

[Federal Register Volume 81, Number 207 (Wednesday, October 26, 2016)]
[Rules and Regulations]
[Pages 74285-74287]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2016-25742]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3821; Directorate Identifier 2014-SW-025-AD; Amendment 39-18696; AD 2016-22-07]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 75-26-05 for Bell Helicopter Textron (Bell) Model 204B, 205A-1 and 212 helicopters. AD 75-26-05 required removing and visually inspecting each main rotor (M/R) blade and, depending on the inspection's outcome, repairing or replacing the M/R blades. This new AD requires more frequent inspections of certain M/R blades and applies to Model 205A helicopters. This AD does not require that helicopter blades be removed to conduct the initial visual inspections. We are issuing this AD to detect a crack and prevent failure of an M/R blade and subsequent loss of helicopter control.

DATES: This AD is effective November 30, 2016.

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 view this 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> in Docket No. FAA-2015-3821; 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 economic evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, 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: Charles Harrison, Project Manager, Fort Worth Aircraft Certification Office, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5140; email charles.c.harrison@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 75-26-05, Amendment 39-2457 (40 FR 57783, December 12, 1975) and add a new AD. AD 75-26-05 applied to Bell Model 204B, 205A-1, and 212 helicopters. AD 75-26-05 required removing and visually inspecting each M/R blade and, depending on the inspection's outcome, repairing or replacing the M/R blade.

The NPRM published in the Federal Register on May 5, 2016 (81 FR 27055). The NPRM was prompted by a report of an M/R blade with multiple fatigue cracks around the retention bolt hole. The NPRM proposed to require more frequent inspections of certain M/R blades and proposed to remove the requirement that helicopter blades be removed to conduct the initial visual inspections. The NPRM also proposed to include the Model 205A in the applicability but remove the Model 212 because similar inspections are required by AD 2011-23-02 (76 FR 68301, November 4, 2011). Finally, the NPRM included specific part-numbered blades in the applicability so that the proposed AD would no longer be required if a new blade is designed that is not subject to the unsafe condition.

Comments

We gave the public the opportunity to participate in developing this AD, but we received no comments on the NPRM (81 FR 27055, May 5, 2016).

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 helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

Bell issued Alert Service Bulletin (ASB) No. UH-1H-13-09, dated January 14, 2013, for the Model UH-1H helicopter (ASB UH-1H-13-09). ASB UH-1H-13-09 specifies a one-time visual inspection, within 10 hours time-in-service (TIS), of the lower grip pad and upper and lower grip plates for cracks, edge voids, and loose or damaged adhesive squeeze-out. ASB UH-1H-13-09 also specifies a repetitive visual inspection, daily and at every 150 hours TIS of the lower grip pad, upper and lower grip plates, and all upper and the lower doublers for cracks, corrosion, edge voids, and loose or damaged adhesive squeeze-out. Similar inspections are contained in Bell ASB No. 204-75-1 (ASB 204-75-1) and No. 205-75-5 (ASB 205-75-5), both Revision C and both dated April 25, 1979, for Bell Model 204B and 205A-1 helicopters, respectively. ASB 204-75-1 and ASB 205-75-5 call for daily inspections and for inspections, rework, and refinishing every 1,000 hours TIS or 12 months, whichever occurs first.

Differences Between This AD and the Service Information

This AD requires all inspections every 25 hours TIS or 2 weeks, whichever occurs first. ASB UH-1H-13-09 specifies a one-time inspection within 10 hours TIS, and then a second repetitive inspection daily and at every 150 hours TIS, while ASB 204-75-1 and ASB 205-75-5 call for daily

visual inspections, and inspections, rework, and refinishing every 1,000 hours TIS or 12 months, whichever occurs first. This AD contains more detailed inspection requirements and a more specific inspection area than the instructions in ASB UH-1H-13-09. The service information applies to M/R blade, part number (P/N) 204-011-250, and was issued for Model 204B and 205A-1 helicopters. This AD also applies to P/N 204-011-200 because this blade is of the same type and susceptible to the unsafe condition. This AD also applies to certain M/R blades installed on the Model 205A helicopters. While none of these models are registered in the U.S., they were included because of blade P/N eligibility.

Costs of Compliance

We estimate that this AD affects 52 helicopters of U.S. Registry and that labor costs average \$85 a work-hour. Based on these estimates, we expect the following costs:

Cleaning and performing all inspections of a set of M/R blades (2 per helicopter) requires a half work-hour. No parts are needed. At an estimated 24 inspections a year, the cost is \$1,032 per helicopter and \$53,664 for the U.S. fleet.

Replacing an M/R blade requires 12 work hours and parts cost \$90,656 for a total cost of \$91,676 per blade.

