



## Service Bulletin

S.B. No: 127

Title:

INSPECTION OF ALUMINIUM FITTINGS FOR EXFOLIATION CORROSION

Compliance:

At the next annual and each subsequent annual.

Applicability:

T67A, T67B, T67C Series, T67M, T67M-MkII, T67M200, T67M260 and T67M260-T3A

The contents of this SB have been approved by the CAA and will be the subject of an Airworthiness Directive.

This Issue 3 deletes classification, original paragraph 3 in its entirety and original paragraph 4 ii. Paragraphs renumbered accordingly.

## INTRODUCTION:

A case has been reported of exfoliation (layer corrosion) in the following positions on a T67A aircraft: forward tailplane attachment brackets, flap centre drive brackets and seat belt attachment brackets. This particular aircraft had been stood down for a period of time prior to re-activation.

An additional case has recently been reported of exfoliation on the tailplane mounted, fuselage to tailplane aft attachment brackets on a T67C aircraft.

## **ACTION:**

- 1. Gain access to the following areas which contain aluminium fittings and visually inspect using torch and mirror where applicable each component for exfoliation (layer) corrosion. Most positions will be visible externally. However for internal fittings the following will have to be removed: external access panels, frame 5 panel, tailplane, seats, centre console top, forward covers, glareshield, cowling and wing seals. All inspections should be performed in accordance with the relevant aircraft's approved Maintenance Manual. For, T67A Section 2; T67M260-T3A Paragraph 2.6; T67B, T67C Series, T67M, T67M-Mkil, T67M200 and T67M260 Paragraph 2.8.
  - a. Aileron hinges and drive lever.
  - b. Aileron drive bellcrank assemblies two places within wing and pushrods.
  - c. Flap hinges, drive lever and flap drive shaft outer pivot bearing, visible through drive lever slot under wing.
  - d. Rudder hinge assemblies and drive horn.
  - Rudder pedal top slider and pedal pad. Not applicable T67A and T67M Works Number 1999.

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- f. Elevator hinges, drive plates, lever and trim tab hinge plate.
- g. Tailplane forward and aft attachments, plus fuselage to tailplane forward attachment. Examine with Tailplane removed.
- h. Forward fin attachment. T67A only.
- i. Elevator drive bellcranks assembly in fuselage and pushrods.
- j. Elevator drive bellcranks assembly Frame 4.
- k. Flap mechanism seat attachment side plates. Pre Mod M950, ie non-electric flap only.
- Control column/spar-mounting brackets.
- m. Seat harness lap strap attachment brackets.
- n. Throttle linkage pivot brackets under instrument panel on Frame 2.
- o. Instrument panel mounting beam, T67A and T67M Works No. 1999 only. Instrument/avionics mounting brackets and trays.
- p. Canopy mechanism pivot mounting blocks. Spigot blocks, Works Number 2266 and subsequent, i.e. Post Mod M957.
- q. Wing mounting load spreader plates fore and aft, ref Frames 3 and 4.
- r. i. Pre Mod M129 (single piece canopy). Canopy rail, slider, radius arm lower pivot mountings and canopy lifting handles.
  - ii. Post Mod M129 (two piece canopy). Canopy rail, slider, radius arm lower pivot mountings and radius arms (Pre Mod M548 aircraft).
- s. Hot air box cabin heating.
- Oil filler access door and hinge on cowling. Hinge only applicable T67M260 and T67M260-T3A.
- u. Carburettor/fuel injector air intake filter/box assy. Not applicable T67M, T67M-MkII Post Mod M595 and T67M260, T67M260-T3A.
- v. Air intakes, exits and baffles.
- w. Seat support rails all aircraft and T67A and T67M Works No. 1999 only, seat adjusting mechanism.
- x. Nose undercarriage casting, torque links and fork. Main undercarriage (Post Mod M468 Fairey Hydraulic manufacture only) torque links and axle knuckle.
- y. Throttle shaft mountings, selector mountings and driveshafts, parking brake mountings and hydraulic pipe mountings.
- Should exfoliation be found please inform SAL Customer Service Department of the component affected and the extent of the exfoliation corrosion. Replace affected component. Other forms of corrosion or defect found should also be dealt with in accordance with relevant aircraft's Slingsby Maintenance Manual.



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 i. Ensure maintenance inspections are adhered to regarding condition of aluminium alloy fittings. For T67A and T67M260-T3A every 100 flying hours, other variants 150 flying hours and annual as indicated by the relevant aircraft's Maintenance Manual. See T67A Section 2 paragraph 2; T67M260-T3A Paragraph 2.6.1; T67B, T67C Series, T67M, T67M-MkII, T67M200 and T67M260 Paragraph 2.8.6. In particular, should the fittings' external finish (eg paint, anodizing, clad) be damaged, clean and re-protect with alochrom and/or paint.

When working with aluminium fittings, care should be taken not to damage the surface finish. If damage occurs, re-protect as above.

- ii. Ensure when re-activating an aircraft that all aluminium fittings are inspected for exfoliation, bare metal and general condition. Re-protect or replace fittings.
- 4. Annotate aircraft Logbook "SB 127 Issue 3 complied with".

For any replacement parts or if in doubt, please contact SAL Customer Service Department.