DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-3257; Directorate Identifier 2015-SW-072-AD; Amendment 39-18846; AD 2017-07-08]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 D-2 helicopters. This AD requires repetitively inspecting the engine mount bushings. This AD was prompted by reports of delaminated and worn bushings. The actions of this AD are intended to prevent an unsafe condition on these products.

DATES: This AD is effective May 12, 2017.

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub.

You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

Examine the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3257; 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 European Aviation Safety Agency (EASA) AD, 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, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On November 21, 2016, at 81 FR 83182, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model MBB-BK 117 D-2 helicopters with a bushing part number 105-60386 installed. The NPRM proposed to require repetitively inspecting the bushings of the inner and outer forward trusses of both engines and repairing or replacing the bushings, depending on the outcome of the inspections. The proposed requirements were intended to detect delaminated engine mount bushings, which can lead to excessive vibration, cracking, failure of the engine mount front support pins, and loss of helicopter control.

The NPRM was prompted by AD No. 2015-0198, dated September 30, 2015, issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA advises of delaminated engine mount bushings. According to EASA, this condition could lead to cracks and eventually failure of the engine mount front support pins, possibly resulting in loss of helicopter control.

The EASA AD consequently requires repetitive inspections of the engine mount bushings and depending on the findings, repairing or replacing the bushings.

Comments

We gave the public the opportunity to participate in developing this AD. We received one comment. However, the comment addressed neither the proposed actions nor the determination of the cost to the public. Therefore, we have made no changes to this AD.

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 EASA AD allows for a 10 hour time-in-service, non-cumulative tolerance for its required compliance times. This AD does not.

Related Service Information

We reviewed Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117 D-2-71A-002, Revision 0, dated September 28, 2015, for Model MBB-BK 117 D-2 helicopters. The ASB introduces repetitive visual inspections of the engine mount bushings for defects, deformation, separation of the rubber, and missing rubber after reports of delaminated engine mount bushings and bushings with damage to the metal inner sleeve. If there is any deformation or separation of the
rubber, the ASB specifies performing a detailed inspection of the bushing in accordance with the aircraft maintenance manual.

Costs of Compliance

We estimate that this AD affects 5 helicopters of U.S. Registry and that labor costs average $85 per work hour. Based on these estimates, we expect the following costs:

- Inspecting the bushings requires 1 work hour. No parts are needed, for a total cost of $85 per helicopter and $425 for the U.S. fleet.
- Replacing a bushing requires 1 work hour and $373 for parts, for a total cost of $458 per bushing.

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):
2017-07-08 Airbus Helicopters Deutschland GmbH: Amendment 39-18846; Docket No. FAA-2016-3257; Directorate Identifier 2015-SW-072-AD.

(a) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters with a bushing part number 105-60386 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a delaminated engine mount bushing. This condition could result in excessive vibration, which could lead to cracking and failure of the engine mount front support pins, and loss of helicopter control.

(c) Effective Date

This AD becomes effective May 12, 2017.

(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 50 hours time-in-service (TIS) and thereafter at intervals not to exceed 50 hours TIS:

(1) Visually inspect each engine mount bushing (bushing) for separation of the rubber from the metal or missing rubber.

(2) If any rubber has separated from the metal or if there is missing rubber, inspect the bushing for deformation, corrosion, and mechanical damage.

   (i) Replace the bushing with an airworthy bushing if there is any deformation, separation of the rubber from the metal, corrosion, or mechanical damage, or repair the bushing if the deformation, separation of the rubber, corrosion, or mechanical damage is within the maximum repair damage limitations.

   (ii) If the inner and outer parts of the bushing are separated with missing rubber, replace the bushing with an airworthy bushing.

(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, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@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) Airbus Helicopters Alert Service Bulletin ASB MBB-BK117 D-2-71A-002, Revision 0, dated September 28, 2015, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2015-0198, dated September 30, 2015. You may view the EASA AD on the Internet at http://www.regulations.gov in Docket No. FAA-2016-3257.

(h) Subject


Issued in Fort Worth, Texas, on March 29, 2017.
Scott A. Horn,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.