AD/PT6A/16 Improved Strength P.T. Shaft Housing and Reduction Gearbox Condition Monitoring 10/85

Applicability: All PT6A-6, -6A, -6B, -6/C20, -20, -20A, 20B, -21. PT6B-9, PT6A-27, -28, -34.

Requirement:

1. Modify affected engine fitted with the P.N 3010548 welded power turbine shaft housing by incorporation of UACL SB No. 1138, Rev. 3.

   Note: Information regarding affected engine model S/Nos., etc. will be found in UACL SBs No. 1138, Rev. 3 and 1217, Rev. 4.

2. Modify all affected engines by installation of a magnetic chip detector in accordance with paragraphs 2.A.1. and 2.A.2 of UACL SB No. 1217, Rev. 4.

3. For engines modified in accordance with paragraph 2 above, check the magnetic chip detector pins for electrical continuity using any utility volt ohmmeter. If continuity is detected, remove the detector and inspect the magnetic pole pieces for contaminants and also perform the oil filter inspection described in paragraph 4 below. Determine subsequent action in accordance with the guidance provided in the paragraphs relating to oil filter element inspections in Part 3, Section 3 of the latest issue of the applicable engine Maintenance Manual.

4. For all engines, remove the main engine oil filter element and inspect visually for signs of metallic contamination. If no visible contamination is present, use a ten power magnifying glass and magnet (minimum lift 225 grammes (8 oz)) to further inspect the element for magnetic and non-magnetic particles. Determine subsequent action in accordance with the guidance provided in the paragraphs relating to oil filter element inspections in Part 3 Section 3 of the latest issue of the applicable engine maintenance manual.

Compliance: For Para. 1 - during the next overhaul shop visit but not later than next engine reconditioning after 30 April 1975.

For Para. 2 - For engines requiring modification in accordance with Para. 1 - as soon as the necessary parts are available, but not later than 30 October 1975. For all other affected engines - not later than 31 January 1976.

For Para. 3 - At intervals not exceeding 25 hours time in service after 30 April 1975.

For Para. 4 - At intervals not exceeding 50 hours time in service after 30 April 1975.

Note 1: Notwithstanding the foregoing, when engines comply with the requirements of Australian AD/UAC-T/26 the oil filter and chip detector check and inspection intervals may revert to those called for in the normal aircraft maintenance procedures.

Note 2: To comply with the certification requirements of Air Navigation Orders, certifications must include reference to the parts of this Directive complied with.

or AD/UAC-T/23D.

Background: This Directive is raised in issue in order to allow oil filter and chip detector check to revert to normal aircraft maintenance inspection periods, when certain power turbine blade containment modifications are included in the engine build status (Ref. AD/UAC-T/26).