SECTION C

This document covers shelf stable beef fajita filling packaged in a polymeric tray for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

PCR-B-062, BEEF FAJITA FILLING, PACKAGED IN A POLYMERIC TRAY, SHELF STABLE

C-2 PERFORMANCE REQUIREMENTS

A. <u>Product standard</u>. A sample shall be subjected to first article (FA) or product demonstration model (PDM) inspection as applicable, in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements (PCR) document. The approved sample shall serve as the product standard. Should the contractor at any time plan to or actually produce the product using different raw material or process methodologies from the approved product standard, which result in a product noncomparable to the product standard, the contractor shall submit a replacement FA or PDM for approval. In any event, all product produced must meet all requirements of this document including product standard comparability.

B. Commercial sterility. The packaged food shall be processed until commercially sterile.

C. <u>Shelf life</u>. The packaged product shall meet the minimum shelf life requirement of 36 months at 80°F.

D. Appearance.

(1) <u>General</u>. The finished product shall be a mixture of cooked whole muscle beef strips with cooked red and yellow bell peppers, onions and green jalapenos. The finished product shall be free from foreign materials.

(2) <u>Beef</u>. The cooked beef strips shall be produced from whole muscle beef cuts and chunking and forming shall not be allowed. The finished product cooked whole muscle beef strips shall have a medium brown cooked beef color and shall have grill marks. At least 60 percent by weight of the finished product cooked beef strips shall be not less than 1/2 inch in width and 1-1/2 inches in length and 1/2 to 1-1/8 inch in thickness. The packaged food shall be practically free of bone or bone fragments, cartilage, coarse connective tissue, tendons or ligaments, and glandular material.

(3) <u>Peppers</u>. The cooked bell peppers shall be distinct strips and shall have a red and yellow bell pepper color.

(4) <u>Onions</u>. The cooked onions shall be distinct, translucent strips.

(5) Jalapenos. The cooked jalapenos shall be distinct, green slices.

(6) <u>Broth</u>. The broth shall be a translucent golden brown color and shall not have excessive surface oil.

E. <u>Odor</u>. The packaged food shall have a moderate cooked beef and bell pepper odor. The packaged food shall be free from foreign odors.

F. <u>Flavor</u>. The packaged food shall have a moderate cooked, grilled beef flavor in a seasoned broth with moderate cooked bell pepper and onion and may have a slight jalapeno flavor with a mild sensation of heat. The packaged food shall be free from foreign flavors.

G. <u>Texture</u>.

(1) <u>Beef</u>. The whole muscle cooked beef strips shall be moist and tender.

(2) <u>Vegetables</u>. The cooked bell peppers, onions, and jalapenos shall be tender.

(3) <u>Broth</u>. The broth shall be thin.

H. <u>Net weight</u>. The average net weight shall be not less than 92 ounces (2608 grams). The net weight of an individual polymeric tray shall be not less than 90 ounces (2552 grams).

I. <u>Drained weight</u>. The average drained weight of the cooked, whole muscle beef strips and vegetables (combined) shall be not less than 40.0 ounces (1134 grams). The drained weight of the cooked, whole muscle beef strips and vegetables (combined) in an individual polymeric tray shall be not less than 38.0 ounces (1077 grams).

J. <u>Palatability and overall appearance</u>. The finished product shall be equal to or better than the approved product standard in palatability and overall appearance.

K. Analytical requirements.

(1) <u>Fat</u>. The fat content shall be not greater than 4.0 percent.

(2) <u>Salt</u>. The salt content shall be not greater than 1.2 percent.

SECTION D

D-1 PACKAGING

A. <u>Preservation</u>. Product shall be filled into polymeric trays which shall conform to the requirements of section 3 of MIL-PRF-32004, Packaging of Food in Polymeric Trays, Type I, Retortable products. Government verification testing and inspection of trays, lids, sleeves and fiberboard pads, as applicable, shall be in accordance with section 4 of MIL-PRF-32004 and the Quality Assurance Provisions of Section E of this Performance-based Contract Requirements document.

D-2 LABELING

A. <u>Polymeric tray body</u>. The polymeric tray body shall be clearly printed or stamped, in a manner that does not damage the tray, with permanent ink of any contrasting color, which is free of carcinogenic elements. One end of the polymeric tray (see figure 1 of MIL-PRF-32004) shall be marked with the product name and number of portions. If the tray body end markings are not readily legible in low light conditions, a small, easily legible label shall be applied, but not over any existing tray markings. All other markings may be applied along the tray body side. The marking of trays with the product name, lot number and filling equipment number shall be applied prior to processing. Additional tray marking may be applied before or after processing. 1/

Tray body markings shall include:

(1) Product name. Commonly used abbreviations may be used.