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 a regulatory distinction is required 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) 75-26-05, Amendment 39-2457 (40 FR 57783, December 12, 1975), and adding the following new AD:



2016-22-07 Bell Helicopter Textron: Amendment 39-18696; Docket No. FAA-2015-3821; Directorate Identifier 2014-SW-025-AD.

(a) Applicability

This AD applies to Model 204B, 205A, and 205A-1 helicopters with a main rotor (M/R) blade, part number (P/N) 204-011-200-001 or P/N 204-011-250-(all dash numbers), installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in an M/R blade, which could result in failure of an M/R blade and subsequent loss of helicopter control.

(c) Affected ADs

This AD supersedes AD 75-26-05, Amendment 39-2457 (40 FR 57783, December 12, 1975).

(d) Effective Date

This AD becomes effective November 30, 2016.

(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 2 weeks, whichever occurs first, and thereafter at intervals not to exceed 25 hours TIS or 2 weeks, whichever occurs first, clean the upper and lower exposed surfaces of each M/R blade from an area starting at the butt end of the blade to three inches outboard of the doublers. Using a 3X or higher power magnifying glass and a light, inspect as follows:

(i) Visually inspect the exposed areas of the lower grip pad and upper and lower grip plates of each M/R blade for a crack and any corrosion.

(ii) On the upper and lower exposed surfaces of each M/R blade from blade stations 24.5 to 35 for the chord width, visually inspect each layered doubler and blade skin for a crack and any corrosion. Pay particular attention for any cracking in a doubler or skin near or at the same blade station as the blade retention bolt hole (blade station 28).

(iii) Visually inspect the exposed areas of each bond line at the edges of the lower grip pad, upper and lower grip plates, and each layered doubler (bond lines) on the upper and lower surfaces of each M/R blade for the entire length and chord width for an edge void, any corrosion, loose or damaged adhesive squeeze-out, and an edge delamination. Pay particular attention to any crack in the

paint finish that follows the outline of a grip pad, grip plate, or doubler, and to any loose or damaged adhesive squeeze-out, as these may be the indication of an edge void.

(2) If there is a crack, any corrosion, an edge void, loose or damaged adhesive squeeze-out, or an edge delamination during any inspection in paragraph (f)(1) of this AD, before further flight, do the following:

(i) If there is a crack in a grip pad or any grip plate or doubler, replace the M/R blade with an airworthy M/R blade.

(ii) If there is a crack in the M/R blade skin that is within maximum repair damage limits, repair the M/R blade. If the crack exceeds maximum repair damage limits, replace the M/R blade with an airworthy M/R blade.

(iii) If there is any corrosion within maximum repair damage limits, repair the M/R blade. If the corrosion exceeds maximum repair damage limits, replace the M/R blade with an airworthy M/R blade.

(iv) If there is an edge void in the grip pad or in a grip plate or doubler, determine the length and depth using a feeler gauge. Repair the M/R blade if the edge void is within maximum repair damage limits, or replace the M/R blade with an airworthy M/R blade.

(v) If there is an edge void in a grip plate or doubler near the outboard tip, tap inspect the affected area to determine the size and shape of the void. Repair the M/R blade if the edge void is within maximum repair damage limits, or replace the M/R blade with an airworthy M/R blade.

(vi) If there is any loose or damaged adhesive squeeze-out along any of the bond lines, trim or scrape away the adhesive without damaging the adjacent surfaces or parent material of the M/R blade. Determine if there is an edge void or any corrosion by lightly sanding the trimmed area smooth using 280 or finer grit paper. If there is no edge void or corrosion, refinish the sanded area.

(vii) If there is an edge delamination along any of the bond lines or a crack in the paint finish, determine if there is an edge void or a crack in the grip pad, grip plate, doubler, or skin by removing paint from the affected area by lightly sanding in a span-wise direction using 180-220 grit paper. If there are no edge voids and no cracks, refinish the sanded area.

(viii) If any parent material is removed during any sanding or trimming in paragraphs (f)(2)(vi) or (f)(2)(vii) of this AD, repair the M/R blade if the damage is within maximum repair damage limits, or replace the M/R blade with an airworthy M/R blade.

(g) Special Flight Permits

Special flight permits are prohibited.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Charles Harrison, Project Manager, Fort Worth Aircraft Certification Office, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5140; 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) Additional Information

Bell Helicopter Alert Service Bulletin (ASB) No. UH-1H-13-09, dated January 14, 2013, and ASB No. 204-75-1 and ASB No. 205-75-5, both Revision C and both dated April 25, 1979, 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 the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6210, Main Rotor Blades.

Issued in Fort Worth, Texas, on October 18, 2016.

James A. Grigg,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.