DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0104; Directorate Identifier 2011-NM-279-AD; Amendment 39-17107; AD 2012-13-05]

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 777-200, -200LR, -300, -300ER, and 777F series airplanes. This AD was prompted by a report indicating that a fire originated near the first officer's area, which caused extensive damage to the flight deck. 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 passing through the low-pressure oxygen hose internal anti-collapse spring, which can cause the low-pressure oxygen hose to melt or burn, and a consequent oxygen-fed fire in the flight compartment.

DATES: This AD is effective August 16, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of August 16, 2012.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA 98057-3356. 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; 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 Document 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, 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.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on February 8, 2012 (77 FR 6518). That NPRM proposed to require replacing the low-pressure oxygen hoses with non-conductive low-pressure oxygen hoses in the flight compartment.

Relevant Service Information

Since we issued the NPRM (77 FR 6518, February 8, 2012), Boeing has issued Alert Service Bulletin 777-35A0027, Revision 1, dated April 19, 2012. This service information was issued to remove airplanes from the effectivity that have had certain changes incorporated in production, update warranty information, and material price information. No additional work is necessary for airplanes changed in accordance with Boeing Alert Service Bulletin 777-35A0027, dated December 15, 2011. We have changed the final rule to reference Boeing Alert Service Bulletin 777-35A0027, Revision 1, dated April 19, 2012. Additionally, we have updated the Costs of Compliance section of the final rule regarding the parts cost and warranty information.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 6518, February 8, 2012) and the FAA's response to each comment.

Support for the NPRM (77 FR 6518, February 8, 2012)

The Air Line Pilots Association (ALPA) stated it supports the NPRM (77 FR 6518, February 8, 2012).

Request To Shorten Compliance Time

The ALPA requested we shorten the compliance time for the replacement of the oxygen hoses from 18 months to 12 months. The commenter based this request on the impact that an oxygen fed fire on the flight deck would have on flight safety.

We disagree. In developing the proposed compliance time, we considered the safety implications, parts availability, and normal maintenance schedules for the timely accomplishment of replacement of the oxygen hoses. Further, the proposed compliance time is in keeping with the manufacturers' recommended compliance time. In consideration of all these factors, operators are always permitted to accomplish the requirements of an AD at a time earlier than the specified compliance time. If additional data are presented that would justify a shorter compliance time, we may consider further rulemaking on this issue. We have not changed the AD in this regard.
Request To Increase Compliance Time

United Airlines requested we increase the compliance time for the replacement of the oxygen hoses from 18 months to 24 months. The commenter stated that based on parts availability and its normal maintenance schedule, it believes that 24 months would be an appropriate interval for the timely accomplishment of the actions while maintaining an adequate level of safety.

We disagree with increasing the compliance time. As stated previously, in developing the proposed compliance time, we considered the safety implications, parts availability, and normal maintenance schedules for a timely accomplishment of replacement of the oxygen hoses. Further, the proposed compliance time is in keeping with the manufacturers' recommended compliance time. However, under the provisions of paragraph (i) of the final rule, we may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety. We have not changed the AD in this regard.

Request To Add Applicability Language

Boeing requested that we add language to paragraph (h) of the NPRM (77 FR 6518, February 8, 2012), stating that this paragraph applies only to any airplane "affected by this AD."

We do not agree with the commenter's request. The applicability statement in all AD actions lists all airplanes affected by that AD. All of the requirements stated in an AD are applicable only to the airplanes listed in the applicability. We find no justification for making the requested change. We have not changed the AD in this regard.

Request for Clarification of Parts Installation Requirement

American Airlines (American) requested clarification of the requirement in paragraph (h) of the NPRM (77 FR 6518, February 8, 2012) that prohibits installing certain oxygen hoses after the effective date of the AD. American stated that the compliance time of paragraph (h) of the NPRM is prior to the compliance date of the low-pressure oxygen hose removal, and if a maintenance procedure is accomplished which would require the removal of the low-pressure oxygen hose, the same low-pressure oxygen hose cannot be re-installed.

We agree to clarify the requirement. Once we have determined that an unsafe condition exists, we generally specify not to allow that condition to be introduced into the fleet. Although the word "install" is generally considered to be broader than the word "replace," for this AD operators can interpret it as meaning "replace" while remaining within the intent of the "Parts Installation" paragraph (paragraph (h) of this AD). By simply reinstalling a part removed during maintenance, the operator is not "installing" a different part. Therefore, removing a part to gain access and then reinstalling that same part for other maintenance activities not associated with the AD is acceptable. We have not changed the AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously.

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

Costs of Compliance

We estimate that this AD affects 169 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:
Estimated Costs

<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>Replacement</td>
<td>18 work-hours × $85 per hour = $1,530</td>
<td>$1,066</td>
<td>$2,596</td>
<td>$438,724</td>
</tr>
</tbody>
</table>

According to the manufacturer, some 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):
2012-13-05 The Boeing Company: Amendment 39-17107; Docket No. FAA-2012-0104; Directorate Identifier 2011-NM-279-AD.

(a) Effective Date

This AD is effective August 16, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin 777-35A0027, Revision 1, dated April 19, 2012.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Unsafe Condition

This AD was prompted by a report indicating that a fire originated near the first officer's area, which caused extensive damage to the flight deck. We are issuing this AD to prevent electrical current from passing through the low-pressure oxygen hose internal anti-collapse spring, which can cause the low-pressure oxygen hose to melt or burn, and a consequent oxygen-fed fire in the flight compartment.

(f) Compliance

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

(g) Replacement

Within 18 months after the effective date of this AD: Replace the low-pressure oxygen hoses with non-conductive low-pressure oxygen hoses in the flight compartment, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-35A0027, dated December 15, 2011, or Boeing Alert Service Bulletin 777-35A0027, Revision 1, dated April 19, 2012.
(h) Parts Installation Prohibition

As of the effective date of this AD, no person may install in the airplane flight compartment oxygen system on any airplane, a low-pressure oxygen hose having part number 57034-81220, 57034-81320, or 57034-91100.

(i) 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 the Related Information section 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.

(j) Related Information

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.

(k) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51.


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

(3) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA 98057-3356. For information on the availability of this material at the FAA, call (425) 227-1221.

(4) You may also review copies of the 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.


John Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.