



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0221; Product Identifier 2019-SW-042-AD; Amendment 39-19862; AD 2020-04-21]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Limited Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bell Helicopter Textron Canada Limited (Bell Canada) Model 429 helicopters. This AD requires inspecting a certain part-numbered curvic coupling for proper engagement and depending on the inspection results, inspecting for play, inspecting the curvic coupling teeth, inspecting the flapping bearing teeth, replacing parts, performing a rigging check, and reporting information. This AD was prompted by a report of disengaged teeth of a curvic coupling due to improper installation. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 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 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <https://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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-2020-0221; 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 AD, the Transport Canada AD, any service information that is incorporated by reference, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone 450-437-2862 or 800-363-8023; fax 450-433-0272; or at <https://www.bellcustomer.com>. You may review the referenced service information at the FAA, Office of the Regional

Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0221.

FOR FURTHER INFORMATION CONTACT: Kristi Bradley, Aerospace Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email kristin.bradley@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and the FAA did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, the FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. The FAA will consider all the comments received and may conduct additional rulemaking based on those comments.

Discussion

Transport Canada, which is the aviation authority for Canada, has issued

Emergency AD No. CF-2019-15, dated April 26, 2019, to correct an unsafe condition for Bell Canada Model 429 helicopters, serial numbers 57001 through 57363. Transport Canada advises of a report of an improperly installed curvic coupling part number (P/N) 429-012-120-101. This was discovered during installation of the tail rotor (T/R) hub and blade assembly when the teeth of the curvic coupling rested on top of each other instead of meshing together. Transport Canada further advises that this condition may result in loosening of the T/R assembly and subsequent vibration and loss of drive to the outboard T/R blades, which will result in degraded directional control. Therefore, the Transport Canada Emergency AD requires inspecting the T/R and correcting any defective conditions, as well as reporting any anomalies to Bell Canada.

FAA's Determination

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 the Transport Canada AD. The FAA is issuing this AD because it has evaluated all information provided by Transport Canada and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type designs.

Related Service Information Under 1 CFR part 51

Bell has issued Alert Service Bulletin 429-19-45, dated April 16, 2019, for Model 429 helicopters, serial numbers 57001 through 57343, 57346 through 57349, 57352 through 57356, and 57362. This service information specifies inspecting the inboard and outboard curvic coupling teeth for proper engagement; inspecting for axial

play between the inboard and outboard hub and blade assemblies; inspecting for play between the curvic coupling teeth and both inboard and outboard flapping bearing teeth; inspecting the curvic coupling teeth for damage; inspecting the inboard and outboard flapping bearing teeth for damage; installing a serviceable T/R hub and blade assembly; performing a rigging check of the directional control system; and reporting any anomalies to Bell Canada.

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.

AD Requirements

This AD requires inspecting the curvic coupling teeth for proper engagement with the inboard and outboard flapping bearing teeth within 10 hours time-in-service (TIS).

If the teeth are not properly engaged, this AD requires removing the T/R hub and blade assembly and inspecting the curvic coupling teeth and the inboard and outboard flapping bearing teeth for a crack, wear, mechanical damage, and corrosion. Depending on the inspection results, this AD requires replacing parts. Then, with the T/R hub and blade assembly installed, this AD requires performing a rigging check of the directional control system.

If the teeth are properly engaged, this AD requires inspecting for axial play between both the inboard and outboard T/R hub and blade assemblies. If there is axial play, this AD requires performing the inspections for a crack, wear, mechanical damage, and corrosion. If there is no axial play, this AD requires inspecting for play between the teeth of the curvic coupling and both the inboard and outboard flapping bearing teeth, and

if play exists, this AD requires performing the inspections for a crack, wear, mechanical damage, and corrosion.

Lastly, this AD requires emailing information about the inspection results that resulted in the replacement of parts to Bell Canada.

Differences between this AD and the Transport Canada AD

The Transport Canada Emergency AD requires reporting information within 3 days after the completion of the inspection, whereas this AD allows a compliance time of up to 10 days after completion of the inspection instead. This AD applies to fewer serial numbered Model 429 helicopters, listed in the applicability section, than the Transport Canada Emergency AD because certain serial numbered helicopters will have complied with the intent of this AD prior to delivery.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 88 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Inspecting the curvic coupling teeth and the flapping bearing teeth for proper engagement requires about 0.5 work-hours for an estimated cost of \$43 per helicopter and \$3,784 for the U.S. fleet.

