I INCH - POUND

MIL-P-23210E

<u>5 February 1991</u>

SUPERCEDING

MIL-P-23210D

5 March 1984

MILITARY SPECIFICATION

PLATFORMS, ALUMINUM AND STEEL; AND ACCESSORIES (FOR SHIPS' BROWS)

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

- 1. SCOPE.
- 1.1 <u>Scope</u>. This document covers aluminum and steel platforms and accessories for brows (ships' gangplanks).
- 1.2 <u>Classification</u>. Platforms and accessories should be of the following types, sizes and styles, as specified (see 3.2 and 6.2).

Type I - Brow Platform:

Size 1 - 6 by 14 by 10 feet high.

Size 2 - 12 by 12 by 10 feet high.

Size 3 - 10 by 12 by 15 feet high.

Size 4 - 10 by 12 by 20 feet high.

Type II - Stair (to serve 10 foot high platforms).

Type III - Stair Platform.

|Beneficial comments (recommendations, additions, deletions) and any pertinent | data which may be of use in improving this document should be addressed to: | Commanding Officer (Code 156), Naval Construction Battalion Center, Port | Hueneme, CA 93043-5000, 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 2090

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

Type IV - Rotating Platform (for brow to ship connection).

Size 4 - for 3 foot and 4 foot wide brows.

Size 5 - for 5 foot wide brow.

Type V - Rotating Brow Support (for brow to ship connection).

Size 3 - 3 foot wide brow.

Size 4 - 4 foot wide brow.

Size 5 - 5 foot wide brow.

Style A - Beam brow support.
Style B - Truss brow support.

APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 <u>Specifications, standards</u>. The following specifications and standards form a part of this document 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).

SPECIFICATIONS

FEDERAL

PPP-B-601 - Boxes, Wood, Cleated-Plywood.

MILITARY

MIL-P-116 - Preservation, Methods of.

MIL-T-704 - Treatment and Painting of Material.

MIL-B-22342 - Brows, Aluminum, Beam and Truss.

STANDARDS

FEDERAL

FED-STD-H28/2 - Screw-thread Standards for Federal Services Section 2 Unified Inch Screw Threads - UN and UNR Thread Forms.

MILITARY

MIL-STD-129 - Marking for Shipping and Storage.

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from Navy Publishing & Printing, Service Office, Bldg. 4D, NPM DODSSP, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

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

DRAWINGS

NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)

- 1404713 Standard Aluminum Brow Platforms Notes and Detail.
- 1404714 Standard Aluminum Brow Platform 6'-0" x 14'-0" x 10'-0" High Plan, Elevation and Sections.
- 1404715 Standard Aluminum Brow Platform 12'-0" x 12'-0" x 10'-0" High Plan, Elevation and Sections.
- 1404716 Standard Aluminum Brow Platform 10'-0" x 12'-0" x 15'-0" High Plan, Elevation and Sections.
- 1404717 Standard Aluminum Brow Platform 10'-0" x 12'-0" x 20'-0" High Plan, Elevation and Sections.
- 1404718 Standard Aluminum Stair Platform for 4-40 Brow Plans and Sections.
- 1404719 Standard Aluminum Stair Platform for 4-40 Brow Steps, Details and Sections.
- 1404720 Standard Steel Rotating Platform for 3'-0", 4'-0", and 5'-0" Wide Brows Plans and Elevation.
- 1404721 Standard Steel Rotating Platform for 3'-0" and 4'-0" Wide Brows Plans, Elevation and Sections.
- 1404722 Standard Steel Rotating Platform for 5'-0" Wide Brows Plans, Elevation and Sections.
- 1404723 Standard Stairs to Serve 10'-0" High Platform.
- 1404724 Standard Rotating Brow Support for Aluminum Brows.
- 1404725 Standard Aluminum Brow Lighting.

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

2.2 <u>Non-Government publications</u>. The following document(s) 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 which are current on the date of the solicitation (see 6.2).

ALUMINUM ASSOCIATION (AA)

Specifications for Aluminum Structures.

