



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 18-135**

**Issued: 08 October 2018**

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

**Type/Model designation(s):**

AIRBUS HELICOPTERS DEUTSCHLAND GmbH    MBB-BK 117 D-2 helicopters

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Numbers:** EASA.R.010

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2017-0146 dated 10 August 2017.

## ATA 42 – Integrated Modular Avionics – Aircraft Management Computer Software – Modification

### Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH

### Applicability:

MBB-BK 117 D-2 helicopters, all serial numbers.

### Definitions:

For the purpose of this AD, the following definitions apply:

**The ASB:** Airbus Helicopters Alert Service Bulletin (ASB) MBB-BK117 D-2-42A-004.

**Affected part:** Aircraft Management Computers (AMC), having software (SW) version V5.0.2, part number (P/N) D462C01S0502 or P/N D462C03S0502, or earlier, installed.

**Groups:** Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.



**Reason:**

Two occurrences were reported of uncommanded helicopter climb/descent, following activation of autopilot cruise height (CRHT) mode concurrently with ground trajectory command in hover (GTCH) mode engaged.

This condition, if not detected and corrected, could lead to temporary loss of control of the helicopter, possibly resulting in damage to the helicopter and/or injury to occupants.

To address this unsafe condition, AH issued Rotorcraft Flight Manual (RFM) Temporary Revisions (TR) introducing a minimum airspeed limitation for the autopilot CRHT mode, and EASA issued AD 2017-0146, requiring amendment of the MBB-BK 117 D2 RFM.

Since that AD was issued, AH developed an updated AMC SW, and published the ASB providing applicable instructions.

For the reasons described above, this AD retains the requirements of EASA AD 2017-0146, which is superseded, and requires updating the AMC SW.

**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Restatement of Requirements of EASA AD 2017-0146****RFM Amendment:**

- (1) For Group 1 helicopters: Within 30 days after 24 August 2017 [the effective date of EASA AD 2017-0146], amend section 2.5.5.1 of the RFM, "Operating limitations of the autopilot", by inserting a copy of Appendix 1 of this AD (or its text), or a copy of the RFM TR as identified in Table 1 of this AD, as applicable, inform all flight crews and, thereafter, operate the helicopter accordingly.

Table 1 – RFM Temporary Revision

MBB-BK 117 D-2 Configuration	RFM Temporary Revision
D-2 (basic)	TR No. 1, dated 28 March 2017
D-2m	TR No. 2, dated 28 March 2017
D-2 (Helionix Step 2)	TR No. 1, dated 28 March 2017
D-2m (Helionix Step 2)	TR No. 1, dated 28 March 2017

- (2) Amending the limitations section of the RFM of a helicopter to incorporate a later RFM revision which includes the procedures detailed in Appendix 1 of this AD is acceptable to comply with the RFM amendment requirement of paragraph (1) of this AD.

**New Requirements of this AD:****Modification:**

- (3) For Group 1 helicopters: Within 2 months after the effective date of this AD, update the SW of the affected part in accordance with the instructions of Section 3.B of the ASB.



- (4) Replacement of an affected part on a helicopter with an AMC having SW version V5.0.3 or higher installed, in accordance with instructions provided by AH, is an acceptable alternative method to comply with the requirement of paragraph (3) of this AD for that helicopter.

**Parts Installation:**

- (5) Do not install on any helicopter an affected part, and do not upload a SW version lower than V5.0.3 on any AMC, as required by paragraph (5.1) or (5.2.) of this AD, as applicable.

(5.1) For Group 1 helicopters: After modification of that helicopter as required by paragraph (3) of this AD.

(5.2) For Group 2 helicopters: from the effective date of this AD.

**RFM Amendment:**

- (6) After modification of a Group 1 helicopter as required by paragraph (3) of this AD, it is allowed to remove the AFM TR, previously inserted as required by paragraph (1) of this AD, from the RFM of that helicopter.

**Ref. Publications:**

AH BK117 D-2, TR No. 1, dated 28 March 2017.

AH BK117 D-2m, TR No. 2, dated 28 March 2017.

AH BK117 D-2 (Helionix Step 2), TR No. 1, dated 28 March 2017.

AH BK117 D-2m (Helionix Step 2), TR No. 1, dated 28 March 2017.

AH ASB MBB-BK117 D-2-42A-004 original issue dated 04 September 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 22 October 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).
4. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86609 Donauwörth, Federal Republic of Germany  
Telephone: + 49 (0)151 1422 8976; Facsimile: + 49 (0)906 71 41



Web portal: <https://keycopter.airbushelicopters.com> > Technical Request Management  
E-mail: [customersupport.helicopters@airbus.com](mailto:customersupport.helicopters@airbus.com)



Appendix 1: RFM Amendment

## **AUTOPILOT LIMITATIONS**

Operating limitations of the autopilot

### Minimum airspeed

– Minimum airspeed with CRHT mode engaged . . . . . 40 kt

