



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3637; Directorate Identifier 2014-NM-219-AD; Amendment 39-18954; AD 2017-14-10]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model MD-11 and MD-11F airplanes. This AD was prompted by report of fuel odor in the cabin. Fuel was found leaking from a cracked fuel line shroud in the left cargo compartment equipment tunnel. This AD requires a check for the presence of fuel at the fuel shroud drain; a high frequency eddy current (HFEC) inspection for cracked fuel line shrouds; a pressure test of the drain system of the tail tank fuel shroud and a pressure test of the drain system of the aft fuselage fuel shroud to determine cracking; and corrective actions, if necessary. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood

Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3637.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA 2015-3637; 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 final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, 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: Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; telephone: 562-627-5254; fax: 562-627-5210; email: serj.harutunian@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model MD-11 and MD-11F airplanes. The NPRM published in the Federal Register on September 29, 2015 (80 FR 58362) (“the NPRM”). The NPRM was prompted by a report of fuel odor in the cabin. Fuel was found leaking from a cracked fuel line shroud in the left cargo

compartment equipment tunnel. The NPRM proposed to require a check for the presence of fuel at the fuel shroud drain; a HFEC inspection for cracked fuel line shrouds; a pressure test of the drain system of the tail tank fuel shroud and a pressure test of the drain system of the aft fuselage fuel shroud to determine if there is cracking; and corrective actions, if necessary. We are issuing this AD to detect and correct fuel leaking from a cracked fuel line shroud, which could result in fuel accumulation below the cargo compartment floor and consequent increased risk of fire.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Withdraw the NPRM

United Parcel Service (UPS) requested that the NPRM be withdrawn until Boeing has the opportunity to work with affected MD-11 operators to develop accurate service information. UPS stated that Boeing Alert Service Bulletin MD11-28A148, dated August 29, 2014, does not provide adequate guidance on the inspection areas. UPS suggested that we revise the NPRM to include specific procedures for an HFEC inspection to the area of the shroud adjacent to the installed internal spacers as well as the curved areas, provide procedures for airplanes on which a previous repair has been accomplished in the HFEC inspection area, and specify that the leak check be done only at the portion of the tail tank transfer line and the #2 engine fuel feed line shroud drain system running through the left-hand portion of the aft lower cargo compartment from approximately airplane station 1501 to 2007.

We disagree with the commenter's request to withdraw or revise the NPRM. Since the NPRM was published, Boeing has released new service information, which corrects certain typographical errors and procedures in an appendix, includes minor

editorial changes, and addresses all of the commenter's concerns. This AD has been revised to require accomplishment of all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017. We have also given credit for Boeing Alert Service Bulletin MD11-28A148, dated August 29, 2014, if those actions were performed before the effective date of this AD.

We agree with the commenter that cracks and leakage in the shrouds are predominantly found in sections of the shroud with internal spacers installed. Since the service information has been revised, Figure 1 of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, addresses the inspection areas of concern in the commenter's request and specifies the areas requiring an HFEC inspection. The "Note" in paragraph 3.B., "Work Instructions," of Option 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, specifies that the pressure test is to be done if a shroud has been repaired with doublers. In addition, the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, reduce the scope of the leak checks as much as practical, and also include instructions to disconnect and reconnect as few lines as possible. As stated previously, we have revised this AD to require accomplishment of all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017.

Request Clarification for Existing Maintenance Planning Document (MPD) Functional Check Items

FedEx noted that functional checks similar to those specified in the proposed AD are already part of the MD-11 MPD and requested clarification regarding the more restrictive checks in the proposed AD. FedEx stated that Boeing Alert Service Bulletin MD11-28A148, dated August 29, 2014, and the proposed AD do not provide instructions on how to handle the existing MPD functional check items. FedEx stated that the more restrictive checks in the proposed AD should have been mandated as a revision to the maintenance or inspection program.

