

## SECTION C

This document covers thermostabilized country captain chicken packaged in a flexible pouch for use by the Department of Defense as a component of operational rations.

### C-1 ITEM DESCRIPTION

**PCR-C-019A, COUNTRY CAPTAIN CHICKEN, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE**

### C-2 PERFORMANCE REQUIREMENTS

A. Product standard. A sample shall be subjected to first article or product demonstration model inspection as applicable, in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements document.

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

C. Shelf life. The packaged food shall meet the minimum shelf life requirement of 36 months at 80°F.

D. Appearance.

(1) General. The finished product shall be a chicken breast fillet in a tomato-based sauce with pieces of tomato, onion, green and red bell peppers, currants or small or midget raisins, slivered almonds, herbs, and spices. The packaged food shall be free from foreign materials.

(2) Chicken. The chicken breast fillet shall be chunked and formed chicken breast meat with rib meat. The chicken breast fillet shall be lightly breaded and shall be a golden brown color. The chicken breast fillet shall be similar to a natural chicken breast shape and shall be intact. The chicken breast fillet shall be free of bone or bone fragments, skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat.

(3) Sauce. The sauce shall be red to reddish brown color and shall be typical of a cooked tomato-based sauce with pieces of tomato, onion, green and red bell peppers, currants or small or midget raisins, slivered almonds, herbs, and spices.

E. Odor and flavor.

(1) General. The packaged country captain chicken shall have an odor and flavor characteristic of chicken breast fillet in spicy tomato-based sauce with pieces of tomato, onion, green and red bell pepper, currants or small or midget raisins, slivered almonds, and herbs. The packaged food shall be free from foreign odors and flavors.

(2) Sauce. The sauce shall have a mild curry odor and flavor.

F. Texture.

(1) Chicken. The chicken breast fillet shall simulate the hardness (initial bite) and chewing characteristics that are normally found in a tender, whole muscle chicken breast. The chicken breast fillet shall be moist.

(2) Sauce. The sauce shall be moderately thick with pieces of soft to slightly firm tomato, onion, green and red bell peppers, soft currants or small or midget raisins, slightly crunchy slivered almonds, and herbs.

G. Net weight. The average net weight shall be not less than 8.0 ounces. No individual pouch shall have a net weight of less than 7.5 ounces.

H. Drained weight. The drained weight of the unbreaded chicken breast fillet shall be not less than 1.8 ounces.

I. Palatability. The finished product shall be equal to or better than the approved product standard in palatability and overall appearance.

J. Analytical requirements.

(1) Fat content. The fat content shall be not greater than 8.0 percent.

(2) Salt content. The salt content shall be not less than 0.5 percent and not greater than 1.2 percent.

### **C-3 MISCELLANEOUS INFORMATION**

THE FOLLOWING IS PROVIDED FOR INFORMATION ONLY AND TO PROVIDE THE BENEFIT OF PAST GOVERNMENT EXPERIENCE. THIS IS NOT A MANDATORY CONTRACT REQUIREMENT.

A. Ingredients/formulation. Ingredients and formulation percentages for the sauce may be as follows:

<u>Ingredients</u>	<u>Percent by weight</u>
Chunky, crushed tomatoes	44.00
Chicken broth	43.97
Slivered almonds	3.25
Dehydrated chopped onions	2.00
High opacity modified food starch	1.85
Currants or small or midget raisins	1.82
Dehydrated red bell peppers	1.00
Garlic powder	0.64
Curry powder	0.55
Salt <sup>1/</sup>	0.55
Dehydrated green peppers	0.18
White pepper	0.07
Dried parsley	0.07
Ground thyme	0.05

<sup>1/</sup> The total amount of salt in the sauce formula may be adjusted as necessary to produce a product that complies with the finished product salt requirements.

### **SECTION D**

#### **D-1 PACKAGING**

Product shall be filled into pouches and each pouch shall be packed in a carton in accordance with MIL-PRF-44073, Packaging of Food in Flexible Pouches.

#### **D-2 LABELING**

A. Pouches. Each pouch shall be clearly printed or stamped, in a manner that does not damage the pouch, with permanent black ink or any other contrasting color, which is free of carcinogenic elements. Prior to thermal processing of the pouches, the product name, lot number and filling equipment number shall be applied. All other marking may be applied before or after thermal processing.

