



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0691; Product Identifier 2020-NM-064-AD; Amendment 39-21377; AD 2021-01-01]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This AD was prompted by evidence that a revised structural life limit of some components of the nose landing gear (NLG) and/or main landing gear (MLG) was not implemented during repair. This AD requires verifying that the affected components are installed on the airplane, revising the structural life limits in the existing structural deviation inspection requirements (SDIR) airplane document, and replacing affected components if necessary. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd, Mirabel, Québec J7N 1E1, Canada; Widebody Customer Response Center North America toll-free telephone +1-844-272-2720 or direct-dial telephone +1-514-855-8500; fax +1-514-855-8501; email thd.crj@mhirj.com; Internet <https://mhirj.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0691.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0691; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2020-09, dated April 7, 2020 (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0691.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain MHI RJ Aviation ULC Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The NPRM published in the *Federal Register* on October 5, 2020 (85 FR 62626). The NPRM was prompted by evidence that a revised structural life limit of some components of the NLG and/or MLG was not implemented during repair. The NPRM proposed to require verifying that the affected components are installed on the airplane, revising the structural life limits in the existing SDIR airplane document, and replacing affected components if necessary. The FAA is issuing this AD to address structural life limits that are 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 airplane damage and injury to the occupants. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA has considered the comment received. Air Line Pilots Association, International (ALPA) stated that it supports the NPRM.

Additional Change Made to this AD

This AD has been revised to provide the revised structural life limits in figure 1 to paragraph (h) of this AD instead of referencing the individual repair engineering orders (REOs) in paragraph (h) of this AD. The REOs did not meet the Office of the Federal Register's criteria for incorporation by reference.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR Part 51

Bombardier has issued Service Bulletin 601R-32-112, dated November 11, 2019. This service information describes procedures for verifying that affected components are installed on the airplane, revising the structural life limits in the existing SDIR airplane document, and replacing affected parts if necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 456 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

| Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|---|--------------------|------------------|------------------------|
| Up to 143 work-hours X \$85 per hour = Up to \$12,155 | Up to \$103,114 | Up to \$115,269 | Up to \$52,562,664 |

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-01-01 MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.): Amendment 39-21377; Docket No. FAA-2020-0691; Product Identifier 2020-NM-064-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to MHI RJ Aviation ULC (type certificate previously held by Bombardier, Inc.) Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 8999 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by evidence that a revised structural life limit of some components of the nose landing gear (NLG) and/or main landing gear (MLG) was not implemented during repair. The FAA is issuing this AD to address structural life limits that are lower than the life limits 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 airplane damage and injury to the occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Verification of Airplane or Technical Records

Within 6 months from the effective date of this AD: Verify the airplane or technical records to determine if an NLG or MLG component listed in Table 1 or Table 2 of Bombardier Service Bulletin 601R-32-112, dated November 11, 2019, is installed on the airplane. If this verification determines that an affected component listed in Table 1 or Table 2 of Bombardier Service Bulletin 601R-32-112, dated November 11, 2019, is installed on the airplane, perform the actions specified in paragraph (h) or (i) of this AD, as applicable.

(h) Incorporation of the Structural Deviation Inspection Requirements (SDIR) Life Limit into the Existing SDIR Airplane Document

If the total flight cycles of the component is less than the revised SDIR life limit identified in figure 1 to paragraph (h) of this AD minus 2,000 flight cycles: Within 12 months after completing the actions specified in paragraph (g) of this AD, incorporate the applicable revised life limit of the affected component into the existing SDIR airplane document as specified in figure 1 to paragraph (h) of this AD.

