

 *Change 01 1 APR 03*

**TECHNICAL DATA FOR MEAL ALTERNATIVE REGIONALLY  
CUSTOMIZED**

**TECHNICAL DATA PACKAGE FOR MEAL ALTERNATIVE REGIONALLY  
CUSTOMIZED**

**PURPOSE:**

The purpose of this ration is to provide a wholesome vegetarian meal. The requirements in this Technical Data Package (TDP) will enable the government to procure a self-contained packet consisting of a single meal utilizing commercial packaging sufficient to meet the salient characteristics, nutritional requirements and other provisions of this document. The ingredients, formulations, and components offered must not contain prohibited material as defined in this document. Entrees and complementary items for the **Meal Alternative Regionally Customized (MARC)** shall comply with applicable shelf life and size requirements specified in this document. The ration may employ some of the same components as the Meal, Ready-to-Eat (MRE), but it is not designed to take the place of an MRE. It is designed to employ commercial components and packaging to reduce costs.

The government shall have sole authority to determine acceptability of products offered based on the commercial practice of the submission of a Certificate of Conformance (COC). A **MARC** composed of an entree and complementary components may be used by offerors as a general guide to show the types of components that have been found to be acceptable. This is in no way intended to limit selections of entrees or complementary components nor is it intended to excuse any of the requirements found in the Salient Characteristics section of this document.

(SEE ATTACHED MENUS)

NOTE: ENTRÉE POUCHES AND MEAL BAGS ARE REQUIRED TO BE IN ACCORDANCE WITH THE REFERENCE SPECIFICATIONS.

**SECTION C TECHNICAL REQUIREMENTS FOR MEAL ALTERNATIVE REGIONALLY CUSTOMIZED**

**C-1 NSN/DESCRIPTION**

8970-01-499-7645

**Meal Alternative, Regionally Customized (MARC)**, Shelf Stable, lunch, individual, ready-to-eat, 10 menus, 10 meals per case. Unit of Issue: Case

Vegetarian meal packet is for one person for one meal. **Except as noted elsewhere herein, animal or animal by-products, including animal-based cooking fats or oils are prohibited. IN ADDITION, PRODUCTS CONTAINING ETHYL ALCOHOL OR INGREDIENTS DERIVED FROM OR CONTAINING ETHYL ALCOHOL IS PROHIBITED.**

**C-2 SALIENT CHARACTERISTICS:**

- a. A meal is comprised of a single meal bag. Each meal bag contains one of ten different menus. It is essential that this item be produced in accordance with good commercial practice to attain high standards of appearance, odor, flavor, and texture.
- b. All food components shall be Shelf Stable and Ready-to-Eat (no preparation necessary).
- c. The minimum shelf life shall be **12 months** at 80°F from the time components are assembled into the meal packet. The contractor shall ship the **MARC** with no less than 9 months shelf life remaining. A Certificate of Conformance shall be furnished to the Contracting Officer prior to award certifying that the product and packaging offered will meet the required shelf life.
- d. The contents of one meal packet shall provide a minimum of 700 calories.
- e. The meal packet shall contain one entree and complementary items which provides sufficient nutrition to adequately sustain a moderately healthy individual for one meal and contain the following minimum nutritional requirements:

<b><u>NUTRIENT</u></b>	<b><u>GRAMS</u></b>	<b><u>CALORIES</u></b>	<b><u>AS PERCENT</u></b>
Fat	17-23	150-210	25-30
Protein	14-26	54-105	9-15
Carbohydrate	NLT 90	NLT 360	NLT 60

**SECTION C (CONTINUED)**

f. Entrees and complementary items may include dairy products, however, dairy amounts shall not exceed levels considered acceptable for lactose-intolerant individuals. Grain products, as well as fortified crackers, jams, nuts, and wet pack fruits are considered acceptable and prominent components of the meal. **Except as noted elsewhere herein, animal or animal by-products, including animal-based cooking fats or oils are prohibited.**

(1) "Prohibited products" are defined as the total exclusion of beef, pork, poultry, or any other animal product or animal by-product from all ration components or from use in the preparation or processing of all ration components, including animal-based cooking fats or oils, except that eggs and dairy products are permitted in amounts digestible by lactose-intolerant individuals. In addition, products containing ethyl alcohol or ingredients derived from or containing ethyl alcohol are prohibited.

