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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0488; Directorate Identifier 2008-SW-20-AD; Amendment 39-17126; AD 2012-14-12]

RIN 2120-AA64

Airworthiness Directives; Various Restricted Category Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Arrow Falcon Exporters, Inc. (previously Utah State University); Firefly Aviation Helicopter Services (previously Erickson Air-Crane Co.); California Department of Forestry; Garlick Helicopters, Inc.; Global Helicopter Technology, Inc.; Hagglund Helicopters, LLC (previously Western International Aviation, Inc.); International Helicopters, Inc.; Precision Helicopters, LLC; Robinson Air Crane, Inc.; San Joaquin Helicopters (previously Hawkins and Powers Aviation, Inc.); S.M.&T. Aircraft (previously US Helicopters, Inc., UNC Helicopter, Inc., Southern Aero Corporation, and Wilco Aviation); Smith Helicopters; Southern Helicopter, Inc.; Southwest Florida Aviation International, Inc. (previously Jamie R. Hill and Southwest Florida Aviation); Tamarack Helicopters, Inc. (previously Ranger Helicopter Services, Inc.); US Helicopter, Inc. (previously UNC Helicopter, Inc.); West Coast Fabrication; and Williams Helicopter Corporation (previously Scott Paper Co.) Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P Helicopters; and Southwest Florida Aviation Model UH-1B (SW204 and SW204HP) and UH-1H (SW205) Helicopters. This AD requires inspecting each affected tail rotor blade (blade) forward tip weight retention block (tip block) and the aft tip closure (tip closure) for adhesive bond voids and removing any blade with an excessive void from service. This AD also requires modifying certain blades by installing shear pins and tip closure rivets. This AD was prompted by reports of missing tip blocks or tip closures, resulting in minor to substantial damage to blades installed on Bell Model 212 and 412 helicopters. The actions are intended to prevent loss of a tip block or tip closure, loss of a blade, and subsequent loss of control of the helicopter.

DATES: This AD is effective September 4, 2012.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of September 4, 2012.

ADDRESSES: 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 the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

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, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

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:

Discussion

On May 13, 2010, at 75 FR 26889, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Arrow Falcon Exporters, Inc. (previously Utah State University); Firefly Aviation Helicopter Services (previously Erickson Air-Crane Co.); California Department of Forestry; Garlick Helicopters, Inc.; Global Helicopter Technology, Inc.; Hagglund Helicopters, LLC (previously Western International Aviation, Inc.); International Helicopters, Inc.; Precision Helicopters, LLC; Robinson Air Crane, Inc.; San Joaquin Helicopters (previously Hawkins and Powers Aviation, Inc.); S.M.&T. Aircraft (previously US Helicopters, Inc., UNC Helicopter, Inc., Southern Aero Corporation, and Wilco Aviation); Smith Helicopters; Southern Helicopter, Inc.; Southwest Florida Aviation International, Inc. (previously Jamie R. Hill and Southwest Florida Aviation); Tamarack Helicopters, Inc. (previously Ranger Helicopter Services, Inc.); US Helicopter, Inc. (previously UNC Helicopter, Inc.); West Coast Fabrication; and Williams Helicopter Corporation (previously Scott Paper Co.) Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P Helicopters; and Southwest Florida Aviation Model UH-1B (SW204 and SW204HP) and UH-1H (SW205) Helicopters. This NPRM proposed to require inspecting each applicable blade tip block and tip closure for voids and removing any blade with an excessive void from service. The NPRM also proposed to require modifying certain blades by installing shear pins and tip closure rivets. The proposed requirements were intended to prevent loss of a tip block or tip closure, loss of a blade, and subsequent loss of control of the helicopter.

AD 2002-09-04, Amendment 39-12737 (67 FR 22349, May 3, 2002), was issued for the Bell Model 205A, 205A-1, 205B, 212, 412, 412CF, and 412EP helicopters and contained the same requirements as those in this AD. AD 2007-22-02, Amendment 39-15238 (72 FR 60760, October 26, 2007), superseded AD 2002-09-04 to expand the applicability to include other part- and serial-numbered blades. Some of the blades in the applicability of AD 2007-22-02 are eligible for installation on helicopters included in this AD, which may have an FAA-approved modification that increases the helicopter's power rating to the equivalent of the Bell Model 205B or the 212 helicopter. The Bell Model 205B and 212 helicopters are addressed in AD 2007-22-02. Consequently, the inspections and modifications required by AD 2007-22-02 are mandated for the blades installed on helicopters included in this AD.

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 except we have revised the estimated costs of complying with this AD to reflect ten hours for inspection instead of three hours, and minor editorial changes. These minor editorial changes are consistent with the intent of the proposals in the NPRM and will not increase the scope of the AD.

