**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0304; Directorate Identifier 2013-NM-005-AD; Amendment 39-17713; AD 2013-26-04]**

**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 747-400, -400D, and -400F series airplanes. This AD was prompted by a report of water leakage into the main deck cargo wire integration unit (WIU). The water flowed from the main deck floor panels, through disbonded seams in the aft main equipment center (MEC) drip shield gutter, then onto the WIU. This AD requires cleaning the aft MEC drip shield gutter; and doing a one-time general visual inspection for disbonded seams, and repair if necessary. This AD also requires installing a fiberglass reinforcement overcoat to the underside of the bonded seams of the aft MEC drip shield gutters. We are issuing this AD to prevent water penetration into the MEC, which could result in the loss of flight critical systems.

**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 a certain publication 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, Washington 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/#!docketDetail;D=FAA-2013-0304; 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 and Environmental Systems Branch, 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 by adding an AD that would apply to the specified products. The NPRM published in the Federal Register on April 11, 2013 (78 FR 21571). The NPRM proposed to require removing the cargo liner support; cleaning the aft MEC drip shield gutter; and doing a one-time general visual inspection for disbonded seams, and repair if necessary. The

NPRM also proposed to require installing a fiberglass reinforcement overcoat to the top surface of the aft MEC drip shield gutters and installing the cargo liner support.

**Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (78 FR 21571, April 11, 2013) and the FAA's response to each comment.

**Request to Clarify Area for Installing Fiberglass Reinforcement Overcoat**

United Airlines (UAL), British Airways (BAB), and Boeing asked that the area for installing the fiberglass reinforcement overcoat, as specified in paragraph (g)(2) of the NPRM (78 FR 21571, April 11, 2013), be changed for clarification. Boeing stated that the description of the area is not accurate. UAL stated that the location for installing the fiberglass reinforcement overcoat "to the top surface" of the aft main equipment center (MEC) drip shield gutters, as specified in paragraph (g)(2) of the NPRM, is different than the area specified in Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012. UAL noted that the referenced service information specifies installing the fiberglass reinforcement overcoat "to the underside surface" of the aft MEC drip shield gutters. BAB stated that Figure 4, Sheets 2 and 3 of Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012, show the installation from underneath the aft MEC drip shield gutter; and added that Figure 4, Step 3, Note (c) specifies to "Install the prepared BMS 9-3 fiberglass impregnated fabric to the underside of the bonded seams."

We agree with the commenters' requests to clarify the location for installing the fiberglass reinforcement overcoat. Figure 4, Sheets 2 and 3 of Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012, provide clarity. Therefore, we have changed the SUMMARY section and paragraph (g)(2) of this final rule to specify the location in Figure 4, Step 3, Note (c) for installation of the fiberglass reinforcement overcoat to "the underside of the bonded seams."

**Request to Clarify the Unsafe Condition**

Boeing asked that we clarify the second sentence of the reason for the unsafe condition, as specified in the SUMMARY section and paragraph (e) of the NPRM (78 FR 21571, April 11, 2013), from "The water flowed from the drip shield through disbonded floor seams into the aft ..." to "The water flowed from the main deck floor panels, through disbonded seams in the aft …." Boeing stated that, as specified, the description is not accurate based on reports received from operators.

We agree with the commenter's request for the reason provided. We have clarified the reason for the unsafe condition in the SUMMARY section and paragraph (e) of this final rule accordingly.

**Request to Add a Note Allowing Different Access for Different Structural Configurations**

UAL asked that we include a note specifying that accessing certain areas to accomplish the actions proposed in the NPRM (78 FR 21571, April 11, 2013) may vary due to configuration differences. UAL stated that including such a note would save operators a lot of time dealing with variances in the quantity of fasteners called out in the service information versus those on the airplane. UAL noted that for AD 2012-15-10, Amendment 39-17139 (77 FR 46943, August 7, 2012), regarding the MEC drip shield, it already has six alternative methods of compliance (AMOCs) due to these variances.

We agree with the commenter's request. Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012, does not identify all possible structural configurations of the affected airplanes when gaining access to the repair area. The resulting AMOC requests and review of those requests creates a high volume of work and time, which impacts both operators and the FAA. These deviations do not directly impact the specified corrective actions.

