



# 適航指令發布單 Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-04-006	發布日期 Date issued	2024/04/24												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	This AD applies to The Boeing Company Model 737-600, -700, -700C, -800, -900 and -900ER airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.														
主旨摘要 Subject	This AD requires an inspection of the fuselage skin and the bear strap at the forward galley door cutout forward upper corner for existing repairs, and applicable related investigative and corrective actions.														
民航局 CAA  <input type="radio"/> 本國產品 Native product  <input type="radio"/> 其他個案 Other	設計國民航主管機構 Original Authority <table><tr><td><input checked="" type="radio"/> FAA</td><td><input type="radio"/> Germany LBA</td></tr><tr><td><input type="radio"/> EASA</td><td><input type="radio"/> CAA-NL</td></tr><tr><td><input type="radio"/> Brazil</td><td><input type="radio"/> UK CAA</td></tr><tr><td><input type="radio"/> Transport Canada Civil Aviation</td><td><input type="radio"/> Japan CAB</td></tr><tr><td><input type="radio"/> DGAC</td><td><input type="radio"/> CAA of Israel</td></tr><tr><td></td><td><input type="radio"/> Other_____</td></tr></table>			<input checked="" type="radio"/> FAA	<input type="radio"/> Germany LBA	<input type="radio"/> EASA	<input type="radio"/> CAA-NL	<input type="radio"/> Brazil	<input type="radio"/> UK CAA	<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB	<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel		<input type="radio"/> Other_____
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<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB														
<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel														
	<input type="radio"/> Other_____														
	設計國AD編號 Original AD number	2024-06-01													
	1. 直接採用原AD之內容? (Is the original AD directly adopted?) <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 否(No)_ a. 生效日期另訂為(Re-specify the effective date as): b. 執行時限另訂為(Re-specify the compliance time or period as): 2. 使用人是否需要將AD執行結果向民航局提出報告? (Do users need to report the status of compliance to the CAA?) <input type="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No)														
備註 Note	ATA 53. Ref. Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.														

註： 1. AD內容後附。

2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。

3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

Note： 1. The AD text is enclosed.

2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.

3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

[Federal Register, Volume 89 Number 75 (Wednesday, April 17, 2024)]

[Rules and Regulations]

[Pages 27376-27379]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2023-1413; Project Identifier AD-2023-00087-T; Amendment 39-22706; AD 2024-06-01]**

**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, -700, -700C, -800, -900 and -900ER airplanes. This AD was prompted by reports of cracks in the forward galley door cutout forward upper corner bear strap. It has been determined that the cracks were caused by high operating stresses in the fuselage skin door cutout corner area due to stress concentration at the door cutout. This AD requires an inspection of the fuselage skin and the bear strap at the forward galley door cutout forward upper corner for existing repairs, and applicable related investigative and corrective actions. The FAA is issuing this AD to address the unsafe condition on these products.

#### **DATES:**

This AD is effective May 22, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 22, 2024.

#### **ADDRESSES:**

*AD Docket:* You may examine the AD docket at *regulations.gov* under Docket No. FAA-2023-1413; 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 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website [myboeingfleet.com](http://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](http://regulations.gov) under Docket No. FAA-2023-1413.

#### **FOR FURTHER INFORMATION CONTACT:**

Owen Bley-Male, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3992; email: [owen.f.bley-male@faa.gov](mailto:owen.f.bley-male@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 737-600, -700, -700C, -800, -900 and -900ER airplanes. The NPRM published in the **Federal Register** on July 24, 2023 ([88 FR 47399](#)). The NPRM was prompted by reports of cracks in the forward galley door cutout forward upper corner bear strap. In the NPRM, the FAA proposed to require an inspection of the fuselage skin and the bear strap at the forward galley door cutout forward upper corner for existing repairs, and applicable related investigative and corrective actions. The FAA is issuing this AD to address cracks in the fuselage skin and bear strap, which could increase in length until the fuselage skin and bear strap severs. If not detected and corrected, a severed fuselage skin and bear strap may lead to the inability of the principal structural element (PSE) to sustain limit loads and may result in rapid decompression of the fuselage and loss of structural integrity.