Figure 1 to paragraph (h) – Revised SDIR Life Limits

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-086, Revision A, dated October 29, 2015 | MLG Axle (P/N 17050-1) | 73,644 | 47,026 ^[1] | 73,644 | 47,026 ^[1] | ^[1] HAAO – Post Modsum TC601R15827 aircraft only |
| 601R-32-11-089, Revision A, dated October 29, 2015 | MLG Axle (P/N 17050-1) | 73,644 | 47,026 ^[1] | 73,644 | 47,026 ^[1] | ^[1] HAAO – Post Modsum TC601R15827 aircraft only |
| 601R-32-11-183, Revision B, dated January 15, 2013 | MLG Pintle Pin (P/N 17040-1) | 57,760 | 55,645 ^[1] | 47,840 | 46,088 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0367, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | ^[2] | ^[1] ^[2] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only ^[2] Structure life limits for ATA NO. 32- 11-118 specified in Part 2 of maintenance requirements manual still apply for 53,000 lbs. MTOW |
| 601R-32-11-0627, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 43,240 | 41,650 ^[1] | 34,930 | 33,650 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-0630, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 57,760 | 55,645 ^[1] | 47,840 | 46,088 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-634, Revision A, dated October 29, 2015 | MLG Axle (P/N 17050-1) | 73,644 | 47,026 ^[1] | 73,644 | 47,026 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0712, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | ^[2] | ^[1] ^[2] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only ^[2] Structure life limits for ATA NO. 32- 11-118 specified in Part 2 of maintenance requirements manual still apply for 53,000 lbs. MTOW |
| 601R-32-11-0783, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 57,760 | 55,645 ^[1] | 47,840 | 46,088 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-786, Revision A, dated January 23, 2019 | MLG Pintle Pin (P/N 17040-1) | 43,240 | 41,650 ^[1] | 34,930 | 33,650 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-835, Revision A, dated October 29, 2015 | MLG Axle (P/N 17050-1) | 73,644 | 47,026 ^[1] | 73,644 | 47,026 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0913, Revision C, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 74,200 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-918, Revision B, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | 48,190 | 46,425 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-921, Revision A, dated October 29, 2015 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 74,026 | 67,976 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0951, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0955, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-956, Revision A, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 43,240 | 41,240 ^[1] | 34,930 | 33,650 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-0958, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1017, Revision B, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | ^[2] | ^[1] ^[2] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only ^[2] Structure life limits for ATA NO. 32- 11-118 specified in Part 2 of maintenance requirements manual still apply for 53,000 lbs. MTOW |
| 601R-32-11-1041, Revision A, dated October 29, 2015 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 76,642 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-1084, Revision A, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | ^[2] | ^[1] ^[2] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only ^[2] Structure life limits for ATA NO. 32- 11-118 specified in Part 2 of maintenance requirements manual still apply for 53,000 lbs. MTOW |
| 601R-32-11-1153, Revision A, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 80,000 | 80,000 ^[1] | ^[2] | ^[1] ^[2] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only ^[2] Structure life limits for ATA NO. 32- 11-118 specified in Part 2 of maintenance requirements manual still apply for 53,000 lbs. MTOW |
| 601R-32-11-1154, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 76,642 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1187, Revision B, dated January 23, 2019 | MLG Axle (P/N 17050-3) | 80,000 | 71,640 ^[1] | 80,000 | 71,640 ^[1] | ^[1] HAAO – Post-Modsum |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| | | | | | | TC601R15827 aircraft only |
| 601R-32-11-1206, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 74,200 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1219, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 74,200 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1220, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 74,200 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1224, Revision B, dated January 23, 2019 | MLG Pivot Pin (P/N 17041-3) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1250, Revision A, dated January 15, 2014 | MLG Pintle Pin (P/N 17040-1) | 57,760 | 55,645 ^[1] | 47,840 | 46,088 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1251, Revision B, dated January 23, 2019 | MLG Pivot Pin (P/N 17041-3) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-11-1255, Revision B, dated January 23, 2019 | MLG Pivot Pin (P/N 17041-3) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1286, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1302, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1650, Revision A, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-11-1673, Revision A, dated January 23, 2019 | MLG Axle (P/N 17050-3) | 73,644 | 47,026 ^[1] | 73,644 | 47,026 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0225, Revision C, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0227, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|--------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| | | | | | | |
| 601R-32-21-414, Revision A, dated February 25, 2015 | NLG Axle (P/N 16124- 101) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-489, Revision A, dated October 29, 2015 | NLG Main Fitting (P/N 16114-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0526, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-535, Revision A, dated February 17, 2015 | NLG Pin (P/N 16404-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0536, Revision B, dated January 23, 2019 | NLG Axle (P/N 16124-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0555, Revision B, dated January 23, 2019 | NLG Axle (P/N 16124-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|--------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-21-0557, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0562, Revision B, dated January 23, 2019 | NLG Axle (P/N 16124-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-570, Revision A, dated February 25, 2015 | NLG Axle (P/N 16124-1) | 47,732 | 47,732 ^[1] | 39,370 | 39,370 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0635, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0661, Revision B, dated January 23, 2019 | NLG Main Fitting (P/N 16114-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0663, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0685, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| | | | | | | |
| 601R-32-21-0689, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0691, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0692, Revision C, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-0693, Revision B, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-1002, Revision A, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-21-1022, Revision A, dated January 23, 2019 | NLG Axle (P/N 16122-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

| Bombardier Repair Engineering Order | Life Limited Component | DISCARD TIME/LIFE LIMIT (LANDINGS) | | | | Notes |
|---|---------------------------------------|------------------------------------|--|-------------------------|---------------------------------|--|
| | | 51,000 lb. MTOW | | 53,000 lb. MTOW | | |
| | | TC/FAA Certification | TC/FAA Certification High Altitude Airfield Operation (HAAO) | TC/FAA Certification | TC/FAA Certification HAAO | |
| 601R-32-32-0056, Revision C, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 80,000 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |
| 601R-32-32-0076, Revision B, dated January 23, 2019 | MLG Side Stay Pin (P/N 17076-1) | 80,000 | 80,000 ^[1] | 80,000 | 74,200 ^[1] | ^[1] HAAO – Post-Modsum TC601R15827 aircraft only |

(i) Replacement of Repaired NLG and/or MLG Component

If the total flight cycles of the component is equal to or more than the applicable revised SDIR life limit specified in figure 1 to paragraph (h) of this AD minus 2,000 flight cycles: Within 12 months or 2,000 flight cycles, whichever occurs first, after completing the actions specified in paragraph (g) of this AD, replace the affected component with a serviceable component.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install any component listed in Table 1 or Table 2 of Bombardier Service Bulletin 601R-32-112, dated November 11, 2019, on any airplane without first incorporating the actions specified in paragraph (h) or (i) of this AD, as applicable.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or MHI RJ Aviation ULC's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2020-09, dated April 7, 2020, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0691.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 601R-32-112, dated November 11, 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact MHI RJ Aviation ULC, 12655 Henri-Fabre Blvd, Mirabel, Québec, J7N 1E1 Canada; Widebody Customer Response Center North America toll-free telephone +1-844-272-2720 or direct-dial telephone +1-514-855-8500; fax +1-514-855-8501; email thd.crj@mhirj.com; Internet <https://mhirj.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 28, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.