



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2025-0338; Project Identifier AD-2024-00641-T; Amendment 39-23188; AD 2025-23-05]

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 multiple nonconformances, including excessive gaps and pull-up, in the forward pressure bulkhead. This AD requires an internal and external detailed inspection (DET) of the forward pressure bulkhead (FPB) for any damage and performing 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-2025-0338; 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](http://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](http://regulations.gov) under Docket No. FAA-2025-0338.

**FOR FURTHER INFORMATION CONTACT:** Joseph Hodgins, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3962; email: [joseph.j.hodgin@faa.gov](mailto:joseph.j.hodgin@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. The NPRM was published in the *Federal Register* on March 14, 2025 (90 FR 12115). The NPRM was prompted by reports of multiple nonconformances, including excessive gaps and pull-up, in the forward pressure bulkhead. In the NPRM, the FAA proposed to require an internal and external DET of the FPB for any damage and performing applicable on-condition actions. The FAA is issuing this AD to address fatigue cracks that can develop prior to baseline structural inspection thresholds. The unsafe condition, if not addressed, could result in undetected fatigue

cracks that can grow to weaken the primary structure where it cannot sustain limit load, which could adversely affect the structural integrity of the airplane.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received comments from Boeing, ProTech Aero Services Limited (ProTech), two individuals, and two anonymous commenters who supported the NPRM without change.

The FAA also received comments from Qantas Airlines (Qantas) and United Airlines (UAL), who supported the NPRM but also requested changes as discussed below.

The FAA received additional comments from three other commenters, including the Foundation for Aviation Safety, an individual, and an anonymous commenter. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request to Correct a Typographical Error**

UAL and Qantas requested that the FAA revise paragraph (d) of the proposed AD to read "Air Transport Association (ATA) of America Code 53, Fuselage." Qantas commented that ATA 41 is a minor error in paragraph (d) in the proposed AD. Both commenters stated that the ATA code should be 53.

The FAA agrees to correct the typographical error. The FAA has revised paragraph (d) of this AD accordingly.

### **Request to Revise Work Instructions**

UAL requested that the FAA revise the Work Instructions of Boeing Alert Service Bulletin B787-81205-SB530093-00, Issue 001, dated October 5, 2024, to remove step (b) of Part 1 from the service bulletin or make it optional. UAL commented that step (b) of

Part 1 instructs to remove the insulation blanket from the nose radome area and stated that no insulation blanket is present per Boeing Illustrated Parts Data (IPD) 53-13-01-01.

The FAA disagrees with UAL's request. Step (b) of Part 1 of Boeing Alert Service Bulletin B787-81205-SB530093-00, Issue 001, dated October 5, 2024, is not a Required for Compliance (RC) step, therefore it is optional to perform. The FAA has not changed this AD in this regard.

#### **Request for Reporting to the FAA**

An anonymous commenter requested that all inspection reports be submitted to the FAA in anonymized form to facilitate broader data collection and trend analysis.

The FAA disagrees with the commenter's request. The actions required by this AD address the identified unsafe condition. The FAA notes that if any cracking is found as the result of any inspections, then it must be reported in accordance with 14 CFR 21.3. The FAA has not changed this AD in this regard.

#### **Request to Expand Inspections and Mandate Re-Inspection**

An anonymous commenter requested that the FAA expand the inspections to include adjacent fuselage structures potentially affected by assembly errors to prevent undetected cascading structural failures. The commenter also requested that the FAA mandate periodic re-inspection schedules beyond the initial compliance for affected aircraft.

The FAA disagrees with the commenter's request. The actions required by this AD address the identified unsafe condition. The FAA notes that for any repaired area, post-repair inspections are required by maintenance and operational rules; therefore, it is not necessary to mandate them in this AD. However, if additional data are presented that would justify expanding the inspection area or mandating repetitive inspections, the FAA might consider further rulemaking on this issue. The FAA has not revised this AD in this regard.

### **Request to Address Costs of Compliance**

An anonymous commenter requested that, given that on-condition repairs may not be fully covered under warranty, the FAA provide more detailed cost ranges to better inform small operators and promote economic equity.

The FAA acknowledges the commenter's concern. For this AD, the repair costs will vary depending on what damage is found, so the FAA has no way of estimating them. Although this AD imposes certain operational costs (inspections) on operators, all operators have an obligation to ensure that their airplanes are in airworthy condition. The FAA has not changed the AD in this regard.

### **Feedback on Training, Environmental Impact, Supply Chain, Worker Safety, Diversity, and New Technology**

An anonymous commenter provided feedback on a range of topics, including workforce training, environmental impact, supply chain oversight, worker safety reporting, diversity and equity considerations, and new technologies.

The FAA acknowledges the commenter's feedback; however, these matters are outside the scope of this AD, and the commenter did not request any specific revisions to the proposed AD. The FAA has not changed this AD in this regard.

