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Supercedes
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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

SPECIFICATION FOR

COVER, WATER CANTEEN, COTTON DUCK

1. SCOPE

1.1 Scope. This document covers one type of canteen case made of medium weight cotton duck with two nylon webbing belt loops.

2. APPLICABLE DOCUMENTS

2.1 Government documents. The following government documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

2.1.1 Government specifications and standards.

SPECIFICATIONS

FEDERAL

DDD-L-20 - Label: For Clothing, Equipage, and Tentage (General Use)
V-T-295 - Thread, Nylon
CCC-C-419 - Cloth, Duck, Cotton, Unbleached, Plied-Yarns, Army and Numbered
A-A-55301 - Webbing, Textile, Textured or Multifilament Nylon

MILITARY

MIL-F-10884 - Fasteners, Snap

STANDARDS

FEDERAL

FED-STD-123 - Marking for Shipment (Civil Agencies)
FED-STD-376 - Preferred Metric Units for General Use by the Federal Government

Beneficial comments (recommendations, additions, deletions) and any pertinent data that may be used in improving this document should be addressed to: USDA Forest Service, Missoula Technology and Development Center, Building 1, Fort Missoula, Missoula, MT 59804-7294 by using the Specification Comment Sheet at the end of this document or by letter.

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications. The following form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those in effect on the date of the solicitation or agreement.

DRAWINGS

USDA FOREST SERVICE

MTDC-487 - Case, Carrying, Canteen (Cotton)

(Copies are available from USDA Forest Service, Missoula Technology and Development Center, Building 1, Fort Missoula, Missoula, MT 59804-7294.)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those in effect on the date of the invitation for bids or request for proposals.

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Copies are available from the American Society for Quality Control, 611 East Wisconsin Avenue, Milwaukee, WI 53202.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1974 - Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers
D 3951 - Standard Practice for Commercial Packaging
D 5118 - Standard Practice for Fabrication of Fiberboard Shipping Boxes
D 6193 - Standard Practice for Stitches and Seams

(Copies are available from ASTM, 1916 Race St., Philadelphia, PA 19103-1187.)

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT

National Motor Freight Classification

(Copies are available from American Trucking Associations, Inc., 2200 Mill Rd., Alexandria, VA 22314.)

(Non-Government standards and other publications normally are available from the organizations that prepare and distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. Unless otherwise specified (see 6.2), samples shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

3.2 Materials and components. Materials and components shall be as specified on drawing MTDC-487 and as specified herein.

3.2.1 Cloth, duck, cotton. The cotton duck shall be in accordance with CCC-C-419, Table I, type I, number 10 or 12, color natural. In exception to CCC-C-419, table I, type I numbered duck (hard textured), the breaking strengths shall be revised as follows:

No, of Duck	Warp	Filling
10	125 lbs. Min.	100 lbs. Min.
12	125 lbs. Min.	100 lbs. Min.

3.2.2 Thread, nylon. The thread shall conform to type II, class A of V-T-295. The thread for all stitching shall be size E. The color shall be black.

3.2.3 Webbing, nylon. The nylon webbing shall be 1 inch wide in conformance with type III or type III (alternate) of A-A-55301. The color shall be black.

3.2.4 Fasteners, snap. The snap fasteners shall be style 2, 24 line, size 1, finish 3 of MIL-F-10884, and shall be part numbers -1N (button), -6N (socket), -7N (stud) and -8N (eyelet) of MS 27980, with the exception that the base material may be either brass of steel.

3.3 Construction. The construction shall conform in all respects to drawing MTDC-487 and as specified herein.

3.3.1 Stitches, seams, and stitchings. All stitching, except bartacking, shall conform to type 301 of ASTM D 6193, 6 to 8 stitches per inch.

3.3.1.1 Type 301 stitching. Ends of all stitching shall be backstitched or overstitched a minimum of 1 inch except where ends are turned under or caught in other seams or stitching. Thread tension shall be maintained so there will be no loose bobbin or top thread or excessively tight stitching resulting in puckering of the materials sewn. The lock shall be embedded in the materials sewn.

