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SECTION C

C-1 ITEM DESCRIPTION

ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements

The Meal, Cold Weather/Food Packet, Long Range Patrol provides an operational ration for two separate operational scenarios. The Meal, Cold Weather (MCW) is intended for cold weather feeding, it will not freeze and supplies extra drink mixes for countering dehydration during cold weather activities. It can be issued at three per day for complete cold weather ration. The Food Packet, Long Range Patrol (LRP) is a restricted calorie ration meant for special operations, where re-supply is not available and weight and volume are critical factors. It is issued at one per soldier per day for up to ten days. The combined product assembly consists of twelve meals or packets per shipping container.

C-2 ASSEMBLY REQUIREMENTS

A. Components.

(1) Menu components. The components for menu assembly shall be as specified in Table I. Packaging of components shall be in a tan material, as appropriate, and as cited in the component document.

TABLE I. Components

Component	Reference	Menu
<u>Entrees</u>		
Beef Stew	PCR-B-015	7
Beef Stroganoff with Noodles	PCR-B-016	2
Chicken and Rice	PCR-C-025	5
Chicken, Spicy Oriental with Rice	PCR-C-026	1
Chili Macaroni with Beef	PCR-C-073	3

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TABLE I. Components (cont'd)

Component	Reference	Menu
Egg, Scrambled	PCR-E-001	
Scrambled Eggs and Bacon Pieces	Type II	11
Scrambled Eggs with Cheese, Western Style	Type III	10, 12
Rice and Chicken, Mexican Style	PCR-R-011	9
Seafood Chowder	PCR-S-017	6
Spaghetti with Meat Sauce	PCR-S-008	8
Turkey Tetrazzini	PCR-T-002	4
<u>Starches</u>		
Cereals, Rolled Oats, Instant, Apples and Cinnamon, Maple and Brown Sugar, Cinnamon and Spice, or Strawberries and Cream, Regular	A-A-20090 E , Type III Flavor B, C, E or F, Style 1	11, 12 <u>1</u> /
Granola, with Milk and Blueberries	PCR-G-003 , Type I	10
<u>Snacks and Candy</u>		
Cakes and Brownies, and Muffin Tops	PCR-C-007C	7 <u>1</u> /
Cakes or Brownies	Type I or II, All Flavors	
Candy and Chocolate Confections	A-A-20177D , Pack. A or B	
Pan Coated Candy	Type VI	
Disks, Chocolate, Plain	Shape A, Flavor 1	8
Oval/Round, Chocolate with Peanuts	Shape B, Flavor 1	3
Starch Jelly Candy,	Type VIII	2, 12
Cheese Spread, Cheddar, Plain, with Jalapeno Peppers, or with Bacon	PCR-C-039 , Type I, II, or III	3, 4 <u>1</u> /
Chocolate Sports Bar, Chocolate	PCR-C-004A , Flavor I	2, 10
Cookies, Regular, Fig Bar, Soft and Chewy, Individual Serving	A-A-20295C , Type I, Style P, Bake Type b, Class 1,	1, 11
Cookies, Regular, Shortbread, Plain, Crisp, Individual Serving	A-A-20295C , Type I, Style A Flav 1, Bake Type a, Class 1	1 , 6, 9
Cookies, Oatmeal, and Brownies, Chocolate Covered, Cookie	MIL-C-44072C , Type II	5, 7

Comment [EP1]: ES12-062 (DSCP-SS-12-84452), change 06, 9 Oct 12 - p. 2, C-2, A(1). TABLE I. Components, - Continued, delete "Starch Jelly Candy, Type VIII, Menus 2, 12"

Comment [EP2]: Follow-up to ES12-032 (DSCP-SS-12-85704), change 06, 9 Oct 12 - p. 2, C-2, A(1). TABLE I. Components, - Continued, under "Cookies, Regular, Shortbread, Plain, Crisp, Individual Serving, A-A-20295C, Type I, Style A", insert Menu "1," before Menus 6, 9

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TABLE I. Components (cont'd)

Component	Reference	Menu
Crackers, Fortified, Plain or Vegetable	PCR-C-037 , Type I or II	3, 4, 6, 8 <u>1/</u>
Dessert Bar,	PCR-D-004	
Mocha	Flavor I	4
Chocolate Banana Nut	Flavor III	9
First Strike™ Bar	PCR-F-001	5
Cran-Raspberry, Regular	Flavor III, Style A	
Fruits, Osmotically Dried	A-A-20299A	<u>2</u> , 9
Sliced Cranberries, Not Fortified	Type VII, Fortification a	
Ice Cream Sandwich, Freeze Dehydrated	PCR-I-002	<u>4</u>
 Cookies and Cream	Flavor I	
Nut and Fruit Mix	PCR-N-003	
Nut and Raisin Mix	Type I	8, 11
Nuts with Raw Sunflower Kernels, Infused	Type III	2, 6
Fruit		
Nuts, Shelled, Roasted	A-A-20164C	6, 9, <u>12</u>
Almonds (Unblanched), Flavored (Smoked)	Type IX, Style A	
Peanut Butter and Peanut Spread	A-A-20328A , Style II	8
Peanut Spread, Regular, Smooth, Stabilized,	Class A, Texture 1, Type a	
Chocolate, Fortified	Flavor 2, Fortification b	
Snack Foods	A-A-20195C	
Filled Pretzels, Cheddar or Nacho Cheese	Type II, Style F, Flavor 1,	10 <u>1/</u>
Toasted Corn Kernels, Plain, Salted	2	
	Type VI, Flavor 1	3, 5, 7
Toaster Pastries, Shelf Stable, Regular	A-A-20211B , Type I,	12
Frosted Brown Sugar Cinnamon, Not Fortified,	Style B, Flavor 3, Fort. a b,	
Rectangular, Single Serving	Shape I, Servings (a)	

