

## CHAPTER 8 - OPERATIONAL CATERING

0801. **Operational Catering Overview.** This chapter covers all aspects of operational catering both in the maritime and land environments. Operational catering will naturally differ depending on the environment in which catering is being conducted. The overriding principle is that the aim is always to provide as near normal a diet as possible in all environments. This will not always be possible due to the nature of the activity and the prevailing situation; in these instances the use of ORP may be necessary; however the aim must always be to migrate to fresh food whenever the operational tempo permits.

0802. **Catering Planning.** In order that a successful catering plan is developed to support operational activity it is essential that food service staff, and when appropriate the Delivery Partner (DP), are represented at all planning meetings and briefings. Food services have a major part to play in the maintenance of morale, health and thus operational capability. A careful balance will need to be struck between the requirement to conserve food stocks with the provision of a nutritious and wholesome diet. Applications for food supply for all overseas exercises should be made to DP through the appropriate FLC.

0803. **Food Services.** During operations the standard of food services must be maintained at the highest levels possible and food hygiene considerations must remain paramount in order to reduce the possibility of food related illness. Operations and exercises will each have requirements peculiar to the geographic location and type of support required; it is impossible to lay down standardised instructions for every possibility. Careful planning is essential, on a case by case basis, and a flexible approach must be maintained at all times.

### TYPES OF OPERATIONS

0804. **Maritime Operations.** Whilst there have been recent operations where maritime logistic support has been utilised in support of the land environment, Naval assets have traditionally operated as discrete forces. To complete successful Maritime Logistics Operations (Food), each class of ship has a set requirement of how many days' worth of food they are to hold, commonly known as endurance. The endurance figures will have a minimum and maximum (detailed in the confidential supplement to Chapter 3 of BRd 2002 (0301)) for which the ship is to ensure they are within the min/max parameters. The ship must take every opportunity to resupply so as to maintain their endurance. The minimum food holdings at any given time are set at 14 days for all classes (with the exception of MM/PPs); approval to drop below this minimum is the preserve of the Fleet Commander. With prior arrangement, ships in company with a Solid Support Ship (SSS) may order foodstuffs from the food supply contractor for storage in the RFA prior to deployment; this is known as storing transit loads.

0805. **Sea Based Logistics.** The provision of a responsive logistic support organisation is an essential requirement for a joint operation. Inherent mobility enables the sea base to provide support to chosen points over a broad front in the theatre. Additionally, the sustainability of the sea base allows the force to poise for extended periods of time in non-territorial waters until it is required, and then respond at short notice as a situation develops. The ability of the Solid Support Ships to warehouse and distribute foodstuffs into the Joint Operations Area (JOA) provides an additional route for operational food supplies.

0806. **Land Operations.** To accommodate the JRRF and NATO RRF, the logistical element has been structured to operate within the joint or combined environment. Army support for the Royal Marines and the RAF when operating in land environs is already established and, as articulated above, RN offshore support for land operations continues to be developed in order to facilitate ship to shore capability. The food element for catering support to deployed operations is currently met by a mixture of ORP and/or commercial food produce. Deployments may be extended on ORP if the operational situation dictates, however the aim is to move to fresh provisions as soon as the operational situation permits.

0807. **Land Based Logistics.** As part of Combat Service Support (CSS) the execution of effective in-theatre food service provision is the responsibility of the Logistic Support Staff. Bulk rations have to be transported from either the Sea Point of Disembarkation (SPOD), or the Air Point of Disembarkation (APOD), to the operational areas via the Lines of Communication (LOC). This requires a co-ordinated approach between food supply contractors, food supply specialists and military transport and distribution specialists.

a. **Food Supply “Push” System.** Distribution methods will naturally differ dependent on the prevailing phase of the operation and it is likely that in the early stages a “push” system of food supply will be adopted. This system is designed to place the responsibility for commodity selection with the supplier, utilising a provisioning plan, as opposed to the consumer. This system lends itself well to the distribution of ORP but has to be closely managed when distributing ambient and fresh provisions.

b. **Food Supply “Pull” System.** When the operational situation allows and food services staff is established a “pull system” for ambient and fresh provisions can be considered and implemented. This system is customer driven and requires trained catering specialists to place orders through the supply chain.

Frequency of delivery is dictated by the operational situation, the numbers requiring support and the logistic resources available. As a general principle it can be assumed that military warehousing and distribution will be required to cover the initial insertion of troops and will be further developed when the situation has matured sufficiently to allow greater use of contract support.

0808. **Air Operations.** The RAF has transitioned from a force mainly designed to fight from well-found Main Operating Bases (MOBs), to an expeditionary force, flexibly tailored to meet a range of threats and operational scenarios. The innate flexibility of air power must be matched by a correspondingly flexible support capability. Operations, including those in Europe, are now less likely to be conducted in areas with extensive Host Nation Support (HNS). Air power is constantly deployed over much wider areas. The escalation in the number of small deployments for non-war fighting tasks has increased the requirement for stand-alone support units. Catering support systems for deployed Air units mirror those in support of Land operations with the type and style of feeding being linked to, and dictated by, the operational tempo and the prevailing level of activity. The principles of ORP consumption, and the stated intention for the early transition to fresh rations, remain constant.

0809. **Air Operations - Logistics.** For single Service and during the early phases of developing joint operations, the procurement, storage and distribution of rations within theatre is the responsibility of the OC Deployed Catering Squadron (OC Dep Cat Sqn), or his/her nominated representative. Once a mature food supply system is in place OC Dep Cat Sqn has the responsibility for the collection, storage and distribution within RAF, or RAF led, feeding sites. This system differs slightly from the Land Forces method as the RAF maintains the responsibility for the collection of rations from hub or spoke locations. Traditionally, 3 MC Sqn provides catering support on deployed operations. Where 3 MC Sqn is not deployed, units are responsible for their own ration supply arrangements and will generally deploy with dedicated chef support. In this instance the method of supply would be linked to the most suitable resource available.

## STAFFING/PERSONNEL

0810. **Maritime Logistics Personnel.** Warships and Submarines are sea based weapons platforms, and whilst the catering function is an essential part of maintaining the fighting platform and is paramount in the sustainment of personnel, it nevertheless must compete for resources within the hull space available. The lack of storage space, for dry, chilled and frozen foodstuffs makes the utilisation of pre-cooked, high tech products extremely limited within current hull designs. Thus, the requirement for professionally trained catering specialists employed within Naval vessels is a vital factor in maintaining the current operational effectiveness of sea-based units. Furthermore, during periods of tension or war it is necessary to conserve food stocks to

increase operational endurance, this must be achieved by the careful balance of controlling issues whilst presenting attractive menus. The design of future warships will continue to maintain the primacy of weapons systems, and thus, the provision of catering areas will remain a secondary consideration during the design and build of future hulls. In addition to the catering function all personnel serving at sea are required to meet “whole ship” activities such as replenishing at sea (RAS), fire fighting, damage control and first aid in addition to watch keeping and communal duties. Therefore highly trained uniformed catering manpower will continue to be a key element in meeting the future maritime operational requirement.

