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 - CF6 Series

AD/CF6/67 Compressor Rear Frame Cracks 12/2007

Applicability: General Electric Company (GE) CF6-80E1A1, CF6-80E1A2, CF6-80E1A3, CF6-80E1A4, and CF6-80E1A4/B model turbofan engines with compressor rear frame (CRF) part numbers (P/Ns) 1520M26G03/G06/G08/G11/G12 installed.

Note 1: These engines are installed on, but not limited to, Airbus Industrie A330 series aeroplanes.

Requirement: Revise GE's Instructions for Continued Airworthiness ALS, and for air carrier operations, revise the approved continuous airworthiness maintenance program, by adding the information detailed below under the headings detailed below of this AD:

- Table 1. - Inspection Compliance Schedule

- Module - Level Inspection of CRFs

- Piece - Part Level Inspection of CRFs

- Determining CSN of the Compressor Rear Frame

Table 1.--Inspection Compliance Schedule

If CRF P/Ns 1520M26G03 / G06 / G08 / G11 / G12 are:	Then Initially Inspect:	And Repetitively Inspect:
(1) Operated at a CF6-80E1A3 or CF6-80E1A4/B engine rating.	Before 12,200 cycles-since-new (CSN).	Within every 6,300 cycles-since-last-inspection (CSLI), except that igniter pad holes on CRFs with P/Ns 1520M26G03 / G06 / G08, must be inspected within every 4,800 CSLI.
(2) Operated at a CF6-80E1A4 engine rating.	Before 13,700 CSN.	Within every 6,300 CSLI, except that igniter pad holes on CRFs with P/Ns 1520M26G03 / G06 / G08, must be inspected within every 6,100 CSLI.
(3) Operated at a CF6-80E1A1 or CF6-80E1A2 engine rating.	Before 14,200 CSN.	Within every 6,300 CSLI.

General Electric Turbine Engines - CF6 Series

AD/CF6/67 (continued)

Module - Level Inspection of CRFs

1. For CRF P/Ns 1520M26G03/G06/G08/G11/G12, at module level:

   a. Clean and eddy current inspect (ECI) the locations numbered 3 through 8.

   b. Information on these locations can be found in figure 801, sheets 2, 3, and 4, of CF6-80E1 Engine Manual No. GEK 99376, Section 05-21-01. The remaining engine manual references in this AD are to No. GEK 99376.

   c. Information on cleaning and ECI can be found in CF6-80E1 Engine Manual, Section 72-00-34, COMPRESSOR REAR FRAME ASSEMBLY - INSPECTION 001, Subtask 72-00-34-250-001.

   d. For CRF P/Ns 1520M26G03/G06/G08, clean and fluorescent penetrant inspect (FPI) the locations numbered 1 and 2.

   e. Information on these locations can be found in figure 801, sheet 1, of CF6-80E1 Engine Manual, Section 05-21-01.

   f. Information on cleaning and FPI can be found in CF6-80E1 Engine Manual, Section 72-00-34, COMPRESSOR REAR FRAME ASSEMBLY - INSPECTION 001, Subtask 72-00-34-230-051.

Piece - Part Level Inspection of CRFs

1. For CRF P/Ns 1520M26G03/G06/G08/G11/G12, at piece-part level:

   a. Clean and FPI the locations numbered 3 through 8.

   b. Information on these locations can be found in figure 801, sheets 2, 3, and 4, of CF6-80E1 Engine Manual, Section 05-21-01.

   c. Information on cleaning and FPI can be found in CF6-80E1 Engine Manual, Section 72-34-01, COMPRESSOR REAR FRAME - INSPECTION 001, Subtask 72-34-01-200-003.

   d. For CRF P/Ns 1520M26G03/G06/G08, clean and FPI the locations numbered 1 and 2.

   e. Information on these locations can be found in figure 801, sheet 1, of CF6-0E1 Engine Manual, Section 05-21-01.

   f. Information on cleaning and FPI can be found in CF6-80E1 Engine Manual, Section 72-34-01, COMPRESSOR REAR FRAME - INSPECTION 001, Subtask 72-34-01-200-003.

General Electric Turbine Engines - CF6 Series

AD/CF6/67 (continued)

Determining CSN of the Compressor Rear Frame

a. Air carriers and operators must use engine operating records to determine the CSN of the compressor rear frame. If the number of cycles accumulated since new cannot be established, inspect the CRF within 300 cycles-in-service after the effective date of this AD.

b. For compressor rear frames that have operated in multiple engine models or thrust ratings, information on correct cycle counting can be found in Method 1 or Method 2 of CF6-80E1 Engine Manual No. GEK 99376, Section 05-11-00, LIFE LIMITS OF ENGINE ROTATING PARTS.

Definition

For the purposes of this AD, piece-part level means that the CRF is removed and disassembled using the disassembly instructions in GE's engine manual.

Note 2: FAA AD 2007-18-10 Amdt 39- 15190 dated 29 August 2007 refers.

Compliance: Within the next 30 days after the effective date of this AD, unless previously accomplished.

This Airworthiness Directive becomes effective on 22 November 2007.

Background: This AD requires enhanced inspections of the CF6-80E1 series turbofan engine CRFs, for cracks to prevent rupture of the CRF, which could result in an under-cowl engine fire.

Charles Lenarcic
Delegate of the Civil Aviation Safety Authority

24 September 2007