Comment [EP3]: ES12-062(DSCP-SS-12-84452), change 06, 9 Oct 12 - p. 3, C-2, A(1). TABLE I. Components, - Continued, under "Fruits, Osmotically Dried, A-A-20299A," insert Menu "2," before Menu 9

Comment [EP4]: Follow-up to ES12-032(DSCP-SS-12-85704), change 06, 9 Oct 12 - p. 3, C-2, A(1). TABLE I. Components, - Continued, delete "Ice Cream Sandwich, Freeze Dehydrated, Cookies and Cream, PCR-I-002, Flavor I, Menu 1"

Comment [EP5]: ES12-062(DSCP-SS-12-84452), change 06, 9 Oct 12 - p. 3, C-2, A(1). TABLE I. Components, - Continued, under "Nuts, Shelled, Roasted, Almonds (Unblanched), Flavored (Smoked), A-A-20164C, Type IX, Style A", insert Menu "12" after Menus 6, 9

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TABLE I. Components (cont'd)

Component	Reference	Menu
<u>Beverages</u>		
Beverage Base, Powdered	A-A-20098D	
Sweetened with Nutritive Sweetener, Flat interlocking closure pouch	Type II Design B	
Orange, Fortified with Vitamin Premix	Flavor 1, Formulation c	4,10,11
Lemon, Lime, Lemon-Lime, Grape or Cherry Fortified with Ascorbic Acid and Enhanced With Maltodextrin	Flavor 2, 3, 4, 5 or 6 Formulation d	1, 2, 6, 7, 9 <u>1/</u>
Beverage Base, Powdered	A-A-20098D	8
Sweetened with Non-Nutritive Sweetener Lap or Fin Seal Pouch	Type III Design D	
Lemonade or Raspberry, Not fortified	Flavor 8 or 13, Formulat. a	
Cocoa Beverage Powder, Fortified	PCR-C-041	10, 11
Flat Interlocking Closure Pouch	Design B	
Dairyshake Powder, Fortified with Calcium and Vitamin D, 100 grams	PCR-D-002A	1, 12 <u>1/</u>
Vanilla, Chocolate, Strawberry or Strawberry Banana	Flavors I, II, III or IV	
Flat Interlocking Closure Pouch	Design B	
Drink Mixes, Coffee (Unflavored and Flavored), Flavored Instant Cappuccino, Regular, French Vanilla, Mocha or Irish Cream	A-A-20336A , Type V, Style A, Flavors 1, 2 or 4	3, 4, 5 <u>1/</u>
Flat Interlocking Closure Pouch	Design B	
<u>Other</u>		
Fork, Knife and Spoon, Picnic, Plastic, High Impact, Spoon, MRE, 7-inch, Brown	A-A-3109B , Type IV, Item 13	All

1/ An equal quantity of at least three flavors of oatmeal (menus 11, 12), three flavors of cakes (menu 7), two flavors of cheese (menus 3, 4), two flavors of crackers (menus 3, 4, 6), two flavors of filled pretzels (menu 10), three flavors of beverage base, carbohydrate fortified (menus 1, 2, 6, 7, 9), two flavors of dairyshake (menus 1, 12), and two flavors of cappuccino (menus 3, 4, 5) will be procured and distributed in as uniform a manner as possible.

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(2) Accessory packet components. The components for the accessory packet assembly shall be as specified in Table II.

TABLE II. Accessory Packet Components

Component	Reference	Packet
Coffee, Instant, Freeze Dried, Regular	A-A-20184B , Type III, Style A	All
Creamer, Non-Dairy, Dry	A-A-20043B	All
Sugar, White, Granulated	A-A-20135C , Type I, Style A, 1/7 oz.	All
Chewing Gum, Tablet, Regular Without Caffeine, Sugarfree Peppermint or Cinnamon <u>1/</u>	A-A-20175C , Type I, Size B Style (1), Class 3 Flavor a or c	All
Hot Sauce, Extra Hot 4x	A-A-20097E , Type II, 1/8 fl. oz.	All <u>2/</u>
Salt, Iodized	Sodium Chloride Monograph , 4 gram	LRP
Hand Cleaner (Pre-Moistened Towelette)	A-A-461B , Type II	All
Toilet Tissue 2 Packets 1 Packet	A-A-59594 , Style I, Type A, Class I, Size a	LRP MCW
Matches, Paper, 20 Splint Book	A-A-59489A , Type I, Class B	All

1/ Flavors shall be procured in equal quantities and assembled in a uniform distribution.

2/ Alternatively, hot sauce may be packed loose in the meal bag.

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(3) Menu contents. The menu contents shall be as specified in Table III.