**0811. Army Food Services Personnel.** The feeding requirement for those directly engaged in, and those in support of, the fighting element is currently met by 24 Hr ORP which are individually held and heated rations. However, during operations there is also a requirement for collective feeding, either to meet the requirements of headquarters staff, or to provide a centralised production, service and distribution solution. The provision of 10 Man ORP; the supplementing of 10 Man with commercial food produce; or the provision of purely commercial food produce are all options available to commanders. Undertaking large scale feeding using operational, fresh or ambient rations requires specialist training. Food hygiene considerations and the requirement to operate specialist equipment in austere environments make it essential that skilled catering manpower is deployed on all operations where a collective feeding solution is required. Army caterers will be required to undertake a wide range of military tasks in support of their Units; therefore soldiering skills and flexibility are key to the maintenance of effective catering manpower. Units deploying should deploy with sufficient chefs to cover the additional feeding requirement. Generally this is based on a 1 in 50 ratio but set figures can be calculated using AGAI 145.

**0812. Royal Air Force Catering Personnel.** In-theatre Deployed Operating Bases (DOBs) are important strategic assets and as such are vulnerable to attack. Personnel will be required to operate these bases for prolonged periods and require high standards of messing in order to maintain morale and operational effectiveness. In the deployed Air environment there is the additional dimension of flight safety and a need to ensure that aircrew receive a safe and balanced diet at appropriate intervals in the flying programme. Furthermore, all deployed caterers must be conversant in common core skills to enable them to undertake the full range of military duties. In addition to the tasks above, Trade Group 19 covers a broader spectrum of activity including service accommodation management, the provision of welfare support and general duties. DOBs are manpower intensive units whose catering requirements are in general met by group feeding solutions. The importance of trained skilled military chefs/caterers in these locations is paramount and the reasons for maintaining skilled uniformed RAF manpower are similar to those for the Army.

**0813. Contractors Support to Operations (CSO).** It is likely that as operations become more enduring, activities may be enhanced by the use of contract support. For the most part this will result in contractors being used in relatively benign environments where there is a readily available workforce to draw upon. The decision to use contractors, and the level to which it is deployed in theatre, will involve a case by case consideration of the prevailing degree of military and commercial risk. The key issue to the deployment of contractors is the balance of risk and this decision normally rests with the military commander in situ. Further details relating to the rules and regulations regarding utilisation and management of contractors are contained within JSP 567<sup>1</sup>.

## **FOOD SUPPLY FOR OPERATIONS AND EXERCISES**

**0814. Introduction.** This section introduces food supply in operational theatres as well as exercises in detached locations. Food supply to small units on exercise detached away from their parent unit in the UK will be totally different to medium or large-scale operations or exercises in foreign countries. There are a variety of methods of dealing with different circumstances and these are briefly described below. The specific food supply solution and accounting procedures will be detailed in the Operation/Exercise Mounting Instruction issued by the Lead FLC prior to

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<sup>1</sup> JSP 567 is being transferred to the DLF.

deployment. Further guidance can be sought from the Chain of Command who will consult with the DP and DE&S CMO.

- a. **Public Funded Messing (PFM).** The current PFM contractor should be used to support Operations and Exercises worldwide. It may be that an amendment to the PFM contract is required and in this instance, the FLC will approach the DP with the proposed food supply solution and the DP would negotiate with DE&S CMO to amend the contract.
- b. **Local Contract.** A local contract may be let in-Theatre where an acceptable quality of product can be routinely supplied and value for money can be demonstrated. The TLB or DP may carry out the letting of the contract. For operations, this would only happen if prevailing political/military conditions allowed. For recurring exercises, there may be a dormant or enabling contract that is activated for the period of each exercise.
- c. **Cash In Lieu Of Rations (CILOR).** For small scale operations and exercises, it may be appropriate to purchase rations locally using CILOR outside of a contractual situation. Details on CILOR are explained in JSP 456 Pt.2 Vol 2 Ch 7.
- d. **Royal Logistic Corps (RLC).** RLC units have the capability to store, handle and distribute Class 1 commodities.
- e. **Airbridge.** The most common types of commodities provided via an Airbridge are ORP, fruit and vegetables; however, it may be extended to rations that might supplement the ORP diet such as flour, oil, cereal and seasonings. It is unlikely that full rationing would be conducted in this manner; rather, targeted commodities may be flown out to supplement existing food supply.
- f. **Supply from Sea.** Land operations may be supported by commercial or the Naval Service.
- g. **Host Nation Support.** Where the situation permits ration supply could be partially or totally provided through Host Nation agreements.
- h. **ORP.** Limited duration small scale exercises or operations would be supported primarily by 24 Hr ORP and/or 10 Man ORP supplemented with commercial food produce where possible.
- i. **Food Balanced Load (FBL) / Transit Loads / Solid Support Packs (SSP).** Embarked by specific RFA vessels when directed by NCHQ, these options are designed to support the task force with a selection of basic food commodities. (Cross reference with JSP 456 Vol 1 Chap 13 RN Catering Management).

0815. **ORP.** ORP is necessary to maintain the operational effectiveness of Service personnel where operational constraints prevent other types of feeding or food supply. It is a comprehensive ration normally based around a 24 hour cycle. It would be the chain of command's intention to move from ORP to ambient/fresh feeding as early as possible in any deployment, operational circumstances permitting. There are a variety of ORP available for both individual and group feeding situations where commercial food supplies are unavailable or only available in limited quantities. The ration types fall in to 2 main groups:

- a. Those suitable for group feeding where trained chefs and field catering equipment is available. This requirement is met by 10 Man ORP, supported, where possible, by an additional commercial food supplement.
- b. Individual rations designed to meet the requirements of an individual for 24 hrs. There are a number of variants to cover all climatic conditions and some special ethnic or

lifestyle dietary requirements. ORP does not provide for any allergy or medical dietary requirements.

