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SECTION C

The Food Packet, Modular Operational Ration Enhancement (MORE) provides a special purpose enhancement packet for the individual and complements both individual and group rations. This packet of performance enhancing and high carbohydrate foods will help the individual maintain optimal performance levels in extreme operational environments and during high intensity missions.

C-1 ITEM DESCRIPTION

ACR-F-002A, FOOD PACKET, MODULAR OPERATIONAL RATION ENHANCEMENT (MORE), ASSEMBLY REQUIREMENTS

Types

Type I - High Altitude

C-2 ASSEMBLY REQUIREMENTS

A. Components. The components are specified in table I.

TABLE I. Components

<u>Component</u>	<u>Reference</u>
Beef and Turkey Snacks, Cured	A-A-20298B
Beef, Moist Cured/Kippered, Chopped and Formed Strips, Smoked	Variety A, Type II, Style a Class 1, Flavor (a)
Beverage Bases (Powdered)	A-A-20098E
Sweetened with Nutritive Sweetener	Type II,
Fortified Ascorbic Acid and Enhanced Maltodextrin	Formulation e
Flat Interlocking Closure Pouch	Design B
Orange	Flavor 1
Lemon-Lime	Flavor 4
Grape	Flavor 5
Tropical Punch	Flavor 10

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TABLE I. Components - Continued

Component	Reference
Caffeinated Chocolate Pudding, Spout Pouch	PCR-C-081
Chewing Gum, Disk, Regular, with Caffeine, Regular, Cinnamon	A-A-20175C , Type VII, Size B, Style (2), Class 1, Flavor c
Crackers, Fortified	PCR-C-037
Plain	Type I
Energy Gel	PCR-E-018
Mixed Berry	Flavor I
Lemon Lime	Flavor II
FIRST STRIKE™ Bar	PCR-F-001
Chocolate, Regular	Flavor I, Style A
Mocha, Mini	Flavor V, Style B
Fruits, Wet Pack	PCR-F-002C
Applesauce, Carbohydrate Enhanced, Sweetened, Regular Style, Zapplesauce®	Type VII Style 2 or 3 Spout Pouch, No Carton
Nut and Fruit Mix	PCR-N-003
Nuts and Raisins with Pan Coated Chocolate Disks	Type II
Nuts with Raw Sunflower Kernels and Infused Fruit	Type III
Snack Foods	A-A-20195D
Filled Pretzels, Cheddar Cheese	Type II, Style F, Flavor 1
Baked Snack Crackers, Hot and Spicy Cheese	Type V, Flavor 2
Toasted Corn Kernels, Plain, Salted	Type VI, Flavor 1
Spread Soup Mix	PCR-S-023
Cheddar Potato with Artificial Bacon Bits	Type II
Toaster Pastries	A-A-20211B
Regular, Frosted, Brown Sugar Cinnamon, Without Sprinkles, Enriched Wheat Flour, Fortified, Rectangular, Single Serving	Type I, Style B, Flavor 3, Frosting Option (B), Grain Composition (1), Fortification a, Shape i, Servings (a)

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C. Contents. The contents of each food packet are specified in table II.

TABLE II. Contents

Type I - High Altitude MORE

<u>Pack 1</u> Caffeine Chocolate Pudding Nut and Fruit Mix, Type III Toaster Pastry Energy Gel, Mixed Berry Snack, Filled Pretzels, Cheddar	<u>Pack 2</u> FIRST STRIKE™ Bar, Chocolate Nuts and Fruit Mix, Type II Energy Gel, Lemon Lime Snack, Corn Kernels Beef Snack, Smoked Caffeinated Gum Beverage <u>1/</u>	<u>Pack 3</u> Cracker Spread Soup Mix Zapplesauce® Snack, Baked Cracker FIRST STRIKE™ Bar, Mini Mocha Beverage <u>1/</u>
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1/ Flavors shall be procured in equal quantities and assembled in a uniform distribution.

SECTION D

D-1 PACKAGING

A. Components.

(1) 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 730 days at 80°F as pivot point.

(2) Assembly package. The assembly package shall be of sufficient thickness and strength to contain the menu components without tearing or spillage of meal contents throughout assembly, packing and distribution. Material will be suitably formulated for use with food packages.

B. Assembly.

(1) Food packet, MORE assembly. Each applicable component for each MORE food packet as described in table II shall be assembled and the pack of components shall be completely shrink wrapped using a heat shrink film suitably formulated for use with food packages. The size of the finished packet shall allow for the packing of 30 food packets into the box.

D-2 LABELING

A. Food packet, MORE. Each MORE food packet shall be correctly and legibly labeled on at least one face with permanent ink or other dark contrasting color. The label shall cite:

Modular Operational Ration Enhancement (MORE)
Type
Pack number
Contents list
Name and address of assembler

D-3 PACKING

A. Packing. Thirty food packets, 10 of each pack, 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, 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. [US Army Research, Development, and Engineering Command, Natick Soldier Research, Development, and Engineering Center has found that solid fiberboard shipping container material consisting of two outer facings of 90# 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 “Food Packet, Modular Operational Ration Enhancement (MORE)” in letters not less than 1-1/4 inches high. In addition, the type shall also be marked on the box.

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

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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.

C. Packaging examination.

(1) Assembled food packets examination. The filled and sealed food packets shall be inspected for the defects listed in table III. 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. 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 packets.

TABLE III. Assembled food packet defects

Category			Defect
<u>Critical</u>	<u>Major</u>	<u>Minor</u>	
1			Tear or hole or open seal in spread soup mix or energy gel or pudding or applesauce.
	2		Swollen spread soup mix or energy gel or pudding or applesauce.
		101	Component missing or incorrect pack for packet.
		102	Packet not clean or outer packaging of contents not clean. <u>1/</u>
		103	Foreign odor.
		104	Label missing or incorrect or illegible.
		105	Tear or hole or open seal in component packages.
		106	Crushed or broken component. <u>2/</u>
		201	Tear or hole or open seal in packet. <u>3/</u>

1/ 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.

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

3/ The holes provided in shrink wrap to allow venting of air to facilitate effective application of shrink wrap are permitted and shall not be scored as defects.

D. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table IV. 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 IV. Shipping container and marking defects

Category		Defect
<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 food packet. <u>2/</u>
105		Not 10 of each pack specified.
	201	Thirty food packets do not fit in box.
	202	Time-temperature indicator missing or not centrally located on panel.
	203	Time-temperature indicator 1/4-inch quiet zone not maintained.

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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 food packet is a defect.

(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 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 Items
DSCP FORM 3556	Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ) www.asq.org

ANSI/ASQ Z1.4 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 4727/D 4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D 5118/D 5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes