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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0639; Directorate Identifier 2013-SW-020-AD; Amendment 39-17518; AD 2013-15-02]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule, request for comments.

SUMMARY: We are superseding Airworthiness Directive (AD) 2008-10-03 for Bell Helicopter Textron Helicopters (Bell) Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters. AD 2008-10-03 required certain checks and inspections of each tail rotor blade assembly (T/R blade) at specified intervals and repairing or replacing, as applicable, any cracked or damaged T/R blade. Since we issued AD 2008-10-03, an accident attributed to a T/R failure occurred. This new AD retains the requirements of AD 2008-10-03 and adds a second, more detailed inspection that allows for an earlier detection of a crack or other damage in a T/R blade. These actions are intended to prevent a failure of the T/R blade and subsequent loss of helicopter control.

DATES: This AD becomes effective August 14, 2013.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of August 14, 2013.

We must receive comments on this AD by September 30, 2013.

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 Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at www.bellcustomer.com/. You may review 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: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170; email 7-AVS-ASW-170@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 April 22, 2008, we issued AD 2008-10-03, Amendment 39-15509 (73 FR 24858, May 6, 2008) for Bell Model 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters. AD 2008-10-03 required certain checks and inspections of each T/R blade at specified intervals and repairing or replacing, as applicable, any unairworthy T/R blade. AD 2008-10-03 was prompted by eight reports of fatigue cracking of T/R blades installed on Bell Model 212 and 412 helicopters (three failures on the Bell Model 212 and five failures on the Bell Model 412) with a T/R blade, part number (P/N) 212-010-750-009, -105, and -107. Three of the Model 412 failures occurred during flight.

Actions Since AD 2008-10-03 Was Issued

Since we issued AD 2008-10-03 (73 FR 24858, May 6, 2008), an accident attributed to a T/R failure occurred. Because of this accident, we have determined that a superseding AD is necessary to require a second, more detailed inspection that allows for an earlier detection of a crack or other damage. These actions are intended to prevent failure of T/R blade and subsequent loss of helicopter control.

This superseding AD does not apply to Model 204B helicopters because those helicopters do not have the affected T/R blades installed and should not have been included in the applicability of AD 2008-10-03. We are no longer requiring a daily check of the T/R blades because we have determined that the additional, more detailed inspection and the sequence of the inspections provide an appropriate level of safety.

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

On February 4, 2013, Bell issued Alert Service Bulletin (ASB) No. 205-13-109 for Model 205A and 205A-1 helicopters; ASB No. 205B-13-61 for Model 205B helicopters; ASB No. 212-13-147 for Model 212 helicopters; ASB 412-13-155 for Model 412 and 412EP helicopters; and ASB No. 412CF-13-52 for 412CF helicopters. All ASBs are dated February 4, 2013. Bell reported that it recently examined a fractured T/R blade and that the fracture originated from surface damage. ASB No. 205-13-109, No. 205B-13-61, and No. 412CF-13-52 describe procedures for a 3X magnifying glass inspection of the entire T/R blade surface for damage every 25 hours time-in-service (TIS), similar to that required by AD 2008-10-03 (73 FR 24858, May 6, 2008). ASB No. 212-13-147 and No. 412-13-155 do not include this 3X visual inspection, because that inspection has been incorporated into the maintenance manual for these models. All five of the ASBs introduce an additional local visual inspection with a 10X magnifying glass of each T/R blade between blade station 20.00 to 35.00 from the leading edge to the trailing edge. Bell added a reminder to operators that it is critical to investigate any paint and skin imperfections should the inspection warrant such action. If any skin damage exceeds the limits in the applicable Maintenance Manual, the ASBs call for removing the T/R blade from service.

AD Requirements

This AD supersedes AD 2008-10-03 (73 FR 24858, May 6, 2008) and requires for any Model 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopter with certain T/R blades the following actions:

Within 25 hours TIS or 30 days, whichever occurs first, and thereafter at intervals not to exceed 25 hours TIS or 30 days, whichever occurs first, cleaning and visually inspecting each T/R blade assembly for a crack, corrosion, nick, scratch, or dent using a 3X or higher power magnifying glass and a bright light; and

Visually inspecting certain parts of each T/R blade for a crack or other damage using a 10X or higher power magnifying glass and a bright light, and if damage exists, measuring the depth of any damage.

Before further flight, replacing any cracked T/R blade and repairing or replacing any damaged T/R blade.

Replacing a blade with T/R blade, P/N 412-016-100-111, on eligible helicopters is terminating action for the inspection requirements of this AD.

Differences Between the AD and the Service Information

This AD differs from the ASBs because we include Model 210 helicopters. The Model 210 helicopter has the same part-numbered blades as the other applicable helicopter models.

Costs of Compliance

We estimate that this AD affects 80 helicopters of U.S. Registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs to comply with this AD:

Visually inspecting a blade (2 per helicopter) for a crack or other damage will require .25 work-hour. No parts are needed. For the expected 12 annual inspections, the total cost per helicopter will be \$510 a year, and \$40,800 for the U.S. fleet.

Replacing a T/R assembly will require 6 work-hours for a labor cost of \$510. Parts will cost \$23,048, bringing the total cost to \$23,558 per helicopter.