TABLE III. Menu Contents

Menu #1	Menu #2
Spicy Oriental Chicken with Rice	Beef Stroganoff with Noodles
Fig Bar	Chocolate Sports Bar
Ice Cream Sandwich Shortbread Cookies	Starch Jelly Candy Dried Cranberries
Dairyshake <u>1/</u>	Nut and Fruit Mix, Type III
Beverage, carbo fortified (formul. d) <u>1/</u>	Beverage, carbo fortified (formul. d) <u>1/</u>
Accessory Pack	Accessory Pack
Spoon	Spoon
Menu #3	Menu #4
Chili Macaroni	Turkey Tetrazzini
Crackers <u>1/</u>	Dessert Bar, Mocha
Cheese Spread <u>1/</u>	Crackers <u>1/</u>
Toasted Corn Kernels	Cheese Spread <u>1/</u>
Chocolate Peanut Pan Coated Disks	Beverage Base, Orange (formul. c)
Cappuccino <u>1/</u>	Cappuccino <u>1/</u>
Accessory Pack	Accessory Pack
Spoon	Spoon
Menu #5	Menu #6
Chicken & Rice	Seafood Chowder
Chocolate Covered Cookies	Shortbread Cookies
Toasted Corn Kernels	Smoked Almonds
First Strike™ Bar, Cran-Raspberry	Nut and Fruit Mix, Type III
Cappuccino <u>1/</u>	Crackers <u>1/</u>
Accessory Pack	Beverage, carbo fortified (formul. d) <u>1/</u>
Spoon	Accessory Pack
	Spoon

Comment [EP6]: Follow-up to ES12-032(DSCP-SS-12-85704), change 06, 9 Oct 12 - p. 6, C-2, A(3). TABLE III. Menu Contents, delete "Ice Cream Sandwich"; insert "Shortbread Cookies"

Comment [EP7]: ES12-062(DSCP-SS-12-84452), change 06, 9 Oct 12 - p. 6, C-2, A(3). TABLE III. Menu Contents, delete "Starch Jelly Candy"; insert "Dried Cranberries"

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TABLE III. Menu Contents (cont'd)

Menu #7	Menu #8
Beef Stew	Spaghetti with Meat Sauce
Cake <u>1/</u>	Nut and Fruit Mix, Type I
Toasted Corn Kernels	Chocolate Peanut Spread
Chocolate Covered Cookies	Crackers <u>1/</u>
Beverage, carbo fortified (formul. d) <u>1/</u>	Chocolate Disks, Pan Coated
Accessory Pack	Sugar Free Beverage
Spoon	Accessory Pack
	Spoon
Menu #9	Menu #10
Rice and Chicken, Mexican	Scrambled Eggs with Cheese,
Shortbread Cookies	Western style
Smoked Almonds	Granola with Blueberries
Dried Cranberries	Chocolate Sports Bar
Dessert Bar, Chocolate Banana Nut	Filled Pretzels <u>1/</u>
Beverage, carbo fortified (formul. d) <u>1/</u>	Beverage Base, Orange (formul. c)
Accessory Pack	Cocoa Beverage Powder
Spoon	Accessory Pack
	Spoon
Menu #11	Menu #12
Scrambled Eggs with Bacon	Scrambled Eggs with Cheese,
Oatmeal, Flavored <u>1/</u>	Western Style
Nut and Fruit Mix, Type I	Oatmeal, Flavored <u>1/</u>
Fig Bar	Toaster Pastry
Beverage Base, Orange	Starch Jelly Candy Smoked Almonds
Cocoa Beverage Powder (formul. c)	Dairyshake <u>1/</u>
Accessory Pack	Cocoa Beverage Powder
Spoon	Accessory Pack
	Spoon

Comment [EP8]: ES12-062 (DSCP-SS-12-84452), change 06, 9 Oct 12 - p. 7, C-2, A(3).
 TABLE III. Menu Contents, delete "Starch Jelly Candy"; insert "Smoked Almonds"

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1/ An equal quantity of at least three flavors of oatmeal (menus 11, 12), three flavors of cakes (menu 7), two flavors of cheese (menus 3, 4), two flavors of crackers (menus 3, 4, 6), two flavors of filled pretzels (menu 10), three flavors of beverage base, carbohydrate fortified (menus 1, 2, 6, 7, 9), two flavors of dairyshake (menus 1, 12), and two flavors of cappuccino (menus 3, 4, 5) will be procured and distributed in as uniform a manner as possible.

SECTION D

D-1 PACKAGING

A. Components.

(1) Components. Packaging of components shall be in a tan material, as appropriate, and as cited in the component document. Candy shall be overpacked in a barrier pouch.

(2) Meal bag. The meal bag shall be made from food grade, low density polyethylene (LDPE) tubing or tubing made from a blend of food grade, low density polyethylene (LDPE) and linear-low density polyethylene (LLDPE). Additives may be used in order to improve sealability, peelability, tear resistance or other attributes provided all additives are food grade and are certified by the FDA as approved for food contact. Polyethylene shall have a minimum thickness of 0.010 inch. Inside dimensions of the bag shall not exceed 8-1/8 x 12-1/2 inches. The color of the bag for LRP shall conform to number 20219, 30219, 30227, 30279, 30313, 30324 or 30450 of FED-STD-595, Colors Used in Government Procurement. The color of the meal bag for MCW shall conform to number 37778 to 37886 of FED-STD-595. One seal shall be a minimum 1/8 inch wide, continuous, peelable seal that forms a hermetic closure. The seal shall be designed with an inverted "V" shaped peel indicator along the seal path. There shall be a minimum of 1/2 inch between the apex of the "V" and the end of the bag. The seal strength of the peelable seal shall be not less than 4 pounds per inch of width and shall be not greater than 10 pounds per inch of width. Alternative bag construction, bag materials, and material thicknesses may be used provided that the alternative method can be demonstrated to meet or exceed the requirements of this document and military abuse testing and controlled pest testing. Samples may be submitted to the contracting officer to be qualified on a case by case basis.