##### **Discussion of Final Airworthiness Directive**

##### **Comments**

The FAA received comments from seven commenters, including Boeing, Aviation Partners Boeing, Delta Air Lines (Delta), Southwest Airlines (Southwest), Sun Country Airlines (SCA), Sideral Linhas Aereas (Sideral), and United Airlines (United). The following presents the comments received on the NPRM and the FAA's response to each comment,

##### **Effect of Winglets on Accomplishment of the Proposed Actions**

Aviation Partners Boeing stated that the installation of winglets per Supplemental Type Certificate (STC) ST00830SE does not affect the actions specified in the proposed AD.

The FAA concurs with the commenter. The FAA has redesignated paragraph (c) of the proposed AD as paragraph (c)(1) of this AD and added paragraph (c)(2) to this AD to state that installation of 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](#).

##### **Request To Clarify Related Investigative Actions**

Boeing requested that the FAA revise the Related Service Information Under [1 CFR part 51](#) portion of the NPRM to specify that related investigative actions include external and internal eddy current inspections,

as well as detailed inspections, as specified in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.

The FAA agrees for the reasons provided and has revised the Related Service Information Under [1 CFR part 51](#) portion of this final rule accordingly.

### **Request To Allow Later-Approved Versions of a Structural Repair Manual (SRM)**

Delta, Southwest, Sideral, and United requested that the proposed AD be revised to allow later-approved revisions of 737NG SRM 53-10-01 Repair 6. United noted that existing repairs are evaluated against 737NG SRM 53-10-01 Repair 6, dated March 10, 2020, to determine appropriate corrective actions. Delta claimed that, as written, only 737NG SRM 53-10-01 Repair 6, dated March 10, 2020, is an approved previous repair in the service information. Southwest, Sideral, and United all noted that the SRM may get updated and older copies of the SRM are not made available to technicians, which may lead to confusion and delays. United and Sideral added that repairs made using a future version of the SRM may not match the current version, which would require operators to obtain an AMOC.

The FAA agrees for the reasons provided. The FAA has added paragraph (h)(3) of this AD to include later-approved revisions of 737NG SRM 53-10-01 Repair 6, dated March 10, 2020.

### **Request To Allow Applying a Certain Repair in Lieu of Obtaining Instructions**

Delta requested that the proposed AD be revised to allow applying 737NG SRM 53-10-01 Repair 6 and following the limitations of Table 3 of Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022, in lieu of contacting Boeing or the FAA for repair instructions and doing that repair when an airplane is in Condition 2.1 or Condition 4.1, as specified in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022. Delta stated that the service information allows retaining 737NG SRM 53-10-01 Repair 6 if it is already applied on an airplane and does not require removal of that repair. Delta added that if an airplane is in an overnight or short visit, the option of installing 737NG SRM 53-10-01 Repair 6 is faster and would only appear to require additional inspections within 24,000 flight cycles.

The FAA disagrees with the commenter's request. Each crack configuration found when accomplishing this AD will be unique and will require an analysis to determine the appropriate repair and post-repair inspection protocol. Boeing 737NG SRM 53-10-01 Repair 6 is designed for a certain crack configuration, and therefore will not be applicable to every crack that might be found when complying with this AD. However, an operator may request an AMOC following the procedures in paragraph (i) of this AD to use a different repair method.

### **Request for Creation of a Preventative Modification**

SCA requested that a preventative modification be developed that could terminate the repetitive inspections specified in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022. SCA added that the proposed AD affects all Boeing 737NG airplanes, but the repair referenced in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022, is only effective for a small portion of the fleet.

The FAA disagrees with the commenter's request. After analyzing the relevant data, the FAA has determined that the repetitive inspections specified in the service information required by this AD are adequate to address the unsafe condition. Additionally, the FAA infers that the repair method the commenter referred to is 737NG SRM 53-10-01 Repair 6. The FAA notes that the service information has conditions related to whether or not a repair was accomplished using 737NG SRM 53-10-01 Repair 6, but requires operators to obtain and follow instructions for new crack findings, which is a method applicable to all airplanes.

Request To Combine Actions With Another AD

SCA requested that the inspections in the proposed AD be combined with the inspections in AD 2021-02-13, Amendment 39-21396 ([86 FR 10776](#), February 23, 2021) (AD 2021-02-13). The commenter stated that the proposed AD's inspection area is in immediate proximity of the inspection area required by AD 2021-02-13, and corrective actions for a finding in either inspection area will affect the inspection requirements for both the proposed AD and AD 2021-02-13. SCA claimed this would require obtaining two AMOCs for a single finding, adding undue complexity. The commenter also noted that, while both the proposed AD and AD 2021-02-13 require contacting the manufacturer, there is a strong potential for oversight regarding compliance with the proposed AD or AD 2021-02-13. SCA stated that, at a minimum, AD 2021-02-13 should be listed as an affected AD in paragraph (b) of the proposed AD, since an external reinforcing repair would affect the inspection of both the proposed AD and AD 2021-02-13.