 (2) Tray code includes: <u>2</u>/ Lot number
Filling equipment identification number
Retort identification number
Retort cook number
Official establishment number

1/ As an alternate method, tray body markings may be clearly printed or stamped onto the polymeric tray lid prior to processing, in a manner that does not damage the lid, with permanent ink of any contrasting color, which is free of carcinogenic elements, provided that the required markings are applied onto the tray body after processing.

2/ The lot number shall be expressed as a four digit Julian code. The first digit shall indicate the year of production and the next three digits shall indicate the day of the year (Example, 14 February 2030 would be coded as 0045). The Julian code shall represent the day the

product was packaged into the tray and processed. Sublotting (when used) shall be represented by an alpha character immediately following the four digit Julian code. Following the four digit Julian code and the alpha character (when used), the other required code information shall be printed in the sequence as listed above.

B. <u>Polymeric tray lid</u>. The lid shall be clearly printed or stamped in a manner that does not cause damage. Permanent ink of any contrasting color, which is free of carcinogenic elements, shall be used. As an alternate labeling method, a pre-printed self-adhering 0.002 inch thick clear polyester label printed with indelible contrasting color ink may be used.

Note: The font tested by Natick was Microsoft Helvetica. The font used shall be similarly clear/easy to read as Helvetica. The recommended font sizes are as follows: 22 for the product name, 14 for "yield" and "to heat in water." If an additional note is required on the label, it should also be in font size 14. All other information should be in font size 9.

(1) Lid labeling shall include:

Product name Ingredients Net weight Name and address of packer Official inspection legend "Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable USDA regulations

(2) Lid labeling shall also show the following statements:

<u>YIELD</u>: Serves 15 portions of approximately 2/3 cup each.

TO HEAT IN WATER: Submerge unopened tray in water. Bring water to a boil. Simmer gently 35-40 minutes. Avoid overheating (tray shows evidence of bulging).

WARNING: Do not heat tray in oven.

TO TRANSPORT AFTER HEATING: Insert tray back into protective sleeve to protect during transport. If sleeve is unavailable, stack trays lid-to-lid with fiberboard pads in between.

<u>CAUTION</u>: Use care when opening as pressure may have been generated within the tray.

TO OPEN: Using a clean knife, cut the lidding around the inside perimeter of the tray seals.

<u>SUGGESTION</u>: Cut lid along 3 sides and fold over uncut portion. Fold back to keep unused portions protected.

(3) The product shall be formulated and labeled in accordance with all USDA labeling regulations and policies. The lid shall be labeled with the following product name:

BEEF FAJITA FILLING

D-3 PACKING

A. <u>Packing</u>. Four filled, sealed and processed polymeric trays shall be packed with sleeves or fiberboard pads in a fiberboard shipping container constructed in accordance with style RSC-L of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, minimum burst grade 275 or ECT 44 of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes. Type I trays shall be placed flat with the first two trays placed with the lids together and the next two trays with the lids together. Each box shall be closed in accordance with ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

D-4 UNITIZATION

A. <u>Unit loads</u>. Unit loads shall be as specified in accordance with DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

D-5 MARKING

A. <u>Shipping containers and unit loads</u>. Shipping containers and unit loads shall be marked in accordance with DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence.

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) <u>Critical defect</u>. 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) <u>Major defect</u>. 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) <u>Minor defect</u>. 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. <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:

(1) <u>Product standard inspection</u>. The first article or product demonstration model shall be inspected in accordance with the provisions of this document and evaluated for appearance, odor, flavor, and texture. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection of the lot.

(2) <u>Periodic review evaluation</u>. The approved first article or product demonstration model shall be used as the product standard for periodic review evaluations. All food components that are inspected by the USDA shall be subject to periodic review sampling and evaluation. The USDA shall select sample units during production of contracts and submit them to the following address for evaluation:

DEPARTMENT OF THE ARMY FCDD-SCC-EMR COMBAT CAPABILITITES DEVELOPMENT COMMAND-SOLDIER CENTER 10 GENERAL GREENE AVENUE NATICK, MA 01760-5056

One lot shall be randomly selected during each calendar month of production or as otherwise specified in the contract. Two (2) sample units shall be randomly selected from that one production lot. The two (2) sample units shall be shipped to Natick within five (5) working days from the end of the production month from which they are randomly selected and upon completion of all USDA inspection requirements. The sample units will be evaluated for overall quality against the current first article or product demonstration model.

