



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0101; Product Identifier 2019-NM-190-AD]

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-8-400 series airplanes. This proposed AD was prompted by a report that certain elevator power control unit (PCU) arm fittings have nonconforming fillet radii. This proposed AD would require an inspection for affected elevator PCU assemblies, inspections of affected elevator PCU arm fittings for nonconforming fillet radii and cracks, replacement if necessary, and re-identification of the affected elevator PCU assemblies. 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 [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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 <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.

For service information identified in this NPRM, contact De Havilland Aircraft of Canada Limited, Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; phone: 416-375-4000; fax: 416-375-4539; email: thd@dehavilland.com; Internet: <https://dehavilland.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0101; 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 regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; 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 the ADDRESSES section. Include “Docket No. FAA-2020-0101; Product Identifier 2019-NM-190-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact the agency receives about this NPRM.

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2019-36, dated October 18, 2019 (“AD CF-2019-36”) (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain De Havilland Aircraft of Canada Limited Model DHC-8-400 series airplanes. You may examine the

MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0101.

This proposed AD was prompted by a report that certain elevator PCU arm fittings have nonconforming fillet radii. The FAA is proposing this AD to address elevator PCU assemblies with nonconforming fillet radii, which could lead to premature failure of the fitting and a jam in one elevator; if the fittings on both elevators fail, a complete loss of elevator control could occur. See the MCAI for additional background information.

Related Service Information under 1 CFR Part 51

De Havilland has issued Service Bulletin 84-55-10, Revision A, dated July 25, 2019. This service information describes procedures for an inspection for affected elevator PCU assemblies, inspections of affected elevator PCU arm fittings for nonconforming fillet radii and cracks, replacement if necessary, and re-identification of the affected elevator PCU assemblies. 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 the ADDRESSES section.

FAA's Determination

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 the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the

unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed Requirements of this NPRM

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the MCAI or Service Information.”

Differences between this Proposed AD and the MCAI or Service Information

Canadian AD CF-2019-36 specifies to do the required inspections before accumulating 8,000 flight cycles from the effective date of Canadian AD CF-2019-36, or before accumulating 30,000 total flight cycles, whichever occurs first. TCCA’s risk assessment was developed using flight cycles on the elevator PCU assembly (which was inadvertently omitted from the Canadian AD). The FAA has determined that using the compliance times specified in the Canadian AD could inadvertently ground certain airplanes. Therefore, the FAA finds that the inspection must be accomplished within 8,000 flight cycles on the elevator PCU assembly after the effective date of this AD, or before the accumulation of 30,000 total flight cycles on the elevator PCU assembly, whichever occurs first, which represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety.

Costs of Compliance

The FAA estimates that this proposed AD affects 38 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
5 work-hours X \$85 per hour = \$425	\$0	\$425	\$16,150

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

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
14 work-hours X \$85 per hour = \$1,190	Up to \$9,060 (\$1,510 per elevator PCU arm fittings – 6 total per airplane)	Up to \$10,250

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) 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 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 (AD):

De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.): Docket No. FAA-2020-0101; Product Identifier 2019-NM-190-AD.

(a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to De Havilland Aircraft of Canada Limited Model DHC-8-400, -401, and -402 series airplanes, certificated in any category, serial numbers 4001 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Reason

This AD was prompted by a report that certain elevator power control unit (PCU) arm fittings have nonconforming fillet radii. The FAA is issuing this AD to address elevator PCU assemblies with nonconforming fillet radii, which could lead to premature failure of the fitting and a jam in one elevator; if the fittings on both elevators fail, a complete loss of elevator control could occur.

(f) Compliance

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

(g) Definition

Affected elevator PCU assemblies are those having part number 85527021-005 or 85527021-006, and having serial number MMC4255 through MMC4276 inclusive.

(h) Inspections

For airplanes having serial numbers 4001 through 4620 inclusive, within 8,000 flight cycles on the elevator PCU assembly after the effective date of this AD, or before the accumulation of 30,000 total flight cycles on the elevator PCU assembly, whichever occurs first: Do the actions specified in paragraphs (h)(1) and (2) of this AD.

(1) Inspect to determine the part number and serial number of each elevator PCU assembly installed on the airplane. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the elevator PCU assembly can be conclusively determined from that review.

(2) If, during any inspection or records review required by paragraph (h)(1) of this AD, any affected elevator PCU assembly is found, do a detailed inspection of the elevator PCU arm fittings for undersized fillet radii and cracks of the fillet radii in accordance with Part A of the Accomplishment Instructions of de Havilland Service Bulletin 84-55-10, Revision A, dated July 25, 2019. If no undersized fillet radii or cracks of the fillet radii are found, before further flight, re-identify the affected elevator PCU assembly in accordance with the Accomplishment Instructions of de Havilland Service Bulletin 84-55-10, Revision A, dated July 25, 2019.

(i) Corrective Actions

If during any inspection of the elevator PCU arm fittings required by paragraph (h)(2) of this AD, any undersized fillet radii or cracks of the fillet radii are found, before further flight, replace the elevator PCU arm fittings and re-identify each affected elevator PCU assembly in accordance with Part B of the Accomplishment Instructions of de Havilland Service Bulletin 84-55-10, Revision A, dated July 25, 2019.

(j) Parts Installation Limitation

As of the effective date of this AD, no person may install an affected elevator PCU assembly, on any airplane, unless it has been re-identified in accordance with the Accomplishment Instructions of de Havilland Service Bulletin 84-55-10, Revision A, dated July 25, 2019.

(k) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (h) and (i) of this AD, if those actions were performed before the effective date of this AD using de Havilland Service Bulletin 84-55-10, dated May 29, 2019.

(l) No Reporting Requirement

Although de Havilland Service Bulletin 84-55-10, Revision A, dated July 25, 2019, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(m) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York 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 local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; fax: 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district 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, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or De Havilland Aircraft of Canada Limited's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(n) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2019-36, dated October 18, 2019, for related information. This MCAI may be

found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0101.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7330; fax: 516-794-5531; email: 9-avs-nyaco-cos@faa.gov.

(3) For service information identified in this AD, contact De Havilland Aircraft of Canada Limited, Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; phone: 416-375-4000; fax: 416-375-4539; email: thd@dehavilland.com; Internet: <https://dehavilland.com>. You may view this service information at the FAA, Transport Standards 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 February 14, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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