DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-2395; Project Identifier AD-2023-00767-T; Amendment 39-22773; AD 2023-12-09]

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) 2022-08-12, which applies to all The Boeing Company Model 757 airplanes. AD 2022-08-12 required repetitive inspections for skin cracking and shim migration at the upper link drag fittings, diagonal brace cracking, and fastener looseness; and applicable on-condition actions. This AD was prompted by reports of bolt rotation in the engine drag fitting joint and fastener heads and cracks found in the skin of the fastener holes, a determination that certain drag fittings may be made of alternate materials, which could result in reduced structural integrity of the engine strut, and a determination that additional inspections and revised compliance times are needed. This AD retains the requirements of AD 2022-08-12 with revised compliance times for certain actions and requires adding inspections for existing repairs and applicable on condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES:
This AD is effective August 22, 2024.

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

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-2395; 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 Boeing service information incorporated by reference 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; websites 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-2023-2395.

FOR FURTHER INFORMATION CONTACT:

Wayne Ha, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 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 to supersede AD 2022-08-12, Amendment 39-22015 (87 FR 26964, May 6, 2022) (AD 2022-08-12). AD 2022-08-12 applied to all The Boeing Company Model 757 airplanes. The NPRM published in the Federal Register on December 21, 2023 (88 FR 88271). The NPRM was prompted by reports of bolt rotation in the engine drag fitting joint and fastener heads and cracks found in the skin of the fastener holes, and the need to reduce the compliance time for certain groups. In the NPRM, the FAA proposed to require repetitive inspections for skin cracking and shim migration at the upper link drag fittings, diagonal brace cracking, and fastener looseness; and applicable on-condition actions. The FAA issued AD 2022-08-12 to address cracking in the wing upper skin and forward drag fittings, which could lead to a compromised upper link and reduced structural integrity of the engine strut, and possible separation of a strut and engine from the airplane during flight.

Actions Since AD 2022-08-12 Was Issued

Since the FAA issued AD 2022-08-12, it was determined that drag fittings made of alternate materials have possibly been installed on some configurations, which could result in reduced structural integrity of the engine strut. The FAA has determined that additional inspections and revised compliance times are needed to maintain structural integrity. Although this AD does not explicitly restate the requirements of AD 2022-08-12, this AD would retain all requirements of AD 2022-08-12. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this AD.
Discussion of Final Airworthiness Directive

Comments

The FAA received comments from The Boeing Company, who supported the NPRM without change.

The FAA received additional comments from five commenters, including Aviation Partners Boeing, Delta Air Lines, UPS Airlines, United Airlines, and FedEx Express. 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 has reviewed the NPRM and has determined that the incorporation of STC ST01518SE for installation of blended or scimitar blended winglets does not affect compliance with the mandated actions in the proposed rule. Boeing does not have delegation to approve repairs in areas affected by the scimitar blended winglet configuration of STC ST01518SE. Therefore, Boeing will not be able to use Organization Designation Authorization (ODA) approval in paragraph (j)(3) of this AD to make an alternative method of compliance (AMOC) finding on behalf of the FAA for alternative inspections and corrective actions in areas affected by the scimitar blended winglet configuration of STC ST01518SE. The operators of scimitar blended winglet airplanes subject to this AD should be aware that approval of any alternative inspections and corrective actions as an AMOC to the final rule will only be obtainable from the FAA through the means described in paragraph (j)(1) of this AD.

The FAA agrees. The FAA has not changed this AD in this regard.

Requests for Revising AMOCs Paragraphs (j)(4) Through (j)(6) of the Proposed Rule

Delta Air Lines, FedEx, UPS Airlines, and United Airlines requested revising AMOCs paragraphs (j)(4), (j)(5), and (j)(6) of the proposed rule. Delta Air Lines stated that restrictions of paragraphs (j)(4) through (j)(6) of the proposed rule would put an extreme and unnecessary burden on Model 757 operators. FedEx was concerned that paragraphs (j)(4) and (j)(5) of the proposed rule would prevent continued operation of the affected airplanes until new AMOC approvals could be obtained. UPS Airlines requested revising paragraphs (j)(4), (j)(5), and (j)(6) of the proposed rule to accept AMOCs issued after March 1, 2021. United Airlines stated that paragraphs (j)(4) through (j)(6) of the proposed rule contains exception for previously approved AMOCs for locations at the wing skin and drag fittings at the upper link drag fittings (fasteners 1-18) that will affect the aircraft operations until new AMOC is received, or new inspection is accomplished.

