## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. FAA–2022–1170; Project Identifier AD–2022–00023–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 747–400, –400D, and –400F series airplanes. This proposed AD was prompted by the FAA's analysis of the Model 747 airplane fuel system reviews conducted by the manufacturer, and by the determination that new or more restrictive airworthiness limitations are necessary. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. 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 December 19, 2022.

**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.

For 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; internet *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–2022–1170.

### Examining the AD Docket

You may examine the AD docket at *regulations.gov* by searching for and locating Docket No. FAA–2022–1170; 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.

**FOR FURTHER INFORMATION CONTACT:** Samuel Dorsey, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 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–2022–1170; Project Identifier AD–2022–00023–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 to Samuel Dorsey, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206–231–3415; email: *Samuel.J.Dorsey@faa.gov.* Any commentary that the FAA receives which 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), Amendment 21–83 (67 FR 72830, December 9, 2002; corrected at 68 FR 37735, June 25, 2003, to change ''21–82'' to ''21–83''), and Amendment 21–101 (83 FR 9162, March 5, 2018).

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, single failures in combination with another latent condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

This proposed AD was prompted by significant changes made to the airworthiness limitations (AWLs) related to fuel tank ignition prevention and the nitrogen generation system. This condition, if not addressed, could result in the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in fuel tank explosions 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 ADs**

The FAA issued AD 2008–10–06 R1, Amendment 39–16160 (75 FR 906, January 7, 2010), which applies to certain Model 747–400, –400D, and –400F series airplanes. AD 2008–10–06 R1 requires revising the existing maintenance program by incorporating new airworthiness limitations (AWLs) for fuel tank systems to satisfy SFAR 88 requirements. That AD also requires the phasing in of certain repetitive AWL inspections, and repair if necessary. AD 2008–10–06 R1 was prompted by the FAA's analysis of the fuel system reviews of Model 747 airplanes conducted by the manufacturer.

This proposed AD also affects the following ADs, which include requirements to incorporate certain airworthiness limitations into the existing maintenance or inspection program. Revising the existing maintenance or inspection program specified in this proposed AD would terminate certain actions specified in these ADs:

- AD 2008–18–09, Amendment 39–15666 (73 FR 52911, September 12, 2008), which applies to certain Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747–400, 747–400D, 747–400F, 747SR, and 747SP series airplanes.
- AD 2010–13–12, Amendment 39–16343 (75 FR 37997, July 1, 2010), which applies to certain Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747–400, 747–400D, 747–400F, 747SR, and 747SP series airplanes.
- AD 2010–14–08, Amendment 39–16353 (75 FR 38397, July 2, 2010), which applies to certain Model 747–400, –400D, and –400F series airplanes.
- AD 2011–06–03, Amendment 39–16627 (76 FR 15814, March 22, 2011), which applies to certain Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747–400, 747–400D, 747–400F, 747SR, and 747SP series airplanes.
- AD 2014–15–14, Amendment 39–17916 (79 FR 45324, August 5, 2014), which applies to certain Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747–400, 747–400D, 747–400F, 747SR, and 747SP series airplanes.
- AD 2016–19–03, Amendment 39–18652 (81 FR 65872, September 26, 2016), which applies to certain Model 747–100, 747–100B, 747–100B SUD, 747–200B, 747–200C, 747–200F, 747–300, 747–400, 747–400D, 747–400F, 747SR, and 747SP series airplanes.

**Related Service Information Under 1 CFR Part 51**

The FAA reviewed Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), of Boeing 747–400 Maintenance Planning Data (MPD) Document, D621U400–9, dated September 2021. This service information specifies airworthiness limitations for fuel tank systems. 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 revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. For information on the procedures and compliance times, see this service information at *regulations.gov* by searching for and locating Docket No. FAA–2022–1170.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (*e.g.,* inspections) and Critical Design Configuration Control Limitations (CDCCLs). Compliance with these actions and CDCCLs is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (k) of this proposed AD.

**Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 119 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

The FAA has determined that revising the existing maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the average total cost per operator to be $7,650 (90 work-hours × $85 per work-hour).

**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–2022–1170; Project Identifier AD–2022–00023–T.

**(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by December 19, 2022.

**(b) Affected ADs**

This AD affects the ADs specified in paragraphs (b)(1) through (7) of this AD.

(1) AD 2008–10–06 R1, Amendment 39–16160 (75 FR 906, January 7, 2010) (AD 2008–10–06 R1).

