



# AIRWORTHINESS DIRECTIVE

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*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-2021-19

**Effective Date:**

27 May 2021

**ATA:**

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**Type Certificate:**

A-276

**Subject:**

Navigation System – Uncommanded Heading Change from Magnetic (MAG) to True (TRU)

**Applicability:**

MHI RJ Aviation ULC. (formerly Bombardier Inc.) aeroplanes:

Model CL-600-2B19, equipped with inertial reference system (IRS) part number (P/N) 465020-0400-0400, 465020-0400-0401, 465020-0400-0402 or 465020-0400-0403;

Model CL-600-2C10, CL-600-2C11, CL-600-2D15 and CL-600-2D24, equipped with IRS P/N 465020-0400-0401, 465020-0400-0402 or 465020-0400-0403;

Model CL-600-2E25, equipped with IRS P/N 465020-0400-0402 or 465020-0400-0403.

**Compliance:**

Within 30 days from the effective date of this AD, unless already accomplished.

**Background:**

MHI RJ Aviation has received reports from operators whereby the displayed heading changed from MAG to TRU with no pilot action. An uncommanded change of the indicated heading from MAG to TRU may result in misleading heading information (greater than 10 degrees in certain areas) on both pilot primary flight displays (PFDs) and multi-function displays (MFDs) and misleading course information on flight management systems (FMS).

Despite possible warnings and guidance provided by other systems such as traffic collision avoidance system (TCAS), enhanced ground proximity warning system (EGPWS) or air traffic control (ATC), this situation may lead to the aircraft being operated outside the terrain and obstacle protection provided in instrument procedure and route designs, and could result in reduced operational safety margins.

This AD mandates the Airplane Flight Manual (AFM) update to the Instrument Systems Abnormal Procedures.

**Corrective Actions:**

- A. Amend the applicable Transport Canada (TC) approved AFM by incorporating the revision to the Chapter 05 – Abnormal Procedures – Instrument Systems as listed in Table 1 below:

**Table 1**

<b>Aeroplane Model</b>	<b>AFM No</b>	<b>AFM Revision</b>
CL-600-2B19	CSP A-012	AFM Revision 74, dated 3 July 2020, or later revisions of this procedure approved by TC
CL-600-2C10 and CL-600-2C11	CSP B-012	AFM Revision 30, dated 28 February 2020, or later revisions of this procedure approved by TC
CL-600-2D15 and CL-600-2D24	CSP C-012	AFM Revision 24, dated 27 March 2020, or later revisions of this procedure approved by TC
CL-600-2E25	CSP D-012	AFM Revision 23, dated 14 February 2020, or later revisions of this procedure approved by TC

- B. Following the incorporation of the above-mentioned AFM revisions, advise all flight crews of the changes introduced by these revisions and thereafter operate the aircraft accordingly.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Matthew Weeks  
Acting Chief, Continuing Airworthiness  
Issued on 13 May 2021

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