DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0017; Project Identifier AD-2022-01418-T; Amendment 39-22753; AD 2024-10-07]

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 all The Boeing Company Model 757 airplanes. This AD was prompted by potential cracks starting in hidden areas underneath the scuff plates in the fuselage skin and bear strap of certain doors. This AD requires a general visual inspection or a maintenance records check for repairs in the areas around the fuselage skin door cutout lower corners of certain doors, applicable on-condition actions, and inspections for airplanes modified to a cargo configuration. The FAA is issuing this AD to address the unsafe condition on these products.

DATES:
This AD is effective July 19, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 19, 2024.

ADDRESSES:

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-0017; 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, 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-2023-0017.

FOR FURTHER INFORMATION CONTACT:
Wayne Ha, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: 562-627-5238; email: wayne.ha@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 all The Boeing Company Model 757 airplanes. The NPRM published in the Federal Register on January 26, 2023 (88 FR 4920). The NPRM was prompted by the potential for cracks to start in hidden areas underneath the scuff plates in the fuselage skin and bear strap of certain doors. In the NPRM, the FAA proposed to require an inspection or a maintenance records check for repairs in the areas around the fuselage skin door cutout lower corners of certain doors, and applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

The FAA issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to all The Boeing Company Model 757 airplanes. The SNPRM published in the Federal Register on September 6, 2023 (88 FR 60904). The SNPRM was prompted by additional inspections for Model 757-200 series airplanes that have been modified from a passenger configuration to a cargo configuration under supplemental type certificate (STC) ST04242AT, ST03562AT, or ST03952AT. The SNPRM proposed to require Model 757-200 series airplanes with STC ST04242AT, ST03562AT, or ST03952AT, only the No. 1, No. 2, and No. 4 passenger entry doors, and the No. 1, No. 2, and No. 3 cargo doors, would have to be inspected. The SNPRM proposed to require that for those airplanes, the crew entry door and main deck cargo door, as applicable, would also have to be inspected. The FAA is issuing this AD to address cracks caused by higher fatigue stresses at the fuselage skin door cutout lower corners, which could adversely affect the structural integrity of the airplane.

Discussion of Final Airworthiness Directive

Comments
The FAA received comments from an individual commenter, Air Line Pilots Association, International (ALPA), and Boeing, who supported the SNPRM without change.

The FAA received additional comments from three commenters, FedEx Express, VT Mobile Aerospace Engineering (VT MAE), and United Parcel Service (UPS). The following presents the comments received on the SNPRM and the FAA’s response to each comment.

Request for Change to Applicability Requirements

FedEx stated that it cannot fully comply with paragraph (g)(3) of this proposed AD. FedEx stated it plans to complete the inspect procedures for Group 1, Group 2, and Group 3 aircraft due to multiple door configurations throughout their 757-200 fleet. In addition to Group 1, Group 2, and Group 3 aircraft inspection requirements, FedEx requested the main deck cargo door inspection area from Group 6 aircraft be included for our VT MAE STC ST03562AT converted aircraft. Therefore, FedEx stated it plans to comply with Group 1, Group 2, and Group 3 aircraft inspection requirements and Group 6 main deck cargo door area only.

The FAA agrees to clarify the requirements. Paragraph (g)(3) of this AD was added to the SNPRM to include the inspections at the main deck cargo door for Model 757-200 series airplanes that have been modified from a passenger to cargo configuration under VT MAE STC ST03562AT or ST03952AT. Paragraph (g)(1) already requires the inspections for Group 1, Group 2, and Group 3 for all airplanes, as applicable. Therefore, this AD captures FedEx's requested change. The FAA has not changed this AD in this regard.

Request for Change to Compliance Requirements

Two commenters requested that the initial compliance time be extended for certain airplanes. FedEx and VT MAE requested initial inspections for the main deck cargo door (MDCD) start 30,000 flight cycles from installation or 3,000 flight cycles from the original issue date of Boeing Requirements Bulletin 757-53A0119 RB (October 12, 2022). FedEx stated main deck cargo doors were installed during passenger-to-freighter conversion per VT MAE STC ST03562AT. VT MAE noted that for airplanes modified from a passenger to a freighter configuration per VT MAE STC ST03562AT or ST03952AT, the skin and bear strap at the main deck cargo door area is newly installed.

The FAA disagrees because the compliance times specified in this AD address the unsafe condition initiating at all of the affected lower door corner cutouts. In addition, although VT MAE provided data showing the skin and bear strap is newly installed during their passenger to freighter conversion, it did not provide a fatigue test report or a fatigue and damage tolerance analysis to substantiate an alternative inspection threshold to what is required by this AD for the main deck cargo door area. The FAA will consider alternative methods of compliance (AMOCs) for extensions to the compliance times if sufficient FedEx needs to supply additional data is submitted to show the proposed compliance time adequately addresses the unsafe condition at this specific location. The FAA has not changed this AD in this regard.

Request Consideration for Damage Tolerance and Allowable Limits

UPS requested that paragraph (h)(2) of the proposed AD be revised to change “any existing repair” to
“any existing reinforcing repair.”

UPS also requested that an exception be added in paragraph (h)(4) of the proposed AD to specify “where Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022, uses the phrase “any repair,” this AD requires using “any reinforcing repair.”

