AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/CF6/57 and issues the following 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/CF6/57 HPT S2 NGV Distress 7/2005 Amdt 1

Applicability: This AD applies to General Electric Company (GE) CF6-80C2A1, -80C2A2, -80C2A3, -80C2A5, -80C2A5F, -80C2A8, -80C2B1, -80C2B1F, - 80C2B2, -80C2B2F, -80C2B4, -80C2B4F, -80C2B5F, -80C2B6, -80C2B6F, - 80C2B6FA, -80C2B7F, -80C2B8F, and -80C2D1F turbofan engines, with the part numbers (P/Ns) of high pressure turbine (HPT) stage 2 nozzle guide vanes (HPT S2 NGVs) listed in the following Table 1, installed:

Table 1. -Affected HPT S2 NGVs

HPT S2 NGV:	Provided that:
P/N 1347M66G03, P/N 1347M66G04, and P/Ns 1815M81G01 through 1815M81G07.	Insert, P/N 1957M40G01 or P/N 1957M40G02, was installed during repair.
P/Ns 9373M80G07 through 9373M80G22, and P/Ns 9373M80G25 through 9373M80G32.	Insert, P/N 1957M40G01 or P/N 1957M40G02, was installed during repair, or NGV was repaired by GE between 1 April 1998 through 30 September 1999.
P/Ns 9373M80G33 through 9373M80G36	Part was repaired.
P/Ns 2080M38G01 through 2080M38G16, and P/Ns 2080M38G19 through 2080M38G24.	Insert, P/N 1957M40G01 or P/N 1957M40G02, was installed during modification or repair.
P/Ns 2080M19G01 through 2080M19G04, P/Ns 2080M19G07 through 2080M19G16, P/Ns 2080M19G19 through 2080M19G46, P/Ns 2080M19G49 through 2080M19G70, and P/Ns 2080M19G73 through 2080M19G80.	Insert, P/N 1957M40G01 or P/N 1957M40G02, was installed during modification or repair.

General Electric Turbine Engines - CF6 Series

AD/CF6/57 Amdt 1 (continued)

Note 1: These engines are installed on, but not limited to, Airbus A300, Airbus A310, Boeing 747, Boeing 767, and McDonnell Douglas MD-11 aeroplanes.

Requirement:

1. Initial Inspection

Flex-boroscope inspect the NGVs following paragraph 3.B.(3) through 3.B.(5) of Accomplishment Instructions of GE Service Bulletin (SB) No. CF6-80C2 S/B 72-0952, Revision 6 dated 5 May 2003.

For NGVs installed in engines operated as more than one engine model configuration (thrust level), use the lowest applicable initial inspection threshold, and use the reinspection intervals associated with the current engine model.

2. Reinspection or removal.

Reinspect or remove from service NGVs as detailed in GE SB No. CF6-80C2 S/B 72-0952, Revision 6.

For NGVs installed in engines operated as more than one engine model configuration (thrust level), use the lowest applicable initial inspection threshold, and use the reinspection intervals associated with the current engine model.

Note 2: FAA AD 2004-22-07 Amdt 39-13835 refers.

Compliance:

Initial Inspection Thresholds

1. Remains unchanged as detailed in the original issue of this Directive as: For all P/N NGVs, initial-inspect after 20 January 2005 (the effective date of the original issue of this Directive) at the following applicable initial inspection thresholds:

   (a) For CF6-80C2A2, -80C2B2, and -80C2B2F engines, inspect at or before accumulating 1,600 HPT cycles-since-overhaul (CSO).

   (b) For CF6-80C2A1, -80C2A3, -80C2A5, -80C2A5F, -80C2A8, - 80C2B1, -80C2B1F, -80C2B4, -80C2B4F, -80C2B5F, -80C2B6, -80C2B6F, -80C2B6FA, -80C2B7F, -80C2B8F, and -80C2D1F engines, inspect at or before accumulating 800 CSO.

   (c) For engines listed in compliance paragraphs (1)(a) and (1)(b) of this Directive that are already beyond the initial inspection thresholds, inspect at or before accumulating an additional 200 CSO after 20 January 2005 (the effective date of the original issue of this Directive).

General Electric Turbine Engines - CF6 Series

AD/CF6/57 Amdt 1 (continued)

Reinspection or removal.

2. In accordance with the Conditions and Reinspection intervals listed in the "Inspection Table for Cracking in the Airfoil Outer Fillet", Figure 5, Sheets 1 and 2, of GE SB No. CF6-80C2 S/B 72-0952 Revision 6.

   (a) If the recommendation contained in Figure 5, Sheets 1 and 2, of GE SB No. CF6-80C2 S/B 72-0952, Revision 6, states "reinspect at next regular S2 Blade inspection," then for the purposes of this Directive, the next regular S2 Blade Inspection must be within the following intervals:

      (i) For CF6-80C2D1F engines with 5.0 or more hours per flight leg, the next regular S2 Blade inspection means within 250 cycles-since-last-inspection (CSLI).

      (ii) For all other engines applicable to this Directive, the next regular S2 Blade inspection means within 400 CSLI.

This Amendment becomes effective on 7 July 2005.

Background: The Directive requires GE CF6-80C2 turbofan engines with certain part number HPT S2 NGV's installed to undertake flex boroscope inspections of the HPT S2 NGV's. This Directive results from an uncontained engine failure due to HPT S2 NGV distress. The actions detailed in this Directive are to prevent blade separation from HPT S2 NGV distress, which could result in an uncontained engine failure.

This amendment makes correction to paragraph 2(a)(i) of the compliance section of this Directive to read 5.0 or more hours per flight leg instead of 5.0 or more cycles per flight leg. There are no other changes to the Directive.

The original issue of this Directive became effective on 20 January 2005.

James Coyne
Delegate of the Civil Aviation Safety Authority

19 May 2005