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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0716; Directorate Identifier 2012-SW-011-AD; Amendment 39-17121; AD 2012-14-07]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Helicopters

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

ACTION: Final rule; request for comments.

SUMMARY: We are adopting an airworthiness directive (AD) superseding an existing airworthiness directive for Bell Helicopter Textron Canada (Bell) Model 407 and 427 helicopters. The existing AD requires inspecting certain hydraulic servo actuators (servo) to determine whether the shaft turns independently of the nut or the clevis assembly, and additional actions based upon the inspection's outcome. The AD also requires reidentifying the servo. Since we issued that AD, Bell has learned that additional servos may need repair or removal. This AD expands the scope of the current AD to include inspections for all servos, and requires that servos meeting inspection requirements be marked with the letter "V" after the part number on the data plate. The actions are intended to detect any loose or misaligned parts in the servo that could lead to failure of the servo and subsequent loss of helicopter control.

DATES: This AD becomes effective August 3, 2012.

We must receive comments on this AD by September 17, 2012.

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

- Federal eRulemaking Docket: Go to <http://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 <http://www.regulations.gov> 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 AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact 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 <http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite 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. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

On September 19, 2011, we issued AD 2011-15-51, Amendment 39-16817 (76 FR 66609, October 27, 2011) for Bell Model 407 helicopters with a servo, part number (P/N) 206-076-062-105 or 206-076-062-107, and Bell Model 427 helicopters, with a servo, P/N 206-076-062-109 or 206-076-062-111, installed. This AD requires inspecting certain servos to determine whether the shaft turns independently of the nut or the clevis assembly. If the shaft turns independently, this AD requires replacing the servo with an airworthy servo. If the shaft does not turn independently, the AD requires inspecting to determine the condition of the lock washers. Based on the condition of the lock washers, the AD requires either replacing the servo with an airworthy servo or bending the tab of the lock washer flush against a flat surface of the nut or clevis assembly. The AD also requires reidentifying the servo by metal-impression stamping or vibro-etching "67-01" onto the modification plate. The AD was prompted by a report that a supplier had a "quality escape" resulting in servos with a loose nut, shaft, and clevis assembly because of improper lock-washer installation. An investigation after an accident revealed the clevis nut on the servo was loose. Transport Canada, which is the aviation authority for Canada, notified the FAA of this unsafe condition and issued AD No. CF-2011-17, dated June 30, 2011. The actions specified by AD 2011-15-51 are intended to prevent a malfunction of a servo in the flight control system and subsequent loss of helicopter control.

Actions Since Existing AD Was Issued

Since we issued AD 2011-15-51 (76 FR 66609, October 27, 2011), Transport Canada issued AD No. CF-2011-17R1, dated December 19, 2011 (AD CF-2011-17R1), which supersedes AD CF-2011-17, to correct an unsafe condition for the Bell Model 407, serial numbers 53000 through 53900, 53911 through 53999, and 54000 through 54081, equipped with servos, P/N 206-076-062-105 or P/N 206-076-062-107; and Model 427 helicopters, serial numbers 56001 through 56077, 58001 and 58002, equipped with servos, P/N 206-076-062-109 or P/N 206-076-062-111. Transport Canada advises that additional servos may have a loose nut, shaft, and clevis assembly after the supplier's "quality escape." Therefore, Transport Canada revised its original AD to include all installed servos, and to require that servos already inspected according to its original AD be reidentified with the letter "V" at the end of the part number on the data plate.

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 our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in its AD. We are issuing this AD because we evaluated all information provided by Transport Canada and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

Related Service Information

We reviewed Bell Alert Service Bulletin (ASB) 407-11-96, Revision B, for the Model 407 helicopter, and Bell ASB 427-11-35, Revision B, for the Model 427 helicopter. Both ASBs are dated August 29, 2011 and describe procedures for performing a one-time inspection of the servos before further flight, and reidentifying servos that meet all of the inspection requirements. Transport Canada classified this service information as mandatory and issued AD No. CF-2011-17R1 to ensure the continued airworthiness of these helicopters.

