[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1285; Directorate Identifier 2010-SW-073-AD;

Amendment 39-17544; AD 2013-16-06]

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 (Eurocopter) Model BO-105A, BO-105C, BO-105LS A-1, BO-105LS A-3, and BO-105S helicopters. This AD requires inspecting for debonding of the erosion protective shell (abrasion strip) on the leading edge of each main rotor blade. This AD was prompted by the discovery of abrasion strip debonding during an inspection on one Model BO-105 helicopter and also by an incident on a second Model BO-105 helicopter that lost its abrasion strip in-flight. The actions of this AD are intended to detect debonding of the main rotor blade abrasion strip, which could lead to an unbalanced main rotor, high vibrations, damage to the tail boom or tail rotor, and loss of control of the helicopter.

DATES: This AD is effective [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, 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 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: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On December 6, 2011, at 76 FR 76068, 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 BO-105A, BO-105C, BO-105LS A-1, BO-105LS A-3, and BO-105S helicopters. The NPRM proposed to require, within 50 hours time-in-service (TIS), inspecting for debonding of the abrasion strip along the leading edge of certain part-numbered main rotor blades with a main rotor blade abrasion strip that was replaced between September 2006 and March 2010. If there is debonding in any area of the abrasion strip, the NPRM proposed to require, before further flight, replacing the main rotor blade.

On December 19, 2012, at 77 FR 75073, the Federal Register published our supplemental NPRM (SNPRM), which proposed to revise some of the actions of the NPRM. The SNPRM proposed clarifying that the inspection method would be a tap inspection and proposed clarifying the replacement date range of the applicable abrasion strips to be inclusive of September 1, 2006 through March 31, 2010.

The NPRM and SNPRM were prompted by Emergency AD No. 2010-0216-E, dated October 21, 2010 (and corrected October 29, 2010), issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA advises that during an inspection on a BO105 helicopter, debonding was found on the erosion protective shell of a main rotor blade, and investigation showed the debonding was caused by incorrect installation of the erosion protective shell. In addition, EASA states that an incident occurred where a second BO105 helicopter lost its erosion protective shell during hover flight. EASA advises that this condition, if not corrected, could result in loss of the main rotor blade erosion protective shell during flight, leading to an unbalanced main rotor and high vibrations,

which could damage the tail boom or tail rotor or result in loss of tail rotor control and loss of control of the helicopter.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (76 FR 76068, December 6, 2011) or the SNPRM (77 FR 75073, December 19, 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.

Differences Between this AD and the EASA AD

The differences between this AD and the EASA AD are:

- The EASA AD allows compliance within "10 flight hours, or 4 flight cycles, or 4 weeks, whichever occurs first," and this AD requires compliance within 50 hours TIS.
- The EASA AD allows you to replace the main rotor blade erosion protective shell if debonding is detected, and this AD requires you to replace the main rotor blade with an airworthy main rotor blade if debonding is detected.
- The EASA AD is applicable to the Model BO105 D helicopter; however, this AD does not include this model because it does not have a type certificate in the U.S.

Related Service Information

Eurocopter has issued Emergency Alert Service Bulletin (ASB) No. ASB BO105-10-124, dated July 14, 2010, for the Model BO105 helicopter, with a main rotor blade, part number (P/N) 105-15103, 105-15141, 105-15141V001, 105-15143, 105-15150, 105-15150V001, 105-15152, 105-81013, 105-87214, 1120-15101, or 1120-15103, where the main rotor blade erosion protective shell was replaced between September 2006 and March 2010. Eurocopter also issued Emergency ASB No. ASB-BO105LS-10-12, dated July 14, 2010, for the Model BO105LS A-3 helicopter, with a main rotor blade, P/N 105-15141, where the main rotor blade erosion protective shell was replaced between September 2006 and March 2010. Both Emergency ASBs exclude helicopters from this inspection if each main rotor blade was inspected at the last 600 flight hour inspection and no debonding was detected during the inspection. Both Emergency ASBs specified a one-time inspection of the main rotor blades within the next 50 flight hours to determine if debonding of the main rotor blade erosion protective shell has occurred.

Eurocopter subsequently issued Emergency ASB No. ASB BO105-10-124, Revision 1, dated October 18, 2010, and Emergency ASB No. ASB-BO105LS-10-12, Revision 1, dated October 20, 2010. These service bulletins specify the same inspection requirements as the original service bulletins, but revise the inspection compliance time from 50 flight hours to 10 flight hours. EASA classified these service bulletins as mandatory and issued EASA Emergency AD No. 2010-0216-E, dated October 21, 2010 (corrected October 29, 2010), to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate that this AD will affect 97 helicopters of U.S. Registry. We estimate

that operators may incur the following costs in order to comply with this AD. It will take about 1.0 work-hour per helicopter to perform the inspection at an average labor rate of $85 per work-hour. Based on these figures, we estimate the cost of the inspection on U.S. operators will be $8,245 or $85 per helicopter. If there is debonding, we estimate that it will take about 2 work-hours to replace a main rotor blade and required parts will cost $114,182, for a total cost of $114,352 per blade. We have no way of determining how many operators will incur replacement costs.

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):

2013-16-06 **EUROCOPTER DEUTSCHLAND GmbH:** Amendment 39-17544; Docket No. FAA-2011-1285; Directorate Identifier 2010-SW-073-AD.

(a) Applicability.

This AD applies to Model BO-105A, BO-105C, BO-105LS A-1, BO-105LS A-3, and BO-105S helicopters, with a main rotor blade, part number 105-15103, 105-15141, 105-15141V001, 105-15143, 105-15150, 105-15150V001, 105-15152, 105-81013, 105-87214, 1120-15101, or 1120-15103; where the main rotor blade erosion protective shell (abrasion strip) was replaced between September 1, 2006 and March 31, 2010, inclusive; certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as debonding of a main rotor blade erosion protective shell (abrasion strip). This condition could result in loss of the abrasion strip and an unbalanced main rotor, high vibration, damage to the tail boom or tail rotor, and 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.

(1) Within 50 hours time-in-service, inspect the main rotor blade for debonding of the erosion protective shell by tap testing the abrasion strip of the leading edge of each

main rotor blade.

(2) If the abrasion strip is debonding in any area, before further flight, replace the main rotor blade.

(f) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matthew.fuller@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.

(1) Eurocopter Emergency Alert Service Bulletin No. ASB BO105-10-124, Revision 1, dated October 18, 2010, and No. ASB-BO105LS-10-12, Revision 1, dated October 20, 2010, which are not incorporated by reference, contain additional information about the subject of this AD. 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 a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) Emergency AD No. 2010-0216-E, dated October 21, 2010 (corrected October 29, 2010). You may view the EASA AD on the Internet at http://www.regulations.gov in Docket No. FAA-2011-1285.

(h) Subject.

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

Issued in Fort Worth, Texas, on July 31, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2013-19158 Filed 08/08/2013 at 8:45 am; Publication Date: 08/09/2013]