[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2025-0474; Project Identifier AD-2024-00777-T; Amendment 39-23186; AD 2025-23-03]

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 757 airplanes. This AD was prompted by reports of precoolers that failed due to a wear-out condition, combined with latently failed overheat detection thermal switches. This AD requires an inspection for heat damage on the engine strut structure, repetitive tests of the thermal switch temperature and ground wires, replacement of the precooler on Model 757-300 airplanes, and applicable on-condition actions. 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:

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2025-0474; 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 material 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.

• You may view this material 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-2025-0474.

FOR FURTHER INFORMATION CONTACT: Kathryn Hill, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3626; email: Kathryn.A.Hill@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 757 airplanes. The NPRM was published in the *Federal Register* on April 1, 2025 (90 FR 14346). The NPRM was prompted by reports of precoolers that failed due to a wear-out condition, combined with latently failed overheat detection thermal switches. In the NPRM, the FAA proposed to require an inspection for heat damage on the engine strut structure, repetitive tests of the thermal switch temperature and ground wires, replacement of the precooler on Model 757-300 airplanes, and applicable on-condition actions. The FAA is issuing this AD to address the combination of a failed precooler and

latently failed overheat detection thermal switches. The unsafe condition, if not addressed, may result in prolonged high temperature heat exposure on the strut, which could lead to separation of the engine strut-to-wing box connection.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from the Air Line Pilots Association, International (ALPA), ProTech Aero Services Limited, a named individual, and two anonymous commenters, who all supported the NPRM without change.

The FAA received additional comments from Aviation Partners Boeing (APB), European Air Transport Leipzig GmbH, and United Parcel Service Co. (UPS Airlines). The following presents those comments and the FAA's response.

Effect of Winglets on Accomplishment of the Proposed Actions

APB stated that the installation of winglets per Supplemental Type Certificate (STC) ST01518SE does not affect compliance with the required actions of the proposed rule.

The FAA agrees. The installation of STC ST01518SE does not affect compliance with the required actions of this AD, specifically, the accomplishment of the manufacturer's service instructions. The FAA has not changed this AD in this regard.

Request to Revise Compliance Time for General Visual Inspection (GVI)

UPS Airlines requested the FAA revise the proposed AD to only require a GVI of the strut if the thermal switch fails the test that is required to be accomplished within 9,000 flight hours or 27 months from the effective date of the AD, whichever occurs first. The commenter stated there are multiple maintenance program inspections of the strut that are accomplished at various intervals as specified in the Boeing 757 Maintenance Planning Data (MPD). The commenter also stated that MPD inspections look for corrosion, heat damage, and any obvious signs of damage. The commenter asserted the

inspection of the strut in the proposed AD is redundant to the MPD inspections and will not provide an enhanced level of safety.

The FAA does not agree with the request. The maintenance tasks provided in the Boeing 757 MPD are in general the manufacturer's recommended tasks so that each operator can develop a customized maintenance program. Also, the intervals of certain inspections can be escalated depending on the operator's existing maintenance practices. The FAA cannot be sure that all strut areas addressed by this AD will be inspected in a timely manner by all affected operators based on each operator's customized maintenance program. The FAA has determined that a latent failure mode identified on the thermal switches may leave hot air leakage due to precooler failure undetected for a prolonged period, and this condition could eventually result in critical thermal damage to the strut structure. The risk of having critical thermal damage becomes significantly high for those airplanes that continue to operate with latently failed thermal switches. Since the failure of thermal switches cannot be detected until the switches are tested, the FAA concluded that the strut should be inspected as soon as reasonably practical to mitigate the risk by detecting thermal damage to the strut structure. The FAA has not changed this AD in this regard.

Request to Correct Aircraft Maintenance Manual (AMM) Reference

European Air Transport Leipzig GmbH requested that the FAA correct the reference to Boeing "757 AMM 26-12-01" for the thermal switch set temperature test in Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025. The commenter stated that "757 AMM 26-12-00" is the correct reference for the accepted procedure.

