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-2025-43

Effective Date:

16 September 2025

ATA:

34

Type Certificate:

A-142

Subject:

Navigation – 5G C-Band wireless Broadband Interference with Radio Altimeter System when operating in the contiguous United States of America (U.S.) airspace.

Applicability:

De Havilland Aircraft of Canada (DHC) Limited (formerly Bombardier Inc.) model DHC-8-401 and DHC-8-402 aeroplanes, all serial numbers.

Compliance:

As indicated below, unless already accomplished.

Background:

Transport Canada (TC) issued AD CF-2023-46 to prohibit certain flight operations requiring radio altimeter data when operating in the contiguous U.S. airspace affected by 5G C-Band wireless signals, in accordance with Federal Aviation Administration (FAA) AD 2023-10-02.

De Havilland has determined that 5G C-Band broadband interference can result in erroneous radio altimeter data when operating in the contiguous U.S. airspace affected by 5G C-Band wireless signals.

Erroneous radio altimeter information may lead to incorrect determination of height above ground and/or delayed transition of the aircraft air to ground mode. This can result in erroneous radio altitude readouts, aural warnings, incorrect inhibition of aircraft protection functions, flight director and autopilot oscillations on approach, increased rollout and stopping distance, and other unexpected flight deck effects that may increase pilot workload. In a 5G environment, when landing in the Flap 35°configuration, there is a potential for a delayed Weight-on-Wheels (WOW) signal due to an erroneous radio altimeter output which results in a delay in propeller discing on ground. This could lead to an unacceptable increase in rollout and stopping distance. The availability of the anti-skid function is required to mitigate the effect of the potential for delayed propeller discing to a negligible value. A serviceable anti-skid system is necessary to support any braking control that may be required due to the possibility of extra landing distance needed.

As terminating action, this AD CF-2025-43 requires aeroplanes operating in the contiguous U.S. airspace to be configured as Radio Altimeter Tolerant (RAT) aeroplanes. In order to mitigate the risk of these specific 5G interference effects until the aeroplane is RAT configured, Part I, II and III of this AD require, when operating with Airplane Flight Manual (AFM) supplements 37, 39 or 77 certain additional requirements to be followed, as indicated. This AD also requires, as mitigation, the prohibition of use of the applicable minimum equipment list item and requires placarding of the console and reinforces existing AFM limitations and procedures reiterated in Part II B.

Corrective Actions:

Definitions:

For purposes of this AD, the following definitions apply:

A. **5G C-Band Mitigated Airport** (**5G CMA**) is an airport at which the telecommunications companies have agreed to voluntarily limit their 5G deployment at the request of the FAA, as identified by an FAA Domestic Notice.

B. **Radio Altimeter Tolerant Aeroplane (RAT)** is one for which the radio altimeter, as installed, demonstrates the tolerances for emissions in Part I paragraphs A.1 and A.2. of AD CF-2023-46, dated 26 June 2023, using a method approved by the FAA or TC. Currently, aeroplanes that meet the requirements of the FAA definition of "radio altimeter tolerant airplane", as per Paragraph (g) Definitions of FAA AD 2023-10-02, are considered radio altimeter tolerant aeroplanes.

C. **Applicable Minimum Equipment List (MEL) Item** refer to the MEL item corresponding with the following Master Minimum Equipment List (MMEL) item:

    a. 32-40-02 – Anti-Skid System

D. **Non-Radio Altimeter Tolerant Aeroplane** is one for which the radio altimeter, as installed, does not demonstrate the tolerances for emissions specified in Part I paragraphs A.1 and A.2. of AD CF-2023-46, dated 26 June 2023. Currently, aeroplanes that meet the requirements of the FAA definition of "non-radio altimeter tolerant airplane", as per Paragraph (g) Definitions of FAA AD 2023-10-02, are considered non-radio altimeter tolerant aeroplanes

Part I – **Mitigating Actions: Applicable to Non-RAT Aeroplane Configurations Operating in the Contiguous U.S.**

