[Federal Register Volume 86, Number 171 (Wednesday, September 8, 2021)]
[Rules and Regulations]
[Pages 50222-50224]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2021-19253]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0450; Project Identifier 2017-SW-100-AD; Amendment 39-21680; AD 2021-16-17]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH (AHD) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (AHD) Model MBB-BK 117 D-2 helicopters. This AD was prompted by the discovery that certain parts that are approved for installation on multiple helicopter models are life limited parts when installed on Model MBB-BK 117 D-2 helicopters and some helicopter delivery documents excluded the life limit information. This AD requires determining the total hours time-in-service (TIS) of a certain part-numbered rotor mast nut and re-identifying a certain part-numbered rotor mast nut. This AD also requires establishing a life limit for a certain part-numbered rotor mast nut and helical gear support, and removing each part from service before reaching its life limit. Additionally, this AD requires replacing a certain part-numbered main gearbox (MGB) with a not affected MGB as specified in a European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, which is incorporated by reference (IBR). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective October 13, 2021.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of October 13, 2021.

ADDRESSES: For EASA material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find this material on the EASA website at https://ad.easa.europa.eu. You may view the referenced service information at the 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. It is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0450.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0450; 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 final rule, 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: Rao Edupuganti, Aerospace Engineer, Dynamic Systems Section, Technical Innovation Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA AD 2017-0037, dated February 22, 2017 (EASA AD 2017-0037), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Deutschland GmbH (formerly Eurocopter Deutschland GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC) Model MBB-BK 117 D-2 and MBB-BK117 D-2m helicopters.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Deutschland GmbH (AHD) Model MBB-BK 117 D-2 helicopters, with an affected MGB or affected rotor mast nut as identified in Note 1 of EASA AD 2017-0037. The NPRM published in the Federal Register on June 7, 2021 (86 FR 30218). The NPRM was prompted by the discovery that certain parts that are approved for installation on multiple helicopter models are life limited parts when installed on Model MBB-BK 117 D-2 helicopters and some helicopter delivery documents excluded the life limit information, The NPRM proposed to require accomplishing the actions specified in EASA AD 2017-0037, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under “Differences Between this AD and EASA AD 2017-0037.” The FAA is issuing this AD to address an unsafe condition on these products. See EASA AD 2017-0037 for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters 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 about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information Under 1 CFR Part 51

EASA AD 2017-0037 requires establishing a life limit for rotor mast nut part number (P/N) D632K1133-201 and helical gear support P/N D632K1113-201, and replacing these parts before exceeding their life limit. EASA AD 2017-0037 also requires replacing each rotor mast nut P/N D632K1133-201 for which the hours TIS are unknown and replacing certain part-numbered rotor mast nuts before accumulating 3,708 hours TIS since first installation on a helicopter. EASA AD 2017-0037 requires re-identifying each rotor mast nut P/N 117-12133-01 to P/N D632K1133-201 by following the specified service information. EASA AD 2017-0037 requires replacing any MGB P/N D632K1001-051 with serial number (S/N) D2-0001 up to D2-0108 inclusive, D2-0123, D2-0126, D2-0127, or D2-0130 up to D2-0136 inclusive with a not affected MGB before the affected MGB accumulates 3,708 hours TIS. EASA AD 2017-0037 also prohibits installing an affected rotor mast nut or an affected MGB that has accumulated more than 3,708 hours TIS since first installation on a helicopter. Additionally, EASA AD 2017-0037 requires revising the Aircraft Maintenance Program (AMP).

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 Alert Service Bulletin MBB-BK117 D-2-63A-001, Revision 0, dated December 1, 2016 (ASB 63A-001), which is not incorporated by reference, which specifies procedures for re-identifying the rotor mast nut by using a vibrograph, crossing out the old P/N and marking the new P/N on the outer surface, engraving the letter "A" behind the S/N of each part, and updating the historical record and log card to confirm compliance with ASB 63A-001. ASB 63A-001 also specifies during the next MGB overhaul, making an entry in the log card to confirm re-identification of the helical gear support, and annotating the S/N of the helical gear support.