We agree to provide clarification; however, we do not agree to delay issuance of this AD to mandate a revision to the manufacturer's maintenance or inspection program. The more restrictive repetitive requirements of this AD take precedence over the current MPD since these actions are necessary to correct the identified unsafe condition. We have not changed this AD regarding this issue.

Request to Revise Certain Wording in the Proposed AD

Boeing requested that we revise paragraphs (g)(1)(i) and (g)(2)(i) of the proposed AD from a check for the presence of fuel at the "fuel shroud drain" to a check at the "fuel shroud drain valves." Boeing stated that paragraph (g) of the proposed AD specified to check the fuel shroud drain, whereas Boeing Alert Service Bulletin MD11-28A148, dated August 29, 2014, emphasizes checking all the drain valves where fuel may accumulate.

We agree with the commenter's request for the reason provided above. We have revised paragraphs (g)(1)(i) and (g)(2)(i) of this AD accordingly, to state "check for the presence of fuel at the fuel shroud drain valves."

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the

changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017. The service information describes procedures for checking for the presence of fuel at the fuel shroud drain valves; a HFEC inspection for cracked fuel line shrouds; a pressure test of the drain system of the tail tank fuel shroud and a pressure test of the drain system of the aft fuselage fuel shroud; and corrective actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 90 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Check for presence of fuel at the fuel shroud drain	2 work-hours X \$85 per hour = \$170, per inspection cycle	\$0	\$170, per inspection cycle	\$15,300, per inspection cycle
HFEC	5 work-hours X	\$0	\$425, per	\$38,250, per

Inspection (optional)	\$85 per hour = \$425, per inspection cycle		inspection cycle	inspection cycle
Pressure Test	3 work-hours X \$85 per hour = \$255, per inspection cycle	\$0	\$255, per inspection cycle	\$22,950, per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

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

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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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 FAA 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 (AD):

2017-14-10 The Boeing Company: Amendment 39-18954 Docket No. FAA-2015-3637; Directorate Identifier 2014-NM-219-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model MD-11 and MD-11F airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel System.

(e) Unsafe Condition

This AD was prompted by a report of fuel odor in the cabin. Fuel was found leaking from a cracked fuel line shroud in the left cargo compartment equipment tunnel. We are issuing this AD to detect and correct fuel leaking from a cracked fuel line shroud, which could result in fuel accumulation below the cargo compartment floor and consequent increased risk of fire.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Check, Inspection, Test, and Corrective Actions

Do the actions in paragraphs (g)(1) or (g)(2) of this AD, as applicable.

(1) Except as specified in paragraph (h) of this AD: At the applicable time in Table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, do the actions in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD. Before further flight do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017. Repeat the actions thereafter at the applicable time in Table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017.

(i) Check for the presence of fuel at the fuel shroud drain valves.

(ii) Do a high frequency eddy current (HFEC) inspection for cracked fuel line shrouds.

(iii) Do a pressure test of the drain system of the tail tank fuel shroud and a pressure test of the drain system of the aft fuselage fuel shroud to determine if there is cracking.

(2) Except as specified in paragraph (h) of this AD: At the applicable time in Table 2 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, do the actions in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD. Before further flight do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017. Repeat the actions thereafter at the applicable time in Table 2 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017.

(i) Check for the presence of fuel at the fuel shroud drain valves.

(ii) Do a pressure test of the drain system of the tail tank fuel shroud and a pressure test of the drain system of the aft fuselage fuel shroud to determine if there is cracking.

(h) Exception to the Service Information

Where Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017, specifies a compliance time of “after the original issue date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin MD11-28A148, dated August 29, 2014.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to:

9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

(1) For more information about this AD, contact Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; telephone: 562-627-5254; fax: 562-627-5210; email: serj.harutunian@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (1)(3) and (1)(4) of this AD.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin MD11-28A148, Revision 1, dated March 24, 2017.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference 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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on June 29, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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