MIL-T-43238C
7 August 1984
SUPERSEDING
MIL-T-43238B
16 April 1971

MILITARY SPECIFICATION

TABLE, SHADOW, PARACHUTE CANOPY INSPECTION

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This document covers a parachute canopy inspection table.

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

A-A-884 - Tape, Pressure-Sensitive Adhesive, Box Closure
PPP-B-601 - Boxes, Wood, Cleated-Plywood
PP-B-621 - Boxes, Wood, Nailed and Lock-Corner
PPP-F-320 - Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes
PPP-T-97 - Tape: Pressure-Sensitive Adhesive, Filament Reinforced

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: US Army Natick Research and Development 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.

FSC 1670

STANDARDS

MILITARY

MIL-STD-105 - Sampling Tables and Procedures for Inspection by Attributes
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-130 - Identification Marking of U.S. Military Property
MIL-STD-1186 - Cushioning, Anchoring, Bracing, Blocking and Waterproofing; With Appropriate, Test Methods

DRAWINGS

U.S. ARMY NATICK RESEARCH AND DEVELOPMENT CENTER

11-1-327 - Table, Shadow, Parachute Canopy Inspection; Table Assembly and Details
11-1-328 - Table, Shadow, Parachute Canopy Inspection; Electrical Components, Assembly and Details
11-1-684 - Table, Shadow, Parachute Canopy Inspection; Table Details

(Copies of documents required by manufacturers 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 First article. When specified, a sample shall be subjected to first article inspection (see 4.3, 6.2, and 6.4).

3.2 Materials (see 6.5) and components. The materials and components used shall conform to the applicable referenced documents and standards specified on Drawings 11-1-327, 11-1-328 and 11-1-684.

3.3 Construction. The fabrication of components and assembly of the table shall conform to the requirements specified herein and as shown on the applicable drawings.

3.3.1 Assembly. Leg, frame and table body assemblies shall be formed, riveted and welded in accordance with drawing details to insure proper functioning in the folded and set-up configurations.

3.3.2 Bonding. The cushion strips shall be bonded to the metal surfaces with the adhesive specified on Drawing 11-1-684. Surface preparation, adhesive application and bonding process shall be in accordance with the adhesive manufacturer's recommendations. The bond shall be continuous with no separations between the metal surface and cushion strips.

3.3.3 Welding. Surfaces to be welded shall be free from oxide, scale, grease and other foreign matter. Welds shall be continuous, free from undercut, overlap cracks, porosity and burn-through. Flux deposits (when flux is used) shall be removed from finished welds. Rough surfaces shall be smoothed.

3.4 Electrical system. Components, details and test shall be as specified on Drawing 11-1-328. When tested, there shall be no evidence of failure or malfunction of the lamps or electrical components.

3.5 Marking for identification. An identification plate shall be Permanently attached to the table in the location shown of Drawing 11-1-327, The following information shall be permanently marked in the ¼ inch minimum size characters.

Nomenclature

Manufacturers name

Contract number

Year of manufacture

Federal stock number

The provisions of MIL-STD-130 shall apply.

3.5.1 Special marking. An information plate containing the data specified on Drawing 11-1-328 shall be permanently affixed to the table. Marking method Marking method shall produce permanent and durable markings.

3.6 Workmanship. The workmanship shall confirm to the quality established established by this document.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwixe 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 Cerificate of compliance. Where certificates of compliance are submitted (see 6.3), the Government reserves the right to check test such items to determine the validity of the certification.

* 4.2 Classification of inspection. The inspection requirements specified herein are classified as follows:

First article inspection (see 4.3).
b. b. Quality conformance inspection (see 4.4).

* 4.3 First article inspection. When a first article is required (see 6.2), it shall be examined for the defects specified in 4.4.3 and 4.4.4 and tested as specified in 4.4.5. The presence of any defect or failure of any test shall be cause for rejection of the first article.

4.4 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

4.4.1. 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.

4.4.2 In-process inspection. Inspection shall be made at appropriate stages of fabrication to determine conformance to the construction require-

consideration for acceptance any material for which in-process inspection has indicated nonconformance.

4.4.3 End item visual examination. The end item shall be examined for the defects listed below. The lot size shall be expressed in units of tables. The sample unit shall be on table. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms Of defects Per hundred units, shall be 6.5 for major defects and 15.0 for total (major and minor combined) defects.

Examine	Defects	Classification Major	Minor
Finish, protective	Any area of rust or corrosion	X	
	Any breaks, scratches, or tool marks through plating to metal		X
Construction and workmanship	Dirt, smudge, oil, grease, or foreign matter		X
	Any component missing, cracked, misaligned (e.g., leg assembly does not fold to collapsed position or unfold to perpendicular in set-up position) except as otherwise classified herein.	X	
	Any sharp edge or burrs.	X	
	Parts not assembled or joined specified.	X	
Design	Any departure from design indicated on drawing, except as otherwise classified herein.	X	
Table top	Scratches or gouges; warped or distorted	X	
Bonding	Any opening in adhesive line between metal and cushion strips		X
Welding	Any weld missing, continuous, undercut, overlapped, cracked, porous, or burned through	X	
	Flux deposit not removed		X
	Surfaces not smooth	X	
Hardware (screws, nuts, eyebolts, pins, rivets)	Missing or wrong type or size, except as otherwise classified herein	X	
	Rivet (Items 1-14, 1-19 and 1-37) missing	X	
	Rivet riot properly set (i.e., head not flush, or cracked on peening)		X