3.3.1.1.1 Repairs of type 301 stitching. Repairs of type 301 stitching shall be as follows (when making the following repairs, the ends of the stitching are not required to be backstitched):

a. When thread breaks or bobbin runouts occur during stitching, except presewing, the stitching shall be repaired by restarting the stitching a minimum of 1 inch back of the end of the stitching.

b. Except for prestitching, thread breaks or two or more consecutive skipped or runoff stitches noted during inspection of the item (inprocess or end item) shall be repaired by overstitching. The stitching shall start a minimum of 1 inch in back of the defective area, continue over the defective area to a minimum of 1 inch into existing stitching. Loose or excessively tight stitching shall be repaired by removing the defective stitching, without damaging the materials, and restitching in the required manner.

3.3.1.2 Bartacking. Bartacking shall be free from thread breaks and loose stitching. Unless otherwise specified, bartacks shall be 5/8 inch ±1/16 inch long, 1/8 inch ±1/32 inch wide, and have 28 stitches per bartack.

3.3.1.3 Automatic stitching. Automatic machines may be used to perform any of the stitch patterns provided the requirements for the stitch pattern, stitches per inch, size, and type of thread, are met; and at least three or more tying, overlapping, or backstitches are used to secure the ends of the stitching.

3.3.2 Thread ends and breaks. All thread ends shall be trimmed to 1/4 inch maximum length. All thread breaks shall be secured by stitching back of the break not less than 1/2 inch.

3.3.3 Lubrication of thread. There shall be no lubrication of the thread by any means, prior to or during sewing (see 4.3.2).

3.3.4 Stitch margins. Unless otherwise specified all stitch margins shall be 1/8 inch.

3.3.5 Setting of snap fasteners. The holes for the snap fasteners are not required to be prepunched. The fasteners shall be securely clinched without cutting the adjacent materials and no more than three splits shall be allowed in the button or eyelet barrels.

3.3.6 Fusing of ends of webbing. All ends of the webbing shall be fused. The apparatus used to fuse the webbing ends shall be capable of producing sufficient heat to provide a smooth edge. The edge shall not have sharpness or roughness. Fusing of the webbing shall be accomplished prior to being assembled for stitching.

3.4 Marking. The letters "FSS" shall be marked with black marking medium in accordance with type IV, class 9 of DDD-L-20 and shall be located as specified by MTDC-487. The letters shall be 1 inch high and 3/4 inch wide. Fastness of the class 9 marking shall be as specified for class 5 marking. The color of the cloth components shall not be visible under the markings.

3.5 Workmanship. All items shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the applicable acceptable quality levels. There shall be no defects that affect use, appearance, or serviceability.

3.6 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch/pound units, provided they fall within the tolerances specified using conversion tables contained in the latest revision of FED-STD-376, and all other requirements of this specification are met.

3.7 Recovered materials. The contractor/offeror is encouraged to use recovered materials to the maximum extent possible in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

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 (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his/her 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 this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point or at all points in the manufacturing process necessary to ensure compliance with all dimensional requirements.

4.1.3 Certification of compliance. Unless otherwise specified, certificates of compliance supplied by the manufacturer of the item, component, or material, listing the specified test method and test results obtained, may be furnished in lieu of actual lot by lot testing performed by the contractor (see 4.3.2). When certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

4.2 Sampling for inspections and tests. Sampling for inspections and tests shall be made in accordance with ANSI/ASQC Z1.4. The inspection level and acceptable quality level (AQL) shall be as specified. All canteen cases manufactured at one time shall be considered a lot for purposes of acceptance inspection and test. A sample unit shall be one complete canteen case.

4.3 Quality conformance inspection. Each end item lot shall be sampled and inspected as specified in 4.3.4.1 and 4.3.4.2. The packaging shall be inspected as specified in 4.4. Unless otherwise specified (see 6.2), first articles submitted in accordance with 3.1 shall be inspected as specified in 4.3.4.1 and 4.3.4.2. Packaging and packing is not part of the first article inspection. The presence of any defect or failure to pass any test shall be cause for rejection of the first article.

