

INCH-POUND

MIL-D-10821F

30 June 1989

SUPERSEDING

MIL-D-10821E

20 May 1968

MILITARY SPECIFICATION

DESKS, FIELD

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

1. SCOPE

1.1 Scope. This specification covers one type of portable desk, designed for storage and maintaining records during field operations.

1.2 Classification. Field desks shall be of the following sizes as specified (see 6.2).

Size 1 - Drawers 14.5 inches deep.

Size 2 - Drawers 17.5 inches deep (see 6.1).

1.3 Part or identifying number (PIN). For the specification based PIN to identify sizes of desk (see 6.6).

2. APPLICABLE DOCUMENTS

2.1 Government documents.

- * 2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

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 7110

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SPECIFICATIONS

FEDERAL

A-A-1927	- Padlock (Pin Tumbler Mechanism)
L-S-626	- Sponge, Cellulose-Type
* QQ-A-200/9	- Aluminum Alloy Bar, Rod, Shapes, Tube and Wire, Extruded, 6063
QQ-A-250/11	- Aluminum Alloy 6061, Plate and Sheet
QQ-B-613	- Brass, Leaded and Non-Leaded; Flat Products (Plate, Bar, Sheet, and Strip)
QQ-S-698	- Steel, Sheet and Strip, Low-Carbon
QQ-S-781	- Steel Strapping, Flat
QQ-W-321	- Wire, Brass
QQ-W-423	- Wire, Steel, Corrosion-Resisting
TT-C-490	- Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coating
TT-E-529	- Enamel, Alkyd, Semi-Gloss
TT-P-636	- Primer Coating, Alkyd, Wood and Ferrous Metal
WW-T-700/6	- Tube, Aluminum Alloy, Drawn, Seamless, 6061
MMM-A-181	- Adhesive, Room Temperature and Intermediate Temperature Setting, (Phenol, Resorcinol and Melamine Base)
MMM-A-1617	- Adhesive, Rubber Base, General Purpose
PPP-B-636	- Box, Fiberboard
PPP-F-320	- Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes
PPP-T-60	- Tape; Pressure Sensitive Adhesive, Waterproof, for Packaging and Sealing

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MIL-C-496	- Clips, End, Strap
MIL-W-530	- Webbing and Tape, Textile, Cotton, General Purpose, Natural or in Colors
MIL-R-3065	- Rubber, Fabricated Products
MIL-C-5541	- Chemicals, Films and Chemical Film Material for Aluminum and Aluminum Alloys
MIL-H-9890	- Hardware, Individual Load Carrying Equipment, and Hardware, Miscellaneous
MIL-F-10336	- Fiber Sheet, Vulcanized

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STANDARDS

FEDERAL

FED-STD-595 - Colors

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

MIL-STD-417 - Rubber Compositions, Vulcanized General Purpose,
Solid. (Symbols and Tests)

* (Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

* 2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

U.S. DEPARTMENT OF COMMERCE

Commercial Standard CS 35 - Hardwood Plywood

Product Standard PS 1 - Softwood, Plywood; Construction and Industrial

(Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.)

DRAWINGS

U.S. ARMY NATICK RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER

5-13-67 - Desks, Field; Illustration

5-13-68 - Desks, Field; Body

5-13-69 - Desks, Field; Cover and Hardware

5-13-70 - Desks, Field; Drawers, "File", "Service Records" and
Drawer Partitions

5-13-71 - Desks, Field; Drawers, "IN" "OUT" and Stool, Folding

5-13-72 - Desks, Field; Hardware

(Copies of drawings are available from the U.S. Army Natick Research, Development, and Engineering Center, ATTN: STRNC-EMSS, Natick, MA 01760-5014.)

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- * 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 the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- A 176 - Corrosion-Resisting Chromium Steel Plate, Sheet and Strip
- * A 510 - Rods, Wire & Coarse Round Wire, Carbon Steel, General Requirements
- * A 513 - Tubing, Mechanical, Electric-resistance-welded Carbon & Alloy Steel
- * A 519 - Tubing, Mechanical, Seamless Carbon
- * B 633 - Electrodeposited Coatings of Zinc on Iron and Steel
- D 2016 - Standard Method of Test For Moisture Content of Wood
- * D 3951 - Commercial Packaging

(Applications for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1187.)

