[Federal Register Volume 86, Number 62 (Friday, April 2, 2021)]
[Rules and Regulations]
[Pages 17275-17278]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2021-06771]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0801; Product Identifier 2019-SW-101-AD; Amendment 39-21472; AD 2021-06-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2017-07-08 for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 D-2 helicopters. AD 2017-07-08 required repetitively inspecting each engine mount elastomeric bushing (elastomeric bushing). Since the FAA issued AD 2017-07-08, Airbus Helicopters has designed an improved engine mount metal bushing (metal bushing). This new AD retains the inspection requirements of AD 2017-07-08 and requires replacing each affected engine mount bushing with an improved engine mount bushing, while also requiring repetitive inspections of the improved engine mount bushing. This AD also prohibits installing an elastomeric bushing on any helicopter. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD is effective May 7, 2021.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 7, 2021.

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 https://www.airbus.com/helicopters/services/technical-support.html. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0801.

Examining the AD Docket

You may examine the AD docket on the internet at https://www.regulations.gov in Docket No. FAA-2020-0801; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through

Friday, except Federal holidays. The AD docket contains this AD, the European Union Aviation Safety Agency (EASA) AD, any service information that is incorporated by reference, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, AD Program Manager, General Aviation & Rotorcraft Unit, Airworthiness Products Section, Operational Safety Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 2017-07-08, Amendment 39-18846 (82 FR 16895, April 7, 2017) (AD 2017-07-08), and add a new AD. AD 2017-07-08 applied to Airbus Helicopters Model MBB-BK 117 D-2 helicopters and required repetitive visual inspections of each elastomeric bushing of the inner and outer forward trusses of both engines, and depending on the outcome of the inspections, repairing or replacing the elastomeric bushings. AD 2017-07-08 was prompted by EASA AD 2015-0198, dated September 30, 2015 (EASA AD 2015-0198), issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA advised that during a pre-flight check of a Model MBB-BK 117 D-2 helicopter, an elastomeric bushing was found delaminated. More cases of delaminated elastomeric bushings were reported following additional investigations. 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 NPRM published in the Federal Register on August 27, 2020 (85 FR 52931) and was prompted by EASA issuing a series of ADs to supersede EASA AD 2015-0198. EASA issued AD 2019-0030, dated February 13, 2019 (EASA AD 2019-0030), to supersede EASA AD 2015-0198. EASA AD 2019-0030 advises that Airbus Helicopters has designed an improved engine mount bushing P/N B712M10X1001, which when installed becomes a terminating action for the repetitive inspections of elastomeric bushing P/N 105-60386. Accordingly, EASA AD 2019-0030 requires installation of improved engine mount bushing P/N B712M10X1001 and also prohibits the installation of elastomeric bushing P/N 105-60386 on any Model MBB-BK 117 D-2 helicopter. Since EASA issued AD 2019-0030, occurrences were reported of finding damaged metal bushings. EASA issued AD 2019-0275, dated November 7, 2019 (EASA AD 2019-0275), which retains the requirements of EASA AD 2019-0030 and requires repetitive visual inspections of the metal bushings. EASA AD 2019-0275 also updates the terminology used in the definitions section from affected part to elastomeric bushing and from serviceable part to metal bushing. The NPRM proposed to retain the repetitive visual inspections of AD 2017-07-08 and proposed to require installing metal bushing part number (P/N) B712M10X1001, which would terminate the repetitive inspections of elastomeric bushing P/N 105-60386. The NPRM also proposed to require repetitive inspections of metal bushing P/N B712M10X1001 and prohibit the installation of elastomeric bushing P/N 105-60386 on any helicopter.

Comments

The FAA gave the public the opportunity to participate in developing this final rule, but the FAA did not receive any comments on the NPRM or on the determination of the cost to the public.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all of the information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other helicopters of these same type design and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between This AD and the EASA AD

EASA AD 2019-0275 allows a non-cumulative tolerance of 10 hours time-in-service for its required compliance times. This AD does not. EASA AD 2019-0275 requires reporting inspection results to Airbus Helicopters Deutschland GmbH if any worn or heavily worn metal is found, whereas this AD does not.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117 D-2-71A-002, Revision 1, dated December 14, 2018. This service information specifies instructions for repetitive visual inspections of elastomeric bushing P/N 105-60386 for defects, deformation, separation of the rubber, and missing rubber. If there is any deformation or separation of the rubber, this service information provides instructions to replace the affected parts with serviceable parts. This service information also specifies replacing elastomeric bushings P/N 105-60386 with metal bushings P/N B712M10X1001. This service information also does not allow the new metal bushings P/N B712M10X1001 to be installed on any helicopter together with the elastomeric bushings P/N 105-60386. This service information also prohibits installing elastomeric bushings P/N 105-60386 after installation of new metal bushings P/N B712M10X1001.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Airbus Helicopters ASB MBB-BK117 D-2-71A-011, Revision 0, dated October 16, 2019. This service information specifies instructions for repetitive inspections of the metal bushings P/N B712M10X1001 of the inner and outer forward trusses for worn metal bushings (gapping between the inner and outer truss less than 1mm) and heavily worn metal bushings (inner and outer metal bushings showing contact marks or worn out metal mesh).