Related Service Information

We have reviewed Bell Helicopter Textron Alert Service Bulletin No. 212-00-111, Revision D, dated March 18, 2005 (ASB), which describes procedures for inspecting and modifying certain tail rotor blades. The ASB was issued as a result of an investigation of an in-flight loss of a blade tip block, part number (P/N) 212-010-750-105. The investigation revealed the countersunk screws retaining the tip block were installed incorrectly, resulting in inadequate tip block retention. Reports have also been submitted about loss of the tip closures from other blades possibly because of inadequate adhesive bonding in this area.

Costs of Compliance

We estimate that this AD will affect 716 helicopters of U.S. registry, and 25 of those helicopters will have the increased power rating. Labor costs will average an estimated \$85 per work hour. Based on these assumptions, we expect the following costs:

- About 1 work hour to review the helicopter records for a labor cost of \$85 per helicopter, \$60,860 for the U.S. fleet.
- About 10 work hours to inspect the affected blades, install the shear pins and tip closure rivets, reidentify, and dynamically balance the blade. Required supplies will cost about \$45, for a total cost of \$895 per helicopter. We assume that the blade sets are installed on 25 helicopters with the FAA-approved modification that will need to be inspected and repaired.

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):



2012-14-12 Arrow Falcon Exporters, Inc. (previously Utah State University); Firefly Aviation Helicopter Services (previously Erickson Air-Crane Co.); California Department of Forestry; Garlick Helicopters, Inc.; Global Helicopter Technology, Inc.; Hagglund Helicopters, LLC (previously Western International Aviation, Inc.); International Helicopters, Inc.; Precision Helicopters, LLC; Robinson Air Crane, Inc.; San Joaquin Helicopters (previously Hawkins and Powers Aviation, Inc.); S.M.&T. Aircraft (previously US Helicopters, Inc., UNC Helicopter, Inc., Southern Aero Corporation, and Wilco Aviation); Smith Helicopters; Southern Helicopter, Inc.; Southwest Florida Aviation International, Inc. (previously Jamie R. Hill and Southwest Florida Aviation); Tamarack Helicopters, Inc. (previously Ranger Helicopter Services, Inc.); US Helicopter, Inc. (previously UNC Helicopter, Inc.); West Coast Fabrication; and Williams Helicopter Corporation (previously Scott Paper Co.) Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P Helicopters; and Southwest Florida Aviation Model UH-1B (SW204 and SW204HP) and UH-1H (SW205) Helicopters: Amendment 39-17126; Docket No. FAA-2010-0488; Directorate Identifier 2008-SW-20-AD.

(a) Applicability

(1) This AD applies to Model HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P helicopters, and Southwest Florida Aviation Model UH-1B series (SW204 series and SW204HP) and UH-1H series (SW205 series) helicopters, with a tail rotor blade (blade), part number (P/N) 212-010-750-009 through -129, all serial numbers except serial numbers with a prefix of "A" or "AFS," and the number 11926, 13351, 13367, 13393, 13400, 13402, 13515, 13540, 13568, 13595 through 13602, 13619, and subsequent larger numbers, installed, certificated in any category.

(2) A blade inspected and modified by following either AD 2002-09-04 (67 FR 22349, May 3, 2002) or AD 2007-22-02 (72 FR 60760, October 26, 2007), for the Bell Helicopter Textron (Bell) Model 205A, 205A-1, 205B, 212, 412, 412CF, and 412EP helicopters satisfies the requirements of this AD.

(b) Unsafe Condition

This AD defines the unsafe condition as adhesive bond voids. This condition could result in loss of the forward tip weight retention block (tip block) or aft tip closure (tip closure), loss of the blade, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective September 4, 2012.

(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

Within 100 hours time-in-service:

(1) Inspect the tip block and tip closure of each blade for voids. Remove from service any blade with a void in excess of that allowed by the applicable maintenance or Component Repair and Overhaul Manual limitations.

(2) Inspect the tip block attachment countersink screws in the four locations to determine if the head of each countersunk screw is flush with the surface of the abrasion strip. The locations of these four screws are depicted on Figure 1 of Bell Alert Service Bulletin 212-00-111, Revision D, dated March 18, 2005 (ASB). If any of these screws are set below the surface of the abrasion strip or are covered with filler material, install shear pins by following the Accomplishment Instructions, Part A, Shear Pin Installation paragraphs, of the ASB.

(3) Install the tip closure rivets on each blade, re-identify the modified blade by adding an "FM" after the P/N, and dynamically balance the tail rotor hub assembly by following the Accomplishment Instructions, Part B, Aft Tip Closure Rivet Installation paragraphs, of the ASB.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, Rotorcraft Directorate, 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.

(g) Subject

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

(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.

(i) Bell Helicopter Textron Alert Service Bulletin No. 212-00-111, Revision D, dated March 18, 2005.

(ii) Reserved.

(3) 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/>.

(4) You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(5) You may also review a copy of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Fort Worth, Texas, on July 10, 2012.
Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.