DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0016; Project Identifier 2019-SW-114-AD; Amendment 39-21567; AD 2021-11-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus Helicopters Model EC225LP helicopters. This AD was prompted by reports of an oil leak from the main gearbox (MGB) during engine start up. This AD requires modifying and performing subsequent repetitive function testing of the MGB emergency lubrication (EMLUB) system as specified in a 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 [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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

ADDRESSES: For 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 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. It is also available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0016.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0016; 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 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: Hal Jensen, Aerospace Engineer, Operational Safety Branch, FAA, 950 L’Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email hal.jensen@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2016-0232, dated November 22, 2016 (EASA AD 2016-0232), to correct an unsafe condition for Airbus Helicopters Model EC 225 LP helicopters. EASA later issued EASA AD 2016-0232R1, dated December 12, 2019 (EASA AD 2016-0232R1), to revise EASA AD 2016-0232.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Helicopters Model EC225LP helicopters. The NPRM published in the Federal Register on March 15, 2021 (86 FR
The NPRM was prompted by reports of oil leaks during engine starting, originating from the MGB. The NPRM proposed to require modifying and repetitively functional testing the MGB EMLUB system, and if there is a discrepancy, accomplishing corrective action(s). Accomplishing any corrective action(s) does not constitute terminating action for the repetitive functional tests, as specified in an EASA AD.

The FAA is issuing this AD to address inadvertent opening of the P 2.4 valve of the MGB EMLUB system, which results from MGB pressurization by compressed air produced by the engine during starting in response to a signal from the EMLUB electronic control card. See EASA AD 2016-0232R1 for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition and do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

EASA AD 2016-0232R1 requires modifying the electrical control circuit of the MGB EMLUB system. After modifying, EASA AD 2016-0232R1 requires a repetitive functional test of the MGB EMLUB system, and if there is a discrepancy, accomplishing
corrective action(s). Accomplishing any corrective action(s) does not constitute terminating action for the repetitive functional tests.

This material 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.

**Differences Between this AD and the EASA AD**

Where EASA AD 2016-0232R1 refers to December 6, 2016 (the effective date of EASA AD 2016-0232), this AD requires using the effective date of this final rule. EASA AD 2016-0232R1 allows an additional interval margin of 225 flight hours (FH), while this AD does not. Where the service information referenced in EASA AD 2016-0232R1 requires contacting Airbus Helicopters for corrective action, this AD requires accomplishing the corrective action using a method approved by the Manager, Strategic Policy Rotorcraft Section, FAA.

**Costs of Compliance**

The FAA estimates that this AD affects 24 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Modifying the electrical control circuit of the MGB EMLUB system takes about 22 work-hours and parts cost about $1,592 for an estimated cost of $3,462 per helicopter and $83,088 for the U.S. fleet.

Functional testing the EMLUB system takes about 12 work-hours for an estimated cost of $1,020 per helicopter and $24,480 for U.S. fleet, per testing cycle.

If the electrical functional test results in a need to replace the lubrication printed circuit board, the replacement time takes about 2 work-hours and parts cost about $5,150 for an estimated cost of $5,320 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

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:

   2021-11-05 Airbus Helicopters: Amendment 39-21567; Docket No. FAA-2021-0016; Project Identifier 2019-SW-114-AD.

   (a) Effective Date

   This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

   (b) Affected Airworthiness Directives

   None.

   (c) Applicability

   This AD applies to all Airbus Helicopters Model EC225LP helicopters, certificated in any category.

   (d) Subject

   Joint Aircraft System Component (JASC) Code 6397, Main Rotor Drive System Wiring.

   (e) Reason

   This AD was prompted by reports of oil leaks during engine starting, originating from the main gearbox (MGB). The FAA is issuing this AD to address the inadvertent opening of the P 2.4 valve of the MGB emergency lubrication (EMLUB) system, which results from MGB pressurization by compressed air produced by the engine during
starting in response to a signal from the EMLUB electronic control card. This condition could result in loss of the MGB lubrication system and a reduced ability of the crew to manage adverse operating conditions.

(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 European Union Aviation Safety Agency AD 2016-0232R1, dated December 12, 2019 (EASA AD 2016-0232R1).

(h) Exceptions to EASA AD 2016-0232R1

(1) Where EASA AD 2016-0232R1 refers to December 6, 2016 (the effective date of European Aviation Safety Agency AD 2016-0232, dated November 22, 2016), this AD requires using the effective date of this AD.

(2) Where EASA AD 2016-0232R1 refers to flight hours (FH), this AD requires using hours time-in-service (TIS).

(3) Where paragraph (2) of EASA AD 2016-0232R1 allows an additional interval margin of 225 FH, this AD does not. This AD requires accomplishing the functional tests within 600 hours TIS, and thereafter at intervals not to exceed 600 hours TIS.

(4) Where the service information referenced in EASA AD 2016-0232R1 requires contacting Airbus Helicopters technical support, this AD requires that the corrective action be accomplished using a method approved by the Manager, Strategic Policy Rotorcraft Section, FAA. The Manager’s approval letter must specifically refer to this AD.

(5) The “Remarks” section of EASA AD 2016-0232R1 does not apply to this AD.
(i) Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the helicopter can be modified (if the operator elects to do so), provided the helicopter is operated under visual flight rules and without passengers only.

(j) 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 (k) 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.

(k) Related Information

For more information about this AD, contact Hal Jensen, Aerospace Engineer, Operational Safety Branch, FAA, 950 L’Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email hal.jensen@faa.gov.

(l) 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 this AD specifies otherwise.
(i) European Union Aviation Safety Agency (EASA) AD 2016-0232R1, dated December 12, 2019.

(ii) [Reserved]

(3) For EASA AD 2016-0232R1, 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 EASA AD on the EASA website at https://ad.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-2021-0016.

(5) You may view this material 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 May 11, 2021.

Ross Landes, Deputy Director for Regulatory Operations, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-11803 Filed: 6/4/2021 8:45 am; Publication Date: 6/7/2021]