

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0821; Directorate Identifier 2008-NE-20-AD; Amendment 39-15619; AD 2009-24-06]

RIN 2120-AA64

Airworthiness Directives; General Electric Company (GE) CF34-8E Series Turbofan Engines

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

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD) for GE CF34-8E series turbofan engines with certain part numbers (P/Ns) full authority digital electronic controls (FADECs) installed. That AD currently requires removing certain P/N FADECs. This superseding AD requires removal of 12 more P/Ns of FADECs. This AD results from 20 additional reports received of loss of thrust control events since AD 2008-16-01 was issued. We are issuing this AD to prevent loss of thrust control of the airplane.

DATES: This AD becomes effective December 28, 2009.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

FOR FURTHER INFORMATION CONTACT: Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: alan.strom@faa.gov; telephone (781) 238-7143; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 by superseding AD 2008-16-01, Amendment 39-15619 (73 FR 44628, July 31, 2008), with a proposed AD. The proposed AD applies to GE CF34-8E series turbofan engines with FADECs, P/Ns 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, or 111E9320G49 installed. We published the proposed AD in the Federal Register on August 24, 2009 (74 FR 42610). That action proposed to require removal of 12 more P/Ns of FADECs than what AD 2008-16-01 required to be removed.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comment received. The commenter supports the proposal.

Conclusion

We have carefully reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

We estimate that this AD will affect 273 engines installed on airplanes of U.S. registry. We also estimate that it will take about one work-hour per engine to perform the actions, and that the average labor rate is \$80 per work-hour, with a parts cost per engine of \$55. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$36,855.

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 that 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, 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 removing Amendment 39-15619 (73 FR 4628, January 1, 2008), and by adding a new airworthiness directive, Amendment 39-16094, to read as follows:

not adopted



FAA
Aircraft Certification Service

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2009-24-06 General Electric Company: Amendment 39-16094. Docket No. FAA-2008-0821; Directorate Identifier 2008-NE-20-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective December 28, 2009.

Affected ADs

- (b) This AD supersedes AD 2008-16-01, Amendment 39-15619.

Applicability

(c) This AD applies to General Electric Company (GE) CF34-8E series turbofan engines with full authority digital electronic controls (FADECs), part numbers (P/Ns) 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, or 111E9320G49 installed. These engines are installed on, but not limited to, Empresa Brasileira de Aeronautica S.A. (EMBRAER) ERJ 170 series airplanes.

Unsafe Condition

(d) This AD results from 20 additional reports received of loss of thrust control events since AD 2008-16-01 was issued. We are issuing this AD to prevent loss of thrust control of the airplane.

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.

Removal of CF34-8E FADECs

(f) Within 60 flight hours time-in-service (TIS) after the effective date of this AD, remove FADEC P/Ns 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, and 111E9320G49.

Installation Prohibition

(g) After 660 flight hours TIS after the effective date of this AD, do not install any FADEC P/N 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, or 111E9320G49 onto any GE CF34-8E series engine.

Alternative Methods of Compliance

(h) 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

(i) Contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: alan.strom@faa.gov; telephone (781) 238-7143; fax (781) 238-7199, for more information about this AD.

(j) Guidance on removal and replacement with an FAA-approved FADEC software version can be found in GE Alert Service Bulletin No. CF34-8E-AL S/B 73-A0020, dated November 12, 2008. For a copy of this service information, contact General Electric Company, GE Aviation, Room 285, 1 Newmann Way, Cincinnati, OH 45215, telephone (513) 552-3272; fax (513) 552-3229; e-mail: geae.aoc@ge.com.

Material Incorporated by Reference

(k) None.

Issued in Burlington, Massachusetts, on November 18, 2009.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.