EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2010-0248 **Date: 26 November 2010** 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.

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].

Type Approval Holder's Name :	**Type/Model designation(s) :**
Eurocopter Deutschland GmbH	MBB-BK 117 C-2 helicopters

TCDS Number :	EASA.R.010
Foreign AD :	Not applicable
Supersedure :	None

ATA 67	**Rotor Flight Controls – Main Rotor Controls Power Boosted Section – Inspection / Rigging**
Manufacturer(s):	Eurocopter Deutschland GmbH (ECD), American Eurocopter LLC
Applicability:	MBB-BK 117 C-2 helicopters, all serial numbers.
Reason:	During rigging of the main rotor controls of a MBB-BK117 C-2 helicopter, it was discovered that the piston of the longitudinal main rotor actuator had moved after shut-down of the external pump drive. This condition, if not detected and corrected, could lead to incorrect rigging results, which might impair the freedom of movement of the upper controls, possibly resulting in reduced control of the helicopter. To address this potentially unsafe condition, ECD has developed an improved rigging procedure which will be incorporated into a next revision of the MBB-BK117 C-2 Aircraft Maintenance Manual (AMM). For the reasons stated above, this AD requires the implementation of temporary changes to the Rotorcraft Flight Manual (RFM), a one-time inspection to verify that the main rotor controls power boosted section is properly rigged and, depending on findings, the necessary corrective actions. After the inspection and, if necessary, corrective action, the RFM changes can be removed. This AD also requires the implementation of the improved rigging procedure as specified in Temporary Revision (TR) 12b of the MBB-BK117 C-2 AMM.
Effective Date:	10 December 2010

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 30 days after the effective date of this AD, introduce temporary amendments into the RFM by incorporating the information of Appendix 1 of this AD into section 5.1.9 “Performance” of the RFM, and by incorporating the information of Appendix 2 of this AD into RFM Supplement 9.2-11 “External Hoist System”, as applicable to the helicopter. These actions can be accomplished by inserting a copy of Appendix 1 and Appendix 2 of this AD into the RFM (Supplement). (2) Within 300 flight hours (+10 %) or 12 months, whichever occurs first after the effective date of this AD, inspect the rigging of the power boosted section of the main rotor controls in accordance with the instructions of ECD Alert Service Bulletin (ASB) MBB BK117 C-2-67A-012. (3) If, during the inspection as required by paragraph (2) of this AD, improper rigging is detected, before next flight, correct the rigging in accordance with the instructions contained in TR 12b of the MBB-BK117 C-2 AMM. (4) After accomplishment of the inspection as required by paragraph (2) of this AD and, if applicable, corrective action as required by paragraph (3) of this AD, the RFM changes as required by paragraph (1) of this AD can be removed from the helicopter. (5) From the effective date of this AD, any scheduled or unscheduled rigging of the power boosted section of the main rotor controls must be carried out in accordance with the instructions of TR 12b of the MBB-BK117 C-2 AMM. (6) Compliance with the requirements of paragraph (5) of this AD can be demonstrated by: (6.1) Revising as follows the approved aircraft maintenance programme for which the Operator or the Owner ensures the continuing airworthiness of each operated helicopter: Incorporate the rigging instructions contained in ECD TR 12b of the MBB BK117 C-2 AMM. and (6.2) Complying with the approved aircraft maintenance programme described in paragraph (6.1) of this AD.
Ref. Publications:	ECD ASB MBB BK117 C-2-67A-012 dated 16 September 2010. ECD MBB-BK117 C-2 AMM, TR 12b (pages attached to ECD ASB MBB BK117 C-2-67A-012) dated 16 September 2010. The use of later approved revisions of these 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. This AD was posted on 23 September 2010 as PAD 10-100 and republished on 09 November 2010 as PAD 10-100R1, for consultation until 23 November 2010. No comments were received during the consultation period.

	3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. 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.

APPENDIX 1

The following information must be added to the RFM, Section 5.1.9:

For hover out of ground effect in density altitudes up to 7000 ft, controllability has been demonstrated for winds up to 30 kts, except for winds from the right-rear side, where 20 kts has been demonstrated, and except for winds from the left-rear side, where 12 kts has been demonstrated.

For hover out of ground effect in density altitudes above 7000ft, controllability has also been demonstrated for winds up to 30 kts, except for winds from the right to the right-rear side, where 17 kts has been demonstrated, and except for winds from the left-rear side, where 12 kts has been demonstrated.

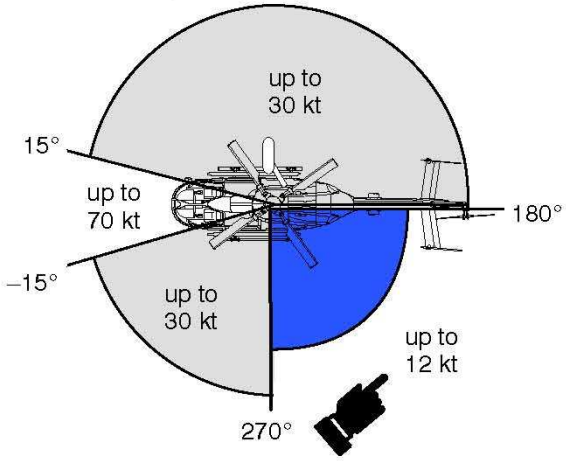
APPENDIX 2

The following information must be added to RFM Supplement 9.2-11:

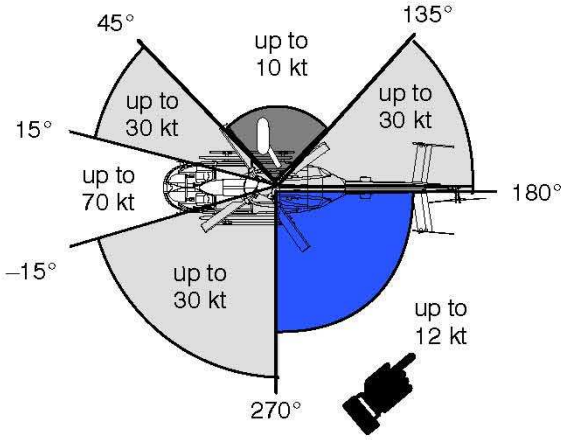
Hoist operations have been demonstrated under the following conditions:

EFFECTIVITY *External Hoist System (RH)installed.*

– up to 7000ft DA

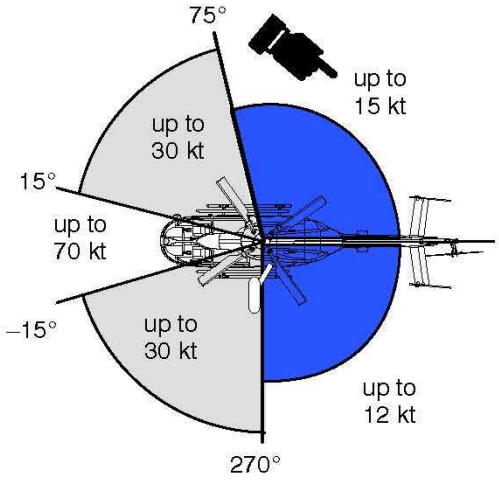


– above 7000ft DA



EFFECTIVITY *External Hoist System (LH) installed.*

– up to 7000ft DA



– above 7000ft DA