



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2025-0919; Project Identifier AD-2024-00648-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)

2013-08-08, which applies to certain The Boeing Company Model 737-600 series airplanes. AD 2013-08-08 requires repetitive inspections for cracking of the fuselage skin at certain locations at chem-mill steps, and repair if necessary. AD 2013-08-08 also provides optional terminating action for the repetitive inspections. Since the FAA issued AD 2013-08-08, Boeing has reported that the compliance times are not adequate because new fleet data indicates that crack growth is faster and more distributed between tear straps, resulting in longer cracks than originally observed in the test data that prompted AD 2013-08-08. This proposed AD would continue to require the actions in AD 2013-08-08, at reduced initial compliance times and repetitive intervals for the inspections, and mandate post-modification inspections if the optional modification is accomplished. 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-2025-0919; 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 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-2025-0919.

FOR FURTHER INFORMATION CONTACT: Luis Cortez-Muniz, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3958; email: Luis.A.Cortez-Muniz@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-2025-0919; Project Identifier AD-2024-00648-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 Luis Cortez-Muniz, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3958; email: Luis.A.Cortez-Muniz@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 2013-08-08, Amendment 39-17425 (78 FR 23465, April 19, 2013) (AD 2013-08-08), for certain The Boeing Company Model 737-600 series airplanes. AD 2013-08-08 was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. AD 2013-08-08 requires repetitive inspections for cracking of the fuselage skin at certain locations at chem-mill steps, and repair if necessary. AD 2013-08-08 also provides an optional terminating action for the repetitive inspections. The FAA issued AD 2013-08-08 to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

Actions Since AD 2013-08-08 Was Issued

Since the FAA issued AD 2013-08-08, the FAA received reports of suspected fuselage fatigue cracks found adjacent to non-chem-mill skin bays on Model 737-700 airplanes with between 40,000 and 43,000 total flight cycles – earlier than the inspection thresholds specified by AD 2013-08-08. Boeing has reported that the inspection compliance times and repetitive intervals in Boeing Service Bulletin 737-52-1309, dated October 20, 2011, are not adequate. The new fleet data indicates that crack growth is faster, and there are more cracks distributed along the chem-mill steps between the tear straps; as a result, the cracks can initiate from multiple sites along the chem-mill step and link up, causing a faster crack propagation than initially observed in the test data that prompted Boeing Service Bulletin 737-52-1309, dated October 20, 2011. As a result of these findings, the FAA has determined that earlier inspection thresholds for the chem-mill areas, as well as post modification inspections (for airplanes on which the terminating action is accomplished), are now necessary to address the unsafe condition.

The FAA is considering similar rulemaking for Model 737-700, -700C, -800, and -900 series airplanes.

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 Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024. This material specifies procedures for inspecting for cracking in the fuselage skin at certain locations at the chem-mill steps by doing repetitive external detailed inspections and either (1) external medium frequency eddy current (MFEC), magneto optic imager (MOI), or C-scan inspections or (2) external ultrasonic phased array (UTPA) inspections, and applicable on-condition actions. On-condition actions include crack repair. This material also specifies an optional modification that eliminates the need for repetitive inspections, provided post modification inspections are also performed for airplanes with the optional modification installed.

This proposed AD would also require Boeing Service Bulletin 737-53-1309, dated October 20, 2011, which the Director of the Federal Register approved for incorporation by reference as of May 24, 2013 (78 FR 23465, April 19, 2013).

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

Although this proposed AD does not explicitly restate the requirements of AD 2013-08-08, this proposed AD would retain all of the requirements of AD 2013-08-08.

Those requirements are referenced in the material identified previously, which, in turn, is referenced in paragraph (g) of this proposed AD.

This proposed AD would reduce the initial compliance times and repetitive intervals for the inspections. This proposed AD would also mandate the optional post-modification inspections (if the operator chooses to perform the optional modification). This proposed AD would require accomplishing the actions specified in the material already described, except for any differences identified as exceptions in the regulatory text of this proposed AD.

