AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Honeywell International Turbine Engines - T5508D Series

AD/T5508D/3 1st Stage Turbine Disk 7/2003

Applicability: Honeywell T5508D engines fitted with first stage turbine disk part number (P/N) 2-120-030-43.

Requirement: Unless previously accomplished:

1. Carry out a visual and fluorescent penetrant inspection of the first turbine rotor assembly, P/N 2-120- 030-43, in accordance with the Accomplishment Instructions contained in Avco Lycoming Service Bulletin (SB) 5508-0031, Revision 1.

2. Remove and replace with new parts, bolts P/N 2-100-079-05 and their associated locking plates P/N 2-100-078-01, in accordance with the Accomplishment Instructions contained in Avco Lycoming SB 5508-0031, Revision 1.

3. Remove from service and replace with a serviceable part, all first turbine disks that exhibit fretting on the disk to shaft mating face and/or a crack indication during inspection.

Note: FAA AD 86-19-13 Amdt. 39-5374 refers.

Compliance:

1. Within the next 50 hours time in service after the effective date of this Directive.

2. When accomplishing the inspections of Requirement 1 of this Directive.

3. Prior to further flight.

This Airworthiness Directive becomes effective on 10 July 2003.

Honeywell International Turbine Engines - T5508D Series

AD/T5508D/3 (continued)

Background: Incorrect torque may have been applied to the turbine disk clamping bolts, due to application of thread lubricant to the bolts. This could lead to fretting of the turbine disk and ultimately disk failure resulting in uncontained engine failure.

Jim Coyne
Delegate of the Civil Aviation Safety Authority

29 May 2003

The above AD is notified in the *Commonwealth of Australia Gazette* on 18 June 2003.