

BGA TWS  
1/2/83

Technical Report  
RF 4/5. SERIES.

**Subject:** Damage caused by dampness to the fuselage section and crossbeam of fin on tail unit.

**Concerned:** FOURNIER RF 4, RF 4 D, RF 5 and RF 5 B SPERBER, all Works numbers.

**Priority:** Steps 1 and 2: To be taken at the next periodic check or end of year examination - whichever falls first, and a repeat check at the time of every 100th periodic examination and end of year examination.

Step 3: To be taken as soon as faults are noticed.

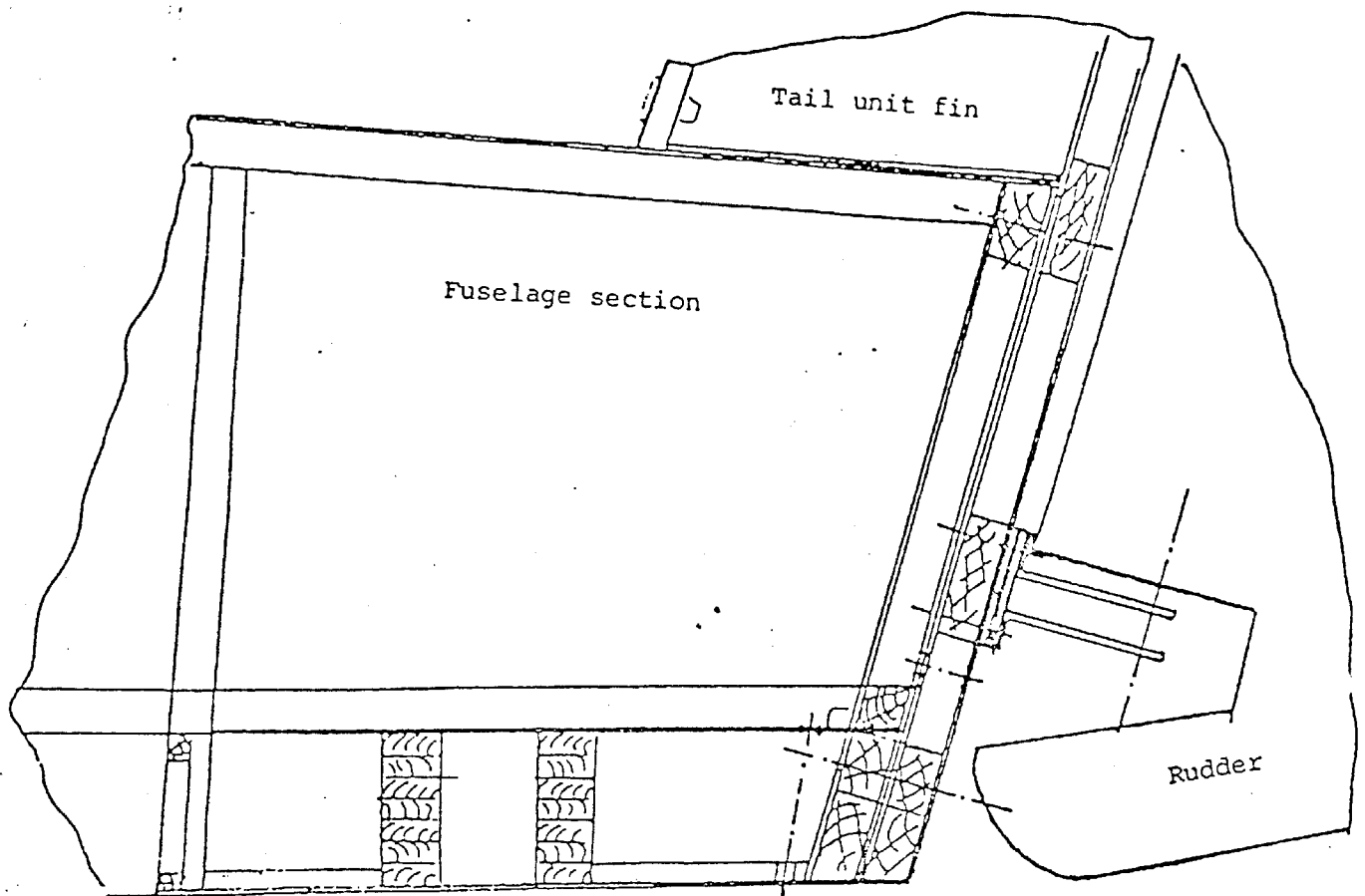
**Course of events:** During a large-scale repair to an RF5 the underside of the fin crossbeam was noticed to be rotting. This rotting was due to the effect of dampness. Presumably water penetrated into the fin crossbeam over the fuselage section and through the drill-hole for the cable to the navigation light.

**Steps:**

1. Examination of the interior condition of the fuselage for damage to the inner preserving agents and to the plywood parts.
2. Examination of the opening to the drainage hole and the position of the hole in the tail skid. (see sketch). If necessary, new drainage holes should be drilled.
3. If damage to the preserving agents or to the plywood has occurred in the fuselage, and/or the drainage hole is faulty, an examination of the interior condition of the tail unit fin will be necessary. For this purpose, the rudder will be dismantled and the planking of the fin cross beam in the area shown on the sketch will be opened up in a circular area of about 30cm. If no damage to the wood is discovered, the area can be doubled over with 1.5 mm plywood after renewing the interior preserving agent. For this purpose, clean surfaces of varnish and preserving agent and glue on the plywood part(s) with AERODUX 185.

Cover the repaired area with preserving agent and varnish  
Re-assemble the rudder with new nuts.  
Examine the functioning of the controls.

If damage to the wooden structure or serious damage to the preserving agent (grey to black colouration of the plywood) be discovered, a special repair order detailing the extent of the damage with drawings should be requisitioned from us.



Drill hole for navigation light.

- 2 Drainage holes in fuselage section bored at the time near the underbrace. Note: Drill holes must pass through the outer casing and the inner floor.

Instructions:

- 1. All steps should be carried out on the premises of a trustworthy aeronautical company. The inspection measures should be taken under the jurisdiction of a Grade 3 Inspector and he should make out the certificate.

We recommend that step 3 should be carried out at the premises upon which the aircraft was manufactured.

- 2. We wish to take this opportunity to reinforce the point that it is of the utmost importance that all drainage holes should be opened in order to forestall damage to all materials.