DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0643; Directorate Identifier 2013-SW-059-AD; Amendment 39-18235; AD 2015-17-02]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada (Bell) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2001-13-51 for Bell Model 206L-4, 407, and 427 helicopters. AD 2001-13-51 required inspecting certain driveshafts for a crack, a loose bolt or nut, or red powder residue and replacing a driveshaft if there is a crack, a loose bolt or nut, or red powder residue. AD 2001-13-51 also required notifying the FAA within 10 days if a crack is found in the driveshaft. This new AD retains the inspection requirement of AD 2001-13-51, expands the applicability to include the Model 429 helicopter, and removes the reporting requirement. This AD is intended to prevent failure of a driveshaft, loss of drive to the main rotor system, and a subsequent emergency landing.

DATES: This AD is effective September 24, 2015.

ADDRESSES: 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 service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, Texas 76177.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov, by searching for and locating Docket No. FAA-2014-0643, or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the Transport Canada Civil Aviation (TCCA) AD, the economic evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document
SUPPLEMENTARY INFORMATION:

Discussion

On August 22, 2014, we issued a notice of proposed rulemaking (NPRM) (79 FR 54922, September 15, 2014) to amend 14 CFR part 39 to supersede AD 2001-13-51, Amendment 39-12443 (66 FR 48535, September 21, 2001). AD 2001-13-51 applied to Bell Model 206L-4, 407 and 427 helicopters. AD 2001-13-51 required visually inspecting driveshaft, part number (P/N) 206-340-300-105, for a crack, a loose bolt or nut, or red powder residue and replacing a driveshaft if there is a crack, a loose bolt or nut, or red powder residue. AD 2001-13-51 also required notifying the FAA within 10 days if a crack is found in the driveshaft and prohibited interchanging a driveshaft between different models if the driveshaft has ever been installed on a Bell Model 407 helicopter.

After we issued AD 2001-13-51, the Model 429 helicopter was certificated. TCCA, which is the aviation authority for Canada, issued Canadian AD CF-2002-03R3, Revision 3, dated September 26, 2013, to add Model 429 helicopters to the applicability and to require removing any driveshaft, part number (P/N) 206-340-300-105, if it has ever been installed on a Bell Model 407 helicopter.

The NPRM proposed to retain the inspection requirements of AD 2001-13-51, expand the applicability to include the Model 429 helicopters, and remove the reporting requirement.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (79 FR 54922, September 15, 2014).

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, TCAA, its technical representative, has notified us of the unsafe condition described in the Canadian AD. We are issuing this AD because we evaluated all information provided by TCAA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between This AD and the TCCA AD

The TCCA AD requires following the compliance time specified in the Bell ASBs, which allows more time, based on the hours TIS, for removing the driveshaft. This AD requires replacing the driveshaft before accumulating 1,250 hours TIS.

Related Service Information

We reviewed Bell Alert Service Bulletin (ASB) No. 206L-01-123, Revision A, dated February 22, 2006, for Bell Model 206L-4 helicopters and ASB No. 427-01-04, Revision A, dated March 31, 2006, for Bell Model 427 helicopters. Both ASBs describe inspecting the Historical Service Record of the engine-to-transmission driveshaft, P/N 206-340-300-105, to determine whether the driveshaft
has ever been installed on a Bell Model 407 helicopter and removing the driveshaft if it has ever been
installed on a Model 407 helicopter. We also reviewed Bell ASB No. 407-01-45, Revision B, dated
April 23, 2013, for Bell Model 407 helicopters, which describes an engine-to-transmission driveshaft
1,250-Hour overhaul. TCCA classified these ASBs as mandatory and issued AD No. CF-2002-03R3,
Revision 3, dated September 26, 2013, to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate that this AD affects 970 helicopters of U.S. Registry. We estimate that operators
may incur the following costs in order to comply with this AD. Labor costs are estimated at $85 per
work-hour. We estimate 0.25 work-hour to determine whether the driveshaft has ever been installed
on a Bell Model 407 helicopter for a total cost of $22 per helicopter or $21,340 for the fleet. If a
driveshaft has been installed on a Model 407 helicopter, we estimate 1 work hour to inspect the
driveshaft for a cost of $85 per helicopter, and 2 work hours and $39,724 for required parts to replace
a driveshaft for a cost of $39,894 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.

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 have 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 above, 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.

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 Airworthiness Directive (AD) 2001-13-51, Amendment 39-12443 (66 FR 48535, September 21, 2001), and adding the following new AD:
2015-17-02 Bell Helicopter Textron Canada (Bell): Amendment 39-18235; Docket No. FAA-2014-0643; Directorate Identifier 2013-SW-059-AD.

(a) Applicability

This AD applies to Model 206L-4, 407, 427, and 429 helicopters with an engine-to-transmission driveshaft assembly (driveshaft), part number (P/N) 206-340-300-105, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of a driveshaft due to cracking of the flex frame on the forward end of the driveshaft. This condition could result in loss of drive to the main rotor system and a subsequent emergency forced landing.

(c) Affected ADs


(d) Effective Date

This AD becomes effective September 24, 2015.

(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) Within 50 hours time-in-service (TIS), determine whether driveshaft, P/N 206-340-300-105, has ever been installed on a Bell Model 407 helicopter, and record this on the component history card or equivalent record. If driveshaft, P/N 206-340-300-105, has ever been installed on a Bell Model 407 helicopter:
   (i) For Bell Model 206L-4, 407, and 427 helicopters, within 25 hours TIS, inspect each driveshaft for a crack, a loose bolt or nut, and red powder residue. If there is a crack, a loose bolt or nut, or red powder residue, replace the driveshaft with an airworthy driveshaft before further flight.
   (ii) For all affected Bell model helicopters, on or before accumulating 1,250 hours TIS, replace each driveshaft with an airworthy driveshaft.
(2) Do not install driveshaft, P/N 206-340-300-105, on any helicopter if it has ever been installed on a Bell Model 407 helicopter.
(g) Special Flight Permit

Special flight permits are prohibited.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matthew Fuller, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, Texas 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, 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.

(i) Additional Information

(1) Bell Alert Service Bulletin (ASB) No. 206L-01-123, Revision A, dated February 22, 2006; ASB No. 427-01-04, Revision A, dated March 31, 2006; and ASB No. 407-01-45, Revision B, dated April 23, 2013, 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, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, Texas 76177.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2002-03R3, Revision 3, dated September 26, 2013. You may view the TCCA AD on the Internet at http://www.regulations.gov in Docket No. FAA-2014-0643.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6300 Main Rotor Drive System.

Issued in Fort Worth, Texas, on August 6, 2015.
Larry M. Kelly,
Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.