# COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

Propellers - Fixed Pitch

### AD/PFP/3 Amdt 3

## **Fairey Metal Propellers**

10/88

Applicability: All Fairey Metal propellers.

Requirement: 1. Daily Inspection:

Carefully examine the blade sheet for cracks on both sides and both edges in the region adjacent to the boss and identification stamping. This inspection may be made visually and without removing the propeller from the aircraft. Withdraw from service any propeller found to be cracked.

*Note:* Daily inspection may be performed and certified by the pilot or owner.

#### 2. Half Overhaul Period Inspection:

Remove the propeller from the hub and the boss blocks from the blade sheet. Clean the blade sheet and inspect for cracks, particularly in the vicinity of the bolt holes and in regions where any fretting or corrosion has occurred. This inspection shall be made under strong diffused illumination using a suitable microscope with magnification in the range 15 to 25 diameters. Withdraw from service any propeller found to be cracked.

If no cracks are found, remove any fretting or corrosion from the blade sheet and boss blocks by means of coarse emery followed by fine emery.

Before re-assembly, ensure that the boss blocks are correctly fitted to the blade sheet using the blueing method. At least 80 per cent contact shall be achieved and at no place shall there be more than .002-in. clearance between boss blocks and blade sheet. This mating of surfaces shall be obtained without bolt pressure of any kind. A light tap with a mallet on the faces of the boss, which is held in alignment on the blade sheet by a suitable mandrel, is all that is permitted to obtain a blade marking.

#### 3. Overhaul:

At the specified overhaul period, inspect and re- condition the propeller in accordance with Fairey Aviation Specification No. FAC1. In addition, carry out the following operations:

- (a) Check fitment of boss blocks to blade sheet by the blueing method as prescribed in sub-paragraph 2 above.
- (b) At each overhaul, anodise the propeller blade sheet and inspect for cracks. The anodic treatment shall be carried out in accordance with specification DTD 910 (latest issue) or other approved specification.

When above contact is achieved ensure any exposed bare metal is reprotected using Alodine or varnish as detailed in Fairey Aviation specification FAC 1.

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Compliance: For Para. 1 - At each daily or overnight inspection.

For Para. 2 - Within 50 hours time in service of the mid- overhaul period.

For Para. 3 - Before installation in an aircraft following each overhaul completed after

30 August 1965.

Exemption: Notwithstanding the foregoing, propellers which have completed between 300 and

500 hours time in service since last overhaul before 30 August 1965 and have been inspected in that period in accordance with DCA Special Inspection Fairey/61/1 are hereby exempted from the inspection requirement of para. 2 during that current

overhaul period.

Background: Recently a Fairey propeller was found assembled with barium chromate as the

jointing compound. Use of an extrudable substance in this application can cause loss

of hub bolt torque.