[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0887; Directorate Identifier 2009-SW-02-AD;

Amendment 39-17551; AD 2013-16-13]

RIN 2120-AA64

Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Eurocopter Deutschland GmbH (ECD) Model BO-105A, BO-105C, BO-105S, BO-105LS A-1, BO-105LS A-3, MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK-117 B-2, and MBB-BK 117 C-1 helicopters to require inspections for corrosion or thread damage to each tail rotor balance weight (weight) and each tail rotor control lever (lever). This AD was prompted by a European Aviation Safety Agency (EASA) AD and a Transport Canada Civil Aviation (TCCA) AD, both issued based on a report that corrosion was detected on a weight in the area of the attachment thread on a model BO-105 helicopter. The actions of this AD are intended to detect corrosion and thread damage in the threaded area of the weight and lever, and to prevent failure of a weight or lever, separation of tail rotor parts, severe vibration, and subsequent loss of control of the helicopter.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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, TX 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 EASA and TCCA ADs, 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: Sharon Miles, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5110; email sharon.y.miles@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On August 29, 2012, at 77 FR 52265, 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 ECD Model BO-105A, BO-105C, BO-105S, BO-105LS A-1, BO-105LS A-3, MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters with certain levers and weights installed. The NPRM proposed to require conducting repetitive visual inspections of each weight and lever and proposed procedures for installing a weight or lever. Additionally, the NPRM proposed allowable tolerances for corrosion or thread damage on the threaded portion of a weight or lever and proposed to require that a part with corrosion or mechanical damage in excess of allowable tolerances be replaced with an airworthy part. The proposed requirements were intended to detect corrosion and thread damage in the threaded area of a weight or lever, to prevent failure of a weight or lever, separation of tail rotor parts, severe vibration, and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2008-0206, dated November 25, 2008, issued by EASA, which is the Technical Agent for the Member States of the European Union, and AD No. CF-2009-12, dated March 24, 2009, issued by the TCCA, which is the aviation authority for Canada. EASA issued AD No. 2008-0206 to correct the unsafe condition for ECD Model BO 105 A, BO 105 C, BO 105 LS A-1, BO 105 D, BO 105 DS, BO 105 DB, BO 105 DBS, BO 105 DB-4, BO 105 DBS-4, BO 105 DBS-5, BO 105 S, MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-

1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters. The TCCA issued AD No. CF-2009-12 to correct the unsafe condition for Eurocopter Model BO 105 LS A-3 helicopters. These ADs state that during a periodical inspection, corrosion was detected on the weights in the area of the attachment thread. Since the issuance of the Canadian AD, the type certificate for the Model BO 105 LS A-3 has been transferred from Eurocopter Canada Limited to Eurocopter Deutschland (Germany).

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (77 FR 52265, August 29, 2012).

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, 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 we are updating some of the contact information to obtain service information from American Eurocopter Corporation and we are incorporating the two figures by reference instead of including them in our AD to meet current publication requirements. These minor changes are consistent with the intent of the proposals in the NPRM (77 FR 52265, August 29, 2012) and will not increase the economic burden on any operator nor increase the scope of this AD.

Differences Between this AD and the EASA and TCCA ADs

This AD does not provide an extra 60 flight hours or 6 months beyond the repetitive compliance time of 600 flight hours or 48 months for the repetitive inspections. This AD only applies to those model helicopters type-certificated in the United States.

Related Service Information

Eurocopter issued Alert Service Bulletin (ASB) No. ASB-MBB-BK117-30-113, dated September 23, 2008, for all MBB BK117 model "A-1 to C-1" helicopters; ASB No. ASB BO105-30-116, dated September 23, 2008, for all Model BO105 helicopters "including BO105 CB-3 and BO105 CBS-5 KLH;" and Eurocopter Canada Limited issued ASB No. ASB BO 105 LS 30-12, dated December 12, 2008, for Model BO 105 LS A-3 helicopters. These ASBs specify visually inspecting the weights and levers to detect corrosion or mechanical damage; corrosion at an advanced stage could destroy the threads. These ASBs also specify replacing damaged weights and levers that exceed certain limits. The actions described in the mandatory EASA and TCCA ADs are intended to correct the unsafe condition, identified in these ASBs, to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate that this AD will affect 33 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. It will take approximately 4 work-hours per helicopter to remove, inspect, and install 2 lever assemblies and 4 weights per helicopter at an average labor rate of $85 per work-hour. Based on these figures, we estimate the inspection cost of this AD will cost $340 per helicopter or $11,220 on U.S. operators per inspection cycle. The required parts will cost

about $5,332 per helicopter. We estimate the cost for replacement will be $5,672 per helicopter, assuming both lever assemblies and all 4 weights are replaced.

