[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0174; Directorate Identifier 2013-NM-212-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This proposed 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 proposed AD would require replacing the low-pressure oxygen hoses with non-conductive hoses in the crew oxygen system. We are proposing 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 compartment in the forward electronics equipment bay.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Boeing service information identified in this proposed 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 proposed 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2014-0174; Directorate Identifier 2013-NM-212-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 received a report indicating that, on a different Boeing airplane model, a fire originated near the first officer's area, which caused extensive damage to the flight deck. A Boeing investigation found that the low pressure flexible hoses in the pressurized flightcrew oxygen system can potentially be conductive because of the anti-kink metallic spring inside the hose. This condition, if not corrected, could result in inadvertent electrical current passing through an internal, anti-collapse spring of the low-pressure oxygen hose causing the low-pressure oxygen hose to melt or burn, leading to an oxygen-fed fire and/or smoke beneath the flight compartment in the forward electronics equipment bay.

Some hoses on Model 787-8 airplanes are similar in design to those on the Boeing airplane model on which the fire occurred; therefore, Model 787-8 airplanes might be subject to the same unsafe condition.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013. For information on the procedures and compliance times, see this service information at http://www.regulations.gov by searching for Docket No. FAA-2014-0174.

Boeing Alert Service Bulletin B787-81205-SB350001-00, Issue 001, dated August 22, 2013, refers to B/E Aerospace Service Bulletin 4421086-35-001, Rev. 002, dated July 9, 2013, as an additional source of guidance for reworking the crew oxygen distribution manifold assembly.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require replacing the low-pressure oxygen hoses with non-conductive hoses in the crew oxygen system, as specified in the service information described previously.

Typographical Error in 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 the service information.

Costs of Compliance

We estimate that this proposed AD affects 6 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Rework and replacement	Up to 2 work-hours X $85 per hour = $170	$1,798	Up to $1,968	Up to $11,808

According to the manufacturer, all of the costs of this proposed 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

We 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 this 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),

(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.

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. Amend § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2014-0174; Directorate Identifier 2013-NM-212-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(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 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 compartment 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)(1) 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

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

(2) 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.

Issued in Renton, Washington, on March 19, 2014.

Ross Landes,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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