Examine	Defect	Classification Major	Minor
Hardware (screws, nuts,eyebolts, pins, rivets) (cont'd)	Two screws or nuts missing		X
	Three or more screws or nuts missing	x	
Electrical system	Component missing or not type specified	x	
	Loose components (i.e., ballasts, lamp-holder) or loose wiring connections	x	
	Frayed or broken insulation	x	
	Conduits and junction boxes not secured to table body as specified	x	
	Ground conductor not connected to frame	x	
Electrical data plate and marking	Plate missing	x	
	Not located as specified		x
	Marking or wiring diagram incorrect or illegible	x	
Identification plate and marking	Plate missing or not located as specified	x	
	Marking incorrect or illegible		x

4.4.4 End item dimensional examination. The end item shall be examined for the dimensional characteristics listed below. Any dimensional chatacteristics deviating from the specified requirements shall be classified as a defect, The lot size shall be expressed in units of tables. The sample unit shall be one table. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

Overall frame dimensions

Location of ballasts

Location of lampholders

Positioning of leg assemblies

Positioning of locking arrangement components

4.4.6 Packing inspection. An examination shall be made to determine that the preservation, packing, and marking comply with 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 not 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 4.0.

Examine	Defect
Marking (interior and (exterior)	omitted; incorrect; illegible; of improper size, location, sequence, or method of application
Materials	Any component missing, damaged, defective, or not as specified
Workmanship	Components not snug fit in container (loose); incomplete or improper application of tape, tie cord, corrugated fiberboard, or shroud; inadequate blocking, bracing, strapping, or nailing

4.4.5 End item testing. Each table shall be tested as specified on Drawing 11-1-328 to determine compliance with 3.4. Any nonconforming table shall be rejected.

5. PACKAGING

5.1 Preservaiton. Preservation shall be level A or Commercial, as specified (see 6.2).

5.1.1 Level A. The feet shall be screwed, full depth, on to each leg of the inspection table. The legs shall be folded flat against the underside of the table and immobilized by securing with cord or twine having a minimum breaking strength of 100 pounds, or tape conforming to PPP-T-97. The electrical plug and outlet shall be sealed with -tape conforming to A-A-884. The free end of the electrical extension cord shall be secured to the table with tape, cord or twine. The fluorescent lamps shall be securely mated to their respective lampholders and the table top set in place. The table top shall then be completely covered with a sheet of corrugated fiberboard conforming to type CF, class domestic, variety SW, grade 200 of PPP-F-320. The fiberboard shall be secured with three girth-wise ties of tape, cord or twine located one at the center and the and the others approximately 18 inches in from each end of the table.

5.1.2 Commercial. Each shadow table shall be preserved in accordance with ASTM D 3951.

5.2 Packing. Packing shall be level A, B, of Commercial as specified (see 6.2).

5.2.1 Level A packing. Each inspection table, preserved as specified in 5.1, shall be packed in a snug-fitting shipping container conforming to overseas type, style A or 1, grade A, type 3 load of PPP-B-601; or class 2,

style 2 or 4, grade A, type 3 load of PPP-B-621. The table shall be positioned in the container with its top up and cushioned, braced, blocked, and waterproofed with a shroud in accordance with the applicable requirements of MIL-STD-1186. Care shall be exercised to prevent the table from bearing on the electrical wire enclosures. Each shipping container shall be closed, reinforced and fitted with skids in accordance with the applicable container specification.

5.2.2 Level B packing. Each inspection table, preserved as specified in 5.1, shall be packed as specified in 5.2.1, except that shipping containers shall be of domestic type and the waterproof shroud requirement shall not apply.

5.2.3 Commercial packing. Shadow tables preserved as specified in 5.1, be packed in accordance with ASTM D 3951.

5.3 Marking. In addition to any special marking required by the contract or purchase order, shipping containers shall be marked in accordance with MIL-STD-129 or ASTM D 3951, Handling marking requirements applicable to fragile items and arrows with the words “THIS SIDE UP” shall apply.

6. NOTES

6.1 Intended use. The inspection table is intended for use in the inspection of parachute canopies. The design provides for use in multiples to accommodate parachute length requirements.

6.2 Ordering data. Acquisition documents should specify the following:

Title, number, and date of this document
b. When first article is required (see 3.1, 4.3, and 6.4)
c. Selection of the applicable levels of preservation packing (see 5.1 and 5.2)

6.3 Certification of compliance. When specified in the contract or purchase order, a certificate of compliance may be accepted for luminous transmittance requirement for item 1-2 on Drawing 11-1-684.

6.4 First article. When a first article is required it shall be inspected and approved under the appropriate provisions of FAR 52.209-4. The first article should be a preproduction sample and consist of one unit. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for inspection and approval of the first article.

6.5 Recycled material. It is encouraged that recycled material be used when practical as long as it meets the requirements of the document (see 3.2).

6.6 Changes from previous issue. The margins of this document are marked with an asterisk (*) to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This has been done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are coutioned to evaluate the requirements of this document based on the entire content as written irrespective of the marginal notations and relationship to the last previous issue.

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Navy - AS
Air Force - 82

Review activities:

Army - AV
Navy - MC

Preparing activity:

Army- GL

Project No. 1670-0693

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE
MIL–T–43238C	Table, Shadow, Parachute Canopy Inspection

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
	☐ USER
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ MANUFACTURER
	☐ OTHER *(Specify)*: _____

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optional	b. WORK TELEPHONE NUMBER *(Include Area Code)* – Optional
c. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional	8. DATE OF SUBMISSION *(YYMMDD)*

DD FORM 82 MAR 1426 PREVIOUS EDITION IS OBSOLETE.

NATICK OP, 1 Apr 84