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.

General Electric Turbine Engines - CF34 Series

AD/CF34/9 High Pressure Compressor Forward Spool 3/2005

Applicability: GE CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, CF34-3B, and CF34-3B1 series turbofan engines with high pressure compressor (HPC) forward spool, part number (P/N) 6078T56P03 or 6078T56P04, installed.

Note 1: These engines are installed on, but not limited to, Bombardier series Business Jet Model CL-600-2A12 (CL- 601), Bombardier series Business Jet Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604), and Bombardier series Regional Jet Model CL- 600-2B19 (Regional Jet Series 100 and 440) aeroplanes.

Requirement:

1. Remove from service HPC forward spools, P/Ns 6078T56P03 and 6078T56P04.

2. Do not install any HPC forward spool, P/N 6078T56P03.

Do not install any HPC forward spool, P/N 6078T56P04, with more than 0 CSN.

Note 2: FAA AD 2004-26-02 Amdt 39-13914 refers.

Compliance: For Requirement 1.

For CF34-3B engines: At the first piece-part exposure after 6,000 cycles-since-new (CSN), but no later than 20,000 CSN.

For CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, and CF34-3B1 engines: At the first piece-part exposure after 6,000 CSN, but no later than 22,000 CSN.

For Requirement 2.

After the effective date of this Directive:

Definition: For the purpose of this Directive, the definition of piece-part exposure for the HPC forward spool is when the spool is completely disassembled.

This Airworthiness Directive becomes effective on 17 March 2005.

General Electric Turbine Engines - CF34 Series

AD/CF34/9 (continued)

Background: This Directive results from an updated low-cycle fatigue (LCF) analysis performed on HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, by GE. We are issuing this AD to prevent LCF cracks and failure of the HPC forward spool, which could result in an uncontained engine failure and damage to the aeroplane.

James Coyne
Delegate of the Civil Aviation Safety Authority

4 February 2005