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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2004-19463; Directorate Identifier 2004-NE-14-AD; Amendment 39-14029; AD 2005-07-05]

RIN 2120-AA64

Airworthiness Directives; General Electric Company CF6-45A, CF6-50A, CF6-50C, and CF6-50E Series Turbofan Engines; Correction

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document makes a correction to Airworthiness Directive (AD) 2005-07-05. That AD applies to General Electric Company (GE) CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines that have not incorporated GE Service Bulletin (SB) No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or that have not incorporated paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003. We published AD 2005-07-05 in the Federal Register on March 30, 2005, (70 FR 16096). A descriptive phrase was inadvertently left out of compliance paragraph (f). This document corrects compliance paragraph (f). In all other respects, the original document remains the same.

DATES: Effective June 9, 2005.

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

SUPPLEMENTARY INFORMATION: A final rule AD, FR Doc. 05-6107, that applies to (GE) CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines that have not incorporated GE Service Bulletin (SB) No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or that have not incorporated paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003, was published in the Federal Register on March 30, 2005, (70 FR 16096). The following correction is needed:

§ 39.13 [Corrected]

On page 16098, in the first column, in compliance paragraph (f), the third line, "cycles-since-new (CSN), or 3,000 cycles-" is corrected to read "cycles-since-new (CSN) on the TMF assembly, or 3,000 cycles-".

Issued in Burlington, MA, on June 2, 2005.

Francis A. Favara,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 05-11442 Filed 6-8-05; 8:45 am]

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[Federal Register: March 30, 2005 (Volume 70, Number 60)]
[Rules and Regulations]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2004-19463; Directorate Identifier 2004-NE-14-AD; Amendment 39-14029; AD 2005-07-05]

RIN 2120-AA64

Airworthiness Directives; General Electric Company CF6-45A, CF6-50A, CF6-50C, and CF6-50E Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for General Electric Company (GE) CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines that have not incorporated GE Service Bulletin (SB) No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or that have not incorporated paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003. This AD requires inspecting the stage 1 low pressure turbine (LPT) blades for damage and replacement of the LPT module if necessary. This AD results from a report of a stud that separated from a turbine mid frame (TMF) strut and from an updated analysis of strut stud failures. We are issuing this AD to prevent uncontained failure of the engine and possible damage to the airplane caused by failure of TMF strut studs.

DATES: This AD becomes effective May 4, 2005. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of May 4, 2005.

ADDRESSES: You can get the service information identified in this proposed 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 on the Internet at <http://dms.dot.gov> or in Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC.

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

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with an airworthiness directive (AD). The proposed AD applies to GE CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines that have not incorporated GE SB No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or that have not incorporated paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003. We published the proposed AD in the Federal Register on October 27, 2004 (69 FR 62623). That action proposed to require inspecting the stage 1 LPT blades for damage and replacement of the LPT module if necessary.

Examining the AD Docket

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the DMS Docket Offices between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in ADDRESSES. Comments will be available in the AD docket shortly after the DMS receives them.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Request To Clarify if Extension Limits Are Still Allowed

One commenter requests that we clarify if the extension limits in aircraft maintenance manual (AMM) 72-00-00, are still allowed if out-of-limit LPT blade damage is found during the required borescope inspection. The commenter provided no justification for this request.

We do not feel we need to clarify allowing extension limits if the operator finds damage during the required borescope inspection. Paragraphs (g) and (i) of the proposed AD require replacing any LPT module that exceeds the AMM limits for the stage 1 LPT blade damage.

Requests for Credit for Inspections Already Performed

One commenter requests that we give operators credit for inspections already performed using GE Alert Service Bulletin (ASB) No. 72-A1251, dated September 24, 2003, before the effective date of the AD. Another commenter requests that we give operators credit for inspections already performed using an approved maintenance program. The commenters believe that based on the proposed AD wording, an operator would have to complete the initial inspection within 150 cycles-in-service after the effective date of the AD, regardless of any prior inspections done.

We agree that we should allow credit for inspection programs begun before the effective date of the AD. Because paragraph (e) of the proposed AD states that you are responsible for having this AD performed within the compliance times specified unless the actions have already been done, we feel that this statement provides credit for inspections already done. However, for clarity, we have added a paragraph (paragraph (j)) to the AD compliance that gives credit for initial and repetitive inspections done using GE ASB No. 72-A1251 or the applicable AMM.

Inspection AD Not Necessary

One commenter states that this inspection AD is not necessary. The commenter's reason is that GE had previously released an improved strut stud joint configuration (reference GE SB No. 72-0897, dated 1987), and recommended that studs not be reused (reference engine manual change in 1996). The commenter asks that we provide additional analysis to substantiate the need for this

inspection AD for engines configured with new, post-SB No. 72-0897 studs. The commenter sites their service experience, which has not shown wear or contact between the stud sleeve and nozzle support. The commenter states that the one documented failure of a first-run engine (non-reused stud) is an extremely rare and unique case because it occurred on a KC-10 military airplane application.

