MIL-C-44218(GL) 28 January 1986 (See 6.6)

MILITARY SPECIFICATION

CARRIER AND CANTEEN/COLLAPSIBLE, 5-QUART CAPACITY

This specification is approved for use by the Natick Research, Development and Engineering Center, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

- 1. SCOPE
- 1.1 <u>Scope</u>. This document covers the requirements for a collapsible carrier and canteen with a 5-quart capacity.
 - 2. APPLICABLE DOCUMENTS
- 2.1 Government documents. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this document to the extent specified herein.

SPECIFICATIONS

FEDERAL

PPP-B-636 - Boxes, Shipping, Fiberboard
PPP-F-320 - Fiberboard; Gorrugated and Solid, Sheet Stock

(Container Grade), and Cut Shapes

MILITARY

MIL-C-44219 - Carrier, Canteen, Collapsible, 5-Quart Capacity MIL-C-44216 - Canteen, Water, Collapsible, 5-Quart Capacity

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Natick Research, Development and Engineering Center, Natick, MA 01760-5014 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 8465

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STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-129 - Marking for Shipment and Storage

MIL-STD-147 - Palletized Unit Loads

(Copies of documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Other publications. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this document to the extent specified herein.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 3951 - Standard Practice for Commercial Packaging

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Technical society and technical association documents are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

- 2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document shall take precedence.
 - 3. REQUIREMENTS
- 3.1 <u>Guide samples</u>. Samples, when furnished, are solely for guidance and information to the contractor (see 6.3). Variations from this document may appear in the sample, in which case this document shall govern.
- 3.2 <u>First article</u>. When specified in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.2 and 6.4).
 - 3.3 Components.
- 3.3.1 <u>Carrier, Canteen, Collapsible, 5-Quart Capacity</u>. The carrier shall conform to MIL-C-44219.
- 3.3.2 <u>Canteen, Water, Collapsible, 5-Quart Capacity</u>. The canteen shall conform to MIL-C-44216.

3.4 Assembly. The assembly of the canteen into the carrier shall be as specified herein.

3.4.1 Assembling of components.

- 3.4.1.1 Insertion of collapsible canteen into carrier. Unsnap snap fasteners and extend closure flap and inner flap away from body of carrier allowing side opening to remain open. Fold collapsible canteen twice widthwise in 3-1/2 inch increments, superimposing each folded portion upon itself. Roll folded collapsible canteen in the lengthwise direction up to the neck resulting in a 1-1/2 inch roll. Insert folded/rolled collapsible canteen, neck first, through the side opening into the carrier, then passing the collapsible canteen neck through the carrier into and thru the mouth opening. With the collapsible canteen neck fully drawn thru the mouth, the mouth pull-up cord shall be securely drawn, and then square knotted locking the collapsible canteen neck in the carrier mouth. The collapsible canteen will then be unrolled and unfolded inside the carrier allowing it to be in a flat state without wrinkles, folds or rolls. The inner flap shall then be reinserted, being placed between the collapsible canteen and carrier body containing the snap fastener eyelets. The flap closure shall then be closed and the snap fasteners secured in a closed position. Close pocket flap by engaging hook and pile tape components attached to flap and pouch of pocket in a flat smooth position.
- 3.4.1.2 Shipment preparation. Lay assembly flat on a suitable surface with the front down (front side has small pocket). With the carrier pouch, carrier neck and closure straps fully extended in a flat position, place the tiedown cords and retainer loops upon the back side of the carrier pouch. Fold each side of the assembly inward widthwise so that the sides overlap the center of the assembly by one inch. Refold the widthwise folded assembly twice in lengthwise flat folds of increments of approximately 3 inches. Pull neck of carrier down over the folded assembly (placing short closure strap under neck panel in a flat position). Adjust assembly (if necessary) to have it lay in a smooth flat position. Twist long closure strap 180 degrees from its normal position to allow the side having the velcro tape attached face the assembler, fold the strap toward the carrier inserting it between the carrying loop and fastener tape. Engage the pile portion of the fastener tape on the strap to the hook position on the carrier securely not permitting any looseness in the long closure strap. The cap shall be removed and spout checked to see that it contains the specified strainer, the chain assembled to the rivet of the cap, and nylon cord properly attached to the free end of chain and neck. The cap shall then be securely screwed to the neck of the canteen.
- 3.5 Workmanship. The finished carrier and canteen assembly shall conform to the quality and grade of product established by this document. The occurrence of defects shall not exceed the applicable acceptable quality levels.

4. QUALITY ASSURANCE PROVISIONS

- 4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the document where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.
- 4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the document shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.
- 4.2 <u>First article inspection</u>. When a first article is required (see 6.2), it shall be examined for the defects specified in 4.3.3. The presence of any defect shall be cause for rejection of the first article.
- 4.3 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.
- 4.3.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified or qualified in this document or applicable purchase document.
- 4.3.2 <u>In-process inspection</u>. Inspection of sub-assemblies shall be made to ascertain that construction details which can not be examined in the finished product are in accordance with specified requirements. The Government reserves the right to exclude from consideration for acceptance, any material or service for which in-process inspection has indicated nonconformance.

4.3.3 End item examination.

4.3.3.1 <u>Visual examination</u>. The end item (one complete collapsible carrier and canteen) shall be examined for the defects listed below. The lot size shall be expressed in units of end items. The sample unit shall be one end item. The inspection level shall be S-4 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

Examine Defect

Carrier and canteen/

Not folded in the specified manner. collapsible assembly Assembly not folded flat and smooth.

