

QUARTERMASTER CORPS  
TENTATIVE  
SPECIFICATION

UNITED STATES ARMY RATION: FIVE -IN-ONE.

A. APPLICABLE SPECIFICATIONS.

A-1. The following specifications, of the issue in effect on date of invitation for bids, shall form a part of this specification:

U. S. Army Tentative Specification No. 22-42A  
"Supplies, Subsistence, for the United States  
Army, Conditions Governing the Purchase of."

Quartermaster Corps Tentative Specification, CQMG  
No. 93, "Boxes, Fibreboard, Corrugated and Solid."

Quartermaster Corps Tentative Specification,  
CQMG No. 94, "Specifications for Marking of Outside  
Shipping Containers by Contractors."

Specifications relating to individual components  
are noted under "Detail Requirements."

B. TYPE AND GRADES

B-1. The Unit Package for Ration 5-in-1 shall be one of three menus and shall consist of food for five (5) men for one day.

B-2. Grades of materials shall be as herein specified.

C. MATERIAL AND WORKMANSHIP.

C-1. All materials shall be manufactured, packaged, and assembled in a strictly sanitary manner and in accordance with good commercial practice.

D. GENERAL REQUIREMENTS.

D-1. All deliveries shall conform, in every respect, to the provisions of the Federal Food, Drug, and Cosmetic Act, and regulations promulgated thereunder.

E. DETAIL REQUIREMENTS.

E-1. The U. S. Army Ration 5-in-1 shall be assembled as three different menus, designated as follows:

- Menu No. 1 as specified in E-1a.
- Menu No. 2 as specified in E-1b.
- Menu No. 3 as specified in E-1c.



E-1a. Menu No. 1 shall consist of the following components:

Product	No. of Units	Minimum Net Wt. of Unit	Maximum Measurement of Container	Related Specifications
Army Spread, Canned	2	3-3/4	300 x 106	*C.Q.D. 32, Type I
Beans, Snap, Canned	1	19	307 x 409 (No. 2)	JJJ-B-151a, Style I
Coffee Product, Soluble, Canned	1	1	202 x 202	C.Q.D. 30
Corn, Sweet, Canned	1	20	307 x 409 (No. 2)	N-C-501a Style II
Beef; Corned, Canned	2	12	Truncated or 404 x 200 or 314 x 202 x 308	PP-B-201
Grapefruit: Canned	1	20	307 x 409 (No. 2)	Z-G-676, Type a
Ham & Eggs; Canned	1	30	404 x 406	C.Q.D. 20 Type IV b
Milk, Evaporated, Canned	1	6	208 x 206 V.H.	C-M-371
Tomatoes; Canned	1	28	401 x 411 (NO. 2 1/2)	JJJ-T-571a, Type I
Beans, Baked, Dehy- drated	1	15		CQD. 90
Biscuit, "O" Square	1	32		C.Q.D. 55
Candy, Hard	5	1-3/8		Commercial Quality
Cereal, Pre-Mixed	1	8 or 10		C.Q.D. 92
Cocoa Beverage Powder	1	10		C.Q.D. 57
Fruit Bar	5	2		C.Q.D. 22
Grape Juice Powder, Syn.	1	15 (grams)		(To be submitted by C.Q.D.)
Pea Soup; Dehydrated	1	6		C.Q.D. 26, Type II, a or Type III
Prune Powder; Dehy- drated	1	8		C.Q.D. 86
Salt	3 or 1	1/2 2		SS-S-31a
Sugar	3	6		JJJ-S-791, Type I
Toilet Paper	3	100 (sheets)		**J.C.Q.D. 10
Opener, Can, Small Ind.	1			***JCMD 313.
Cigarettes	5	5 (Cigarettes)		Commercial Quality

\*Chicago Quartermaster Depot Specification

\*\*Jersey City Quartermaster Depot Specification

\*\*\*Jeffersonville Quartermaster Depot Specification

(Others refer to Federal Specification)



E-1c. Menu No. 3 shall consist of the following components:

