



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2025-1103; Project Identifier AD-2024-00141-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2024-01-01, which applies to certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. AD 2024-01-01 requires repetitive general visual inspections (GVIs) of the area under all lavatory washbasins for evidence of intermittent and active leaks at the faucet control module (FCM) and applicable on-condition actions. The FAA has determined that the affected FCMs must be replaced with an improved design FCM to address the unsafe condition. This proposed AD would continue to require the actions of AD 2024-01-01 and would require replacing the FCM as terminating action for the repetitive GVIs, performing a leak test, installing moisture management devices, and performing applicable on-condition actions. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-1103; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For the Boeing material identified in this proposed 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-2025-1103.

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:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2025-1103; Project Identifier AD-2024-00141-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Courtney Tuck, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3986; email: Courtney.K.Tuck@faa.gov. Any commentary that the FAA

receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2024-01-01, Amendment 39-22652 (89 FR 6422, February 1, 2024) (AD 2024-01-01), for The Boeing Company Model 787-8, 787-9, and 787-10 airplanes with certain line numbers. AD 2024-01-01 was prompted by reports of undetected water leaks from the FCM migrating below the passenger floor in multiple lavatory locations during flight, and into the electronic equipment bay(s). AD 2024-01-01 requires repetitive GVIs of the area under all lavatory washbasins for evidence of intermittent and active leaks at the FCM. If there are leaks, AD 2024-01-01 requires replacing the FCM with a new or serviceable FCM and doing a leak test. The agency issued AD 2024-01-01 to address undetected water leaks, which could damage flight critical equipment.

Investigation identified the o-ring seal at the top of the FCM mixing chamber as the source of the leaking. As a result, Boeing developed an FCM with an improved design that is not susceptible to leaking. The FAA has determined that replacing FCM part number (P/N) AFUT000200A0001 or AFUT000200A0002 with the new FCM P/N AFUT000200A0004 is necessary to address the unsafe condition and would be terminating action for the GVIs required by AD 2024-01-01.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Material Incorporated by Reference under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 002, dated January 31, 2025. This material specifies procedures for a

repetitive general visual inspection of the area under all lavatory washbasins for evidence of intermittent and active leaks at the FCM and applicable on-condition actions. On-condition actions include replacing the affected FCM with new or serviceable FCM at affected lavatory washbasin(s) and performing a leak test. If a leak is found during the leak test, this material specifies completing applicable corrective action, repeating the leak test, and making sure no leak is found.

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024. This material specifies procedures for replacing the FCM, performing a leak test and repairing any leaks, and installing moisture management devices if not previously installed. This material also specifies procedures for reviewing and updating, if necessary, the existing maintenance program documentation to include Maintenance Review Board Report item number 38-025-00. This material specifies that replacement of the FCM terminates the repetitive inspections (which are required by AD 2024-01-01).

This proposed AD would also require Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 001, dated November 1, 2022, which the Director of the Federal Register approved for incorporation by reference as of March 7, 2024 (89 FR 6422, February 1, 2024).

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.

Proposed AD Requirements in this NPRM

This proposed AD would retain the repetitive inspections and all other requirements in AD 2024-01-01. This proposed AD would also require replacing the FCM as specified in the material already described, except for any differences identified

as exceptions in the regulatory text of this proposed AD. The FCM replacement would be terminating action for the repetitive inspections.

For information on the procedures and compliance times, see this material at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-1103.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 155 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
GVI of area under all lavatory washbasins (retained actions from AD 2024-01-01)	2 work-hour X \$85 per hour = \$170 per inspection cycle	\$0	\$170 per inspection cycle	\$26,350 per inspection cycle
Replacement of FCM (new proposed action)	3 work-hours X \$85 per hour = \$255	\$6,021	\$6,276	\$972,780
Install moisture management devices (new proposed action)	79 work-hours X \$85 per hour = \$6,715	\$1,610	\$8,325	\$432,900 (52 airplanes)
Review maintenance program documentation (new proposed action)	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$13,175

*The FAA has received no definitive data on which to base the cost estimate for the FCM replacement parts.

The FAA estimates the following costs to do any replacements that would be required based on the results of the proposed inspection. The agency has no way of determining the number of aircraft that might need these replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement	1 work-hour X \$85 per hour = \$85	\$6,021	\$6,106

The FAA has determined that revising the existing maintenance or inspection program would take an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the average total cost per operator would be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this proposed 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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

- a. Removing Airworthiness Directive (AD) 2024-01-01, Amendment 39-22652 (89 FR 6422, February 1, 2024), and

- b. Adding the following new AD:

The Boeing Company: Docket No. FAA-2025-1103; Project Identifier AD-2024-00141-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2024-01-01, Amendment 39-22652 (89 FR 6422, February 1, 2024) (AD 2024-01-01).