- * (Nongovernment standards and other publications are normally available from the organizations that prepare or 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 a conflict between the text of this document and the references cited herein, 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 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3), in accordance with 4.3.
- * 3.2 Materials. Where materials are not definitely specified, they shall be of the quality normally used for the purpose in commercial practice. It is encouraged that recycled material be used when practical as long as it meets the requirements of this specification.

3.2.1 Plywood. Plywood shall be of the thickness specified in applicable drawings and shall conform to either of the following:

- a. Hardwood, type I, fully waterproof bond, grade 2 face and back veneer, regular sanded, conforming to commercial Standard CS 35.
- b. Softwood, group I, exterior type, grade B-B, sanded 2 sides, conforming to Product Standard PS 1.

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3.2.2 Wood, solid. Solid wood shall be seasoned to a moisture content of not less than 6 nor more than 12 percent at time of fabrication when tested as specified in 4.4.1.1.1, and shall be free from decay, case-hardening, warp, loose knots, shakes or checks.

The species of wood used shall be any of the following:

Beech	Maple
Birch	Red Gum
Hackberry	Sycamore

3.2.3 Vulcanized fiber. Vulcanized fiber shall conform to MIL-F-10336.

3.2.4 Steel.

3.2.4.1 Sheet and strip. Sheet steel shall conform to cold rolled, commercial quality, and strip steel shall conform to cold rolled of QQ-S-698. The temper of the steel strip shall conform to the manufacturer's current commercial practice.

3.2.4.2 Tube. Steel tube shall be round, welded or seamless type of ASTM A 513 or ASTM A 519.

3.2.4.3 Plate, sheet and strip, corrosion-resisting. Corrosion-resisting steel plate, sheet and strip shall conform to type 430, of ASTM A 176.

3.2.5 Aluminum.

3.2.5.1 Tube. Aluminum tube shall conform to 6061-T6, type I of WW-T-700/6.

3.2.5.2 Plate or sheet. Aluminum plate or sheet shall conform to 6061-T4 of QQ-A-250/11.

* 3.2.5.3 Extrusion. Aluminum extrusion shall conform to 6063-T5 of QQ-A-200/9.

3.2.6 Brass strip. Brass strip shall conform to composition 2, half-hard temper of QQ-B-613.

3.2.7 Wire.

3.2.7.1 Steel, carbon. Carbon steel wire shall conform to Grade 1015 to 1020 of ASTM A 510.

3.2.7.2 Steel, corrosion-resisting. Corrosion-resisting steel wire shall conform to form I, composition 304, condition A of QQ-W-423.

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3.2.7.3 Brass. Brass wire shall conform to composition 6 or 7, annealed, 1/8 hard or 1/4 hard of QQ-W-321.

3.2.8 Rubber. Rubber shall conform to type, class, grade and suffix letters RS415A1BD of MIL-R-3065 and MIL-STD-417.

3.2.9 Adhesive.

3.2.9.1 Room-temperature and intermediate-temperature setting resin. Room-temperature setting resin adhesive shall conform to type I or II of MMM-A-181.

3.2.9.2 Rubber. Rubber adhesive shall conform to type I of MMM-A-1617.

3.2.10 Webbing, textile, cotton. Cotton webbing shall be Olive Drab 7 to match the standard shade sample (see 6.4), and conform to type II, class 4 of MIL-W-530.

3.2.11 Nails, steel. Steel nails shall be smooth, box type, cement coated, and conforming to a size not smaller than 3d (1.125 inch long by 0.072 inch diameter).

3.2.12 Primer. The primer shall conform to TT-P-636.

3.2.13 Enamel. Enamel shall conform to class A or class B of TT-E-529. The color shall be Olive Drab conforming to Color No. 33070 of FED-STD-595.

3.3 Design. The desk shall be designed with a removable cover, folding leg stools, and drawers. The body of the desk shall house drawers for service records; general filing; drawers marked "IN" and "OUT"; and one drawer with padlock and key. The side table shall serve as a cover for the body when in transport and, in addition, house the folding stools. The size 1 desk shall be provided with two folding stools. The size 2 desk shall be provided with one folding stool.

3.4 Construction. The desks shall be constructed in accordance with Drawings 5-13-67, 5-13-68, 5-13-69, 5-13-70, 5-13-71, and 5-13-72.