(1) Product name (not less than 1/8 inch high). Commonly used abbreviations may be used when authorized by the inspection agency.

(2) Pouch code includes: 1/

Lot Number  
Filling equipment identification number  
Official establishment number (for example, EST-38)  
Retort identification number  
Retort cook number

1/ 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, 6 July 2000 would be coded as 0188). The Julian code shall represent the day the product was packaged into the pouch and processed. Sub-lotting (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. Cartons.

(1) The cartons shall be clearly printed on one of the largests panel with permanent black ink as follows:

Product name (7/32 to 9/32 inch block letters).  
Ingredients.  
Net weight.  
Name and address of packer.  
Code (same as pouch code, see pouches). 1/ 2/  
USDA approval stamp for the packers plant.  
"Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable FDA/USDA regulations.

1/ Code may be ink printed or embossed on the outside of any other panel except the largest panels of the carton.

2/ Official establishment number not required in carton code.

(2) Military nutrition information entitled "Military Rations Are Good Performance Meals" shall be printed on the entrée cartons large panel opposite to the panel printed with the data in D-2,B,(1) above. The information, provided by the contacting officer, shall be clearly printed with permanent black ink in an area no smaller than 4-1/4 inches by 6-3/4 inches.

**D-3 PACKING**

A. Packing for shipment to ration assembler. Seventy-two pouches (of the same product) in cartons shall be packed flat or on edge in a snug-fitting fiberboard shipping container conforming to style RSC , type CF, class domestic, grade 200 of ASTM D 5118, Standard Practice for Fabrication of Fiberboard Shipping Boxes. Each container shall be securely closed in accordance with ASTM D 1974, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers.

**D-4 MARKING**

A. Shipping containers. Shipping containers shall be marked in accordance with DPSC Form 3556, Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence.

## **SECTION E INSPECTION AND ACCEPTANCE**

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required. 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. Classification of inspections. The inspection requirements specified herein are classified as follows:

(1) Product standard inspection. The first article or product demonstration model shall be inspected in accordance with the provisions of this Performance-based Contract Requirements document and evaluated for overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection of the lot.

(2) Conformance inspection. Conformance inspection shall include the examinations and the methods of inspection cited in this section.

## **E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)**

A. Product examination. 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/ASQC Z1.4 - 1993. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in Table I. For drained weight inspection, a separate set of pouches shall be selected from the lot using the same sampling criteria as above. The pouches shall be immersed in 140°F to 190°F water for 10 minutes prior to conducting the product examination and the drained weight inspection.

TABLE I. Product defects 1/ 2/ 3/

Category		Defect
<u>Major</u>	<u>Minor</u>	
		<u>Appearance</u>
101		Bone or bone fragments measuring more than 0.3 inch in any dimension.
102		Chunked and formed chicken breast fillet not chicken breast meat with rib meat.
	201	Chicken breast fillet not a lightly breaded chicken fillet or not golden brown color.
	202	Chicken breast fillet not similar to a natural chicken breast shape or not intact.
	203	Total weight of skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat more than 0.20 ounce.
	204	Color of sauce not red to reddish brown.
	205	Sauce not typical of a tomato-based sauce with pieces of tomato, onion, green and red bell peppers, currants or small or midget raisins, and slivered almonds.
		<u>Odor and flavor</u>
103		Odor or flavor not of cooked chicken in a spicy tomato-based sauce with onions, green and red bell peppers, currants or small or midget raisins, almonds, herbs, and curry.
104		Sauce does not have a mild curry odor and flavor.
		<u>Texture</u>
	206	Chicken breast fillet not similar to initial bite and chewing characteristics of a tender, whole muscle chicken breast.
	207	Chicken breast fillet not moist.
	208	Sauce not moderately thick with pieces of slightly soft to slightly firm tomato, green and red bell peppers, soft currants or small or midget raisins, and crunchy slivered almonds.
		<u>Weight</u>
	209	Net weight of an individual pouch less than 7.5 ounces. <u>4/</u>
	210	Drained weight of the unbreaded chicken breast fillet less than 1.8 ounces.

1/ The presence of any foreign material such as but not limited to, dirt, insect parts, hair, wood, glass, metal, or mold or the presence of any foreign odors or flavors such as, but not limited to burnt, scorched, rancid, sour, or stale 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.