(2) Non-prohibited entrees include, but are not limited to: cereal, grain, legume, vegetable, or a combination of vegetable, grain, fruit, nut-based products, vegetable stews, potato/other nutritious tubers, soy products, pastas, lentils/other beans, wheat/rice/corn/other cereal products, pasta, fruit rolls, fruit/grain bars, wet pack/dried fruits, fortified biscuits, nuts/nut pastes, iodized salt and/or other spices.

g. Offerors shall provide a minimum of one entrée variety per shipping container. No entrees shall be duplicated within a menu.

h. Each shipping container shall contain ten meal bags.

**C-3 PRODUCT STANDARD REQUIREMENTS:**

A sample (assembled meal packets) shall be subjected to Product Demonstration Model (PDM) inspection as applicable in accordance with the requirements of this solicitation and contract. The approved sample shall serve as the manufacturing (product) standard. Should the contractor at any time plan to, or actually produce meal packets utilizing different components from the approved product standard, the contractor shall arrange for a new or alternate PDM approval. In any event, all product produced must meet all requirements of this document including PDM comparability.

**SECTION C (CONTINUED)**

**C-4 MISCELLANEOUS REQUIREMENTS:**

- a. Evidence of an insect or rodent infestation, foreign material, or contamination involving any component item, assembled meal packet or final packed shipping container shall be cause for rejection of the involved lot.
- b. The procedures contained in the “Integrated Pest Management (IPM) Program Requirements for Operational Rations”, December 1998, and the “Contractor Sanitation Program – Operational Rations”, December 1998 are required and apply to all assembly and food component operations.
- c. For all items thermostabilized by retorting, each filled and sealed pouch shall be in the retort process within two hours after sealing.
- d. No lots or portions of lots intended for use in the MRE and subsequently withdrawn from offer or rejected due to failure to comply with the requirements for inclusion in the MRE program will be used in the **MARC**.

**C-5 SANITARY REQUIREMENTS:**

As required by 48 CFR 246.471-1 Subsistence, AR 40-657, Veterinary/Medical Food Inspection and Laboratory Service, DLAR 4155.3, Inspections of Subsistence Supplies and Services, DSCP Clause 52.246-9P31, “SANITARY CONDITIONS (JAN 1992) DPSC,” contained in the solicitation for this product, and as clarified by the Armed Forces Food Risk Evaluation Committee, 31 JAN 1996, all Operational Ration food components will originate from sanitarily approved establishments. Acceptable sanitary approval is constituted by listing in the “Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement,” published by the U.S. Army Veterinary Command (VETCOM), or an establishment inspected and approved by the U.S. Department of Agriculture (USDA) or the U.S. Department of Commerce (USDC) and possessing a USDA/USDC establishment number. This requirement applies to all GFM and CFM Operational Ration food components and to all Operational Ration types. Requests for inspection and “Directory” listing by VETCOM will be routed through DSCP-HR for coordination and action. Situations involving sole sources of supply, proprietary supply sources, and commercial brand name items will be evaluated directly by the Chief, DSCP-HR, in coordination with the Chief, Approved Sources Division, **VETCOM**.

In cases such as these offers are required to submit documented proof that their organization complies with the provisions contained in Title 21, Chapter 1, Code of Federal Regulations, Part 110, "Current Good Manufacturing, Packaging or Holding Human Food". Offers are also required to send documentation of their existing Integrated Pest Management / Sanitation Program.

**SECTION C (CONTINUED)**

**C-6 REGULATORY REQUIREMENTS:**

All products shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, processing, thermoprocessing, packaging, labeling, packing, storage, and distribution of those products and with all applicable provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

## **SECTION D PACKAGING/LABELING/PACKING/MARKING/UNITIZATION**

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

- a. All food components shall be filled and sealed into separate preformed or form-fill-seal packaging material containing gas and moisture barrier properties sufficient to provide the required shelf life. The use of oxygen scavengers is not permitted.
- b. Entrees and other components shall be packed into meal bags fabricated of a minimum 7 mils of linear low density polyethylene with surface print. The manufacturer's seal will be a peelable seal with seal strength of approximately 3 to 10 lbs. Labeling shall be as stipulated herein.