(3) Accessory packet. The accessory packet shall be a preformed packet or a form-fill-seal packet. Dimensions shall be sufficient to contain all components. Seals shall be a minimum 1/8 inch wide. A tear nick, notch or serrations shall be provided to facilitate opening the filled and sealed pouch. The average seal strength of the packet seals shall be not less than 3.5 pounds per inch of width and no individual specimen shall have a seal strength

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of less than 3.0 pounds per inch of width. As an alternative to the seal strength requirement, the filled and sealed packet shall exhibit no rupture or seal separation greater than 1/16 inch or seal separation that reduces the effective seal width to less than 1/16 inch when tested for internal pressure resistance as specified in E,D,(1),a. The packet shall be made from polymeric films or film combinations with adequate strength and thickness to contain and protect the components. The water vapor transmission rate (WVTR) of the film shall not exceed 6.2 gm/m²/24hrs/90%rh/100°F when tested in accordance with ASTM F 372, Standard Test Method for Water Vapor Transmission Rate of Flexible Barrier Materials Using an Infrared Detection Technique; ASTM E 96, Standard Test Methods for Water Vapor Transmission of Materials or Method 3030 of FED-STD-101, Test Procedures for Packaging Materials. The material shall show no evidence of delamination, degradation, or foreign odor when heat sealed or fabricated into pouches. The exterior color of the packet shall be clear or tan.

(4) Time-temperature indicator (TTI) label. The TTI label shall be a 3/4 inch square, bull's-eye type, pressure sensitive adhesive label. The TTI label shall have an activation energy (Ea) of 24–30 kcal/mole, be protected from ultraviolet radiation and have a shelf life of 1100 days at 80°F as pivot point.

B. Assembly.

(1) Meal assembly. Each applicable component for each meal as described in Table III shall be inserted in a meal bag. The bag shall be closed with a heat seal not less than 1/8 inch wide. The closure seal shall have an average seal strength of not less than 4 pounds per inch of width with no individual specimen test result less than 3 pounds per inch of width. The sealed meal bag shall not show any evidence of foreign odor.

(2) Accessory packet assembly. One of each applicable component as described in Table II shall be inserted in a packet. For a preformed packet, contents shall be inserted in the pouch and the pouch shall be closed with a heat seal not less than 1/8 inch wide. For a form-fill-seal packet, components shall be placed in the body and the cover applied by heat sealing with a seal not less than 1/8 inch wide. The closure seal shall be free of foldover wrinkles or entrapped matter that reduces the effective seal width to less than 1/16 inch. The sealed accessory packets shall not show any evidence of material degradation or delamination from packet fabrication, forming, or heat sealing. The average seal strength of the packet seals shall be not less than 3.5 pounds per inch of width and no individual specimen shall have a seal strength of less than 3.0 pounds per inch of width. As an alternative to the seal strength requirement, the filled and sealed pouch shall exhibit no rupture or seal separation greater

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than 1/16 inch or seal separation that reduces the effective closure seal width to less than 1/16 inch when tested for internal pressure resistance as specified in E,D,(1),c.

D-2 LABELING

A. Meal bag. Each meal bag shall be printed on at least one face in dark contrasting colored permanent ink with the information contained in Figures 1 and 2.

B. Accessory packet. Accessory packet, if not of clear material, shall be printed on one side in dark contrasting colored permanent ink:

ACCESSORY PACKET

D-3 PACKING

A. Packing. Twelve meals shall be packed in a fiberboard box. The fiberboard box shall conform to RSC-L of ASTM D 5118/D 5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes and grade V2s of ASTM D 4727/D 4727M Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes, except the requirements for dry burst strength shall be minimum 425 psi, the requirement for wet burst strength shall be minimum 250 psi and the laminated board thickness shall be 0.069 inches. [The U.S. Army Research, Development & Engineering Command, Natick Soldier Center has found that solid fiberboard shipping container material consisting of two outer facings of 90 pound wet strength linerboard and an inner ply of 69# linerboard meets the performance criteria of this specification.] The box liner shall be a full inside width box liner fabricated from grade W5c fiberboard in accordance with ASTM D 5118/D 5118M, except the terminal ends of the liner shall overlap a minimum of 2 inches and no fastening of the overlap is required. The box shall be closed in accordance with closure method 2A1 of ASTM D 1974, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes; except the gap between the outer flaps shall be not more the 3/4 inch wide. Each box shall be reinforced with two girthwise nonmetallic straps. The inside dimensions of the box shall be 16-11/16 inches in length, 9-1/8 inches in width and 10-1/4 inches in depth.

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D-4 UNITIZATION

A. Unit loads. Forty-eight boxes shall be arranged in unit loads in accordance with Type I, Class C of DSCP Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items. At least two boxes in each tier shall be oriented to display the TTI label.

D-5 MARKING

A. Shipping containers. Shipping containers shall be marked in accordance with DSCP FORM 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence and as specified in the contract with the following exceptions:

(1) Identification markings normally placed on an end of the shipping container shall read from top to bottom, left to right, when the shipping container is rotated from its upright position onto its side for palletization. The major flaps of the shipping container closure immediately to the right of the marked end of the shipping container shall bear the following marking:

Contract data and other required markings
Date of pack
Lot number
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Time Temperature Indicator label shall be centrally positioned on the panel. A minimum distance (quiet zone) of 1/4 inch from the nearest identification marking shall be maintained.

(2) One side panel of shipping container shall be marked “MEAL, COLD WEATHER” or “FOOD PACKET, LONG RANGE PATROL” in letters not less than 1-1/4 inches high.

