[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0334; Product Identifier 2017-SW-133-AD]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Limited Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Bell Helicopter Textron Canada Limited (BHTC) Model 429 helicopters. This proposed AD would require repetitive inspections of certain cyclic and collective assembly bearings. This proposed AD is prompted by reports that precipitation can lead to reduced effectiveness of the grease in the bearings. The actions of this proposed AD are intended to address an unsafe condition on these products.

DATES: The FAA must receive comments on this proposed 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-2018-0334; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the Transport Canada Civil Aviation (Transport Canada) AD, any comments received, and other information. The street address for the Docket Operations Office is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed 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 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 FURTHER INFORMATION CONTACT: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222-5110; email david.hatfield@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

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 might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, 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 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 proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

Transport Canada, which is the aviation authority for Canada, has issued Canadian AD No. CF-2016-11R2, dated October 18, 2017, to correct an unsafe condition for BHTC Model 429 helicopters equipped with a bellcrank assembly part number (P/N) 429-001-523-101, 429-001-523-103, 429-001-532-101 or 429-001-532-103.

Transport Canada advises that in-service reports show that bearings in the roof-mounted flight control bellcranks are adversely affected by precipitation. Pooling can occur at the forward portion of the roof, providing a source of contamination for bearings in the roof-mounted flight controls. Precipitation may reduce the effectiveness of the grease in the bearings, allowing corrosion to occur, and resulting in intermittent restrictions, such as binding and roughness in the flight controls, Transport Canada advises. Transport Canada also advises that an undetected corroded bearing could lead to restrictions in the collective, directional, or pitch control systems, resulting in difficulty controlling the helicopter.

Transport Canada consequently requires within 12 months after the helicopter was manufactured and thereafter at intervals not to exceed 6 months, inspecting the flight controls and replacing any discrepant bearings. If the helicopter's age exceeds 12 months, Transport Canada requires the 12-month inspection within 30 days. Transport Canada also requires, within 30 days, performing a functional check and replacement, if applicable, of the bearings if the most recent functional check of the helicopter was performed with the alternate procedure of using a hydraulic test stand or if the inspection method is unknown.

FAA's Determination

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant the FAA's bilateral agreement with Canada, Transport Canada, its technical representative, has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all

known relevant information and determining that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information

The FAA reviewed Bell Helicopter Alert Service Bulletin 429-15-21, Revision B, dated May 11, 2017 (ASB), which specifies moving the cyclic stick fore, aft, and laterally, and the collective stick up and down from stop to stop to detect deteriorated pivot bearings. The ASB also specifies inspecting to determine whether the bearings in the collective, lateral, and longitudinal arm assemblies rotate freely. If discrepant arm bearings are found, the ASB specifies contacting BHTC Product Support Engineering to report the findings and replacing the discrepant parts with serviceable parts.

Proposed AD Requirements

This proposed AD would require within 12 months after the helicopter was manufactured or 30 days after the effective date of this AD, whichever occurs later, and thereafter at intervals not to exceed 6 months:

- Disconnecting the forward ends of the collective control tube, longitudinal stability and control augmentation system (SCAS) actuator, and lateral SCAS actuator and stowing the collective control tube and each SCAS actuator to prevent binding.
- Slowly moving the cyclic fore/aft and laterally, and the collective up/down from stop to stop to determine if there is any roughness. If there is any roughness in the flight control system, before further flight, replace the six pivot bearings in the collective/lateral bellcrank assembly and the longitudinal bellcrank assembly.
- Inspecting each arm end bearing at the end of the collective, lateral, and longitudinal arm assemblies by rotating each bearing and ensuring each bearing rotates

freely. If there is any binding in any arm end bearing or on the longitudinal bellcrank assembly, before further flight, replace each arm end bearing.

Differences between this Proposed AD and the Transport Canada AD

Transport Canada provides requirements if the most recent functional procedure was performed using a hydraulic test stand as an alternate procedure. This AD provides no such alternate procedure.

Interim Action

The FAA considers this proposed AD to be an interim action. If final action is later identified, the FAA might consider further rulemaking then.

Costs of Compliance

The FAA estimates that this proposed AD would affect 64 helicopters of U.S. Registry and that labor costs average $85 per work-hour. Based on these estimates, the FAA expects the following costs:

- Inspecting the cyclic and the collective for roughness would require 3 work-hours and no parts for a total cost of $255 per helicopter, and $16,320 for the U.S. fleet.

- Replacing six pivot bearings would require 3 work-hours for a labor cost of $255. Parts would cost $624 for a total cost of $879 per helicopter.

- Replacing 3 arm end bearings would require 3 work-hours for a labor cost of $255. Parts would cost $135 for a total cost of $390 per helicopter.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

Bell Helicopter Textron Canada Limited: Docket No. FAA-2018-0334; Product Identifier 2017-SW-133-AD.

(a) Applicability

This AD applies to Bell Helicopter Textron Canada Limited (BHTC) Model 429 helicopters with a bellcrank assembly part number (P/N) 429-001-523-101, 429-001-523-103, 429-001-532-101 or 429-001-532-103 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as precipitation in the forward portion of the roof structure that can lead to pooling at the bellcrank assembly and corrosion of the bearings. This condition could result in restrictions in the collective, directional or pitch control systems, and subsequent loss of helicopter control.

(c) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 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

Within 12 months after the helicopter was manufactured or 30 days after the effective date of this AD, whichever occurs later, and thereafter at intervals not to exceed 6 months:

(1) Disconnect the forward ends of the collective control tube, longitudinal stability and control augmentation system (SCAS) actuator, and lateral SCAS actuator. Stow the collective control tube and each SCAS actuator to prevent binding.

(2) Slowly move the cyclic stick fore/aft and laterally, and the collective stick up/down from stop to stop to determine if there is any roughness. If there is any roughness in the flight control system, before further flight, replace all six pivot bearings, P/N MS27646-41, in the collective lateral bellcrank assembly and the longitudinal bellcrank assembly.

(3) Inspect the collective arm assembly P/N 429-001-525-101, the lateral arm assembly P/N 429-001-527-101, and the longitudinal arm assembly P/N 429-001-530-101, by rotating each bearing and ensuring each bearing rotates freely. If there is any binding in any arm end bearing or on the longitudinal bellcrank assembly, before further flight, replace each arm end bearing.

(f) Special Flight Permits

Special flight permits are prohibited.

(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: David Hatfield, Aviation Safety 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

(1) Bell Helicopter Alert Service Bulletin 429-15-21, Revision B, dated May 11, 2017, which is not incorporated by reference, contains additional information about the subject of this AD. For 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. 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.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation (Transport Canada) AD No. CF-2016-11R2, dated October 18, 2017. You may view the Transport Canada AD on the Internet at https://www.regulations.gov in the AD Docket.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 2700, Flight Control System.

Issued on March 11, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-05379 Filed: 3/19/2020 8:45 am; Publication Date: 3/20/2020]