DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0189; Directorate Identifier 2017-SW-008-AD; Amendment 39-18847; AD 2017-05-51]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are publishing a new airworthiness directive (AD) for Bell Helicopter Textron Canada (Bell) Model 429 helicopters. This AD requires inspecting the condenser blower motor (motor) and condenser blower (blower) to determine if the motor is securely attached to the blower support (shroud). This AD is prompted by a report that the motor detached from the blower. The actions of this AD are intended to prevent an unsafe condition on these products.

DATES: This AD becomes effective April 25, 2017 to all persons except those persons to whom it was made immediately effective by Emergency AD 2017-05-51, issued on March 3, 2017, which contains the requirements of this AD.

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of April 25, 2017. We must receive comments on this AD by June 9, 2017.

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 by searching for and locating Docket No. FAA-2017-0189; 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, any incorporated by reference service information, 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 final rule, contact Air Comm Corporation, 1575 West 124th Avenue, Westminster, CO 80234; telephone: (303) 440-4075 (during business hours) or (720) 233-8330 (after hours); email: service@aircommcorp.com; Web site: http://www.aircommcorp.com/contact. 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 http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0189.

FOR FURTHER INFORMATION CONTACT: Matthew Bryant, Aerospace Engineer, Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver CO 80249; phone (303) 342-1092; fax (303) 342-1088; email Matthew.Bryant@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 March 3, 2017, we issued Emergency AD 2017-05-51 to correct an unsafe condition on Bell Model 429 helicopters with an Air Comm Corporation (Air Comm) air conditioning system part number (P/N) 429EC-200 or 429EC-202 installed. Emergency AD 2017-05-51 was sent previously to all known U.S. owners and operators of these helicopters. Emergency AD 2017-05-51 requires inspecting the motor and blower to determine if the motor is securely attached to the shroud.

Emergency AD 2017-05-51 was prompted by a report that the motor detached from the blower. The motor is secured to the shroud by three screw fasteners with thread locker applied. The report states that the detached motor was resting on the flight controls.

An initial investigation indicates that the motor mount fasteners may not have had the thread locker adhesive applied during production. However, the root cause is under investigation. The motor fell on the collective control tube, causing wear damage to the control tube. The motor's power wiring also was on the collective control tube near hydraulic and fuel lines. The actions in Emergency AD
2017-05-51 are intended to prevent the motor from detaching, causing failure of the primary flight controls and subsequent loss of helicopter control.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Related Service Information Under 1 CFR Part 51

We reviewed Air Comm Service Bulletin 429-201-1, Revision NC, dated February 17, 2017 (SB 429-201-1), which advises inspecting the motor to determine whether it is attached to the blower assembly within 20 flight hours. If the motor is not attached to the blower assembly, SB 429-201-1 advises reporting the detachment to Air Comm and inspecting the surrounding area for damage. If any surrounding parts are damaged, SB 429-201-1 specifies replacing or repairing the damaged parts. SB 429-201-1 then specifies replacing the blower assembly if parts are available and deactivating the air conditioning system if parts are not available. SB 429-201-1 also provides instructions if any P/N MS27039-1-15 fasteners are missing or loose or if the motor is not secured firmly to the blower assembly. These instructions include rotating the fan blades by hand and verifying the clearance between the blades and the shroud. If the fan blades are scraping or rubbing against the shroud or if the blades cause visible damage to the shroud, SB 429-201-1 advises replacing the blower assembly if parts are available. If parts are not available, SB 429-201-1 advises deactivating the air conditioning system. If the motor is secure, SB 429-201-1 provides instructions for replacing any missing fasteners and removing and reinstalling any existing fasteners with thread locker.

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, before further flight and at intervals not to exceed 25 hours time-in-service (TIS), inspecting the air conditioner condenser blower for motor attachment and for missing or loose fasteners. If the motor is not attached or if a fastener is missing or loose, this AD requires deactivating the air conditioning system. If the motor is not attached, this AD also requires inspecting the collective flight control tube, the area under the forward transmission cowling, and each wiring harness, and depending on the findings, repairing or replacing the affected parts. Additionally, if the motor is not attached or if the motor is attached but any fasteners are missing, this AD requires inspecting for and removing any found detached hardware. Deactivating the air conditioning system constitutes terminating action for the repetitive inspections required by this AD. This AD also requires reporting certain information to the FAA within 10 days.

Differences Between This AD and the Service Information

SB 429-201-1 advises performing the initial inspection within 20 hours TIS. This AD requires the initial inspection before further flight. SB 429-201-1 advises reporting certain incidents to Air Comm, whereas this AD requires reporting certain information to the FAA. SB 429-201-1 does not specify inspecting for and removing missing hardware, whereas this AD does. If replacement parts are available, SB 429-201-1 advises replacing the blower, while this AD makes no allowance for replacing the blower except by alternate means of compliance. If fasteners are missing or loose but the motor is secure, SB 429-201-1 advises replacing missing fasteners and removing and reinstalling existing fasteners with thread locker and a torque stripe. This AD requires removing the blower assembly if fasteners are missing or loose but the motor is still secure. SB 429-201-1 does not require
repetitive inspections, while this AD requires the inspection every 25 hours time-in-service until the air conditioning system is deactivated.

**Interim Action**

We consider this AD to be an interim action. The inspection report that is required by this AD will enable us to obtain better insight into the cause of the motor's detachment, and help us develop final action to address this unsafe condition. The design approval holder is also currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we might consider additional rulemaking.

