model MKT 99.

Setup and Feeding Capability

5-4.       Four trained food service specialists can set up the MKT for operation in approximately 30 minutes. The MKT can support approximately 250 Soldiers per meal when using UGR-As and 300 Soldiers per meal when using the UGR-H&S.

Site Requirements

5-5.       Tactical operational environments are commonly linear with deep, close, and rear components. When selecting a site for the operation of the MKT, or any of the other Army field kitchen equipment, the first consideration is accomplishment of the mission, followed by security and safety. Commanders, leaders, and the SFOS must use all available resources including maps to identify terrain that will protect the field kitchen from enemy observation and fires while providing observation and fires into the possible engagement area. Additionally, leaders use intelligence updates to increase their situational awareness and understanding, reducing the possibility of the enemy striking at a time or in a place for which the supported unit and field kitchen is unprepared. Unit and food service leaders at the tactical level of operations must consider all aspects of three-dimensional battle and use standard control measures to organize security within their AO. Deployment of the MKT to support unit food service operations requires an area that is on firm and level ground with good water drainage and clear of large rocks and trees. The desirable area for normal operation is 30 feet by 30 feet with an overhead clearance of 11 feet. A minimum of 4 feet should be allowed between the kitchen (when it is packed up for travel) and any large obstacles in order to have sufficient space to expand the unit and install the ramps.

Configuration

5-6.       The MKT contains a metal roof that can be lowered for storage and transport or raised when food is prepared. After the roof has been extended to its full operational position, mosquito netting should be attached to keep flying insects out of the kitchen area. The kitchen also has detachable fabric sides to protect Soldiers from inclement weather.

Operational Conditions

5-7.       The MKT is designed for operation in extreme weather conditions, such as snow, high winds, rain, and extreme temperatures. All MKTs are equipped with fabric curtains and screens for operation in a variety of weather conditions. Follow the steps below to prepare the MKT for operation during cold or inclement weather:

  Partially close roof air vents to prevent entry of outside elements.

  Remove six fabric curtains from storage.

  Install the longest curtains on the sides and fasten them to the roof fabric flap.

  Install the two smallest curtains on the right side of the roof fabric flap (both ends).

  Install the two remaining curtains. Secure the bottom edge of the curtains to the ramps with rope tie-downs.

  Open and close kitchen exits as required with Velcro hook-pile tabs. Secure all ties around the tent poles rails, except at the entrances and exits.

  Install the cold weather skirt assembly (MKTs with the MKT-I kit).

 Caution

Restrict the use of the MKT (without the MKT-I kit) in cold weather to temperatures above 32ºF. Commanders and food operations leaders must complete composite risk management (CRM) when deploying all MKTs in temperatures below 32ºF. Risks are associated with poor heat distribution (from the waist up) within the MKT, significant condensation (condensation rapidly turns to ice at the end of the cooking process) buildup as part of the cooking process inside the MKT, and risk associated with mobility problems related to frame rigidity during transport of the MKT in severe cold weather.

Shipping Requirements

5-10.   The MKT-90, MKT-95, and MKTs upgraded to the MKT-99 standard from the reset program have the capability to be sling loaded by single point lift by the CH-47A/B/C/D helicopter and are easily transported by truck, rail, and sea. When preparing the MKT for rail, air, or sea shipment to a major training area or deployment, the MKT's height, length, width, and weight must be considered prior to shipment. Food service specialists should review unit SOPs for all shipping requirements. [Table 5-1](https://rdl.train.army.mil/catalog/view/100.ATSC/B3B43BC8-E3F8-4BB5-A575-A4A145D51E76-1300786037043/4-41/chap5.htm#_Toc240781767) provides MKT specification data. [Table 5-2](https://rdl.train.army.mil/catalog/view/100.ATSC/B3B43BC8-E3F8-4BB5-A575-A4A145D51E76-1300786037043/4-41/chap5.htm#_Toc240781768) provides the MKT weight dry and wet.

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| Table 5-1. MKT height, length, and width |
| Height | Length | Width |
| 93 inches (travel) | 171 inches (travel) | 92 inches (travel) |
| 132 inches (operational) | 201 inches (operational) | 152 inches (operational) |
|  | Table 5-2. MKT weight dry and wet |  |
|  | Model | Weight Dry (lb) | Weight Wet (lb) |  |
|  | MKT-75 | 5,480 | 6,020 |  |
|  | MKT-75A | 4,680 | 5,220 |  |
|  | MKT-82 | 4,500 | 5,100 |  |
|  | MKT-85 | 4,680 | 5,220 |  |
|  | MKT-85S | 4,680 | 5,220 |  |
|  | MKT-90 | 4,600 | 5,260 |  |
|  | MKT-95 | 4,600 | 5,260 |  |
|  | MKT-99 | 6,100 | 6,731 |  |
|  | ***Note.*** The dry weight of the MKT is without fuel and water. The wet weight of the MKT includes fuel in MBU units and water. |  |
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Containerized Kitchen

5-11.   The CK is a mobile, self-contained field kitchen configured in an 8-foot by 8-foot by 20-foot ISO container. The CK can be transported and deployed separately or mounted on its trailer (Chassis, Containerized Kitchen Trailer: 7½ Ton, 4-wheel Vehicle).

