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.

CFM International Turbine Engines - CFM56 Series

AD/CFM56/23 Engine Main Fuel Pumps 9/2004

Applicability: CFM INTERNATIONAL CFM56-2C, CFM56-3 series and CFM56-5 series turbofan engines fitted with fuel pumps with solid bronze bearings.

Note 1: These engines are installed on, but not limited to, Airbus Industrie A319 and A320, Boeing 737, and McDonnell Douglas DC-8 aeroplanes.

Requirement:

1. Replace main fuel pumps equipped with solid bronze bearings with pumps equipped with bi-metal aluminium/bronze bearings in according with the applicable Service Bulletin as listed below.

   Service Bulletin (CFM56-2C) 73-0104 Revision 3 dated December 17, 2003

   Service Bulletin (CFM56-3) 73-0120 Revision 5 dated December 17, 2003

   Service Bulletin (CFM56-5A) 73-0126 Revision 4 dated December 17, 2003.

2. Do not install a main fuel pump with bronze bearings.

Note 2: FAA AD 2004-10-13 Amdt 39-13643 and DGAC AD F-2004-095 refer.

Compliance: For requirement 1: Either at next engine shop visit, or at next main fuel pump replacement, or before January 1st, 2007, whichever occurs first.

For the purpose of this Directive, an engine shop visit is defined as any maintenance that includes the separation of an engine casing flange.

For requirement 2: After the effective date of this Directive.

This Airworthiness Directive becomes effective on 2 September 2004.

CFM International Turbine Engines - CFM56 Series

AD/CFM56/23 (continued)

Background: This amendment requires removing from service main fuel pumps with bronze gear-stage bearings and installing main fuel pumps with bi-metal, aluminum/bronze bearings. This amendment results from several reports of main fuel pump bronze bearing failures. The issue of this Directive is to prevent main fuel pump bearing failures resulting in fuel nozzle clogging, low pressure turbine (LPT) case burn-through, and damage to the aeroplane.

Bernard Malcolm Hole
Delegate of the Civil Aviation Safety Authority

14 July 2004

The above AD is notified in the *Commonwealth of Australia Gazette* on 11 August 2004.