



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

**[Docket No. FAA-2025-0482; Project Identifier MCAI-2024-00152-T; Amendment
39-23145; AD 2025-19-05]**

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) 2019-16-09, which applied to certain De Havilland Aircraft of Canada Limited Model DHC-8-400 series airplanes. AD 2019-16-09 required one-time inspections for cracks and damage of the elevator power control unit (PCU) brackets and surrounding area, horizontal stabilizer rear spar, elevator front spar, and related investigative and corrective actions if necessary. Since the FAA issued AD 2019-16-09, new findings have been reported as a result of maintenance activities and/or inspections. This AD continues to require certain actions in AD 2019-16-09 and requires repeating the inspections one time and performing applicable on-condition actions. This AD also removes an airplane model from the applicability and provides optional terminating action for repetitive inspections. 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 certain publications 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-2025-0482; 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. You may find this material on the Transport Canada website at 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-2025-0482.

FOR FURTHER INFORMATION CONTACT: Yaser Osman, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; email: 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 2019-16-09, Amendment 39-19712 (84 FR 46434, September 4, 2019) (AD 2019-16-09). AD 2019-16-09 applied to certain De Havilland Aircraft of Canada Limited Model DHC-8-400, -401, and -402 airplanes. AD 2019-16-09 required one-time inspections for cracks and damage of the elevator PCU fittings (brackets) and surrounding area, horizontal stabilizer rear spar, elevator front spar, and related investigative and corrective actions if necessary. The FAA issued AD 2019-16-09 to address failure of an elevator PCU fitting (bracket) or fracture of the front spar into two segments; either structural failure may cause a jam in one elevator or a loss of airplane pitch control if both elevators are affected.

The NPRM was published in the *Federal Register* on June 23, 2025 (90 FR 26466). The NPRM was prompted by AD CF-2024-10, dated March 1, 2024 (Transport Canada AD CF-2024-10), issued by Transport Canada, which is the aviation authority for Canada. Transport Canada AD CF-2024-10 states that new findings have been reported as a result of maintenance activities and/or inspections performed in accordance with De Havilland Aircraft of Canada Service Bulletin 84-55-09, dated June 7, 2018 (the service information originally issued by Bombardier as required by FAA AD 2019-16-09). Transport Canada AD CF-2024-10 requires repeating the inspections one time and performing applicable on-condition actions, while maintaining the requirements of AD 2019-16-09. Transport Canada AD CF-2024-10 also removes the requirement to report findings to the manufacturer. Transport Canada also issued AD CF-2025-19, dated March 24, 2025 (Transport Canada AD CF-2025-19), which provides a new design solution to address the unsafe condition in this AD and terminates the actions specified in Transport Canada AD CF-2024-10.

In the NPRM, the FAA proposed to continue to require certain actions in AD 2019-16-09, require repeating the inspections one time and performing applicable on-condition actions, remove the reporting requirement, and remove an airplane model from the applicability, as specified in Transport Canada AD CF-2024-10. In the NPRM, the FAA also proposed to provide an optional terminating action for the repetitive inspections, as specified in Transport Canada AD CF-2025-19. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0482.

Discussion of Final Airworthiness Directive

Comments

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

Conclusion

These products have been approved by the civil aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. 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 Transport Canada AD CF-2024-10, which specifies procedures for performing detailed visual and fluorescent penetrant inspections for cracks

and damage of the elevator PCU fittings (brackets), horizontal stabilizer rear spar, and elevator front spar; repeating the inspections one time; rectifying any cracked or damaged elevator PCU fitting (bracket) (which includes replacing the elevator PCU fitting (bracket) and performing related investigative and corrective actions including performing an eddy current inspection for cracking of certain mating holes of the horizontal stabilizer rear spar); and repairing any cracked or damaged horizontal stabilizer rear spar assembly.

The FAA reviewed Transport Canada AD CF-2025-19, which specifies procedures for, among other actions, replacement of existing PCU fittings with redesigned PCU fittings. The replacement includes detailed inspections for damage and eddy current inspections for cracking, repair, installation of new bushings, and installation of doublers.

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 an interim action. The FAA is considering mandating the optional terminating action specified in Transport Canada AD CF-2025-19.

Costs of Compliance

The FAA estimates that this AD affects 54 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
13 work-hours X \$85 per hour = \$1,105	\$0	Up to \$1,105	Up to \$59,670

Estimated costs for optional actions

Labor cost	Parts cost	Cost per product
48 work-hours X \$85 per hour = \$4,080	\$16,343	\$20,423

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

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
18 work-hours X \$85 per hour = \$1,530	\$14,233	\$15,763

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this AD.