0816. **Types of ORP.** The various types of ORP available are listed below with a breakdown of their contents by menu listed on the DP webpage. Order guidance and Pallet configuration for each type of ORP is listed at Annex A.

a. **Group Feeding Ration - 10 Man ORP.** The current version of this ration is supplied in 5 menu variants packed in separate boxes labelled Menus A through to E. Each box contains sufficient food to feed 10 Men for 24 hours, 5 men for 48 hours etc. The main components are contained in either pouches or tins and some of the components require re-hydration with the use of hot water. Basic catering equipment i.e. Operational Field Catering System (OFCS) and cooking utensils are required to prepare and cook meals using this type of ration and it is not suitable for use with individual cookers such as the Operational Ration Heater (ORH). These rations are suitable for use in all climatic conditions. There are no ethnic or vegetarian variants of the current version. The 10 Man ration can be supplemented with fresh produce to increase the variety of meals provided with an associated increase in the calorific value. This product is primarily designed for use by trained food service staff.

b. **24 Hr ORP.** This range of packs is designed to meet the nutritional requirements of service personnel when deployed into the field. The range also includes variants that recognise the religious and cultural diversity requirements of serving personnel. The main components are contained in retort pouches which are designed for re heating by the 'boiling in the bag' method using an Operational Ration Heater. All components, with the exception of the beverage elements, are suitable for eating cold straight from their primary packaging. The range of 24 Hr ORP is listed below:

(1) **24 Hr GP.** This ration is suitable for use in all climatic conditions. There are currently 20 menu variants (1 to 20) split numerically into Box A (1-10) and Box B (11-20). Each individual ration contains sufficient food to feed one man for 24 hrs.

(2) **24 Hr Vegetarian.** This ration is based on the 24 Hr ration with contents suitable for lacto-ovo-vegetarian diets. The ration is supplied in 6 menu variants (V1 to V6) and is packed with at least one of each variant into a 10 rations outer.

(3) **24 Hr Halal.** This ration is based on the 24 Hr ration and the contents are suitable for personnel of the Muslim faith. The ration is currently supplied in 6 menu variants (H1 to H6) and is packed at least one of each variant into a 10 rations outer.

(4) **24 Hr Sikh/Hindu.** This ration is based on the 24 Hr ration and the contents are suitable for personnel of both the Sikh and Hindu faith. This ration also meets the requirement of a lacto-ovo-vegetarian diet. The ration is currently supplied in 6 menu variants (S1 to S6) and is packed with at least one of each variant into a 10 rations outer.

(5) **24 Hr Kosher:** This ration is based on the 24 Hr ration and the contents are suitable for personnel of both the Jewish faith. This ration also meets the requirement of a lacto-ovo-vegetarian diet. The ration is currently supplied in 10 menu variants (K1 to K10) and is packed with at least one of each variant into a 10 rations outer.

(6) **24 Hr Enhanced Ration.** This ration is based on the standard 24 Hr ration and contains additional components and a Flameless Ration Heater to increase the nutritional values to 4500kcls per day. The ration is designed for use by SF and other specialist units and is not available for general consumption. The ration is

currently supplied in 10 menu variants and is packed into plastic bag with at least one of each variant into an outer box.

(7) **Cold Climate Ration (CCR).** This ration is a specialist and lightweight high calorie 24 Hr Ration for use by troops above the snow line or in the high artic. The ration comprises mainly of dehydrated meals and energy dense snack items designed to support troops operating in a cold weather environment. The ration provides 5,500 kcals per ration and is packed into plastic bags with one of 8 variants into an outer box

c. **Single Meal Ration (SMR)**<sup>2</sup>. This is a light-weight ration designed specifically for sustainment over a specific period. It is issued with a Flameless Ration Heater (FRH) dispensing with the requirement for an additional heating source. Contents include a main meal pouch, a range of snack items and both isotonic drink and hot beverage powders but no matches. The SMR provides a minimum of 1400 kcal per ration, supplied in 10 menu variants, including one vegetarian, mixed per box.

d. **Emergency, Flying and Survival Rations.** There are a range of emergency rations designed to meet the needs of service personnel in challenging and hostile situations. The range is listed on the DP webpage see link below:

<http://defenceintranet.diif.r.mil.uk/libraries/6/Docs9/20160405.1/GRP%20Brochure%202016.pdf>

0817. **Operational Ration Heater**<sup>3</sup>. The Operational Ration Heater (ORH) is designed for individual use in field conditions to boil water for hot drink and to heat retort pouches contained in the 24hr ORP. The ORH consists of a folding stove and a detachable windshield. In terms of fuel source the ORH is **not** supplied with fuel tablets, however each 24 hour fuel pack contains 6 fuel tablets, additional fuel tablets can be demanded separately.

0818. **ORP Management Procedures.** ORP and related items are held as a ready reserve in the event of military operations. [Delivery partner \(DP\) \(Leidos\)](#) as the ORP Commodity Manager is the authority for all ORP issue and stock holding matters. All central stocks of ORP and related items are stored at [Defence Fulfilment Centre](#). In addition, some theatres hold specific reserves of ORP and related items.

0819. **ORP Pack Date and Re-examination Procedures.** All variants of ORP and 10 Man rations are commercially produced and components contain Best Before Dates (BBDs). The outer packaging of ORP contains a packing date (PD) month/year, denoting the packing phase in which the rations were assembled. All ORP variants will have a 24 month shelf life from their PD. The DP collates and publishes the product life expectancy to the FLCs monthly. When required by the Front Line Command, the DP will apply for product shelf life extension for specifically identified PD held at 1<sup>st</sup> and 2<sup>nd</sup> line from the food manufacturer via the ORP contract supplier. An explanation of the ORP life expectancies codes is shown below:

SS3 MATCON	BODMS MATCON	COMMENT
A1	A1	New stock in first class condition.
E0	E0	Examination. Units holding stock annotated as E0 are to contact the DP, through the CoC, to establish if the shelf life of the ORP can be extended. Once the DP declares no further extension to the shelf life, the ORP is only fit for disposal in accordance with policy hosted on the <a href="#">Defence Logistic Framework (DLF)</a> .