The FAA disagrees with the commenter's request. Although the two ADs require actions in areas that are in close proximity (AD 2021-02-13 requires inspections for cracks of the fuselage skin and bear strap at the forward galley door between certain stations, and applicable on-condition actions), they require different actions to address different unsafe conditions. Therefore, combining the two ADs would not be practical. Additionally, only ADs that are superseded or terminated by another AD are considered "affected" ADs. Finally, if an operator needs to request a repair that affects both this AD and AD 2021-02-13, they may request a single AMOC.

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.

Related Service Information Under [1 CFR Part 51](#)

The FAA reviewed Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022. This service information specifies procedures for an external general visual inspection of the fuselage skin at the forward galley door cutout forward upper corner for any repair, and applicable related investigative and corrective actions. Related investigative actions include detailed inspections for cracking of the fuselage skin and bear strap; and internal and external high frequency eddy current (HFEC) and low frequency eddy current (LFEC) inspections for cracking of the fuselage skin, bear strap, and repair parts. Corrective actions include obtaining and following instructions for crack 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 1,938 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 general visual inspection for repairs	0.5 work-hour × \$85 per hour = \$42.50 per inspection cycle	\$0	\$42.50 per inspection cycle	\$82,365 per inspection cycle.

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
External detailed and eddy current inspection for cracks	3.5 work-hours × \$85 per hour = \$197.50	0	\$197.50	\$576,555.
External eddy current inspection without a quadrupler repair	4 work-hours × \$85 per hour = \$340 per inspection cycle	0	\$340 per inspection cycle	Up to \$658,920 per inspection cycle.
External eddy current inspection with a quadrupler repair	4 work-hours × \$85 per hour = \$340 per inspection cycle	0	\$340 per inspection cycle	Up to \$658,920 per inspection cycle.
Internal eddy current inspection for cracks	26 work-hours × \$85 per hour = \$2,210	0	\$2,210	\$4,282,980.

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs or for the alternative inspections 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:

**2024-06-01 The Boeing Company:** Amendment 39-22706; Docket No. FAA-2023-1413; Project Identifier AD-2023-00087-T.

#### (a) Effective Date

This airworthiness directive (AD) is effective May 22, 2024.

#### (b) Affected ADs

None.

#### (c) Applicability

(1) This AD applies to The Boeing Company Model 737-600, -700, -700C, -800, -900 and -900ER airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.

(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 cracks in the forward galley door cutout forward upper corner bear strap. The FAA is issuing this AD to address cracks in the fuselage skin and bear strap, which could increase in length until the fuselage skin and bear strap severs. If not detected and corrected, a severed fuselage skin and bear strap may lead to the inability of the principal structural element (PSE) to sustain limit loads and may result in rapid decompression of the fuselage and loss of structural integrity.

#### (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 737-53A1407 RB, dated December 20, 2022, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 737-53A1407, dated December 20, 2022, which is referred to in Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.

#### **(h) Exceptions to Service Information Specifications**

(1) Where the Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022, refer to the original issue date of Requirements Bulletin 737-53A1407 RB, this AD requires using the effective date of this AD.

(2) Where Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 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.

(3) Where the Compliance Time columns of the tables in the “Compliance” paragraph and the Condition columns and flag notes of the tables in the “Compliance” and “Accomplishment Instructions” paragraphs of Boeing Alert Requirements Bulletin 737-53A1407 RB, dated December 20, 2022, use the phrase “737NG SRM 53-10-01 REPAIR 6 DATED MARCH 10, 2020,” this AD requires replacing that text with “737NG SRM 53-10-01 Repair 6 dated March 10, 2020, or later-approved versions.”

#### **(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: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto: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.

#### **(j) Related Information**

(1) For more information about this AD, contact Owen Bley-Male, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3992; email: [owen.f.bley-male@faa.gov](mailto:owen.f.bley-male@faa.gov).

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraph (k)(3) of this AD

#### **(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 Requirements Bulletin 737-53A1407 RB, dated December 20, 2022.

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

Issued on March 12, 2024.

Victor Wicklund,

Deputy Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[[FR Doc. 2024-08104](#) Filed 4-16-24; 8:45 am]

BILLING CODE 4910-13-P