ACR-F-07
29 November 2006
W/Change 04 22 May 2009

SECTION C

The First StrikeRation® (FSR®) provides a special purpose operational ration for the individual during the first 72 hours of a mission.

C-1 ITEM DESCRIPTION

ACR-F-07, FIRST STRIKE RATION® (FSR®), ASSEMBLY REQUIREMENTS

C-2 ASSEMBLY REQUIREMENTS

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

TABLE I. Components

Component	Reference
Entrees	
Chicken Chunks, White, Cooked, Canned or in a Pouch, 7 oz. Pouch	A-A-20352, Type VI
Filled Bakery Items, Filled French Toast	MIL-DTL-32221, Type I
Sandwich, Breakfast, Shelf Stable	MIL-DTL-32223
Sandwich, Shelf Stable	MIL-DTL-32141
Pepperoni	Type II
Honey Barbecue Beef	Type IV
Italian Style	Type V
Tuna, Canned or in Flexible Pouches, White (Albacore), Water, Regular Salt, 3 oz. Pouch	A-A-20155C, type B, Color b, Packing Media 1, Salt/Sodium Level a
Starches and Soups	
Tortillas	PCR-T-008
Snack Bread, Fortified, Wheat	PCR-S-009, Type I
Crackers, Fortified, Plain	PCR-C-037, Type I
Fruits	
Fruits, Wet Pack	PCR-F-002B
Applesauce, Carbohydrate Enhanced, Sweetened, Regular Style	Type VII
Beverages	
Beverage Base, Powdered, Sweet, Ascorbic Acid and Maltodextrin, Flat Interlocking Closure Pouch	A-A-20098D, Type II, Formulation e, Design B
Orange, Lemon-Lime, Grape or Tropical Punch	Flavors 1, 4, 5 or 10

TABLE I. Components (cont'd)

Component	Reference
Desserts and Snacks	
Mini FIRST STRIKE™-Bar Chocolate, Apple Cinnamon, Cran-Raspberry or Mocha	PCR-F-001, Flavors I, II, III or V; Style B
Dessert Bar, Mocha, Peanut Butter or Chocolate Banana Nut	PCR-D-004, Flavors I, II or III
Cakes and Brownies, and Muffin Tops, Pound Cake, Lemon Poppy Seed	PCR-C-007C, Type I, Flavor 6
Cheese Spread, Cheddar; Fortified, Plain or with Jalapeno Peppers	PCR-C-039, Type I or II
Peanut Butter and Peanut Spread, Peanut Butter, Regular, Smooth, Stabilized, Fortified	A-A-20328A, Style I, Class A, Texture 1, Type a, Fortification b
Beef Snacks, Cured, Kippered Beef Strips Teriyaki and Barbeque	A-A-20298A, Type II, Style A, Flavors 2 and 3, Package type J
Nut and Fruit Mix, Nuts with Raw Sunflower Kernels and Infused Fruit	PCR-N-003, Type III
Toaster Pastry, Regular, Shelf Stable, Not fortified, Rectangular, Single Serving Frosted Brown Sugar Cinnamon	A-A-20211A, Type I, Style B, Class 1, Flavor c, Fortification b, Shape i, Servings a
Other Items	
Chewing Gum, Disk, with Caffeine, Regular, Cinnamon	A-A-20175C, Type VII, Style (2), Class 1, Flavor c
Hot Sauce, Extra Hot 4x, 1/8 fl. oz	A-A-20097E, Type II
Mayonnaise, Salad Dressing and Tartar Sauce Mayonnaise, Fat Free	A-A-20140C Type I, Style C
Fork, Knife and Spoon, Picnic (Plastic), High Impact, Spoon, MRE, 7-inch (Brown)	A-A-3109B, Type IV, Item 13
Hand Cleaner (Pre-moistened Towelette), Unscented, Water Based	A-A-461B, Type II
Re-closeable Interlocking Plastic Bag	1/

1/ The plastic bag shall be 0.003" thick, beige, opaque, LDPE, minimum 10 inches wide by 12 inches long, with double track zippers.