The FAA agrees with the commenters. The FAA has determined that paragraphs (j)(4), (j)(5), and (j)(6) of the proposed rule are not required. The FAA has determined that the Compliance Tables 19 and 20 of Revision 3 of the Boeing Alert Requirements Bulletin 757-57A0073 RB address all existing repairs and existing drag fitting replacement with universal fitting. The FAA has removed paragraphs (j)(4), (j)(5), and (j)(6) of the proposed rule accordingly.

Request To Not Reduce Inspection Compliance Times Under Certain Circumstances

UPS Airlines proposed that the inspection compliance times for some configurations that installed upper link drag fitting made of optional materials be reduced only if this condition has been confirmed
by visual inspection and/or maintenance records review.

The FAA acknowledges UPS Airlines' concern. However, the FAA does not agree with the proposed request because UPS Airlines did not submit sufficient data to substantiate that the proposed actions would provide an acceptable level of safety. Under the provisions of paragraph (j) of this AD, the FAA will consider requests for approval of alternative actions and compliance times if sufficient data are submitted to substantiate that the change would provide an acceptable level of safety. This AD has not been changed regarding this proposed request.

Request for Revising Paragraphs (h)(1) Through (h)(4) of the Proposed Rule

UPS Airlines also requested to revise paragraphs (h)(1) through (h)(4) of the proposed rule from “Where the Compliance Time columns of the tables” to “Where the Compliance Time columns and notes of the tables.” UPS Airlines explained that both Compliance Time columns and notes in the tables are referred to Boeing Alert Requirements Bulletin 757-57A0073 RB.

The FAA agrees to revise from “Where the Compliance Time columns of the tables” to “Where the Compliance Time columns and notes of the tables” for paragraphs (h)(2), (h)(3), and (h)(4) of this AD, because the notes in compliance tables refer to “On or after the Revision 1 date of Boeing Alert Requirements Bulletin 757-57A0073 RB.” Paragraph (h)(2) of this AD refers to the phrase “the Revision 1 date of Boeing Alert Requirements Bulletin 757-57A0073 RB,” paragraph (h)(3) of this AD refers to the phrase “the Revision 2 date of Boeing Alert Requirements Bulletin 757-57A0073 RB,” and paragraph (h)(4) of this AD refers to the phrase “the Revision 3 date of Boeing Alert Requirements Bulletin 757-57A0073 RB.” However, the FAA does not agree to revise paragraph (h)(1) of this AD, because the notes in the compliance tables only refer to “On or after the Revision 1 date of Boeing Alert Requirements Bulletin 757-57A0073 RB.” The original issue date of Boeing Alert Requirements Bulletin 757-57A0073 RB is not included for paragraph (h)(1) of this AD. The FAA has not changed paragraph (h)(1) of this AD. The FAA has revised paragraphs (h)(2), (h)(3), and (h)(4) of this AD accordingly.

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 757-57A0073 RB, Revision 3, dated May 5, 2023. This service information specifies procedures for a general visual inspection or records check of the wing upper skin at the drag fitting attachment holes for any existing repair; repetitive general visual and detailed inspections for loose fasteners, skin cracking, and shim migration at the upper link drag fittings, and for cracking in the diagonal brace and diagonal brace fittings; repetitive open-hole high frequency eddy current (HFEC) inspections for cracking of the fastener holes and loose bolt holes; and applicable on-condition actions. On-condition actions include performing an ultrasonic inspection for cracks at any repaired upper wing skin location; installing the upper link and upper link pins;
replacing drag fittings; installing bolts, washers, and nuts; performing a torque check of fasteners on the affected shims; trimming affected shims and applying chemical conversion coating on the shims, fillet seal, and drag fittings; and repairing cracks, migrated shims, mistorqued bolts, and loose fasteners.