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):

2013-16-13 **EUROCOPTER DEUTSCHLAND GmbH (ECD):** Amendment 39-17551; Docket No. FAA-2012-0887; Directorate Identifier 2009-SW-02-AD.

(a) Applicability.

This AD applies to Model BO-105A, BO-105C, BO-105S, and BO-105LS A-1 helicopters, with a tail rotor control lever (lever), part number (P/N) 105-317231, 105-317365, 105-31736, 105-31767, 105-31728, or 1121-31730, with tail rotor balance

weight (weight) P/N 117-31715.01, 117-31715.02, 105-31728.03, 105-31732.07, or 105-31732.08; Model BO-105LS A-3 helicopters, with lever P/N 105-31736 or 105-31767, with weight P/N 117-31715.01, 117-31715.02, B642M1011 201, or 105-317171.10; and Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters, with lever P/N 117-31730, 117-317361, or 105-31736, with weight P/N 117-31714.07, 117-31715.01, 117-31720.01, or 117-31730.02, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as corrosion or thread damage in the threaded area of a lever or weight. This condition could result in failure of a weight or lever, separation of a tail rotor part, severe tail rotor vibration, and subsequent loss of control of the helicopter.

(c) Effective Date.

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(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 (TIS) or 2 months, whichever occurs first, and thereafter at intervals not to exceed 600 hours TIS or 48 months, whichever occurs first:

(1) Remove the weights from the lever as depicted in Figure 1 of Eurocopter Alert Service Bulletin (ASB) No. ASB-MBB-BK117-30-113, dated September 23, 2008; ASB

No. ASB BO105-30-116, dated September 23, 2008; or ASB No. ASB BO 105 LS 30-12, dated December 12, 2008; as applicable to your model helicopter. Apply marks to the weights before they are removed in order to be able to re-establish the correct assignment and the old installation position towards the lever when the weights are installed.

(2) Visually inspect each weight and lever for corrosion and damage in the threaded areas as depicted in Figure 2 of ASB No. ASB-MBB-BK117-30-113, dated September 23, 2008; ASB No. ASB BO105-30-116, dated September 23, 2008; or ASB No. ASB BO 105 LS 30-12, dated December 12, 2008; as applicable to your model helicopter.

(i) If there is no corrosion or thread damage on either the weight or lever, before further flight, reinstall the weight by following paragraph (e)(3) of this AD.

(ii) If there is corrosion or thread damage on the threaded portion of a weight:

(A) If the total area of corrosion or thread damage, or both, covers less than 25 percent of the length of the threaded area, the weight can be threaded (screwed) onto the lever, and the cylindrical mating surface has no damage, before further flight, remove the corrosion and reinstall the weight by following paragraph (e)(3) of this AD.

(B) If the total area of corrosion or thread damage, or both, covers 25 percent or more of the length of the threaded area, the weight cannot be threaded (screwed) onto the lever, or the cylindrical mating surface has damage, before further flight, replace the weight with an airworthy weight by following paragraph (e)(3) of this AD.

(iii) If there is corrosion or thread damage on the threaded portion of the lever, polish out the corrosion and thread damage using a polishing cloth 600 and:

(A) If the thread depth does not exceed 0.3 millimeter (mm) and the diameter of the lever in the area before the threaded area is not less than 9.95 mm after polish out, before further flight, install airworthy weights to the lever by following paragraph (e)(3) of this AD.

(B) If the thread depth is 0.3 mm or greater or the diameter of the lever in the area before the threaded area is less than 9.95 mm after polish out, before further flight, replace the lever with an airworthy lever.

(3) Apply corrosion preventive paste onto the thread of the lever and install weights to the lever as depicted in Figure 1 of ASB No. ASB-MBB-BK117-30-113, dated September 23, 2008; ASB No. ASB BO105-30-116, dated September 23, 2008; or ASB No. ASB BO 105 LS 30-12, dated December 12, 2008; as applicable to your model helicopter. Ensure during installation of the weights that the weights are correctly assigned and installed to the control lever in accordance with the applied marks.

(f) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Sharon Miles, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5110; email sharon.y.miles@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 (EASA) AD No. 2008-0206, dated November 25, 2008, and in Transport Canada Civil Aviation (TCCA) AD No. CF-2009-12, dated March 24, 2009. You may view the EASA and the TCCA AD on the Internet at http://www.regulations.gov in Docket No. FAA-2012-0887.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 6420, Tail Rotor Head.

(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 (ASB) No. ASB-MBB-BK117-30-113, dated September 23, 2008.

(ii) Eurocopter ASB No. ASB BO105-30-116, dated September 23, 2008.

(iii) Eurocopter ASB No. ASB BO 105 LS 30-12, dated December 12, 2008.

(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, TX 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 August 2, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2013-19442 Filed 08/22/2013 at 8:45 am; Publication Date: 08/23/2013]