B. Accessory components. Accessory components are specified in Table II.

TABLE II. Accessory Components

Component	Reference	Pack
Chewing Gum, Regular Tablet, Xylitol Sweetened, Peppermint or Cinnamon	A-A-20175C, Type I, Size B, Style (1), Class 3, Flavor a or c	All
Hand Cleaner (Pre-moistened Towelette), Unscented, Water Based	A-A-461B, Type II	All
Matches, Safety	A-A-59489A, Type I, Class B	All
Salt, Table, Iodized, 4 g.	NaCl Monograph	All
Toilet Tissue, Institutional	A-A-59594, Style II, Type A, Size b	All
Coffee, Soluble, Freeze-Dried, Regular, Lap or fin seal pack	A-A-20184B, Type III, Style A, Pack 2	A
Creamer, Non-Dairy, Dry	A-A-20043B	A
Sugar, 1/7 oz.	A-A-20135D, Type I, Style A	A
Tea, Instant, Regular, Sweetened, Lemon Flavor, 16 g.	A-A-20183B, Type I, Style B, Flavor 2	B
Beverage Base, Powdered, Sweet, Ascorbic acid, Apple, Cider, 17 g.	A-A-20098D, Type II, Formulation b, Flavor 12	C

C. Contents. The contents of each meal are specified in Table III.

TABLE III. Contents

Menu #1	Menu #2	Menu #3
Filled French Toast	Italian Style Sandwich	Honey BBQ Beef Sandwich
Bacon Cheddar Sandwich	Chicken	Tuna
Pepperoni Sandwich	Toaster Pastry	Pound Cake
Cheese spread (Jalapeno)	Tortillas	Tortillas
Wheat snack bread	Peanut butter	Cheese spread (plain)
Beverage (2) 1/	Crackers	Crackers
Mocha Mini	Beverage (2) 1/	Beverage (2) 1/
FIRST STRIKE™ Bar	Appl/Cinn Mini	Mocha Mini
Chocolate Mini	FIRST STRIKE™ Bar	FIRST STRIKE™ Bar
FIRST STRIKE™ Bar	Cran/Rasp Mini	Cran/Rasp Mini FIRST
Dessert Bar (Peanut butter)	FIRST STRIKE™ Bar	STRIKE™ Bar
Beef Snack: Teriyaki	Dessert Bar (Mocha)	Dessert Bar (Choc. Banana)
Beef Snack: Barbeque	Beef Snack: Teriyaki	Beef Snack: Teriyaki
Zapplesauce	Beef Snack: Barbeque	Beef Snack: Barbeque
Nut Fruit Mix	Zapplesauce	Zapplesauce
Accessory packet C	Nut Fruit Mix	Nut Fruit Mix
Caffeinated Gum	Mayonnaise	Mayonnaise
Hot Sauce	Accessory packet B	Accessory packet A
Hand Cleaner (2)	Caffeinated Gum	Caffeinated Gum
Re-closeable plastic bag	Hot Sauce	Hand Cleaner (2)
Spoon	Hand Cleaner (2)	Re-closeable plastic bag
	Re-closeable plastic bag	Spoon
	Spoon	

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

SECTION D

D-1 PACKAGING

A. Components.

(1) Subassembly packet/accessory packet. The subassembly/accessory packet shall be a preformed pouch or a form-fill-seal pouch. Dimensions shall be sufficient to contain all components. Seals shall be a minimum 1/8 inch wide. A tear nick, notch or serrated edge shall be located on one or more seals to facilitate opening. The average seal strength of the pouch 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 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),a. The pouch 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/m^2/24hrs/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 exterior color of the pouch shall be clear or tan.

(2**)** 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**.**

(3) Meal assembly packet. The meal assembly packet shall be of sufficient thickness and strength to contain the meal components without tearing or spillage of meal contents throughout assembly, packing and distribution.

B. Assembly.

(1) Subassembly/accessory packet assembly. One of each applicable component as described in table II shall be inserted in a pouch. If a subassembly is used, additional components may also be inserted in the pouch. For a preformed pouch, 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 pouch, 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 average seal strength of the pouch 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 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)b.

(2) Meal assembly. Each applicable component for each meal as described in Table III shall be inserted in a meal assembly packet. The meal assembly packet shall be shrink wrapped or heat-sealed (as applicable). If closed by heat seal, the seal shall be not less than 1/8 inch wide. The sealed assembly packet shall not show any evidence of foreign odor. The size of the finished meal assembly packet shall allow for the packing of nine meals into the box.

D-2 LABELING

A. Subassembly/Accessory packet. The subassembly/accessory packet shall be labeled on one face in permanent dark contrasting color ink with the letter A, B, or C as applicable.

B. Meal assembly packet. Each packet shall be correctly and legibly labeled in accordance with the colors and design of the FIRST STRIKE RATION® label shown in Figure 1. (NOTE: The registered label design of the U.S. Army Natick Soldier Center is available on disk.) As an alternate labeling method, a pre-printed self-adhering 0.002 inch thick polyester label may be used.