<sup>2</sup> DIN Single Meal Ration – 2016DIN04-035

<sup>3</sup> DIN Operational Ration Heater – 2016DIN04-032

0820. **Storage and Turnover Procedures.** Although ORP is produced and packaged to a very high standard, care still needs to be taken in its storage. Exposure to extremes of temperature will dramatically shorten its shelf life and the products will become unpalatable. [The table below provides guidance on the correct temperature management for the storage of ORP in operational theatres where these raised climatic conditions are the norm.](#)

Duration of previous controlled storage at temperatures $\leq 25^{\circ}\text{C}$ at time of delivery to the authority	Remaining shelf life at temperatures up to <sup>4</sup> :			
	$\leq 25^{\circ}\text{C}$ ( $\sim 77^{\circ}\text{F}$ )	$39^{\circ}\text{C}$ ( $\sim 102^{\circ}\text{F}$ )	$43^{\circ}\text{C}$ ( $\sim 109^{\circ}\text{F}$ )	$49^{\circ}\text{C}$ ( $\sim 120^{\circ}\text{F}$ )
0 months	24 months	12 months	6 months	1 month
12 months	12 months	6 months	3 months	1 month
18 months	6 months	3 months	2 months	1 month

Ideal storage conditions are in a temperature range of between  $10^{\circ}\text{C}$  and  $20^{\circ}\text{C}$ <sup>5</sup> in a store protected from the elements and safe from pests and vermin. Units holding ORP are to ensure that stock they are holding is stored in the optimum conditions, issued in the correct date order and used before its consumption date. To ensure that ORP stocks are turned over, earlier pack dates are issued for consumption during training exercises. Contingent Operating Stocks will be monitored and turned over by DP who will inform DOSC of the details and arrange the bulk transfer of stocks.

0821. **Demands for ORP.** Instructions on the demanding and issuing of ORP are contained in the [DLF](#). Issue of stocks are controlled by the DP. All unit demands are to be submitted through their authorising authority to the DOSC. Electronic demands are to be inputted through MJDI. Those units without access to MJDI may utilise the ORP Demand Form (AF G8620) (RN may use S145) and place demands by fax (not post) to DOSC. Additionally, the following is to be adhered to:

- a. **ORP Demand Information.** Demands for ORP are to be made by the generic NATO Stock Number (NSN) listed at Annex A, not by menu or pack date. They are to be demanded by the number of rations required, not by boxes. Demands are to be placed in multiples of 10 rations. ORH demands should be demanded by 'each' and in multiples of box quantities (see Annex A) whenever possible. However, broken bulk will be issued where the issue of full boxes is not feasible.
- b. **Special Instructions.** Units must enter ORP consumption information in the 'Special Instruction' box of the demand form. This will normally be the latest consumption date of the exercise for which the ORP is being demanded. For operations with no end date, the DP will advise DOSC of what MATCONs may be issued, in consultation with the operations staff. This is to ensure that units are issued with in-date ORP. Where a special operations code is allocated to an operation, this is to be noted on the demand form. Additionally, Code 'E' is to be entered in the 'Reason for Demand' box.
- c. **ORP Demand Priority Code.** Demands are to be at the priority authorised for the operation. All demands for training are to be at Priority 16, although the system is capable of meeting higher priority demands on approval from Formation HQs or with special

<sup>4</sup> Extract from NATO Standard AMedP-1.11 Ed A v.1 dated Oct 13.

<sup>5</sup> Temperature requirements:  $10^{\circ}\text{C}$  to  $20^{\circ}\text{C}$  should be seen as an optimum storage temperature for ORP. For storage and distribution outside of the UK a temperature of  $13^{\circ}\text{C} \pm 2^{\circ}\text{C}$  is recommended. This recommendation includes long term storage on board RFA Supply Ships. ORP products stored in temperatures above the recommended range will degrade quicker, resulting in a loss of shelf-life and are more likely to be classed as "not fit for purpose".

authority from the DP. Information on urgent demands can be obtained by telephoning Bicester which has a 24 hour helpline.

0822. **Issue of ORP.** The MATCONs (Materiel Condition) listed in para 0819 apply to ORP. The Stores System (SS3) MATCON will be printed in the MATCON field of the plain paper Issue Voucher that is generated by the Base Ordnance Depot Management System (BODMS) computerised warehouse management system. For ORP issues only, a BODMS MATCON will be printed in the 'Customer Reference' field of the Issue Voucher and will be indicated by << symbol before and >> after it (e.g. <<CD>>). These BODMS MATCONS are based on the DP's published consumption advice for the particular ORP holdings (para 0819 refers).

0823. **Stock Rotation.** In order to ensure that ORP stocks are turned over, stocks will normally be issued in the following BODMS MATCON order: CSA, CA, GC, A1. For the same reason, within each MATCON the stock with the earliest code date as advised by the DP will be issued first.

0824. **ORP Distribution.** For units located in NW Europe, distribution will be via one of the following methods:

- a. Distribution outlets operated by DSCOM.
- b. POD of the Operational Supply Chain.
- c. Collection from DOSC (by special arrangement only through DP).

0825. **Receipt of ORP.** Units must bring the ORP to account by the individual menu NSN's listed at Annex A. The DP publishes monthly bulletins advising on the consumption of ORP holdings. Units should check the various menus and pack dates against the information contained in these bulletins. BODMS MATCON is only an indication of consumption advice at the time it was issued and therefore the appropriate formation HQ should be consulted immediately, if there is any doubt as to whether any 'E0' stock is still in-date [and available for issue/consumption](#).

0826. **Surplus Holdings of ORP.** [Due to a unit's ability to receive ORP deliveries within 7 days, the requirement to hold a level of stock holding that is effectively "surplus to requirement" should be avoided and discouraged.](#) The only exception to this requirement will be for those units authorised by formation HQs. Surplus holdings of ORP are to be dealt with as follows:

- a. **Transfer of In-Date Stock.** Units holding surplus in-date stocks are in the first instance to apply to their formation HQ to enable stocks to be cross-serviced to other units within formation dependencies.
- b. **Back loading of Stocks.** Where there is no requirement for cross-servicing, formation HQs must seek clearance from DP, through the chain of command, to backload stocks to [the DFC](#). Where approval to backload ORP is given, DP will issue authority giving information on items, quantity's and unit involved. Units must submit AF G8621 (Army Form for Request for Disposal Instructions) to [DP](#) with the return of ORP stocks. Under no circumstances are units to return surplus ORP holdings to [the DFC](#) without first applying for authority from the DP, refer to DLF: Returns ORP refers<sup>6</sup>.
- c. **Disposal Out-of-date Stock.** [Out-of-date \(life expired\)ORP should be accounted for according to the regulations to affect write-down procedures<sup>7</sup>. This will normally take place at unit level. In the case of large quantities of out-of-date stocks, units should refer to the DLF: Identify Item for Disposal and advise their Formation HQs. In the UK, units may dispose of small quantities of out-of-date ORP in a deep land fill site, or incinerated](#)

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<sup>6</sup> Previously JSP 886 Vol 6 Part 4

<sup>7</sup> JSP 456 Vol 2 Chap 12 refers

depending on local authority regulations detailed in the DLF: Identify Item for Disposal – Unit Disposal of ORP<sup>8</sup>. All out-of-date stocks should be accompanied by the Hazardous Waste Declaration form found at the Disposal Services Authority (DSA) website under Related Documents at Annex G.

d. **Disposal Out-of-Date 10 Man ORP – Depot Stock.** In the event that there is a surplus of 10 Man ORP in the Depot at the point that the stock is designated as E0, it has been extended to maximum extent, is not required to meet contingent stock and it cannot be consumed by a FLC, there is the option to donate this stock to a charity food bank<sup>9</sup> rather than send for disposal. In this event the DP will consult with Army HQ for authorisation to Write-off the stock of rations. Arrangements will be undertaken by the DP for the ORP to be collected by the charity from the Depot.