(Application for copies should be addressed to the Aluminum Association, 900 19th Street NW, Washington, DC 20006.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM - A 36 -- Structural Steel. - Stainless and Heat Resisting Chromium-Nickel Steel ASTM - A 167 Plate, Sheet, and Strip. ASTM - A 276 - Stainless and Heat Resisting Steel Bars and Shapes. ASTM - B 26 - Aluminum-Alloy Sand Castings. - Aluminum and Aluminum-Alloy Sheet and Plate. ASTM - B 209 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, ASTM - B 221 Shapes and Tubes. - Aluminum-Alloy Forgings, Hand Forgings and Rolled ASTM - B 247 Ring Forgings. - Aluminum-Alloy 6061-T6 Standard Structural Shapes, ASTM - B 308 Rolled or Extruded. - Laminated Thermosetting Materials. ASTM - D 709 ASTM - D 3951 - Commercial Packaging. ASTM - D 3953 - Strapping, Flat Steel and Seals.

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

AMERICAN WELDING SOCIETY (AWS)

AWS B3.0 - Welding Procedures and Performance Qualifications.

AWS D1.1 - Structural Welding Code - Steel.

AWS D1.2 - Structural Welding Code - Aluminum.

(Application for copies should be addressed to the American Welding Society, 550 NW Lejeune Road, Miami, FL 33135.)

NATIONAL HARDWOOD LUMBER ASSOCIATION (NHLA)

Rules for the Measurement and Inspection of Hardwood and Cypress Lumber.

(Application for copies should be addressed to the National Hardwood Lumber Association, P.O. Box 34518, Memphis, TN 38134.)

SOCIETY OF AUTOMOTIVE ENGINEERS, INC. (SAE)

SAE J534 - Lubrication Fittings.

(Application for copies should be addressed to the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.)

SOUTHERN PINE INSPECTION BUREAU (SPIB)

. Standard Grading Rules for Southern Pine Lumber.

(Application for copies should be addressed to the southern Pine Inspection Bureau, 4709 Scenic Highway, Pensacola, FL 32504.)

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)

Standard Grading Rules for West Coast Lumber.

(Application for copies should be addressed to the West Coast Lumber Inspection Bureau, 6980 SW Varns Road, P.O. Box 23145, Portland, OR 97223.)

(Non-Government 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 (except for associated detail specifications, specification sheets of MS standards), the text of this specification takes precedence. Nothing in this specification, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

- 3.1 <u>Description</u>. Brow platforms, stair platforms, rotating platforms, stairs and rotating brow supports shall have the characteristics, dimensions and fittings specified herein and as shown on the drawings referenced herein.
- 3.2 <u>Drawings</u>. The drawings forming a part of this document are engineering design drawings. The contractor is responsible for preparing his own shop drawings. Where tolerances prescribed could cumulatively result in incorrect fits, the contractor shall provide tolerances within those prescribed on the drawings to insure correct fit, assembly and operation of the items. No deviation from the prescribed dimensions or tolerances is permissible without prior approval of the contracting officer. Refer to TABLE 1 to determine the applicable drawing for each type, size, or style of platform specified (see 1.2 and 6.2).
- 3.3 <u>First article</u>. When specified in the contract or purchase order, the contractor shall furnish one complete item for first article inspection and approval (see 4.2.1, 6.2 and 6.4). Unless otherwise specified (see 6.2), the first article shall be maintained at the manufacturer's facility and delivered as the last item.

TABLE 1. Platform drawings.

Classification	Description Brow Platform, 6 by 14 by 10 feet.	Drawing	
Type I, Size 1		1404714	
Type I, Size 2	Brow Platform, 12 by 12 by 10 feet.	1404715	
Type I, Size 3	Brow Platform, 10 by 12 by 15 feet.	1404716	
Type I, Size 4	Brow Platform, 10 by 12 by 20 feet.	1404717	
Type II	Stairs for 10 foot high Platform.	1404723	
Type III	Stair Platform. 👇	1404718, 1404719	
Type IV, Size 4	Rotating Platform, 3 and 4 foot wide Brows.	1404720, 1404721	
Type IV, Size 5	Rotating Platform, 5 foot Wide Brows.	1404720, 1404722	
Type V, Style A,	Rotating Brow Support,	1404724	
Sizes 3, 4, & 5	Beam Brow.		
	Rotating Brow Support,	1404724	
Sizes 3, 4, & 5	- · · · · · · · · · · · · · · · · · · ·		

3.4 <u>Materials</u>. Materials used shall be free from defects which would adversely affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this specification are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification.