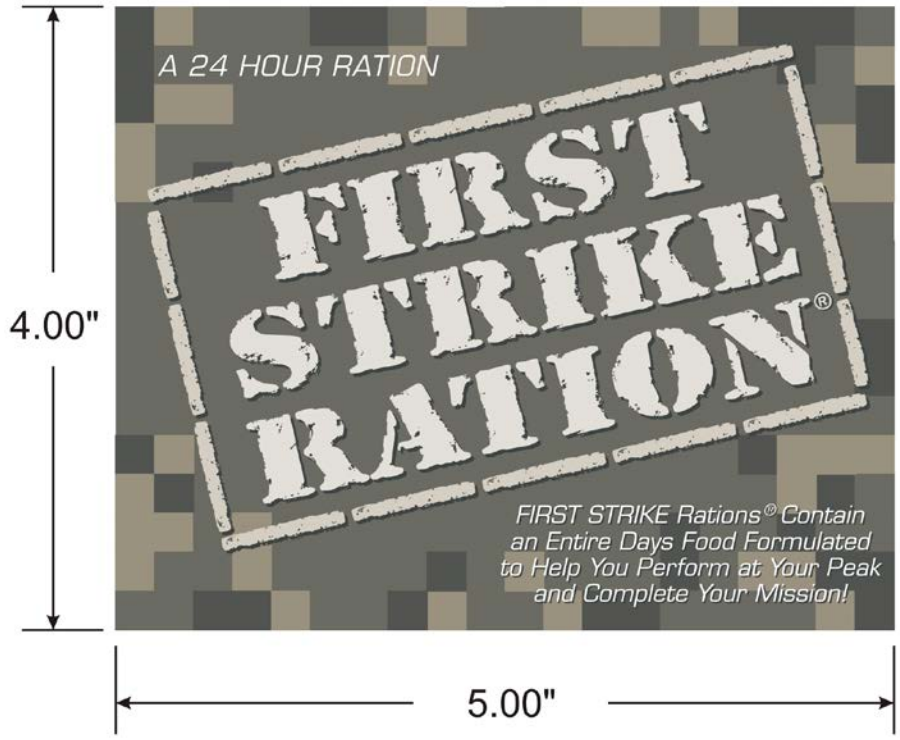

Figure 1. FIRST STRIKE RATION® Label.

The following information shall also be printed on the packet:

Contractor's name and address
Appropriate menu number and contents

D-3 PACKING

A. Packing. Nine meals, three of each menu, 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. [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# 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.

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
U.S. GOVERNMENT PROPERTY – COMMERCIAL RESALE IS UNLAWFUL

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 "FIRST STRIKE RATION®" in letters not less than 1-1/4 inches high.

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

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) 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
Color of subassembly/accessory pouch	D-1,A,(1)	Visual evaluation
Water vapor transmission rate	D-1,A,(1)	ASTM F 372, ASTM E 96 or Method 3030, FED-STD-101 1/

1/ 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) Unfilled preformed subassembly/accessory packet pouch certification. A Certificate of Compliance may be accepted as evidence that unfilled pouches conform to the requirements specified in D-1,A(1). When deemed necessary by the USDA, testing of the unfilled preformed pouches for seal strength shall be as specified in E,D(1)a.

(3) Subassembly/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.

TABLE IV. Subassembly/accessory packet defects

Category		Defect
Major	Minor	
101		Not clean. 1/
	201	Seal width less than 1/16 inch. 2/
	202	Tear nick or notch or serrations missing or does not facilitate opening.
	203	Tear or hole or open seal.
	204	Label missing or incorrect or illegible.
	205	Pouch not sealed on four sides.

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.

(4) Accessory packet contents examination. The filled and sealed packets shall be examined for the defects listed in table V (this examination may be performed on the preformed pouches after filling and prior to sealing). The lot size shall be expressed in packets. The sample unit shall be one packet open or sealed. The inspection level shall be S-4 and the AQL, expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects.

TABLE V. Subassembly/accessory packet contents defects

Category		Defect
Major	Minor	
101		Component not clean. 1/
	201	Missing or unserviceable component.
	202	Plastic shrink film missing from around screw cap of hot sauce bottle or hot sauce bottle leaking, as applicable.

1/ Outer packaging shall be free from foreign matter, which is unwholesome, has the potential to cause package damage (for example, 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 package face, or an aggregate of scattered dried product which affects less than 1/4 of the total surface area of one package face.