B. Unit loads. Unit loads shall be marked in accordance with DSCP FORM 3556.

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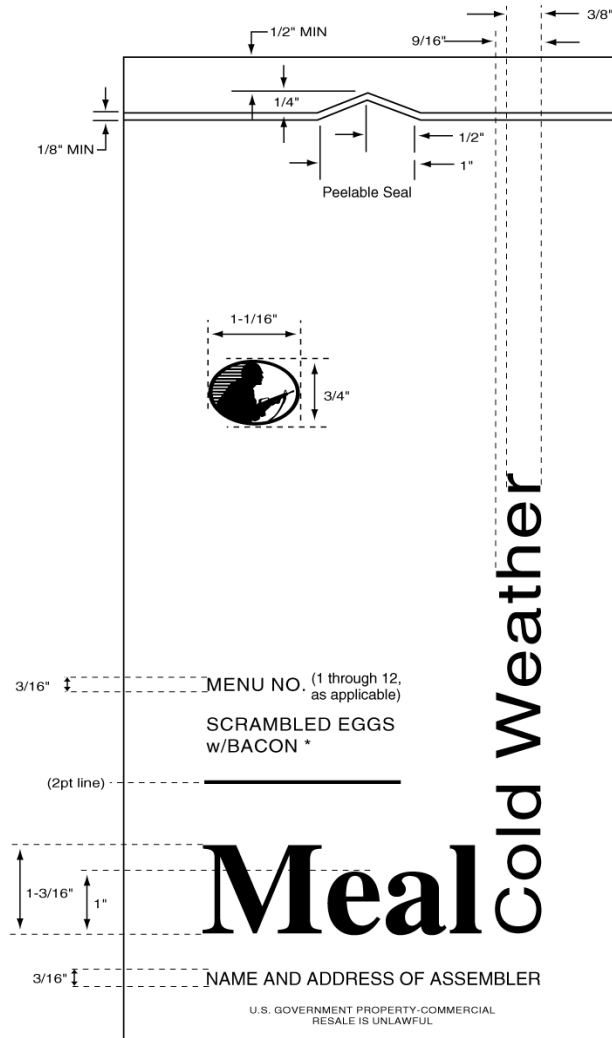


FIGURE 1. GRAPHIC DESIGN AND LETTERING HEIGHT **

* Name of applicable entree component as listed in table 1 component column

** A tolerance of plus or minus 1/16 inch is applicable to letter height requirements

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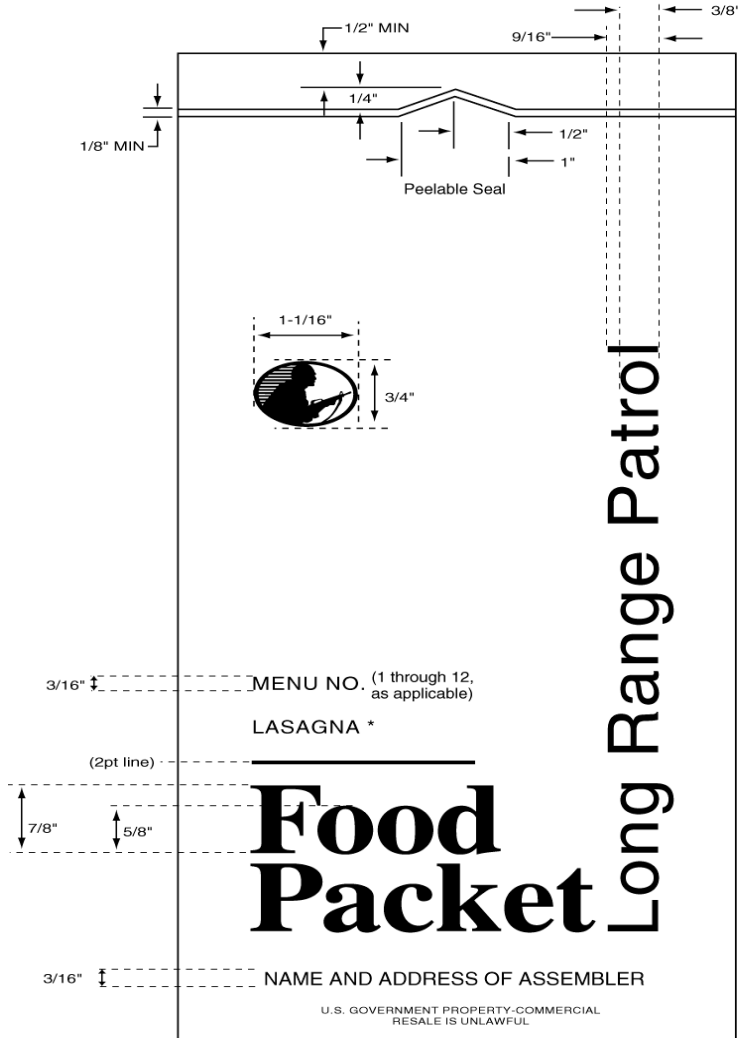


FIGURE 2. GRAPHIC DESIGN AND LETTERING HEIGHT **

* Name of applicable entree component as listed in table I component column

** A tolerance of plus or minus 1/16 inch is applicable to letter height requirements

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SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing ANSI/ASQ Z1.4, Sampling Procedures and Tables for Inspection by Attributes, are required. Unless otherwise specified, single sampling plans indicated in ANSI/ASQ Z1.4 will be utilized. When required, the manufacturer shall provide the certificate(s) of conformance to the appropriate inspection activity. Certificate(s) of conformance not provided shall be cause for rejection of the lot.

A. Definitions.

(1) Critical defect. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.

(2) Major defect. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

(3) Minor defect. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

B. Conformance inspection. Conformance inspection shall include the examinations/tests and the methods of inspection cited in this section.

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C. Packaging examination.

(1) Pouch material certification. A Certificate of Compliance may be accepted as evidence that the characteristics listed below conform to the specified requirements.