**Costs of Compliance**

We estimate that this AD affects 78 helicopters of U.S. Registry and that labor costs average $85 per work-hour. Based on these estimates, we expect the following costs:

- Inspecting the motor attachment requires 1 work-hour and no parts for a total cost of $85 per helicopter, and $6,630 for the U.S. fleet, per inspection cycle.
- Removing the motor and deactivating the air conditioning requires 2 work-hours and no parts for a total cost of $170 per helicopter.
- Removing the blower assembly and deactivating the air conditioning requires 13 work-hours and no parts for a total cost of $1,105 per helicopter.
- Reporting the findings to the FAA requires 1 work-hour and no parts for a total 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 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 current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting required by this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW., Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

**FAA's Justification and Determination of the Effective Date**

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we found and continue to find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the required initial inspection must be accomplished before further flight and the recurring inspection must be accomplished at intervals not to exceed 25 hours TIS. These helicopters, typically used for police and medical transport, are expected to reach 25 hours TIS within a few weeks.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comments before issuing this AD were impracticable and contrary to public interest and good cause existed to make the AD effective immediately by Emergency AD 2017-05-51, issued on March 3, 2017, to all known U.S. owners and operators of these helicopters. These conditions still
exists and the AD is hereby published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons.

Authority for This Rulemaking


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 adding the following new airworthiness directive (AD):
2017-05-51 Bell Helicopter Textron Canada: Amendment 39-18847; Docket No. FAA-2017-0189; Directorate Identifier 2017-SW-008-AD.

(a) Applicability

This AD applies to Bell Helicopter Textron Canada (Bell) Model 429 helicopters with an Air Comm Corporation air conditioning system part number (P/N) 429EC-200 or 429EC-202 installed, certificated in any category.

Note 1 to paragraph (a) of this AD: Air conditioning system P/N 429EC-200 and 429EC-202 are identifiable by a three-screw installation as depicted in Figure 1 of Air Comm Corporation Service Bulletin 429-201-1, Revision NC, dated February 17, 2017 (SB 429-201-1).

(b) Unsafe Condition

This AD defines the unsafe condition as a condenser blower motor (motor) detaching from the condenser blower support (shroud). This condition could lead to failure of the primary flight controls and subsequent loss of helicopter control.

(c) Effective Date

This AD becomes effective April 25, 2017 to all persons except those persons to whom it was made immediately effective by Emergency AD 2017-05-51, issued on March 3, 2017, which contains the requirements of this AD.

(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

Before further flight, and thereafter at intervals not to exceed 25 hours time-in-service:

(1) Inspect the motor and condenser blower to determine whether the motor is attached to the shroud.

   (i) If the motor is not attached, before further flight:

   (A) Inspect the collective flight control tube for loss of protective primer, a scratch, any gouging, and a dent. If there is any loss of protective primer, a scratch, any gouging, or a dent, repair or replace the control tube.

   (B) Inspect the area under the forward transmission cowling for loss of protective primer, a scratch, any gouging, and a dent. Inspect each wiring harness for any cuts, chafing, and exposed wires. If there is any loss of protective primer, a scratch, any gouging, a dent, or if any wiring harness has a cut, chafing, or an exposed wire, repair or replace the affected parts.

   (C) Inspect the area under the forward transmission cowling for the three fasteners as depicted in Figure 1 of SB 429-201-1. Also inspect for the crimp-on external fan retaining ring (crimp ring) and
the slotted fan drive spring (commonly known as a roll pin), which may have fallen loose with the motor. Remove any fasteners, the crimp ring, and the roll pin if found detached.

(D) Deactivate the air conditioning system by following the instructions in Procedure, paragraphs B.2.d.i. through B.2.d.v., of SB 429-201-1.

(ii) If the motor is attached to the shroud but a fastener is missing or loose, before further flight:
(A) Remove any detached fasteners found in the area under the forward transmission cowling.
(B) Deactivate the air conditioning system as follows:
(1) Pull and red collar the air conditioning COND circuit breaker.
(2) Pull and red collar the air-conditioning COMP circuit breaker.
(3) Remove the compressor drive belt.
(4) Remove the condenser blower assembly.

(2) Deactivating the air conditioning system as required by paragraph (e)(1) of this AD constitutes terminating action for the repetitive inspections required by paragraph (e)(1) of this AD.

(3) If the air conditioning system is deactivated as required by paragraph (e)(1) of this AD, within 10 days after completing the inspection, report the information requested in Appendix 1 to this AD by mail to the Manager, Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver, CO 80249, ATTN: Matthew Bryant; by fax to (303) 342-1088; or by email to Matthew.Bryant@faa.gov.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Denver Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Matthew Bryant, Aerospace Engineer, Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver, CO 80249; fax (303) 342-1088; email Matthew.Bryant@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) Subject

Joint Aircraft Service Component (JASC) Code: 2150, Cabin Cooling System.

(h) 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.


(ii) Reserved.

(3) For Air Comm Corporation service information identified in this AD, contact Air Comm Corporation, 1575 West 124th Avenue, Westminster, CO 80234; telephone: (303) 440-4075 (during business hours) or (720) 233-8330 (after hours); email: service@aircommcorp.com; Web site: http://www.aircommcorp.com/contact.

(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, call (202) 741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.
Issued in Fort Worth, Texas, on March 29, 2017.
Scott A. Horn,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.