

MIL-C-6136A

Amendment 2

30 June 1970

MILITARY SPECIFICATION

CONDUIT: ELECTRICAL, FLEXIBLE, SHIELDED, ALUMINUM ALLOY FOR AIRCRAFT INSTALLATIONS

This amendment forms a part of Military Specification MIL-C-6136A, 10 December 1965, and is mandatory for use by all Departments and Agencies of the Department of Defense.

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2.1 Specifications - Military Delete reference to:

"MIL-R-6855, Rubber, Synthetic, Sheeted, Molded and Extruded" and substitute "MIL-S-6855, Synthetic Rubber Sheets, Strips, Molded or Extruded Shapes".

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Add the following paragraph:

"2.2 Other publications - The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials

ASTM D 149-64	Dielectric Breakdown Voltage and Dielectric Strength of Electrical Insulating Materials at Commercial Power Frequencies
ASTM D 412-68	Tension Testing of Vulcanized Rubber
ASTM D 568-61	Flammability of Plastics 0.127 CM (0.050 inch) and Under in Thickness
ASTM D 570-63	Water Absorption of Plastics
ASTM D 624(c)-54	Test for Tear Resistance of Vulcanized Rubber

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American Society for Testing and Materials (Continued)

ASTM D 746-64T	Test for Brittleness Temperature of Plastics and Elastomers by Impact
ASTM D 792-66	Test for Specific Gravity and Density of Plastics by Displacement
ASTM D 2240-64T	Test for Indentation Hardness of Rubber and Plastics by means of a Durometer

(Copies of ASTM publications may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103)"

3.1.4. Delete in its entirety and substitute the following:

"3.1.4 Outer covering material (Type II) - The outer cover of Type II conduit shall be either synthetic rubber or nitrile rubber plasticized polyvinyl chloride or nitrile rubber plasticized polyvinyl chloride - acetate

3.1.4.1 Synthetic rubber - The synthetic rubber shall conform to Class 2 of MIL-S-6855 and shall be of uniform thickness and free from pits and pinholes.

3.1.4.2 Nitrile rubber plasticized polyvinyl chloride or nitrile rubber plasticized polyvinyl chloride - acetate - The nitrile rubber plasticized polyvinyl chloride or nitrile rubber plasticized polyvinyl chloride-acetate shall be of uniform thickness and free from pitting and shall conform to Table I "

TABLE I

PROPERTY	VALUE	APPLICABLE ASTM OR FEDERAL TEST PROCEDURE
Tensile strength (psi, min.)	1800	ASTM D 412
Elongation (%) Min	350	ASTM D 412
Modulus at 100% elongation (psi)	900	ASTM D 412
Tear strength (lbs/inch) Min.	350	ASTM D 624 Die (c)
Water absorption (gram/sq in)	04 max	ASTM D 624
Hardness (Durometer ± 3)	82	ASTM D 2240

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TABLE I (Continued)

PROPERTY	VALUE	APPLICABLE ASTM OR FEDERAL TEST PROCEDURE
Specific gravity	1.20 max.	ASTM D 792
Low temperature flexibility(° F)	-70	Fed. Test Method Std. No. 601, Method 5211
Flammability	Self-extin- guishing	ASTM D 568
Dielectric strength (volts/mil) Minimum	600	ASTM D 149 (Short time in air-0.30 mil sheet) 2-inch diameter electrodes

3.2.1.1, 3.2.1.2, and 3.2.2.1: Delete reference to "Table I" and substitute "Table II".

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Change existing Table I to Table II.

Change existing Table II to Table III.

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3.2.2.2, 3.2.2.3, 3.2.3.1, 3.2.3.2, and 3.4: Delete references to "Table I" and substitute "Table II".

3.2.4: Delete reference to "MIL-R-6855" and substitute "MIL-S-6855".

3.4, lines 5 and 6: Delete reference to "Table II" and substitute "Table III".

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4.5.1 and 4.5.3: Delete reference to "Table I" and substitute "Table II".

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Figure 2: Delete reference to "Table I" and substitute "Table II".

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6.2(c): Delete reference to "Table I" and substitute "Table II".

Custodians:

Army - EL
Navy - AS
Air Force - 85

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Navy - AS
(Project No. 5975-0404)

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