<u>Product</u>	<u>No. of Units</u>	<u>Minimum Net Wt. of Unit of Unit of Container Gunces</u>	<u>Maximum Measurement of Container</u>	<u>Related Specifications</u>
Army Spread, Canned	2	3-3/4	300 x 106	C.Q.D. 32, Type I
Beets;(Pickled, Canned	1	20	307 x 409 (No.2)	JJJ-B-181a
Carrots, Canned	1	20	307 x 409 (No.2)	JJJ-C-76a, Styles II or IV
Coffee Product, Soluble, Canned	1	1	202 x 202	C.Q.D. 30
Meat Balls and Spaghetti, Canned	2	30	401 x 411 (No.2½) or 404 x 406	C.Q.D. 82
Milk: Evaporated Canned	2	6	208 x 206 V.H.	C-M-371
Orange Juice, Canned	1	18 fl.	307 x 409(No.2)	Z-C-666
Pork Sausage Meat: Canned	1	32	404 x 504	C.Q.D. 98
Stew: Meat, Kidney and Vegetable	1	30	401 x 411(No.2½) or 404 x 406	C.Q.D. 76
Tomato Soup: Dehydra- ted	1	6		C.Q.D. 26, Type V
Biscuits, "C" Square	1	32		C.Q.D. 55
Candy Hard	5	1-3/8		Commercial Quality
Cereal: Premixed	1	8 or 10		C.Q.D. 92
Fruit Bar	5	2		C.Q.D. 22
Fruit Spread, Dehy.	1	5		C.Q.D. 87
Lemon Juice Powder, Syn.	5	1/4		C.Q.D. 43
Rice Pudding Mix, Dry	1	10		C.Q.D. 93
Salt	3 or 1	1/2 2		SS-S-31a
Sugar	3	6		JJJ-S-791, Type I
Tea	1	10 bags (individual servings)		HHH-T-191
Toilet Paper	3	100 (sheets)		J.C.Q.D. 10
Opener, Can, Small Individual	1			JQMD 313
Cigarettes	5	5 (Cigarettes)		Commercial Quality

E-lb. Menu No. 2 shall consist of the following components:

Product	No. of Units	Minimum Net. Wt. of Unit Gunces	Maximum Measurement of Container	Related Specifications
Army Spread, Canned	2	3-3/4	300 x 106	C.Q.D. 32, Type I
Beef, Roast, Canned	2	12	Truncated or 404 x 200 or 314 x 202 x 308	C.Q.D. 53
Coffee Product, Soluble, Canned	2	1	202 x 202	C.Q.D. 30
Bacon: Smoked, Canned	1	24	307 x 509	C.Q.D. 33 Type II
Meat & Veg. Stew, "C" Canned	2	30	404 x 411 (No. 2 1/2) or 404 x 406	C.Q.D. 25
Milk: Evaporated Canned	2	6	208 x 206 V.H.	C-M-371
Peas, Canned	1	20	307 x 409 (No. 2)	JJJ-P-151a
Tomato-Juice, Canned or (Tomato Juice Cocktail, Dehydrated	1	23 fl.	307 x 512	JJJ-T-576
Apricot Powder, Dehydrated	1	2 1/2		C.Q.D. 79
	1	8		C.Q.D. 85
Bean Soup: Dehydrated	1	6		C.Q.D. 26, Type IV, a
Biscuit, "C" Square	1	32		C.Q.D. 55
Candy, Hard	5	1-3/8		Commercial Quality
Cereal, Pre-Mixed	1	8 or 10		C.Q.D. 92
Orange Juice Powder Syn.	5	1/4		C.Q.D. dated Feb. 3, 1943
Prunes, Evaporated	1	15		Z-P-681c
Rice, Precooked	1	10		C.Q.D. 89
Salt	3 or 1	1/2 or 2		SS-S-31a
Sugar	3	6		JJJ-S-791, Type I
Toilet Paper	3	100 (sheets)		J.C.Q.D. 10
Opener, Can, Small	1			JQMD 313
Individual Cigarettes	5	5 (Cigarettes)		Commercial Quality



E-2.

Packaging of Components.

The surfaces of all packages, except the cans and transparent overwraps shall have a dull nonreflective color such as drab, khaki, olive, or that of unbleached kraft.

All the paper, paperboard, waxes, adhesives and laminating materials shall be free from objectionable odors to eliminate any possibility of contaminating the packaged foodstuffs.

The packaging of items not specifically described in this section shall be in accordance with the appropriate specifications listed in paragraphs E-1a., E-1b., and E-1c., in effect on the date of invitation for bids.

