



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0862; Directorate Identifier 2011-NM-198-AD; Amendment 39-17803; AD 2014-05-31]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2008-08-25 that applied to certain The Boeing Company Model 747-400 and 747-400F series airplanes.

AD 2008-08-25 required installing drains and drain tubes to eliminate water accumulation in the drip shield above the M826 cardfile in the main equipment center. This new AD requires installing modified drain tubes, relocating wire bundle routing, installing a new drip shield and drip shield deflectors, and replacing insulation blankets. For certain airplanes, this new AD also concurrently requires sealing the drain slot, installing spuds, and installing drain tubes. This AD was prompted by reports of continued water damage to diode fire card 285U0072-1 in the M826 automatic fire overheat logic test system cardfile following a false FWD CARGO FIRE message, with no change in frequency, which resulted in an air turn back. We are issuing this AD to prevent water from exiting over the edge of the existing drip shield and contaminating electrical components in the M826 cardfile, which could result in an electrical short and potential loss of several functions essential for safe flight.

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 publications 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 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 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> by searching for and locating Docket No. FAA-2012-0862; 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: Francis Smith, Aerospace Engineer, Cabin Safety & Environmental Control Systems, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6596; fax: 425-917-6590; email: francis.smith@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2008-08-25, Amendment 39-15479 (73 FR 21240, April 21, 2008). AD 2008-08-25 applied to certain The Boeing Company Model 747-400 and 747-400F series airplanes. The NPRM published in the Federal Register on September 6, 2012 (77 FR 54854). The NPRM was prompted by reports of continued water damage to diode fire card 285U0072-1 in the M826 automatic fire overheat logic test system cardfile following a false FWD CARGO FIRE message, with no change in frequency, which resulted in an air turn back. The NPRM proposed to require installing drain tubes, relocating wire bundle routing, installing a new drip shield and drip shield deflectors, and replacing insulation blankets. For certain airplanes, the NPRM also proposed to concurrently require sealing the drain slot, installing spuds, and installing drain tubes. We are issuing this AD to prevent water from exiting over the edge of the existing drip shield and contaminating electrical components in the M826 cardfile, which could result in an electrical short and potential loss of several functions essential for safe flight.

Relevant Service Information

Since we issued the NPRM (77 FR 54854, September 6, 2012), we have reviewed Boeing Alert Service Bulletin 747-25A3580, Revision 2, dated May 13, 2013. We referred to Boeing Alert Service Bulletin 747-25A3580, Revision 1, dated July 14, 2011, as an appropriate source of service information for accomplishing certain actions specified in the NPRM.

Boeing Alert Service Bulletin 747-25A3580, Revision 2, dated May 13, 2013, among other changes, revises line number 1087 to 1332 for group 1 airplanes to account for airplanes that had the drain tubes installed in production, adds figures to account for actions required by certain groups, adds brackets and rivets, and changes certain part numbers of certain brackets.

Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, among other things, clarifies wire routing, allows for trimming of parts, and adds parts to the top kit.

We have added a new paragraph (i) to this final rule to allow for credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 747-25A3580, Revision 1, dated July 14, 2011, which is not incorporated by reference in this AD. We have redesignated subsequent paragraphs accordingly.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 54854, September 6, 2012) and the FAA's response to each comment.

Request to Use Latest Service Information

United Parcel Service (UPS) and Boeing requested that we revise the NPRM (77 FR 54854, September 6, 2012) to replace Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011, with Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012. UPS explained that Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, revises the effectivity, and includes changes, corrections, and clarifications to the work instructions. UPS reasoned that in order to avoid additional efforts of applying for, approving, and documenting alternative methods of compliance for using Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, we should instead revise the NPRM to incorporate Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, which, according to Boeing, would change paragraphs (c)(2), (g), and (h) of the NPRM.

We partially agree. We disagree with the request to change paragraphs (c)(2) and (h) of this AD. Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, adds one new airplane to the effectivity and would require resubmittal of the NPRM (77 FR 54854, September 6, 2012) for public comment on this change, which would delay the publication of this final rule. To delay this action would be inappropriate, since we have determined that an unsafe condition exists and that the required actions must be conducted to ensure continued safety. We might consider further rulemaking at a later time to address the additional airplane. However, we do agree to revise paragraph (g) of this AD by also referring to Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012, as an appropriate method of compliance for the actions required by paragraph (g) of this AD.