UPS stated that structural repair manual (SRM) procedure 53-00-15-1A-2 allows for dents common to the main and lower cargo door lower scuff plates and the fuselage outer skin to have a maximum depth of 0.010” without further inspection of the underlying skin or repetitive supplemental inspections. Additionally, UPS stated that SRM procedure 53-00-01-1A-1 allows for the fuselage skin to have smooth dents, edge, surface blends up to 15% of any cross-sectional area, and SRM procedure 53-00-01-2R-6 allows for rivet plugging of lightning-strike or small-hole damage. UPS stated that rivet plugs using solid rivets are noted as a category A repair with no supplemental inspections. UPS stated that the repairs within the SRM allowable limits and small damage repair do not appreciably affect damage tolerance of the fuselage skin at the door cutouts and surrounding structure. Furthermore, UPS noted the potential for non-reinforcing repairs (dents, blends, etc.) that are beyond SRM-allowable limits but approved by Boeing authorization to remain with no supplemental inspections. UPS considered the intent of the general visual inspection (GVI) or maintenance records review is to identify and report existing reinforcing repairs that may affect damage tolerance of the fuselage skin.

The FAA disagrees. The unsafe condition identified in this AD has an impact on the damage tolerance of all repairs in the affected areas. These repairs need to be evaluated in conjunction with the unsafe condition identified in this AD to determine whether they still provide an acceptable level of safety. The FAA has not changed this AD in this regard.

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 SNPRM. 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 757-53A0119 RB, dated October 12, 2022. This service information specifies procedures for either a general visual inspection or a maintenance records check for repairs in the areas around the fuselage skin door cutout lower corners of the No. 1, No. 2, and No. 4 passenger entry doors; crew entry door; No. 1, No. 2, and No. 3 cargo doors; and main deck cargo door; and applicable on-condition actions, including repetitive low frequency and high frequency eddy current inspections for cracks in the skin or bear strap in the unrepaired areas, and 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 482 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>General visual inspection for repairs</td>
<td>1 work-hour × $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>$40,970</td>
</tr>
</tbody>
</table>

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of the proposed inspection. The agency has no way of determining the number of airplanes that might need these on-condition actions:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspections for cracks</td>
<td>Up to 27 work-hours × $85 per hour = Up to $2,295 per inspection cycle</td>
<td>$0</td>
<td>Up to $2,295 per inspection cycle.</td>
</tr>
</tbody>
</table>

The extent of cracking found during the on-condition inspection could vary significantly from airplane to airplane. The FAA has no way of determining the extent of cracking that may be found on each airplane, the cost to repair the cracking on each airplane, or the number of airplanes that may require repair.

**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:

   2024-10-07   The Boeing Company: Amendment 39-22753; Docket No. FAA-2023-0017;
   Project Identifier AD-2022-01418-T.

(a) Effective Date

This airworthiness directive (AD) is effective July 19, 2024.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to all The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes, certificated in any category.
(2) Installation of Supplemental Type Certificate (STC) ST01518SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01518SE 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 the potential for cracks to start in hidden areas underneath the scuff plates in the fuselage skin and bear strap of certain doors. The FAA is issuing this AD to address cracks caused by higher fatigue stresses at the fuselage skin door cutout lower corners. This unsafe condition, if not addressed, 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
(1) For all airplanes: Except as specified by paragraph (h) of this AD, at the applicable times specified in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022.

(2) For Model 757-200 series airplanes that have been modified from a passenger to cargo configuration under VT Mobile Aerospace Engineering (VT MAE) STC ST04242AT: Except as specified by paragraph (h) of this AD, at the applicable times specified in Table 4 and Table 5 of the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022, do all applicable actions for Group 4 identified in, and in accordance with, Table 4 and Table 5 of the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022.

(3) For Model 757-200 series airplanes that have been modified from a passenger to cargo configuration under VT MAE STC ST03562AT or ST03952AT: Except as specified by paragraph (h) of this AD, at the applicable times specified in Table 5 of the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022, do all applicable actions for Group 6 identified in, and in accordance with, Table 5 of the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 2022.

Note 1 to paragraph (g):
Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 757-53A0119, dated October 12, 2022, which is referred to in Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 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 757-53A0119 RB, dated October 12, 2022, use the phrase “the original issue date of Requirements Bulletin 757-53A0119 RB,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Requirements Bulletin 757-53A0119RB, dated October 12, 2022, specifies performing a general visual inspection (GVI) or a maintenance records check for any existing repair, if only a maintenance records check is accomplished with no GVI, then any initial high frequency eddy current (HFEC) or low frequency eddy current (LFEC) inspection with a compliance time of before further flight must be done prior to the accumulation of 30,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later.

(3) Where Boeing Alert Requirements Bulletin 757-53A0119 RB, dated October 12, 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, before further flight 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 Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (j) 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, 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 Wayne Ha, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: 562-627-5238; email: wayne.ha@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the address 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 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.


(ii) [Reserved]

(3) For service information, 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.html or email fr.inspection@nara.gov.

Issued on May 14, 2024.

James D. Foltz,
Deputy Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2024-13015 Filed 6-13-24; 8:45 am]

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