


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2011-0148R1</b></p> <p><b>Date: 30 July 2012</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> Eurocopter Deutschland GmbH</p>	<p><b>Type/Model designation(s) :</b> MBB-BK117 helicopters</p>
TCDS Number :	EASA.R.010
Foreign AD :	Not applicable
Revision:	This AD revises EASA AD 2011-0148 dated 05 August 2011, which superseded EASA AD 2011-0131 dated 08 July 2011.
<b>ATA 85</b>	<b>Optional Equipment – External Rescue Hoist System – Deactivation / Modification</b>
Manufacturer(s):	Eurocopter Deutschland GmbH (ECD), Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH
Applicability:	MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2 and MBB-BK117 C-1 helicopters, all serial numbers.
Reason:	<p>In a recent incident with a MBB-BK117 C-1 helicopter, the cable cut-off function of the rescue hoist was triggered uncommanded and the hoist cable was cut. The subsequent investigation revealed that this was caused by a malfunction within the remote control handle assembly of the rescue hoist system, when extending the hoist boom.</p> <p>This condition, if not detected and corrected, would lead to detachment of an external load or person from the helicopter hoist, possibly resulting in personal injury, or injury to persons on the ground.</p> <p>The same Part Number (P/N) 117-80403 and P/N 117-804061 hoist systems are known to be installed on other models of the same type design.</p> <p>To address this potential unsafe condition, EASA issued AD 2011-0126 to require deactivation of the affected external hoist system by pulling and securing the related circuit breakers, or by removing the hoist boom. Pending the results of the investigation, EASA AD 2011-0126 also prohibited installation of an affected external hoist system on any other helicopter.</p> <p>Following issuance of EASA AD 2011-0126, it was discovered that by pulling the circuit breaker WARN ANN II, the redundant power supply of the</p>

	<p>Annunciator System is degraded which in case of second helicopter system failure could be not annunciated to pilots. Prompted by these findings, EASA issued EASA AD 2011-0131, which superseded EASA AD 2011-0126, retained partially its requirements and required pulling only three (3) circuit breakers (CABLE CUTTER, WINCH CONT. and WINCH BOOM) while the circuit breaker for WARN ANN II must remain inserted.</p> <p>Since EASA AD 2011-0131 was issued, a corrective action has been developed to establish an adequate safety level, while a terminating action is under investigation but currently not available.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2011-0131, which is superseded, and requires repetitive inspections of the external hoist system control handle with coiled cable, Part Number (P/N) 76803, modification of helicopter wiring and a revision of the related Flight Manual Supplement. This AD also requires implementation of a 10-year time between overhaul (TBO) for the external hoist system control handle with coiled cable. This AD is still considered to be an interim measure and further AD action may follow.</p> <p>This AD has been revised to correct the Applicability, as the Model MBB-BK117 A-4 had inadvertently been omitted when AD 2011-0148 superseded AD 2011-0131 whose Applicability was correct. In addition, the Model MBB-BK117 A-1 has been deleted from the Applicability, as none are in operation any longer.</p>
Effective Date:	<p>Revision 1: 30 July 2012</p> <p>Original issue: 12 August 2011</p>
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p><b>Re-statement of requirements of EASA AD 2011-0131:</b></p> <p>(1) For helicopters equipped with (optional) rescue hoist (sometimes referred to as rescue winch), P/N 117-80403 or P/N 117-804061, accomplish one of the actions, paragraph (1.1) or (1.2) below:</p> <p>(1.1) Before the next hoist operation, or within 30 days, whichever occurs first after 12 July 2011 [the effective date of AD 2011-0131], deactivate the external hoist system by pulling the three (3) affected circuit breakers, CABLE CUTTER, WINCH CONT. and WINCH BOOM, and securing each with a cable tie, or</p> <p>(1.2) Before the next hoist operation, or within 30 days, whichever occurs first after from 05 July 2011 [the effective date of EASA AD 2011-0126], remove the hoist boom in accordance with the instructions of Chapter 832 of the applicable ECD MBB-BK 117 Maintenance Manual.</p> <p>(2) For all other helicopters, from 05 July 2011 [the effective date of EASA AD 2011-0126], do not install an affected P/N rescue hoist, as identified in paragraph (1) of this AD, on any helicopter, unless the installation is in compliance with the requirements of paragraph (1) or in compliance with the requirements of paragraph (3) of this AD.</p> <p><b>New requirements of this AD:</b></p> <p>(3) For helicopters equipped with (optional) rescue hoist, P/N 117-80403 or P/N 117-804061, before the next hoist operation, or within 30 days, whichever occurs first after 12 August 2011 [the effective date of the original issue of this AD], accomplish the following actions concurrently:</p> <p>(3.1) Modify the helicopter wiring and the operator handle P/N 76803 to deactivate the external hoist system cable cutter function in accordance with the instructions of ECD Alert Service Bulletin (ASB) MBB-BK117-80-166 Revision 1 (Rev.1), and</p>

(3.2) Replace the affected pages of the relevant Rotorcraft Flight Manual (RFM) and its applicable Supplement (RFMS) with the applicable Temporary Revision (TR) as listed in Table 1 of this AD, to incorporate pre-flight check instructions for the condition of the control handle P/N 76803, including the coiled cable.

Table 1

RFM	TR No.
BK117 C1C	2
BK117 C1	3
BK117 B2 S/N7203	2
BK117 B2	2
BK117 B1	7
BK117 A4	6
BK117 A3	10

- (4) Concurrent with the modification as required by paragraph (3) of this AD, and thereafter at intervals not to exceed 30 days (+ 10% tolerance), inspect the control handle P/N 76803 for damage, in accordance with the instructions of ECD ASB MBB-BK117-80-166 Rev.1.
- (5) If, during any pre-flight check as required by paragraph (3) of this AD, or during any inspection as required by paragraph (4) of this AD, damage is detected, before the next hoist operation, replace the control handle P/N 76803 with a serviceable part.
- (6) From 12 August 2011 [the effective date of the original issue of this AD], do not install a control handle P/N 76803 on any helicopter, unless it has been modified in accordance with the instructions of ECD ASB MBB-BK117-80-166 Rev.1.
- (7) Modification of a helicopter as required by paragraph (3) of this AD cancels the requirements of paragraph (1) of this AD for that helicopter.
- (8) Within 10 years after first installation on a helicopter, or within 9 months after 12 August 2011 [the effective date of the original issue of this AD], whichever occurs later, and thereafter at intervals not to exceed 10 years, accomplish an overhaul of the control handle P/N 76803.

## Ref. Publications:

ECD ASB MBB-BK117-80-166 Revision 1 dated 04 August 2011.  
The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

## Remarks :

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- Based on the required actions and the compliance time, EASA have decided to issue of a Final AD with Request for Comments, postponing the public consultation process until after publication.
- Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
- 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.