

AIRCRAFT GENERAL PURPOSE
ELECTRICAL WIRE, MINIMUM
PERFORMANCE STANDARD

1. PURPOSE: This document defines the minimum performance levels that are required for electrical wire used in civil aircraft.
2. SCOPE: The wire considered herein is that generally regarded as general purpose airframe wire, and used from point to point within the aircraft. The conductor material used in this wire shall be tin, silver or nickel coated copper, or copper alloy. This document does not apply to special purpose wire, some examples of which are:
 - a) Wire found wholly within an enclosed and removable piece of electrical or electronic equipment.
 - b) Wire found on removable electronic shelves which remains attached to the shelf on its removal.
 - c) Wire used in the fire detection system.
 - d) Thermocouple wire.
 - e) Wire with aluminum conductor.
 - f) Wire used in high temperature areas (in excess of 150°C (302°F) from combined current and ambient heating).

CANCELLED

June 1995

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3. PUBLICATIONS: The following documents form a part of this Aerospace Standard to the extent specified herein:

Society of Automotive Engineers:

AS 1198	Method 3001 Life Cycle
	Method 3002 Bend
	Method 3004 Cold Bend
	Method 3015 Wet Dielectric
	Method 3016 Impulse
	Method 3004 Shrinkage

(Copies of SAE publications may be obtained from their offices at 400 Commonwealth Drive, Warrendale, PA 15096)

American Society of Testing and Materials:

B33-74	Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes
B298-74a	Standard Specification for Silver-Coated Soft or Annealed Copper Wire
B355-74	Standard Specification for Nickel-Coated Soft or Annealed Copper Wire
D3032-78	Standard Methods of Testing Hookup Wire Insulation

(Copies of ASTM publications may be obtained from their offices at 1916 Race St., Philadelphia, PA. 19103)

Federal Aviation Administration:

Federal Aviation Regulation	Air Worthiness Standards:
Part 25	Transport Category Airplanes

(Copies of FAA publications may be obtained from their offices at 800 Independence Ave., SW, Washington, DC 20590)

4. TEST REQUIREMENTS:

- 4.1 Insulation Resistance: The wire shall be subjected to the Insulation Resistance test defined in ASTM D 3032-78, paragraph 5. Test specimens shall not measure less than 1000 megahoms for 300 meters (1000 ft.).