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

NOTE: ALL LABELING SHALL BE IN ACCORDANCE WITH FDA AND USDA REQUIREMENTS INCLUDING NUTRITIONAL FACTS LABELING IN ACCORDANCE WITH THE NUTRITIONAL LABELING AND EDUCATION ACT (NLEA). MAXIMUM SIZE OF PRINT FOR SUCH REQUIRED USDA/FDA LABELING SHALL BE THE MINIMUM SIZE PERMITTED BY THOSE REQUIREMENTS AND WITH THE REQUIREMENTS STATED BELOW.

- a. Assembled meal packets shall be labeled: "MEAL ALTERNATIVE REGIONALLY CUSTOMIZED". "U.S. GOVERNMENT PROPERTY COMMERCIAL RESALE IS UNLAWFUL." The name of the meal entree shall be visible or printed legibly on the assembled meal packet.

### **D-3 PACKING:**

- a. Ten meals shall be snugly packed in a fiberboard box. The fiberboard box shall conform to RSC-L; grade W5c of ASTM D 5118. The box shall be closed in accordance with one of the following closure methods (2A1, 2A4, or 2B2) of ASTM D 1974. The inside dimensions of the box shall be such as to accommodate the liner and meals resulting in a snug pack.

**SECTION D (CONTINUED)**

**D-4 MARKING:**

a. Shipping containers for assembled meal bags shall be marked as follows:

MEAL  
ALTERNATIVE  
REGIONALLY  
CUSTOMIZED

Quantity: 10 Meals

Date Packed/Lot No:

Inspection/Test Date 1/

Name and Address of Assembler

US GOVERNMENT PROPERTY  
COMMERCIAL RESALE IS UNLAWFUL

1/ A shelf life of 12 months shall be applied to compute Inspection/Test Date.

b. A placard shall be affixed to the outside of each Unit Load with the following markings:  
1) MEAL ALTERNATIVE REGIONALLY CUSTOMIZED; 2) NSN; 3) Contract Number;  
4) Gross Weight and Cube (including pallet base); 5) Number of shipping containers per load.

**D-5 UNITIZATION:**

Shipping containers shall be palletized and stretch wrapped in accordance with Type III, Class G requirements of DSCP Form 3507. In addition, a top pad shall be applied and the unit load height shall be no greater than 54 inches.

## **SECTION E - INSPECTION AND ACCEPTANCE**

a. The contractor shall only tender for acceptance those items that conform to the requirements of this solicitation and are free from defects. The Government reserves the right to inspect or test any products that have been tendered for acceptance, at a level determined necessary to ensure conforming product. Inspection will include, a sanitary inspection of the delivery vehicle, and inspection of product count, condition and identity. Inspection for condition shall include, but not be limited to package integrity, quality of food, comparison to product standard and compliance with date of pack requirements and the presence of any internal infestation or foreign material. Any evidence of insect or rodent infestation, foreign material, or contamination shall be cause for rejection of the lot.

b. The Government may require repair or replacement of nonconforming product at no increase in contract price. The Government must exercise its post-acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item; and (3) in accordance with the warranty provisions of this contract.

c. Inspection and acceptance shall be at origin.

d. In lieu of performing the examinations cited in E-2 Assembled Meal Packet, E-3 Shipping Container, E-4 Palletized Meal Packets and E-5 Traceability Requirements below, the contractor may offer a Certificate of Conformance (COC) as verification of conformance. The Government Quality Assurance Representative may accept the Contractor's COC as verification. The Certificate of Conformance (COC) shall accompany each shipment of assembled product. The COC shall identify the lots in the shipment and shall contain a statement that the involved lots are in compliance with the requirements of this solicitation and contract.

### **E-1 FOR ENTREES AND COMPONENTS (INCLUDING PACKAGING AND PACKING MATERIAL):**

a. Contractor is responsible for receipt inspection at his/her plant for all component items to include, as a minimum, compliance with the applicable requirements.

b. The Government reserves the right to perform laboratory testing to verify that all nutritional requirements are in compliance with contractual requirements.