3.4.1 Panels. Panels shall be fabricated of vulcanized fiber specified in 3.2.3, bonded with adhesive specified in 3.2.9.1 to both surfaces of plywood specified in 3.2.1 to form clean, smooth panels, free from waves or irregularity. The adhesive bond of fiber to plywood shall show a fiber failure of 95 percent average and 90 percent minimum before panels are primed or enameled when tested as specified in 4.5.1.

3.4.2 Vulcanized fiber binding. Vulcanized fiber binding shall be fabricated from fiber specified in 3.2.3. The binding shall be bent in a right angle to the dimensions shown on applicable drawing.

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* 3.4.3 Metal components. Hinge plates, angle supports, runners, drawer pull, valance and metal bindings shall be made of steel specified in 3.2.4.1. Partition guides and slides shall be made of steel specified in 3.2.4.1 or aluminum specified in 3.2.5.3. Mitered joints shall be tight. Tongue and groove bindings shall be formed in one unit or in four pieces. When formed of four pieces, each piece shall fit the side to which it shall be attached.

3.4.4 Legs. Legs for the desk table shall be formed of steel tubing specified in 3.2.4.2 and conform to Drawing 5-13-72. The open ends of the leg shall be plugged with wood specified in 3.2.2 and as shown on Drawing 5-13-72.

* 3.4.5 Stool, folding. The legs for the folding stool shall be fabricated of aluminum tubing specified in 3.2.5.1 and conform to Drawing 5-13-71. The retainers for attaching the legs to the seat of the stool shall be made of aluminum specified in 3.2.5.2. The ends of the legs shall be joined as shown on the applicable drawing, either by pins or by crimping. When pinned, the pins shall be made of steel specified in 3.2.7.1, and zinc plated in accordance with ASTM B 633. Washers used as spacers shall be fabricated of corrosion-resisting steel specified in 3.2.4.3.

3.4.6 Gasket, cover. The cover gasket shall be fabricated of rubber specified in 3.2.8 and shall be held in the cover groove binding with adhesive specified in 3.2.9.2.

3.4.7 Strap, retaining. The retaining strap shall be fabricated of webbing specified in 3.2.10 and the following:

- a. Buckle conforming to type XII of MIL-H-9890.
- b. End clip conforming to type I, class 2 of MIL-C-496.
- c. Rivet made of brass specified in 3.2.7.3.
- d. Burr (washer) made of brass specified in 3.2.6.

The webbing shall be inserted the full depth of the end clip prior to flattening. The clip shall be flattened to attach the webbing without cutting. The webbing shall lie flat at the point where it enters the clip.

3.4.8 Hardware. Hardware components shall be the manufacturer's commercial type, fabricated of steel specified in 3.2.4.1, and shall be of similar design to those shown on drawings. Safety hasp, staple, draw bolt, and lug bolt shall have a nominal metal thickness of 0.0478 inch and other hardware shall have a nominal metal thickness of 0.0359 inch. The draw bolt loop (buckle) shall be of the welded type.

3.4.9 Rivets. Solid, tubular and bifurcated rivets shall be carbon steel except as otherwise shown on applicable drawings. The rivets shall be not less than 9/64 inch diameter. The length of solid and tubular rivets shall be

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sufficient to provide a minimum 1/16 inch clinch. The length of bifurcated rivets and trunk tacks shall provide a minimum 1/8 inch clinch. Trunk heads shall be oval or short head with square shank. Carbon steel rivets shall be fabricated of steel specified in 3.2.7.1, composition 1007-1020. Corrosion-resisting rivets shall be fabricated of steel specified in 3.2.7.2. At time of attaching, rivets shall be clean and free of oil, dirt, grease, paraffin or other lubricant, rust or other foreign matter.

3.4.9.1 Driving of rivets, trunk tacks, and screws. Solid and tubular rivets shall be driven with heads flush against hardware, burrs (washers) or fiber, and the ends shall be securely headed or set. Holes for solid or tubular rivets shall be drilled or punched through fiber, plywood or hardware and shall be not more than 0.015 inch over the rivet diameter. All bifurcated rivets, trunk tacks, and screws shall be thoroughly driven with heads flush against hardware, wood, or fiber. Rivets and tacks shall be clinched to provide a smooth finish on interior surfaces. Evidence of anvil marks on interior surfaces, due to clinch in process, will be acceptable.