(3) <u>Conformance inspection</u>. Conformance inspection shall include the examinations/tests and methods of inspection cited in this section.

E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. <u>Product examination</u>. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in trays. The sample unit shall be the contents of one tray. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0 for major defects and 6.5 for minor defects. Defects and defect classifications are listed in table I. The trays shall be heated in accordance with the heating instructions from the tray label prior to conducting any portion of the product examination. The samples for drained weight inspection shall be selected using the same sampling criteria as above.

TABLE I. <u>Product defects</u> $1/2/$		
Category		Defect
Major	Minor	
		Appearance
101		Finished product not a mixture of cooked whole muscle beef strips with cooked red or yellow bell peppers or onions or green jalapenos. $\underline{3}/$
102		Bone or bone fragment measuring more than 0.3 inch in any dimension.

TABLE I. Product defects 1/2/

Category		Defect
<u>Major</u>	Minor	
	201	Finished product cooked whole muscle beef strips not a medium brown cooked beef color or not with grill marks.
	202	Finished product cooked beef strips not percent by weight or not dimensions as specified. $\underline{4}/$
	203	Total weight of cartilage, coarse connective tissue, tendons or ligaments, and glandular material more than 2.0 ounces (57 grams).
	204	Cooked bell peppers not distinct strips or not a red or not a yellow bell pepper color.
	205	Cooked onions not distinct or not translucent strips.
	206	Cooked jalapenos not distinct or not green slices.
	207	Broth not translucent or not a golden brown color or has excessive surface oil.
		<u>Odor</u>
103		The packaged food does not have a moderate cooked beef or not a moderate bell pepper odor.
		<u>Flavor</u>
104		The packaged food does not have a moderate cooked, grilled beef flavor in a seasoned broth or not with moderate cooked bell pepper or not an onion flavor.
		Texture
	208	The whole muscle cooked beef strips not moist or not tender.
	209	The cooked bell peppers or onions or jalapenos not tender.
	210	Broth not thin.

TABLE I. Product defects <u>1</u>/<u>2</u>/ - Continued

		TABLE I. Product defects 1/2/ - Continued
Category		Defect
Major	Minor	
		Net weight
	211	Net weight of an individual polymeric tray less than 90 ounces (2552 grams). $5/$
		Drained weight
	212	Drained weight of the cooked, whole muscle beef strips and vegetables (combined) in an individual polymeric tray less than 38.0 ounces (1077 grams). $\underline{6}$ /

 $\underline{1}$ / Presence of any foreign materials such as, but not limited to dirt, insect parts, hair, glass, wood, or metal, or any foreign odors or flavors such as, but not limited to burnt, scorched, rancid, sour, stale, musty or moldy shall be cause for rejection of the lot.

2/Finished product not equal to or better than the approved product standard in palatability and overall appearance shall be cause for rejection of the lot.

<u>3</u>/ Requirement that beef strips be produced from whole muscle beef cuts in accordance with NAMP Item No. 115D, Beef Chuck, Square Cut, Pectoral Meat (IM) or NAMP Item No. 120, Beef Brisket, Deckle-Off, Boneless, shall be verified by a Certificate of Conformance (CoC).

<u>4</u>/ Verification that at least 60 percent by weight of the cooked beef strips in the finished product meet the dimensions of not less than 1/2 inch in width and not less than 1-1/2 inches in length and not 1/2 to 1-1/8 inch in thickness shall be verified by USDA upon the first production lot and each subsequent replenishment PDM during a contract cycle or in the case a new beef supplier is obtained. A CoC for width and length measurements of the cooked beef strips shall be provided on all lots produced between PDM replenishments.

5/ Sample average net weight less than 92 ounces (2608 grams) shall be cause for rejection of the lot.

 $\underline{6}$ / Sample average drained weight of the cooked, whole muscle beef strips and vegetables (combined) less than 40.0 ounces (1134 grams) shall be cause for rejection of the lot.

B. Methods of inspection.

(1) <u>Commercial sterility</u>. Commercial sterility shall be verified in accordance with USDA/FSIS regulations.

(2) <u>Shelf life</u>. The contractor shall provide a Certificate of Conformance that the product has a 36 month shelf life when stored at 80°F. Government verification may include storage for 6 months at 100°F or 36 months at 80°F. Upon completion of either storage period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point quality scale to be considered acceptable.

(3) <u>Net weight</u>. The net weight of the filled and sealed polymeric tray shall be determined by weighing each sample unit on a suitable scale tared with a representative empty tray and lid. Results shall be reported to the nearest 1 ounce or to the nearest 1 gram.

