



AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) with ADs.

Number: CF-2020-34
Effective Date: 20 October 2020
ATA: 27
Type Certificate: A-142

Subject:
 Flight Controls – Rudder Actuator Bracket – Cracked or Missing Nuts

Applicability:
 De Havilland Aircraft of Canada Limited (formerly Bombardier Inc.) aeroplanes:
 Model DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, DHC-8-314, and DHC-8-315, serial numbers 003 through 672,
 Model DHC-8-400, DHC-8-401 and DHC-8-402, serial numbers 4001 and 4003 through 4609.

Compliance:
 Before accumulating 8000 hours air time or no later than 4 years, whichever occurs first, from the effective date of this AD, unless already accomplished.

Background:
 Mounting nuts attaching the rudder actuator bracket to the vertical stabilizer have been found cracked or missing due to hydrogen embrittlement. The loss of the rudder actuator bracket will result in a disconnect between the rudder actuator and the vertical stabilizer which could be dormant. This condition, if not corrected, could result in a loss of directional control of the aircraft.

This AD mandates a one-time inspection of the rudder actuator bracket mounting nuts.

Corrective Actions:
 For the purpose of this AD, the term “the applicable SB” refers to the service bulletin (SB) applicable to the aeroplane model as listed in Table 1 of this AD.
 Inspect the rudder actuator bracket mounting nuts and, if necessary, correct any deficiencies in accordance with Section 3.B of the Procedure in the Accomplishment Instructions of the applicable SB in Table 1 below.

Table 1: SB References

Aeroplane Model	De Havilland Aircraft of Canada Limited SB
DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, DHC-8-314, and DHC-8-315	SB 8-27-123 Initial Revision dated 20 December 2019 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
DHC-8-400, DHC-8-401 and DHC-8-402	SB 84-27-74 Revision A dated 20 January 2020 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 6 October 2020

Contact:

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