3.4.10 Burrs (washers). Steel burrs (washers) shall be fabricated of steel strip specified in 3.2.4.1. Brass burrs (washers) and caps shall be fabricated of brass strip specified in 3.2.6. At the time of attaching, burrs shall be clean and free of oil, dirt, grease, paraffin or other lubricant, rust or other foreign matter.

3.4.11 Gluing. All wood joining requiring glue shall be glued at time of assembly with the adhesive specified in 3.2.9.1. Application of adhesive to the joints, fiber, and plywood shall be in a uniform manner with adequate quantities as recommended by the adhesive manufacturer. Assembly, clamping, or pressing time, pressure, and curing time shall be in accordance with the adhesive manufacturer's recommendations.

3.4.12 Nailing. In addition to being glued, the body and cover shall be nailed with nails specified in 3.2.11. All nails shall be equally spaced and thoroughly driven with heads flush against plywood, wood, or fiber. The desk body shall have four nails joining each end panel to each side panel; five nails joining each end panel to bottom panel and six nails joining each side panel to top panel.

3.4.13 Surfacing of partitions. All surfaces and edges of each finished drawer shall be sanded smooth. All exposed edges shall be rounded.

* 3.4.14 Locking. The padlocks for locking the drawer and for locking the desk shall conform to type III of A-A-1927 with a laminated case, individually keyed, and supplied with a 9 inch chain. The free end of the chain supplied with locks shall be equipped with a clevis for fastening, by means of rivet, to the desk body as shown on applicable drawing.

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3.5 Finish.

3.5.1 Wood and fiber surface preparation. Prior to finishing, all wood and vulcanized fiber surfaces shall be thoroughly cleaned of dust, dirt and grease.

3.5.2 Metal surface preparation.

3.5.2.1. Cleaning and pretreatment of ferrous surfaces. Prior to assembly, surfaces of ferrous metal parts, except steel pins, nails, rivets, burrs, and screws, shall be cleaned and prepared for painting in accordance with type I or II of TT-C-490.

3.5.2.2 Cleaning and pretreatment aluminum surfaces. Prior to assembly, aluminum surfaces shall be prepared for finishing in accordance with class 2 of MIL-C-5541.

3.5.3 Priming. All parts that have been pretreated in accordance with 3.5.1, 3.5.2.1, and 3.5.2.2 shall be coated with primer specified in 3.2.12. Primer shall level out to a dry uniform coat.

3.5.4 Enameling. After assembly, all parts that have been primed shall be coated with enamel specified in 3.2.13. All hardware items may be coated with enamel prior to assembly. The enamel shall level out to produce a smooth, uniform film without orange peel, sags or runs, wrinkles, drops, streaks, or areas of no film. The finish shall be free of rust, dirt, grit, or foreign matter. All surfaces of the drawers and compartments shall be dried before final assembly.

3.6 Marking. Desks shall be marked as shown on the applicable drawings. The marking shall be stamped or marked with water resistant ink. The marking shall be legible, and the original color shall not smear nor crack or peel when tested as specified in 4.5.2. The identification marking shall consist of the letters "U.S." in characters not less than 1 inch high, and the manufacturer's name, trade name or trademark of such known characters easily identifiable with said manufacturer, and number and date of contract in characters not less than 0.25 inch high.

* 3.7 Workmanship. The desks shall conform to the quality of product established by this specification. Metal components shall be free from sharp edges, slivers, burrs, or corrosion. Fiber covering shall be free from tears and scuffs.

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.

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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 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 assure compliance with all dimensional requirements.
- * 4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:
 - a. First article inspection (see 4.3)
 - b. Quality conformance inspection (see 4.4)
- * 4.3 First article inspection. When a first article is required (see 3.1 and 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.
- * 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 specification or applicable purchase document.
 - 4.4.1.1 Component testing.

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4.4.1.1.1 Moisture content of wood. The moisture content of wood requirement in 3.2.2 shall be determined in accordance with ASTM D 2016 at time of assembly. The lot shall be all wood prepared under the same conditions, stored as a group, and offered for inspection at one time. The sample unit shall be one piece of wood. The inspection level shall be S-1 (see 6.5). When testing is performed by the electric moisture meter method, three determinations shall be made on each sample unit. The average of the three determinations shall be the moisture content of the sample unit.

