DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0252; Directorate Identifier 2013-NM-213-AD; Amendment 39-17933; AD 2014-16-09]

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 707 airplanes, Model 720 and 720B series airplanes, Model 727 airplanes, and Model 737-100, -200, and -200C series airplanes. This AD was prompted by a report of a fire that originated near the first officer's area and caused extensive damage to the flight deck on a different airplane model. This AD requires replacing the low-pressure oxygen hoses with non-conductive low-pressure oxygen hoses in the flight compartment. We are issuing this AD to prevent electrical current from inadvertently 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 in the flight deck.

DATES: This AD is effective September 23, 2014.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of September 23, 2014.

ADDRESSES: For 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. 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-2014-0252; 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: For Model 707 airplanes, Model 720 and 720B series airplanes, and Model 727 airplanes, contact Patrick Farina, Aerospace Engineer, Cabin Safety, Mechanical and Environmental Systems Branch, ANM-150L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5344; fax: 562-627-5210; email: Patrick.Farina@faa.gov.

For Model 737-100, -200, and -200C series airplanes, contact Tracy Ton, Aerospace Engineer, Cabin Safety, Mechanical and Environmental Systems Branch, ANM-150L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5352; fax: 562-627-5210; email: Tracy.Ton@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 707 airplanes, Model 720 and 720B series airplanes, Model 727 airplanes, and Model 737-100, -200, and -200C series airplanes. The NPRM published in the Federal Register on April 23, 2014 (79 FR 22599). The NPRM was prompted by a report of a fire that originated near the first officer’s area and caused extensive damage to the flight deck on a different airplane model. The NPRM proposed to require replacing the low-pressure oxygen hoses with non-conductive low-pressure oxygen hoses in the flight compartment. 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 in the flight deck.

Explanation of Changes Made to This Final Rule

We have changed the point-of-contact information for the various affected airplane models in paragraphs (i)(1) and (j) of this final rule.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 22599, April 23, 2014) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD 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 (79 FR 22599, April 23, 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 22599, April 23, 2014).
Costs of Compliance

We estimate that this AD affects 530 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace oxygen hoses</td>
<td>Up to 17 work-hours × $85 per hour = $1,445</td>
<td>$297</td>
<td>Up to $1,742</td>
<td>Up to $923,260</td>
</tr>
</tbody>
</table>

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):
2014-16-09 The Boeing Company: Amendment 39-17933; Docket No. FAA-2014-0252; Directorate Identifier 2013-NM-213-AD.

(a) Effective Date

This AD is effective September 23, 2014.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company airplanes identified in paragraphs (c)(1) through (c)(3) of this AD, certificated in any category.

1. Model 707-100 long body, -200, -100B long body, and -100B short body airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B series airplanes; as identified in Boeing 707 Alert Service Bulletin A3538, dated October 2, 2013.


(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report of a fire which originated near the first officer's area and caused extensive damage to the flight deck on a different airplane model. 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 in the flight deck.

(f) Compliance

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

(g) Oxygen Hose Replacement

Within 36 months after the effective date of this AD: Replace the low-pressure oxygen hoses in the flight compartment with non-conductive low-pressure oxygen hoses, in accordance with the Accomplishment Instructions of the service bulletin specified in paragraphs (g)(1) through (g)(3) of this AD, as applicable.
(1) For Model 707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B series airplanes: Boeing 707 Alert Service Bulletin A3538, dated October 2, 2013.


(h) Parts Installation Prohibition

As of the effective date of this AD, no person may install a low-pressure oxygen hose specified in Table 1 to paragraph (h) of this AD, on any airplane.

Table 1 to Paragraph (h) of this AD–Low-Pressure Oxygen Hoses (P/N)

<table>
<thead>
<tr>
<th>Boeing specification No.</th>
<th>Hydroflow</th>
<th>B/E Aerospace</th>
<th>RE Darling (aka REDAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-60174-24</td>
<td>37001-642</td>
<td>Not applicable (n/a)</td>
<td>(n/a)</td>
</tr>
<tr>
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<td>ZH833-36</td>
<td></td>
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</table>

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for The Boeing Company Model 707 airplanes, Model 720 and 720B series airplanes, Model 727 airplanes, and Model 737-100, -200, and -200C series airplanes, covered by 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 (j)(1) or (j)(2) of this AD, as applicable. 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.

(j) Related Information

For more information about this AD, contact the applicable person identified in paragraph (j)(1) or (j)(2) of this AD.

(1) For Model 707 airplanes, Model 720 and 720B series airplanes, and Model 727 airplanes, contact Patrick Farina, Aerospace Engineer, Cabin Safety, Mechanical and Environmental Systems Branch, ANM-150L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5344; fax: 562-627-5210; email: Patrick.Farina@faa.gov.

(2) For Model 737-100, -200, and -200C series airplanes, contact Tracy Ton, Aerospace Engineer, Cabin Safety, Mechanical and Environmental Systems Branch, ANM-150L, FAA, Los
(k) 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.


(3) For 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) 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.

(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 July 30, 2014.

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