AD Number: CF-2017-14

# 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) to ADs.

Number: Effective Date:
CF-2017-14 5 May 2017
ATA: Type Certificate:

32 A-131

### Subject:

Landing Gear – Failure of Main Landing Gear Shimmy Damper Belleville Washers

## Applicability:

Bombardier Inc. model CL-600-2C10, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes.

# Compliance:

Within 60 days from the effective date of this AD, unless already accomplished.

# **Background:**

It has been found that Belleville washers installed on the Main Landing Gear (MLG) Shimmy Damper may fail in fatigue. A failed washer segment migrating into the piston cavity may interfere with piston travel. As a result, shimmy damper performance would be compromised, MLG shimmy could occur and potentially lead to a MLG failure.

As a result of this investigation, a restoration task has been added for Belleville washers replacement at 20 000 flight cycles, during MLG overhaul. For aeroplanes that have passed the 20 000 flight cycle threshold, a phase-in period is defined.

This AD is issued to mandate the Maintenance Review Board (MRB) revised task for the affected aeroplanes models.

# **Corrective Actions:**

Amend the Transport Canada approved maintenance schedule to incorporate MRB task number 320100-229 introduced by Bombardier CRJ700/705/900/1000 Maintenance Requirements Manual (MRM) – Part 1, CSP B-053, Revision 16, dated 25 April 2016.

Incorporation of Temporary Revision MRB-0070, dated 20 October 2015, prior to the effective date of this AD, also satisfies the requirements of this AD.

Compliance with later revisions of the above-mentioned tasks in the MRM, approved by Transport Canada also satisfies the requirements of this AD.

## **Authorization:**

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr Chief, Continuing Airworthiness Issued on 21 April 2017

#### Contact:

Adil Chaudhry, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.

