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JSWAG
JOINT SERVICES
WIRING ACTION GROUP

Alternate Method for Rigid Antenna Mounting

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Alternate Method for Rigid Antenna Mounting

- TM 1-1500-344-23-3
  - WP 6.3.1.4 – Alternate Method for Rigid Antenna Mounting
- Used when conductive gaskets are not available
- Prepare aircraft skin and mounting area per Para 6.3.1.2
- Clean surface and apply Chemical Conversion Coating MIL-DTL-81706 Class 3

MIL-DTL-81706

- MIL-DTL-81706 Class 3 – Chemical Conversion Coating (Alodine)
  - Class 1A – Maximum protection against corrosion
  - Class 3 – Corrosion protection where low electrical resistance is required

- MIL-DTL-81706 - Types
  - Type I – Hexavalent Chromium – Cancer Causing
  - Type II – Non Hexavalent Chromium

- MIL-DTL-5541
  - If no material type is specified Type 1 shall be used

WP 6.3.1.4

- Apply MIL-PRF-16173 Grade 4 – Corrosion Preventive Compound
  - To aircraft skin surface and
  - To antenna mast base

MIL-PRF-16173

- MIL-PRF-16173 Grade 4 – 24-hour dry time
  - Para 3.11.2.1
    - Dry in 4 hours to permit handling
    - After 24 hours, the film shall be tack free (see 4.6.13.1)
  - Para 4.6.13.1
    - Drying (grades 4 only) Tackiness
  - Para 4.6.13.1.2 Procedure
    - (d) Coating should be sufficiently dry to permit handling in 4 hours
    - It shall be allowed to dry for an additional 20 hours

WP 6.3.1.4

- Wipe any Corrosion Preventive Compound
  - Aircraft Cleaning Compound – MIL-PRF-85570 Type II
  - Air Force may use MIL-PRF-87937 Type IV
- Position Antenna Base
  - Ensure countersink area is clean
- Check Electrical Resistance
- Clean outside edge of antenna and fastener heads

WP 6.3.1.4

- Apply MIL-PRF-81733 Class I – Sealing Compound
  - Apply a fillet seal around outside edge
  - Allow 30-minute cure time
  - Cover fastener heads with MIL-PRF-81733 Class 1

MIL-PRF-81733

- MIL-PRF-81733 Class I
  - Class I – Polysulfide rubber base material
  - Class II – Polythioether rubber base material

- MIL-PRF-81773 Grade?
  - Grade A – Contains cromate corrosion inhibitors (Cancer Causing)
  - Grade B – Contains Non cromate corrosion inhibitors

- Assuming Type I – brush or spatula
  - 16-24 hours drying time