0827. **Export and Import Procedures.** ORP is classified as military stores and is not required to conform to UK or EC Labelling Regulations. Units attempting to export ORP for training exercises may experience difficulties from both UK and Foreign Customs Authorities. Even countries within the EC may have differing food import/export requirements that need to be satisfied, particularly in the area of Bio-Security measures. Therefore, it is essential that Units wishing to export ORP for training exercises must seek authority from the DP, through their chain of command, prior to the event. The authority for the export of ORP for operations or operational reserve stock is dealt with centrally. The information required by the DP is as follows:

- a. Unit.
- b. Contact name, telephone number and fax number.
- c. Type and number of rations to be exported.
- d. The date of movement out of the UK.
- e. Disembarkation point out of the UK.
- f. Operation or exercise name.

Due to the strict regulations imposed by Department Environmental Food Rural Affairs (DEFRA), in relation to the importation of food and Bio-Security measures, if ORP has been exported outside of the EU units are not to import ORP back into the UK. When ORP has been exported outside of the EU and it is necessary to return the ORP to the UK due to operational reasons, then the stock has to be classified as International Catering Waste (ICW)<sup>10</sup>. In this instance the importing unit is required to advise the relevant authorities and arrange for the ICW ORP to be transferred to an approved licenced waste disposal contactor for correct disposal. As ORP may contain hazardous items, the rations identified for disposal should be accompanied by a Hazardous Waste Declaration form (para 0826.c. refers).

0828. **Accounting Regulations.** The accounting regulations covering ORP are detailed in JSP 456 Pt.2 Vol 2 Ch 12.

0829. **Royal Logistic Corps (RLC)** A residual capability exists within RLC Close Support Logistics Regiments (CSLR), Theatre Logistics Regiments (TLR) and Force Logistics Regiments (FLR) to manage limited quantities of Class 1 rations including the fresh ration supplements to 10 Man ORP. The capability includes the following tasks:

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<sup>8</sup> Previously JSP 886 Vol 6 Part 4

<sup>9</sup> DLD DE&S MinSub dated 30 Aug 18.

<sup>10</sup> Exemptions are applied to RN/RFA vessels if ORP is being **cross-serviced** and not being “landed”. **Cross servicing can only be undertaken for ORP stock that has remained on-board.** NCHQ to be consulted.

- a. Receipt, storage and issue of ORP and ORH.
- b. Receive, store and issue an ambient supplement to 10 Man ORP, i.e. foodstuffs that do not require complex handling (e.g. packaged and tinned rations, some fruits and vegetables and frozen bread).
- c. Provide an ability to operate a limited chill/cold fresh ration supply chain within theatre for up to a Battle Group sized unit by purely military means. This capability could also be used to support a niche or small scale operation.
- d. Provide a limited capability to receive, store and issue palletised bottled water (until such time as this function can be passed to an appropriate Food Supply Contractor).
- e. The Sustainment Fusion Cell (SFC) within the TLR and FLR will provide manpower for the Food Contract Supervisory Team (FCST) to provide liaison with and monitoring of the Food Supply Contract in the provision of fresh rations<sup>11</sup>.

0830. **RLC Local Resources Section (LRS).** LRS has the capability to procure limited quantities of fresh rations to supplement 10 Man ORP. The LRS are part of the Sustainment Fusion Cells (SFC) within the TLR and FLR units.

0831. **Accounting for Operations and Exercises.** Instructions on maintaining individual Unit Ration Accounts will be contained in the Operational/Exercise Mounting Instruction issued by the Lead HQ prior to deployment. Instructions and procedures for accounting by SFC while deployed on operations can be found in JSP 456 Pt.2 Vol 2 Ch 19.

## CATERING ORGANISATION IN THE FIELD

**Note:** Reference may also be sought from the Army Operational Feeding Doctrine.

0832. **Introduction.** Catering has a major part to play in the maintenance of good morale in the field. Personnel have keener appetites having worked in the open air, plus there are fewer diversions from the normal routine, and as such catering assumes an even greater importance than under benign conditions. The standard of catering in the field must, therefore, be as high as possible. Although conditions are inevitably less refined, catering staff must approach their job with determination and ingenuity. Special operations and exercises each has requirements peculiar to the location and type of support required. Careful planning is essential for each operation or exercise, and a flexible approach to all problems must be maintained.

0833. **Planning Considerations.** Before the Caterer can carry out any detailed field catering planning, it is essential that the scope of the exercise or operation is understood. Consequently, attendance at the initial planning meeting for an operation or exercise is mandatory so that the catering task can be accurately assessed. The type of information required during this planning stage may include the following:

- a. What is the scope and possible duration of the operation?
- b. What is the commander's intent and what is the best feeding plan to support that intent?
- c. What is the feeding strength by Rank if appropriate?
- d. Where is the location of the operation/exercise?
- e. What types of rations are available?

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<sup>11</sup> This function may also be undertaken by any suitably qualified tri-service catering specialist NCO.

- f. How many feeding locations will be required?
- g. Will there be a requirement for dispersed feeding?
- h. Is re-supply available? What is the frequency?
- i. Will a supply of fresh water be available?
- j. Will there be a requirement for a dining tent?
- k. Will there be a night meal or 24 hour commitment?
- l. What equipment is available?
- m. What manning and catering support is available?

Answers to these and other questions pertinent to the situation will provide a planning basis for staff and equipment requirements, menus and rations.

0834. **Reconnaissance.** Having obtained as much information as possible from the initial planning meeting, the NCO IC field kitchen should, if practical, attend the preliminary site survey. The type of surface and availability of level areas or hard standing should be noted. After a suitable reconnaissance and other known operational and administrative factors have been taken into account, recommendations should be made as to the most suitable location for the field kitchen and dining tents locations.

0835. **Staff Requirements.** During the planning phase the following staffing matters must be considered:

- a. Number of chefs for the task.
- b. Number of ancillary staff required.
- c. Provision of a kit list and administrative orders.
- d. Briefing staff to cover all specific functional requirements.
- e. R&R, time off and training.