4.4.1.1.2 Vulcanized fiber adhesion test. The test specified in 4.5.1 shall be performed on five samples from each lot. Each sample shall be a 4-inch square of fiber covered plywood. Each sample shall be taken from different panels. Any sample failing to meet requirements as specified in 3.4.1 shall be cause for rejection of the lot. The lot shall be the amount of fiber covered plywood offered for inspection at one time.

4.4.2 In-process inspection. Inspection shall be made during the manufacturing process for the requirements specified in table I to establish that no deviation is made from indicated requirements. Whenever nonconformance is noted, correction shall be made to affected items and process.

TABLE I. In-process inspection

Requirement, operation, or assembly	Requirements reference
Insertion of webbing to the full depth of the clip prior to flattening.	3.4.7
Application of sufficient length rivets to provide required length of clinch, diameter not as specified, or rivets are cleaned as specified.	3.4.9
Rivet holes in fiber, plywood or hardware are not more than 0.015 inch over the rivet diameter.	3.4.9.1
Burrs (washers) are cleaned as specified.	3.4.10
Application of adhesive to joints, fiber and plywood.	3.4.11
Assembly clamping or pressing time, pressure and curing time.	3.4.11
Nailing.	3.4.12
Cleaning of wood and vulcanized fiber surfaces prior to finishing.	3.5.1

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TABLE I. In-process inspection (cont'd)

Requirement, operation or assembly	Requirements reference
Cleaning and pretreatment of ferrous metal parts (except steel pins, nails and screws).	3.5.2.1
Cleaning and pretreatment of aluminum surfaces prior to assembly.	3.5.2.2
Priming prior to enameling.	3.5.3

* 4.4.3 End item visual examination. The end items shall be examined for the defects listed in table II. The lot size shall be expressed in units of desks. The sample unit shall be one desk. The inspection level shall be II (see 6.5).

TABLE II. End item visual defects

Examine	Defect	Classification	
		Major	Minor
Finish	Not specified color		201
	Not smooth and uniform film		202
	Area of no film on exterior surfaces	101	
	Area of no film on interior surfaces		203
	Area of corrosion		204
	Sags or runs		205
	Dirt, grit or foreign matter imbedded in enamel		206
	Wet or tacky enamel		207
	Peeled, wrinkled, drops, or streaks		208
Construction and workmanship:			
Vulcanized fiber	Only one surface or plywood covered by vulcanized fiber	102	
	Not clean, smooth or free from waves or irregularity		209
	Tear or scuff		210
Vulcanized fiber binding	Not bent in a right angle where applicable.		211

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TABLE II. End item visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Steel binding	Not tight mitered joints at the corners		212
	Not tight against surfaces on drawers		213
	Tongue and groove binding not formed as specified		214
	Metal channels for the slide not formed with right angle bends		215
	Sharp edges, slivers, burrs or corrosion	103	
Leg	Ripples or dents		216
Folding stool	Washer missing or washer not placed where specified	104	
	Leg joint not pinned or crimped	105	
Cover gasket	Not held in groove binding with adhesive		217
Retaining strap	Cutting of webbing		218
	Buckle not attached to webbing		219
	Brass rivet and cap not set		220
	Webbing not flat at clip		221
Hardware	Drawbolt buckle (loop) not type specified		222
Rivets	Solid or tubular rivet missing		223
	Bifurcated rivet or trunk tack missing		224
	Trunk tack head or shank not as specified		225
Driving of rivet, trunk tack, screw and nail head	Rivet, trunk tack, screw and nail head not driven flush against hardware, burr washer, fiber or wood as applicable		226
	Rivet end not securely headed or set		227
	Interior surface not smooth finish due to clinched rivets and tacks (except anvil marks)		228
Drawer, tray and partition	Drawer binding, or not operating freely		229
	Exposed edges not rounded		230
Locking	Free end of chain not equipped with a clevis		231
	Clevis not fastened with rivet		232

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TABLE II. End item visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Component	Missing	106	
	Not specified type		233
Padlock	One key or wire ring missing		234
	Two keys missing	107	
Marking	Missing (on any of the following):		
	Top of body (exterior)		
	Back of body (interior)		
	Cover (exterior)		
	Cover (interior)		
	Drawer front (except top left hand corner)		
	"In" or "out" drawer-back steel seat (underneath side)		235
	Defective, i.e., incomplete, illegible, wrong size or color, wrong location (misplaced more than 1 inch), or incorrect		236

4.4.4 End item dimensional examination. The end items shall be examined for conformance to the dimensions 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. The lot size shall be expressed in units of desks. The sample unit shall be one desk. The inspection level shall be S-2 (see 6.5).