Requirement	Requirement para	Test procedure
Thickness of meal bag	D-1,A,(2)	ASTM D 2103 <u>1/</u>
Color of meal bag and accessory packet	D-1,A,(2) and D-1,A,(3)	Visual evaluation and FED-STD-595, as applicable <u>2/</u>
Water vapor transmission rate	D-1,A,(3)	ASTM F 372, ASTM E 96 or Method 3030, FED-STD-101 <u>3/</u>

1/ ASTM D 2103 Standard Specification for Polyethylene Film and Sheeting

2/ FED-STD-595 Colors Used in Government Procurement

3/ ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials
 ASTM F 372 Standard Test Method for Water Vapor Transmission Rate of Flexible
 Barrier Materials Using an Infrared Detection Technique
 FED-STD-101 Test Procedures for Packaging Materials

(2) Accessory packet examination. The filled and sealed packets shall be examined for the defects listed in Table IV. The lot size shall be expressed in packets. The sample unit shall be one packet. The inspection level shall be S-4 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 2.5 for major defects and 4.0 for minor defects.

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TABLE IV. Accessory packet defects

<u>Category</u>	<u>Defect</u>
<u>Major</u>	<u>Minor</u>
101	Not clean. <u>1/</u>
201	Seal width less than 1/16 inch. <u>2/</u>
202	Tear nick, notch or serrations missing or does not facilitate opening.
203	Tear or hole or open seal.
204	Evidence of delamination, when applicable.
205	Labeling, when applicable, missing or incorrect or illegible.
206	Missing or unserviceable component.
207	Plastic shrink film missing from around screw cap of hot sauce bottle or hot sauce bottle leaking, as applicable.
208	Foreign odor.

1/ Outer packaging shall be free from foreign matter, which is unwholesome, has the potential to cause package damage (for example, glass, metal fillings, etc.), or generally detracts from the clean appearance of the package. The following examples shall not be scored as defects for unclean:

a. Foreign matter which presents no health hazard or potential package damage and which can be readily removed by gently shaking the package or by gently brushing the package with a clean dry cloth.

b. Localized dried product which affects less than 1/8 of the total surface area of one pouch face, or an aggregate of scattered dried product which affects less than 1/4 of the total surface area of one pouch face.

2/ An effective seal is defined as any uncontaminated, fusion bonded, continuous path, minimum 1/16 inch wide, producing a hermetically sealed pouch.

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(3) Assembled meal bag examination. The filled and sealed meal bags shall be externally inspected and then opened and the components inspected for the defects listed in Table V. The lot size shall be expressed in bags. The sample unit shall be one bag. The inspection level shall be S-4 and the AQL, expressed in terms of defects per hundred units, shall be 2.5 for major defects and 4.0 for minor defects. A minimum of 50 samples shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot. The inspection sample shall contain a proportionate amount of each of the meals.

TABLE V. Assembled meal bag defects

Category			Defect
<u>Critical</u>	<u>Major</u>	<u>Minor</u>	
1			Tear or hole or puncture in cheese spread.
2			Swollen cheese spread pouch.
	101		Menu component missing or incorrect assortment for menu package. <u>1/</u>
	102		Not clean, the meal bag or any of the outer packaging of its contents. <u>2/</u>
	103		Foreign odor.
	104		Labeling missing or incorrect or illegible.
	106		Loss of vacuum in vacuum packaged components. <u>3/</u>
	107		Crushed or broken component. <u>4/</u>
	108		Broken spoon.
	109		Tear or hole or open seal in component packages.
	110		Candy not in barrier pouch.
	111		Swollen peanut butter pouch.

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TABLE V. Assembled meal bag defects (cont'd)

Category			Defect
<u>Critical</u>	<u>Major</u>	<u>Minor</u>	
		201	Tear or hole or open seal in meal bag.
		202	Tear or hole or open seal in accessory packet bag.
		203	Inverted "V" shaped peel indicator missing or not located as specified.
		205	Plastic shrink film missing from around screw cap of hot sauce bottle or hot sauce bottle leaking, as applicable.
		206	Labeling graphics of meal bag not correct.

1/ A missing entrée shall be cause for rejection of the lot.

2/ Outer packaging shall be free from foreign matter, which is unwholesome, has the potential to cause package damage (i.e. glass, metal filings, etc.), or generally detracts from the clean appearance of the package. The following examples shall not be scored as defects for unclean:

a. Foreign matter which presents no health hazard or potential package damage and which can be readily removed by gently shaking the package or by gently brushing the package with a clean dry cloth.

b. Localized dried product which affects less than 1/8 of the total surface area of one pouch face, or an aggregate of scattered dried product which affects less than 1/4 of the total surface area of one pouch face.

3/ When vacuum retention cannot be determined visually by obvious cling of the bag walls to the contents, retention shall be verified by testing as specified in the Packaging Requirements and Quality Assurance Provisions for Dehydrated Product in a Brickpack Pouch.

4/ For definition of crushed or broken, refer to applicable component document.

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D. Methods of inspection.

