



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0342; Product Identifier 2019-SW-078-AD; Amendment 39-21242; AD 2020-19-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters. This AD was prompted by a report of an erroneous low rotor revolutions per minute (RPM) indication after establishing a one engine inoperative (OEI) condition. This AD requires a software (SW) modification for the aircraft management computer (AMC). 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 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 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-2020-0342.

### **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-2020-0342; 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:** George Schwab, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email [george.schwab@faa.gov](mailto:george.schwab@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

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 Deutschland GmbH Model MBB-BK 117 D-2 helicopters. The NPRM published in the *Federal Register* on April 28, 2020 (85 FR 23489). The NPRM was prompted by a report of an erroneous low rotor RPM indication after establishing an OEI condition. The NPRM proposed to require a SW modification for the AMC. The FAA is issuing this AD to address erroneous low RPM indications, which could cause the pilot to make inappropriate control inputs, resulting in damage to the helicopter or injury to occupants.

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0208, dated August 22, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0342.

### **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**

Airbus Helicopters has issued Alert Service Bulletin MBB-BK117 D-2-42A-005, Revision 3, dated June 6, 2019. This service information describes procedures for a SW modification for the AMC.

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.

## **Differences Between this AD and the MCAI or Service Information**

The MCAI provides a 60-day compliance time for accomplishing the SW modification. This AD requires completion of the SW modification within 50 hours time-in-service.

## **Costs of Compliance**

The FAA estimates that this AD affects 30 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:

### Estimated costs for required actions

| Labor cost                            | Parts cost | Cost per product | Cost on U.S. operators |
|---------------------------------------|------------|------------------|------------------------|
| 1 work-hour X \$85<br>per hour = \$85 | \$3,000    | \$3,085          | \$92,550               |

#### 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.

**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):

**2020-19-01 Airbus Helicopters Deutschland GmbH:** Amendment 39-21242; Docket No. FAA-2020-0342; Product Identifier 2019-SW-078-AD.

**(a) Effective Date**

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

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 42, Integrated Modular Avionics.

**(e) Reason**

This AD was prompted by a report of an erroneous low rotor revolutions per minute (RPM) indication after establishing a one engine inoperative condition. The FAA is issuing this AD to address erroneous low RPM indications, which could cause the pilot to make inappropriate control inputs, resulting in damage to the helicopter or injury to occupants.

**(f) Compliance**

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

**(g) Definitions**

(1) Affected part: An aircraft management computer (AMC) having a software (SW) version installed that is identified as “pre-modification SW” in Figure 1 to paragraphs (g)(1), (h), and (i) of this AD, or earlier SW version.

**Figure 1 to Paragraphs (g)(1), (h), and (i) – Helicopter Configuration and Updated SW**

| <b>Helicopter Configuration</b>    | <b>Pre-modification SW</b>   | <b>Post-modification/ Upgraded SW</b> |
|------------------------------------|--|---------------------------------------|
| D-2 and D-2m (basic)               | As of the effective date of this AD, no D-2 and D-2m (basic) helicopters are known to be in service. |                                       |
| D-2 and D-2m (Helionix Step 2)     | V5.0.1 P/N D462C01S0501  | V5.0.4 P/N D462C01S0504               |
|                                    | V5.0.2 P/N D462C01S0502  | V5.0.4 P/N D462C01S0504               |
|                                    | V5.0.2 P/N D462C03S0502  | V5.0.4 P/N D462C03S0504               |
| D-2 and D-2m (Helionix Step 2.0.1) | V5.0.3 P/N D462C01S0503  | V5.0.4 P/N D462C01S0504               |
|                                    | V5.0.3 P/N D462C03S0503  | V5.0.4 P/N D462C03S0504               |
| D-2 and D-2m (Helionix Step 3)     | V6.0 P/N D462C01S0600  | V6.0.2 P/N D462C01S0602               |
|                                    | V6.0 P/N D462C03S0600  | V6.0.2 P/N D462C03S0602               |

(2) Group 1: Helicopters that have an affected part installed.

(3) Group 2: Helicopters that do not have an affected part installed.

**(h) Software Modification**

(1) For Group 1: Within 50 hours time-in-service after the effective date of this AD, update the SW of each affected part to the corresponding upgraded SW, as listed in Figure 1 to paragraphs (g)(1), (h), and (i) of this AD, in accordance with the Accomplishment Instructions, Section 3.B.2, of Airbus Helicopters Alert Service Bulletin MBB-BK117 D-2-42A-005, Revision 3, dated June 6, 2019.

(2) Replacement on a helicopter of an affected part with an AMC having the corresponding upgraded SW installed, as listed in Figure 1 to paragraphs (g)(1), (h), and (i) of this AD, or later SW upgrade is an acceptable alternative method of compliance for the requirements of paragraph (h)(1) of this AD for that helicopter.

**(i) Parts Installation Prohibition**

Do not install on any helicopter an affected part, and do not upload any SW identified as “pre-modification SW” in Figure 1 to paragraphs (g)(1), (h), and (i) of this

AD, or earlier SW version, on any AMC, as required by paragraph (i)(1) or (2) of this AD, as applicable.

(1) For Group 1: After modification of that helicopter as specified in paragraph (h) of this AD.

(2) For Group 2: As of the effective date of this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: George Schwab, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5151; 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, 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.

**(k) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information European Union Aviation Safety Agency (EASA) 2019-0208, dated August 22, 2019. This EASA AD may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0342.

(2) 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>. 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.

**(I) 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) Airbus Helicopters Alert Service Bulletin MBB-BK117 D-2-42A-005, Revision 3, dated June 6, 2019.

(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 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.

(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](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on September 1, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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