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

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 find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the required corrective actions must be accomplished within 25 hours TIS or 30 days, whichever comes first, a very short time period based on the average flight-hour utilization rate of these helicopters. These helicopters are typically used for logging, firefighting, and lifting and carrying external loads.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in less than 30 days.

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 the 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.

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) 2008-10-03, Amendment 39-15509 (73 FR 24858, May 6, 2008), and adding the following new AD:



2013-15-02 BELL HELICOPTER TEXTRON: Amendment 39-17518; Docket No. FAA-2013-0639; Directorate Identifier 2013-SW-020-AD.

(a) Applicability

This AD applies to Bell Helicopter Textron (Bell) Model 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters with a tail rotor blade assembly (T/R blade), part number (P/N) 210-010-001-(all dash numbers) or 212-010-750-(all dash numbers), certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as fatigue cracking of a T/R blade, which could lead to failure of the T/R blade and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD No. 2008-10-03, Amendment 39-15509 (73 FR 24858, May 6, 2008).

(d) Effective Date

This AD becomes effective August 14, 2013.

(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 25 hours time-in-service (TIS) or 30 days, whichever occurs first, and thereafter at intervals not to exceed 25 hours TIS or 30 days, whichever occurs first:

(i) Clean each T/R blade by hand using a mild soap and cheesecloth (C-486) on both sides of the blade in a spanwise direction and dry thoroughly.

(ii) Using a 3X or higher power magnifying glass and a bright light, visually inspect the T/R blade skins, leading edge spar, doublers, grip plates, and trailing edge on both sides of each blade for a crack, corrosion (may be indicated by blistering, peeling, flaking, bubbling, or cracked paint), a nick, scratch, dent, or other damage. Pay particular attention to both sides of the T/R blade in the area located 16 to 35 inches from the T/R blade tip (blade station 20.00 to 35.00—the T/R blade tip is located at blade station 51) as shown by the shaded area of Figure 1 of Bell Alert Service Bulletin (ASB) No. 205-13-109; ASB No. 205B-13-61; ASB No. 212-13-147; ASB 412-13-155; or ASB No. 412CF-13-52, all dated February 4, 2013, as applicable to your helicopter. Also, pay particular attention to the inboard blade butt area near the attachment of the external balance weight and screws, and to any blade surface that was snagged by cheesecloth, as that may be an indication of a crack or paint chip that could lead to corrosion.

Note 1 to Paragraph (f) of this AD: Figure 1 of the Bell ASB No. 205-13-109; ASB No. 205B-13-61; ASB No. 212-13-147; ASB 412-13-155; and ASB No. 412CF-13-52, all dated February 4, 2013, show the shaded area as part of the 10X inspection only. This AD requires the shaded area to be inspected during both the 3X and 10X inspections.

(iii) Using a 10X or higher magnifying glass and a bright light, visually inspect both sides of each blade for a crack or other damage between blade station 20.00 to 35.00 as shown by the shaded area of Figure 1 of Bell ASB No. 205-13-109; ASB No. 205B-13-61; ASB No. 212-13-147; ASB 412-13-155; or ASB No. 412CF-13-52, all dated February 4, 2013, as applicable to your helicopter.

(iv) If any blistering, peeling, flaking, bubbling, or cracked paint is detected anywhere on the blade, remove the paint from the affected area by sanding in a spanwise direction with abrasive cloth or paper (C-406) 240-grit or finer, and a final sanding using abrasive cloth or paper (C-406) 400-grit or finer. Visually inspect the affected area for any corrosion or a crack using a 10X or higher magnifying glass and a bright light. If any corrosion is found, measure the depth of the damage. (A digital optical micrometer is one tool that can be used for this measurement.)

(v) If a nick, scratch, or dent is found anywhere on the blade, visually inspect for a crack using a 10X or higher power magnifying glass and a bright light. Measure the depth of the damage. (A digital optical micrometer is one tool that can be used for this measurement.)

(2) Before further flight:

(i) Replace with an airworthy blade any T/R blade that has a crack or that has any corrosion, nick, scratch, dent, or other damage that exceeds any of the maximum repair limits.

(ii) Repair or replace with an airworthy blade any T/R blade that has any corrosion, nick, scratch, dent or other damage that is within the maximum repair limits.

(3) Replacing a T/R blade with T/R blade, P/N 412-016-100-111, on eligible helicopter models is considered terminating action to this AD.

(g) Special Flight Permit

Special flight permits are prohibited.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170; email 7-AVS-ASW-170@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) Subject

Joint Aircraft Service Component (JASC) Code: 6410, Tail Rotor Blades.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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.

(i) Bell ASB No. 205-13-109, dated February 4, 2013.

(ii) Bell ASB No. 205B-13-61, dated February 4, 2013.

(iii) Bell ASB No. 212-13-147, dated February 4, 2013.

(iv) Bell ASB No. 412-13-155, dated February 4, 2013.

(v) Bell ASB No. 412CF-13-52, dated February 4, 2013.

(3) For Bell 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 www.bellcustomer.com/.

(4) You may view this service information that is incorporated by reference in the AD Docket on the Internet at <http://www.regulations.gov>.

(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 July 11, 2013.

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