We do not agree. We didn't make GE SB No. 72-0897, which introduced the improved configuration, mandatory. We also didn't make the 1996 engine manual change, which specified the studs were not to be reused, mandatory. Also, GE has provided data that shows that the potential for contact, rubbing, and wear, exists by design, as a result of insufficient clearance between the hole in the LPT nozzle support and the sleeve fitted to the TMF strut stud. During engine operation, thermal and mechanical deflections between the nozzle support and the stud and sleeve assembly can result in contact between these components if minimum assembly clearance requirements are not met. This contact causes transverse loads and bending moments in the strut stud. The fatigue life of the stud is reduced as a result of these loads. The fracture surface of the stud involved in the most recent event showed signs of fatigue damage, characteristic of bending loads. Although the commenter has not yet experienced this condition, and there is only one known failure for the post SB No. 72-0897 configuration with a non-reused stud, the potential exists for stud failure. This inspection AD is necessary to detect studs that have failed, and to prevent an uncontained engine failure.

Request To Clarify the Word "Optional"

One commenter requests that we clarify the word "optional" in the Optional Terminating Action paragraph of the proposed AD. The commenter states that incorporation of GE SB No. 72-1239 is terminating action for the repetitive inspections in the proposed AD.

We do not agree. The proposed AD requires that operators perform the initial and repetitive inspections of the LPT. The proposed AD does not require that operators perform the reassembly described in GE SB No. 72-1239. However, if an operator chooses to perform GE SB No. 72-1239, as described in paragraph (j) of the proposed AD (now paragraph (k) of the AD), the initial and repetitive inspections are no longer required. The incorporation of GE SB No. 72-1239 is described as optional, because an operator can choose to continue to perform repetitive inspections or incorporate that SB. Either action provides an acceptable level of safety.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

There are about 2,079 GE CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines of the affected design in the worldwide fleet. We estimate that 790 engines installed on airplanes of U.S. registry will be affected by this AD. We also estimate that it will take about one work hour per engine to perform the actions, and that the average labor rate is \$65 per work hour. Based on these figures, we estimate the total cost of the AD to perform one inspection to U.S. operators to be \$51,350.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

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 this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under 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 at the address listed under ADDRESSES.

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 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 adding the following new airworthiness directive:

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).

CORRECTION: [*Federal Register: June 9, 2005 (Volume 70, Number 110); Page 33692;*
www.access.gpo.gov/su_docs/aces/aces140.html]

2005-07-05 General Electric Company: Amendment 39-14029. Docket No. FAA-2004-19463;
Directorate Identifier 2004-NE-14-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 4, 2005.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to General Electric Company (GE) CF6-45A, CF6-50A, CF6-50C, and CF6-50E series turbofan engines that have not incorporated GE Service Bulletin (SB) No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or that have not incorporated paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003. These engines are installed on, but not limited to, Boeing DC10 and 747 series airplanes, and Airbus Industrie A300 series airplanes.

Unsafe Condition

(d) This AD results from a report of a stud that separated from a turbine mid frame (TMF) strut and from an updated analysis of strut stud failures. We are issuing this AD to prevent an uncontained failure of the engine and possible damage to the airplane caused by failure of TMF strut studs.

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.

Initial Inspection

(f) Borescope-inspect the low pressure turbine (LPT) stage 1 blades within 3,000 cycles-since-new (CSN) on the TMF assembly, or 3,000 cycles-since-replacement of the TMF strut studs, or 150

cycles-in-service (CIS) after the effective date of this AD, which ever occurs later. Use paragraph 3.A.(2) of the Accomplishment Instructions of GE Alert Service Bulletin (ASB) No. CF6-50 S/B 72-A1251, dated September 24, 2003, to do the inspection.

(g) Replace any LPT module that has stage 1 LPT blade damage exceeding aircraft maintenance manual (AMM) limits.

Repetitive Inspections

(h) Borescope-inspect the LPT stage 1 blades within intervals of 500 cycles-since-last-inspection or within 500 cycles-since-last shop visit, or within 150 CIS after the effective date of this AD, whichever occurs later. Use paragraph 3.A.(3) of the Accomplishment Instructions of GE ASB No. CF6-50 S/B 72-A1251, dated September 24, 2003, to do the inspections.

(i) Replace any LPT module that has stage 1 LPT blade damage exceeding AMM limits.

Credit for Previous Actions

(j) We allow credit for compliance with paragraph (f) or (h) of this AD, for either of the following:

(1) Initial or repetitive inspections of LPT stage 1 blades using GE ASB No. CF6-50 SB 72-A1251, dated September 24, 2003 within the compliance times of this AD; or

(2) Initial or repetitive inspections of LPT stage 1 blades using the applicable AMM, within the compliance times of this AD.

Optional Terminating Action

(k) Engines incorporating GE SB No. CF6-50 S/B 72-1239, Revision 1, dated September 24, 2003, or incorporating paragraph 3.B. of GE SB No. CF6-50 S/B 72-1239, original issue, dated May 29, 2003, ends the repetitive inspection requirements in paragraph (h) of this AD.

Alternative Methods of Compliance

(l) 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.

Related Information

(m) None.

Material Incorporated by Reference

(n) You must use General Electric Company Alert Service Bulletin No. CF6-50 S/B 72-A1251, dated September 24, 2003, 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. Contact General Electric Company via Lockheed Martin Technology Services, 10525 Chester Road, Suite C, Cincinnati, Ohio 45215, telephone (513) 672-8400, fax (513) 672-8422 for a copy of this service information. You may review copies at the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001, on the internet at <http://dms.dot.gov>, 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.

Issued in Burlington, Massachusetts, on March 22, 2005.

Peter A. White,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 05-6107 Filed 3-29-05; 8:45 am]

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