



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-2020-35

Effective Date:

21 October 2020

ATA:

27

Type Certificate:

A-177

Subject:

Flight Controls – Roll Control Input-Modules (RCIMs) Incorrect Installation

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9002 through 9998, 60005 through 60007, 60013, and 60015 through 60019.

Compliance:

Within 10 days from the effective date of this AD, unless already accomplished.

Background:

There are several in-service reports of a single RCIM being installed incorrectly, and one report of both RCIMs being installed incorrectly. An investigation has determined that it is physically possible for an RCIM to be installed and zeroed 180 degrees from its intended (design) installation orientation. If both RCIMs are installed incorrectly in the same manner, a misrigging condition occurs causing the multi-function spoilers (MFSs) to deploy opposite to the roll command. Misrigging of the MFS in this manner could lead to loss of control of the aeroplane.

To reduce the likelihood of incorrect RCIM installation during maintenance, the Aircraft Maintenance Manual (AMM) has been revised with improved RCIM installation and adjustment tasks. These improved tasks provide additional guidance to ensure proper orientation of the RCIM. A new AMM functional test task was introduced to improve the robustness of post-maintenance checks to confirm proper installation of the RCIMs. This AD requires the use of these latest AMM procedures when performing maintenance involving one or both RCIMs.

Corrective Actions:

When performing maintenance on the RCIM, the procedures in the following AMM tasks for the applicable aeroplane AMM must be used, with AMM Task Issue Dates of 21 February 2020 or later.

- a) Task 27-11-13-400-801 Installation of the Roll Control Input-Module
- b) Task 27-11-13-720-801 Function Test of the Roll Control Input-Module
- c) Task 27-11-13-820-801 Adjustment of the Roll Control Input-Module

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 7 October 2020

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