

Proposed Rules

Federal Register

Vol. 73, No. 67

Monday, April 7, 2008

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-2008-0403; Directorate Identifier 2007-NM-166-AD]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-11 and MD-11F Airplanes Equipped With General Electric CF6-80C2 Series 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 certain McDonnell Douglas Model MD-11 and MD-11F airplanes. This proposed AD would require revising the airplane flight manual to advise the flightcrew to use certain procedures during descent in certain icing conditions. This proposed AD results from reports of several in-flight engine flameouts, including multiple dual engine flameout events, in ice-crystal icing conditions. We are proposing this AD to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight without the ability of the engines to be relit, and consequent forced landing of the airplane.

DATES: We must receive comments on this proposed AD by May 22, 2008.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Fax:* 202-493-2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024).

Examining the AD Docket

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

FOR FURTHER INFORMATION CONTACT: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2008-0403; Directorate Identifier 2007-NM-166-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each

substantive verbal contact we receive about this proposed AD.

Discussion

We have received reports indicating that there have been six (two dual) engine flameout events on McDonnell Douglas Model MD-11 airplanes, in ice-crystal icing conditions during descent. These airplanes were equipped with General Electric (GE) CF6-80C2 series engines. Each flameout was in or near convective weather with ice-crystal icing; this type of icing does not appear on radar due to its low reflectivity, and neither the airplane ice detectors nor visual indications indicate the presence of this type of icing conditions. Therefore, it is usually undetected by the flightcrew. These conditions can cause ice crystals to accumulate in the core flow path of the engine during low-power conditions, such as idle or idle descent. The accumulated ice sheds during throttle increase and is ingested into the engine, causing the combustor to flameout resulting in an in-flight flameout and potential damage to the high pressure compressor due to ice impact.

Activating the anti-ice system increases the flameout margin and reduces the potential for multiple engine flameouts by increasing bleed flow and engine idle speed. However, in some of the subject engine flameouts, the anti-ice was already on when the engines flamed out. In each event, the engines relit and continued to operate normally for the remainder of the flight. Having the igniters on is necessary to ensure that the engine will relight quickly.

This condition, if not corrected, could result in a multiple engine flameout during flight without the ability of the engines to be relit, and consequent forced landing of 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 airplanes of this same type design. For this reason, we are proposing this AD, which would require revising the airplane flight manual (AFM) to advise the flightcrew to use certain procedures during descent in certain icing conditions.

Interim Action

We consider this proposed AD interim action. If final action is later identified, we might consider further rulemaking then.

Costs of Compliance

There are about 118 airplanes of the affected design in the worldwide fleet. The following table provides the

estimated costs for U.S. operators to comply with this proposed AD.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
AFM revision	1	\$80	\$0	\$80	70	\$5,600

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. 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 regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket. 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

Accordingly, under the authority delegated to me by the Administrator, the FAA 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

McDonnell Douglas: Docket No. FAA-2008-0403; Directorate Identifier 2007-NM-166-AD.

Comments Due Date

- (a) The FAA must receive comments on this AD action by May 22, 2008.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to McDonnell Douglas Model MD-11 and MD-11F airplanes, certified in any category, equipped with General Electric CF6-80C2 series engines.

Unsafe Condition

- (d) This AD results from reports of several in-flight engine flameouts, including multiple dual engine flameout events, in ice-crystal icing conditions. We are issuing this AD to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight without the ability of the engines to be relit, and consequent forced landing 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.

Airplane Flight Manual (AFM) Revision

(f) Within 14 days after the effective date of this AD, revise the Limitations Section of the McDonnell Douglas MD-11/MD-11F AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"Prior to reducing thrust for descent in visible moisture when TAT is 6 °C and below, the ENG IGN OVRD switch and the ENG, WING, and TAIL ANTI-ICE switches must be placed in the ON position."

Note 1: When a statement identical to that in paragraph (f) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

Alternative Methods of Compliance (AMOCs)

(g)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Issued in Renton, Washington, on March 27, 2008.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-7151 Filed 4-4-08; 8:45 am]

BILLING CODE 4910-13-P