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 39.001(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/CFM56/28 Low Pressure Turbine Rear Frame 3/2009 DM

Applicability: CFM International CFM56-7B turbofan engines equipped with a low pressure turbine (LPT) rear frame part number (P/N) 340-166-254-0, 340-166-255-0, 340-166-256-0, 340-166-257-0, 340-166-258-0, 340-166-259-0, 340-177-551-0, 340-177-552-0, 340-177-553-0, 340-177-554-0, 340-177-555-0, 340-177-556-0.

Note 1: These engines are known to be installed on, but not limited to, Boeing 737series aeroplanes.

Requirement:

1. Amend the approved operator maintenance programme to incorporate the new LCF life limits for LPT rear frame P/N 340-166-254-0, 340-166-255-0, 340-166-256-0, 340-166-257-0, 340-166-258-0, 340-166-259-0, 340-177-551-0, 340-177-552-0, 340-177-553-0, 340-177-554-0, 340-177-555-0, 340-177-556-0, in accordance with the CFM56-7B ESM chapter 05 Temporary Revision (TR) 05-0097, 05-0098, and 05-0099, as applicable or subsequent revisions of the Engine Shop Manual following Revision 38 that incorporate these Temporary Revisions.

2. If the number of total cycles accumulated by a LPT rear frame P/N 340-166-254-0, 340-166-255-0, 340-166-256-0, 340-166-257-0, 340-166-258-0, 340-166-259-0, 340-177-551-0, 340-177-552-0, 340-177-553-0, 340-177-554-0, 340-177-555-0, 340-177-556-0 cannot be positively established, remove and replace the LPT rear frame or perform the inspections in accordance with CFM56-7B Service Bulletin S/B 72-0558 revision 2, or CFM56-7B Service Bulletin S/B 72-0579 revision 4, as applicable.

The use of later approved revisions of the Service Bulletins is acceptable for compliance with the requirements of this AD.

Note 2: The number of total cycles accumulated of the LPT rear frame is the sum of the number of cycles accumulated before and after compliance with CFM56-7B S/B 72-0527.

Note 3: EASA AD 2009-0009 dated 15 January 2009 refers.

Compliance: For Requirement 1 - Within 30 days after the effective date of this AD.

For Requirement 2 - Within 300 cycles after the effective date of the AD.

CFM International Turbine Engines - CFM56 Series

AD/CFM56/28 (continued)

This Airworthiness Directive becomes effective on 28 January 2009.

Background: The LPT rear frame part numbers detailed in this AD were introduced by the CFM56-7B Service Bulletin S/B 72-0527 revision 02 issued 21 January 2008. They are obtained by modifying (reworking) older P/N LPT frames.

Before the issue of the CFM56-7B Engine Shop Manual (ESM) Temporary Revisions (TR) 05-0097, 05-0098, and 05-0099 on September 19, 2008, the concerned LPT rear frames were neither subject to a life limit nor to a mandatory inspection.

This AD is issued to make sure that all operators are informed about the Low Cycle Fatigue (LCF) life limits or mandatory inspections affecting these new P/N and revise their aircraft maintenance programs accordingly.

James Coyne
Delegate of the Civil Aviation Safety Authority

23 January 2009