3.4.1 Aluminum.

- 3.4.1.1 Alloy 6061. Unless otherwise specified herein or on the applicable drawing(s), all plates, structural shapes, forgings, bolts, nuts, washers, rivets, pipe, stanchions and fittings shall be fabricated from aluminum alloy 6061-T6 conforming to ASTMs B 209, B 221, B 247, or B 308, as applicable.
- 3.4.1.2 Alloy 6063. Gratings for platforms and stair treads shall be plank or bar gratings made from aluminum alloy 6063-T6 conforming to ASTM B 221. The grading shall have ridges or serrations for a nonskid surface. Square or rectangular holes shall be upset punched through the top surface; the hole dimensions shall not exceed 5/8 inch in length or width. Material thickness and depth of grating on platforms shall be as shown on the drawings and as specified herein.

- 3.4.1.3 Alloy 3003. The abrasive tread plate, when used for treads on stair steps, shall be of aluminum alloy 3003 conforming to ASTM B 221, shall have a fused oxide wearing surface and shall be not less than 0.125 inch in thickness. An alternate material may be used by the manufacturer if it can be shown that it meets the requirements specified herein and those on the applicable drawing.
- 3.4.1.4 <u>Alloy 5456</u>. As indicated on drawings 1404715, 1404716 and 1404717, the 15-inch channel shall be fabricated from aluminum alloy 5456 conforming to ASTM B 221, temper H 111 or H 321.
- 3.4.1.5 <u>Alloy 356.0</u>. At the option of the manufacturer, the stanchion sockets for the removable handrails on the brow platforms may be a casting of aluminum alloy 356.0, conforming to ASTM B 26.
 - 3.4.2 Structural steel. Structural steel shall conform to ASTM A 36.
- 3.4.3 <u>Stainless steel</u>. Ships' connections, pins, bolts, nuts and washers shall be of stainless steel conforming to ASTM A 276, type 304, condition A or B, commercially designated as 18-8 chromium-nickel steel, hot or cold finished. Stainless steel plate shall conform to ASTM A 167, type 304 or other class suitable for welding.
- 3.4.4 <u>Bronze bearing plates</u>. Self-lubricating bronze bearing plates for rotating platforms shall be as shown on the applicable drawing.
- 3.4.5 Synthetic resin laminate. Synthetic resin laminate separation sheets shall be provided where indicated on the drawings. The laminate material shall conform to ASTM D 709, grade G-10, thickness as shown on the applicable drawing(s). Other suitable material having similar physical and chemical properties may be used with prior approval by the contracting officer.
- 3.4.6 <u>Epoxy-resin sand-mortar</u>. Epoxy-resin sand-mortar specified on drawing 1404722 shall be prepared and installed in accordance with the manufacturer's recommendations.
- 3.4.7 <u>Mineral-coated fabric</u>. Mineral-coated fabric shall be coated on one surface with silicon carbide particles, No. 60 grit, and shall be applied in accordance with the manufacturer's recommendations.
- .3.4.8 <u>Hardwood lumber</u>. Hardwood lumber shall be NHLA grade No. 1 construction boards of any of the following species: elm, soft; gum, black, red, and sap; hackberry; oak, red and white; and maple, soft. Moisture content shall be not greater than 19 percent.
- 3.4.9 <u>Softwood lumber</u>. Lumber for bearing pads used for bolting to the base plates of the rotating brow supports shall be either southern yellow pine or Douglas fir. Moisture content shall be not greater than 19 percent.
- 3.4.9.1 <u>Southern yellow pine</u>. Southern yellow pine lumber shall be not less than grade dense structural 58 or longleaf structural 48, as graded under the SPIB rules.

