

Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-1000; Project Identifier AD-2023-01051-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 certain The Boeing Company Model 747-400F series airplanes. This proposed AD was prompted by a report that cap seals were not applied to certain fasteners in the fuel tanks during production. This proposed AD would require applying cap seals to certain fastener collars inside the fuel tanks. 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 May 28, 2024.

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](https://www.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](https://www.regulations.gov) under Docket No. FAA-2024-1000; 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 service information identified in this NPRM, 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.

- 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](https://www.regulations.gov) by searching for and locating Docket No. FAA-2024-1000.

FOR FURTHER INFORMATION CONTACT:

Samuel Dorsey, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3415; email: samuel.j.dorsey@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-2024-1000; Project Identifier AD-2023-01051-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](https://www.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 to Samuel Dorsey, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3415; email: samuel.j.dorsey@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 examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, the FAA issued a final rule titled “Transport Airplane Fuel Tank System Design Review, Flammability Reduction, and Maintenance and Inspection Requirements” (66 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, that rule included Amendment 21-78, which established Special Federal Aviation Regulation No. 88 (“SFAR 88”) at 14 CFR part 21. Subsequently, SFAR 88 was amended by Amendment 21-82 (67 FR 57490, September 10, 2002; corrected at 67 FR 70809, November 26, 2002) and Amendment 21-83 (67 FR 72830, December 9, 2002; corrected at 68 FR 37735, June 25, 2003, to change “21-82” to “21-83”).

Among other actions, SFAR 88 requires certain type design (*i.e.*, type certificate (TC) and supplemental type certificate (STC)) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the final rule published on May 7, 2001, the FAA intended to adopt airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, the FAA has established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: Single failures, combination of failures, and unacceptable (failure) experience. For all three failure criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

The FAA has determined that the actions identified in this proposed AD are necessary to reduce the potential of ignition sources inside fuel tanks,

which, in combination with flammable fuel vapors, could result in fuel tank explosion or fire.

The FAA has received a report indicating that cap seals were not applied to certain fasteners in the fuel tank during production. The FAA issued AD 2022–10–11, Amendment 39–22049 (87 FR 34120, June 6, 2022) to require, among other actions, application of cap seals to certain fasteners in the fuel tank on airplanes having line numbers 645 through 1363 inclusive. Cap seals were determined to be a necessary feature by SFAR 88 reviews and were required to be retrofitted onto existing airplanes by AD 2022–10–11 and earlier ADs. Boeing intended to incorporate similar changes on future airplanes, ultimately those having line numbers 1364 through 1419 inclusive, via a production design change. However, Boeing discovered that the design change omitted application of the cap seals on eight fasteners (four each on the left and right wings in the inboard main fuel tanks). Without these cap seals, the ends of the fasteners do not have sufficient electrical insulation to prevent arcing in the event of a lightning strike or high-powered short circuit, possibly creating an ignition source in the inboard main fuel tanks. A failure to prevent possible ignition sources in the fuel tank, in combination with flammable fuel vapors, could result in an explosion or fire and consequent loss of the airplane.

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 747–57A2371 RB, dated September 29, 2023. This service information specifies procedures for applying cap seals to four fastener collars inside the fuel tank common to the stiffeners located at the front spar on the left and right wings. 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 accomplishing the actions specified in the service information already described, except for any differences identified as exceptions in the regulatory text of this proposed AD. For information on the procedures and compliance times, see this service information at regulations.gov under Docket No. FAA–2024–1000.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 15 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
Apply cap seals	37 work-hours × \$85 per hour = \$3,145	\$1,000	\$4,145	\$62,175

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–2024–1000; Project Identifier AD–2023–01051–T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by May 28, 2024.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 747–400F series airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 747–57A2371 RB, dated September 29, 2023.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report that cap seals were not applied to certain fasteners in the fuel tanks during production. The FAA is issuing this AD to address missing cap seals in the fuel tanks. The unsafe condition, if not addressed, could result in a failure to prevent possible ignition sources in the fuel tanks, which in combination with flammable fuel vapors, could result in an explosion or fire and consequent loss of the airplane.

(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 747–57A2371 RB, dated September 29, 2023, do all applicable

actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 747–57A2371 RB, dated September 29, 2023.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 747–57A2371, dated September 29, 2023, which is referred to in Boeing Alert Requirements Bulletin 747–57A2371 RB, dated September 29, 2023.

(h) Exceptions to Service Information Specifications

(1) Where Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 747–57A2371 RB, dated September 29, 2023, use the phrase “the original issue date of Requirements Bulletin 747–57A2371 RB,” this AD requires using the effective date 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 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.

(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 Samuel Dorsey, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206–231–3415; email: samuel.j.dorsey@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the address specified in paragraphs (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 747–57A2371 RB, dated September 29, 2023.
(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 or email fr.inspection@nara.gov.

Issued on April 4, 2024.

Victor Wicklund,

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

[FR Doc. 2024–07562 Filed 4–11–24; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2024–0773; Project Identifier MCAI–2023–00256–R]

RIN 2120–AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2021–22–05, which applies to all Leonardo S.p.a. (Leonardo) Model A119 and AW119 MKII helicopters. AD 2021–22–05 requires repetitively inspecting certain torque tube assemblies for any deficiency and corrective action if necessary, and replacing any affected part with a serviceable part, which is terminating action for the repetitive inspections. AD 2021–22–05 was prompted by reports of abnormal play on the collective torque tube on two Leonardo Model AW119 MKII helicopters, which were due to an erroneous manufacturing process. Since the FAA issued AD 2021–22–05, it was discovered that additional torque tube assemblies are subject to the unsafe condition. This proposed AD would retain certain requirements specified in AD 2021–22–05, reduce the