0836. **Support Staff.** Many operations/exercises may require staff support from other sources, in which case maximum notice must be given to Formation staff. Manpower requirements will vary according to the commitment, and advice should be sought from Formation staff, once planning considerations are known. Only trained staff are to use field catering equipment. As a minimum requirement, all chefs are to have received formal field catering training and annual refresher training. Ancillary personnel are to have had induction training, supervised by a competent trainer covering field fire precautions, field hygiene and safety procedures.

0837. **Additional Labour Requirements.** Catering personnel may be required to undertake many other duties outside their normal cooking function. Cleaning tasks and pot wash duties, minor servicing and refuelling of field kitchen equipment, salvage, swill and refuse disposal, collection and handling of bulk rations are but a few of the catering staff's possible extended range of duties. Ideally, additional staff will be brought in to undertake these tasks.

0838. **Catering Standing Orders.** Elementary catering standing orders are to be produced and distributed to all catering personnel involved in the operation/exercise.

0839. **Lack of Dedicated Trained Chef Support.** In exceptional circumstances, there may be occasions where small detachments are deployed to locations without dedicated trained chef support. In such circumstances troops will be required to cater for themselves. Detailed guidance of the procedures to be undertaken by non-catering trained personnel should be provided by the Command responsible for the detachment in the form of a written aide memoire in addition to basic food safety training.

0840. **Personalities.** Key personalities to be identified early in the planning stage are, but not limited to:

- a. OIC of the exercise or deployment.
- b. The point of contact for briefings and SITREPs.
- c. Support staff for stores, transport, rationing and water supply.

0841. **Food Supply Requirements.** Rationing options will be provided by a mix of ORP, ambient food, and fresh, frozen or chilled food. All rations shall be accounted for utilising the tri service accounting regulations contained within JSP 456 Pt.2 Vol 2. In determining the food supply options the following require consideration:

- a. What is the commander's intent and what feeding plan will support that intent?
- b. What will be the sources of supply? Will re-supply be possible or will it be necessary to take all supplies at the outset?
- c. Will fresh and frozen rations be available?
- d. Will there be a need to take ORP?
- e. What are the Lines of Communication? Will rations be delivered or will transport be required to collect?
- f. What storage is required/available?
- g. What Mechanical Handling Equipment (MHE) is available?

Re-supply systems shall be established before deployment; this must include water, fuel, and rations and on extended operations/exercises may include personnel. Key information required will include mode of supply, delivery point and method of collection. The application for exercise food supplies outside of a NTEP training camp can be found at Annex C to Chap 3 and should be submitted to the DP through the Chain of Command 6 weeks prior for UK exercises and 10 weeks prior for exercises outside the UK.

0842. **Menu Structure and Timings.** Prior to deployment the following factors in relation to menu structure and meal requirements must be determined:

- a. Where possible menu cycles should be planned in advance but must remain flexible to support a developing exercise/operational scenario.
- b. Deployments may require separate messes to be erected, and separate meal timings.
- c. The requirement for meals out of the set meal timings such as early/late and night meals will need to be considered.

0843. **Field Catering Equipment Requirements.** One of the most important aspects of planning a successful field kitchen is that of equipment. The first consideration, however, should be transportation and freight space availability; therefore, the Caterer must tailor their needs accordingly. The following should also be considered:

- a. **Tentage.** It is normally advantageous for the Caterer to demand, draw, hold and transport tentage requirements for the field catering organisation. In planning a layout, due regard must be given to seating capacity, duration of operation/exercise, work pattern of operation/exercise personnel, equipment, food and personnel flows. Arrangements must be made for a suitable working party to be detailed to assist in mess and store tent erection at the beginning of the operation/exercise.
- b. **Dining and Kitchen Equipment.** Dining and kitchen equipment requirements must be carefully calculated well in advance of the operation/exercise and a demand should be placed for any equipment which cannot be provided from within the units' normal holding.
- c. **Lighting.** Responsibility for the provision of lighting must be clearly established during the early stages of planning. Is it to be a centralised engineering provision - by portable electric generator - an administrative provision, or a catering provision?
- d. **Transportation and Fuel.** If regular transportation is required a bid is to be made to the MTO detailing the forecast requirements and requesting drivers and vehicles. The provision of a water carriage packs must also be arranged.
- e. **Fuel Deliveries.** It will be necessary to arrange for fuel deliveries to the field kitchen. Ration vehicles are not to be used for this purpose. Pack fuel e.g. DIESO or Kerosene shall be carried in accordance with HAZMAT requirements. Liquid Propane gas cylinders shall be firmly lashed to the superstructure in an upright position close to the tail board.
- f. **Transportation.** Service chefs must ensure that any vehicles used for transporting rations and catering equipment is loaded in a logical way. Equipment differs from unit to unit, it is therefore not practical to give exact procedures to be followed in vehicle loading. As a routine the equipment required first on reaching a location, should be loaded last.

0844. **Planning a Field Catering Complex.** There are a few hard and fast rules governing the layout of field catering complex. Only when the scope of the operation/exercise has been fully examined and the feeding patterns established can planning on this important aspect begin. Operational requirements will dictate the precise layout of field kitchen, but ideally the following should apply:

- a. A kitchen should be sited on dry ground, preferably on hard standing, to the leeward of the camp, on a slight slope to assist drainage, and close to a good road or track.
- b. Mess tents should be as near as possible to the kitchen in order to facilitate the quick and easy carriage of food from the servery to dining table.
- c. Soakaways should be built on the lower side of the site, but not too far from the kitchen, preferably not closer than 25 m (82 ft), depending on the terrain.
- d. Latrines, urinals, incinerators should be situated as far as possible from the kitchen and be both down-wind and down-hill from the kitchen.

0845. **Kitchen and Dining Area Layout.** The layout of the kitchen and dining area is dependent on the size and nature of the exercise or operation. The standard principles of linear flow, with

minimal cross-over points must be applied. Where space allows kitchens, food preparation and storage areas should comply with current legislation. Where possible the standards should be:

- a. **Preparation Room(s).** Preparation room(s) should be kept well ventilated and used only for the preparation of food. A separate room for this purpose has the following advantages:
  - (1) The cooler, drier atmosphere is much more suitable for the preparation of pastry; also where flour and other similar commodities are being mixed by hand, clean air admitted to the mixture instead of smoke, fumes and dust as happens when preparation is carried out in the actual field kitchen.
  - (2) Certain advanced preparation of dishes to be served on the following day can be better arranged in the preparation room than in the kitchen, where space is often fully occupied by dishes in hand for current meals.
  - (3) Flies can be more easily controlled than in the kitchen where they are encouraged by the warmth.
- b. **Bread Store.** The bread store must be kept cool, dry and well-ventilated.
- c. **Grocery Store.** The grocery store should have a cool, dry atmosphere, with adequate shelving and it should be made as secure as possible.
- d. **Vegetable Store.** The vegetable store must be kept cool, dry and well-ventilated.
- e. **Meat Store.** The meat store should be cool, well ventilated, and fly-proofed. It should provide adequate facilities for butchering meat. On smaller field exercises, temporary storage of meats may be achieved by utilising polar packs for chilled storage. On larger exercises or operations, when re-supply will be infrequent, consideration should be given to the provision of chilled or frozen storage facilities.
- f. **Swill and Refuse.** A clearly defined swill area should be established and where possible sufficient bins, with well-fitting lids, should be provided for each type of refuse. Catering officers will need to be aware of local regulations for the disposal of waste.