- 3.4.9.2 <u>Douglas fir</u>. Douglas fir lumber shall be not less than construction grade as graded under WCLIB rules.
- 3.5 <u>Fasteners</u>. Threaded fasteners shall be of the size, type, style and quantity indicated on the drawings. The threads shall be class 2 unified thread form conforming to FED-STD-H28/2. Fasteners shall be of aluminum alloy conforming to 3.4.1.1, except where stainless steel is indicated on the drawings. Stainless steel fasteners shall conform to 3.4.3 and shall be as shown on the applicable drawing(s). Threads shall be lubricated prior to assembly. Securing chains shall be provided for all removable pins.
- 3.6 <u>Safety chain</u>. Safety chain for stair platform and rotating platform stanchions shall be welded aluminum chain of 1/4 inch size, having a safe working load of not less than 500 pounds (1b).
- 3.7 <u>Swivel caster</u>. Swivel caster shall be a heavy-duty commercial product designed for both static and dynamic loading, and having one or two wheels as indicated on drawing 1404713. Each wheel shall have a manual brake. Each swivel caster shall have a four-position swivel lock which, when disengaged, shall freely permit 360 degree swiveling. Both the wheel brake and the swivel lock shall be capable of resisting a horizontal force of 1,500 lbs.
- 3.8 <u>Bearings. swivel and wheel</u>. Swivel and wheel bearings shall be corrosion-resistant, replaceable, precision-type of ball, roller, or taper roller design. The bearings shall be sealed for the retention of lubricant and exclusion of contaminants. The bearing seal shall permit the bearing to be purged when normal lubricating pressure is applied.
- 3.9 <u>Stanchions</u>. Stanchions on the rotating brow platforms shall be provided with a system for attaching and adjusting the safety chain to permit the rotating platform and its connecting brow to rotate through a 90 degree arc without damaging the safety chain.
- 3.10 <u>Winch assembly</u>. The winch assembly for the stair platform shall consist of two winches, four sheaves, and wire rope. The winches shall have a working capacity of not less than 500 lbs. and shall be of the worm-geared wall type. The pull required on the winch handle under full working capacity shall be no greater than 30 lbs. The winches and sheaves shall be either corrosion-resistant marine bronze or steel. A sufficient length of 1/4 inch preformed, galvanized, 6 by 19 wire rope shall be included on the winches. All ferrous metal to aluminum connections shall be isolated by 1/8 inch synthetic resin laminated in accordance with 3.4.5. Winch assemblies shall be mounted on platforms only when specified by the contracting officer (see 6.2).
- 3.11 Stair treads. The stair treads shall be either extruded aluminum alloy floor grating conforming to 3.4.1.2 or reinforced aluminum alloy floor plate or aluminum alloy channel having a fused oxide wearing surface per 3.4.7. The stair treads shall be designed to withstand a live load of not less than 75 pounds-force per square foot (psf). Alternate stair treads may be used by the manufacturer if they can be shown that to meet the requirements specified herein and those in the applicable drawing.