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 496 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>Repetitive HFEC inspections (retained actions from AD 2022-08-12)</td>
<td>85 work-hours × $85 per hour = $7,225 per inspection cycle</td>
<td>$0</td>
<td>$7,225 per inspection cycle</td>
<td>$3,583,600 per inspection cycle.</td>
</tr>
<tr>
<td>New actions</td>
<td>Up to 4 work-hours × $85 per hour = Up to $340</td>
<td>$0</td>
<td>Up to $340</td>
<td>Up to $168,640.</td>
</tr>
</tbody>
</table>

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

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:

a. Removing Airworthiness Directive (AD) 2022-08-12, Amendment 39-22015 (87 FR 26964, May 6, 2022); and

b. Adding the following new AD:

2023-12-09 The Boeing Company: Amendment 39-22773; Docket No. FAA-2023-2395; Project Identifier AD-2023-00767-T.

(a) Effective Date
This airworthiness directive (AD) is effective August 22, 2024.

(b) Affected ADs
This AD replaces AD 2022-08-12, Amendment 39-22015 (87 FR 26964, May 6, 2022) (AD 2022-08-12).
(c) Applicability
This AD applies to all The Boeing Company Model 757-200, PF, -200CB, and -300 series airplanes, certificated in any category.

(d) Subject
Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition
This AD was prompted by reports of bolt rotation in the engine drag fitting joint and fastener heads and cracks found in the skin of the fastener holes, a determination that certain drag fittings may be made of alternate materials, which could result in reduced structural integrity of the engine strut, and a determination that additional inspections and revised compliance times are needed. The FAA is issuing this AD to address cracking in the wing upper skin and forward drag fittings, which could lead to a compromised upper link and reduced structural integrity of the engine strut, and possible separation of a strut and engine from the airplane during flight.

(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 757-57A0073 RB, Revision 3, dated May 5, 2023, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 757-57A0073, Revision 3, dated May 5, 2023, which is referred to in Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023.

(h) Exceptions to Service Information Specifications
(1) Where the Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023, use the phrase “the Original Issue date of Requirements Bulletin 757-57A0073 RB,” this AD requires using “September 10, 2018 (the effective date of AD 2018-16-05, Amendment 39-19345 (83 FR 38250, August 6, 2018))” (AD 2018-16-05).

(2) Where the Compliance Time columns and notes of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023, use the phrase “the Revision 1 date of Requirements Bulletin 757-57A0073 RB,” this AD requires using “January 14, 2021 (the effective date of AD 2020-21-17, Amendment 39-21290 (85 FR 79418, December 10, 2020))” (AD 2020-21-17).
(3) Where the Compliance Time columns and notes of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023, use the phrase “the Revision 2 date of Requirements Bulletin 757-57A0073 RB,” this AD requires using “June 10, 2022 (the effective date of AD 2022-08-12).”

(4) Where the Compliance Time columns and notes of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023, use the phrase “the Revision 3 date of Requirements Bulletin 757-57A0073 RB,” this AD requires using the effective date of this AD.

(5) Where Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 3, dated May 5, 2023, 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 (j) of this AD.

(i) Credit for Previous Actions

(1) This paragraph provides credit for the actions specified in paragraph (g) of this AD, except for the open-hole high frequency eddy current inspections at fastener locations 11-18, if those actions were performed before January 14, 2021 (the effective date of AD 2020-21-17) using Boeing Alert Requirements Bulletin 757-57A0073 RB, dated July 14, 2017.

(2) This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before June 10, 2022 (the effective date of AD 2022-08-12) using Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 1, dated August 1, 2019.

(3) This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Requirements Bulletin 757-57A0073 RB, Revision 2, dated March 1, 2021.

(j) 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 (k)(1) 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.
(k) Related Information

(1) For more information about this AD, contact Wayne Ha, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 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 (l)(3) of this AD.

(l) 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.


(ii) [Reserved]

(3) For Boeing 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 June 14, 2024.

Peter A. White,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2024-15827 Filed 7-17-24; 8:45 am]

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