

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0174; Directorate Identifier 2013-NM-212-AD; Amendment 39-18028; AD 2014-23-12]

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 787-8 airplanes. This AD was prompted by a report indicating that, on a different Boeing airplane model, there was an oxygen-fed fire, which caused extensive damage to the flight deck. This AD requires replacing the low-pressure oxygen hoses with non-conductive hoses in the crew oxygen system. We are issuing this AD to prevent inadvertent electrical current from passing through an internal, anti-collapse spring of the low pressure oxygen hose, which can cause the low-pressure oxygen hose to melt or burn, leading to an oxygen-fed fire and/or smoke beneath the flight deck in the forward electronics equipment bay.

DATES: This AD is effective December 31, 2014.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of December 31, 2014.

ADDRESSES: For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. For B/E Aerospace service information identified in this AD, contact B/E Aerospace, Inc., Commercial Aircraft Products Group, 10800 Pfluum Road, Lenexa, KS 66215; phone: 913-338-9800; fax: 913-469-8419. You may view this referenced 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.

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-2014-0174; 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 AD, 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: Susan Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@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 787-8 airplanes. The NPRM published in the Federal Register on March 28, 2014 (79 FR 17457). The NPRM was prompted by a report indicating that, on a different Boeing airplane model, there was an oxygen-fed fire, which caused extensive damage to the flight deck. The NPRM proposed to require replacing the low-pressure oxygen hoses with non-conductive hoses in the crew oxygen system. We are issuing this AD to prevent inadvertent electrical current from passing through an internal, anti-collapse spring of the low pressure oxygen hose, which can cause the low-pressure oxygen hose to melt or burn, leading to an oxygen-fed fire and/or smoke beneath the flight deck in the forward electronics equipment bay.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 17457, March 28, 2014) and the FAA's response to each comment.

Boeing, United Airlines, and John Johnson stated that they support the NPRM (79 FR 17457, March 28, 2014).

Request To Shorten Compliance Time

The Air Line Pilots Association (ALPA) stated that it supports the intent of the NPRM (79 FR 17457, March 28, 2014) but that the 60-month compliance time is excessive. ALPA recommended that the compliance time be shortened. ALPA did not provide justification for its request, or propose what the shorter compliance time should be.

We do not agree that the compliance time for this final rule should be shortened. In developing the compliance time we considered the implications, parts availability, and normal maintenance schedules for timely accomplishment of the replacement of the oxygen hoses. Further, the compliance time is in keeping with the manufacturers' recommended compliance time. Operators are always permitted to accomplish the requirements of an AD earlier than the specified compliance time. If additional data are presented that would justify reducing the compliance time we may consider further rulemaking on this issue. We have not changed this final rule in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 17457, March 28, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 17457, March 28, 2014).

Costs of Compliance

We estimate that this AD affects 6 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
Rework and replacement	Up to 2 work-hours × \$85 per hour = \$170	\$1,798	Up to \$1,968	Up to \$11,808.

According to the manufacturer, all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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):



2014-23-12 The Boeing Company: Amendment 39-18028; Docket No. FAA-2014-0174; Directorate Identifier 2013-NM-212-AD.

(a) Effective Date

This AD is effective December 31, 2014.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Unsafe Condition

This AD was prompted by a report indicating that, on a different Boeing airplane model, there was an oxygen-fed fire, which caused extensive damage to the flight deck. We are issuing this AD to prevent inadvertent electrical current from passing through an internal, anti-collapse spring of the low pressure oxygen hose, which can cause the low-pressure oxygen hose to melt or burn, leading to an oxygen-fed fire and/or smoke beneath the flight deck in the forward electronics equipment bay.

(f) Compliance

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

(g) Rework of Crew Oxygen Distribution Manifold Assembly

For airplanes identified in Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013: Within 60 months after the effective date of this AD, rework the crew oxygen distribution manifold assembly from part number (P/N) 4421086-101 to P/N 4421086-102, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013; and B/E Aerospace Service Bulletin 4421086-35-001, Rev. 002, dated July 9, 2013; except as specified in paragraph (i) of this AD.

(h) Replacement of Forward Crew Oxygen Supply Hose

For airplanes identified as Group 2 in Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013: Within 60 months after the effective date of this AD, replace the forward crew oxygen supply hose with a new non-conductive forward oxygen supply hose, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013.

(i) Exception to Service Information

Paragraph III.A., "Verification," of B/E Aerospace Service Bulletin 4421086-35-001, Rev. 002, dated July 9, 2013, has a typographical error. The last sentence in that paragraph states, "If the decal shows PN 4421086-101, continue with the retrofit steps in paragraph II.B." The sentence should refer to paragraph III.B. of B/E Aerospace Service Bulletin 4421086-35-001, Rev. 002, dated July 9, 2013.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install a distribution manifold having B/E Aerospace P/N 4421086-101; a flexible supply hose having B/E Aerospace P/N 4421189-016; or a supply hose having Boeing P/N 4421189-023; on any airplane.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle 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 (l) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-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 required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(l) Related Information

For more information about this AD, contact Susan Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@faa.gov.

(m) 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 B787-81205-SB350001-00, Issue 001, dated August 22, 2013.

(ii) B/E Aerospace Service Bulletin 4421086-35-001, Rev. 002, dated July 9, 2013.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) For B/E service information identified in this AD, contact B/E Aerospace, Inc., Commercial Aircraft Products Group, 10800 Pfluum Road, Lenexa, KS 66215; phone: 913-338-9800; fax: 913-469-8419.

(5) You may view this service information at 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.

(6) 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 November 5, 2014.

Jeffrey E. Duven,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.