INCH-POUND
MIL-DTL-43342F
25 April 2005
SUPERSEDING
MIL-W-43342E
14 DECEMBER 1982

#### DETAIL SPECIFICATION

### WEBBING ASSEMBLIES, GENERAL SPECIFICATION FOR

This specification is approved for use by the Natick Soldier 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 requirements for miscellaneous cotton and nylon webbing assemblies used in rigging for airdrop operations.
- 1.2 <u>Classification</u>. The classification of webbing assemblies are defined as part numbers as specified in the acquisition requirements (see 6.2).

# 2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this specification. These lists do not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of these lists, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this specification, whether or not they are listed.

# 2.2 Government documents.

2.2.1 <u>Specifications and standards.</u> The following specifications and standards form a part of this document to the extent herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

Comments, suggestions, or questions on this document should be addressed to Natick Soldier Center, ATTN: AMSRD-NSC-AD-AD, J. Riley, Natick, MA 01760-5017 or emailed to <a href="mailto:john.riley@natick.army.mil">john.riley@natick.army.mil</a>. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>

AMSC N/A FSC 1670

<u>DISTRIBUTION STATEMENT A.</u> Approved for public release; distribution is unlimited.

### FEDERAL SPECIFICATION

A-A-59291 - Ink, Marking (For Parachutes and Other Textile Items)

FEDERAL STANDARD

FED-STD-595 - Colors Used In Government Procurement

(Copies of these documents are available online at <a href="http://assist.daps.dla.mil/quicksearch/">http://assist.daps.dla.mil/quicksearch/</a> or <a href="http://assist.daps.dla.mil/quicksearch/">www.dodssp.daps.mil</a> or from the standardization order desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094)

2.3 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents are those cited in the solicitation of contract.

### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 6193 - Standard Practice for Stitches and Seams

(Copies of these documents are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

# 3. REQUIREMENTS

- 3.1 <u>First article</u>. When specified (see 6.2), a sample shall be subjected to a first article inspection in accordance with 4.2.
- 3.2 <u>Materials</u>. Materials shall conform to the requirements of the applicable Technical Data Package (TDP), to subsidiary specifications and standards applicable thereto and as specified herein.
- 3.2.1 <u>Marking medium</u>. Unless otherwise specified on the drawing, the marking shall be Blue, Color No. 15102 of FED-STD-595, using marking ink in accordance with A-A-59291.
- 3.2.2 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided the materials meet or exceed the operational requirements, and promote economically advantageous life cycle costs.

- 3.3 <u>Construction</u>. Details of construction shall be in accordance with the TDP and the additional requirements as specified herein.
- 3.3.1 <u>Measuring and cutting of webbing</u>. Unless otherwise specified on the applicable drawing, all webbing shall be measured and cut while substantially free of tension. Rolls of tightly wound nylon webbing should be unwound, and the webbing allowed to relax a minimum of 12 hours prior to use.

# 3.3.2 Stitches and stitching.

- 3.3.2.1 <u>Machine stitching</u>. Unless otherwise specified on the drawing, all machine stitching shall be type 301, conforming to ASTM D 6193. Thread breaks, bobbin runouts, or two or more consecutive skipped stitches shall be overstitched a minimum of 1 inch beyond ends of each defect, except for type 304 or 308 stitching, which shall be overstitched two or three stitches. Runoff areas shall be restitched to conform to the required stitch pattern. Backstitching is not required when ends of type 301 stitching are turned under in a hem or held down by other stitching. Thread tension shall be maintained so that there will be no loose stitching and the lock will be imbedded in the materials sewn. All thread ends shall be trimmed.
- 3.3.2.2 <u>Automatic machinery stitching</u>. Stitching patterns produced by automatic machines may be utilized in lieu of those specified, providing the basic design and size of the pattern, the size of the thread, and the number of stitches per inch are as specified on the drawing. A minimum of three tie-in, overlapping, or back stitches shall be used to secure the ends.
- 3.3.3 <u>Wax dipping or searing</u>. Unless otherwise specified on the applicable drawing, all exposed ends of cotton webbing shall be dipped a minimum of  $\frac{1}{2}$  inch in a melted mixture of 50 percent beeswax and 50 percent paraffin, maintained at a temperature of  $180 \pm 20^{\circ}$ F. All exposed ends of nylon webbing shall be seared smooth, even, and free of sharp edges.
- 3.4 <u>Marking</u>. Using the marking medium specified in 3.2.1, all marking, unless otherwise noted, shall be in characters ½ inch high at the location specified on the applicable drawings.
- 3.5 <u>Workmanship</u>. The webbing assemblies shall conform to the quality of product established by the specification and documents referenced herein.

