

Proposed Rules

Federal Register

Vol. 72, No. 10

Wednesday, January 17, 2007

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-26585; Directorate Identifier 2006-NE-44-AD]

RIN 2120-AA64

Airworthiness Directives; General Electric Company CF34-10E Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for General Electric Company (GE) CF34-10E series turbofan engines. This proposed AD would require revising the combustor case published life limit and removing combustor cases from service before reaching a reduced life limit. This proposed AD results from GE's evaluation of the effects to the combustor case due to installing version 5.10 software in the full-authority digital electronic control (FADEC), and revising the combustor case published life limit. We are proposing this AD to prevent uncontained combustor case failure resulting in an in-flight engine shutdown and possible damage to the airplane.

DATES: We must receive any comments on this proposed AD by March 19, 2007.

ADDRESSES: Use one of the following addresses to comment on this proposed AD.

- *DOT Docket Web site:* Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- *Government-wide rulemaking Web site:* Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- *Mail:* Docket Management Facility; U.S. Department of Transportation, 400

Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.

- *Fax:* (202) 493-2251.
- *Hand Delivery:* Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may examine the comments on this proposed AD in the AD docket on the Internet at <http://dms.dot.gov>.

FOR FURTHER INFORMATION CONTACT: Tara Chaidez, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7773; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send us any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2006-26585; Directorate Identifier 2006-NE-44-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the DOT Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78) or you may visit <http://dms.dot.gov>.

Examining the AD Docket

You may examine the docket that contains the proposal, any comments received, and any final disposition in person at the DOT Docket Office

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 Docket Management Facility receives them.

Discussion

GE released version 5.10 software for FADECs installed in CF34-10E series turbofan engines. The software was released to change the engine's High Pressure Turbine Active Clearance Control. GE has since evaluated the effects of this software version release, and discovered that combustor cases are being adversely affected. The software release causes changes to thermal gradients and greater stresses to the combustor case, reducing its life. This condition, if not corrected, could result in uncontained combustor case failure resulting in an in-flight engine shutdown and possible damage to the airplane.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. However, since none of the affected combustor cases are near or above the proposed new life limit and are not expected to be for at least two years, we do not propose to mandate immediate replacement of combustor cases. Instead, we are proposing this AD which would require:

- Revising the published life limit in the Airworthiness Limitations Section of the CF34-10E Engine Manual, for combustor cases, part number (P/N) 2070M47G02 and P/N 2070M47G03, from 39,600 cycles-since-new (CSN) to 24,600 CSN; and
- Removing from service combustor cases, P/N 2070M47G02 and P/N 2070M47G03, before reaching 24,600 CSN.

Costs of Compliance

We estimate that this proposed AD would affect 42 CF34-10E series turbofan engines installed on airplanes of U.S. registry. This proposed combustor case removal does not impose any additional labor costs if

performed at the time of scheduled engine overhaul. The financial burden to the operators (prorate) is about \$140,080 per engine due to the reduction in the life limit. Based on these figures, and on the prorating for the usage of the combustor cases, we estimate the cost of the proposed AD on U.S. operators to be \$5,886,720.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed 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. Would 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 regulatory evaluation of the estimated costs to comply with this proposed AD. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Under the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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:

General Electric Company: Docket No. FAA-2006-26585; Directorate Identifier 2006-NE-44-AD.

Comments Due Date

(a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by March 19, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to General Electric Company (GE) CF34-10E2A1, CF34-10E5, CF34-10E5A1, CF34-10E6, CF34-10E6A1, and CF34-10E7 turbofan engines. These engines are installed on, but not limited to, Embraer ERJ-190 and -195 airplanes.

Unsafe Condition

(d) This AD results from GE's evaluation of the effects to the combustor case due to installing version 5.10 software in the full-authority digital electronic control (FADEC), and revising the combustor case published life limit. We are issuing this AD to prevent uncontained combustor case failure resulting in an in-flight engine shutdown and possible damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within 30 days after the effective date of this AD, unless the actions have already been done.

(f) Revise the published life limit in the Airworthiness Limitations Section of the CF34-10E Engine Manual, for combustor cases, part number (P/N) 2070M47G02 and P/N 2070M47G03, from 39,600 cycles-since-new (CSN) to 24,600 CSN.

(g) Remove from service combustor cases, P/N 2070M47G02 and P/N 2070M47G03, before reaching 24,600 CSN.

(h) The requirements of this AD have been met when the engine manual changes are made and operators have modified their continuous airworthiness maintenance plans to reflect the Engine Maintenance Program requirements specified in the GE CF34-10E Engine Manual.

Alternative Methods of Compliance

(i) 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

(j) Contact Tara Chaidez, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7773, fax (781) 238-7199; e-mail: tara.chaidez@faa.gov for more information about this AD.

Issued in Burlington, Massachusetts, on January 10, 2007.

Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E7-499 Filed 1-16-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

RIN 2120-AA64

[Docket No. FAA-2005-22430; Directorate Identifier 2005-NE-34-AD]

Airworthiness Directives; Turbomeca Arrius 2 F Turbohaft Engines

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) for Turbomeca Arrius 2 F turboshaft engines. That AD currently requires removing from service certain serial number (SN) fuel control units (FCUs) or replacing the constant delta pressure diaphragm in those FCUs. This proposed AD would require replacing all FCUs not incorporating modification Tf 55 with FCUs that incorporate modification Tf 55. This proposed AD results from the European Aviation Safety Agency (EASA) and Turbomeca expanding the applicability to the full population of FCUs installed on Arrius 2 F turboshaft engines. FCUs not incorporating modification Tf 55 are susceptible to having an improperly assembled constant delta pressure (delta P) diaphragm. We are proposing this AD to prevent an uncommanded engine in-flight shutdown on a single-engine helicopter, resulting in a forced autorotation landing or an accident.

DATES: We must receive any comments on this proposed AD by March 19, 2007.

ADDRESSES: Use one of the following addresses to comment on this proposed AD.