

# PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-043/2001

Datum vydání: 25. května 2001

## MOTOR - VYSOKOTLAKÁ TURBÍNA - DISK ROTORU - KONTROLA/VÝMĚNA

**Týká se:** motorů CF6-80C2, vyrobených firmou General Electric Company (GE) vybavených rotorovými disky prvního stupně vysokotlaké turbíny, katalogových čísel (P/N's) 1531M84G02, 1531M84G06, 1531M84G08, 1531M84G10, 9392M23G10, 9392M23G12, 9392M23G21 a 1862M23G01. Tyto motory mohou být nainstalovány na letadlech Airbus Industrie A300 a A310, Boeing 747, 767 a McDonnell Douglas MD-11, ale nejen na těchto.

**Datum účinnosti:** 12. července 2001

**Provést v termínech:** Jak je popsáno v FAA AD 2001-10-07, od data účinnosti tohoto PZZ.

**Postup provedení prací:** Dle FAA AD 2001-10-07 (příloha tohoto PZZ).

Poznámky: Provedení tohoto PZZ musí být zapsáno do motorové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Toman. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 2001-10-07.

**Ing. Pavel MATOUŠEK**  
**Ředitel technického inspektorátu**  
**Úřad pro civilní letectví**

**2001-10-07 General Electric Co.:** Amendment 39-12233. Docket No. 2001-NE-05-AD.

### Applicability

This airworthiness directive (AD) is applicable to General Electric Company (GE) CF6-80C2 series turbofan engines with stage 1 high pressure turbine (HPT) rotor disks, part numbers (P/N's) 1531M84G02, 1531M84G06, 1531M84G08, 1531M84G10, 9392M23G10, 9392M23G12, 9392M23G21, and 1862M23G01 installed. These engines are installed on, but not limited to Airbus Industrie A300 and A310 series, Boeing 747 and 767 series, and McDonnell Douglas MD-11 series airplanes.

**Note 1:** This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

### Compliance

Compliance with this AD is required as indicated below, unless already done.

To detect cracks in the bottoms of the dovetail slots that could propagate to failure of the disk and cause an uncontained engine failure, perform the following inspections:

(a) For stage 1 HPT rotor disks that have been inspected prior to the effective date of this AD, in accordance with 3.A(1) through 3.C.(10)(i) of the Accomplishment Instructions of GE Alert Service Bulletin (ASB) CF6-80C2 72-A1026, dated January 17, 2001, and had greater than zero cycles-since-new (CSN) at the time of inspection, inspect the disk at each piece-part exposure, and replace as necessary.

(b) For stage 1 HPT rotor disks not previously inspected, inspect the disk in accordance with 3.A.(1) through 3.C.(10)(i) of the Accomplishment Instructions of GE ASB CF6-80C2 72-A1026, dated January 17, 2001, and Table 1 of this AD, and replace if necessary, as follows:

**Table 1. Compliance Times for Stage 1 HPT Rotor Disk Inspections.**

<b>Stage 1 HPT Rotor Disk Cycles-since-new (CSN) on the Effective Date of This AD</b>	<b>Initial Inspection</b>	<b>Repetitive Inspections</b>
(1) 1,500 CSN or fewer.	At the next engine shop visit (ESV) after the effective date of this AD, but not to exceed 5,000 CSN.	At each piece-part exposure.
(2) More than 1,500 CSN.	At the next ESV after the effective date of this AD, but not to exceed 3,500 cycles-in-service (CIS) after the effective date of this AD.	At each piece-part exposure.
(3) Any number of CSN if the disk has been inspected using ASB CF6-80C2 72-A1024, Revision 1, dated November 3, 2000, or original ASB issue, dated October 13, 2000, before the effective date of this AD, and, if the disk had greater than zero CSN at the time of inspection.	At the next ESV after the effective date of this AD.	At each piece-part exposure.

(c) After the effective date of this AD, do not install any stage 1 HPT rotor disk with greater than zero CSN until it has been inspected in accordance with 3.A.(1) through 3.C.(10)(i) of the Accomplishment Instructions of GE ASB CF6-80C2 72-A1026, dated January 17, 2001.

(d) Thereafter, inspect the disk at each piece-part exposure, and replace if necessary.

**Definitions**

(e) The following definitions apply for this AD:

(1) Piece-part exposure means the stage 1 HPT rotor disk is considered completely disassembled as follows:

(i) When done in accordance with the disassembly instructions in the engine manufacturer’s, or other FAA-approved engine manual, AND

(ii) The disk has accumulated more than 100 CIS since the last piece-part opportunity inspection, if the disk was not damaged or related to the cause for its removal from the engine.

(2) An ESV is defined as the induction of an engine into a shop where the separation of a major engine flange will occur after the effective date of this AD. The following actions, either separately or in combination, are not considered ESV’s for the purpose of this AD:

(i) Induction of an engine into a shop solely for removal of the upper compressor stator case for airfoil maintenance.

(ii) Induction of an engine into a shop solely for the module level inspection of the high pressure compressor rotor 3-9 spool.

**Reporting Requirements**

(f) Report the results of inspections on all disks that equal or exceed the reject criteria of GE ASB CF6-80C2 72-A1026, dated January 17, 2001, within 5 calendar days of the inspection, to the Manager, Engine Certification Office, FAA,

Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7140; fax: (781) 238-7199. Reporting requirements have been approved by the Office of Management and Budget and assigned OMB control number 2120-0056. The following information must be included in the report:

- (1) Engine model in which the stage 1 HPT rotor disk was installed, AND
- (2) Disk P/N, AND
- (3) Disk serial number, AND
- (4) CSN on the disk, AND
- (5) Cycles-since-last-inspection, AND
- (6) Date and location of the inspection.

#### **Alternative Methods of Compliance**

(g) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

#### **Special Flight Permits**

(h) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

#### **Incorporation by Reference**

(i) The inspections must be done in accordance with GE ASB CF6-80C2 72-A1026, dated January 17, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from General Electric Company via Lockheed Martin Technology Services, 10525 Chester Road, Suite C, Cincinnati, Ohio 45215, telephone: (513) 672-8400, fax: (513) 672-8422. Copies may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

#### **Effective Date of this AD**

(j) This amendment becomes effective on June 18, 2001.

**FOR FURTHER INFORMATION CONTACT:** Ann Mollica, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7740, fax: (781) 238-7199.

Issued in Burlington, Massachusetts, on May 10, 2001.

Francis A. Favara, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.