



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2024-2420; Project Identifier MCAI-2024-00143-T; Amendment  
39-22978; AD 2025-05-06]**

**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:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2022-01-02, which applied to certain De Havilland Aircraft of Canada Limited Model DHC-8-400, -401, and -402 airplanes. AD 2022-01-02 required inspecting for corrosion of the nacelle to wing rear spar attachment pins, and the nacelle to landing gear attachment pins, and doing all applicable corrective actions. This AD was prompted by a determination that some operators were unable to identify the airplanes subject to each requirement. This AD continues to require the actions specified in AD 2022-01-02, clarifies the affected airplanes for each required action, and revises the applicability by removing Model DHC-8-400 airplanes; as specified in Transport Canada AD, which is incorporated by reference. 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](https://www.regulations.gov) under Docket No. FAA-2024-2420; 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, the mandatory continuing airworthiness information (MCAI), 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 Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email [TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca](mailto:TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca). You may find this material on the Transport Canada website at [tc.canada.ca/en/aviation](https://tc.canada.ca/en/aviation).

- 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](https://www.regulations.gov) under Docket No. FAA-2024-2420.

**FOR FURTHER INFORMATION CONTACT:** Fatin Saumik, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2022-01-02, Amendment 39-21890 (87 FR 4145, January 27, 2022) (AD 2022-01-02). AD 2022-01-02 applied to certain De Havilland Aircraft of Canada

Limited Model DHC-8-400, -401, and -402 airplanes. AD 2022-01-02 required doing a detailed visual inspection for corrosion of the nacelle to wing rear spar attachment pins, and the nacelle to landing gear attachment pins, and doing all applicable corrective actions. The FAA issued AD 2022-01-02 to address premature corrosion and subsequent failure of the nacelle to landing gear and nacelle to rear wing spar attachment pins, which, if undetected, could lead to a single or dual collapse of the main landing gear.

The NPRM published in the *Federal Register* on November 12, 2024 (89 FR 88910). The NPRM was prompted by AD CF-2020-51R2, dated February 27, 2024, issued by Transport Canada, which is the aviation authority for Canada (Transport Canada AD CF-2020-51R2) (also referred to as the MCAI). The MCAI provides clarification of the applicability for each of its parts (Parts I through V) and otherwise maintains the requirements of Transport Canada AD CF-2020-51R1. It also revises the applicability section to remove Model DHC-8-400 airplanes since no Model DHC-8-400 airplanes have been delivered.

In the NPRM, the FAA proposed to continue to require the actions specified in AD 2022-01-02, clarify the affected airplanes for each required action, and revise the applicability by removing Model DHC-8-400 airplanes, as specified in Transport Canada AD CF-2020-51R2. The NPRM also proposed to correct an error in AD 2022-01-02, which included a compliance time that incorrectly used the number of flight cycles on the airplane instead of on the pins. The FAA is issuing this AD to address premature corrosion and subsequent failure of the nacelle to landing gear and nacelle to rear wing spar attachment pins. The unsafe condition, if not addressed, could result a single or dual collapse of the main landing gear.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2420.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received a comment from Air Line Pilots Association, International (ALPA), who supported the NPRM without change.

The FAA received an additional comment from Horizon Air. The following presents the comment received on the NPRM and the FAA's response to that comment.

### **Request for Corrections to Exception Paragraph**

Horizon Air stated that the proposed AD incorrectly listed the FAA AD number as the Transport Canada AD number in the paragraph title and in paragraph (h)(1) of the proposed AD. Horizon Air requested that the number be replaced with the Transport Canada AD number, CF-2020-51R2, in the title and paragraph (h)(1) of the proposed AD.

The FAA agrees with the requested change to correctly identify the Transport Canada AD number. The FAA has changed this AD accordingly.

### **Conclusion**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comment 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 this product. 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.

## **Material Incorporated by Reference Under 1 CFR Part 51**

Transport Canada AD CF-2020-51R2 specifies procedures for doing a detailed visual inspection of the nacelle to wing rear spar attachment pins, and the nacelle to landing gear attachment pins, for any corrosion; and doing all applicable corrective actions. Corrective actions include applying epoxy primer to the bore surface of the pins, performing a fluorescent magnetic particle inspection for any cracking, removing corrosion, reworking and part marking certain pins, and replacing any cracked or corroded pins with serviceable pins.

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.

### **Costs of Compliance**

The FAA estimates this AD affects 41 airplanes in the U.S. registry. The FAA estimates the following costs to comply with this AD:

#### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 25 work-hours X \$85 per hour = Up to \$2,125	Up to \$21	Up to \$2,146	Up to \$87,986

### **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(f), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2022-01-02, Amendment 39-21890 (87 FR 4145, January 27, 2022); and

b. Adding the following new AD:

**2025-05-06 De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.):** Amendment 39-22978; Docket No. FAA-2024-2420; Project Identifier MCAI-2024-00143-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**

This AD replaces AD 2022-01-02, Amendment 39-21890 (87 FR 4145, January 27, 2022) (AD 2022-01-02).

**(c) Applicability**

This AD applies to De Havilland Aircraft of Canada Limited (type certificate previously held by Bombardier, Inc.) Model DHC-8-401 and -402 airplanes, certificated in any category, as identified in Transport Canada AD CF-2020-51R2, dated February 27, 2024 (Transport Canada AD CF-2020-51R2).

**(d) Subject**

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

**(e) Unsafe Condition**

This AD was prompted by a report that the epoxy primer on the internal bore of the nacelle and landing gear attachment pins was not applied, and by corrosion found on the internal bore of the wing rear spar attachment pins. The FAA is issuing this AD to address premature corrosion and subsequent failure of the nacelle to landing gear and nacelle to rear wing spar attachment pins. The unsafe condition, if not addressed, could result a single or dual collapse of the main landing gear.

**(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: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada AD CF-2020-51R2.

**(h) Exceptions to Transport Canada AD CF-2020-51R2**

(1) Where Transport Canada AD CF-2020-51R2 refers to “the effective date of AD CF-2020-51, 9 December 2020,” this AD requires using March 3, 2022 (the effective date of AD 2022-01-02).

(2) Where paragraph A. of Parts I, II, and III, and Parts IV and V, of Transport Canada AD CF-2020-51R2 specifies the compliance time, for this AD, the compliance time for paragraph A. of Parts I, II, and III, and for Parts IV and V, of Transport Canada AD CF-2020-51R2 is at the later of the times in paragraphs (h)(2)(i) and (ii) of this AD.

(i) Prior to the pins reaching 14 years from their entry-into-service or prior to the pins reaching 30,000 total flight cycles, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

**(i) Additional AD Provisions**

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation 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 International Validation Branch, mail it to the address identified in paragraph (j) of this AD. Information may be emailed to AMOC@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(ii) AMOCs approved previously for AD 2022-01-02 are approved as AMOCs for the corresponding provisions of Transport Canada AD CF-2020-51R2 that are required by paragraph (g) of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or Transport Canada; or De Havilland Aircraft of Canada Limited's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Additional Information**

For more information about this AD, contact Fatin Saumik, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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 this AD specifies otherwise.

(i) Transport Canada AD CF-2020-51R2, dated February 27, 2024.

(ii) [Reserved]

(3) For Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email TC.AirworthinessDirectives-

Consignesdenavigabilite.TC@tc.gc.ca. You may find this material on the Transport Canada website at [tc.canada.ca/en/aviation](http://tc.canada.ca/en/aviation).

(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](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on February 28, 2025.

Steven W. Thompson,  
Acting Deputy Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.  
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