4.4.5 End item testing. The end item shall be tested as specified in 4.5.2. The inspection level shall be S-2 (see 6.5).

4.4.6 Packaging examination. The fully packaged end items shall be examined for the defects listed below. The lot size shall be expressed in units of shipping containers. The sample unit shall be one shipping container fully packaged. The inspection level shall be S-2 (see 6.5).

<u>Examine</u>	<u>Defect</u>
Marking (exterior and interior)	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

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<u>Examine</u>	<u>Defect</u>
Materials	Any component missing, damaged, or not as specified
Workmanship	Inadequate application of components, such as: incomplete sealing or closure of flap, improper taping, loose strapping, or inadequate stapling Bulged or distorted container
Content	Number per container is more or less than required

- * 4.4.7 Palletization examination. The fully packaged and palletized end items shall be examined for the defects listed below. The lot size shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load, fully packaged. The inspection level shall be S-1 (see 6.5).

<u>Examine</u>	<u>Defect</u>
Finished dimensions	Length, width, or height exceeds specified maximum requirement
Palletization	Pallet pattern not as specified Interlocking of loads not as specified Load not bonded as specified
Weight	Exceeds maximum load limits
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

4.5 Methods of inspection.

4.5.1 Vulcanized fiber adhesion test. Samples of the fiber covered plywood shall be immersed in boiling water for 3 hours. The samples shall then be cooled in 70°F, plus or minus 5°F, water for a period of 10 minutes and immediately subjected, while wet, to the following test: The sharp edge of a pocket-knife blade or similar sharp instrument shall be inserted at the glue line. The fiber covering shall be peeled completely off each sample while the fiber covering is held between the thumb and knife blade. The percentage area of fiber failure of fibrous material remaining adhered to the plywood at the glue line of the samples shall be calculated to determine compliance with 3.4.1.

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4.5.2 Resistance of markings to water. Position the desk so that the identification markings specified in 3.6 are in a horizontal plane. Place a cellulose sponge fully saturated with water (do not squeeze out) and conforming to type II, coarse pores, of L-S-626, in contact with the markings. Cover the sponge to retard evaporation of water. Leave the wet sponge in contact with the markings at 70°F to 80°F for 4 hours + 10 minutes. Remove the sponge and allow the markings to air dry for 1 hour at 70°F to 80°F. Examine the markings for legibility, color retention, cracking, and peeling. Rub vigorously with a finger. Any illegibility or tendency to smear, crack, or peel constitutes failure of the test.

5. PACKAGING

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

5.1.1 Level A. The drawers shall be located in the body of the desk and the top lefthand corner drawer locked with the padlock which shall have the keys securely attached with not less than 0.072 inch diameter annealed wire. The support shall be folded into the cover and the stool(s) securely fastened in the cover by means of the support and the retaining strap. The cover shall be securely fastened to the body in the closed position with the drawbolts, and locked with the drawbolt padlock. The two keys for the drawbolt padlock shall be securely fastened to a handle on one side of the desk with not less than 0.072 inch diameter annealed wire. The keys, wire, and handle shall be spirally wound with tape conforming to type optional, class 1 or 2 of PPP-T-60 in such a manner as to entirely cover the keys, wire, and handle. The ends of the tape shall be securely fastened to prevent unwinding.

* 5.1.2 Commercial. Desks shall be preserved in accordance with ASTM D 3951.

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

5.2.1 Level A packing. Each desk, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC, V2s of PPP-B-636. Pads, fabricated from fiberboard meeting the material requirements of grade W6c of PPP-F-320 shall be positioned between the desk and the inside surfaces of the shipping container in a manner as to protect the lock hasp and hinges of the desk. Each shipping container shall be closed, waterproofed by means of tape, and reinforced with steel strapping or tape banding in accordance with the appendix of PPP-B-636.