(1) Seal testing. The pouch seals shall be tested for seal strength or internal pressure resistance as required in a, b, c, or d, as applicable.

a. Unfilled preformed accessory packet pouch. The seals of the unfilled preformed pouches for the accessory packet shall be tested for seal strength in accordance with ASTM F 88, Seal Strength of Flexible Barrier Materials. The lot size shall be expressed in pouches. The sample unit shall be one pouch. The inspection shall be level S-1 and the AQL, expressed in defects per hundred units, shall be 10.0. Three specimens shall be cut from each of the three sealed sides of each pouch in the sample. The average seal strength of any side shall be calculated by averaging the results of the three specimens cut from that side. Any test specimen failing to meet a seal strength of 3 pounds per inch of width shall be scored as a major defect. Any average seal strength of less than 3.5 pounds per inch of width shall be cause for rejection of the lot. Alternatively, the internal pressure resistance shall be determined by pressurizing the pouches while they are restrained between two rigid plates. The sample size shall be the number of pouches indicated by inspection level S-1. If a three seal tester (one that pressurizes the pouch through an open end) is used, the closure seal shall be cut off for testing the side and bottom seals of the pouch. For testing the closure seal, the bottom seal shall be cut off. The pouches shall be emptied prior to testing. If a four-seal tester (designed to pressurize filled pouches by use of a hypodermic needle through the pouch wall) is used, all four seals can be tested simultaneously. The distance between rigid restraining plates on the four-seal tester shall be equal to the thickness of the product +1/16 inch. Pressure shall be applied at the approximate uniform rate of 1 pound per square inch gage (psig) per second until 14 psig pressure is reached. The 14 psig pressure shall be held constant for 30 seconds and then released. The pouches shall then be examined for separation or yield of the heat seals. Any rupture of the pouch or evidence of seal separation greater than 1/16 inch in the pouch manufacturer's seal shall be considered a test failure. Any seal separation that reduces the effective closure seal width to less than 1/16 inch (see table IV, footnote 2/) shall be considered a test failure. Any test failure shall be cause for rejection of the lot.

b. Unfilled meal bag. The seals of the unfilled meal bags shall be tested for seal strength in accordance with ASTM F 88. The lot size shall be expressed in bags. The sample unit shall be one bag. The sample size shall be the number of bags indicated by inspection level S-1. Three specimens shall be cut from the sealed end of each bag in the sample. Samples shall not be taken from the inverted "V" peel initiation. Any specimen with a seal strength less than 4 pounds per inch of width or greater than 10 pounds per inch of width shall be cause for rejection of the lot.

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c. Accessory packet pouch closure. The closure seals of the pouches for the accessory packet shall be tested for seal strength in accordance with ASTM F 88. The lot size shall be expressed in pouches. The sample unit shall be one pouch. The inspection level shall be S-1 and the AQL, expressed in defects per hundred units, shall be 10.0. For the closure seal on preformed pouches, three adjacent specimens shall be cut from the closure seal of each pouch in the sample. For the form-fill-seal pouches, three specimens shall be cut from each side and each end of each pouch in the sample. The average seal strength of any side, end or closure shall be calculated by averaging the three specimens cut from that side, end or closure. Any test specimen failing to meet a seal strength of 3 pounds per inch of width shall be scored as a major defect. Any average seal strength of less than 3.5 pounds per inch of width shall be cause for rejection of the lot. Alternatively, the internal pressure resistance shall be determined by pressurizing the pouches while they are restrained between two rigid plates. The sample size shall be the number of pouches indicated by inspection level S-1. If a three seal tester (one that pressurizes the pouch through an open end) is used, the closure seal shall be cut off for testing the side and bottom seals of the pouch. For testing the closure seal, the bottom seal shall be cut off. The pouches shall be emptied prior to testing. If a four-seal tester (designed to pressurize filled pouches by use of a hypodermic needle through the pouch wall) is used, all four seals can be tested simultaneously. The distance between rigid restraining plates on the four-seal tester shall be equal to the thickness of the product +1/16 inch. Pressure shall be applied at the approximate uniform rate of 1 pound per square inch gage (psig) per second until 14 psig pressure is reached. The 14 psig pressure shall be held constant for 30 seconds and then released. The pouches shall then be examined for separation or yield of the heat seals. Any rupture of the pouch or evidence of seal separation greater than 1/16 inch in the pouch manufacturer's seal shall be considered a test failure. Any seal separation that reduces the effective closure seal width to less than 1/16 inch (see table IV, footnote 2/) shall be considered a test failure. Any test failure shall be cause for rejection of the lot.

d. Meal bag closure. The closure seals of the meal bags shall be tested for seal strength in accordance with ASTM F 88. The lot size shall be expressed in bags. The sample unit shall be one bag. The sample size shall be the number of bags indicated by inspection level S-1. Three specimens shall be cut from the closure seal of each bag in the sample. The average seal strength shall be calculated by averaging the three test specimens cut from that seal (the sample unit). Any test specimen result less than 3 pounds per inch of width shall be cause for rejection of the lot. Any average seal strength of less than 4 pounds per inch of width shall be cause for rejection of the lot.

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(2) Unfilled meal bag and unfilled preformed accessory packet pouch seal certification. A certificate of conformance may be accepted as evidence that unfilled bags or pouches conform to the seal strength requirements specified in D-1,A,(2) and (3). When deemed necessary, seal testing of the unfilled bags or pouches shall be as specified in E,D,(1), a and b.

E. Packing.

(1) Shipping container examination. The filled and closed shipping container shall be examined for the defects listed in Table VI. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container fully packed. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

TABLE VI. Shipping container defects

<u>Category</u>	<u>Defect</u>
<u>Major</u>	<u>Minor</u>
101	Marking missing or incorrect or illegible.
102	Outer flaps do not completely meet, leaving an opening greater than 3/4 inch between flap ends.
103	Inadequate workmanship. <u>1/</u>
104	Missing meal. <u>2/</u>
105	Not one of each menu specified.
201	Meal bag graphics do not coincide with specified design.
202	Time-temperature indicator missing or not located as specified.

1/ Inadequate workmanship is defined as, but not limited to, incomplete closure of container flaps, loose strapping, inadequate stapling, improper taping, or bulged or distorted container.

2/ Each missing meal is a defect.

