


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2011-0168</b></p> <p><b>Date: 02 September 2011</b></p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p><b>Type Approval Holder's Name :</b></p> <p>Eurocopter Deutschland GmbH</p>	<p><b>Type/Model designation(s) :</b></p> <p>EC 135, EC 635 and MBB-BK117 C-2 helicopters</p>
TCDS Number:	EASA.R.009, EASA.R.010
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA Emergency AD 2010-0247-E dated 26 November 2010.
<b>ATA 33</b>	<b>Lights – Instrument Lighting Display Brightness for Flight in Night Vision Goggle (NVG) Mode – Modification</b>
Manufacturer(s):	<p>EC135/635: Eurocopter Deutschland GmbH (ECD), Eurocopter España S.A., Eurocopter S.A.</p> <p>MBB-BK117 C-2: Eurocopter Deutschland GmbH, American Eurocopter LLC</p>
Applicability:	<p>EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CPDS), EC 135 T2(CPDS), EC 135 T2+, EC 635 T1(CPDS), EC 635 P2+ and EC 635 T2+ helicopters, serial numbers (s/n) 0642 through 0999 inclusive, if equipped with optional NVG system, and</p> <p>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.</p>
Reason:	<p>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.</p> <p>This condition, if not corrected, would likely impair the visibility of the flight crew, possibly resulting in loss of control of the helicopter.</p> <p>To address this unsafe condition, EASA issued Emergency AD 2010-0247-E to require amendment of the Rotorcraft Flight Manual Supplement (RFMS) to</p>

	<p>implement a procedure for flights in NVG mode, to set the background lighting of CAD, VEMD, PFD and ND to an acceptable minimum level.</p> <p>Since that AD was issued, ECD has developed a terminating action that would end the need for RFM change, allowing the procedure to be removed.</p> <p>For the reasons described above, this AD retains the requirements of EASA Emergency AD 2010-0247-E, which is superseded, and requires an electrical wiring modification in the overhead panel. After modification of a helicopter, the RFM changes are to be removed.</p>
Effective Date:	16 September 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Before the 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.</li> <li>(2) Within 18 months after the effective date 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.</li> <li>(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.</li> </ol>
Ref. Publications:	<p>ECD ASB EC135-33A-009 Revision 2, and ASB MBB BK117 C-2-33A-013 Revision 2, both dated 30 June 2011.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 02 August 2011 as PAD 11-080 for consultation until 30 August 2011. The Comment Response Documents can be found at <a href="http://ad.easa.europa.eu/">http://ad.easa.europa.eu/</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact: Eurocopter Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Federal Republic of Germany Telephone: + 49 (0)151-1422 8976; Facsimile: + 49 (0)906-71 4111.</li> </ol>