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, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.3.2 Certification. Unless otherwise specified (see 6.2), as part of first article presentations and lot inspections, it shall be acceptable for the contractor to provide certificates of compliance for all materials and components in lieu of actual lot by lot testing, except as specified in 4.3.2.1. In addition, when the contractor changes component or material suppliers, a new certification based on actual test results shall be required. The contractor shall also furnish a certificate of compliance for the requirement of 3.3.3 prohibiting use of thread lubricants before or during sewing. All certificates shall include as a minimum:

Specification, type, class, form, etc. as applicable
Quantity purchased
Purchase source, address, and telephone number
Purchase date
Lot number traceable to materials used in production
Contract number

4.3.3 In-process inspection. Inspection shall be made at any point or during any phase of the manufacturing process to determine whether cut lengths, cut parts, markings for location of components, and location of assembled component parts are in accordance with specified requirements. Inspection shall be made to determine that holes drilled for location marking do not exceed 0.076 inch diameter and are placed in such a manner that each shall be covered in the finished item (see 3.3.4). Whenever nonconformance is noted, corrections shall be made to the parts affected and lot in process. Components that cannot be corrected shall be removed from production.

4.3.4 End item examination.

4.3.4.1 End item visual examination. The end items shall be examined for the defects list in table I on a lot by lot basis. The lot size shall be expressed in units of complete field packs. 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 15.0 for combined major and minor defects. Unless otherwise specified, defects shall be scored on an individual basis, i.e., each seam, each stitching end, each dimension, etc.

TABLE I. End item visual defects

Examine	Defect	Classification Major	Minor
Materials and components:			
General	Any materials or component not as specified	X	
Snap Fasteners	Any fastener not functioning properly i.e., fails to snap closed, provide a secure closure, or open freely	X	
	NOTE: The fasteners shall be snapped and unsnapped twice to determine whether parts of fastener separate freely and also effect a secure closure.		

(cont)

TABLE I. End item visual defects (continued)

Examine	Defect	Classification Major	Minor
	Clinched excessively tight, cutting adjacent material	X	
	Clinched loosely, permitting any component to rotate freely but not to the degree that any component can be expected to become detached during use		X
	Clinched loosely to the degree that components can be expected to become detached during use	X	
	NOTE: Incomplete roll of end of button or eyelet barrel is evidence of improper and insecure clinching.		
	Incorrect style	X	
	More than three splits in eyelet or button barrel	X	
Cloth	Any hole, cut or tear	X	
	Any abrasion mark, smash, large slub, broken or missing yarn, multiple float, or open place clearly visible at a normal inspection distance (3 feet)	X	
	Needle chews	X	
	NOTE: Needle holes visible as the result of broken or skipped stitches that has been removed shall not be considered as needle chews providing the hole are spaced as in normal stitching.		
	Color not as specified	X	
	Shade bar, fine or course filling bar		X
Webbing	Size or type not as specified	X	
	Any hole, cut, tear or smash	X	
	Abrasion mark, slub, broken end or pick		X
	Cut ends not fused as specified	X	
	Not firmly and tightly woven	X	
	Edges frayed or scalloped	X	
	Multiple floats		X
Thread	Not specified type, class, subclass or size	X	
	Any thread lubrication used		X
	Color not as specified		X
Open seams	1/2 inch or less		X
	More than 1/2 inch	X	

(cont)

TABLE I. End item visual defects (continued)

Examine	Defect	Classification Major	Minor
	NOTE: A seam shall be classified as open when one or more stitches joining a seam are broken or when two or more consecutive stitches or run-off stitches occur. On double stitched seams, a seam shall be considered open when either one or both sides of the seam are open.		
Run-off	(see open seam)		
Seam and stitch type	Seam or stitch type not as specified		X
Bartacks	Any bartack omitted		X
	Any bartack not as specified or not in specified location		X
	Loose stitching, incomplete or broken		X
Stitch tension	Loose, resulting in a loose bobbin or top thread		X
	Excessively tight, resulting in puckering of material		X
Stitches per inch	Not within the range specified on the drawing	X	
Stitch ends	Not secured as specified		X
Thread breaks, skipped stitches or runoffs	Not overstitched as specified		X
	NOTE: Thread breaks or two or more consecutive skipped or runoff stitches not overstitched shall be classified as open seam.		
Rows of stitching	Any row of stitching missing		X
Cleanness	Grease, oil, dirt, or ink stains clearly noticeable		X
	Thread ends not trimmed as specified		X
FSS marking	Omitted, incorrect, illegible, misplaced or size not as specified		X
	Color visible under FSS marking		X