### **Request to Address Concerns with Forward Pressure Bulkheads**

An individual expressed concern that the proposed AD is inadequate and does not adequately address the underlying issues with non-compliant forward pressure bulkheads. The commenter stated there are some problems with the forward pressure bulkhead and commented on Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024. The commenter urged that the FAA further investigate pressure bulkhead safety risks for the safety of the public.

The FAA acknowledges the commenter's concern. The FAA investigated and verified with Boeing that the concerns regarding problems with forward pressure bulkheads were appropriately addressed in the analysis conducted during the safety

investigation. The FAA has determined that an unsafe condition exists related to the forward pressure bulkhead, as specified in paragraph (e) of this AD, and has worked with Boeing to ensure all known non-conformances were considered during the evaluation of this safety issue.

### **Comments on Mandated Service Information**

The same individual also provided comments on Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024, that relate to accomplishing the required actions. The following specifies those comments that implicate a request for changes, and the FAA's responses.

The commenter stated that the detailed inspection is inadequate because sealant covers the inspection zone and stated that a non-destructive inspection (NDI) for cracking should instead be done.

The FAA notes that only the fastener is encased in sealant and that it is not necessary to see the fastener to do the detailed inspection, which looks for cracks that will extend beyond the fastener sealant and cracks near the chord radius. An NDI is not required to detect such cracking. The detailed inspections required by this AD detect any early cracking resulting from identified non-conformances. However, if additional data are presented that would justify requiring NDIs in the subject area, the FAA might consider further rulemaking.

The commenter noted that for torque values, the structural repair manual (SRM) should be followed on interference fit.

The FAA notes that the commenter referred to "torque values" in a standard note in the General Information paragraph of the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024. The removal and installation of fasteners common to the forward pressure bulkhead is not an action specified in the requirements bulletin. If, however, any damage

is detected during an inspection specified in Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024, the operator is instructed to contact Boeing for repair instructions and do the repair. The repair instructions would include fastener installation requirements such as torquing values and appropriate hole fit requirements.

The commenter suggested “a remove and replace” in a standard note in the General Information paragraph of the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024.

The FAA notes that this is a standard note for removing parts for access. No removal of structure is necessary to perform the required detailed inspection. If, however, any damage is detected during an inspection specified in Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024, the operator is instructed to contact Boeing for repair instructions and do the repair. The repair instructions would include any applicable removal and replacement requirements.

The FAA has not changed this AD in regard to these comments.

### **Support for Previous Commenter**

The Foundation for Aviation Safety expressed support for the points made by the individual who requested changes to the mandated service instructions. They also expressed concern for the manufacturing of Boeing airplanes, and the actions government agencies are taking to mitigate what it described as chronic manufacturing problems.

The FAA addressed the referenced individual’s comments above. Otherwise, the Foundation for Aviation Safety did not request any change to the AD.

### **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 any 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-SB530093-00 RB, Issue 001, dated October 5, 2024. This material specifies procedures for an internal DET of the FPB attach angle and splice chords as well as an external DET of the FPB dome web and Y-chord for any damage and applicable on-condition actions including repair. 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 135 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspections	10 work-hours X \$85 per hour = \$850	\$0	\$850	\$114,750

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this AD.

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:

**2025-23-05 The Boeing Company:** Amendment 39-23188; Docket

No. FAA-2025-0338; Project Identifier AD-2024-00641-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-SB530093-00 RB, Issue 001, dated October 5, 2024.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

#### **(e) Unsafe Condition**

This AD was prompted by reports of multiple nonconformances, including excessive gaps and pull-up, in the forward pressure bulkhead. The FAA is issuing this AD to address fatigue cracks that can develop prior to baseline structural inspection thresholds. The unsafe condition, if not addressed, could result in undetected fatigue

cracks that can grow to weaken the primary structure where it cannot sustain limit load, which could adversely affect the structural integrity of the airplane.

**(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-SB530093-00 RB, Issue 001, dated October 5, 2024, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 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-SB530093-00, Issue 001, dated October 5, 2024, which is referred to in Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024.

**(h) Exceptions to Requirements Bulletin Specifications**

(1) Where the Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024, refer to the Issue 001 date of Requirements Bulletin B787-81205-SB530093-00 RB, this AD requires using the effective date of this AD.

(2) Where Boeing Alert Requirements Bulletin B787-81205-SB530093-00 RB, Issue 001, dated October 5, 2024, specifies contacting Boeing for repair instructions, this AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (i) 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 Joseph Hodgin, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3962; email: joseph.j.hodgin@faa.gov.

(2) Material identified in this AD that is not incorporated by reference is available at the address specified in paragraph (k)(3) 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-SB530093-00 RB, Issue 001, dated October 5, 2024.

(ii) [Reserved]

(3) 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](http://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](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on December 5, 2025.

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

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