## EASA

## **AIRWORTHINESS DIRECTIVE**



## AD No.: 2013-0015

## Date: 16 January 2013

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 748/2012, Part 21.A.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].

Design Approval Holder's Name: Eurocopter Deutschland GmbH		<b>Type/Model designation(s):</b> BO 105 helicopters
TCDS Number:	EASA.R.011	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes LBA Germany AD (LTA) 1999-300/3 dated 31 August 1999, and LTA 1999-289/3 and LTA 1999-290/3, both dated 05 April 2001. This AD also replaces the requirements of Transport Canada Civil Aviation (TCCA) AD CF-2008-17R1 dated 26 May 2008, which will be cancelled.	
ATA 04	Time Limits and Maintenance Checks – Airworthiness Limitation Items – Amendment	
Manufacturer(s):	Eurocopter Deutschland Gmbh (ECD), Messerschmitt-Bölkow-Blohm GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm Helicopter Canada Limited, Eurocopter Canada (ECL).	
Applicability:	BO 105 A, BO 105 C, BO 105 D, BO 105 S, BO 105 LS A-1 and BO 105 LS A-3 helicopters, all variants, all serial numbers.	
Reason:	In July 1999, a main rotor blade separation resulted in loss of the affected MBB-BK 117 helicopter. The cause of the blade separation was a tension-torsion strap rupture in the main rotor head. The design of the main rotor head on the BO105 is similar to the MBB-BK117. Therefore, prompted by this occurrence, LBA Germany issued LTA 1999-289, LTA 1999-290 and LTA 1999-300, all later revised to issue 3, while TCCA (at the time, State of Design authority for the BO 105 LS A-3 helicopters) issued AD CF-2008-17, later revised to R1, to require a one-time inspection and implementation of a life limit for the affected tension-torsion straps on all BO105 helicopters.	
	Since those ADs were issued, the results of fatigue life evaluations for the tension-torsion straps have been reviewed. ECD has revised the related life limits and/or inspection intervals for these reviewed components and their constituent parts. These airworthiness limitations are published in the BO 105 Aircraft Maintenance Manual (AMM), Chapter 101, and for the BO 105 LS A-3 'Superlifter' in Appendix 010 thereto, which are approved by EASA.	
	Revision 27 (for Models MBB-BO 105 A, C, D, S, LS A-1), Revision 4 (for	

	<ul> <li>Model BO 105 LS A-3) of Chapter 101 and Rev. 1 of Appendix 010 of the BO105 AMM introduces new airworthiness limitations. Failure to comply with the instructions contained in these documents could result in an unsafe condition.</li> <li>For the reasons described above, this AD supersedes LBA Germany LTA LTA 1999-289/3, LTA 1999-290/3 and LTA 1999-300/3, replaces the requirements of Transport Canada AD CF-2008-17R1 (which is to be cancelled), and requires the implementation of all airworthiness limitations as specified in ECD BO105 AMM Chapter 101 Revision 27, ECD BO105 LS A-3 AMM Chapter 101 Revision 4 or Rev. 1 of Appendix 010, as applicable to the helicopter model.</li> </ul>	
Effective Date:	30 January 2013	
Required Action(s) and Compliance Time(s):	<ul> <li>Required as indicated, unless accomplished previously:</li> <li>(1) After the effective date of this AD, in accordance with ECD BO105 AMM Revision 27, ECD BO105 LS A-3 AMM Rev.4 of Chapter 101 or Rev. 1 of Appendix 010 to the BO105 LS A-3 AMM, as applicable to the helicopter Model, replace each component before or upon reaching the applicable life limit as specified in the applicable ECD document.</li> <li>(2) Compliance with the requirements of paragraph (1) of this AD can be demonstrated by:</li> </ul>	
	<ul> <li>(2.1) Revising as follows, the approved Aircraft Maintenance Programme (AMP) on the basis of which the Operator or the Owner ensures the continuing airworthiness of each operated helicopter:</li> <li>Incorporate all airworthiness limitations specified in the ECD BO 105 AMM Chapter 101 at Revision 27 or Revision 4, respectively Appendix 010 at Revision 1, as applicable to the helicopter model, and</li> <li>(2.2) Complying with the approved AMP described in paragraph (2.1) of this AD.</li> <li>Note: ECD has published Alert Service Bulletin (ASB) BO105-10-113 Revision 4, ASB BO105-10-114 Revision 4 and BO105 LS-10-10 Revision 2,</li> </ul>	
Ref. Publications:	which contain additional information on the subject addressed by this AD. ECD ASB BO105-10-113 Revision 4 dated 4 September 2012. ECD ASB BO105-10-114 Revision 4 dated 4 September 2012. ECD ASB BO105 LS-10-10 Revision 2 dated 4 September 2012.	
	BO 105 A, C, D, S, LS A-1: ECD BO105 AMM Revision 27, BO 105 LS A-3: ECD BO105 LS A-3 AMM Revision 4. BO 105 LS A-3 'Superlifter': ECD BO105 LS A-3 AMM Appendix 010 Rev.1. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.	
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.</li> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> <li>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, Fax: + 49 (0)906-71 4111.</li> </ol>	