Tiedown cord or retainer loop extending outward away

from folded assembly.

Mouth pull up cord not drawn tight or knotted. Long closure strap not twisted as specified. Long closure strap not secured as specified.

Long closure strap loose.

Short closure strap not placed as specified.

Pocket flap not closed as specified.

Canteen not fully extended within carrier.

One or more snap fasteners not closed.

Side closure flap not closed.

Inner flap not positioned as specified; i.e. not between snap fastener eyelet and canteen.

4.3.4 Packaging inspection. An examination shall be made to determine that the preservation, packing, and marking comply with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully packaged. The lot size shall be the number of shipping containers in the inspection lot. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

Examine Defect

Marking (exterior and Omitted; incorrect; illegible; of improper size, interior) location, sequence or method of application.

Materials Any component missing, damaged, or not as specified.

Workmanship Inadequate application of components, such as: incomplete closure of container flaps, improper taping, loose strapping or inadequate stapling.

Bulged or distorted container.

Content Number of carrier and canteen/collapsible assemblies per shipping container is more or less than required.

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- 1/ For this defect, one shipping container in the sample shall be examined.
- 4.3.5 Palletization examination. An examination shall be made to determine that the palletization complies with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one palletized unit load fully packaged. The lot size shall be the number of

palletized unit loads in the inspection lot. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

<u>Examine</u> <u>Defect</u>

Finished dimensions Length, width, or height exceeds specified maximum

requirements.

Palletization Pallet pattern not as specified.

Interlocking of loads not as specified.

Load not bonded with required straps as specified.

Weight Exceeds maximum load limits.

Marking Omitted; incorrect; illegible; of improper size,

location, sequence, or method of application.

5. PACKAGING

- 5.1 <u>Preservation</u>. Preservation shall be level A or Commercial as specified (see 6.2).
- 5.1.1 Level A. Each collapsible carrier and canteen, assembled as specified (see 3.4.1), shall be unit packed in a fiberboard box conforming to style RSC, grade W6c of PPP-B-636. Inside dimensions of each box shall approximate 7-1/4 inches in length, 4-1/2 inches in width and 2-1/4 inches in depth. Approximate dimensions are furnished as a guide only. The top and bottom flaps of each box shall be securely closed with waterproof tape as specified in the appendix of PPP-B-636.
- 5.1.2 <u>Commercial</u>. Each complete collapsible carrier and canteen assembly shall be preserved in accordance with ASTM D 3951.
- 5.2 <u>Packing</u>. Packing shall be level A, B or Commercial as specified (see 6.2).
- 5.2.1 Level A packing. Sixty carrier assemblies, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, grade V2s of PPP-B-636. Level A unit packs shall be packed flat, five in length, two in width and six in depth within a shipping container. Inside dimensions of each shipping container shall approximate 23-3/4 inches in length, 15 inches in width and 15 inches in depth. Approximate dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method III, waterproofed in accordance with method V and reinforced as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.3.4.

- 5.2.2 Level B packing. Sixty carrier assemblies, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, type CF (variety SW) or SF, class domestic, grade 275 of PPP-B-636. Level A unit packs shall be placed flat five in length, two in width and six in depth within a shipping container. Inside dimensions of each shipping container shall approximate 23-3/4 inches in length, 15 inches in width and 15 inches in depth. Approximate dimensions are furnished as a guide only. Each shipping container shall be closed in accordance with method II as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.3.4.
- 5.2.2.1 Weather-resistant fiberboard containers. When specified (see 6.2), the shipping container shall be a grade V3c, V3s or V4s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of PPP-B-636, except that the inspection shall be in accordance with 4.3.4.
- 5.2.3 Commercial packing. Collapsible carrier and canteen assemblies, preserved as specified in 5.1, shall be packed in accordance with ASTM D 3951.
- 5.3 Palletization. When specified (see 6.2), collapsible carrier and canteen assemblies packed as specified in 5.2, shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet types shall be type I (4-way entry), type IV or type V in accordance with MIL-STD-147. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means K and L or film bonding means O or P. Pallet pattern shall be number 3 in accordance with the appendix of MIL-STD-147. Interlocking of loads shall be effected by reversing the pattern of each course.
- 5.4 Marking. In addition to any special marking required by the contract or purchase order, unit packs, shipping containers and palletized unit loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable.

6. NOTES

- 6.1 <u>Intended use</u>. The collapsible carrier and canteen is designed to serve as a suitable 5-quart water carrying device.
 - 6.2 Ordering data. Acquisition documents should specify the following:
 - a. Title, number and date of this document.
 - b. Selection of applicable levels of preservation and packing (see 5.1 and 5.2).
 - c. When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
 - d. When a first article sample is required (see 3.2, 4.2 and 6.4).
 - e. When palletization is required (see 5.3).

- 6.3 <u>Samples</u>. For access to samples, address the contracting activity issuing the invitation for bids.
- 6.4 First article. When a first article is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209. The first article should be a preproduction sample consisting of one finished collapsible carrier and canteen assembly. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for inspection and approval of the first article.
- 6.5 <u>Supersession data</u>. This document includes the requirements of Limited Production Purchase Description 17-68, dated 18 April 1968, Carrier and Flotation Bladder/Collapsible Canteen (5-Quart).

Custodian:

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Project No. 8465-A934

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL (See Instructions – Reverse Side)			
1. DOCUMENT NUMBER	2. DOCUMENT TITLE	Carrier And Cant	een/Collapsible, 5-Quart
MIL-C-44218 (GL)		Capacity	
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			URER
b. ADDRESS (Street, City, State, ZIP Code)			
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