E-2a. Army Spread: - Two ounces shall be packed in a hermetically sealed, round, sanitary style can made of either hot-dipped tinplate having a 1.25 lb. tin coating or electrolytic tinplate having a 0.5 lb. tin coating. Electrolytic plate cans shall be coated outside with a corrosion-resistant lacquer or enamel and both types of cans shall be coated inside with an enamel suitable for the product.

E-2b. Bacon, Canned: - Twenty-four ounces shall be packed in a hermetically sealed, round, sanitary style can made in accordance with E-2a.

E-2c. Coffee Product, Soluble: - One ounce shall be packaged in a waxed friction plug or scored top round can with soldered side seam of most suitable size obtainable and made of any of the following materials:

- (a) 1.25 lbs. tin coating throughout
- (b) 0.5 lb. tin coating, enamelled or lacquered or both sides
- (c) Body as in (a) or (b), ends of enamelled or lacquered black iron or bonderized black iron.

The scored top shall bear suitable instructions for opening. If desired, instead of lithographing the required information on the can, as specified in E-3a, it may be printed on a hard-sized, kraft-colored label which shall cover the cylindrical surface of the can with at least a 1/4" overlap and be firmly glued at the top with a water-resistant glue.

E-2d. Beans, Baked, Dehydrated: - Fifteen ounces shall be packaged in a wax-wrapped or wax-dipped kraft-lined siftproof seal-end carton having an inner lamination of greaseproof paper.

The greaseproof paper shall have a basis weight of not less than 25 pounds per ream (24 x 36 - 500) and shall have a turpentine test of not less than 300 seconds (TAPPI T 454 m-42). It shall be laminated to the inner surface of the carton stock with an odor-free adhesive.

The carton shall be made of kraft-lined bending chipboard of not less than #2 finish. The overall thickness of the board including the glassine liner shall be not less than 0.022 inch, of which the kraft liner shall be not less than 0.004 inch. The carton size shall be not greater than 3 1/4 inches by 2-3/4 inches by 5-3/8 inches and shall be made moisture-vapor resistant by one of the following methods:

(1) The container shall be wrapped with a single sheet of waxed paper to effect an overlap at the seam of at least  $\frac{1}{2}$  inch and provide a continuous heat seal along the seam and end closures.

The waxed paper shall have a basis weight of not less than 25 pounds per ream (24 x 36-500), a tearing resistance (TAPPI T 414 m-40) of not less than 22 grams in any direction and shall be coated with sufficient wax to effect a good heat seam. Not less than 10 lbs. per ream (24 x 36-500) of a fully refined wax, containing not less than 5 percent of amorphous wax, shall be used and the mixture shall have a melting point (ASTM D 87-37) not lower than 132° F.

(2) Alternatively, the container shall be wax dipped to effect a partial penetration and to provide an even and continuous film of wax over its surface. The wax or wax mixture shall have a melting point (ASTM D 127-30) of not less than 135° F. and shall be of such nature that it will neither crack nor chip at -20° F. nor block excessively at 120° F.

E-2e. Bean, and Other Soups, Dehydrated: - Six ounces shall be packaged in a moisture-vapor-resistant bag contained in a seal-end carton of kraft lined bending chipboard not less than 0.022 inch thick (85 lbs. per 1000 square feet), or of bending chipboard not less than 0.024 inch thick (90 lbs. per 1000 square feet). The set-up carton shall have no scores on its faces so that a rigid container is provided. The bag shall be flat or gusset style, with all seams and closures completely sealed by application of heat or a moisture-vapor-proof adhesive.

The bag shall be made of a laminated film consisting of an inner sheet of duPont MST-54 or Sylvania PM CSX cellophane not less than .0009 inch thick, or a glassine paper having a basis weight of not less than 25 pounds per ream (24 x 36-500) laminated to one of the following sheets with not less than 12 pounds per ream of a permanently plastic moisture-vapor-resistant laminating material: glassine made from kraft pulp having a basis weight of not less than 25 pounds per ream (24 x 36-500); plasticized vegetable parchment having a basis weight of not less than 20 pounds per ream (24 x 36-500); or a sheet of duPont MST-53 or Sylvania PMCDX-K cellophane having a thickness of not less than 0.0013 inch provided that glassine be not laminated to glassine.

