



AEROSPACE STANDARD	AS85376™	
	Issued 2002-02 Reaffirmed 2017-11	
Stand, Shipboard, Helicopter Maintenance		
FSC 4920		

RATIONALE

AS85376 has been reaffirmed to comply with the SAE Five-Year Review policy.

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Documents
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1. SCOPE:

1.1 Scope:

This specification covers a helicopter maintenance stand used by personnel aboard aviation capable ships.

2. APPLICABLE DOCUMENTS:

2.1 Government documents:

- 2.1.1 Specifications and standards: Unless otherwise specified, the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

QQ-A-200/9	Aluminum Alloy Bar, Rod, Shapes, Tube and Wire, Extruded, 6063
QQ-A-250/11	Aluminum Alloy 6061, Plate and Sheet
WW-T-700/6	Tube, Aluminum Alloy, Drawn, Seamless, 6061
MMM-A-134	Adhesive, Epoxy Resin, Metal to Metal Structural, Bonding
PPP-B-601	Boxes, Wood, Cleated-Plywood
PPP-B-621	Box, Wood, Nailed and Lock-corner

MILITARY

MIL-C-5541	Chemical Conversion Coatings on Aluminum and Aluminum Alloys
MIL-R-5674	Rivet, Structural, Aluminum Alloy, Titanium Columbium
MIL-W-22248	Weldment, Aluminum and Aluminum Alloy
MIL-C-22751	Coating System, Epoxy-Polyamide, Chemical and Solvent Resistant, Process for Application of
MIL-P-23377	Primer Coatings: Epoxy-Polyamide, Chemical and Solvent Resistant
MIL-N-25027	Nut, Self-locking, 250°F, 450°F, and 800°F

STANDARDS

FEDERAL

FED-STD-595 Colors

2.1.1 (Continued):

MILITARY

MIL-STD-129	Marking for Shipment and Storage
MIL-STD-130	Identification Marking of US Military Property
MS17829	Nut, Self-Locking, Hexagon, Regular Height 250°F, (Nonmetallic Insert), Non-Corrosion-Resistant Steel
MS17985	Pin, Quick-release, Self-retaining, Positive Locking, Single Acting (T) Handle
MS21044	Nut, Self-locking, Hexagon Regular Height, 250°F, 125 ksi Ft _u and 60 ksi Ft _u (Asg)
MS24380	Caster, Industrial
AN3	Bolt and Machine, Aircraft
AN6	Bolt and Machine, Aircraft

(Copies of specifications, standards, handbooks, drawings, and publications required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

- 2.1.2 Other Government documents, drawings, and publications: The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein.

NAVAIRENGCEN

MPR 1212	Formulation and Processing of Polyurethane Type Compound for Moulding of Parts With or Without Metal Inserts for Impact Resistance
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(Application for copies should be addressed to the Naval Air Engineering Center, Ship Installations Engineering Department, Code 912, Lakehurst, New Jersey 08733).

- 2.1.3 Order of precedence: In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

3. REQUIREMENTS:

3.1 First article inspection:

When specified, a sample shall be subjected to first article inspections (see 4.2 and 6.3).

3.2 Materials:

The front frame, rear folding frame, braces, and the spreader latch assembly shall be constructed of extruded aluminum alloy conforming to QQ-A-200/9. The rails shall be constructed of drawn aluminum tubing conforming to WW-T-700/6 Type I.

- 3.2.1 Treads: Each tread shall be constructed of open-grip aluminum alloy 6061 conforming to QQ-A-250/11 or aluminum alloy 6063. (Morton Mfg. Co., 5th and Church Streets, P.O. Box 640, Libertyville, IL 60048) or equivalent (see 3.4.2).
- 3.2.2 Platform: The platform shall be constructed of tread-grip aluminum alloy 6061 conforming to QQ-A-250/11 or aluminum alloy 6063.

3.3 Design and construction:

The work platform shall be 80 ± 2 inches high. The stand shall have hand rails on the front frame parallel to the channels, removable guard rails on the work platform and a folding rear frame (see Figure 1). The stand shall be equipped with a chain. The chain shall latch and unlatch the front and rear frames when in the collapsed position. The chain shall be removable without the use of tools. The stand shall be capable of supporting not less than 1000 pounds. The stand shall weigh not more than 85 pounds. Lighten holes are acceptable where they do not effect the structural strength of the stand. All weldments shall conform to MIL-W-22248 class 3.

3.4 Dimensions:

- 3.4.1 Front frame: The front frame shall be fabricated from aluminum alloy channels (5 x 2 x 0.1875 inch). The frame shall be at an angle of $60(+0, -5)$ degrees from the horizontal when in the open position. It shall be 18 ± 3 inches wide at the top and 24 ± 3 inches at the bottom. There shall be two 5 x 2 x 0.1875 inch side rail channels. The channels shall open to the outside of the stand. The frame shall be welded to the work platform.
- 3.4.1.1 Tread Spacing: There shall be nine (9) treads equally spaced on the front frame. The treads shall be 4.875 ± 0.0625 inches deep and 0.125 inch thick with 2 inch flanges. Treads shall be fabricated from open-grip tread or equivalent. Treads shall be fastened to the front frame with bolts conforming to AN3 and nuts conforming to MS21044 (see 4.4.2).
- 3.4.1.2 Braces: Two 45° cross braces shall be fabricated from 1 x 1 x 0.1875 inch aluminum alloy angle. Each brace shall be secured to the underside of the lowest tread by aluminum alloy rivets conforming to MIL-R-5674 or bolts conforming to AN3 and nuts conforming to MS21044 or by welding (See Figure 1).
- 3.4.1.3 Casters: The stand shall be equipped with two (2) rigid casters conforming to MS 24380-6RC. Each caster shall be fastened to two (2) 0.5 x 1.0 inch aluminum alloy rectangular bars conforming to QQ-A-200/9. The bars shall be welded to the back of the front channels (see Figure 1). The casters shall be secured to the bars by four (4) bolts conforming to AN6C5 and four (4) self-locking nuts conforming to MS17829-6F.
- 3.4.2 Work Platform: The work area of the platform shall be 18 by 18 inches square and 0.125 inches thick. The platform shall be constructed of tread-grip or equivalent. The platform shall be inspected and tested as specified in 4.4.1 and 4.4.2.