

# AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Civil 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) to ADs.

Number:	Effective Date:
CF-2019-10	21 March 2019
ATA:	Type Certificate:
34	A-131

#### Subject:

Avionic System – Airplane Flight Manual Navigation System Limitations – Prohibit Editing CLIMB TO Altitudes and Use of Temperature Compensation on Flight Management System (FMS)

### Applicability:

Bombardier Inc. model CL-600-2B16 aeroplanes, serial numbers 5301 and subsequent, equipped with FMS-6000 software version 3.3.X through to 4.X.

Note: FMS-6000 with software version 4.X is not part of the Type Certificate configuration but may have been installed via Transport Canada Civil Aviation (TCCA) STC SA09-64 or Federal Aviation Administration (FAA) STC ST01505WI-D.

#### Compliance:

As indicated below, unless already accomplished.

#### Background:

If the crew edits a CLIMB TO altitude in a departure or missed approach procedure, either manually or by activating the Temperature Compensation, the FMS will remove the database's turn direction (if any) on the following leg. The FMS will command the aircraft to turn in the wrong direction after sequencing the CLIMB TO leg if the shortest turn direction is different from the required turn direction onto the next leg. This may lead to an increase of crew workload and possible Air Traffic Control airspace violation.

This AD mandates the introduction of a Navigation System Limitation to the Airplane Flight Manual (AFM) or AFM Supplement to address the above mentioned unsafe condition.

#### **Corrective Actions:**

A. Within 30 days from the effective date of this AD, amend the applicable AFM or AFM Supplement by incorporating the Navigation System Limitation to prohibit the editing of the CLIMB TO altitudes and use of Temperature Compensation on the FMS:



Aeroplane Model	AFM Procedure	AFM Revision
CL-600-2B16	Section - 2 Limitations - Flight	Rockwell Collins AFM
With TCCA STC SA09-64 or	Management System (FMS)	Supplement ACC-09-107
FAA STC ST01505WI-D		Revision K or later FAA
		approved revisions
CL-600-2B16	Section - 2 Limitations - Flight	Rockwell Collins AFM
With TCCA STC SA09-64 or	Management System (FMS)	Supplement RCA-0289
FAA STC ST01505WI-D		Revision H or later FAA
		approved revisions
CL-600-2B16	Limitations - Navigation	AFM PSP 604-1 Revision 109,
	System Limitation - Flight	dated May 29 2018, or later
	Management System (FMS)	revisions of this procedure
		approved by Transport
		Canada (TC)
CL-600-2B16	Limitations - Navigation	AFM PSP 605-1 Revision 47,
	System Limitation - Flight	dated May 29 2018, or later
	Management System (FMS)	revisions of this procedure
		approved by TC

B. Within 30 days from the effective date of this AD, advise all flight crews of the changes introduced by AFM Revisions listed above.

## Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Remy Knoerr Chief, Continuing Airworthiness Issued on 7 March 2019

#### Contact:

Marie-Claude Cardinal, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail <u>AD-CN@tc.gc.ca</u> or any Transport Canada Centre.