



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2023-2137; Project Identifier MCAI-2022-01389-T; Amendment  
39-22737; AD 2024-08-04]

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 adopting a new airworthiness directive (AD) for all De Havilland Aircraft of Canada Limited Model DHC-8-401 and -402 airplanes. This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. 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].

#### **ADDRESSES:**

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2137; 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 De Havilland material, 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](mailto:thd@dehavilland.com); website [dehavilland.com](http://dehavilland.com).

- 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](http://regulations.gov) under Docket No. FAA-2023-2137.

**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 by adding an AD that would apply to all De Havilland Aircraft of Canada Limited Model DHC-8-401 and -402 airplanes. The NPRM published in the *Federal Register* on October 27, 2023 (88 FR 73775). The NPRM was prompted by AD CF-2022-59, dated October 27, 2022, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that new or more restrictive airworthiness limitations have been developed.

In the NPRM, the FAA proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address new or more restrictive maintenance

interval limitations. Failure to adhere to the specified interval limitations may result in reduced structural integrity of the airplane.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2137.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received a comment from an individual who supported the NPRM without change.

The FAA received additional comments from De Havilland Aircraft of Canada Limited and Horizon Air. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request to Update the Number of Affected Airplanes**

De Havilland requested that the Costs of Compliance section of the NPRM be updated to show the correct number of affected airplanes.

The FAA agrees. The Costs of Compliance section of this AD has been updated to show 52 affected airplanes.

### **Request to Require Tasks as Mandated in the MCAI**

Horizon Air requested that the proposed AD directly mandate maintenance review board report (MRBR) tasks instead of Aircraft Maintenance Manual (AMM) tasks. Horizon noted that Transport Canada AD CF-2022-59 mandates MRBR tasks directly, and that using the AMM tasks would put an additional burden on the operator to monitor multiple sources for the same tasks. The commenter also asserted that AMM task 77-31-00-710-803, which would be required by the proposed AD, adds MRBR tasks 731100-203, 733100-201, 740000-201, 750000-201, 772100-202, and 793000-201. These tasks are not identified in Section 7-00, PSM 1-84-7 – Maintenance Requirements Manual – Part 2 ALI.

The FAA does not agree because the FAA has decided to not mandate MRBRs that are part of Candidate Certification Maintenance Requirements (CCMRs), which are required by Transport Canada AD CF-2022-59. Instead of mandating the CCMR as done in the Transport Canada AD, the FAA, after coordination with Transport Canada, determined the corresponding AMM task numbers will be used. With the AMM tasks, operators must check for all engine fault codes at once, which involves reading codes from the engine fault code indicator. Although this involves more tasks, it does not add a significant number of steps. Requiring the AMM task does not pose a significant burden on the operator. This AD has not been changed with regard to this request.

#### **Request to Limit Required Tasks to Procedure Section**

Horizon Air requested that the proposed AD require only the procedure section of the AMM, with provisions for equivalent tooling and materials, rather than requiring the entire AMM maintenance task, including the job set-up, specific tools, equipment, and close-out sections. The commenter stated that mandating the entire AMM maintenance task procedure may restrict the operator's ability to perform other maintenance along with AMM tasks.

The FAA does not agree. The job set-up and close-out procedures are essential for ensuring the safety of maintenance personnel, and for ensuring the correct completion of the AMM task. This AD has not been changed with regard to this request.

#### **Request to Allow Further AMM Revisions**

Horizon Air requested clarification of whether future revisions of the AMM are allowed. Horizon noted that the proposed AD did not address whether task changes such as additions, removals, and interval adjustments could cause an operator to be out of compliance with the rule as issued.

The FAA agrees to clarify. Using the current revision of the AMMs or other revisions that incorporate the information specified in paragraph (g) of this AD is

acceptable for compliance with this AD. This AD does not mandate using a specific revision of the AMM, provided that the revision used complies with the requirements of paragraph (g) of this AD.

### **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 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 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.

### **Costs of Compliance**

The FAA estimates that this AD affects 52 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

The FAA has determined that revising the 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 agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$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**

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 adding the following new airworthiness directive:

**2024-08-04 De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.):** Amendment 39-22737; Docket No. FAA-2023-2137; Project Identifier MCAI-2022-01389-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**

None.

**(c) Applicability**

This AD applies to all De Havilland Aircraft of Canada Limited Model DHC-8-401 and -402 airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

**(e) Reason**

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address new or more restrictive maintenance interval limitations. Failure to adhere to the specified interval limitations may result in reduced structural integrity 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 figure 1 to paragraph (g) of this AD. The initial compliance time for each task in the AMM Task column of figure 1 to paragraph (g) of this AD is at the time specified in the initial compliance time column of figure 1 to paragraph (g) of this AD or within 12 months after the effective date of this AD, whichever occurs later.

**Figure 1 to paragraph (g) – Maintenance or Inspection Program Revision**

| <b>Effectivity</b> | <b>Initial Compliance Time</b> | <b>Interval Limitation</b> | <b>AMM Task</b>  |
|--------------------|--------------------------------|----------------------------|------------------|
| All                | 10,000 total flight hours (FH) | 10,000 FH                  | 21-31-00-710-801 |
| All                | 20,000 total FH                | 20,000 FH                  | 21-31-00-710-803 |
| All                | 20,000 total FH                | 20,000 FH                  | 21-31-00-710-804 |
| All                | 35,000 total FH                | 35,000 FH                  | 22-11-00-720-803 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-801 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-802 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-805 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-807 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-803 |
| All                | 30,000 total FH                | 30,000 FH                  | 26-20-00-900-804 |
| All                | 20,000 total FH                | 20,000 FH                  | 26-20-00-710-801 |
| All                | 20,000 total FH                | 20,000 FH                  | 28-21-00-710-801 |
| All                | 10,000 total FH                | 10,000 FH                  | 29-12-00-720-803 |
| All                | 4,950 total FH                 | 4,950 FH                   | 29-12-00-720-805 |
| All                | 4,950 total FH                 | 4,950 FH                   | 29-12-00-720-802 |
| All                | 4,950 total FH                 | 4,950 FH                   | 29-12-00-720-804 |
| All                | 30,000 total FH                | 30,000 FH                  | 30-11-00-710-802 |
| All                | 5,280 total FH                 | 5,280 FH                   | 31-41-00-710-802 |
| All                | 1,760 total FH                 | 1,760 FH                   | 32-11-00-210-802 |
| All                | 30,000 total FH                | 30,000 FH                  | 52-24-00-210-802 |
| All                | 4,400 total FH                 | 4,400 FH                   | 61-20-00-710-802 |
| All                | 150 total FH                   | 150 FH                     | 77-31-00-710-803 |

### **(h) No Alternative Actions or Intervals**

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be



used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) of this AD.

**(i) Other FAA 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 International Validation Branch, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(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**

(1) Refer to Transport Canada AD CF-2022-59, dated October 27, 2022, for related information. This Transport Canada AD may be found in the AD docket at regulations.gov under Docket No. FAA-2023-2137.

(2) 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**

None.

Issued on April 17, 2024.

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

[FR Doc. 2024-08577 Filed: 5/15/2024 8:45 am; Publication Date: 5/16/2024]