We have changed the language in the SUMMARY and Costs of Compliance sections, as well as paragraphs (g)(1) and (g)(2) of this final rule, to remove the reference

to the cargo liner support. We have also added a sentence to the introductory text of paragraph (g) of this AD to specify that accomplishing paragraphs 3.B.1. and 3.B.4. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012, is optional.

**Request to Ground All Affected Airplanes**

One anonymous commenter reiterated the actions proposed by the NPRM (78 FR 21571, April 11, 2013), and stated that he found it troubling that we are asking the public "(presumably experts)" to comment on a safety issue with a Boeing design, yet these airplanes have not been grounded until the notice and comment period ends. The commenter added that The Boeing Company must comply with strict FAA guidelines, as outlined by the Federal Aviation Act of 1958 (49 U.S.C. App. 1301 et seq.). The commenter noted that, crucial to this particular airworthiness directive, the FAA encourages the development of "next wave" civil aeronautics, new aviation technology, and continued safety enhancements of all domestically flown commercial airplanes. The commenter also added that participation in the notice and comment period is in line with the FAA's mission. The commenter concluded that Congress charges the FAA with promoting safe flight of civil airplanes in air commerce by prescribing regulations for practices, methods, and procedures.

We infer that the commenter finds we lack sufficient information to determine a compliance time for correcting this unsafe condition before receiving public comment. We also infer the commenter concluded that that affected airplanes are exposed to an unacceptably high risk requiring immediate action to remove them from service until more information is obtained through public comments. We do not agree. Before posting an NPRM for public comment, we must perform an investigative review of the subject concern or unsafe condition first obtained from operator reports. After gathering this information from operators and the manufacturer, we make a determination on the

associated risk of the unsafe condition and coordinate with the manufacturer on a compliance time and corrective action for all affected airplanes. Airplanes are grounded in rare cases where it is determined that the unsafe condition has an immediate risk to public safety. The unsafe condition in this AD does not meet these criteria.

Additionally, agencies welcome and consider all relevant rulemaking comments received from the public. The purpose of public participation is more to obtain comments from interested parties, not necessarily "experts" in the aviation industry. This is in line with the democratic, legal, and management principles behind good government and effective rulemaking. Further information on these principles can be found on the Internet at http://www.regulations.gov, under "docs/Factsheet_Public_Commnets_Make_a_Difference.pdf." We have made no change to 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 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 this AD.

**Costs of Compliance**

We estimate that this AD affects 79 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 |
|---|---|---|---|---|
| Clean gutter, inspect | 1 work-hour X $85 per hour = $85 | $0 | $85 | $6,715 |
| Install fiberglass reinforcement | 1 work-hour X $85 per hour = $85 | $100 | $185 | $14,615 |

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

**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):

**2013-26-04 The Boeing Company**: Amendment 39-17713; Docket No. FAA-2013-0304; Directorate Identifier 2013-NM-005-AD.

**(a) Effective Date**

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

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 747-400, -400D, and -400F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 25: Equipment/Furnishings.

**(e) Unsafe Condition**

This AD was prompted by a report of water leakage into the main deck cargo wire integration unit (WIU). The water flowed from the main deck floor panels, through disbonded seams in the aft main equipment center (MEC) drip shield gutter, then onto the WIU. We are issuing this AD to prevent water penetration into the MEC, which could result in the loss of flight critical systems.

**(f) Compliance**

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

**(g) Removal/Cleaning/Inspection/Repair if Necessary/Installations**

Within 24 months after the effective date of this AD: Do the actions specified in paragraphs (g)(1) and (g)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012. Accomplishing paragraphs 3.B.1. and 3.B.4. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-25A3613, dated June 22, 2012, is optional.

(1) Clean the aft MEC drip shield gutter, and do a general visual inspection for disbonded seams; repair before further flight if any seam disbonding is found.

(2) Install a fiberglass reinforcement overcoat to the underside of the bonded seams of the aft MEC drip shield gutters.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 (i) 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.

**(i) Related Information**

For more information about this AD, contact Francis Smith, 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) 917-6596; fax: (425) 917-6590; email francis.smith@faa.gov.

**(j) 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 747-25A3613, dated June 22, 2012.

(ii) Reserved.

(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 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.

(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 December 13, 2013.

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

[FR Doc. 2013-30469 Filed 12/27/2013 at 8:45 am; Publication Date: 12/30/2013]