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(2) Flap closure testing. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0. The closure of the four outer flaps of the container shall be tested separately. A 90 degree angular bar with each leg approximately 5 inches long by 3 inches wide by 1/8 inch thick shall be used to test the flap closures. Insert one leg of the angular bar full length under the center of one outer flap. Insertion shall be made through the open slot between the outer flaps. Lift the container vertically by the other leg of the bar until the container is suspended. The complete upper surface of the inserted leg shall be in contact with the inner surface of the flap during the lifting and suspension of the container. Complete separation of the adhesive bond of one or more of the outer flaps, showing no evidence of fiber tear, shall be scored as a major defect.

F. Unit load examination. The unit load shall be examined in accordance with the requirements of DSCP FORM 3507. Any nonconformance shall be classified as a major defect.

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SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the issues of these documents are those active on the date of the solicitation or contract.

DSCP FORMS

DSCP FORM 3507	Loads, Unit: Preparation of Semiperishable Subsistence Item
DSCP FORM 3556	Marking Instructions for Shipping Cases, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence

FEDERAL STANDARD

FED-STD-101	Test Procedures for Packaging Materials
FED-STD-595	Colors Used in Government Procurement

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC) www.aoc.org
ANSI/ASQ Z1. Sampling Procedures and Tables for Inspection by Attributes

ASTM INTERNATIONAL www.astm.org

D 1974	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D 2103	Standard Specification for Polyethylene Film and Sheeting
D 4727/D 4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shape
D 5118/D 5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes
E 96/E 96M	Standard Test Methods for Water Vapor Transmission of Materials
F 88	Standard Test Method for Seal Strength of Flexible Barrier Materials
F 372	Standard Test Method for Water Vapor Transmission Rate of Flexible Barrier Materials Using an Infrared Detection Technique

AOAC INTERNATIONAL www.aoac.org
Official Methods of Analysis of the AOAC International

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For DLA Website Posting

RDNS-CFF

9 October 2012

TO: DLA-FTRE

SUBJECT: ES12-062 (DSCP-SS-12-84452); Substitution request and Document changes; ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements; find substitute for Candy and Chocolate Confections, Type VIII, Starch Jelly Candy, PKG&QAP A-A-20177E, in Menus 2 and 12; Contract SPM3S1-10-D-Z103, Vendor

Date received: 20 September 2012

Date due: 20 October 2012

Date replied: 9 October 2012

1. Natick received an Engineering Support Case from DLA Troop Support requesting a substitution for Starch Jelly Candy for use in the Meal, Cold Weather and Food Packet, Long Range Patrol (MCW/LRP).
2. Vendor has been unable to source a domestic Starch Jelly Candy for use in the MCW/LRP. The Ferrara Candy Company previously supplied the Starch Jelly Candy, aka "Chuckles" to Vendor, but has since moved the production of Chuckles to Mexico. Ferrara Candy Company, based out of Mexico, is not on the Veterinary Commands approved establishment list for the Military.
3. Natick recommends that Dried Cranberries replace the Starch Jelly Candy in Menu 2 and that Smoked Almonds replace the Starch Jelly Candy in Menu 12 of ACR-M-001A. Natick submits the following changes to ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements:

NOTE: Changes made to the attached Change 06, ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements document, dated 9 Oct 2012 also includes changes made for Follow up to ES12-032 (DSCP-SS-12-85704); Substitution request and Document changes; ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements; substitute Cookies, Packaged in a Flexible Pouch, Shelf Stable, Type I, Style A, Flavor 1, Short Bread Cookies, PKG & QAP 20295B in Menu 1 for the Type I, Ice Cream Sandwich, Freeze Dehydrated,

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Packaged in a Flexible Pouch, Shelf Stable, PCR-I-002

a. p. 2, C-2, A(1). TABLE I. Components, - Continued, delete “Starch Jelly Candy, Type VIII, Menus 2, 12”

b. p. 2, C-2, A(1). TABLE I. Components, - Continued, under “Cookies, Regular, Shortbread, Plain, Crisp, Individual Serving, A-A-20295C, Type I, Style A”, insert Menu “1,” before Menus 6, 9

c. p. 3, C-2, A(1). TABLE I. Components, - Continued, under “Fruits, Osmotically Dried, A-A-20299A,” insert Menu “2,” before Menu 9

d. p. 3, C-2, A(1). TABLE I. Components, - Continued, delete “Ice Cream Sandwich, Freeze Dehydrated, Cookies and Cream, PCR-I-002, Flavor I, Menu 1”

e. p. 3, C-2, A(1). TABLE I. Components, - Continued, under “Nuts, Shelled, Roasted, Almonds (Unblanched), Flavored (Smoked), A-A-20164C, Type IX, Style A”, insert Menu “, 12” after Menus 6, 9

f. p. 6, C-2, A(3). TABLE III. Menu Contents, delete “Ice Cream Sandwich”; insert “Shortbread Cookies”

g. p. 6, C-2, A(3). TABLE III. Menu Contents, delete “Starch Jelly Candy”; insert “Dried Cranberries”

h. p. 7, C-2, A(3). TABLE III. Menu Contents, delete “Starch Jelly Candy”; insert “Smoked Almonds”

4. These changes will not have a negative impact on the nutritional content of the MCW/LRP menus.

5. The Service Representatives were contacted and their replies were:

Army - Concurs with Natick

Marine Corps - Concurs with Natick

6. Attached is Change 06, ACR-M-001A, Meal Cold Weather/Food Packet Long Range Patrol, Combined Ration, Assembly Requirements, dated 9 Oct 2012 with changes highlighted.