



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD Number	CAA-2015-06-002	發布日期 Date issued	2015/6/8
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	MBB-BK117 A-1, 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.		
主旨摘要	Electrical Power – Ground Reference Connection – Retrofit / Rotorcraft Flight Manual – Amendment		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主關機構 Original Authorities <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國AD編號 Original AD number	2015-0098	
	1. 直接採用原AD之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) ___ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將AD執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 90. Ref. Publications: ECD ASB-MBB-BK117-90-118 Revision 02 dated 04 May 2009.		
註：1. AD內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331-3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw Note：1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331-3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw			

EASA	AIRWORTHINESS DIRECTIVE	
	AD No.: 2015-0098	
	Date: 02 June 2015 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 EU 748/2012, Part 21.A.3B. In accordance with 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 [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].		
Design Approval Holder's Name: AIRBUS HELICOPTERS DEUTSCHLAND GmbH	Type/Model designation(s): MBB-BK117 helicopters	
TCDS Number:	EASA.R.010	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 90	Electrical Power – Ground Reference Connection – Retrofit / Rotorcraft Flight Manual – Amendment	
Manufacturer(s):	Airbus Helicopters Deutschland GmbH (AHD) (formerly Eurocopter Deutschland GmbH (ECD), Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH).	
Applicability:	MBB-BK117 A-1, 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>An occurrence was reported on a MBB-BK117 helicopter of an in-flight interruption of the grounding connection to the generator voltage regulator. The reason for this interruption was a break in the wire terminal attached at terminal E of the starter-generator. As a consequence, overvoltage occurred in the electrical power system and caused damage to the electronic equipment.</p> <p>In addition, it was determined that the use of an outdated revision of the Rotorcraft Flight Manual (RFM) could, in case of overvoltage, lead to application of incorrect emergency procedures.</p> <p>This condition, if not detected and corrected, could lead to loss of required electronic equipment, possibly resulting in loss of control of the helicopter.</p> <p>To address this potential unsafe condition, ECD issued Alert Service Bulletin (ASB) ASB-MBB-BK117-90-118 Revision 02 to provide instructions for inspection and corrective action.</p> <p>For the reasons described above, this AD requires repetitive inspections of the wire terminals and measurements of the resistance between starter-generator and generator voltage regulator and, in case discrepancies are found, replacement of the wire terminal. This AD also requires retrofit of the ground reference line and amendment of the RFM.</p>	
Effective Date:	16 June 2015	

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 50 flight hours after the effective date of this AD and, thereafter, each time the starter-generator is removed and/or the wiring is disconnected from the starter-generator, accomplish a visual inspection of the wire terminals and a measurement of the resistance between starter-generator and generator voltage regulator in accordance with the instructions of ECD ASB-MBB-BK117-90-118 Revision 02. (2) If, during any inspection or measurement as required by paragraph (1) of this AD, any discrepancy is found, before next flight, replace the wire terminal with a serviceable part in accordance with the instructions of ECD ASB-MBB-BK117-90-118 Revision 02. (3) At the next periodical inspection, but no later than 6 months after the effective date of this AD, accomplish a retrofit of the ground reference line in accordance with the instructions of ECD ASB-MBB-BK117-90-118 Revision 02. (4) Accomplishment on a helicopter of the retrofit as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspections and measurements required by paragraph (1) of this AD for that helicopter. (5) Concurrently with the retrofit as required by paragraph (3) of this AD, amend the RFM by inserting a copy of the Temporary Revision (TR) specified in Table 1 of this AD, as applicable to helicopter model, inform all flight crews and, thereafter, operate the helicopter accordingly. <p style="text-align: center;">Table 1 – Applicable RFM TR</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>RFM</th> <th>TR No.</th> </tr> </thead> <tbody> <tr> <td>BK117 A-3</td> <td>9</td> </tr> <tr> <td>BK117 A-4</td> <td>5</td> </tr> <tr> <td>BK117 B-1</td> <td>6</td> </tr> <tr> <td>BK117 B-2</td> <td>1</td> </tr> <tr> <td>BK117 C-1</td> <td>2</td> </tr> <tr> <td>BK117 C-1C</td> <td>1</td> </tr> </tbody> </table>	RFM	TR No.	BK117 A-3	9	BK117 A-4	5	BK117 B-1	6	BK117 B-2	1	BK117 C-1	2	BK117 C-1C	1
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<p>Ref. Publications:</p>	<p>ECD ASB-MBB-BK117-90-118 Revision 02 dated 04 May 2009.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p> <p>BK117 A-3 RFM, TR 9, dated 22 September 2006.</p> <p>BK117 A-4 RFM, TR 5, dated 22 September 2006.</p> <p>BK117 B-1 RFM, TR 6, dated 22 September 2006.</p> <p>BK117 B-2 RFM, TR 1, dated 22 September 2006.</p> <p>BK117 C-1 RFM, TR 2, dated 22 September 2006.</p> <p>BK117 C-1C RFM, TR 1, dated 22 September 2006.</p>														
<p>Remarks:</p>	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 29 April 2015 as PAD 15-052 for consultation until 27 May 2015. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information 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: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86607 Donauwörth, Federal Republic of Germany Telephone: + 49 (0)151 1422 8976; Fax: + 49 (0)906 71 4111 														