

NYCOTE APPLICATION CASE STUDY #1

Aircraft structures contain numerous electrical bonding points. These are used to ground static electricity from non-metallic components such as radomes and to provide an earth path for lightning strike and a current return path for any electricity.* They are essential for electrical safety and must be preserved in good condition.

Nycote products provide an excellent permanent barrier from such environments and can be used to coat and encapsulate bonding points.

Protection is required from:

- Degradation due to corrosive environments
- Sparking and flashover
- Damp and moisture ingress
- Service chemicals such as battery acid, fuels, deicers, etc.

Nycote products provide an excellent permanent barrier from harsh environments and can be used to coat and encapsulate bonding points. Nycote 7-11, 88 and 99 all deliver a thin, flexible conformal layer that prevents ingress of corrosive elements. Both products are approved and used by major aerospace companies for this application.

The combination of Nylon and Epoxy provides a thin barrier which adheres to the many different materials used on electrical bonding points.

Nycote forms a pinhole free film and therefore allows no pathways for electricity to escape. Nycote products are available in a range of colors for easy identification and will break if the point is unfastened, providing an indication that interference has occurred. Application of Nycote is easy with a small paintbrush avoiding removal of the assembly from its location.

*See FAA Advisory Circulars AC 25.899-1, AC 25.954-1



FIG 1: ELECTRICAL BONDING POINT ENCAPSULATED IN NYCOTE 7-11 BLUE

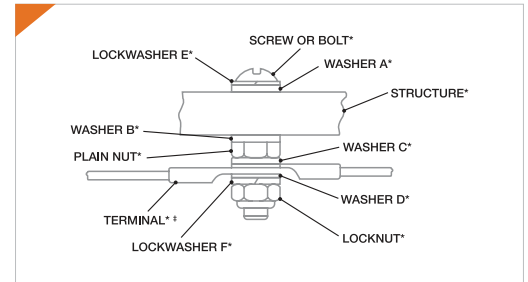


FIG 2: BONDING POINT SET UP FROM FAA AC 43-206



FIG 3: CORRODED BONDING STRAP AND CONNECTION (FROM FAA AC 43-206)

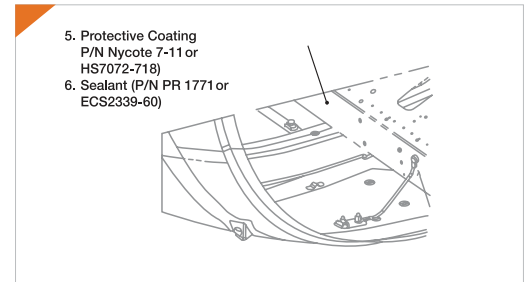


FIG 4: DRAWING CALL OUT FOR NYCOTE 7-11 FOR FLOOR BONDING POINT