For information on the procedures and compliance times, see this material at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0919.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 6 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 |
|--|--|------------|------------------------------|-------------------------------|
| Inspection of chem-mill step locations | 39 work-hours X \$85 per hour = \$3,315 per inspection cycle | \$0 | \$3,315 per inspection cycle | \$19,890 per inspection cycle |

Estimated costs for optional actions

| Action | Labor cost | Parts cost | Cost per product |
|-------------------------------|--|------------|------------------|
| Modification | 855 work-hours X \$85 per hour = \$6,840 | \$Minimal | \$6,840 |
| Post-modification inspections | 92 work-hours X \$85 per hour = \$7,820 | \$0 | \$7,820 |

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

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) 2013-08-08, Amendment 39-17425 (78 FR 23465, April 19, 2013), and

b. Adding the following new AD:

The Boeing Company: Docket No. FAA-2025-0919; Project Identifier

AD-2024-00648-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 2013-08-08, Amendment 39-17425 (78 FR 23465, April 19, 2013) (AD 2013-08-08).

(c) Applicability

(1) This AD applies to The Boeing Company Model 737-600 series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024.

(2) Installation of Supplemental Type Certificate (STC) ST00830SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes

on which STC ST00830SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels, and by the need for reduced inspection compliance times. The FAA is issuing this AD to detect and correct fatigue cracking of the fuselage skin at the specified chem-mill step locations. The unsafe condition, if not addressed, could result in rapid decompression of the airplane.

(f) Compliance

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

(g) Inspections

Except as required by paragraph (j) of this AD: At the applicable time specified in Table 1 of paragraph 1.E., Compliance, of Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024, do an external detailed inspection and an external nondestructive inspection (a medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspection) for cracking in the fuselage skin along the chem-mill steps at the locations specified in, and in accordance with, Part 2 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024. Repeat the inspections thereafter at the applicable times specified in Table 1 of paragraph 1.E., Compliance, of Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024.

(h) Repair

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(i) Optional Terminating Modification

Accomplishment of the actions specified in paragraphs (i)(1) through (4) of this AD terminates the repetitive inspections required by paragraph (g) of this AD for the modified area only.

(1) Do an external detailed inspection and an external nondestructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking of the area to be modified, and if no cracking is found, do the modification, including doing a high frequency eddy current inspection of all existing holes for cracking, in accordance with paragraph 3.B.3., “Part 3: Modification” of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1309, dated October 20, 2011, or Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024. As of the effective date of this AD, only Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024, may be used for performing the actions in this paragraph.

(2) Repair, before further flight, any crack found during any inspection specified in paragraph (i)(1) of this AD, using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(3) Accomplish the repetitive post-modification inspections specified in Tables 2 and 3 of paragraph 1.E., “Compliance,” and in Part 5 of the Accomplishment Instructions, of Boeing Service Bulletin 737-53-1309, dated October 20, 2011, or Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024. The inspections must be performed and repeated at the applicable times specified in Tables 2 and 3 of paragraph 1.E., “Compliance,” of Boeing Service Bulletin 737-53-1309, dated

October 20, 2011, or Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024. As of the effective date of this AD, only Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024, may be used for performing the actions in this paragraph.

(4) Repair, before further flight, any crack found during any inspection specified in paragraph (i)(3) of this AD, using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(j) Exception to Service Information Specifications

Where the Compliance Time column of Tables 1, 2, and 3 in the “Compliance” paragraph of Boeing Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024, refers to the Revision 1 date of Boeing Special Attention Service Bulletin 737-53-1309, this AD requires using the effective date of this AD.

(k) 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 (l) 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 2013-08-08 are not approved as AMOCs for the corresponding provisions of this AD.

(l) Related Information

For more information about this AD, contact Luis Cortez-Muniz, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3958; email: Luis.A.Cortez-Muniz@faa.gov.

(m) 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 Special Attention Service Bulletin 737-53-1309, Revision 1, dated May 22, 2024.

(ii) [Reserved]

(4) The following material was approved for IBR on May 24, 2013 (78 FR 23465, April 19, 2013).

(i) Boeing Service Bulletin 737-53-1309, dated October 20, 2011.

(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 May 23, 2025.

Lona C. Saccomando,
Acting Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.
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