E-2f. Candy, Hard: - Each piece shall be wrapped with suitable waxed paper or cellophane of such nature as to prevent undue adherence of the paper to the candy. From 1 to 2 ounces, as specified in the invitation for bids, of wrapped pieces shall be over-wrapped with a heat-sealing, moisture-vapor-resistant cellophane or similar moisture-vapor-resistant material which will provide protection in handling.

E-2g. Cereal, Premixed: - The product shall be packaged in a greaseproof or glassine inner-lined, sift-proof seal-end carton either double waxed-paper wrapped or wax dipped.

If waxed-paper wrapped, the carton shall be made of bending chipboard of not less than #2 finish laminated to a greaseproof or glassine paper, having a turpentine test of not less than 300 seconds (TAPPI T 454 m-42), with an overall thickness of not less than .018 inches.

If wax dipped, the carton shall be made of sulphite pulp or kraft lined chip with the same lamination and thickness as above. The carton shall be wax-dipped in accordance with E-2d (2).

The waxed paper wrapping shall be in accordance with E-2d(1). The wrappers shall have an overlap at the seam of at least  $\frac{1}{2}$  inch and a continuous heat-seal shall be effected along the seam and closures. The seam of the second wrap shall

on the side opposite to that of the first. If the wrappers are sufficiently transparent, the required printing may be on the face of the carton.

E-2h. Cocoa Beverage Powder:— Ten ounces of the product shall be packaged in a siftproof gusseted square duplex bag inserted in a seal-end carton made from 0.022 inch thick kraft lined chipboard and wax dipped in accordance with E-2d(2); or a seal-end carton made from 0.024 inch chipboard, #2 finish or higher, wrapped according to E-2d(1) with a single wax wrapper.

The duplex bag shall be made of a sheet of 25 pound (24 x 36 -500) kraft paper and a sheet of 25 pound (24 x 36 -500) glassine. The closure may be either glued, heat-sealed, or folded over and clamped.

E-2i. Fruit Bars:— Two ounces shall be sealed in a moisture-vapor resistant heat-sealing anchored cellophane bag, the film being at least 0.0009 inch thick, and placed in a carton made from dark colored board at least 0.010 inch thick made from virgin pulp or pulp made from clean mixed papers carefully sorted to exclude any material that might impart a flavor or odor to the contents. The bar shall then be adequately pasteurized. After cooling, the package shall be overwrapped in a sheet of moisture-vapor resistant cellophane not less than 0.0013 inch thick. All seams and closures shall be tightly sealed against the transmission of water vapor.

Alternatively, the fruit may be placed in a wrapper or liner made from waxed glassine, having a turpentine test (TAPPI T 454 m-42) of not less than 300 seconds, and placed in a tray or carton made from virgin pulp or pulp made from clean mixed papers carefully sorted to exclude any material that might impart a flavor or odor to the contents; or, placed directly in a waxed tray made from virgin groundwood and sulphite pulp similar to butter carton board except that both faces shall have a dull color produced by a nontoxic dye. The tray or carton shall then be wrapped with a sheet of moisture-vapor resistant anchored cellophane not less than 0.0009 inch thick, then pasteurized and overwrapped as required in the preceding paragraph.

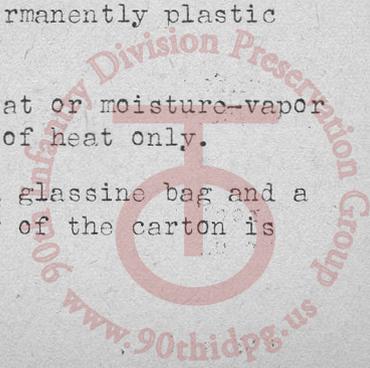
E-2j. Fruit Spreads:— Five or eight ounces shall be packaged in a bag constructed from two sheets of laminated cellophane and carton, in accordance with E-2e, and wrapped according to E-2d(1) with a single wax wrapper.

E-2k. Grape, Orange, or Lemon Juice Powder:— The powder shall be packaged in a water-vapor-resistant envelope made from a laminated sheet composed of du Pont's MSAT - 84 or Sylvania's PMB2-CSX cellophane having a thickness of not less than 0.0013 inch, combined to du Pont's LST - 53 or Sylvania's PMCSX-K cellophane having a thickness of not less than .0013 inch, using not less than 18 pounds per ream of a permanently plastic moisture-vapor-resistant laminating medium. The construction shall be such as to have the MSAT -84 or PMB2-CSX cellophane on the inside of the envelope or bag.