4.3.4.2 End item dimensional examination. End items shall be examined for the defects listed in table II on a lot by lot basis. Only those dimensions that can be evaluated without damaging or disassembling the end items shall be examined. The inspection level shall be S-3. An AQL, expressed in terms of defects per hundred units, shall be 6.5 major defects and 15.0 for combined major and minor defects.

TABLE II. End item dimensional defects

Examine	Defect	Classification Major	Minor
Dimensions	Smaller than nominal dimensions less applicable minus tolerance indicated on drawing, but not smaller than nominal dimensions less twice the applicable minus tolerances		X
	Larger than nominal dimension and applicable plus tolerance	X	
Stitch margin and gauge	Not as specified		X

4.4 Packaging inspection. An examination shall be made to determine that 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 except that it shall not be palletized and it need not be closed. Shipping containers fully packaged that have not been palletized shall be examined for defects in closure. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 and the AQL shall be 2.5 defects per hundred units.

Examine	Defect
Markings	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.
Materials	Any component missing or not as specified.
	Any component damaged, affecting serviceability.
Workmanship	Inadequate application of components, such as: incomplete closure of container flaps, improper taping, loose strapping, inadequate stapling.
	Bulged or distorted container.
Contents	Number of liners per container is more or less than required.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Fifty (50) cases shall stacked, alternating ends, and wrapped with kraft paper.

5.2 Packing. Six (6) bundles, packaged as specified, shall be packed in a close-fitting fiberboard box, minimum burst strength 200 psi, meeting the requirements of the latest version of ASTM D 5118. Boxes shall be in compliance with the National Motor Freight Classification. Each box shall be closed in accordance with the latest version of ASTM D 1974, except that the inspection shall be in accordance with 4.4.

5.3 Marking. In addition to any special marking required by the contract or purchase order, shipping containers and unit packs shall be marked in accordance with FED-STD-123. Bar code marking is required.

6. NOTES

6.1 Intended use. The canteen cases are intend to hold the Forest Service disposable canteen on a belt.

6.2 Ordering data. Documents utilizing this material should specify the following:

(a) Title, number and date of this specification.
(b) When first article samples are not required.
(c) When lot by lot testing is required in lieu of certificates of compliance (see 4.3.2).
(d) Preservation, packing, and marking required in addition to specification requirements (see section 5).

6.3 First article. When first articles are required, they shall be inspected and approved under the appropriate provisions of Federal Acquisition Regulation 52.209. The first article shall consist of three completely assembled chest harnesses covered under this specification and shall be preproduction samples. The contracting officer should include specific instructions regarding arrangements for selection, inspection, and approval of the first articles.

6.4 Notice. When Government drawings, specifications or other data are used for any other purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever.

6.5 Preparing Activity. USDA Forest Service, Missoula Technology and Development Center (MTDC), Building 1, Fort Missoula, Missoula, Montana 59804-7294.

USDA
Forest Service

Standardization Document Improvement Proposal

This form is provided to solicit beneficial comments that may improve this document and enhance it's use. Contractors, government activities, manufacturers, vendors, and users are invited to submit comments to:

USDA Forest Service
Missoula Technology and Development Center
Building 1, Fort Missoula
Missoula, MT 59804-7294

Attach any additional pertinent information that may be of use in improving this document to this form and mail in a envelope. A response will be provided when the submitter includes their name and address.

NOTE: This form shall not be used to submit requests for waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the document, or to amend contractual requirements.

Document Identification: **5100-85B - COVER, WATER CANTEEN, COTTON DUCK**

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❑ Has any part of the Document created problems or required interpretation in procurement use?
❑ Is any part of the Document too rigid, restrictive, loose, or ambiguous? Please explain below:

Give paragraph number and wording: _____

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Recommended change(s):_____

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