DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0036; Product Identifier 2017-SW-015-AD; Amendment 39-19354; AD 2018-16-14]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Inc., Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Bell Helicopter Textron Inc. (Bell) Model 212, Model 412, and Model 412EP helicopters. This AD requires replacing the emergency flotation system (EFS) tube assembly. This AD was prompted by a report of an EFS tube assembly failure. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD is effective October 4, 2018.

ADDRESSES: For service information identified in this final rule, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at http://www.bellcustomer.com/files/. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 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-2018-0036; 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 economic evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) 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: Rory Rieger, Aviation Safety Engineer, DSCO Branch, AIR-7J0, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5193; email rory.rieger@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On January 26, 2018, at 83 FR 3630, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Bell Model 212, Model 412, and Model 412EP helicopters with a certain EFS tube assembly installed. The NPRM proposed to require, within 300 hours time-in-service (TIS), replacing any EFS tube assembly part number (P/N) 412-073-820-101 with an unknown manufacture date or that was manufactured before July 28, 2016. The NPRM also proposed to prohibit installing on any helicopter an EFS tube assembly P/N 412-073-820-101 that was manufactured before July 28, 2016 or that has an unknown manufacture date.

The NPRM was prompted by a report from Bell that an EFS tube assembly separated from the valve during a 2-year inflation test. A subsequent investigation found that excessive sleeve preset force during manufacturing caused cracks in the sleeve of the tube assembly, which may result in the EFS float failing to deploy. Bell determined that only those EFS tube assemblies with P/N 412-073-820-101 that were shipped prior to July 28, 2016, were subject to this manufacturing defect. Bell states that because this manufacturing defect is difficult to detect, affected EFS tube assemblies in service must be replaced. The affected parts were associated with a single Bell supplier that is no longer manufacturing the tube assembly.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

FAA's Determination

We have reviewed the relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

We reviewed Bell Alert Service Bulletin (ASB) 212-11-143 for Bell Model 212 helicopters, and ASB 412-11-147 for Bell Model 412 and 412EP helicopters, both Revision C and dated December 22, 2016. Each ASB describes and illustrates procedures to replace the tube assembly within 600 flight hours or by March 31, 2017.

Differences Between This AD and the Service Information

The service information requires compliance within 600 flight hours or by March 31, 2017; this AD requires compliance within 300 hours TIS.

Costs of Compliance

We estimate that this AD will affect 250 helicopters of U.S. Registry.
We estimate that operators will incur the following costs in order to comply with this AD. At an average labor rate of $85 per hour, replacing a tube assembly will require about 6 work-hours and required parts will cost $4,902, for a total cost of $5,412 per helicopter and $1,353,000 for the U.S. fleet.

According to Bell's service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Bell. Accordingly, we have included all costs in our cost estimate.

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

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.

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 adding the following new airworthiness directive (AD):

(a) Applicability

This AD applies to Bell Helicopter Textron Inc. Model 212, Model 412, and Model 412EP helicopters, certificated in any category, with an emergency flotation system (EFS) tube assembly part number (P/N) 412-073-820-101 with a date of manufacture before July 28, 2016, or an unknown date of manufacture installed.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack on an EFS tube assembly. This condition could result in failure of the emergency floats to inflate during an emergency water landing.

(c) Effective Date

This AD becomes effective October 4, 2018.

(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 300 hours time-in-service:
   (i) Remove the EFS tube assembly from service.
   (ii) Lubricate the shoulder of the sleeves, threads, and seat of each mating fitting with anti-seize compound.
   (iii) Install an EFS tube assembly not listed in paragraph (a) of this AD.
(2) After the effective date of this AD, do not install an EFS tube assembly listed in paragraph (a) of this AD on any helicopter.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, DSCO Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Rory Rieger, Aviation Safety Engineer, DSCO Branch, AIR-7J0, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5193; email rory.rieger@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.
(g) Additional Information

Bell Helicopter Alert Service Bulletins 212-11-143 and 412-11-147, both Revision C and dated December 22, 2016, 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, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at http://www.bellcustomer.com/files/. You may review a copy of information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 3212 Emergency Flotation Section.

Issued in Fort Worth, Texas, on August 3, 2018.

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