AD Requirements

This AD retains the inspection requirements of AD 2011-15-51 (76 FR 66609, October 27, 2011), and adds a requirement to mark the letter "V" at the end of the part number on the data plate if the servo meets all of the inspection's requirements. This AD also expands the applicability to all servos.

Costs of Compliance

We estimate that this AD will affect 582 helicopters of U.S. Registry and that labor costs will average \$85 a work hour. Based on these estimates, we expect the following costs:

The required inspection will take about a 1/2 hour for a labor cost of about \$43 per helicopter. The cost for the total U.S. fleet would be \$25,026.

Replacing the servo, if needed, will require 2 work hours for a labor cost of \$170. Parts will cost \$33,000 for a total cost of \$33,170 per helicopter.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments before adopting these AD requirements would delay implementing the safety actions needed to detect any loose or misaligned parts in the servo, the failure of which could adversely affect control of the helicopter. Therefore, we find that the risk to the

flying public justifies waiving notice and comment prior to adoption of this rule because the required corrective actions must be accomplished before further flight.

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.

We are 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

We 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;
2. Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. 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.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

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 removing Amendment 39-16817 (76 FR 66609, October 27, 2011), and adding the following new airworthiness directive (AD):



CORRECTED: Figure 1 to paragraph (f) is now included in this copy of the AD.

2012-14-07 Bell Helicopter Textron Canada Helicopters: Amendment 39-17121; Docket No. FAA-2012-0716; Directorate Identifier 2012-SW-011-AD.

(a) Applicability

This AD applies to the following helicopters, certificated in any category:

(1) Model 407 helicopters, serial numbers (S/Ns) 53000 through 53900, 53911 through 53999, and 54000 through 54081, with a hydraulic servo actuator assembly (servo) part number (P/N) 206-076-062-105 or P/N 206-076-062-107; and

(2) Model 427 helicopters, S/Ns 56001 through 56077, 58001, and 58002, with a servo, P/N 206-076-062-109 or P/N 206-076-062-111.

(b) Unsafe Condition

This AD defines the unsafe condition as a loose or misaligned part in the servo that could lead to failure of the servo and subsequent loss of helicopter control.

(c) Other Affected ADs

This AD supersedes AD 2011-15-51, Amendment 39-16817 (76 FR 66609, October 27, 2011).

(d) Effective Date

This AD becomes effective August 3, 2012.

