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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0119; Directorate Identifier 2011-SW-034-AD; Amendment 39-17541; AD 2013-16-03]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model AS350 and AS355 helicopters, to require inspecting for a crack in the control lever attachment yokes, and if needed, replacing the tail rotor gearbox (TGB). This AD is prompted by improper casting of TGB casing assemblies, which may lead to cracking. A crack in the control lever attachment yokes could cause a loss of tail rotor pitch control, and consequently, loss of control of the helicopter.

DATES: This AD is effective October 22, 2013.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of October 22, 2013.

ADDRESSES: For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. 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.

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 foreign authority's 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: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5110; email robert.grant@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On February 11, 2013, at 78 FR 9634, 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 Eurocopter Model AS350 and AS355 helicopters. The NPRM proposed to require inspecting for a crack in the control lever attachment yokes, and if needed, replacing the TGB. The proposed requirements were intended to prevent a crack in the control lever attachment yokes, which could cause a loss of tail rotor pitch control, and consequently, loss of control of the helicopter.

The NPRM was prompted by AD No. 2011-0104, dated May 27, 2011, issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for the Eurocopter Model AS 350 and AS 355 helicopters. EASA advises that cracks were found on some TGB casing assemblies when a dye-penetrant inspection was performed after the machining of the control lever attachment yokes. The inspection followed the repair of the manufacturing mold. EASA reports that cracks in the TGB casing assemblies, if not detected and corrected, could lead to a crack on the control lever attachment yokes, which could cause the loss of tail rotor pitch control and subsequent loss of control of the helicopter.

Comments

We gave the public the opportunity to participate in developing this AD, but we received no comments on the NPRM (78 FR 9634, February 11, 2013).

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the 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 except the reference to the Aerospace Material Specification 2647 or equivalent has been removed and we are now incorporating by reference procedures for the Fluorescent Penetrant Inspection. These changes are consistent with the intent of the proposals in the NPRM (78 FR 9634, February 11, 2013) and will not increase the economic burden on any operator nor increase the scope of the AD.

Differences Between This AD and the EASA AD

We require inspecting for a crack in the attachment yokes of the TGB casing assemblies within 100 hours time-in-service (TIS). EASA requires that the inspection be conducted within 26 months or 660 flight hours if the TGB casing assemblies have less than 550 flight hours and within 110 flight hours or 13 months if the TGB casing assemblies have 550 or more flight hours. We do not include

the Model AS350BB helicopter because it is not type certificated in the United States, but we do include models AS350C and AS350D1.

Related Service Information

Eurocopter issued Alert Service Bulletin (ASB) No. AS350-65.00.46 for Model AS350 helicopters and ASB AS355-65.00.22 for AS355 helicopters. Both ASBs are Revision 0 and dated May 18, 2011. The ASBs call for non-destructive inspections, such as a dye-penetrant inspection, to check for cracks in the attachment yokes of the TGB casing assemblies. If there is a crack, the ASBs call for replacing the TGB with an airworthy TGB and returning the replaced TGB to Eurocopter.

Costs of Compliance

We estimate that this AD affects 693 helicopters of U.S. Registry and that labor costs average \$85 per work-hour. We estimate that it takes two work-hours to inspect TGB casing assemblies for a cost of \$170 per helicopter, and \$117,810 for the U.S. fleet. No parts are needed. Replacing the TGB requires five work hours for a labor cost of \$425. Parts cost \$37,825 for a total cost of \$38,250 per helicopter.

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 helicopters 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):



2013-16-03 EUROCOPTER FRANCE HELICOPTERS (EUROCOPTER): Amendment 39-17541; Docket No. FAA-2013-0119; Directorate Identifier 2011-SW-034-AD.

(a) Applicability

This AD applies to Eurocopter AS350C, D, D1, B, BA, B1, B2, and B3; and AS355E, F, F1, F2, N, and NP helicopters, with a tailrotor gearbox (TGB) casing assembly, part number (P/N) 350A33-1090-02 and serial number (S/N) MA47577, MA47585, MA47587 through MA47593, MA47597 through MA47600, MA47602, MA47604, MA47606, MA47610, MA47613, MA47615, MA47617, MA47619 through MA47624, MA47626, MA47628, or MA47631 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the control lever attachment yoke of the TGB casing assembly, which could result in loss of tail rotor pitch control and loss of helicopter control.

(c) Effective Date

This AD becomes effective October 22, 2013.

(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) Remove the control lever, as depicted in Figure 1, item (b), of Eurocopter Alert Service Bulletin (ASB) No. AS350-65.00.46 or No. AS355-65.00.22, both Revision 0 and both dated May 18, 2011, as applicable for your model helicopter.
- (2) Strip the paint from the TGB control lever attachment yokes, as depicted in Figure 2, item (z), of the ASB No. AS350-65.00.46 or No. AS355-65.00.22, as applicable to your model helicopter.
- (3) Perform a Fluorescent Penetrant Inspection (FPI) in accordance with paragraph 3.B.2 of ASB No. AS350-65.00.46 or No. AS355-65.00.22, as applicable to your model helicopter, on the TGB control lever attachment yokes for a crack. You are only required to follow the actions defined in this ASB paragraph pertaining to the FPI.
- (4) If a crack exists, before further flight, replace the TGB with an airworthy TGB.
- (5) If there is no crack, clean the inspected area and apply chemical conversion coating (Alodine 1200 or equivalent), Epoxy primer, and top coat paint.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email robert.grant@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

The subject of this AD is addressed in European Aviation Safety Agency AD No. 2011-0104, dated May 27, 2011. You may view the EASA AD at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-0119.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6520, Tail Rotor Gearbox.

(i) 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) Eurocopter Alert Service Bulletin No. AS350-65.00.46, Revision 0, dated May 18, 2011.

(ii) Eurocopter Alert Service Bulletin No. AS355-65.00.22, Revision 0, May 18, 2011.

(3) For Eurocopter service information identified in this AD, contact American Eurocopter Corporation, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. 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 July 26, 2013.

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