(2) AD 2008–18–09, Amendment 39–15666 (73 FR 52911, September 12, 2008) (AD 2008–18–09).

(3) AD 2010–13–12, Amendment 39–16343 (75 FR 37997, July 1, 2010) (AD 2010–13–12).

(4) AD 2010–14–08, Amendment 39–16353 (75 FR 38397, July 2, 2010) (AD 2010–14–08).

(5) AD 2011–06–03, Amendment 39–16627 (76 FR 15814, March 22, 2011) (AD 2011–06–03).

(6) AD 2014–15–14, Amendment 39–17916 (79 FR 45324, August 5, 2014) (AD 2014–15–14).

(7) AD 2016–19–03, Amendment 39–18652 (81 FR 65872, September 26, 2016) (AD 2016–19–03).

**(c) Applicability**

This AD applies to all The Boeing Company Model 747–400, –400D, and –400F series airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel.

**(e) Unsafe Condition**

This AD was prompted by the FAA's analysis of the fuel system reviews on Model 747–400, –400D, and –400F series airplanes conducted by the manufacturer, and by the determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**(f) Compliance**

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

**(g) Maintenance or Inspection Program Revision**

Within 60 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Section B, Airworthiness Limitations—Systems, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), of Boeing 747–400 Maintenance Planning Data (MPD) Document, D621U400–9, dated September 2021; except as provided by paragraph (h) of this AD. The initial compliance time for doing the airworthiness limitation instruction (ALI) tasks is at the times specified in paragraphs (g)(1) through (13) of this AD.

(1) For AWL No. 28–AWL–01, ''External Wires Over Center Fuel Tank'': At the applicable time specified in paragraph (g)(1)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–01 in their maintenance or inspection program before the effective date of this AD: Within 144 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 12 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(1)(i) of this AD: Within 144 months since AWL No. 28–AWL–01 was added to the maintenance or inspection program, or within 144 months after the most recent inspection was performed as specified in AWL No. 28–AWL–01, whichever occurs later.

(2) For AWL No. 28–AWL–03, ''Fuel Quantity Indication System (FQIS)—Out of Tank Wiring Lightning Shield to Ground Termination'': At the applicable time specified in paragraph (g)(2)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–03 in their maintenance or inspection program before the effective date of this AD: Within 144 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 12 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(2)(i) of this AD: Within 144 months since AWL No. 28–AWL–03 was added to the maintenance or inspection program, or within 144 months after the most recent inspection was performed as specified in AWL No. 28–AWL–03, whichever occurs later.

(3) For AWL No. 28–AWL–10, ''Main Tank, Center Wing Tank, and Horizontal Stabilizer Tank (if installed) Refuel Valve Installation—Fault Current Bond'': At the applicable time specified in paragraph (g)(3)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–10 in their maintenance or inspection program before the effective date of this AD: Within 144 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 12 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(3)(i) of this AD: Within 144 months since AWL No. 28–AWL–10 was added to the maintenance or inspection program, or within 144 months after the most recent inspection was performed as specified in AWL No. 28–AWL–10, whichever occurs later.

(4) For AWL No. 28–AWL–17, ''Over-Current and Arcing Protection Electrical Design Features Operation—Fault Current Detector (FCD) for Center Wing Tank (CWT) Pumps and Inboard Main Tank Override/Jettison (O/J) Pumps and Horizontal Stabilizer Tank (HST) Transfer Fuel Pumps'': At the applicable time specified in paragraph (g)(4)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–17 in their maintenance or inspection program before the effective date of this AD: Within 18 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 90 days after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(4)(i) of this AD: Within 18 months since AWL No. 28–AWL–17 was added to the maintenance or inspection program, or within 18 months after the most recent inspection was performed as specified in AWL No. 28–AWL–17, whichever occurs later.

(5) For AWL No. 28–AWL–24, ''Horizontal Stabilizer Tank (HST) Fuel Pump Automatic Shutoff Circuit (If Installed)'': At the applicable time specified in paragraph (g)(5)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–24 in their maintenance or inspection program before the effective date of this AD: Within 12 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 90 days after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(5)(i) of this AD: Within 12 months since AWL No. 28–AWL–24 was added to the maintenance or inspection program, or within 12 months after the most

recent inspection was performed as specified in AWL No. 28–AWL–24, whichever occurs later.