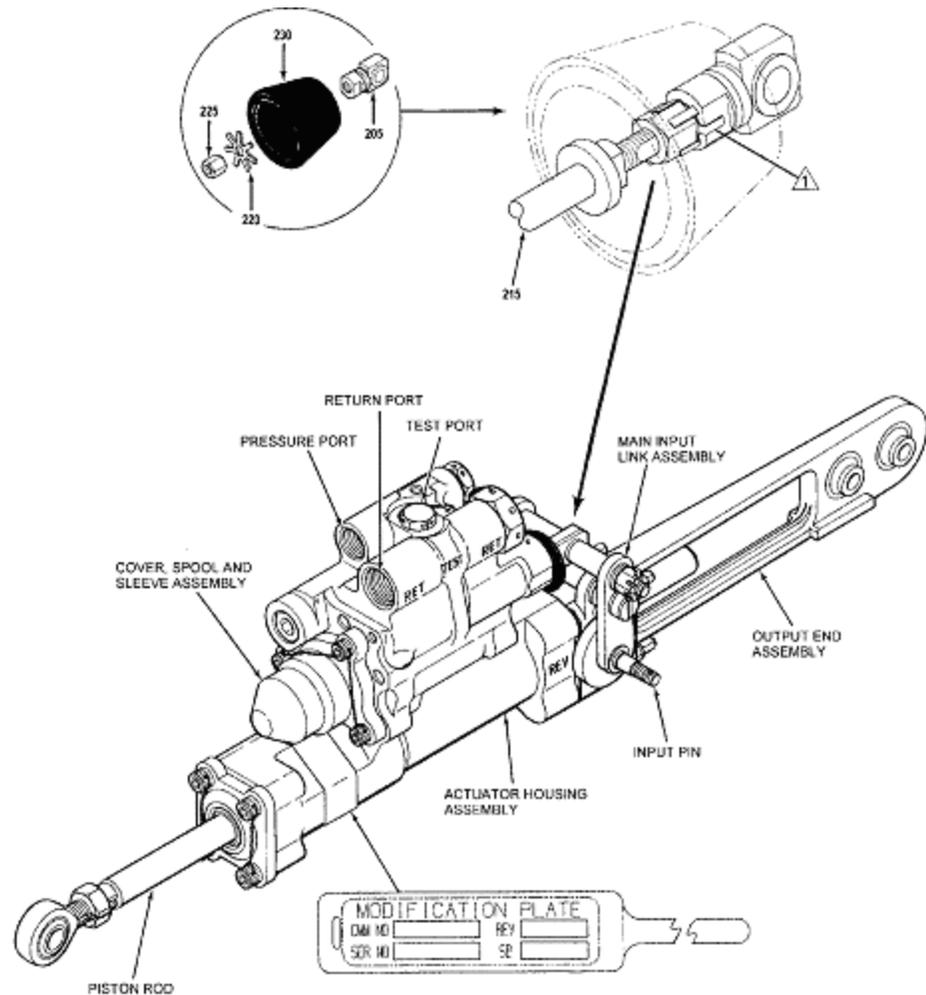
(e) Compliance

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.

(f) Required Actions

(1) Before further flight, conduct a one-time visual inspection of the servo by doing the following:

(i) Retract the boot depicted as 230 in Figure 1 to Paragraph (f) of this AD.



NOTE:

ACCEPTABLE CONDITION
 A MINIMUM OF ONE TAB SHALL BE IN LINE AND BENT FLUSH WITH THE NUT FLAT SURFACE AND A MINIMUM OF ONE TAB SHALL BE IN LINE AND BENT FLUSH WITH THE CLEVIS ASSEMBLY FLAT SURFACE

Clevis Assembly
 Figure 1

- Legend:
 205 Clevis Assembly
 215 Shaft
 225 Nut
 220 Lock Washer
 230 Boot

Figure 1 to Paragraph (f)

(ii) Applying only hand pressure, determine whether the nut, the shaft, or the clevis assembly, depicted as items 225, 215 and 205, respectively, in Figure 1 to Paragraph (f) of this AD, turn independently. If the shaft turns independently of the nut or clevis assembly, before further flight, replace the servo with an airworthy servo.

(iii) If the shaft does not turn independently, inspect to determine if at least one tab of the lock washer is bent flush against a flat surface of the nut and if at least one tab of the lock washer is bent flush against a flat surface of the clevis assembly.

(iv) If at least one lock washer tab is not aligned and bent flush with a nut flat surface and at least one lock washer tab is not aligned and bent flush with a flat surface of the clevis assembly, before further flight, replace the servo with an airworthy servo.

(v) If any tab of the lock washer is not bent flush against either a flat surface of the nut or clevis assembly, bend the tab flush against a flat surface.

(2) After accomplishing paragraphs (f)(1)(i) through (f)(1)(v), vibro-etch the letter "V" at the end of the part number on the data plate.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest 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 Bulletins 407-11-96 and 427-11-35, both Revision B and both dated August 29, 2011, which are not incorporated by reference, contain 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 <http://www.bellcustomer.com/files/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in Transport Canada AD CF-2011-17R1, dated December 19, 2011.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6730, Rotorcraft Servo System.

Issued in Fort Worth, Texas, on July 2, 2012.

Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.