The FAA also reviewed Airbus Helicopters AMM BK117 C2C2e, dated August 7, 2018. This service information specifies instructions for a detailed inspection of the engine mount bushings.

Costs of Compliance

The FAA estimates that this AD affects 30 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at $85 per work-hour.

Inspecting the engine mount bushings will take about 1 work-hour, for an estimated cost of $85 per helicopter and $2,550 for the U.S. fleet. Replacing the three engine mount bushings will take about 8 work-hours and parts would cost about $2,505, for an estimated cost of $3,185 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.

The FAA is 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

The FAA has determined that 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) Will not affect intrastate aviation in Alaska, and

(3) 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.

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:

a. Removing Airworthiness Directive (AD) 2017-07-08, Amendment 39-18846 (82 FR 16895, April 7, 2017); and

b. Adding the following new AD:

2021-06-05 Airbus Helicopters Deutschland GmbH: Amendment 39-21472; Docket No. FAA-2020-0801; Product Identifier 2019-SW-101-AD.

(a) Applicability

This airworthiness directive (AD) applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters, certificated in any category, with an engine mount elastomeric bushing (elastomeric bushing) part number (P/N) 105-60386 or an engine mount metal bushing (metal bushing) P/N B712M10X1001 installed.

(b) Unsafe Condition

This AD defines the unsafe condition as a delaminated elastomeric 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) Affected ADs

This AD replaces AD 2017-07-08, Amendment 39-18846 (82 FR 16895, April 7, 2017).

(d) Effective Date

This AD becomes effective May 7, 2021.

(e) 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.

(f) Required Actions

(1) For helicopters with an elastomeric bushing P/N 105-60386 installed, within 50 hours time-in-service (TIS) and thereafter at intervals not to exceed 50 hours TIS:

(i) Visually inspect each elastomeric bushing for separation of the rubber from the metal or missing rubber by following Section 3.B.2 of Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117 D-2-71A-002, Revision 1, dated December 14, 2018.

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

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

(B) If the inner and outer parts of the elastomeric bushing are separated with missing rubber, before further flight, replace the elastomeric bushing with an airworthy engine mount bushing.

(2) For helicopters with a metal bushing P/N B712M10X1001 installed, within 100 hours TIS, and thereafter every 100 hours TIS, visually inspect the metal bushing of the inner and outer forward trusses for gapping between the inner and outer truss, contact marks on the inner and outer engine mount bushings, and worn out metal mesh.

(i) If there is gapping between the inner and outer truss less than 1mm, within 50 hours TIS, replace the metal bushing with an airworthy engine mount bushing.

(ii) If there is gapping between the inner and outer truss of 1mm or greater than 1mm, contact marks on the inner or outer engine mount bushings, or worn out metal mesh, before further flight, replace the metal bushing with an airworthy engine mount bushing.

(3) For helicopters with an elastomeric bushing P/N 105-60386 installed, within 300 hours TIS, replace each elastomeric bushing P/N 105-60386 with metal bushing P/N B712M10X1001.

(4) Performing the actions required by paragraph (f)(3) of this AD constitutes a terminating action for the repetitive inspections required by paragraph (f)(1) of this AD.

(5) As of the effective date of this AD, do not install elastomeric bushing P/N 105-60386 on any helicopter.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, AD Program Manager, General Aviation & Rotorcraft Unit, Airworthiness Products Section, Operational Safety Branch, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-AVS-AIR-730-AMOC@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests 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.

(h) Additional Information

(1) Airbus Helicopters ASB MBB-BK117 D-2-71A-011, Revision 0, dated October 16, 2019, and Airbus Helicopters AMM BK117 C2C2e, dated August 7, 2018, which are not incorporated by reference, contain additional information about the subject of this AD. This service information is available at the addresses specified in paragraphs (j)(3) and (4) of this AD.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) 2019-0275, dated November 7, 2019. You may view the EASA AD on the internet at https://www.regulations.gov in Docket No. FAA-2020-0801.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 7200, Engine (Turbine, Turboprop).

(j) 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) Airbus Helicopters Alert Service Bulletin MBB-BK117 D-2-71A-002, Revision 1, dated December 14, 2018.

(ii) [Reserved]

(3) For service information identified in this 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 https://www.airbus.com/helicopters/services/technical-support.html.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. 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, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on March 5, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-06771 Filed 4-1-21; 8:45 am]