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.

Porsche Piston Engines

AD/PORSCHE/4 Drive Shaft Teeth 7/2003

Applicability: Porsche AG PFM 3200 N01 and N03 engines.

Requirement:

1. Carry out an inspection of the drive shaft teeth in accordance with Porsche Service Bulletin (S/B) N/300-038 Revision 1.
2. Repeat the inspection of the drive shaft teeth in accordance with Porsche Service Bulletin (S/B) N/300-038 Revision 1.
3. Replace the drive shaft if the area of pitting is larger than 4mm^2 for 1 drive tooth, or 38 mm^2 total for all drive shaft teeth, or if between inspections the growth of pitting exceeds more than 2 mm^2 for any 1 tooth.
4. Defects found to during the inspections detailed in this Directive must be reported to the manufacturer.

Note: LBA AD 2003-020/2 refers.

Compliance:

1. For gearboxes with a Time Since Overhaul:
   a. between 900-1200 flight hours; At the next 100 hour inspection of the engine.
   b. over 1200 flight hours; Before the next flight. (A ferry flight to allow maintenance to be carried out is allowed)
2. At intervals not to exceed 200 flight hours from the initial inspection.
3. Before further flight.
4. Within 30 days of the inspection.

This Airworthiness Directive becomes effective on 10 July 2003.

Porsche Piston Engines

AD/PORSCHE/4 (continued)

Background: Pitting corrosion of the gear wheels has been found. This may have been as a result of unapproved oil being used, wrong oil change intervals, or exceeding oil temperature limitations. The pitting of the gear teeth can lead to failure of the gear wheel and subsequent failure of the engine.

Jim Coyne
Delegate of the Civil Aviation Safety Authority

28 May 2003

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