



# 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-2019-31R1

**Effective Date:**

5 November 2020

**ATA:**

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**Type Certificate:**

A-236

**Subject:**

Ice and Rain Protection – Insufficient Engine Core Ventilation Resulting in Higher Engine Core Temperatures

**Revision:**

Supersedes AD CF-2019-31, issued 6 September 2019.

**Applicability:**

Airbus Canada Limited Partnership (formerly C Series Aircraft Limited Partnership, Bombardier Inc.) model BD-500-1A11 aeroplanes, serial numbers 55018, 55019, 55022, 55024, 55026, 55028, 55031 and 55035.

**Compliance:**

Within 850 hours air time or 6 months, whichever occurs first, from 20 September 2019, the effective date of AD CF-2019-31.

**Background:**

During flight testing, it was discovered that under certain combinations of aeroplane configuration and flight conditions, higher than anticipated temperatures could lead to an Engine Fire Warning nuisance message. This nuisance message could cause the aircrew to shutdown an engine unnecessarily, which in combination with other failures, may lead to an unsafe condition.

AD CF-2019-31 required the installation of Integrated Air Systems Controller (IASC) software version 5.0 which prevents the nuisance message from appearing by reducing the high pressure/intermediate pressure switch point under certain conditions.

This AD revision, CF-2019-31R1, is issued to allow the installation of later software versions if certain requirements are met.

**Corrective Actions:**

Install IASC software version 5.0 in accordance with the Accomplishment Instructions of Bombardier Service Bulletin (SB) BD500-219001 Issue 002, dated 11 September 2018, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Accomplishment of Issue 001 of the above-mentioned SB, dated 3 August 2018, prior to 20 September 2019, the effective date of AD CF-2019-31, also meets the intent of this AD.

An IASC software version approved by Transport Canada after 20 September 2019, the effective date of AD CF-2019-31, and installed in accordance with aeroplane modification instructions approved by Transport Canada also meets the intent of this AD.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 22 October 2020

**Contact:**

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