5.2.2 Level B packing. Each desk, preserved as specified in 5.1, shall be packed in a corrugated fiberboard protector in the form of a tube (two ends open). The tube shall run the long dimension of the desk. Each tube shall be strapped with two flat steel straps, minimum 0.625 inch by 0.020 inch,

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conforming to type I, class A of QQ-S-781. Each strap shall be placed approximately 4 inches in from each end. When specified (see 6.2), the fiberboard protector shall be fabricated from grade V3c, V3s, or V4s fiberboard conforming to PPP-F-320.

- * 5.2.3. Commercial. Desks, preserved as specified in 5.1, shall be packed in accordance with ASTM D 3951.
- * 5.3 Palletization. When specified (see 6.2), desks, 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 the bonding means K and L or film bonding O or P. Pallet patterns shall be in accordance with the appendix of MIL-STD-147. Interlocking of loads shall be effected by reversing the pattern of each course. If the container is of a size which does not conform to any of the patterns specified in MIL-STD-147, the pallet pattern shall first be approved by the contracting officer.

5.4 Marking. In addition to any special marking required by the contract or order, fiberboard protectors, shipping containers, and palletized unit loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The desks are intended for field use by the Armed Forces for typing, writing, and storing records. The Marine Corps requirement is for size 2.

- * 6.2 Acquisition requirements. Acquisition documents must specify the following:
 - a. Title, number, and date of this specification.
 - b. Size of desk required (see 1.2).
 - c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
 - d. When a first article is required (see 3.1, 4.3, and 6.3).
 - e. Selection of applicable levels of preservation and packing (see 5.1 and 5.2).
 - f. When V-board protectors are required for level B packing (see 5.2.2).
 - g. When palletization is required (see 5.3).
 - h. Acceptance criteria required (see 6.5).

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6.3 First article. When a first article is required, it shall be inspected and approved under the appropriate provisions of Federal Acquisition Regulations 52.209. The first article should be a preproduction sample. The contracting officer should specify the appropriate type of first article and the number of units to be furnished. The contracting officer should include specific instructions in acquisition documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Samples. For a sample of the approved shade of Olive Drab 7 referenced in 3.2.10, address the contracting office issuing the invitation for bids.

6.5 Acceptance criteria. The acceptance criteria below are recommended for use. The acceptance criteria as specified in the contract or purchase order shall be binding. Unless otherwise specified, the following acceptance criteria are in accordance with MIL-STD-105.

6.5.1 For moisture content of wood testing. An acceptable quality level (AQL), expressed in terms of defects per hundred units, of 4.0 is recommended.

6.5.2 For end item visual examination. An AQL, expressed in terms of defects per hundred units, of 4.0 for major defects and 10 for total (major and minor combined) defects is recommended.

6.5.3 For end item dimensional examination. An AQL, expressed in terms of defects per hundred units, of 6.5 is recommended.

6.5.4 For end item testing. An AQL, expressed in terms of defects per hundred units, of 4.0 is recommended.

6.5.5 For packaging examination. An AQL, expressed in terms of defects per hundred units, of 2.5 is recommended.

6.5.6 For palletization examination. An AQL, expressed in terms of defects per hundred units, of 6.5 is recommended.

6.6 Part or Identifying Number (PIN). The PINs to be used for items acquired to this specification are created as follows:

<u>M</u>	<u>10821</u>	<u>X</u>
Prefix to indicate military specification	Specification number	Size number (see 1.2)

* 6.7 Subject term (key word) listing.

Field equipment
Office furniture
Writing

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

Custodians:

Army - GL
Air Force - 84

Review activity:

Air Force - 99

User activity:

Navy - MC

Preparing activity:

Army - GL
(Project 7110-0143)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side).

1. DOCUMENT NUMBER MIL-D-10821F		2. DOCUMENT TITLE DESKS, FIELD	
3a. NAME OF SUBMITTING ORGANIZATION		4. TYPE OF ORGANIZATION (Mark one)	
b. ADDRESS (Street, City, State, ZIP Code)		<input type="checkbox"/> VENDOR	
		<input type="checkbox"/> USER	
		<input type="checkbox"/> MANUFACTURER	
		<input type="checkbox"/> 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)	