- 3.12 <u>Towing attachments</u>. Each brow platform, stair and stair platform shall have a pair of towing attachments as shown on the tow bar detail of the applicable drawing:
- 3.13 <u>Lubrication</u>. Swivel and wheel bearings shall be provided with a suitable means of pressure lubrication. Hydraulic lubrication fittings shall conform to SAE J534, and shall be located in positions easily accessible to personnel but sheltered from weather effects. The swivel bearings shall have a lubricating passage drilled within the kingpin. The wheel bearings shall have a lubricating passage drilled through the axle or wheel hub as appropriate. All bearings shall be lubricated during final assembly, prior to shipment, and shall be tagged to show type and temperature rating of the lubricant used.
- 3.14 <u>Rub strips</u>. The rub strips for the brow platforms shall be hardwood lumber conforming to 3.4.8. At the option of the manufacturer, and with the approval of the contracting officer, the rub strips may be of neoprene rubber or other suitable reinforced plastic composition, not less than 1 inch thick, bonded to the metal member.
- 3.15 Cleaning, treatment, and painting. Surfaces normally painted in good commercial practice shall be cleaned, treated, and painted in accordance with MIL-T-704, type B. The color of the finish coat shall be as specified (see 6.2). Surfaces to be painted shall be cleaned and dried to insure that they are free from contaminants such as oil, grease, welding slag and spatter, loose mill scale, water, dirt, corrosion product, or any other contaminating substances. As soon as practicable after cleaning and before any corrosion product or other contamination can result, the surfaces shall be prepared or treated to ensure the adhesion of the coating system. The painting shall consist of at least one coat of primer and one finish coat. The primer shall be applied to a clean, dry surface as soon as practicable after cleaning and treating. Painting shall be with manufacturer's current materials according to manufacturer's current processes and the total dry film thickness shall be not less than 2.5 mils over the entire surface. The paint shall be free from runs, sags, orange peel, or other defects.
- 3.16 <u>Identification marking</u>. Identification shall be permanently and legibly marked directly on the platform or on a corrosion-resisting metal plate securely attached to the platform at the source of manufacturer. Identification shall include the manufacturer's model and serial number, name and trademark to be readily identifiable to the manufacturer.
- 3.17 <u>Workmanship</u>. Completed units shall have a uniformly clean appearance, free from fabrication and mill markings, smudges, smears and foreign materials. Handrails and all exposed surfaces and edges shall be smooth, free from burrs and sharp projections.
- 3.17.1 Welding. Welding procedures shall be in accordance with AWS D1.1 or D1.2, as appropriate. The surface of parts to be welded shall be free from rust, scale, paint, grease, or other foreign matter. Welds shall be of sufficient size and shape to develop the full strength of the parts connected by the welds. Welds shall transmit stress without permanent deformation or failure when the parts connected by the weld are subjected to proof and service loadings.

- 3.17.2 Welder qualifications. All welders shall be qualified for the types of welds and positions they are required to use in construction of the platform. Qualifications shall be on the type of base material and filler utilized in actual construction or on similar alternate materials not requiring welder requalification. Welder qualification shall be performed in accordance with AWS B3.0. Copies of the qualification record for each qualified welder shall be kept by the manufacturer or contractor and shall be available to authorized Government inspectors. Aluminum shall not be flame cut, and weldments shall conform to the AA Specification for Aluminum Structures, as applicable.
- 3.17.3 <u>Bolted connections</u>. Bolt holes shall be accurately punched or drilled and shall have the burrs removed. Washers or lock washers shall be provided in accordance with good commercial practice, and all bolts, nuts, and screws shall be tight.
- 3.17.4 <u>Castings</u>. All castings shall be sound and free from patching, misplaced coring, warping, or any other defect which reduces the castings ability to perform its intended function.

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 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 <u>Material inspection</u>. The contractor is responsible for ensuring that supplies and materials are inspected for compliance with all the requirements specified herein and in applicable referenced documents.
- 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
 - a. First article inspection (see 4.2.1).
 - b. Quality conformance inspection (see 4.2.2).