3/ Small or midget raisins shall be Type I or Type III of the US Standards for Grades of Processed Raisins and shall be verified by a USDA certificate.

4/ Sample average net weight less than 8.0 ounces shall be cause for rejection of the lot.

B. Methods of inspection.

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

(2) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year 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 hedonic scale to be considered acceptable.

(3) Net weight. The net weight of the filled and sealed pouches shall be determined by weighing each sample on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1 ounce.

(4) Drained weight. The pouch contents shall be poured into a flat-bottom container. A minimum of three times the pouch's volume of 180°F to 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 and remove the sauce without breaking the chicken breast fillet. The contents shall then be poured into a U.S. Standard No. 7 sieve in a manner that will distribute the product over the sieve without breaking the chicken breast fillet. 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 approximately a 45° angle and allowed to drain for 2 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 0.1 ounce.

(5) Analytical. The sample to be analyzed shall be a composite of eight filled and sealed pouches, which have been selected at random from the lot. The composited sample shall be prepared (see Note) and analyzed in accordance with the following methods of the Official Methods of Analysis of AOAC International:

<u>Test</u>	<u>Method Number</u>
Fat	960.39
Salt	935.47

Test results shall be reported to the nearest 0.1 percent. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

NOTE: The USDA will use AOAC method 983.18 for preparation of the sample.

**E-6 QUALITY ASSURANCE PROVISIONS (PACKAGING AND PACKING MATERIALS)**

A. Packaging and labeling.

(1) Pouch material testing. The pouch material shall be examined for the characteristics listed in table II. The lot size, sample unit, and inspection level

criteria are provided for each of the test characteristics. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

TABLE II. Pouch material quality assurance criteria

Characteristic	Lot size expressed in	Sample unit	Inspection level
Oxygen transmission rate	Yards	1/2 yard	S-1
Water vapor transmission rate	Yards	1/2 yard	S-1
Camouflage	Yards	1/2 yard	S-1
Thermal processing	Pouches	1 pouch	S-2
Environmental conditions	Pouches	1 pouch	S-2

(2) Pouch examination. The pouches shall be examined for the defects listed in table II of MIL-PRF-44073. The lot size shall be expressed in pouches. The sample unit shall be one thermal processed pouch. 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.

(3) Examination of pouch and carton assembly. The completed pouch and carton assemblies shall be examined for the defects listed in table III of MIL-PRF-44073. The lot size shall be expressed in units of completed assemblies. The sample unit shall be one pouch and carton assembly. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major defects and 2.5 for minor defects. Fifty sample pouch and carton assemblies shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot.

B. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table III below. 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
Major	Minor	
101		Marking omitted, incorrect, illegible, or improper size, location sequence or method of application.
102		Inadequate workmanship. <u>1</u> /
	201	Contents more or less than 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.

**SECTION J REFERENCE DOCUMENTS**

DSCP FORMS

DPSC FORM 3556 Marking Instructions for Shipping Cases, Sacks and

Palletized/Containerized Loads of Perishable and Semiperishable  
Subsistence

MILITARY SPECIFICATIONS

MIL-PRF-44073 Packaging of Food in Flexible Pouches

GOVERNMENT PUBLICATIONS

US Standards for Grades of Processed Raisins

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ)

ANSI/ASQCZ1.4-1993 Sampling Procedures and Tables for Inspection by Attributes

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1974 Standard Practice for Methods of Closing, Sealing, and Reinforcing  
Fiberboard Shipping Containers

D 5118 Standard Practice for Fabrication of Fiberboard Shipping Boxes

AOAC INTERNATIONAL Official Methods of Analysis of the AOAC International

AMSSB-RCF-FN (Valvano/4259)

8 April 2002

TO: DSCP-HRAA (LeCollier/3625)

Subject: (ES02-105) Technical Inquiry; Various MRE Documents (listing below); Clarify  
Carton labeling information

Ref: Quality Summit Mar 13, 2002, Industry One on One Sessions.

1. Based on discussions at referenced meeting, the U.S. Army Soldier and Biological  
Chemical Command, Soldier Systems Center (SBCCOM) has decided to clarify the carton  
labeling information since the requirement as written has been misinterpreted.