0846. **Field Catering Equipment Maintenance.** Field catering equipment is potentially dangerous and must only be operated and maintained by trained personnel; this must be enforced by Line Managers. Operating instructions for OFCS can be found in Army Equipment Support Publication 7310-B-105-201, with Failure Diagnosis & Repair Instructions contained in AESP 7310-B-105-522. Operating instructions for the No5 Cookset can be found in the relevant Army Equipment Support Publications 7360-G-100-201. Operating instructions for the M67 Immersion heater are detailed in US Army Technical Manual TM 5-4550-202-12&P dated 16 Dec 80. The following standard checks must be undertaken on field catering equipment before it is used:

- a. Confirm by performing practical tests and checking records that the field catering equipment is in good working order, clean and serviceable.
- b. Check that adapters and regulators for use with cooksets utilising LPG are compatible with the gas cylinders available.
- c. Ensure that sufficient spares are held and that they are readily available.

0847. **OFCS Maintenance Schedule.** OFCS should be serviced and maintained as directed within the relevant AESP. PRE and other inspections are to be undertaken in accordance with JSP 341 and AGAI Vol 4.

0848. **Hygiene in the Field.** Wherever possible, hygiene in the field should replicate normal hygiene practices in kitchens. Refer to JSP 456 Pt.2 Vol 3 Ch 3.

0849. **Safety in the Field.** Because of their very nature, the way they are used and fuels which they burn, all field catering equipment must be considered inherently dangerous, and treated with the greatest of respect. All POL stores should be sited well away from tents or permanent buildings. The POL compound should be downwind, downhill and 50m from any other complex. If digging is permitted, all fuel containers should be dug in to approximately 0.3m (1 ft) or lashed by rope and pegged. As a last resort fuel containers can be sandbagged into a secure position. 'First aid fire fighting appliances' must also be secured to prevent accidental spillage or damage; however, they must never be tied as this would impede speedy access in an emergency. The following are the colour codes for the fuels specified:

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|----|----------------------------|---|
| a. | CivGas (petrol)            | Red   |
| b. | Diesel (DIESO)             | Yellow  |
| c. | Kerosene (paraffin)        | Blue/grey   |
| d. | Methylated spirits (meths) | If stored in jerry cans it will be clearly marked 'METHS' in white lettering on the can.  |
| e. | Oils                       | When stored in jerry cans they will be marked with a black circle with 'OMD (number)' in white lettering on the circle, e.g., OMD 45 is 2-stroke oil. |
| f. | Propane gas                | Red/orange cylinder - 12.7 kg (28 lb), 19 kg (42 lb), or 47 kg (104 lb).  |
| g. | Butane gas                 | Blue cylinder - 12.7 kg (28 lb).  |

0850. **Water Supplies.** The provision of an adequate and safe water supply is important for the maintenance of health and operational efficiency, and all water in the field must be regarded as unsafe unless obtained from an approved source or known to have been purified. Water should only be collected from approved water points, issued by Ops/Ex staff once approved by medical staff. The Army (Royal Engineers) is responsible for providing potable water in the field to all Services in all theatres in both peace and war. To discharge its responsibility the Army will normally set up water points at suitable locations to serve units in the locality. It is the unit responsibility to collect its requirements of water from the water points. When camps or expeditions are held in the UK, other than under field conditions, the parent unit is to make arrangements for water supplies. During mobility exercises, when it is possible to collect water from a neighbouring mains source, the unit is to collect water direct.

0851. **Water Quantities Required.** The quantities of water required for domestic purposes for personnel in the field are dictated by the operational scenario, however the following guidance should be considered:

- a. Initial stages of an operation or for periods of intense operations: 10 lt per man per day.
- b. Steady state for field conditions: 25 lt per man per day.
- c. Steady state for Temporary Deployable Accommodation (TDA): 70 lt per man per day.

- d. Steady state for well-found accommodation: 150 lt per man per day.

Calculations for the provision of domestic water requirements in the field should be used on the provision of 22.5 litres per man per day. In war conditions only, a reserve sufficient for 3 days at the rate of 6 litres per man per day is to be held at the field site to allow for disruption of supplies from the water points to units.

0852. **Catering in an CBRN Environment.** The problems of catering in a CBRN environment have caused confusion about when catering staff should wear CBRN Individual Protective Equipment (IPE) and when cooking should or should not take place. In the final analysis, this is a decision which can only be taken by the commander on the spot, for it is he who is responsible for the safety, training, efficiency and morale of his personnel at all times and under all conditions. The factors involved in reaching this decision are many and varied; however, the following guidance should be used where appropriate:

- a. **IPE.** Catering staff should wear IPE as per threat levels indicated in Technical Aide Memoires (TAMs) Part 2, Section 5. Food can still be prepared up to NBC Black when using protected cooking methods such as COLPRO and, boil in the bag; however, when at CBRN Black, it may be advisable to go to cold rations if protection cannot be maintained.
- b. **Action on Attack Warning RED.** Pre-Attack measures as per TAMs should be in position ensuring all foodstuffs are protected and under cover. On declaration of attack warning RED, catering staff are to take personal protection measures as detailed by the local commander. Cooking should cease and, if time allows, foodstuffs being used in the cooking process should be sealed in containers.
- c. **Chemical IA Drill.** In the event of having to implement the IA drill, catering staff are, on completion of the drill, to:
- (1) Cease food preparation and cooking.
  - (2) Check catering areas for liquid chemical contamination and dispose of foodstuffs that may be contaminated. If foodstuffs had been covered prior to the attack, this will reduce the need to check for contamination. Disposal of contaminated food waste should be dealt with as per SOPs
  - (3) Seal uncontaminated foodstuffs in containers.
- d. **Action on Declaration of CBRN State BLACK.** On declaration of CBRN state BLACK catering staff are to:
- (1) Don full CBRN IPE.
  - (2) Cease food preparation and cooking.
  - (3) Seal uncontaminated foodstuffs in containers.
  - (4) Implement stringent contamination control measures to protect food and water stocks from contamination.
- e. **Action of Declaration of All Clear.** On declaration of 'all clear' from attack (i.e. cancellation of Attack Warning RED) catering staff are to:

**Hostiles Clear:**

- (1) Revert to the previous level of protection when ordered to unmask or as ordered by the local commander.