Conclusion

We reviewed the relevant data, considered the comment received, 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 (77 FR 54854, September 6, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 54854, September 6, 2012).

Costs of Compliance

We estimate that this AD affects 38 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
Installation, relocation, and replacement	Up to 23 work-hours X \$85 per hour = \$1,955	Up to \$8,887	Up to \$10,842	Up to \$411,996
Concurrent installation	8 work-hours X \$85 per hour = 680	\$1,801	\$2,481	\$94,278

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

We have determined that 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 removing Airworthiness Directive (AD) 2008-08-25, Amendment 39-15479 (73 FR 21240, April 21, 2008), and adding the following new AD:

2014-05-31 The Boeing Company: Amendment 39-17803; Docket No. FAA-2012-0862; Directorate Identifier 2011-NM-198-AD.

(a) Effective Date

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

(b) Affected ADs

This AD supersedes AD 2008-08-25, Amendment 39-15479 (73 FR 21240, April 21, 2008).

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category, as specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 747-400F series airplanes, as identified in Boeing Alert Service Bulletin 747-25A3580, Revision 2, dated May 13, 2013.

(2) Model 747-400 series airplanes, as identified in Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

(e) Unsafe Condition

This AD was prompted by reports of continued water damage to diode fire card 285U0072-1 in the M826 automatic fire overheat logic test system cardfile following a false FWD CARGO FIRE message, with no change in frequency, which resulted in an air turn back. We are issuing this AD to prevent water from exiting over the edge of the existing drip shield and contaminating electrical components in the M826 cardfile, which could result in an electrical short and potential loss of several functions essential for safe flight.

(f) Compliance

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

(g) Installation and Replacement

Within 24 months after the effective date of this AD, install aft and forward drain tubes, relocate wire bundle routing, install a new drip shield and drip shield deflectors, and replace insulation blankets, in accordance with the Accomplishment Instructions of the service information identified in paragraph (g)(1), (g)(2), or (g)(3); as applicable; of this AD.

(1) (For Model 747-400F series airplanes) Boeing Alert Service Bulletin 747-25A3580, Revision 2, dated May 13, 2013.

(2) (For Model 747-400 series airplanes) Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011.

(3) (For Model 747-400 series airplanes) Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012 (for Model 747-400 series airplanes).

(h) Concurrent Actions

For Group 1 airplanes as identified in Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011: Prior to or concurrently with the actions required by paragraph (g) of this AD, seal the drain slot, install spuds, and install left- and right-side drain tubes, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-25A3526, Revision 1, dated February 20, 2009 (for Model 747-400 series airplanes), except as specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Steps 1 through 5 of Figure 2 of Boeing Alert Service Bulletin 747-25A3526, Revision 1, dated February 20, 2009, are not required if work is being accomplished concurrently with the actions specified in Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011 (for Model 747-400 series airplanes).

(2) The portion of “More Data” in step 8 of Figure 3 of Boeing Alert Service Bulletin 747-25A3526, Revision 1, dated February 20, 2009, which says “Attach drain tube and strap above bead on the spud,” is not required.

(i) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 747-25A3580, Revision 1, dated July 14, 2011, which is not incorporated by reference in this AD.

(j) 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 (k)(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.

(k) Related Information

(1) For more information about this AD, contact Francis Smith, Aerospace Engineer, Cabin Safety & Environmental Control Systems, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6596; fax: 425-917-6590; email: francis.smith@faa.gov.

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

(I) 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 747- 25A3526, Revision 1, dated February 20, 2009.

(ii) Boeing Alert Service Bulletin 747-25A3580, Revision 2, dated May 13, 2013.

(iii) Boeing Alert Service Bulletin 747-25A3581, Revision 1, dated June 30, 2011.

(iv) Boeing Alert Service Bulletin 747-25A3581, Revision 2, dated September 11, 2012.

(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) You may view this service information at 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.

(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 March 5, 2014.

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

[FR Doc. 2014-05558 Filed 03/27/2014 at 8:45 am; Publication Date: 03/28/2014]