2. SBCCOM requests that DSCP implement the following change to the listed subject  
documents for all current, pending and future procurements until the documents are  
formally amended or revised:

In Section D, D-2 Labeling, B Cartons: Delete Footnote 1 entirely and insert:

"1/ Code may be ink printed on any outside carton panel. Code may be embossed on  
any outside carton panel except the largest panels of the carton."

3. The affected MRE entrée related documents are as follows:

Clam Chowder, New England style, Pouch	PCR-C-045	25 Oct 01
Pork Rib, Boneless, Imitation, Pouch	PCR-P-028	25 Oct 01
Fruits, Wet Pack, Pouch	PCR-F-002A	24 Oct 01
Vegetable Manicotti, Pouch	PCR-V-002	24 Oct 01
Beef Roast w/Vegetables, Pouch	PCR-B-035	24 Oct 01
Chili and Macaroni, Pouch	PCR-C-027	15 Nov 00
Beef Stew, Pouch	PCR-B-020	15 Nov 00
Beef Ravioli in Meat Sauce, Pouch	PCR-B-021	15 Nov 00

**PCR-C-019A**  
**31 July 2000**  
**SUPERSEDING**  
**PCR-C-019**  
**8 September 1999**

Beef w/Mushrooms in Sauce, Pouch	PCR-B-022	15 Nov 00
Beef Patty, Grilled, Pouch	PCR-B-029	15 Nov 00
Beefsteak, Grilled w/Mushroom Gravy, Pouch	PCR-B-030	15 Nov 00
Pork Chop, Jamaican, Pouch	PCR-P-012	15 Nov 00
Seafood Tortellini, Pouch	PCR-S-011	15 Nov 00
Turkey Breast, in Gravy w/Potatoes, Pouch	PCR-T-004	15 Nov 00
Country Captain Chicken, Pouch	PCR-C-019A	31 Jul 00
Jambalaya w/Ham & shrimp, Pouch	PCR-J-001	30 Sep 99
Beef Enchilada in Sauce, Pouch	PCR-B-010 (1)	30 Sep 99
Potatoes, Mashed, Pouch	PCR-P-011	30 Sep 99
Black Bean and Rice Burrito, Pouch	PCR-B-0002	17 Dec 97
Spaghetti w/Meat Sauce, Pouch	PCR-S-0002	5 Nov 97
Pork Chow Mein, Pouch	PCR-P-0002	5 Nov 97
Chicken and Rice, Pouch	PCR-C-0005	5 Nov 97
Chicken Stew, Pouch	PCR-C-0006	5 Nov 97
Beef Frankfurters, Pouch	PCR-B-0003	5 Nov 97
Pasta w/Vegetables in Cheese Sauce, Pouch	PCR-P-0001	22 Sep 97
Noodles, Buttered, Pouch	PCR-N-0001	22 Sep 97
Meatloaf w/Gravy, Pouch	PCR-M-0001	22 Sep 97
Chicken Breast w/Salsa, Pouch	PCR-C-0002	22 Sep 97
Chicken Breast in Thai Sauce, Pouch	PCR-C-0003	22 Sep 97
Beef in Teriyaki Sauce w/Vegetables, Pouch	PCR-B-0001	22 Sep 97
Apple Slices in Spice Sauce, Pouch	PCR-A-0001	4 Apr 97

4. Several MRE related component documents, i.e. breads, cakes, cookies, do not require a carton.

5. Several MRE entrée related documents from the Oct 1998 time frame did not contain the specific labeling of pouches and cartons inclusively. They referenced MIL-PRF-44073 in the Section D requirements.

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6. Therefore, SBCCOM requests that DSCP implement the following change to the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073E Packaging of Foods in Flexible Pouches for all current and pending procurements until the document is formally amended or revised:

In III, A, 1 Labeling and marking, b, Cartons: Delete Footnote 1 entirely and insert:

"1/ Code may be ink printed on any outside carton panel. Code may be embossed on any outside carton panel except the largest panels of the carton."

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PCR-C-019A  
31 July 2000  
SUPERSEDING  
PCR-C-019  
8 September 1999

Moody  
Richards  
Sherman  
Trottier  
Valvano

CF: DSCP & SVCs:

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Arthur  
Beward  
Charette  
Ferrante  
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