# 4. VERIFICATION

- 4.1 <u>Classification of Inspections.</u> The inspection requirements specified herein are classified as follows:
  - a. First article inspection (see 4.2).
  - b. Conformance inspection (see 4.3).
- 4.2 <u>First article inspection</u>. First article inspection shall be performed on one complete container assembly, unless otherwise stated in the contract, when a first article sample is

specified (see 3.1). This inspection shall include the examinations of 4.3.1, 4.3.2, 4.4, and 4.5. Any defect or nonconformance shall be cause for rejection of the first article.

- 4.3 <u>Conformance inspection</u>. Conformance inspections shall include the examinations of 4.3.1, 4.3.2, 4.4, and 4.5. Sampling plans and acceptance/rejection criteria for 4.4 and 4.5 shall be as specified in the contract or purchase order. Assemblies which fail the acceptance criteria shall be cause for rejection of the lot.
- 4.3.1 <u>Component and material inspection</u>. Components and materials shall be inspected in accordance with all of the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in the specification or applicable purchase document.
- 4.3.2 <u>In-process inspection</u>. Inspection of subassemblies shall be made to ascertain that construction details and dimensional requirements, which cannot be examined in the finished product, are in accordance with specified requirements. The Government reserves the right to exclude from consideration of acceptance any material or service for which in-process inspection has indicated nonconformance.
- 4.4 <u>End item visual examination</u>. The end items shall be examined for the defects listed in table I. Any nonconformance to the TDP shall be classified as a defect.

TABLE I. <u>Visual Defects</u>

		Classification	
Examine	Defect	Major	Minor
Materials	Color not as specified		201
Construction and assembly	Component missing, not assembled or joined as specified	101	
Cleanness	Dirt, grease, oil, or other foreign matter Thread ends not trimmed throughout		202 203
Stitches and stitching	Not type of stitch specified One stitch per inch under or over minimum or maximum specified Two or more stitches per inch under or	102	204
	over minimum or maximum specified Thread breaks, runoffs, or two or more consecutive skips in stitching not overstitched or restitched as specified	103	205

# TABLE I. Visual Defects (cont'd)

		Classification	
Examine	Defect	Major	Minor
NOTE:	Variation in the number of stitches per inch caused by the operator speeding up the machine and pulling fabric to sew over heavy places, heavy seams, or in turning corners shall be classified as follows:		
	<ul> <li>(a) Within the major defect classification – minor defect</li> <li>(b) Within the minor defect classification – no defect</li> </ul>		
Stitches and stitching (cont'd)	Loose tension, resulting in loose top or bobbin thread; or tight tension, resulting in tightness or puckering of material at stitch line Any row of stitching missing Needle chews Stitching pattern not as specified Stitch margin or gage not as specified Ends of stitching not secured as specified (except where turned under in a hem or held down by other stitching)	104 105 106	<ul><li>206</li><li>207</li><li>208</li></ul>
Webbing, duck, tape or thread (as applicable)	Exposed ends not waxed or seared as specified Cut, tear, hole, abrasion marks, or thin weak place Edge beaded or corded	107	209 210
Hardware	Not type or size specified  Component fractured or malformed protective finish omitted; corroded areas, burrs or sharp edges	108	
Identification marking	Omitted, illegible, incorrect, wrong color, improper location, or not as specified		211

4.5 <u>End item dimensional examination</u>. The end items shall be examined for conformance to the dimension specified on the drawings. Only those dimensions that can be evaluated without damaging or disassembling the end items shall be examined. Any dimension not within the specified tolerance shall be classified as a defect.

# 5. PACKAGING

5.1 <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

#### 6. NOTES

- 6.1 <u>Intended use.</u> The webbing assemblies covered by this document consisting of adapters, bridles, or straps, usually equipped with hardware, are used to rig, lash or restrain miscellaneous equipment or supplies to be airdropped.
  - 6.2 Acquisition requirements. Acquisition documents should specify the following:
  - a. Title, number and date of this specification.
  - b. Part number (see 1.2).
  - c. When a first article is required (see 3.1).
  - d. Sampling plan (see 4.3).
  - e. Packaging requirements (see 5.1).
  - 6.3 Subject terms (key word) listing.

Aerial delivery Rigging Adapters

**Bridles** 

6.4 <u>Changes from previous issue</u>. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians: Preparing Activity:
Army - GL2
Navy - AS

Preparing Activity:
Army - GL2

(Project 1670-1046)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>.