The FAA agrees that the AMM reference to the accepted procedure for the thermal switch set temperature test is incorrect, since 757 AMM 26-12-01 relates to the removal and installation of the strut overheat switch, and 757 AMM 26-12-00 relates to

the thermal switch set temperature test. However, no change to the AD is necessary in this regard. The FAA notes that the incorrect AMM reference is in Boeing Alert Service Bulletin 757-26A0062, dated January 17, 2025, not Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025. In addition to containing the same information that is required for compliance with the requirements bulletin, the service bulletin provides additional guidance, including references to accepted procedures for accomplishing the required actions. Since the reference to the incorrect AMM section in the service bulletin is "referred to" as additional guidance, operators are not required to use it to accomplish the thermal switch set temperature test. Operators may use the appropriate AMM sections to accomplish the required actions. 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, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025. This material specifies procedures for a GVI for heat damage on the left and right engine strut structure, repetitive thermal switch temperature tests and continuity tests of the ground wires, and, for Model 757-300 airplanes, replacement of the precooler at intervals not to exceed 45,000 total precooler flight hours. This material also specifies procedures for applicable on-condition actions including repair of structures with heat damage, replacement of the thermal switch, repair or replacement of failed

circuit wires, and a system test of the strut overheat detection system, which includes doing applicable corrective actions until the test is passed.

This material 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.

Interim Action

The FAA considers this AD to be an interim action. If final action is later identified, the FAA might consider further rulemaking then.

Costs of Compliance

The FAA estimates that this AD affects 235 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
Inspection	12 work-hours X $85 per hour = $1,020	$0	$1,020	$239,700
Temperature and continuity test	20 work-hours X $85 per hour = $1,700	$0	$1,700	$399,500 per test cycle
Precooler replacement (21 Model 757-300 airplanes)	34 work-hours X $85 per hour = $2,890	Up to $96,675	Up to $99,565	Up to $2,090,865 per replacement cycle

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

On-condition costs*

Action	Labor cost	Parts cost	Cost per product
Strut overheat detection system test	2 work-hours X $85 per hour = $170	$0	$170
Thermal switch replacement, part number (P/N) 975-0304-003	2 work-hours X $85 per hour = $170	$939	$1,109
Thermal switch replacement, P/N 975-0304-004	2 work-hours X $85 per hour = $170	$1,704	$1,874
Thermal switch replacement, P/N 975-0304-008	2 work-hours X $85 per hour = $170	$3,810	$3,980
Wire repair or replacement	2 work-hours X $85 per hour = $170	$0	$170

*The FAA has received no definitive data on which to base the cost estimates for some of the on-condition 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:

2025-23-03 The Boeing Company: Amendment 39-23186; Docket No. FAA-2025-0474; Project Identifier AD-2024-00777-T.

(a) Effective Date

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

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025.

(d) Subject

Air Transport Association (ATA) of America Code 26, Fire protection.

(e) Unsafe Condition

This AD was prompted by reports of precoolers that failed due to a wear-out condition. The FAA is issuing this AD to address the combination of a failed precooler and latently failed overheat detection thermal switches. The unsafe condition, if not addressed, may result in prolonged high temperature heat exposure on the strut, which could lead to separation of the engine strut-to-wing box connection.

(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: At the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 757-26A0062, dated January 17, 2025, which is referred to in Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025.

(h) Exceptions to Requirements Bulletin Specifications

(1) Where the "Boeing Recommended Compliance Time" columns in the tables under the "Compliance" paragraph of Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025, refer to the Original Issue date of Requirements Bulletin 757-26A0062 RB, this AD requires using the effective date of this AD.

(2) Where Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025, specifies contacting Boeing for repair instructions, this AD requires doing the repair using a method approved in accordance with the procedures 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)(1) of this AD. Information may be emailed to AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) 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) Additional Information

(1) For more information about this AD, contact Kathryn Hill, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3626; email: Kathryn.A.Hill@faa.gov.

(2) Material identified in this AD that is not incorporated by reference is available at the address specified in paragraph (k)(3) this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Requirements Bulletin 757-26A0062 RB, dated January 17, 2025.

(ii) [Reserved]

(3) For Boeing material 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 material 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 November 5, 2025.

Peter A. White,
Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.
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