- 4.2.1 <u>First article inspection</u>. The first article inspection shall be performed on one complete platform when a first article is required (see 3.2 and 6.2 and 6.4). This inspection shall include the examination of 4.3 and the tests of 4.4. The first article may be either a first production item or a standard production item from the supplier's current inventory provided the item meets the requirements of the specification and is representative of the design, construction, and manufacturing technique applicable to the remaining items to be furnished under the contract.
- 4.2.2 Quality conformance inspection. The quality conformance inspection shall include the examination of 4.3, and the packaging inspection of 4.6.
- 4.3 Examination. Each platform shall be examined for compliance with the requirements specified in section 3 of this specification. Any redesign or modification of the contractor's standard product to comply with specified requirements, or any necessary redesign or modification following failure to meet specified requirements shall receive particular attention for adequacy and suitability. This element of inspection shall encompass all visual examinations and dimensional measurements. Noncompliance with any specified requirement or presence of one or more defects preventing or lessening maximum efficiency shall constitute cause for rejection.
- 4.3.1 <u>Visual inspection of welds</u>. In accordance with AWS D1.2, Section 6, provide AWS-certified welding inspectors for fabrication/erection, testing, and verification inspection. Welding inspectors shall visually inspect and mark welds, including fillet weld end returns. Inspection reports shall be available to the Government when requested (see 6.2).
- 4.4 <u>Tests</u>. The first article test item, preproduction test item or reproduction test model of an initial production item shall be the individual unit, or the first unit of several identical units of the same type, style and size as specified in the contract. The test model shall be performance tested as specified in 4.4.1, and subjected to the check analyses of 4.5. Failure to pass any test shall constitute cause for rejection.
- 4.4.1 <u>Performance tests</u>. Only types I, III, and IV shall be subjected to the performance tests. The performance test load for each test model shall be applied for a duration of not less than 10 minutes. While loaded, the test model of types I and III shall be moved back and forth longitudinally over a distance of 4 feet each way for five complete cycles. Swivel caster wheels shall operate freely and show no signs of jamming, binding, or distortion during or after the test. The contractor shall be responsible for correcting all defects resulting from improper workmanship or fabrication procedures, or from materials, dimensions, or arrangements not in conformance with this document and referenced drawings.
- 4.4.1.1 Type I. sizes 1 and 2. The test loads shall consist of two 8,000 lb. concentrated loads, plus a 150 psf uniform load. The two concentrated loads shall be spaced 5 feet apart on centers on a line parallel to the transverse centerline and symmetrical about the longitudinal centerline of the brow platform. Each concentrated load shall have a bearing area of not greater than 1 square foot. The uniform load shall be applied to either half of the brow platform, as formed by the transverse centerline.

- 4.4.1.2 Type I, sizes 3 and 4. The test loads shall consist of four 5,300 lb. concentrated loads, plus a 150 psf uniform load. The four concentrated loads shall act in pairs spaced 5 feet apart on centers. One pair shall act on the transverse centerline; the other pair shall act on either end parallel to the transverse centerline. Both pairs shall be symmetrical about the longitudinal centerline. Each concentrated load shall have a bearing area not greater than 1 square foot. The uniform load shall be applied to the half of the brow platform on which the four concentrated loads are located and exclusive of their area.
- 4.4.1.3 Type III. The test loads for the stair platforms consist of two 3,400 lb. concentrated loads, plus a 150 psf uniform load. The two concentrated loads shall be placed 4 feet apart on centers parallel to the transverse centerline and inboard 6 inches from the 6-foot edge farthest from the stairs. The concentrated loads shall be symmetrical to the longitudinal centerline. Each concentrated load shall have a bearing area not greater than one-half of a square foot. The uniform load shall be applied to the stair steps and to the remaining stair platform area not occupied by the concentrated loads. After removal of the test loads, each winch shall be mounted and dynamically tested for compliance with the requirements of 3.10.
- 4.4.1.4 Type IV. size 4. The steel rotating platform shall be tested with a 150 psf uniform load on the platform and a 75 psf uniform load on a 4 foot by 70 foot standard aluminum brow joined to the platform. A total equivalent load equal to 16,000 lbs. may be hung from the brow connections to simulate the 4 foot by 70 foot brow in lieu of actually attaching the brow. The platform, while thus loaded, shall be capable of being rotated to any of its possible positions.
- 4.4.1.5 Type IV. size 5. The steel rotating platform shall be tested in a similar manner to 4.4.1.4, except the loaded brow shall be 5 foot by 80 foot; if a simulated load is used, the load shall be 33,500 lbs.
- 4.5 <u>Check Analyses</u>. Tests and check analyses for determining conformance to mechanical property and chemical composition requirements for aluminum shall be as specified in the reference material specifications. Check analyses for chemical compositions will be waived provided the material can be identified as having been produced under acceptable chemical composition control procedures and provided each length of material is marked to indicate the alloy designation and the producer.
- 4.6 <u>Packaging inspection</u>. The preservation, packing, and marking of the item shall be inspected to verify conformance to the requirements of section 5.
 - 5. PACKAGING
- 5.1 <u>Preservation</u>. Preservation shall be level A or commercial as specified (see 6.2).
 - 5.1.1 <u>Level A</u>.
- 5.1.1.1 <u>Disassembly</u>. Disassembly shall be the minimum necessary to protect parts subject to damage or loss, and to accomplish reduction in cube. Removed

bolts, nuts, pins, screws and washers shall be reinstalled in mating parts and secured to prevent their loss.