### **E-2 ASSEMBLED MEAL PACKET:**

Meal packet examination. The filled and sealed meal packets shall be examined for the defects in Table I. The lot size shall be expressed in shipping cases. The sample unit shall be one filled and sealed meal bag. The inspection level shall be S-2 and the AQL expressed in terms of defects per hundred units shall be 2.5 for major defects and 6.5 for minor defects. The finding of

## **SECTION E – INSPECTION AND ACCEPTANCE**

any critical defect shall be cause for rejection of the lot. The sample meal bags shall be selected from shipping containers, which have been filled and sealed. The inspection sample shall contain a proportionate amount of each of the menus.

TABLE I. Assembled Meal Packet and Components Container Defects 1/

Critical	Category		Defect
	Major	Minor	
1			Meal packet not comparable to approved product standard.
2			Tear, hole, or puncture through component packaging, exposing product.
3			Swollen cheese spread pouch, or swollen component of thermostabilized item.
	101		Tear, hole or split in meal packet exposing components to potential damage.
	102		Menu component missing or incorrect assortment for menu packet.
	103		Foreign odor.
	104		Meal entree label not visible or printed legibly on the assembled meal packet.
	105		Swollen non-thermostabilized component.
	106		Crushed or broken component.
	107		Not clean, the meal packet or any of the outer packaging of its contents. <u>2/</u>
		201	Tear, hole or split in meal packet.
		202	Component labeling missing, incorrect or illegible.

1/ Any evidence of rodent or insect infestation shall be cause for rejection of the lot.

**SECTION E – INSPECTION AND ACCEPTANCE**

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

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

b. Dried product that affects less than 1/8 of the total surface area of one container face (localized or aggregate).

### **E-3 SHIPPING CONTAINER**

Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in Table II. 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-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects.

TABLE II. Shipping Container and Marking Defects

Category	Defect
Major	
101	Marking omitted, incorrect or illegible.
102	Inadequate workmanship. <u>1/</u>
103	Missing meal. <u>2/</u>
104	Improper packing of meals in shipping case causing crushing or otherwise damage to the meal packets or components.

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.

## **SECTION E – INSPECTION AND ACCEPTANCE**

### **E-4 PALLETIZED MEAL PACKETS:**

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 and shall be cause for rejection of the lot.

**E-5 TRACEABILITY:**

The contractor shall maintain records identifying the menu components used in packing and assembling each end item lot. These records shall maintain traceability of components to the extent that a manufacturer's lot number of a component can be traced to an assembled **MARC** lot. The system should also enable the contractor to list component numbers and lots within a particular end item lot. The assembled end item lot, usually one day's production, shall be clearly identified on the exterior of each case. In addition, the contractor shall maintain records of when and where assembled a particular **MARC** assembly lot has been shipped. Upon the request of the Government, the contractor shall provide a copy of the lot traceability records.

The purpose of the above, is to maintain traceability of a component lot through the contractors assembly operation, in depot storage and up to the customer's receipt of the **MARC**. This is necessary in the event of a recall/ALFOODACT for DSCP to isolate suspect product in the depot system and to notify customers of potentially hazardous product.

**SECTION J - REFERENCE DOCUMENTS**

DSCP FORM 3507

Loads, Unit: Preparation of Semiperishable Items.  
DSCP Form 3507, April 1, 2002.

DSCP FORM 3556

Marking Instructions for Shipping Cases, Sacks, and Palletized/Containerized Loads of  
Perishable and Semiperishable Subsistence.  
DSCP FORM 3556, October 2001.

MIL-STD-3006

Sanitation Requirements for Food Establishments, MIL-STD-3006, 20 August 2000. DoD  
Standard Practice.

ANSI/ASQC Z1.4 – 1993

Sampling Procedures and Tables for Inspection by Attributes.  
American Society for Quality Control, Milwaukee, WI 53202

ASTM B 479

Standard Specification for Annealed Aluminum and Aluminum-Alloy for Flexible Barrier  
Applications. ASTM B 479 – 00, 2000

ASTM D 2103

Standard Specification for Polyethylene Film and Sheeting. ASTM D 2103 – 92, May 1992.

ASTM D –5118/D-5118M-90

Standard Practice for Fabrication of Fiberboard Shipping Boxes. ASTM D 5118-95, 1995.

ASTM D 1974

Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes. ASTM D  
1974 – 98.

ASTM D-5276

Standard Test Method for Drop Test of Loaded Containers by Free Fall. ASTM D – 5276-98,  
1998.

