[Federal Register, Volume 89 Number 22 (Thursday, February 1, 2024)]
[Rules and Regulations]
[Pages 6413-6416]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2024-01968]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2023–1041; Project Identifier AD–2022–01223–T; Amendment 39–22657; AD 2024–01–06]

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 737–600, 737–700, and 737–800 series airplanes. This AD was prompted by an evaluation by the design approval holder (DAH) indicating the fuselage skin repairs at the double row of fasteners centered on certain stringers have inadequate inspection requirements for continuing airworthiness following repair accomplishment. This AD is intended to complete certain programs to support the airplane reaching its limit of validity (LOV). This AD requires repetitive inspections for cracks of skin repairs at Stringer S–17, and corrective actions if necessary. The FAA is issuing this AD to address the unsafe condition on these products.

DATES:

This AD is effective March 7, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of March 7, 2024.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2023–1041; 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 service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110–SK57, Seal Beach, CA 90740–5600; telephone 562–797–1717; website *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 at *regulations.gov* under Docket No. FAA–2023–1041.

FOR FURTHER INFORMATION CONTACT:

Bill Ashforth, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 206–231–3520; email *Bill.Ashforth@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 (Boeing) Model 737–600, 737–700, and 737–800 series airplanes. The NPRM was published in the **Federal Register** on May 25, 2023 (88 FR 33849). The NPRM was prompted by an evaluation by the DAH indicating the fuselage skin repairs at the double row of fasteners centered on certain stringers have inadequate inspection requirements for continuing airworthiness following repair accomplishment, which could result in fatigue cracking of the repair going undetected.

In the NPRM, the FAA proposed to require repetitive inspections for cracking of the skin repairs at S–17, and corrective actions if necessary. The FAA is issuing this AD to address this fatigue cracking, which, if not addressed, could grow to a critical length and result in rapid decompression and loss of the airplane's structural integrity.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from the Air Line Pilots Association, International (ALPA) who supported the NPRM without change.

The FAA also received comments from Aviation Partners Boeing (APB), Boeing, Southwest Airlines (Southwest), and SunExpress Airline (SunExpress).

Compliance With AMOC Procedures

APB determined that the incorporation of supplemental type certificate (STC) ST00830SE for installation of split scimitar winglets affects compliance with the mandated actions in the proposed rule, but the extent of the impact to compliance is not fully known at this time. APB noted that paragraph (h) of the proposed AD would replace the provisions in Boeing Service Bulletin 737–53A1217 R1 that specify contacting Boeing for an alternative method of compliance (AMOC) for alternative inspections and corrective actions, and instead would require using a method approved in accordance with paragraph (i) of the proposed AD. APB stated that for affected airplanes with these winglets, approval of any alternative inspections and corrective actions for Zone 3 and Zone 4 repairs must be obtained from the Manager, AIR–520 Continued Operational Safety Branch, FAA, through the means described in paragraph (i)(1) of the proposed AD. APB asserted that Boeing does not have delegation to approve repairs in areas affected by the configuration of STC ST00830SE and cannot use ODA approval as specified in paragraph (i)(3) of the proposed AD.

The FAA acknowledges APB's comment. Paragraph (h)(1) of this AD states that AMOC approval be obtained using a method approved in accordance with the procedures specified in “paragraph (i)” of this AD, and does not limit approvals to the provisions of paragraph (i)(1) or (3) of this AD. Therefore, no change to this AD is necessary.

Request To Correct Service Bulletin Reference

Boeing reported that the Background section of the NPRM incorrectly identified the original service information as Boeing Service Bulletin “737–53A1217,” but that document was not an alert service bulletin and should have been identified as Service Bulletin “737–53–1217.”

The FAA agrees; no change to the final rule is necessary because that reference is not used.

Request To Specify Service Bulletin Revision Level

The NPRM's Background section explained that certain existing post-repair inspections are inadequate to address the unsafe condition, and that the actions in paragraph (g) of the proposed AD would apply only to airplanes on which a repair has been done as specified in “Boeing Alert Service Bulletin 737–53A1217.” Boeing requested that the statement be clarified by adding the revision level and date of the service bulletin. Boeing further stated that Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, was issued to add the post-repair inspections to airplanes on which a repair has been done.

The FAA disagrees. In this context, the revision level and date of the service bulletin were intentionally omitted so the Background section of the NPRM would refer to any repair–including a repair done using a method other than the service bulletin (at any revision level). No change is necessary to this final rule.

Request To Revise Unsafe Condition

Boeing requested changes to paragraph (e) of the proposed AD, which implied the unsafe condition is the potential for cracking. Boeing stated that the proposed AD would require only post-repair

inspections, and asserted that the unsafe condition is actually the lack of post-repair inspections because it could result in undetected post-repair fatigue cracks.

The FAA agrees and has incorporated the relevant changes.

Request To Revise Compliance Time

Southwest and SunExpress stated that Boeing Alert Service Bulletin 737–53A1217 provides no grace period for airplanes that have exceeded the threshold, and requested that the proposed AD be revised to provide a grace period or optional threshold value.