- 5.1.1.2 <u>Unprotected surfaces</u>. Unprotected exterior metal surfaces requiring the application of a contact preservative in accordance with MIL-P-116 and not specifically provided for herein shall be preserved with P-1.
- 5.1.2 <u>Commercial</u>. The platforms and stairs shall be preserved in accordance with ASTM D 3951.
- 5.2 <u>Packing</u>. Packing shall be level A, B, or commercial as specified (see 6.2).
- 5.2.1 Level A. A basic assembly shall be shipped uncrated. Handrails and similar components shall be secured to the basic assemblies by steel strapping, where practicable. If not practicable, such components shall be secured in bundles with flat steel strapping and bolting in combination with suitable wood blocking or battens as required to form compact, nonshifting bundles. The strapping shall conform to ASTM D 3953, Type 1 or 2, Grade 2. Small disassembled components and fittings, such as casters, chain, wire rope, winches and similar items shall be packed in close-fitting boxes conforming to PPP-B-601, overseas type. The contents shall be blocked and secured to prevent movement within the containers and damage to the contents.
- 5.2.2 <u>Commercial</u>. The platforms and stairs shall be packed in accordance with ASTM D 3951.
- 5.3 <u>Marking</u>. Bundles and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

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

- 6.1 <u>Intended use</u>. The platforms, stairs, and supports specified herein are intended for use with the aluminum brows procured under the latest version of MIL-B-22342.
- 6.2 <u>Acquisition requirements</u>. Acquisition documents should specify the following:
 - a. Title, number, and date of this specification.
 - b. Type, size and style of item required (see 1.2 and 3.2).
 - 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 first article is required for inspection and approval (see 3.3, 4.2.1, and 6.5).
 - e. When a winch assembly shall be mounted on a platform (see 3.10).
 - f. Color of paint required (see 3.16).
 - g. When a welding inspection report is required (see 4.3.1).
 - h. Level of preservation and packing required (see 5.1 and 5.2).

6.3 <u>Consideration of data requirements</u>. The following data requirements should be considered when this specification is applied on contract. The applicable Data Item Descriptions (DID) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the DIDs are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Paragraph No. Data Requirement Title Applicable DID No. Sug. Option
3.18.1, 4.1.1, Certification Tests/ UDI-A-23264 Inspection and testing reports, check analyses, welder qualifications.

6.4 Commercial Manual DI-M-4022

The above DIDs were those cleared as of the date of this specification. The current issue of DOD 5010.12--L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

- 6.4 <u>Technical manuals</u>. The requirement for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, military specifications and standards that have been cleared and listed in DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL) must be listed on a separate Contract Data Requirements List (DD Form 1423), which must be acquired under separate contract line item in the contract.
- 6.5 <u>First article</u>. When a first article inspection is required, the item will be tested and should be a first production item or it may be a standard production item from the contractor's current inventory as specified in 4.2.1. The first article should consist of one unit. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examination, test, and approval of the first article.
- 6.6 <u>Waiver of performance tests</u>. The contracting officer may waive the performance tests (see 4.4.1) when the contractor has previously furnished and tested identical items in compliance with this specification.
 - 6.7 Subject term (key word) listing.

Gangplanks
Stairs
Rotating Platforms
Rotating Platforms Supports

6.8 <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 extent of the changes.

Custodians:

Army - ME Navy - YD

Preparing Activity: Navy - YD

(Project No. 2090-N100)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

- 1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
- 3. The preparing activity must provide a reply within 30 days from receipt of the form.

1 RECOMMEND A CHANGE: 1. DOCUMENT N		2. DOCUMENT DATE 20 February	
3. DOCUMENT TITLE PLATFORMS, ALUMINUM AND STEEL; AND AC	CESSORIES (FOR SHIPS	' BROWS)	
4. NATURE OF CHANGE (Identify paragraph number and included)	de proposed rewrite, il possible.	Attach extra sheets a	s needed.)
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DD Form 1426, OCT 89

Naval Construction Battalion Center

Port Hueneme, CA 93043-5000

Defense Quality and Standardization Office

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