(c) Applicability

This AD applies to The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category, having line numbers 6 through 687 inclusive, 689 through 954 inclusive, 956 through 970 inclusive, 972 through 982 inclusive, 984 through 989 inclusive, 991 through 996 inclusive, 999, 1001 through 1008 inclusive, 1012, 1013, 1016 through 1019 inclusive, 1021, 1022, 1024 through 1026 inclusive, 1029 through 1032 inclusive, 1038, 1040, 1041, 1044, 1045, 1047, 1048, 1054 through 1062 inclusive, 1071, 1072, 1074, 1075, 1082, 1085, 1087, 1091, 1094, 1095, 1098, 1099, 1103, 1109, 1112 through 1114 inclusive, 1117, 1118, 1121, 1122, 1125, 1126, 1128 through 1134 inclusive, 1136 through 1145 inclusive, 1147, 1148, 1151, 1161, and 1167.

(d) Subject

Air Transport Association (ATA) of America Code 38, Water/waste.

(e) Unsafe Condition

This AD was prompted by reports of undetected water leaks from the faucet control module migrating below the passenger floor in multiple lavatory locations during flight, and into the electronic equipment bay(s). The FAA is issuing this AD to address undetected water leaks, which could damage flight critical equipment. The unsafe condition, if not addressed, could result in loss of multiple line replaceable units and subsequent loss of continued safe flight and landing.

(f) Compliance

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

(g) Retained Inspection, With Revised Service Information

This paragraph restates the requirements of paragraph (g) of AD 2024-01-01, with revised service information. 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-SB250290-00 RB, Issue 001, dated November 1, 2022, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 001, dated November 1, 2022, or Issue 002, dated January 31, 2025. As of the effective date of this AD, only use Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 002, dated January 31, 2025, for the actions required by this paragraph.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by paragraph (g) of this AD can be found in Boeing Alert Service Bulletin B787-81205-SB250290-00, Issue 002, dated January 31, 2025, which is referred to in Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 002, dated January 31, 2025.

(h) Retained Exception to Requirements Bulletin B787-81205-SB250290-00 RB, with No change

This paragraph restates the exception in paragraph (h) of AD 2024-01-01, with no change. Where the Compliance Time column of the table in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 001, dated November 1, 2022, uses the phrase “the Issue 001 date of the Requirements Bulletin B787-81205-SB250290-00 RB,” this AD requires using March 7, 2024 (the effective date of AD 2024-01-01).

(i) New Required Actions

Except as specified by paragraph (j) of this AD: At the applicable times specified in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024.

Note 1 to paragraph (i): Guidance for accomplishing the actions required by paragraph (i) of this AD can be found in Boeing Alert Service Bulletin B787-81205-SB250291-00, Issue 002, dated November 22, 2024, which is referred to in Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024.

(j) Exception to Requirements Bulletin B787-81205-SB250291-00 RB

(1) Where the Boeing Recommended Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024, refer to the Issue 001 date of Requirements Bulletin B787-81205-SB250291-00 RB, this AD requires using the effective date of this AD.

(2) For Group 4, Configuration 3 airplanes identified in Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024: The actions in Table 1 and Table 2 of the Accomplishment Instructions in Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024, are not required by this AD.

(k) Terminating Action for Repetitive Inspections

Replacing faucet control module (FCM) part number (P/N) AFUT000200A0001 or AFUT000200A0002 with FCM P/N AFUT000200A0004 terminates the repetitive inspections required by paragraph (g) of this AD.

(l) Credit for Previous Actions

For Group 1, 2, 3, 5, 6, and 7 airplanes and Group 4, Configuration 1 and 2 airplanes, as identified in Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024: This paragraph provides credit for the actions required by paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 001, dated August 30, 2023.

(m) 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 Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (n)(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.

(4) AMOCs approved for AD 2024-01-01 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(n) 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 (o)(5) of this AD.

(o) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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.

(3) The following material was approved for IBR on [DATE 35 DAYS AFTER PUBLICATION OF THE FINAL RULE].

(i) Boeing Alert Requirements Bulletin B787-81205-SB250291-00 RB, Issue 002, dated November 22, 2024.

(ii) Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 002, dated January 31, 2025.

(4) The following material was approved for IBR on March 7, 2024 (89 FR 6422, February 1, 2024).

(i) Boeing Alert Requirements Bulletin B787-81205-SB250290-00 RB, Issue 001, dated November 1, 2022.

(ii) [Reserved]

(5) 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.

(6) 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.

(7) 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 June 11, 2025.

Peter A. White,
Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.
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