(5) Assembled meal packet examination. The filled and sealed meal packets shall be inspected for the defects listed in table VI. The lot size shall be expressed in packets. The sample unit shall be one packet. 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 VI. Assembled meal packet defects

Category			Defect
Critical	Major	Minor	
1			Tear or hole or open seal in sandwich or French toast or cheese spread or tuna or chicken pouch.
2			Swollen sandwich or applesauce or cheese spread or tuna or chicken pouch.
	101		Menu component missing or incorrect assortment for menu.
	102		Meal packet not clean or outer packaging of contents not clean. 1/
	103		Foreign odor.
	104		Labeling missing or incorrect or illegible.
	105		Swollen peanut butter pouch.
	106		Tear or hole or open seal in component packages.
	107		Crushed or broken component. 2/
	108		Broken spoon.
		201	Tear or hole or open seal in meal packet. 3/

TABLE VI. Assembled meal packet defects cont'd

Category			Defect
Critical	Major	Minor	
		202	Tear or hole or open seal in subassembly/accessory packet.
		203	Plastic shrink film missing from around screw cap of hot sauce bottle or hot sauce bottle leaking, as applicable.

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 films to allow venting of air to facilitate effective application of shrink wrap film are permitted and shall not be scored as defects. In addition a single vent hole in a preformed bag not greater than 1/4 inch diameter is allowed and shall not be scored a defect.

Comment [U1]: ES09-070(DSCP-SS-09-19704) Ch 04, 22 May 09, Section E, C., (5), Table VI., Footnote 3, line 2, insert new sentence 2 as follows:
" In addition a single vent hole in a preformed bag not greater than 1/4 inch diameter is allowed and shall not be scored a defect."

D. Methods of inspection.

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

a. Unfilled preformed subassembly/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 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 classified as a major defect and shall be cause for rejection of the lot.

b. Subassembly/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 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 classified as a major defect and shall be cause for rejection of the lot.

E. Packing.

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

Category		Defect
Major	Minor	
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. 1/
104		Missing meal. 2/
105		Not three of each menu specified.
	201	Time-temperature indicator missing or not centrally located on panel.
	202	Time-temperature indicator 1/4-inch quiet zone not maintained.

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.

(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.

SECTION J REFERENCE DOCUMENTS

DSCP FORMS

DSCP FORM 3507	Loads, Unit: Preparation for Semiperishable Subsistence Items
DSCP FORM 3556	Marking Instructions for Boxes, Sacks and Unit Loads of Perishable and Semiperishable Subsistence

FEDERAL STANDARDS

FED-STD-101	Test Procedures for Packaging Materials

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ)

ANSI/ASQ Z1.4-2003	Sampling Procedures and Tables for Inspection by Attributes

ASTM INTERNATIONAL

D 1974-98 (2003)	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D 4727/D 4727M-05	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D 5118/D 5118M-05a	Standard Practice for Fabrication of Fiberboard Shipping Boxes
E 96/E 96M-05	Standard Test Methods for Water Vapor Transmission of Materials
F 88-06	Standard Test Method for Seal Strength of Flexible Barrier Materials
F 372-99 (2003)	Standard Test Method for Water Vapor Transmission Rate of Flexible Barrier Materials Using an Infrared Detection Technique

For DSCP Website Posting

RDNS-CFF 22 May 2009

TO: DSCP-FTRE

SUBJECT: ES09-070 (DSCP-SS-09-19704) Request for Specification Changes to First Strike Ration® Assembly Document, ACR-F-07

1. Natick concurs with contractor's request for permission to place a "pin hole" in the seam of the bag gusset to allow packaging of the First Strike Ration® case on a temporary basis. Duration of temporary is balance of 46 thousand meal packets.

a. By allowing the hole in the bag, the bags are able to exhaust headspace air in the bag to facilitate case packing and case closure. Contractor provided data showing very low production efficiency without having the hole in the bag (around 20-25 percent efficiency). Efficiency is expected to triple if allowed "pin hole" in seam of bag gusset.

2. Natick concurs with contractor's request asking that footnote 3 be revised as follows: "3/ The holes provided in shrink films to allow venting of air to facilitate effective application of shrink wrap film are permitted and shall not be scored as defects. In addition a single vent hole in a preformed bag not greater than 1/4 inch diameter is allowed and shall not be scored a defect."

a. The 1/4 inch hole is representative of the hole allowed in shrink film. With the material in the FSR® menus and the case size it is necessary to place the bags in the case without a vacuum and then allow the compression of the case to evacuate the air.

b. The ACR allows the menu components to be contained by either shrink film or a preformed bag. If a bag is used the millage is not specified indicating that the use of the bag is the same as that of the shrink film, which is to contain the components.

3. Natick recommends the following change to the subject document for all current, pending and future contracts until the document is formally amended or revised:

a. Section E, C., (5), Table VI., Footnote 3, line 2, insert new sentence 2 as follows: " In addition a single vent hole in a preformed bag not greater than 1/4 inch diameter is allowed and shall not be scored a defect."

4. Attached is ACR-F-07 Change 04 dated 22 May 09 with changes highlighted.