ASTM F 88

Standard Test Method for Seal Strength of Flexible Barrier Materials. ASTM F 88 – 00, 2000.

### Menus for MARC

1	2	3	4	5
Chili with Black Beans	Pasta with Veg Tomato	Minestrone	Cheese Tortellini	Curried Vegetables
Crackers	Crackers (Veg)	Crackers (Veg)	Crackers	Crackers (Veg)
	Raspberry Applesauce			Spiced Apples
Nuts	Nuts	Separate packets of Raisins and Dry Roasted Nuts	Nuts	
Jam		Jam	Jam	Jam
Tea (powdered drink mix)	Tea (powdered drink mix) Tea	Tea (powdered drink mix)	Tea (powdered drink mix)	Tea (powdered drink mix)
6	7	8	9	10
Saag Chole (Spinach & Garbanzos)	Alu Chole (Curried garbanzos & potatoes)	Channa dal masala (Golden lentils with veg)	Vegetable Jalfrazi (Spicy garden vegetables)	Dhingri Mutter (Garden peas & sautéed mushrooms)
Yellow & Wild Rice	Rice	Yellow & Wild Rice	Mexican Rice	Rice
Cracker		Cracker	Cracker	Cracker (Veg)
	Spiced Apples			
Jam		Jam	Jam	Jam
Tea (powdered drink mix)Tea	Tea (powdered drink mix)	Tea (powdered drink mix)	Tea (powdered drink mix)	Tea (powdered drink mix)

AMSSB-RCF-F(N) (Norton/5356)

1 April 2003

TO: DSCP-HSC (Malason/7772)

Subject: ES 03-088; DSCP-SS-03-02820, Solicitation SP0300-02-R-7057, Meal, Alternative Regionally Customized (MARC) Response to Query on Requirements

**1. References:**

- a. DLA Form 339, requesting resolution of contract queries concerning requirements and quality assurance provisions of the MARC solicitation.**
- b. Discussions, held 26 – 31 March 03, between, J. Kennedy, B. Hill, R. Valvano, D. Hamlin and C. Norton, Natick Soldier Systems Center, concerning subject ES case.**
- c. Memo, 26 March 03, J. Kennedy, providing input to subject ES case.**

2. The questions and comments submitted by the two potential contractors, Wornick and Ameriquel, have been evaluated.

3. The following responses are recommended for inclusion in current and future procurement documents for the MARC:

a. Wornick:

3. The substitution of lentils for black beans in the Black Bean Chili is acceptable.

4. The fat nutritional requirements for Menus 1, 2 and 4 should be met. If all other nutritional requirements are met, i.e. protein, carbohydrate and calories, then a higher fat level would be acceptable.

5. Response to QA questions:

Defect 2. Concur partially. Delete current defect 2 and sub critical defect:  
“ 2 Tear, hole or puncture through carton of open carton causing a hole in the pouch or obviously wet or stained carton due to leaking pouch. 2/ ”

Defect 101. Concur.

Defect 104. Do not concur. Retain defect as a major; this is the precedent set by MRE.

Defect 106. Do not concur. The inspector must have the option of opening the meal bag and component packaging to determine any defects.

6. Natick defers to DSCP concerning warranty clauses.

Subject: ES 03-088; DSCP-SS-03-02820, Solicitation SP0300-02-R-7057, Meal, Alternative Regionally Customized (MARC) Response to Query on Requirements  
1 April 03

b. Ameriqua:

2. Natick defers to DSCP concerning warranty clauses.

3. Concur. Rewrite Critical Defect 3:

“ 3 Swollen pouch or carton of thermostabilized item. ”

4. Concur in part. Any nonconformance of DSCP Form 3507 shall be classified as a major defect.

Delete last phrase of sentence “and shall be cause for rejection of the lot”.

DONALD A. HAMLIN  
Team Leader  
Food Engineering Services Team  
Combat Feeding Directorate  
C. Norton

CF:

Natick:

Aylward

Friel

Hamlin

Hill

Loveridge

Richards

Sherman

Trottier

Valvano

LaBrode

Daley

Arcidiacono

DSCP and Services:

Anthony

Arthur

Beward

Ferrante

Galligan

Kavanagh

Lecollier

Lowry

Malason

Miller

Richardson H.

Salerno