



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0689; Product Identifier 2020-NM-060-AD; Amendment 39-21359; AD 2020-26-04]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2013-18-08, which applied to certain The Boeing Company Model 737-200, -200C, -300, -400, and -500 series airplanes. AD 2013-18-08 required repetitive inspections for cracking of certain skin panels of the fuselage, and of the fuselage skin along certain chem-milled lines, and corrective actions if necessary. AD 2013-18-08 also included a terminating action for the repetitive inspections of certain areas. This AD retains those actions, expands the nondestructive inspection (NDI) area, and adds airplanes to the applicability. This AD was prompted by reports of additional cracking in certain horizontal and vertical chem-milled step locations outside of those identified in AD 2013-18-08. 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: For service information identified in this final rule, 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; internet <https://www.myboeingfleet.com>. You may view this service information 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 on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0689.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0689; 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.

FOR FURTHER INFORMATION CONTACT: James Guo, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: james.guo@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2013-18-08, Amendment 39-17581 (78 FR 60660, October 2, 2013) (AD 2013-18-08). AD 2013-18-08 applied to certain The Boeing Company Model 737-200, -200C, -300, -400, and -500 series airplanes. The NPRM published in the *Federal*

Register on August 17, 2020 (85 FR 49978). The NPRM was prompted by reports of additional cracking in certain horizontal and vertical chem-milled step locations outside of those identified in AD 2013-18-08. The NPRM proposed to continue to require repetitive inspections for cracking of the fuselage skin along certain chem-milled lines and applicable on-condition actions, and to expand the NDI area. The NPRM also proposed to continue to provide terminating action for repetitive inspections of certain modified or repaired areas. The NPRM also proposed to add airplanes to the applicability. The FAA is issuing this AD to address fatigue cracking of the skin panels, which could result in sudden fracture and failure of the skin panels of the fuselage, and consequent rapid decompression of the airplane.

Comments

The FAA gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment. An individual had no objection to the NPRM.

Effect of Winglets on Accomplishment of the Proposed Actions

Aviation Partners Boeing stated that accomplishing Supplemental Type Certificate (STC) ST01219SE does not affect compliance with the proposed actions.

The FAA agrees with the commenter. Paragraph (c) of the proposed AD has been redesignated as paragraph (c)(1) of this AD, and paragraph (c)(2) has been added to this AD to state that installation of STC ST01219SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01219SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirement of 14 CFR 39.17.

Request to Revise Certain Language in the Preamble

Boeing asked that the FAA change the language under the section titled “Actions Since AD 2013-18-08 was Issued.” Boeing asked that the FAA refer to the “NDI inspection” instead of the “repetitive inspection.”

Boeing also asked that the FAA change the language under the section titled “Proposed AD Requirements.” Boeing asked that the FAA refer to the expanded area for the existing NDI inspection instead of referring to the expanded area for the existing inspection.

Boeing requested these changes because Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, expands only the initial and repetitive NDI areas and not the detailed visual inspection area.

The FAA acknowledges that the expanded inspections are only to the NDI area. Those sections of the preamble do not reappear in the final rule; however, the FAA clarified that the NDI area is expanded in the Summary and Discussion sections.

Conclusion

The FAA 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, and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020. This service information describes procedures for repetitive detailed and non-destructive tests (NDTs) (including external medium frequency eddy current (MFEC), external magneto optical imaging (MOI), external c-scan, external sliding probe, external high frequency eddy current (HFEC), external low frequency eddy current (LFEC), internal ultrasonic phased array (UTPA), or internal ultrasonic); inspections for cracking of the fuselage skin along all horizontal and vertical chem-milled locations with a history of cracking between stations (STAs) 259.5 and 1016; and applicable on-condition actions. On-condition actions include repair; LFEC inspections of certain repairs for cracking; detailed inspections of certain repairs for cracking and loose, missing, or damaged fasteners; replacement of loose, missing, or damaged fasteners; and preventative modifications. This service information 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 141 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product
Inspections	Up to 165 work-hours X \$85 per hour = Up to \$14,025 per inspection cycle	\$0	Up to \$1,977,525 per inspection cycle

The FAA estimates the following costs to do any necessary corrective actions required based on the results of the inspections. The FAA has no way of determining the number of aircraft that might need these corrective actions:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 185 work-hours X \$85 per hour = Up to \$15,725	\$*	Up to \$15,725

*The FAA has received no definitive data that enables providing parts costs 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.

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 has determined that 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.

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:

a. Removing Airworthiness Directive (AD) 2013-18-08, Amendment 39-17581 (78 FR 60660, October 2, 2013), and

b. Adding the following new AD:

2020-26-04 The Boeing Company: Amendment 39-21359; Docket No. FAA-2020-0689; Product Identifier 2020-NM-060-AD.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2013-18-08, Amendment 39-17581 (78 FR 60660, October 2, 2013) (AD 2013-18-08).

(c) Applicability

(1) This AD applies to The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes

on which STC ST01219SE 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 additional cracking in the horizontal and vertical chem-milled step locations outside of those identified in AD 2013-18-08. The FAA is issuing this AD to address fatigue cracking of the skin panels, which could result in sudden fracture and failure of the skin panels of the fuselage, and consequent rapid decompression of the airplane.

(f) Compliance

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

(g) Required Actions for Group 1 through 25 Airplanes

For airplanes identified as Group 1 through 25 in Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, except as specified in paragraph (h) of this AD: At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020. Actions identified as terminating action in Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, terminate the applicable required actions of this AD, provided the terminating action is done in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020.

(h) Exceptions to Service Information Specifications

(1) Where Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, specifies contacting Boeing for repair instructions, this AD requires doing the repair before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Required Actions for Group 26 Airplanes

For airplanes identified as Group 26 in Alert Service Bulletin 737-53A1346, dated March 27, 2020: Within 120 days after the effective date of this AD, inspect the fuselage skin along certain chem-milled lines for cracks, using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO 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 local Flight Standards District 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 (k) of this AD. Information may be emailed to:

9-ANM-LAACO-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, 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, Los Angeles ACO 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 previously for AD 2013-18-08 are approved as AMOCs for the corresponding provisions of Boeing Alert Service Bulletin 737-53A1346, dated March 27, 2020, which are required by paragraph (g) of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(5)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

For more information about this AD, contact James Guo, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: james.guo@faa.gov.

(I) 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 737-53A1346, dated March 27, 2020.

(ii) [Reserved]

(3) For service information 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; internet <https://www.myboeingfleet.com>.

(4) You may view this service information 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 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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 7, 2020.

Ross Landes, Deputy Director for Regulatory Operations,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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