(4) <u>Drained weight</u>. Weigh a U.S. Standard 1/4 inch sieve to obtain the sieve tare weight. The polymeric tray contents shall be poured into a flat-bottom container. A minimum of three times the volume of the polymeric tray of not less than 140°F and not greater than 190°F water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat without breaking the beef strips or vegetables. The contents shall then be poured into a U.S. Standard 1/4 inch sieve in a manner that will distribute the product over the sieve without breaking the beef strips or vegetables. The sieve area shall be such that the distributed product does not completely cover all the openings of the sieve. The sieve shall be tilted at such an angle to assure complete drainage of liquid from the product. Drain product for two minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. The drained weight shall be reported to the nearest 0.5 ounce or to the nearest 1 gram.

(5) <u>Analytical</u>. The sample to be analyzed shall be a one-pound composite of beef fajita filling from three thoroughly drained, filled and sealed polymeric trays that have been selected at random from the production lot. $\underline{1}$ / The composite sample shall be prepared and analyzed in accordance with the following methods of the Official Methods of Analysis (OMA) of AOAC International:

Test	Method Number
Fat	991.36, 960.39, 2007.04, or 2008.06
Salt	935.47, 971.27

Test results shall be reported to the nearest 0.1 percent. Government verification will be conducted through actual testing by a Government laboratory. Any result not conforming to the analytical requirement shall be cause for rejection of the lot.

1/ Drain polymeric trays thoroughly for two minutes.

E-6 QUALITY ASSURANCE PROVISIONS (PACKAGING AND PACKING MATERIALS, POLYMERIC TRAY)

A. Packaging and labeling.

(1) <u>Polymeric tray testing</u>. For purposes of clarification, the polymeric tray without the lid will be referred to as the "tray" and the polymeric tray with the lid shall be referred to as the "container". The tray, container and packaging materials, as applicable, in accordance with the lot size, sample unit, and inspection level criteria shall be examined for the performance characteristics listed in table I of MIL-PRF-32004, Packaging of Food in Polymeric Trays. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

(2) <u>Examination of container</u>. The container shall be examined for the defects listed in table II of MIL-PRF-32004. The lot size shall be expressed in containers. The sample unit shall be one processed and labeled container. The inspection level shall be I and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major A defects, 2.5 for major B defects and 4.0 for minor defects. Two hundred sample units shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot. The labeling defects are listed in table II as follows:

		TABLE II. Container labernig derects
Category		Defect
<u>Major A</u> 101	<u>Minor</u>	Polymeric tray lid or body labeling missing or incorrect or illegible.
	201	When a pre-printed self-adhering label is used, the label not adhering to tray lid (for example, label raised or peeled back from edge to corner) or presence of any areas of gaps along the perimeter of the label where the label is not properly adhered.

TABLE II. Container labeling defects

(3) <u>Label adhesive examination</u>. When self-adhering labels are used, the adhesive shall be tested in accordance with ASTM D3330/D3330M, Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape. In lieu of testing, a CoC shall be provided.

B. Packing.

(1) <u>Shipping container and marking examination</u>. The filled and sealed shipping containers shall be examined for the defects listed in table III. 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 III. Shipping container and marking defects		
Category		Defect
<u>Major</u>	Minor	
101		Marking missing or incorrect or illegible.
102		Inadequate workmanship. <u>1</u> /
	201	Arrangement or number of polymeric trays not 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.

C. Unitization.

(1) <u>Unit load examination</u>. The unit load shall be examined in accordance with DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items. Any nonconformance shall be classified as a major defect.

SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the applicable version of these documents is that which is active on the date of the solicitation or contract.

DLA Troop Support Forms

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

DEPARTMENT OF DEFENSE SPECIFICATION

MIL-PRF-32004 Packaging of Food in Polymeric Trays (Copies of these documents are available from <u>http://quicksearch.dla.mil/qsSearch.aspx</u> or from the Standardization Document Order Desk, 700 Robbins Ave, Building 4D, Philadelphia, PA 19111-5094.)

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 <u>www.astm.org</u>

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D3330/D3330M	Standard Test Method for Peel Adhesion of Pressure- Sensitive Tape
D4727/D4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D5118/D5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes

AOAC INTERNATIONAL www.aoac.org

Official Methods of Analysis (OMA) of AOAC International

NORTH AMERICAN MEAT INSTITUTE (NAMI) www.meatinstitute.org

Meat Buyers Guide