- (2) Continue food preparation and cooking as the tactical situation allows.

**CBRN Clear:** On the declaration of 'all clear' from CBRN hazards (i.e. cancellation of CBRN state BLACK) catering staff are to:

- (1) Revert to the previous level of protection when ordered to unmask or as ordered by the local commander.
- (2) Continue food preparation and cooking as appropriate to the threat level. This will require careful monitoring of any food using detector paper or the Chemical Agent Monitor.

0853. **Peacetime Considerations.** The above guidance applies to peacetime training exercises as well as operations. However, on some exercises the administrative requirement to have a hot meal at a certain time including post exercise or to avoid wasting food, may override the CBRN training scenario. In order to avoid teaching false lessons as a result of peacetime constraints, the following clarification is given:

- a. Where it is essential that the preparation of food continues regardless of the tactical scenario it is recommended that food preparation be completed in a 'white' area which is excluded from exercise play. In these circumstances personnel should not be required to wear CBRN clothing.
- b. Where catering staff are attached to a formation in a tactical situation as part of their operational role and/or are involved in CBRN training, they must adopt the form of dress appropriate to the CBRN threat before continuing with their tasks, if viable. If exercise controllers are concerned about unnecessary waste of food in preparation, they may choose one of the following courses of action:
  - (1) Advise units of a time by which feeding must be completed, based on the CBRN play timings.
  - (2) Advise units that food in preparation should be covered, for continuation of preparation and/or cooking for foods which lend themselves to such a procedure, on resumption of a lower threat state.
  - (3) Advise units that from CBRN HIGH, food should be prepared for cold consumption.

0854. **Wearing of CBRN Protective Clothing by Catering Personnel.** One of the main priorities for caterers in peacetime is to practise actions that would be taken in war. When the wearing of CBRN protective clothing is ordered all catering staff are to comply as follows:

- a. When employed on cooking duties they are to wear the full CBRN suit over at least one other layer of clothing.
- b. Helmets are always to be kept close. Respirators are to be carried at the waist so that the 9 second donning time remains viable at all times.
- c. Normal 'Buddy-Buddy' procedures are to be practised.
- d. The chef's apron is to be worn in conjunction with CBRN suits whilst preparing and cooking food in field conditions (Chefs Apron Field, olive drab (8415-99-132-2937)).
- e. Unless specifically directed by Unit Cdrs, catering staff who are temporarily

employed outside kitchens on stand-to etc, need not don the additional layers of clothing required during exercises.

f. CBRN suits' protective quality is degraded by external contamination caused by fat spillage or water. There is also a risk that, if it is too near a naked flame, it could begin to smoulder or ignite without the wearers' immediate knowledge. Such risks are to be drawn to the attention of all catering personnel who are to take appropriate precautions and keep a watchful eye on their colleagues.

0855. **Heat Stress.** Wearing CBRN protective clothing in hot kitchens can lead to heat stress. Heat stress tables are now included in TAMs, Section 5-19-5; however, the following factors are relevant:

a. **Clothing Insulation.** Thick clothing restricts evaporation of sweat and will also interfere with heat exchange by convection and radiation. Extended wear of IPE will cause significant heat strain. Degradation of protection by contamination of IPE with cooking oils and other materials can be prevented by wearing the olive drab apron, but this will further increase heat stress.

b. **Workload.** Work increases body temperature; the harder the work, the hotter the body will become. After each bout of work sufficient rest should be given to allow the body temperature to return to normal.

c. **Environmental Temperature.** While IPE insulates the individual to a certain extent this added to hot weather can lead to an increase of susceptibility to heat stress. Furthermore, radiant heat resulting from the usual hot conditions in which catering staff are working can compound the problem. Equally since catering staff are conditioned in peace time to working in a hotter environment than normal, cold weather can also cause stress.

d. **Type of Kitchen.** Consideration must also be given to the type of kitchen in use, e.g. field (open air), under canvas or in a structure i.e. TDA. These vary widely as to location, quantity of radiant heating in use and the tasks involved.

e. **Suffering Heat Stress.** Personnel suffering from heat stress may become flushed and irritable. In later stages they will suffer from fatigue, disinterest and lack of efficiency. Commanders should instigate the 'buddy-buddy' system so that out of character behaviour indicating heat stress would be noticed. In situations where catering staff are unable to complete their operational task due to the high heat load of CBRN IPE in a kitchen environment, underclothing may be removed at the local Commander's discretion, to reduce the number of layers worn. It must be appreciated that this will reduce the protection afforded by the CBRN suit and, if personnel become chemically contaminated, the Immediate Decontamination (ID) drill assumes even greater importance. In the event of CBRN attack underclothing layers which have been removed must be replaced as soon as practicable.

0856 – 0899. Reserved.

**CHAPTER 8 Annex A - OPERATIONAL RATION PACKS**

<b>Ser No:</b>	<b>NSN</b>	<b>Description</b>	<b>D of Q</b>	<b>Number per Carton (minimum order)</b>	<b>Weight per Carton (Kg)</b>	<b>No of Rations per Pallet</b>	<b>Weight Inc Pallet(Kg)</b>
1	8970-99-567-4173	10 Man General Purpose Ration Menu A to E	Ration	10	24	350	870
2	8970-99-575-0992	Single Meal Ration (SMR)	Ration	10	9.95	350	350
3	8970-99-001-9011	24 Hr General Purpose Ration	Ration	10	22	350	793
4	8970-99-190-6881	24 Hr Vegetarian	Ration	10	22	350	793
5	8970-99-190-6873	24 Hr Kosher	Ration	10	22	350	793
6	8970-99-190-6874	24 Hr Sikh/Hindu	Ration	10	22	350	793
7	9870-99-190-6875	24 Hr Halal	Ration	10	22	350	793
8	8970-99-302-2654	24 Hr Cold Climate Ration	Ration	8	15	280	550
9	8970-99-378-9083	24 Hr Enhanced Ration	Ration	10	23	350	825
10	7310-99-587-4226	Operational Ration Heater (ORH)	Each	100	12.7	15 boxes	475
11	9110-99-426-2694	ORH Fuel Pack (pack of 6 tablets)	Each	48	9.5	44 boxes	418

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