REFERENCE: ANTENNA INSPECTION, MAINTENANCE and REPLACEMENT

RELATED DOCUMENTS:
FAA Form 8100-2, Standard Airworthiness Certificate, block 5.
Federal Aviation Act of 1958, Public Law 85-726, Section 603. (c).
AC 43.13-1B, Appendix 1, Glossary.
AC20-5G, Plane Sense (General Aviation Information) page 3, question 6.
AC-120-77 Maintenance & Alterations, Definitions (i.e. Airworthy, Approved Data, Major Repair, etc.)
FAA Order 8130.2D Chapter 1 paragraph 9.
43.2 Records of Overhaul and Rebuilding
43.3 Persons Authorized to Perform Maintenance, Preventive Maintenance, Rebuilding, and Alterations.
43.5 Approval for Return to Service After Maintenance, Preventive Maintenance, Rebuilding, and Alterations.
Appendix A to Part 43, Major Alterations, Major repairs and Preventive Maintenance.

BACKGROUND
Many mechanics want to know if minor chips or cracks in an antenna radome can or must be repaired or if the antenna must be replaced. And other mechanics want to know who is responsible or authorized for determining when and if an antenna must be replaced. Comant recommends that any antenna falling within these categories may be returned to the factory for testing and repaint if the antenna is in proper condition to undergo these processes. Otherwise, the antenna should be determined as Airworthy or Unairworthy as defined by the FAA documents cited on these pages. We have also provided reference to FAA documents that outline who is qualified to make an airworthiness determination.

DEFINITION of AIRWORTHINESS:
The term Airworthy is defined in its simplest terms as, "when an aircraft or one of its component parts meets its type design and is in a condition for safe operation". Reference: 43.13-1B, Appendix 1, Glossary.
FAA Order 8130.2D Chapter 1 paragraph 9; states two conditions must be met for an aircraft to be considered "Airworthy". Title 49 Section 44704(c) and 14 CFR part 21, Certification Procedures for Products and Parts (part 21) 21.183 (a), (b), and (c), all relate to the two conditions necessary for issuance of an Airworthiness Certificate. The statutory language establishes the two conditions.
a. The aircraft must conform to its TC (Type Certificate). Conformity to type design is considered attained when the aircraft configuration and the components installed are consistent with the drawings, specifications, and other data that are part of the TC, and would include any STC (Supplemental Type Certificate) and field approved alterations.
b. The aircraft must be in a condition for safe operation. This refers to the condition of the aircraft relative to wear and deterioration, e.g., skin corrosion, window delamination/crazing, fluid leaks, tire wear, etc.
Note: If one or both of these conditions were not met, the aircraft would be considered unairworthy. Aircraft which have not been issued a TC must meet the requirements of paragraph 9b above.
REPAIR and INSPECTION AUTHORIZATION

§ 43.3 Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.

(a) Except as provided in this section and §43.17, no person may maintain, rebuild, alter, or perform preventive maintenance on an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which this part applies. Those items, the performance of which is a major alteration, a major repair, or preventive maintenance, are listed in appendix A.

(b) The holder of a mechanic certificate may perform maintenance, preventive maintenance, and alterations as provided in Part 65 of this chapter.

(c) The holder of a repairman certificate may perform maintenance, preventive maintenance, and alterations as provided in part 65 of this chapter.

65.95 Inspection authorization: Privileges and limitations.

(a) The holder of an inspection authorization may—

(1) Inspect and approve for return to service any aircraft or related part or appliance (except any aircraft maintained in accordance with a continuous airworthiness program under part 121 of this chapter) after a major repair or major alteration to it in accordance with part 43 [New] of this chapter, if the work was done in accordance with technical data approved by the Administrator.

It is Comant’s stated policy that antennas should not be modified in any way, including re-painting, sanding, filling, or Comant’s 3 year warranty is void.

If you have any questions regarding this policy or information contained herein please feel free to contact Comant or your local FAA office.

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