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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–28319; Directorate Identifier 2007–NE–27–AD; Amendment 39–15243; AD 2007–22–07]

RIN 2120–AA64

Airworthiness Directives; General Electric Company (GE) CF6–80C2D1F Turbofan Engines

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for GE CF6–80C2D1F turbofan engines, installed on, but not limited to, McDonnell Douglas Corporation MD–11 series airplanes. This AD requires removing previous software versions from the engine electronic control unit (ECU). Engines with new version software will have increased margin to flameout. This AD results from reports of engine flameout events during flight, including reports of events where all engines simultaneously experienced a flameout or other adverse operation. Although the root cause investigation is not yet complete, we believe that exposure to ice crystals during flight is associated with these flameout events. We are issuing this AD to minimize engine flameout caused by ice accretion and shedding during flight.

DATES: This AD becomes effective November 28, 2007.

ADDRESSES: You can get the service information identified 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.

The Docket Operations office is located at U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: John Golinski, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: *john.golinski@faa.gov;* telephone: (781) 238–7135, fax: (781) 238–7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to GE CF6–80C2D1F turbofan engines, installed on McDonnell Douglas Corporation MD–11 series airplanes. We published the proposed AD in the **Federal Register** on July 17, 2007 (72 FR 39039). That action proposed to require removing previous software versions from the engine ECU.

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 the same as the Mail address 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 comments received.

Request for Clarification

Boeing and GE request clarification of the statement that the AD action results from reports of engine flameout events during flight, including reports of events where all engines simultaneously experienced a flameout or other adverse operation. The commenters point out that there have been no all-engine flameout events on MD–11 series airplanes.

We disagree. While we agree that no all-engine flameout events on the MD–11 have occurred, single and multiple engine flameout events have taken place. We did not change the AD.

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 as proposed.

Costs of Compliance

We estimate that this AD will affect 175 CF6–80C2D1F turbofan engines installed on McDonnell Douglas Corporation MD–11 series airplanes of U.S. registry. We estimate it will take about 6 work-hours per ECU. The average labor rate is $80 per work-hour. Based on these figures, we estimate the cost to U.S. operators to be $63,120. Our cost estimate is exclusive of warranty coverage.

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, 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:

2007–22–07 General Electric Company: Amendment 39–15243. Docket No. FAA–2007–28319; Directorate Identifier 2007–NE–27–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 28, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to General Electric Company (GE) CF6–80C2D1F turbofan engines, installed on, but not limited to, McDonnell Douglas Corporation MD–11 series airplanes.

Unsafe Condition

(d) This AD results from reports of engine flameout events during flight, including reports of events where all engines simultaneously experienced a flameout or other adverse operation. We are issuing this AD to minimize engine flameout due to ice accretion and shedding during flight. Exposure to ice crystals during flight is believed to be associated with these flameout events.

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.

Interim Action

(f) These actions are interim actions due to the on-going investigation, and we may take further rulemaking actions in the future based on the results of the investigation and field experience.

Engine Electronic Control Unit (ECU) Software Removal

(g) At the next shop visit of the engine or of the ECU, whichever occurs first, and not to exceed 60 months from the effective date of this AD, remove the following software versions from the ECUs:

TABLE 1.—REMOVAL OF ECU SOFTWARE VERSIONS

Software version	Installed in ECU Part No.
(1) 8.5.A ...	1851M51P01, 1851M51P02, 1851M52P01, 1851M52P02, 1851M53P01, 1851M53P02
(2) 8.3C ...	1471M69P01, 1471M69P02, 1519M91P01
(3) 8.3.D ..	1519M91P02
(4) 8.3.E ...	1519M91P03, 1519M91P04
(5) 8.3.F ...	1519M91P05
(6) 8.3.G ..	1519M91P06, 1820M34P01
(7) 8.3.H ..	1519M91P07, 1820M34P02
(8) 8.3.J ...	1519M91P09, 1519M91P10, 1820M34P04, 1820M34P05

Previous Software Versions of ECU Software

(h) For a period of 24 months after the effective date of this AD, once an ECU containing a software version not listed in Table 1 of this AD is installed on an engine, that ECU can be replaced with an ECU containing a previous version of software listed in Table 1.

(i) Once the software version listed in Table 1 of this AD has been removed and new FAA-approved software version is installed in an ECU, reverting to those older software versions in that ECU is prohibited.

(j) After 60 months from the effective date of this AD, use of an ECU with a software version listed in Table 1 of this AD is prohibited.

Definitions

(k) For the purposes of this AD:

(1) Next shop visit of the ECU is when the ECU is removed from the engine for overhaul or maintenance after the effective date of this AD.

(2) Next shop visit of the engine is when the engine is removed from the airplane for maintenance in which a major flange is disassembled after the effective date of this AD. The following engine maintenance actions, either separately or in combination with each other, are not considered a next shop visit of the engine:

(i) Removal of the upper high pressure compressor (HPC) stator case solely for airfoil maintenance.

(ii) Module-level inspection of the HPC rotor stages 3–9 spool.

(iii) Replacement of stage 5 HPC variable stator vane bushings or lever arms.

(iv) Removal of the accessory gearbox.

(v) Replacement of the inlet gearbox polytetrafluoroethylene seal.

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.

Special Flight Permits

(m) Special flight permits are not authorized.

Related Information

(n) Information on removing ECU software and installing new software, which provides increased margin to flameout, can be found in GE Service Bulletin No. CF6–80C2 S/B 73–0351, dated April 11, 2007.

(o) Contact John Golinski, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: *john.golinski@faa.gov;* telephone: (781) 238–7135, fax: (781) 238–7199, for more information about this AD.

Issued in Burlington, Massachusetts, on October 17, 2007.

Peter A. White,

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

[FR Doc. E7–20813 Filed 10–23–07; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–28115 Directorate Identifier 2007–CE–045–AD; Amendment 39–15235; AD 2007–21–17]

RIN 2120–AA64

Airworthiness Directives; British Aerospace Regional Aircraft Model HP.137 Jetstream Mk.1, Jetstream Series 200, Jetstream Series 3101, and Jetstream Model 3201 Airplanes

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

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

There has been a report of landing gear radius rods suffering cracks starting in the flashline near the microswitch boss. Such cracks can result in loss of the normal hydraulic system and may lead to a landing gear collapse. Main landing gear collapse is considered as potentially hazardous/