The FAA notes that paragraph (g) of this AD mandates only Tables 3 through 6 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022. For those actions, the service bulletin specifies a compliance time of 50,000 total flight cycles, with a grace period of 4,000 flight cycles after the repair. Therefore, no change is necessary to the AD.

Request To Clarify Configuration Description

Southwest requested clarification of the affected airplanes and corresponding requirements for Tables 1 through 3 of Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022. Southwest noted that paragraphs 1.A.1. and 1.D. define Groups 1 through 3, Configuration 3, as "airplanes that have installed a repair," but tables 1 through 3 of paragraph 1.E list conditions for airplanes that both have and have not accomplished a repair.

The FAA provides the following clarification. The tables apply to any airplanes that have performed a repair, whether the repair was done in accordance with "SB 737–53–1217 Original Issue" or in accordance with some other method. So the condition "Airplanes that have not accomplished a repair in accordance with `SB 737–53–1217 Original Issue' applies to airplanes that have been repaired using some method other than `SB 737–53–1217 Original Issue.' " Groups 1 through 3, Configuration 3, include any airplane on which a repair has been accomplished in one of the zones specified in the service information. No changes to this AD are necessary as a result of this comment.

Request To Use BMS 3–35 or BMS 3–23 Compound

Southwest noted that Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, specifies the use of BMS 3–23 corrosion-inhibiting compound (CIC) for repairs. Southwest requested that the proposed AD be revised to allow the use of BMS 3–35 CIC due to the faster drying time compared to BMS 3–23 CIC. Southwest stated that Boeing Corrosion Prevention Manual (CPM) 20–60–00 and Boeing Service Request (SR) SWA–SWA–10–1232–02B approve BMS 3–35 for use on all Boeing commercial airplanes including those no longer in production.

The FAA agrees that either BMS 3–35 or BMS 3–23 CIC is acceptable because both provide an adequate level of safety. Paragraph (h)(2) of this AD has been added to allow use of either CIC.

Conclusion

The FAA reviewed the relevant data, considered the received comments, and determined that air safety requires adopting this AD as proposed, with limited changes as previously stated. 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.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022. This service information specifies procedures for, among other actions, repetitive internal and external detailed inspections, low frequency eddy current (LFEC) inspections, and medium frequency eddy current (MFEC) inspections for cracks of the skin repair of S–17, station (STA) 360 to STA 380, and STA 888 to STA 907, left and right sides of the airplane. Corrective actions include repair. 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 **ADDRESSES** .

Costs of Compliance

The FAA estimates that this AD affects 106 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
External Post Repair Inspection	56 work-hours × $85 per hour = $4,760 per inspection cycle	$0	$4,760 per inspection cycle	$504,560 per inspection cycle.
Internal Post Repair Inspections	52 work-hours × $85 per hour = $4,420 per inspection cycle	0	$4,420 per inspection cycle	$468,520 per inspection cycle.

The FAA has received no definitive data on which to base the cost estimates for the repairs 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

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:

2024–01–06 The Boeing Company: Amendment 39–22657; Docket No. FAA–2023–1041; Project Identifier AD–2022–01223–T.

(a) Effective Date

This airworthiness directive (AD) is effective March 7, 2024.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737–600, 737–700, and 737–800 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder (DAH) indicating the fuselage skin repairs at the double row of fasteners centered on certain stringers have inadequate inspection requirements for continuing airworthiness following repair accomplishment, which could result in fatigue cracking of the repair going undetected. The FAA is issuing this AD to address the inadequacy of post-repair inspection requirements at certain repair fastener locations centered on stringer S–17L and S–17R, at station (STA) 360 to STA 380 and at STA 888 to STA 907. Such inspection inadequacy could result in post-repair fatigue cracks going undetected. Fatigue cracking, if not addressed, could grow to a critical length, which could result in rapid decompression and loss of 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 in paragraph (h) of this AD: For Group 1 through 3, Configuration 3 airplanes as identified in Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, at the applicable times specified in Tables 3 through 6 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022.

(h) Exceptions to Service Information Specifications

(1) Where Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, specifies contacting Boeing for repair instructions or for alternative inspections: This AD requires doing the repair, or doing the alternative inspections and applicable on-condition actions, using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(2) Where Boeing Alert Service Bulletin 737–53A1217, Revision 1, dated September 8, 2022, specifies using corrosion inhibiting compound (CIC) compound BMS 3–23, this AD also allows use of CIC compound BMS 3–35.

(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, AIR–520 Continued Operational Safety Branch, FAA, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: *9-ANM-Seattle-ACO-AMOC-Requests@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) Except as specified by paragraph (h) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(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.

(j) Related Information

For more information about this AD, contact Bill Ashforth, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 206–231–3520; email *Bill.Ashforth@faa.gov*.

(k) 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 737–53A1217, Revision 1, dated September 8, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110–SK57, Seal Beach, CA 90740–5600; telephone 562–797–1717; website *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 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 January 6, 2024.

Caitlin Locke,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2024–01968 Filed 1–31–24; 8:45 am]

BILLING CODE 4910–13–P