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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2001-NE-45-AD; Amendment 39-13625; AD 2004-09-34]**

**RIN 2120-AA64**

### **Airworthiness Directives; General Electric Company CF6-80E1 Model Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD) for General Electric Company (GE) CF6-80E1 model turbofan engines with high pressure turbine (HPT) stage 2 (S2) nozzle guide vanes (NGVs) part number (P/N) 1647M84G09 or 1647M84G10, installed. That AD currently requires flex borescope inspections of HPT S2 NGVs installed in CF6-80E1 model turbofan engines. This AD requires the same actions but at reduced compliance intervals. This AD results from inspection findings of HPT S2 NGVs that show cracks from distress could occur sooner and grow faster than originally predicted. We are issuing this AD to prevent failure of HPT rotor blades from HPT S2 NGV distress, which could result in an uncontained engine failure.

**DATES:** Effective May 26, 2004. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of May 26, 2004.

We must receive any comments on this AD by July 12, 2004.

**ADDRESSES:** Use one of the following addresses to submit comments on this AD:

- By mail: The Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2001-NE-45-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: 9-ane-adcomment@faa.gov.

You can get the service information referenced in this AD 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.

You may examine the AD docket, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. You may examine the service information, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records

Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Karen Curtis, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7192; fax: (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** On January 15, 2002, the FAA issued AD 2002-01-04, Amendment 39-12595 (67 FR 4326, January 30, 2002). That AD requires flex borescope inspections of HPT S2 NGVs installed in CF6-80E1 model turbofan engines. That AD was the result of an uncontained engine failure attributed to HPT S2 NGV distress. That condition, if not corrected, could result in failure of HPT rotor blades from HPT S2 NGV distress, which could result in an uncontained engine failure.

### **Actions After AD 2002-01-04 Was Issued**

After AD 2002-01-04 was issued, GE received inspection findings of HPT S2 NGVs that show cracks from distress. GE and the FAA have determined that cracks from this distress could occur sooner and propagate faster than originally predicted, and have also determined that the inspection compliance intervals of AD 2002-01-04 are too long.

### **Relevant Service Information**

We have reviewed and approved the technical contents of GE Service Bulletin (SB) No. CF6-80E1 S/B 72-0217, Revision 2, dated January 5, 2004, that describes procedures for initial and repetitive flex borescope inspection of HPT S2 NGV P/Ns 1647M84G09 and 1647M84G10.

### **FAA's Determination and Requirements of This AD**

Although no airplanes that are registered in the United States use these GE CF6-80E1 model turbofan engines, the possibility exists that the engine model could be used on airplanes that are registered in the United States in the future. The unsafe condition described previously is likely to exist or develop on other GE CF6-80E1 model turbofan engines of the same type design. We are issuing this AD to prevent blade failure from HPT S2 NGV distress, which could result in an uncontained engine failure. This AD requires flex borescope inspections of HPT S2 NGVs installed in GE CF6-80E1 model turbofan engines. These actions are required at initial and repetitive compliance intervals that are reduced from the intervals in AD 2002-01-04. You must use the service information described previously to perform the actions required by this AD.

### **FAA's Determination of the Effective Date**

Since there are currently no domestic operators of this engine model, notice and opportunity for public comment before issuing this AD are unnecessary. Therefore, a situation exists that allows the immediate adoption of this regulation.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under

ADDRESSES. Include "AD Docket No. 2001-NE-45-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us verbally, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You may get more information about plain language at <http://www.faa.gov/language> and <http://www/plainlanguage.gov>.

### **Examining the AD Docket**

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See ADDRESSES for the location.

### **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 2001-NE-45-AD" in your request.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Amendment 39-12595 (67 FR 4326, January 30, 2002) and by adding a new airworthiness directive, Amendment 39-13625, to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2004-09-34 General Electric Company:** Amendment 39-13625. Docket No. 2001-NE-45-AD.  
Supersedes AD 2002-01-04, Amendment 39-12595.

## Effective Date

- (a) This airworthiness directive (AD) becomes effective May 26, 2004.

## Affected ADs

- (b) This AD supersedes AD 2002-01-04.

## Applicability

(c) This AD applies to General Electric Company (GE) CF6-80E1 engine models with high pressure turbine (HPT) stage 2 (S2) nozzle guide vanes (NGVs), part number (P/N) 1647M84G09 or 1647M84G10, installed. These engines are installed on, but not limited to, Airbus A330 airplanes.

## Unsafe Condition

(d) This AD results from inspection findings of HPT S2 NGVs that show cracks from distress could occur sooner and propagate faster than originally predicted. We are issuing this AD to prevent failure of HPT rotor blades from HPT S2 NGV distress, which could result in an uncontained engine failure.

## Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

## NGVs Previously Inspected by Flex Borescope

(f) For NGVs inspected by flex borescope before the effective date of this AD, reinspect or remove from service the NGVs using the Conditions and Reinspection intervals listed in the "Inspection Table for Cracking in the Airfoil Outer Fillet," Figure 5, of GE Service Bulletin (SB) No. CF6-80E1 S/B 72-0217, Revision 2, dated January 5, 2004, or within 200 cycles-in-service-since-last inspection (CSLI), whichever is earlier.

## **NGVs Not Previously Inspected by Flex Borescope**

(g) For NGVs not previously inspected by flex borescope, remove from service, or inspect using the Accomplishment Instructions of GE SB No. CF6-80E1 S/B 72-0217, Revision 2, dated January 5, 2004, at the following:

(1) For NGVs with more than 800 cycles-since-overhaul (CSO) on the effective date of this AD, within 50 cycles-in-service (CIS) after the effective date of this AD.

(2) For NGVs with 800 or fewer CSO on the effective date of this AD, at the first regular HPT blade inspection after 800 CSO, but before reaching 900 CSO.

(3) Reinspect or remove from service NGVs using the Conditions and Reinspection intervals listed in the "Inspection Table for Cracking in the Airfoil Outer Fillet," Figure 5, of GE SB No. CF6-80E1 S/B 72-0217, Revision 2, dated January 5, 2004.

## **Cycles-Since-Overhaul Defined**

(h) For the purposes of this AD, cycles-since-overhaul (CSO) is defined as cycles since repair as described in GE SB No. CF6-80E1 S/B 72-0164, dated March 16, 1999.

## **Engines Not Affected by this AD**

(i) Engines configured with HPT S2 NGV P/Ns 1647M84G05, 1647M84G06, 2080M47G01, 2080M47G02, 2086M62G03, or 2086M62G04 are not affected by this AD.

## **Alternative Methods of Compliance**

(j) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

## **Material Incorporated by Reference**

(k) You must use General Electric Company Service Bulletin No. CF6-80E1 S/B 72-0217, Revision 2, dated January 5, 2004, to perform the inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy 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. You may review copies at the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA 01803-5299; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

## **Related Information**

(l) None.

Issued in Burlington, Massachusetts, on April 29, 2004.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 04-10371 Filed 5-10-04; 8:45 am]

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