

INCH-POUND

MIL-A-5503E
AMENDMENT 1
27 OCTOBER 1992

MILITARY SPECIFICATION

ACTUATORS: AERONAUTICAL LINEAR UTILITY,
HYDRAULIC, GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-A-5503E, dated 10 January 1986 and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Delete "2.1.1" entirely and add:

"2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks 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)."

Under SPECIFICATIONS, FEDERAL, delete "PPP-C-843" entirely and add: "FED-STD-101, Test Procedures For Packaging Materials"; "GGG-W-665 Wrench, Spanner" and "PPP-B-1672 Boxes, Shipping, Reusable With Cushioning."

Delete "Beneficial comment block" entirely and add new:

"Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Oklahoma City Air Logistics Center/TICLA, Tinker AFB, OK 73145-5990 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter."

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Under SPECIFICATION, MILITARY delete "MIL-B-131", "MIL-C-5501", "MIL-H-6083", and "MIL-I-6868", entirely.

Under STANDARDS, MILITARY, delete "MIL-STD-143"; "MS28903" entirely and add: "MIL-STD-970 Standards And Specification, Order Of Preference For The Selection Of", "MIL-STD-1949 Inspection, Magnetic Particle", "MIL-STD-6866 Inspection, Liquid Penetrant" and "MIL-STD-2073/1 DOD Materiel Procedures For Development And Application Of Packaging Requirements." MS15002 delete "Leakproof, 1/8 Pipe Threads, Steel, Type II" and add: "Surface Check, Straight Threads, Steel, Type II."

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Under 2.1.2 delete "AN8514" and "AN8515" entirely.

AMSC N/A

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FSC 1650

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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Delete old source statement and add new:

"(Unless otherwise indicated, copies of federal and military specification, standards, and handbooks are available from the Standardization Document Order Desk, Bldg 4D, 700 Robbins Ave, Philadelphia, PA 19111-5094.

2.2 Line 6 delete "ANSI B46.1" and add: "ANSI/ASME B46.1".

Delete "2.3" entirely and add new:

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

3.2 Line 3 after specifications add: "or Department of Defense approved industry specifications." Line 6 delete "MIL-STD-143" and add: "MIL-STD-970."

3.2.1.1 Line 4 delete "piston" and add "pistons."

3.3.2 Line 4 delete "providing" and add "provided."

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3.3.6 Line 2 after MIL-P-25732 add: "or MIL-P-83461" and delete "MS" and add: "These."

3.3.7 Delete sentences 1 and 2 and add: "Landing gear strut actuators and utility actuators whose piston rods are exposed to ice, dirt, or foreign matter shall use scraper rings conforming to MS28776, installed in a groove per MS33675."

3.3.10 Lines 3 and 5 delete "and that such components can be replaced either as a unit or by detail part."

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3.3.14 Line 4 after MS15002 add "or MS15006," also delete the "last sentence."

3.3.16 Lines 3 and 4 delete "ANSI B46.1" and add: "ANSI/ASME B46.1."

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FIGURE 1. In the title delete "AN8514, AN8515, and MS8516 key arm type only" and add: "per GGG-W-665."

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Delete "4.1" entirely and add new:

"4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all

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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."

Add: "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."

4.3.1 Line 2 delete "MIL-H-5606": add; "MIL-H-83282" line 4 delete "MIL-H-6083";
add: "MIL-H-46170" and delete the "last sentence" entirely.

4.6.5 Delete the first three sentences and add: "Highly stressed parts such as end caps, piston heads and rods, locks, and other parts as specified on the detail drawings manufactured from magnetic materials shall be subject to magnetic inspection in accordance with MIL-STD-1949. Cracks or other injurious defects shall be cause for rejection. Non-magnetic parts shall be inspected in accordance with MIL-STD-6866. Harmful discontinuities shall be cause for rejection."

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4.6.8.2.1(d) Line 3 delete "ANSI B46.1" and add: "ANSI/ASME B46.1."

Delete section 5 entirely and add new:

5. PACKAGING

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

5.1.1 Preservation-packaging. Unless otherwise specified by the contracting activity, item shall be packaged in Quantity Unit Pack (QUP) of one each. Each item will be provided a preservation method C-1 IAW MIL-P-116.

5.1.2 Cleaning. Item shall be cleaned IAW MIL-P-116 1A-8 process.

5.1.3 Drying. Immediately after cleaning, the item shall be dried following any one or combination of the drying procedures listed in MIL-P-116. The drying procedures employed shall not be injurious to the item.

5.1.4 Level A. Item shall be preserved IAW MIL-P-116 and MIL-STD-2073/1 to provide a method 1A-8.

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5.1.5 Piston Rod Bearing. The piston rod bearing shall be protected with preservative conforming to MIL-C-11796 or packed with the operating grease and wrapped in grade A paper conforming to MIL-B-121.

5.1.6 Piston Rod. Any exposed surface of the piston rod shall be coated with preservative conforming to MIL-H-6083, and wrapped in grade A paper conforming to MIL-B-121.

5.1.7 Level C. Item shall be individually preserved in a manner that will afford adequate protection against corrosion, deterioration, and physical damage during shipment from the supply source to the first receiving activity as specified in MIL-P-116 and MIL-STD-2073/1.

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

5.2.1 Container-Cushioning. Intermediate container requirements shall conform to PPP-B-601 cleated plywood, PPP-B-636, or PPP-B-1672, weather-resistant fiberboard, unless otherwise specified by the contracting activity. Intermediate containers shall be large enough to allow for application of sufficient cushioning/dunnage material between the unit container and intermediate container to ensure the item is held securely in position.

5.2.2 Level A. Item will be preserved as specified in 5.1 and shall be packed in exterior containers conforming to PPP-B-601 cleated plywood, PPP-B-636, or PPP-B-1672, weather-resistant fiberboard, unless otherwise specified by the contracting activity or Special Packaging Instructions (SPI). Exterior container shall be uniform shape, size, and minimum tare and cube, consistent with the protections required. Closure shall be in accordance with appropriate PPP-B-601, PPP-B-636, or PPP-B-1672 procedures, as specified by Special Packaging Instructions (SPI), and the contracting activity.

5.2.3 Level B. Same as level "A" unless otherwise specified by Special Packaging Instructions (SPI) or the contracting activity.

5.2.4 Level C. Item will be packed in containers in such a manner as to afford protection against physical damage during direct domestic shipment from the supply source to the first receiving activity. These packs shall conform to MIL-STD-2073/1.

5.3 Marking. Units, intermediate, and exterior containers shall be marked IAW special markings required by the contracting activity, SPI and MIL-STD-129.

5.4 Inspection and Test. Test of methods of preservation shall be accomplished in accordance with Section 4 of MIL-P-116 to ensure compliance with Section 5 of this specification. Packing tests shall be conducted IAW rough handling as specified in FED-STD-101.

Under section 6. NOTES add: "(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)"

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6.2(c) Delete entirely and add: "Applicable level of preservation and packing (see 5.1 and 5.2)."

Add: "6.2(f) Issue of DODISS to be cited in the solicitation, and if required the specific issue of individual document referenced (see 2.1)."

Custodians:
Air Force - 99
Navy - AS
Army - AV

Preparing activity:
Air Force - 71

(Project 1650-0454)