[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0513; Project Identifier 2018-SW-116-AD; Amendment 39-21717; AD 2021-18-16

RIN 2120-AA64

Airworthiness Directives; Bell Textron Canada Limited (Type Certificate Previously Held by Bell Helicopter Textron Canada Limited) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bell Textron Canada Limited (Bell) Model 429 helicopters. This AD was prompted by reports of tail rotor gearbox assemblies found loose on the gearbox support. This AD requires repetitive torque checks of the tail rotor gearbox attachment hardware, and corrective action 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 document 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 Bell Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J 1R4, Canada; telephone 1-450-437-2862 or 1-800-363-8023; fax 1-450-433-0272; email productsupport@bellflight.com; or at https://www.bellflight.com/support/contact-support. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available at https://www.regulations.gov by searching for and

locating Docket No. FAA-2021-0513.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0513; 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, the Transport Canada AD, any comments received, and other information. The street 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: Darren Gassetto, Aerospace Engineer, COS Program Management Section, FAA, Operational Safety Branch, Compliance & Airworthiness Division, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7323; email Darren.Gassetto@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bell Textron Canada Limited (Bell) Model 429 helicopters. The NPRM published in the *Federal Register* on June 28, 2021 (86 FR 33918). In the NPRM, the FAA proposed to require repetitive torque checks of the tail rotor gearbox attachment hardware, and corrective action if necessary. The NPRM was prompted by Canadian AD CF-2018-35, dated December 19, 2018 (Canadian AD CF-2018-35), issued by Transport Canada, which is the aviation authority for Canada, to correct an unsafe condition for Bell Textron Canada Limited Model 429 helicopters. Transport Canada advises that there have been reports of tail rotor gearbox assemblies found loose on the gearbox support. Transport Canada issued Emergency Canadian Airworthiness Directive CF-2018-18, dated July 11, 2018, which corresponds to FAA AD 2018-16-51, Amendment 39-19421 (83 FR 53171, October 22, 2018), to address the immediate safety concern. An ongoing investigation determined that this condition-loose tail rotor gearbox assemblies-could return even after the corrective

actions by the previous AD have been completed. This condition, if not addressed, could result in structural damage and possible loss of control of the helicopter.

Accordingly, Canadian AD CF-2018-35 requires repetitive torque checks of the tail rotor gearbox attachment hardware and corrective actions if necessary. The corrective action is doing additional repetitive torque checks at intervals of 10 to 25 hours air time until the torque stabilizes on all the nuts.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with Canada, Transport Canada, its technical representative, has notified the FAA of the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Bell Alert Service Bulletin 429-18-41, dated July 24, 2018. This service information specifies procedures for repetitive torque checks of the tail rotor gearbox attachment hardware.

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.

Differences Between this AD and the Transport Canada AD

Where Canadian AD CF-2018-35 refers to "200-hour" inspections and "10 to 25 hours air time" for the torque checks, for this AD use "time-in-service" instead.

Costs of Compliance

The FAA estimates that this AD affects 98 helicopters of U.S. Registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Torque check	1 work-hour X $85 per hour = $85	$0	$85	$8,330

The FAA estimates the following costs to do any necessary on-condition actions that are required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition actions:

Estimated costs of on-condition actions

Action	Labor cost	Parts cost	Cost per product
Repetitive torque check	1 work-hour X $85 per hour = $85, per cycle	$0	$85, per cycle

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 helicopters 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.

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:

2021-18-16 Bell Textron Canada Limited (Type Certificate Previously Held by Bell Helicopter Textron Canada Limited): Amendment 39-21717; Docket No. FAA-2021-0513; Project Identifier 2018-SW-116-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 Bell Textron Canada Limited (type certificate previously held by Bell Helicopter Textron Canada Limited) Model 429 helicopters, certificated in any category, serial numbers 57001 and subsequent.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6500, Tail Rotor Drive System; and 6520, Tail Rotor Gearbox.

(e) Unsafe Condition

This AD was prompted by reports of tail rotor gearbox assemblies found loose on the gearbox support. The FAA is issuing this AD address tail rotor gearbox assemblies found loose on the gearbox support. The unsafe condition, if not addressed, could result in structural damage and possible loss of control of the helicopter.

(f) Compliance

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

(g) Required Actions

Within 12 months after the effective date of this AD; or at the next scheduled 200-hours time-in-service (TIS) or 12-month inspection, whichever occurs first, do a torque check of the tail rotor gearbox attachment hardware, in accordance with the Accomplishment Instructions, paragraph 2., of Bell Alert Service Bulletin 429-18-41, dated July 24, 2018. Repeat the torque check thereafter at intervals not to exceed 200 hours TIS or 12 months, whichever occurs first.

(h) Corrective Actions

If, during any torque check required by paragraph (g) of this AD, any tail rotor gearbox attachment moves during any torque check, repeat the torque check specified in paragraph (g) of this AD at intervals no less than 10 hours TIS and not to exceed 25 hours TIS until the torque stabilizes on all the nuts. Stabilization has occurred when, at the next torque check, the value has remained within the specified acceptable limits (160 to 200 inch-pounds (in-lbs) or 19 to 22 newton meters (Nms), inclusive), preventing movement of the gearbox housing. After the torque stabilizes on all the nuts, the repetitive torque checks specified in paragraph (g) of this AD are still required.

(i) Credit for Previous Actions

This paragraph provides credit for the initial torque check required by paragraph (g) of this AD, if that action was done before the effective date of this AD as required by paragraph (f)(2) of AD 2018-16-51, Amendment 39-19421 (83 FR 53171, October 22, 2018).

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation 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 District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, COS Program Management Section, FAA, Operational Safety Branch, Compliance & Airworthiness Division, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; email Darren.Gassetto@faa.gov.

(2) The subject of this AD is addressed in Transport Canada AD CF-2018-35, dated December 19, 2018. You may view the Transport Canada AD at https://www.regulations.gov in Docket No. FAA-2021-0513.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 the AD specifies otherwise.

(i) Bell Alert Service Bulletin 429-18-41, dated July 24, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Bell Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J 1R4, Canada; telephone 1-450-437-2862 or 1-800-363-8023; fax 1-450-433-0272; email

productsupport@bellflight.com; or at https://www.bellflight.com/support/contact-support.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(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: fr.inspection@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on August 26, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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