Alternatively, the envelope may be constructed from three sheets of glassine, each having a basis weight of 20 pounds per ream (24 x 36 -500), laminated together with a total of not less than 15 lbs. per ream of a permanently plastic moisture-vapor-resistant laminating agent.

The bag seams shall be made by the application of heat or moisture-vapor proof adhesive. All closures shall be made by the application of heat only.

E-2l. Rice Pudding Mix:— Ten ounces shall be packaged in a glassine bag and a carton in accordance with E-2h. No wax dipping or wax wrapping of the carton is required.



E-2m. Rice Precooked: - Ten ounces shall be packaged in a wax-dipped or single wax-paper wrapped carton in accordance with E-2d(1) or in a bag in a wax-dipped or single waxed-paper wrapped carton, in accordance with E-2h.

E-2n. Prune Powder Dehydrated: - Eight ounces of the product shall be packaged in a bag and seal-end carton in accordance with E-2e and wrapped according to (E-2d(1) with a single wax wrapper.

E-2o. Prunes Evaporated: - 16 ounces shall be packaged in a commercial foil-wrapped, seal-end carton with a bag liner possessing strength when wet.

E-2p. Sugar: - Six ounces shall be packaged in a wax-wrapped or wax-dipped seal-end carton as in E-2g, except that the inside glassine liner is not necessary, the board being not less than .018 inch thick.

E-2q. Cigarettes: - Shall be in commercial packages in units of 5, or 10, wrapped and sealed with moisture-resistant cellophane.

E-2r. Toilet Paper: - Shall be packaged 100 sheets to an asphalt-laminated kraft paper envelope.

E-2s. Salt: - One-half ounce shall be packaged in a specially constructed envelope made from No. 1 kraft paper having a basis weight of at least 45 lbs. (24 x 36 - 500) and a bursting strength of at least 45 points. The bag shall be equipped with a perforated paper tape under the flap, which will expose the perforations when the flap is opened and allow the salt to be shaken out. After filling, the flap shall be securely sealed so that the envelope will not allow its contents to sift.

Alternatively two ounces shall be packaged in a round paper canister with a sifter under the top cap.

E-3. Labeling of Components.

E-3a. All components shall be labeled plainly with the following information:

NAME OF PRODUCT  
NET WEIGHT  
Instructions for preparation, if necessary  
NAME and ADDRESS of Manufacturer

In addition, any other information shall be given as required in conformance to the provisions of the Federal Food, Drug, and Cosmetic Act, and regulations promulgated thereunder.

The cans for meat or meat products shall have lithographed in process-proof ink the above information, together with the inspection legend, on the body or on one end of the can.

The Establishment Number (EST --) also may be lithographed on the can; otherwise, it and the date (month) of packing (-- 43), shall be embossed on one end of the can.

E-3b. A menu for breakfast, dinner, and supper indicating the components packed, shall be placed in each carton.

F. METHODS OF INSPECTION AND TEST.

F-1. Inspection shall be made at point of origin, unless otherwise specified.

F-2. Chemical analyses, if required by the purchaser, shall be made in accordance with methods of the Association of Official Agricultural Chemists in effect on date of invitation for bids.

F-3. Physical tests of packaging materials shall be made in accordance with the methods of the Technical Association of the Pulp and Paper Industry (TAPPI) and those of the American Society for Testing Materials (ASTM).

F-4. The sizing of the board in paragraph G-1c shall be determined as follows: A 6-inch square section of the board shall be weighed, immersed in a horizontal position for ten (10) minutes in water at  $73 \pm 3^{\circ}\text{F}$ . at a depth of 3 inches. The board shall then be removed, the excess water quickly wiped off with a dry, soft, absorbent rag, using a minimum of pressure, and the board reweighed at once. To be hard-sized, the board shall not absorb more than 4.0 grams of water under these conditions.

