



## Airworthiness Directive

**AD No.:** 2011-0168R1

**Issued:** 23 March 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

### Type/Model designation(s):

EC 135, EC 635 and MBB-BK117 C-2 helicopters

**Effective Date:** Revision 1: 23 March 2018  
Original issue: 16 September 2011

**TCDS Number(s):** EASA.R.009, EASA.R.010

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2011-0168 dated 02 September 2011. The original issue of this AD superseded EASA Emergency AD 2010-0247-E dated 26 November 2010.

## ATA 33 – Lights – Instrument Lighting Display Brightness – Modification

### Manufacturer(s):

EC135/635: Eurocopter Deutschland GmbH (ECD), Eurocopter España S.A., Eurocopter S.A.  
MBB-BK117 C-2: Eurocopter Deutschland GmbH, American Eurocopter LLC

### Applicability:

EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CPDS), EC135 T2(CPDS), EC135 T2+, EC635 T1(CPDS), EC635 P2+ and EC635 T2+ helicopters, serial numbers (s/n) 0642 through 0999 inclusive, if equipped with optional night vision goggle (NVG) system, and

MBB-BK117 C-2 helicopters, s/n 9004 through 9450 inclusive, if equipped with the optional NVG system with the secured toggle switch Part Number (P/N) 845UN01F4AD0A (and associated wiring changes), either installed during production, or in-service in accordance with ECD Service Bulletin (SB) MBB-BK117 C-2-33-006 original issue or Revision 1.

### Reason:

In 2010, routine safety reviews of the EC 135/635 and MBB BK-117 type designs revealed that, when the "INSTR LIGHTS" potentiometer is at certain positions, the diodes in the NVG system may



overheat. The review results indicated that this could lead to failure of the entire instrument and overhead panel lighting and, depending on the position of the potentiometer, the background lighting of Caution and Advisory Display (CAD), Vehicle and Engine Monitoring Display (VEMD), Primary Flight Display (PFD) and the Navigation Display (ND) could suddenly increase to maximum brightness.

This condition, if not corrected, would likely impair the visibility of the flight crew, possibly resulting in loss of control of the helicopter.

To address this unsafe condition, EASA issued Emergency AD 2010-0247-E to require amendment of the Rotorcraft Flight Manual Supplement (RFMS) to implement a procedure for flights in NVG mode, to set the background lighting of CAD, VEMD, PFD and ND to an acceptable minimum level.

After that AD was issued, ECD developed a modification that prevents that unsafe condition. Consequently, EASA issued AD 2011-0168, retaining the requirements of EASA Emergency AD 2010-0247-E, which was superseded, requiring an electrical wiring modification in the overhead panel and, after that modification, removal of the RFM changes previously inserted.

Since that AD was issued, it was determined that MBB-BK117 C-2 helicopters equipped with the optional NVG system installed in-service in accordance with ECD SB MBB-BK117 C-2-33-006 Revision 2 or later are not affected. This AD is revised to limit the Applicability accordingly.

This AD revision also introduces editorial changes for the purpose of standardization and readability, without changing the requirements.

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

Required as indicated, unless accomplished previously:

- (1) Before next night flight in NVG Mode after 30 November 2010 [the effective date of AD 2010-0247-E], amend the applicable RFMS [Night Vision Imaging System operation with NVG] by inserting the flight manual pages included in ECD ASB EC135-33A-009 (original issue) or ASB MBB BK117 C-2-33A-013 (original issue), as applicable to the helicopter type, and inform the flight crews accordingly.
- (2) Within 18 months after 16 September 2011 [the effective date of the original issue of this AD], modify the electrical wiring in the overhead panel in accordance with the instructions of ECD ASB EC135-33A-009 Revision 2 or ASB MBB BK117 C-2-33A-013 Revision 2, as applicable to the helicopter type.
- (3) Before next flight after modification of a helicopter as required by paragraph (2) of this AD, remove the flight manual pages as required by paragraph (1) of this AD from the RFMS of that helicopter.

#### **Ref. Publications:**

ECD ASB EC135-33A-009 Revision 2 dated 30 June 2011.

ECD ASB MBB BK117 C-2-33A-013 Revision 2 dated 30 June 2011.



ECD SB MBB-BK117 C-2-33-006 original issue dated 04 October 2007, or Revision 1 dated 15 September 2008, or Revision 2 dated 12 April 2011, or Airbus Helicopter Deutschland SB MBB-BK117 C-2-33-006 Revision 3 dated 24 April 2014.

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

**Remarks:**

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. The original issue of this AD was posted on 02 August 2011 as PAD 11-080 for consultation until 30 August 2011. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Federal Republic of Germany  
Telephone: + 49 (0)151 1422 8976; Facsimile: + 49 (0)906 71 4111.  
Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management  
E-mail: [customersupport.helicopters@airbus.com](mailto:customersupport.helicopters@airbus.com)