If required, removing and installing the T/R hub and blade assembly to inspect the curvic coupling teeth and the inboard and outboard flapping bearing teeth for a crack, wear, mechanical damage, and corrosion requires about 0.5 work-hours for an estimated cost of \$43 per helicopter.

Replacing a curvic coupling requires about 0.5 work-hours and parts cost about \$4,141 for an estimated cost of \$4,184 per curvic coupling.

Replacing a flapping bearing requires about 0.5 work-hours and parts cost about \$19,948 for an estimated cost of \$19,991 per flapping bearing.

If required, reporting information takes about 1 work-hour for an estimated cost of \$85 per helicopter.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort

Worth, TX 76177-1524.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (5 U.S.C.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without seeking comment prior to the rulemaking.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the unsafe condition requires corrective action within 10 hours TIS. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the reasons stated above, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

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

The FAA determined that 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, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866, and
2. Will not affect intrastate aviation in Alaska.

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 (AD):

2020-04-21 **Bell Helicopter Textron Canada Limited:** Amendment 39-19862; Docket No. FAA-2020-0221; Product Identifier 2019-SW-042-AD.

(a) Applicability

This AD applies to Bell Helicopter Textron Canada Limited Model 429 helicopters, certificated in any category, with a serial number 57001 through 57343 inclusive, 57346 through 57349 inclusive, 57352 through 57356 inclusive, and 57362, with a curvic coupling part number 429-012-120-101 installed.

(b) Unsafe Condition

This AD defines the unsafe condition as an improperly installed curvic coupling of the tail rotor (T/R) hub and blade assembly. This condition could result in loosening of the T/R assembly, which could cause vibration and loss of drive to the outboard T/R blades, and subsequent degraded directional control.

(c) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 10 hours time-in-service, using a light source, flap the inboard and outboard T/R blades to inspect for proper engagement of the inboard and outboard curvic coupling teeth with the inboard and outboard flapping bearing teeth as shown in Figure 2 of Bell Alert Service Bulletin 429-19-45, dated April 16, 2019 (ASB 429-19-45).

(i) If the teeth are not properly engaged, before further flight, remove the T/R hub and blade assembly and do the following:

Note to paragraph (e)(1)(i) of this AD: Figure 1 of ASB 429-19-45 shows an example of improperly engaged teeth.

(A) Inspect the inboard flapping bearing teeth and the curvic coupling teeth that mate to them for a crack, wear, mechanical damage, and corrosion. If there is a crack, wear, mechanical damage, or corrosion on the teeth, before further flight, replace with an airworthy part.

(B) Inspect the outboard flapping bearing teeth and the curvic coupling teeth that mate to them for a crack, wear, mechanical damage, and corrosion . If there is a crack, or wear, mechanical damage, or corrosion on the teeth, before further flight, replace with an airworthy part.

(C) With the T/R hub and blade assembly installed, perform a rigging check of the directional control system.

(ii) If the teeth are properly engaged, before further flight, inspect for axial play between both the inboard and outboard T/R hub and blade assemblies.

(A) If there is axial play, remove the T/R hub and blade assembly, and perform the actions required by paragraph (e)(1)(i)(A) through (C) of this AD.

(B) If there is no axial play, inspect for play between the teeth of the curvic coupling and both the inboard and outboard flapping bearing teeth by applying a lead/lag force to the inboard and outboard T/R hub and blade assemblies. If there is play, remove the T/R hub and blade assembly, and perform the actions required by paragraph (e)(1)(i)(A) through (C) of this AD.

(2) Within 10 days after an inspection that resulted in replacing any part as required by paragraph (e)(1) of this AD, email a description of the inspection results that includes a description of each replaced part to: productsupport@bellflight.com. Include the following information in the email subject line: “ASB 429-19-45,” the helicopter’s serial number, and the operator’s name.

(f) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Kristi Bradley, Aerospace Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA,

10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

The subject of this AD is addressed in the Transport Canada Emergency AD No. CF-2019-15, dated April 26, 2019. You may view the Transport Canada Emergency AD on the Internet at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2020-0221.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6400, Tail Rotor System.

(j) 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 429-19-45, dated April 16, 2019.

(ii) [Reserved]

(3) For Bell service information identified in this AD, contact Bell Helicopter

Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone 450-437-2862 or 800-363-8023; fax 450-433-0272; or at <https://www.bellcustomer.com>.

(4) You may view this service information at 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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 6, 2020.

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

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