F-5. The water-resistance of the adhesives used shall be determined as follows:

Two sections of the board to be used shall be cut approximately 3 inches by 6 inches. The adhesive shall be applied evenly over the surface of one of these sections. The other section shall be superimposed on the first and maintained under a pressure of 5 pounds per square inch for one minute and then allowed to dry for twenty-four hours. The sample shall be trimmed into two square pieces cut from the interior, approximately 2 inches by 2 inches, then immersed in tap water for twenty-four hours. The joint shall then be carefully pried apart from all four edges. To be water-resistant, not less than 75 percent of the surface shall show a fiber separation.

G. PACKAGING, LABELING, PACKING, AND MARKING FOR SHIPMENT.

G-1. Packaging.

The components of this ration other than those in cans (possibly excepting the plug top coffee can) shall be compactly assembled in a specially constructed solid fiber carton with snug fitting inner liner and top and bottom pads. All these materials shall be free from objectionable odor.

G-1a. The solid fiber carton shall be manufactured of double kraft-lined bending board between 0.040 and 0.045 inch in thickness. The kraft liners shall be at least 0.006 inch thick; the filler shall be of a finish which will insure the finished board conforming with all requirements.

G-1b. The carton shall be of special slotted construction with all flaps meeting. It shall be approximately 9-5/8 inches by 6-3/8 inches by 7-5/8 inches, inside dimensions. No overlap of the inner and outer flaps shall be permissible, nor shall they gap more than 1/16 inch. Each side of the outer flaps shall be tapered inward at an angle of  $7^{\circ}$  from a point about 5/8 inch from the hinge and about 1/4 inch from the side of the carton. Except at the hinges, all corners (including those situated 5/8 inch from the hinges) of the shaped flaps shall be rounded with a 1/4 to 5/16 inch radius. The carton shall have tear slots 1/8 inch long.

G-1c. The board shall be hard-sized throughout (See F-4).

G-1d. The bursting strength (TAPPI T 403 m-36) of the board shall be at least 155 points.

G-1e. The board shall weigh not less than 140 pounds and not more than 155 pounds per thousand square feet.

G-1f. No scores shall check or crack when folded through 135 angular degrees in one direction and 180° in the other.

G-1g. The average tensile strength of the board (TAPPI T 404 m-41) shall be not less than 140 pounds per inch of width, machine direction, nor less than 55 pounds per inch of width, cross direction.

G-1h. The board shall permit penetration of the wax specified in G-1n, to a depth of about 65 percent of the thickness of the board when one side is held in contact with the wax, heated to 195° ± 5°F., between 10 and 25 seconds.

G-1i. The convex side of the score line bead shall be on the inside of the carton.

G-1j. The manufacturer's joint on the carton shall be glued and made in the following manner:

(1) The flap of the joint shall be on the outside of the end of the case and integral with one side of the case. The outer corners of the flap shall be rounded with a 1/4 inch radius.

(2) The flap shall be tightly and adequately glued with a water-resistant adhesive (See F-5) with no excess of glue on the outside of the container.

(3) The center line of the vertical score inside the carton at the glue flap, shall meet the adjoining end of the carton with a maximum clearance of 1/16 inch.

(4) The center line of the scores around each side, or end or the top or bottom of the carton shall lie in a plane within 1/16 inch.

G-1k. The sides and ends of the carton shall have a snug fitting liner having the vertical abutting joint near the center of one of the large panels. The top and bottom of the carton shall be lined with pads cut the full size of the carton. The liner shall be of such height that it will fit between the top and bottom pads and the three pieces form a snug fit in the carton depth. Pads and liners shall be made of "B" flute board with .009 corrugations and .016 facings having a bursting strength (Mullen test) of 200 points. Corrugations shall run vertically in the liner and the long way of the pads.

G-1l. The flaps of the carton shall be securely closed by means of a water-resistant adhesive (See F-5). The closure shall be given special attention in order that it shall be as tight as possible.

G-1m. The sealed carton shall be dipped (completely submerged) for approximately 195° F. After a short cooling period, the carton shall be dipped a second time (completely submerged) for approximately 5 seconds in a bath of the same wax at approximately 180° F. The first dip shall cause the wax to impregnate the

board to a depth of approximately 65 percent of the thickness of the board, and the second dip shall build up a continuous film of wax on the board about 0.010 inch thick.

