



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-2665; Project Identifier AD-2024-00203-T; Amendment 39-23033; AD 2025-09-12]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This AD was prompted by reports of water leakage from the potable water system due to improperly installed waterline couplings, and water leaking into the electronics equipment (EE) bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. This AD requires an inspection of seat tracks above the EE bays for missing, damaged, or deteriorated sealant, moisture barrier tape, or tape dams, as applicable, and applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

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:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2665; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For Boeing material identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website myboeingfleet.com.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2665.

FOR FURTHER INFORMATION CONTACT: Courtney Tuck, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3986; email: courtney.k.tuck@faa.gov.

SUPPLEMENTARY INFORMATION:**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-14-04, Amendment 39-18585 (81 FR 44499, July 8, 2016) (AD 2016-14-04). AD 2016-14-04 applies to certain The Boeing Company Model 787-8 airplanes. The NPRM published in the *Federal Register* on December 26, 2024 (89 FR 104900). AD 2016-14-04 was prompted by reports of water leakage from the potable

water system due to improperly installed waterline couplings, and water leaking into the EE bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. The NPRM proposing to supersede AD 2016-14-04 was prompted by the determination that the sealant, moisture barrier tape, and tape dam required above the EE bays may not have been installed on production airplanes. In the NPRM, the FAA proposed to retain the actions in AD 2016-14-04, expand the applicability to include additional Model 787-8 airplanes and certain Model 787-9 and 787-10 airplanes, and require an inspection of seat tracks above the EE bays for missing, damaged, or deteriorated sealant, moisture barrier tape, or tape dams, as applicable, and applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Air Line Pilots Association, International, and The Boeing Company, who supported the NPRM without change.

The FAA received additional comments from The Foundation for Aviation Safety, United Airlines, and an individual. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Change NPRM to a Stand-Alone AD Action

United Airlines and an individual requested that the FAA change the proposed AD to a new stand-alone AD that does not supersede AD 2016-14-04. The commenters stated that the actions in the proposed AD are not applicable to AD 2016-14-04. United Airlines further commented that although the proposed AD would require the actions in Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024, the effectivity of that bulletin does not include the same Model 787-8

airplanes as those listed in AD 2016-14-04 and does not impose any requirements for the airplanes in AD 2016-14-04.

The FAA agrees. The airplanes identified in this AD are different than those in AD 2016-14-04, and no new actions are required for airplanes that complied with AD 2016-14-04. Therefore, the FAA has revised this AD to not supersede AD 2016-14-04.

Request for an Explanation of the Cause and Corrective Actions Taken in the Factory

The Foundation for Aviation Safety requested the FAA provide a detailed explanation of the root cause and corrective actions taken in the factory to address the issue.

The FAA provides the following clarification. The root cause was due to the floor panel design missing sealant and moisture barrier tape at certain floor panels and seat tracks, because of the inadvertent omission of sealing instructions from Boeing floor panel drawings in 2018 when build requirements were consolidated into one document as part of a value engineering project. To address these issues, Boeing revised engineering documents, including drawings and instructions, to clearly reinstate the sealing instructions, implemented a design review checklist, and provided additional training to employees to ensure the sealant was properly applied. No change to this AD is necessary as a result of this comment.

Request to Implement Corrective Actions Immediately

The Foundation for Aviation Safety questioned the compliance time for the new proposed actions and requested that the FAA mandate the corrective actions to be done immediately. The Foundation for Aviation Safety stated that the unsafe condition has been known since at least 2016, and that the proposed AD would add 64 more airplanes to the applicability.

The FAA disagrees. Although the unsafe condition has been known since 2016, the omission of sealant in the airplanes added to this AD didn't occur until 2018. The new actions in this AD must be accomplished within 5 years. In developing an appropriate compliance time for this action, the FAA considered the recommendations of the manufacturer, the urgency associated with the subject unsafe condition, and the practical aspect of accomplishing the required actions within a period of time that corresponds to the normal scheduled maintenance for most affected operators. The sealant is one of many layers intended to prevent water ingress into the aft EE bay, with additional layers of protection including visual leak detection above the floor and drip shield protection for critical equipment in the aft EE bay. The FAA further notes that, as the FAA is no longer superseding AD 2016-14-04, this AD now applies to only 47 U.S.-registered airplanes. AD 2016-14-04 applies to 17 of the 64 airplanes identified in the NPRM. The FAA has not changed this AD as a result of this comment.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes and other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024. This material specifies procedures for a detailed inspection of seat tracks located above the aft EE bays for missing, damaged, or deteriorated sealant, moisture barrier tape, or tape dams, as applicable, and applicable on-condition actions. On-condition actions include applying sealant, moisture barrier tape, and tape dams to each affected area.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 47 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of floor seat track	22 work-hours X \$85 per hour = \$1,870	\$0	\$1,870	\$87,890

The FAA estimates the following costs to do any on-condition actions that would be required based on the results of the inspection. The agency has no way of determining the number of aircraft that might need this repair:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Applying sealant, moisture barrier tape, or tape dam	33 work-hours X \$85 per hour = \$2,805	\$350	\$3,155

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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.

The FAA is 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) Will not affect intrastate aviation in Alaska, and
- (3) 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 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:

2025-09-12 The Boeing Company: Amendment 39-23033; Docket No. FAA-2024-2665; Project Identifier AD-2024-00203-T.

(a) Effective Date

This airworthiness directive (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 787-8, 787-9, and 787-10 airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024.

(d) Subject

Air Transport Association (ATA) of America Code 38, water waste; 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of water leakage from the potable water system due to improperly installed waterline couplings, and water leaking into the electronics equipment (EE) bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. A water leak from an improperly installed potable water system coupling, or main cabin water source, if not addressed, could cause the equipment in the EE bays to become wet, resulting in an electrical short and potential loss of system functions essential for safe flight.

(f) Compliance

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

(g) Required Actions

Except as specified by paragraph (h) of this AD, at the applicable times specified in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin B787-81205-SB530085-00, Issue 001, dated March 6, 2024, which is referred to in Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024.

(h) Exceptions to Requirements Bulletin Specifications

Where the Boeing Recommended Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024, refer to the Issue 001 date of the Requirements Bulletin B787-81205-SB530085-00 RB, this AD requires using the effective date of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, AIR-520, Continued Operational Safety Branch, 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 responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, AIR-520, Continued Operational Safety Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(j) Related Information

(1) For more information about this AD, contact Courtney Tuck, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3986; email: courtney.k.tuck@faa.gov.

(2) Material identified in this AD that is not incorporated by reference is available at the address specified in paragraph (k)(3) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Requirements Bulletin B787-81205-SB530085-00 RB, Issue 001, dated March 6, 2024.

(ii) [Reserved]

(3) For the Boeing material identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd.,

MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website myboeingfleet.com.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on April 30, 2025.

Victor Wicklund,
Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.
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