



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-2020-09

Effective Date:

21 April 2020

ATA:

32

Type Certificate:

A-276

Subject:

Landing Gear – General – Nose Landing Gear and Main Landing Gear Components Repaired by Bombardier Repair Engineering Orders Affected by Specific Airworthiness Limitation.

Applicability:

Bombardier Inc. model CL-600-2B19 aeroplanes, serial numbers 7003 through 8999.

Compliance:

As indicated below, unless already accomplished.

Background:

There is evidence that some components of the nose landing gear (NLG) and/or main landing gear (MLG) were repaired using repair engineering orders (REOs) that resulted in a specific airworthiness limitation (SAL). In certain cases, the related structural deviation inspection requirements (SDIRs) were not attached to the REO when the parts were repaired and provided to the operator.

Consequently, the SDIR was not incorporated into the SDIR aeroplane document and the revised life limit of the repaired NLG and/or MLG components, as indicated in the SDIR, was not implemented. Those parts, repaired by REO that resulted in a SDIR, have a structural life limit that is lower than the life limit published in the Maintenance Requirements Manual (MRM), Part 2.

This condition, if not corrected, could lead to the collapse of the affected NLG and/or MLG, possibly resulting in aeroplane damage and injury to the occupants.

Bombardier issued Service Bulletin (SB) 601R-32-112, Revision NC, dated 11 November 2019, to provide a list of revised REOs identified as missing the SDIR.

This AD mandates a verification of the aeroplane and/or the aeroplane technical records to determine if NLG and/or MLG components listed in Table 1 and Table 2 of SB 601R-32-112 are installed on the aeroplane. If it is determined that an affected component is installed on the aeroplane, Corrective Actions Part II or Part III as applicable, must be accomplished.

Corrective Actions:

Part I – Verification of Aeroplane and/or the Aeroplane Technical Records

Within 6 months from the effective date of this AD, verify the aeroplane and/or the aeroplane technical records to determine if a NLG and/or MLG component listed in Table 1 and/or Table 2 of Bombardier SB 601R-32-112, Revision NC, dated 11 November 2019, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, is installed on the aeroplane. If this verification determines that an affected component listed in Table 1 and/or Table 2 of SB 601R-32-112 is installed on the aeroplane, perform Part II or Part III of this AD, as applicable.

Part II – Incorporation of the SDIR Life Limit into the SDIR Aeroplane Document

If total accumulated Flight Cycles (FC) of the component is less than the revised REO SDIR life limit minus 2000 FC, within 12 months from the completion date of Part I of this AD, incorporate the revised life limit of the part into the SDIR aeroplane document as per the latest revision of the applicable REO.

Part III – Replacement of Repaired NLG and/or MLG Component

If total accumulated FC of the component is equal to or more than the revised REO SDIR life limit minus 2000 FC, within 12 months or 2000 FC, whichever occurs first, from the completion date of Part I of this AD, replace the affected component with a serviceable component.

Part IV – Installation of Replacement NLG or MLG Components on Aeroplane Model CL-600-2B19, Serial Number 7003 through 8999

As of the effective date of this AD, the installation of a NLG and/or MLG with affected components listed on Table 1 and/or Table 2 of SB 601R-32-112, Revision NC, dated 11 November 2019, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, on Bombardier aeroplane model CL-600-2B19 as a replacement part, is prohibited without incorporating Corrective Actions Part II or Part III of this AD, as applicable.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 7 April 2020

Contact:

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