Differences Between This AD and EASA AD 2017-0037

EASA AD 2017-0037 applies to Model MBB-BK117 D-2 and D2m helicopters, whereas this AD only applies to Model MBB-BK117 D-2 helicopters because Model D-2m is not FAA type-certificated. If the total hours TIS for an affected rotor mast nut cannot be determined, this AD requires removing the rotor mast nut from service before further flight, whereas EASA AD 2017-0037 does not contain this requirement. EASA AD 2017-0037 requires using a vibrograph to re-identify certain rotor mast nuts, whereas this AD requires using a vibro etch instead. EASA AD 2017-0037 requires replacing certain parts, whereas this AD requires removing certain parts from service instead. EASA AD 2017-0037 requires revising the AMP, whereas this AD does not.

Costs of Compliance

The FAA estimates that this AD affects 30 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Determining the total hours TIS on an affected rotor mast nut takes about 1 work-hour for an estimated cost of $85 per helicopter and $2,550 for the U.S. fleet.

Re-identifying a rotor mast nut takes about 1.5 work-hours for an estimated cost of $128 per rotor mast nut.

Replacing a rotor mast nut takes about 6 work-hours and parts cost about $5,351 for an estimated cost of $5,861 per rotor mast nut.

Replacing a MGB, which includes replacing the helical gear support, takes about 42 work-hours and parts cost about $295,000 (overhauled) for an estimated cost of $298,570.

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 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) 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.

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:

2021-16-17 Airbus Helicopters Deutschland GmbH (AHD): Amendment 39-21680; Docket No. FAA-2021-0450; Project Identifier 2017-SW-100-AD.

(a) Effective Date

This airworthiness directive (AD) is effective October 13, 2021.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH (AHD) Model MBB-BK 117 D-2 helicopters, certificated in any category, with an affected main gearbox or affected rotor mast nut as identified in Note 1 of European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2017-0037, dated February 22, 2017 (EASA AD 2017-0037) installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6200 Main gearbox.

(e) Unsafe Condition

This AD was prompted by the discovery that certain parts that are approved for installation on multiple helicopter models are life limited parts when installed on Model MBB-BK 117 D-2 helicopters and some helicopter delivery documents excluded the life limit information. The FAA is issuing this AD to prevent certain parts from remaining in service beyond their fatigue life. The unsafe condition, if not addressed, could result in failure of the part and loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2017-0037.

(h) Exceptions to EASA AD 2017-0037

(1) Where EASA AD 2017-0037 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2017-0037 refers to flight hours (FH), this AD requires using hours time-in-service (TIS).

(3) Where paragraph (1) of EASA AD 2017-0037 requires determining the FH (total hours TIS) accumulated by the affected rotor mast nut since first installation on a helicopter, this AD requires removing the rotor mast nut from service before further flight if the total hours TIS cannot be determined.

(4) Where the service information referenced in Note 3 of EASA AD 2017-0037 specifies to use a vibrograph to mark the new part number, this AD requires using a vibro etch.

(5) Where paragraph (4) of EASA AD 2017-0037 requires replacing each affected rotor mast nut with a not affected rotor mast nut before exceeding 3,708 FH (total hours TIS) since first installation on a helicopter, this AD requires removing each affected rotor mast nut from service before accumulating 3,708 total hours TIS.

(6) Where paragraph (6) of EASA AD 2017-0037 requires replacing each part as identified in Table 2 of EASA AD 2017-0037 before exceeding the FH (total hours TIS) limit, this AD requires removing each part from service before exceeding the total hours TIS limit.

(7) Paragraph (7) of EASA AD 2017-0037 does not apply to this AD.

(8) The "Remarks" section of EASA AD 2017-0037 does not apply to this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Rao Edupuganti, Aerospace Engineer, Dynamic Systems Section, Technical Innovation Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

(k) 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) EASA AD 2017-0037, dated February 22, 2017.

(ii) [Reserved]

(3) For EASA AD 2017-0037, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu.

(4) You may view this service information at the 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. This material may be found in the AD docket on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0450.

(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: fr.inspection@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on July 30, 2021.
Lance T. Gant,
Director, Compliance & Airworthiness Division, Aircraft Certification Service.
[FR Doc. 2021-19253 Filed 9-7-21; 8:45 am]