Setup and Feeding Capability

5-12.   Five trained food service specialists can set up the CK for operation in approximately 45 minutes. The CK can support approximately 800 Soldiers per meal using any of the group meals in the Army family of rations. The average meal preparation time is approximately three hours. The CK provides approximately 360 square feet of food preparation and service area protected from environmental elements.

Site Requirements

5-13.   When the CK arrives at the deployment site, all equipment necessary for setup and operation is packed inside the container. If the CK is mounted on a trailer, the selected site must have a minimum of 50 feet by 30 feet of level, open space to provide maneuvering room for the tow vehicle and trailer. The site must be level to a maximum elevation difference of 6 inches in 10 feet. The terrain must be firm, well drained, and relatively free of surface rocks and stones. If soil at the site is not dry and well packed, dunnage or other support materials must be placed under the jack base plates of the CK to prevent them from sinking into the ground. The slope of the terrain must not exceed 18 inches over the projected floor area of the expanded shelter (approximately 20 feet by 22 feet).

Configuration

5-14.   The overall layout of the CK is oriented around a central cook center located in the shelter core. The cook center houses four MBUs which can heat any of the following: the griddle, the steam table, two 10‑gallon or 15-gallon cook pots, and two baking and roasting pans (square heads) which can be set up on either the left or right half of the cook center. The cook center also serves as the dividing line between the food preparation and the serving areas. An aisle way allows personnel to freely move between the two areas without exiting the shelter. Integral to the cook center are provisions for both electrical and fuel connections for five MBUs. Four of these connections are fixed within the cook center to accommodate 10-gallon and 15-gallon pots, griddle, and one steam table. A fifth connection at the aisle way supplies the tray pack heater or the cook pot cradle assembly. The cook center also has a tray slide on the serving side for diner use. In the center of the work space, two tables are set up as a food preparation island which is accessible from all areas of the kitchen. The refrigerators, warming cabinet, sink, tray pack heater, oven, and pan rack are located along the perimeter of the expandable sidewalls. The tray pack heater and the oven are located at the mechanical room end, with electrical and fuel connections provided. The CK has two refrigerators located next to the personnel access door. In the serving area, two field tables and two storage cabinets are provided. The CK provides two access doors to the serving area. Personnel enter one door and exit the other. The field tables can be used as an extra length of food preparation surface or for laying out condiments while food is being served.

Shipping Requirements

5-16.   The CK meets ISO container standards and is easily transported by truck, rail, or sea. In addition, it is transportable in C-130 and larger Air Mobility Command aircraft. The container meets all ISO requirements for safe containers, including nine-high stacking in container storage areas. [Table 5-3](https://rdl.train.army.mil/catalog/view/100.ATSC/B3B43BC8-E3F8-4BB5-A575-A4A145D51E76-1300786037043/4-41/chap5.htm#_Toc240781769) provides the CK trailer equipment data.

| Table 5-3. CK data without trailer |
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| Length | 20 ft (6.1m) |
| Width | 8ft (2.44m) |
| Height | 8 ft (2.44m) |
| Weight (dry) | 14,080 lb (6392 kg) |

Modular Field Kitchen

5-17.   The MFK provides responsive, flexible, and mobile food service support to medical units in the field. The Food Container, Insulated Hospital Ward (FCIHW) and food preparation and service sets furnish addition items to support the patient feeding mission. The MFK is housed in a tent while subsistence storage and dining eating areas use MGPTS tents based on the unit's MTOE. The MFK is designed to support up to 250 personnel and patients. The MFK can be transported by a 5-ton truck or LMTV with a 1 ½-ton trailer.

Configurations

5-18.   The MFK is configured in two sections to support staff and patients by authorized beds per command level. Refer to FM 4-02.56, chapter 3, para 3-2, on number of authorized MFK per command level. The equipment is arranged to provide food preparation and cooking areas and serving lines. The TEMPER tent is equipped with one 8-foot fabric section with doorways on each side and screened roof vents with flaps. The fabric for the other section is provided with windows on each side and one stove pipe opening. The roof vents are designed to remove excess kitchen heat and/or fumes. Because the MFK is modular, it can be consolidated with other MFK modules to feed larger units. In cold regions, entrances to the tents should have vestibules with doors attached to cut down on air exchange. The MFK and FSC can be made into a complex by connecting vestibules. For additional information on how to prepare the MFK for operation under normal and unusual conditions, refer to TM 10-7360-208-13&P, chapter 2.