(6) For AWL No. 28–AWL–26, ''Main Tank 2 and Main Tank 3 Override/Jettison Fuel Pump Uncommanded on System'': At the applicable time specified in paragraph (g)(6)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–26 in their maintenance or inspection program before the effective date of this AD: Within 12 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 90 days after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(6)(i) of this AD: Within 12 months since AWL No. 28–AWL–26 was added to the maintenance or inspection program, or within 12 months after the most recent inspection was performed as specified in AWL No. 28–AWL–26, whichever occurs later.

(7) For AWL No. 28–AWL–28, ''Over-Current and Arcing Protection Electrical Design Features Operation—Main Tank AC Fuel Pump Ground Fault Interrupter (GFI)'': At the applicable time specified in paragraph (g)(7)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–28 in their maintenance or inspection program before the effective date of this AD: Within 12 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 90 days after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(7)(i) of this AD: Within 12 months since AWL No. 28–AWL–28 was added to the maintenance or inspection program, or within 12 months after the most recent inspection was performed as specified in AWL No. 28–AWL–28, whichever occurs later.

(8) For AWL No. 28–AWL–29, ''Over-Current and Arcing Protection Electrical Design Features Operation—Center Tank Scavenge AC Fuel Pump Ground Fault Interrupter (GFI)'': At the applicable time specified in paragraph (g)(8)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–29 in their maintenance or inspection program before the effective date of this AD: Within 12 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 90 days after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(8)(i) of this AD: Within 12 months since AWL No. 28–AWL–29 was added to the maintenance or inspection program, or within 12 months after the most recent inspection was performed as specified in AWL No. 28–AWL–29, whichever occurs later.

(9) For AWL No. 28–AWL–33, ''Cushion Clamps and Teflon Sleeving Installed on Out-of-Tank Wire Bundles Installed on Brackets that are Mounted Directly on the Fuel Tanks,'' at the applicable time specified in paragraph (g)(9)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–33 in their maintenance or inspection program before the effective date of this AD: Within 144 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 12 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(9)(i) of this AD: Within 144 months since AWL No. 28–AWL–33 was added to the maintenance or inspection program, or within 144 months after the most recent inspection was performed as specified in AWL No. 28–AWL–33, whichever occurs later.

(10) For AWL No. 28–AWL–40, ''Reserve Tank Refuel Valve Installation—Lightning Protection Electrical Bond,'' at the applicable time specified in paragraph (g)(10)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 28–AWL–40 in their maintenance or inspection program before the effective date of this AD: Within 72 months since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 12 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(10)(i) of this AD: Within 72 months since AWL No. 28–AWL–40 was added to the maintenance or inspection program, or within 72 months after the most recent inspection was performed as specified in AWL No. 28–AWL–40, whichever occurs later.

(11) For AWL No. 47–AWL–07, ''Nitrogen Generation System—Nitrogen Enriched Air (NEA) Distribution Ducting Inspection,'' at the applicable time specified in paragraph (g)(11)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 47–AWL–07 in their maintenance or inspection program before the effective date of this AD: Within 21,250 total flight hours since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 4 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(11)(i) of this AD: Within 21,250 total flight hours since AWL No. 47–AWL–07 was added to the maintenance or inspection program, or within 21,250 total flight hours after the most recent inspection was performed as specified in AWL No. 47–AWL–07, whichever occurs later.

(12) For AWL No. 47–AWL–08, ''Nitrogen Generation System [NGS]—Cross-Vent Check Valve Functional Check,'' at the applicable time specified in paragraph (g)(12)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 47–AWL–08 in their maintenance or inspection program before the effective date of this AD: Within 21,250 total flight hours since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 4 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(12)(i) of this AD: Within 21,250 total flight hours since AWL No. 47–AWL–08 was added to the maintenance or inspection program, or within 21,250 total flight hours after the most recent inspection was performed as specified in AWL No. 47–AWL–08, whichever occurs later.

(13) For AWL No. 47–AWL–10, ''NGS—Thermal Switch,'' at the applicable time specified in paragraph (g)(13)(i) or (ii) of this AD.

(i) For airplanes that did not have any version of AWL No. 47–AWL–10 in their maintenance or inspection program before the effective date of this AD: Within 54,000 total flight hours since issuance of the original airworthiness certificate or original export certificate of airworthiness, or within 4 months after the effective date of this AD, whichever occurs later.