Within 60 days from the effective date of this AD:

A. When operating in accordance with AFM Supplement 37 – Supplementary Performance Information For Operation On Contaminated Runways:

For operation on contaminated runways. The following is required for dispatch or release to airports in contiguous U.S. airspace in the presence of 5G C-Band wireless broadband interference.

    a. For landing with flap 35°, landing performance must be calculated using the data provided in AFM Temporary Amendment No. 7 which states:

    The unfactored landing distance required on a contaminated runway, obtained from Figure 6-37-22, must be increased by 400 ft.

B. When operating in accordance with AFM Supplement 39 – Noise Abatement Procedures and Performance (Landing With 850 Propeller RPM):

Supplement 39 requires the following:

    a. With the REF SPEEDS switch selected to INCR, flap 35° landing with reduced RPM is prohibited.

C. When operating in accordance AFM Supplement 77 – Supplementary Performance Information for Operation on Contaminated Runways with Measured Friction Values:

Supplement 77 requires the following:

    a. For landing with flap 35°, the unfactored landing distance required on a contaminated runway, obtained from Figure 6-77-10, is invalid.

D. Operational Landing Distance (OLD):

For landing with Flap 35° on contaminated runways, if any revisions of the DHC Technical Operations Document (TOD) listed in Table 1 are used, the landing distance referenced therein must be increased by 810 ft.

TABLE 1

Document	Revision	Release Date
TOD-8400-OLD-FAA-IMP-01	Rev. 01	26 June 2018
TOD-8400-OLD-FAA-IMP-02	Rev. 02	21 June 2019
TOD-8400-OLD-FAA-IMP-03	Rev. 03	15 November 2021
TOD-8400-OLD-FAA-IMP-03A	Rev. 03A	30 August 2022

NOTE: Operators using other than DHC supplied operational landing distance information available from third party sources must contact their respective providers to ensure this third party supplied operational landing distance guidance, when operating in the contiguous U.S. while in the presence of 5G C-band interference, is valid.

Part II– Mitigating Actions - Beta Lockout System and Beta Warning Horn:

A. Unless already accomplished, within 60 days from the effective date of this AD, install label Part Number (P/N) 81151129-101 in the cockpit, in the vicinity of the power levers in accordance with the Accomplishment Instructions in Section 3B Service Bulletin (SB) 84-11-57, Revision NC, dated 31 March 2023, or later revisions approved by the Chief, Continuing Airworthiness.

B. Brief all flight crew of the potential for inhibition of the Beta Lockout System and Warning Horn systems in the presence of 5G wireless interference and the necessity to strictly comply with the following AFM limitations and procedures:

   a. Existing AFM Engine Airborne Operating Limitation 2.5.8 prohibiting in-flight operation of power levers aft of the Flight Idle.

   b. AFM Normal Landing procedure 4.4.1 delaying selection of power levers from Flight Idle to DISC until after touchdown has been positively identified.

Part III– Mitigating Actions - MEL:

For Non-Radio Altimeter Tolerant Aeroplanes: it is prohibited to dispatch or release into or out of airports in the contiguous US airspace under the applicable MEL items defined in this AD, CF-2025-43.

Part IV – Terminating Action

Modifying the aeroplane as defined in Part IV of this AD, CF-2025-43 terminates the requirements specified by Part I, Part II and Part III of this AD.

Unless already accomplished, within 4 months of the effective date of this AD, modify the aeroplane in accordance with the Accomplishment Instructions in section 3 B of the applicable DHC SB listed in Table 2 below, or later revisions of the SB approved by the Chief, Continuing Airworthiness, Transport Canada.

TABLE 2

Radio Altimeter installed	SB Number
Honeywell KRA 405B	84-34-240, Revision F, dated 13 January 2025
Collins ALT 4000	84-34-248 Revision B. dated 27 September 2024

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 2 September 2025

Contact:

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