[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0429; Project Identifier AD-2022-00775-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all The Boeing Company Model 777 airplanes. This proposed AD was prompted by an evaluation by the design approval holder (DAH) that found the force limiter assemblies for the lateral control mechanism are not breaking out within the maximum design force requirements. This proposed AD would require inspecting or doing a records review to determine if a certain part number force limiter assembly is installed, and replacing affected force limiter assemblies with serviceable force limiter assemblies. The AD would also prohibit the installation of affected parts. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2023-0429; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

• For The Boeing Company service information identified in this NPRM, 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 by searching for and locating Docket No. FAA-2023-0429.

FOR FURTHER INFORMATION CONTACT: Douglas Y. Tsuji, Senior Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200

South 216th St., Des Moines, WA 98198; phone: 206 231 3548; email: Douglas.Tsuji@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2023-0429; Project Identifier AD-2022-00775-T" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent Douglas Y. Tsuji,

Senior Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3548; email: Douglas.Tsuji@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA has received a report from Boeing that it found an issue in production with the force limiter assemblies for the lateral control mechanism on the Model 777 airplanes not breaking out within the maximum design force requirements. The force limiter assemblies have a pre-loaded spring that lets them compress or extend when higher than normal forces are applied to a control wheel. During normal flight conditions, the force limiter assemblies are set in their neutral position and supply the load path for roll control. If there is a jam of a control wheel, the breakout mechanism from the force limiter assemblies lets the other control wheel operate and continue roll control. When a jam/restriction occurs on one side of the lateral controls, the pilot may not be able to override the jam preventing lateral control from the wheel. An investigation by Boeing found that too much BMS3-23 Corrosion Inhibiting Compound (CIC) was used during the assembly of the force limiter which resulted in an increase in their breakout forces. This condition, if not addressed, could result in the loss of lateral control from the wheel and potentially affect continued safe flight and landing.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021. This service information specifies procedures for replacing the lower

and upper force limiter assemblies, part number (P/N) 253W1263-1, with force limiter assemblies, P/N 253W1263-3.

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.

Proposed AD Requirements in this NPRM

This proposed AD would require inspecting or doing a records review to determine if a certain part number force limiter assembly is installed, and as applicable, accomplishing the actions specified in the service information already described, except as discussed under "Differences Between this Proposed AD and the Service Information" and except for any differences identified as exceptions in the regulatory text of this proposed AD. This proposed AD would also prohibit the installation of affected parts. For information on the procedures and compliance times, see this service information at regulations.gov by searching for and locating Docket No. FAA-2023-0429.

Differences Between this Proposed AD and the Service Information

The effectivity of Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021, is limited to Model 777-200LR, -300ER, and 777F series airplanes, line numbers 1531 through 1707 inclusive. However, the applicability of this proposed AD includes all Boeing Model 777-200, -200LR, -300, -300ER, and 777F series airplanes. Because the affected parts are rotable parts, the FAA has determined that these parts could later be installed on airplanes that were initially delivered with acceptable parts, thereby subjecting those airplanes to the unsafe condition. The FAA has confirmed with Boeing that the Accomplishment Instructions in Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021, are applicable to the expanded group of airplanes.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 353 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection or records review	1 work-hour X $85 per hour = $85	$0	$85	$30,005

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement	7 work-hours X $85 per hour = $595	$8,960	$9,555

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

The Boeing Company: Docket No. FAA-2023-0429; Project Identifier AD-2022-00775-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder that the force limiter assemblies for the lateral control mechanism are not breaking out within the maximum design force requirements. The FAA is issuing this AD to address the force limiter assemblies not breaking out within the maximum design force requirements. The unsafe condition, if not addressed, could result in the loss of lateral control from the wheel and potentially affect continued safe flight and landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 12 months after the effective date of this AD, inspect the force limiter assembly to determine whether part number (P/N) 253W1263-1 is installed. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the force limiter assembly can be conclusively determined from that review.

(2) If, during an inspection or records review required by paragraph (g)(1) of this AD, any force limiter assembly, part number (P/N) 253W1263-1, is found, at the

applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021, except as specified by paragraph (h) of this AD, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 777-27A0124 RB, dated October 27, 2021, which is referred to in Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021.

(h) Exceptions to Service Information Specifications

Where the Compliance Time columns of the tables in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021, use the phrase "the original issue date of Requirements Bulletin 777-27A0124 RB," this AD requires using "the effective date of this AD."

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install a force limiter assembly, P/N 253W1263-1, on any airplane.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO 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) 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, Seattle ACO 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

For more information about this AD, contact Douglas Y. Tsuji, Senior Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206 231 3548; email: Douglas.Tsuji@faa.gov.

(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.

(i) Boeing Alert Requirements Bulletin 777-27A0124 RB, dated October 27, 2021.

(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 service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on March 5, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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