(ii) For airplanes not identified in paragraph (g)(13)(i) of this AD: Within 54,000 total flight hours since AWL No. 47–AWL–10 was added to the maintenance or inspection program, or within 54,000 total flight hours after the most recent inspection was performed as specified in AWL No. 47–AWL–10, whichever occurs later.

**(h) Additional Acceptable Wire Types and Sleeving**

As an option, during accomplishment of the actions required by paragraph (g) of this AD, the alternative materials specified in paragraphs (h)(1) and (2) of this AD are acceptable.

(1) Where AWL No. 28–AWL–08 identifies wire types BMS 13–48, BMS 13–58, and BMS 13–60, the following wire types, as applicable, are acceptable: MIL–W–22759/16, SAE AS22759/16 (M22759/16), MIL–W–22759/32, SAE AS22759/32 (M22759/32), MIL–W–22759/34, SAE AS22759/34 (M22759/34), MIL–W–22759/41, SAE AS22759/41 (M22759/41), MIL–W–22759/86, SAE AS22759/86 (M22759/86), MIL–W–22759/87, SAE AS22759/87 (M22759/87), MIL–W–22759/92, and SAE AS22759/92 (M22759/92); and MIL–C–27500 and NEMA WC 27500 cables constructed from these military or SAE specification wire types.

(2) Where AWL No. 28–AWL–08 identifies TFE–2X Standard wall for wire sleeving, the following sleeving materials are acceptable: Roundit 2000NX and Varglas Type HO, HP, or HM, as applicable.

**(i) No Alternative Actions, Intervals, or Critical Design Configuration Control Limitations (CDCCLs)**

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (*e.g.,* inspections), intervals, or CDCCLs may be used unless the actions, intervals, and CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

**(j) Terminating Actions**

(1) Accomplishing the actions required by paragraph (g) of this AD terminates all requirements of AD 2008–10–06 R1.

(2) Accomplishing the actions required by paragraph (g) of this AD terminates paragraph

(g)(2) of AD 2008–18–09 for Model 747–400, –400D, and –400F airplanes only.

(3) Accomplishing the actions required by paragraph (g) of this AD terminates paragraph (h)(1) of AD 2010–13–12 for Model 747–400, –400D, and –400F airplanes only.

(4) Accomplishing the actions required by this AD terminates paragraph (j) of AD 2010–14–08.

(5) Accomplishing the actions required by paragraph (g) of this AD terminates paragraph (l) of AD 2011–06–03 for Model 747–400, –400D, and –400F airplanes only.

(6) Accomplishing the actions required by paragraph (g) of this AD terminates paragraph (h)(1) of AD 2014–15–14 for Model 747–400, –400D, and –400F airplanes only.

(7) Accomplishing the actions required by paragraph (g) of this AD terminates paragraph (h) of AD 2016–19–03 for Model 747–400, –400D, and –400F airplanes only.

**(k) 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 (l)(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, 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.

**(l) Related Information**

(1) For more information about this AD, contact Samuel Dorsey, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206–231–3415; email: *Samuel.J.Dorsey@faa.gov.*

(2) 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; internet *myboeingfleet.com*. You may view this referenced 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.

Issued on September 19, 2022.

**Christina Underwood,**

*Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.*

[FR Doc. 2022–23901 Filed 11–3–22; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. FAA–2022–1403; Project Identifier MCAI–2022–00122–T]**

**RIN 2120–AA64**

## Airworthiness Directives; De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.) 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 De Havilland Aircraft of Canada Limited Model DHC–8–401 and –402 airplanes. This proposed AD was prompted by reports of corrosion on the horizontal stabilizer lower center skin panel, including a finding of corrosion where the skin thickness had been substantially reduced, which affected design margins. This proposed AD would require inspecting the horizontal stabilizer lower center skin panel for corrosion, and reworking, repairing, or replacing the lower center skin panel if necessary. 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 December 19, 2022.

**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–2022–1403; 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, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

*Material Incorporation by Reference:*

- For service information identified in this NPRM, contact De Havilland Aircraft of Canada Limited, Dash 8 Series Customer Response Centre, 5800 Explorer Drive, Mississauga, Ontario, L4W 5K9, Canada; telephone 855–310–1013 or 647–277–5820; email *thd@dehavilland.com*; website *dehavilland.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.

**FOR FURTHER INFORMATION CONTACT:** Yaser Osman, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7300; email *9-avs-nyaco-cos@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–2022–1403; Project Identifier MCAI–2022–00122–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 the 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