G-1n. The wax mentioned in paragraph G-1m, shall be of a microcrystalline type and may be a mixture of waxes, with or without a crystallization inhibitor which shall give as a final product, an amorphous type of wax having a melting point (ASTM D 127-30) of not less than 140° F., which shall not crack, chip, or become separated from the surface on which applied, when subjected to 20° F. below zero. The product shall be odorless, tasteless, and nontoxic. A list of approved waxes may be obtained from the Subsistence Research Laboratory, Chicago Quartermaster Depot, Chicago, Illinois.

G-2. Labeling.

No labeling is necessary on the carton described in G-1.

G-3. Packing.

G-3a. The carton described in paragraph G-1 shall be surrounded by a close-fitting regular slotted container, or a double sleeve. The board for the container or sleeve shall be made of 200 lb. test A or C flute board having .009 corrugations and facings .016 inch thick. All the corrugations shall run in the direction of the depth of the box. The double sleeve shall be as follows: The first sleeve shall fit snugly over the top, bottom, and ends of the carton; the second sleeve shall fit over the top, bottom, and sides of the carton. The corrugations shall run in the direction of the depth of the tube forming both sleeves.

G-3b. The protected carton shall be placed in the center, with the ends adjoining the sides of a Type SF, Grade 1R, Symbol V1rs or Type SF, Grade 1, Symbol V1s (grade shall be as specified in invitation to bid, contract or purchase order) regular slotted solid fibre box and sleeve (Style RSC-SL) constructed in accordance with CQAG Specification No. 93, except that the length of sleeves shall equal the full outside length of the box and the sleeve shall cover the top, bottom, and sides of the box. The box shall be provided at the top and bottom with close fitting 200 lb. test B or C flute pads. The box shall be of such width as to fit the overall length of the carton and sleeve snugly. The box shall be of such a length as to provide space on either side of the carton for the canned items, which will result in a box about 14-7/8 x 10 1/2 x 8-5/8 inches deep. Two pads made of 3/30 or heavier box grade plywood extending the full depth of the box and the full width of the box, or two .100 solid fibre pads shall be provided. One of the pads shall be placed next to each side of the carton sleeve separating the sleeve from the canned items in either end of the box.

G-3c. The cans shall be suitably packed in the space between the plywood or fibre pads on either side of the carton and the ends of the box. Suitable double-faced corrugated pads or scored sheets shall be used to wrap, separate, or otherwise protect cans from damage or prevent their movement by snugly filling in any spaces between cans.

G-3d. All flaps of the box shall be securely sealed with a water-resistant adhesive (see F-5) throughout the entire area of contact between the flaps. The outer sleeve shall then be placed over the box and reinforced with two (2) flat steel 3/8 x .015 inch straps protected by a rust-resistant coating, having a joint breaking strength of not less than 75 percent of the ultimate breaking strength of the strap which shall be not less than 80,000 pounds per square inch. The two

straps shall be applied at right angles to each other, one over the sides and ends and the other over ends, top, and bottom.

G-4. Marking.

G-4a. The box and outer sleeve shall be imprinted or stenciled in bold Gothic capital letters as follows:

On one end of the box:

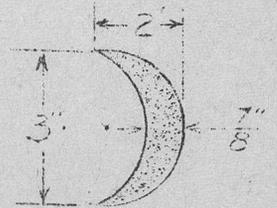
CONT -- (Contract Number in letters  $\frac{1}{2}$  inch high)

RATION 5-IN-1 (in letters  $1\frac{1}{4}$  to  $1\frac{1}{2}$  inches high)

5 RATIONS (in letters  $\frac{1}{2}$  inch high)

MENU -- (in letters  $\frac{1}{2}$  to  $\frac{7}{8}$  inch high.  
The number of the menu shall be inserted after the word menu with a number  $\frac{7}{8}$  to 1 inch high)

WT. \_\_\_\_\_ OZ. \_\_\_\_\_ (in letters  $\frac{3}{4}$  to  $\frac{7}{8}$  inch high).



The above markings shall be on only the upper two-thirds of the box, the lower third being left blank.

In the upper right-hand corner of the sleeve on the front of the box, with the marked ends of the box on the right, in letters  $\frac{1}{2}$  inch high shall be imprinted or stenciled the following information:

\_\_\_\_\_ (Name of Packer)  
\_\_\_\_\_ (Month & Year Packed)

G-4b. The ink used shall be either black or green unless the exterior of the case is black, in which case the ink used shall be white or yellow. The ink shall take on fibre, and be both water-fast and sunfast.