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

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:

- a. Removing Airworthiness Directive (AD) 2019-16-09, Amendment 39-19712 (84 FR 46434, September 4, 2019); and

- b. Adding the following new AD:

2025-19-05 De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.): Amendment 39-23145; Docket No. FAA-2025-0482; Project Identifier MCAI-2024-00152-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 2019-16-09, Amendment 39-19712 (84 FR 46434, September 4, 2019) (AD 2019-16-09).

(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-2024-10, dated March 1, 2024 (Transport Canada AD CF-2024-10).

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reports of cracked elevator power control unit (PCU) fittings (brackets) on the horizontal stabilizer rear spar and cracking on the elevator front spar. The FAA is issuing this AD to address this condition, which, if not detected and corrected, may cause failure of an elevator PCU fitting (bracket) or fracture the front spar into two segments; either structural failure may cause a jam in one elevator or a loss of airplane pitch control if both elevators are affected.

(f) Compliance

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

(g) Requirements

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-2024-10.

(h) Exceptions to Transport Canada AD CF-2024-10

(1) Where Transport Canada AD CF-2024-10 refers to the effective date of AD CF-2018-34 (December 31, 2018), this AD requires using October 9, 2019 (the effective date of AD 2019-16-09).

(2) Where Transport Canada AD CF-2024-10 refers to hours air time, this AD requires using flight hours.

(3) Where Transport Canada AD CF-2024-10 refers to “if cracks or damage”, this AD requires replacing that text with “if any crack or damage”.

(4) Where Transport Canada AD CF-2024-10 specifies actions if certain conditions are found on “rear spar assembly P/N 85517044 and/or elevator assembly P/N 85527021”, this AD requires replacing that text with “rear spar assembly P/N 85517044 or elevator assembly P/N 85527021”.

(5) Where Transport Canada AD CF-2024-10 specifies “after inspecting as required by AD CF-2018-34”, this AD requires replacing that text with “after inspecting as specified in Bombardier Service Bulletin 84-55-09 or de Havilland Aircraft of Canada Limited Service Bulletin 84-55-09”.

(6) Where paragraph B. of Part I and paragraph A. of Part II of Transport Canada AD CF-2024-10 specify a compliance time to do a repeat inspection, this AD allows the inspection to be done within 90 days after the effective date of this AD.

(i) No Reporting Requirement

Although the material referenced in Transport Canada AD CF-2024-10 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Optional Terminating Action for Repetitive Inspections

(1) For airplane serial numbers 4001 and 4003 through 4058 inclusive on which any inspection specified in Section 3.B. of the Accomplishment Instructions of Bombardier Service Bulletin 84-55-09 or de Havilland Aircraft of Canada Limited Service Bulletin 84-55-09 has been done: Replacement of existing PCU fittings with redesigned PCU fittings in accordance with Part I, paragraph B., of Transport Canada AD CF-2025-19, dated March 24, 2025, terminates the requirements of paragraph (g) of this AD.

(2) For airplane serial numbers 4059 through 4580 inclusive on which any inspection specified in Section 3.B. of the Accomplishment Instructions of Bombardier Service Bulletin 84-55-09 or de Havilland Aircraft of Canada Limited Service Bulletin 84-55-09 has been done: Replacement of existing PCU fittings with redesigned PCU fittings in accordance with Part II, paragraphs B. and C., of Transport Canada AD CF-2025-19, dated March 24, 2025, terminates the requirements of paragraph (g) of this AD.

(k) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph A. of Part I of Transport Canada AD CF-2024-10, as required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-55-09, dated June 7, 2018; or de Havilland Aircraft of Canada Limited Service Bulletin 84-55-09, Revision A, dated January 10, 2020.

(l) Additional AD Provisions

The following provisions also apply to this AD:

(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, International Validation Branch, send it to the attention of the person identified in paragraph (m)(1) of this AD and email to: AMOC@faa.gov.

(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.

(m) Additional Information

(1) For more information about this AD, contact Yaser Osman, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; email: 9-avs-nyaco-cos@faa.gov.

(2) For Bombardier or De Havilland Aircraft of Canada Limited material identified in this AD that is not incorporated by reference, contact De Havilland Aircraft of Canada Limited, Dash 8 Series Customer Response Centre, 5800 Explorer Drive, Mississauga, Ontario, L4W 5K9, Canada; telephone North America (toll-free): 855-310-1013, Direct: 647-277-5820; email thd@dehavilland.com; website dehavilland.com.

(n) 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 this AD specifies otherwise.

(i) Transport Canada AD CF-2024-10, dated March 1, 2024.

(ii) Transport Canada AD CF-2025-19, dated March 24, 2025.

(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.

(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 September 16, 2025.

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