


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<b>AD No.: 2011-0091</b>  <b>Date: 18 May 2011</b>  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].	
<b>Type Approval Holder's Name :</b> Eurocopter Deutschland GmbH	<b>Type/Model designation(s) :</b> BO105 helicopters
TCDS Number : EASA.R.011	
Foreign AD : Not applicable	
Supersedure : This AD supersedes EASA AD 2010-0223 dated 26 October 2010.	
<b>ATA 63</b>	<b>Main Rotor Drive – Main Gearbox – Inspection</b>
Manufacturer(s):	Eurocopter Deutschland GmbH (ECD), Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH
Applicability:	BO105 A, BO105 C, BO105 D and BO105 S helicopters, all variants, all serial numbers.
Reason:	<p>In 2010, an accident occurred with a BO105 helicopter and the initial findings indicated that the event was linked with a deterioration of the Main Gearbox (MGB), due to a contaminated oil supply.</p> <p>This condition, if not detected and corrected, could lead to MGB failure and consequent loss of control of the helicopter.</p> <p>ECD developed measures to address and correct this unsafe condition and published these instructions in Alert Service Bulletin (ASB) BO105-10-125. EASA issued AD 2010-0223 to require a one-time inspection of the MGB magnetic plug / chip detector and of the MGB oil filter and, depending on findings, corrective action(s). That AD also required the implementation of new corrective action criteria for later (scheduled and unscheduled) MGB inspections, to be applied each time there is a particle identification.</p> <p>Since that AD was issued, it has been determined that repetitive inspections of the magnetic plug and oil filter at reduced intervals are necessary to ensure that any discrepancy is detected and corrected, and ASB BO105-10-125 has been revised accordingly.</p> <p>For the reasons described above, this AD retains the initial requirements of AD 2010-0223, which is superseded, and requires the implementation of repetitive inspections of the magnetic plug and oil filter and corrective actions, depending on findings.</p>

Effective Date:	01 June 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p><b>Re-statement of requirements of AD 2010-0223:</b></p> <ol style="list-style-type: none"> <li>(1) Within the next 100 flight hours (FH) or 3 months, or at the next scheduled MGB magnetic plug / chip detector inspection, whichever occurs first after 09 November 2010 [the effective date of AD 2010-0223], inspect the MGB magnetic plug / chip detector and MGB oil filter for contamination in accordance with the instructions of ECD Alert Service Bulletin (ASB) BO105-10-125 and the BO105 Maintenance Manual (MM).</li> <li>(2) Thereafter, at each scheduled or unscheduled MGB magnetic plug / chip detector inspection, apply the instructions of Table 11-2, as provided on pages 4 and 5 of ECD ASB BO105-10-125.</li> </ol> <p><b>New requirements of this AD:</b></p> <ol style="list-style-type: none"> <li>(3) Within 10 FH after the latest check as required by EASA AD 2010-0223, now paragraphs (1) or (2) of this AD, as applicable, and thereafter at intervals not to exceed 10 FH, inspect the MGB magnetic plugs for chips, in accordance with the instructions of ECD ASB BO105-10-125 Revision 1 (R1) and the BO105 MM.</li> <li>(4) Within 100 FH after the latest check as required by EASA AD 2010-0223, now paragraphs (1) or (2) of this AD, as applicable, and thereafter at intervals not to exceed 100 FH, inspect MANN oil filter Part Number (P/N) 6140063321 for particles, in accordance with the instructions of ECD ASB BO105-10-125 R1 and the BO105 MM.</li> <li>(5) Accomplishment of the initial inspections on a helicopter, as required by paragraphs (3) and (4) of this AD respectively, constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD.</li> <li>(6) If contamination is found during any inspection as required by paragraphs (1), (2), (3) or (4) of this AD, before next flight, except where ECD ASB BO105-10-125 R1 (page 4, table 11-2) defines different compliance times, accomplish the corrective actions in accordance with the instructions of ECD ASB BO105-10-125 R1 and the BO105 MM.</li> <li>(7) Compliance with the requirements of paragraphs (3) and (4) of this AD can be demonstrated by: <ol style="list-style-type: none"> <li>(7.1) Revising as follows the approved aircraft maintenance programme on the basis of which the Operator or the Owner ensures the continuing airworthiness of each operated helicopter: <p>Incorporate the repetitive inspections of paragraphs (3) and (4) of this AD, as well as the revised Table 11-2 (pages 4 and 5 of ASB BO105-10-125 R1) and picture 11-14 (page 6 of ASB BO105-10-125 R1) instructions.</p> <p>and</p> </li> <li>(7.2) Complying with the approved aircraft maintenance programme described in paragraph (7.1) of this AD.</li> </ol> </li> </ol>
Ref. Publications:	<p>Eurocopter Deutschland ASB BO105-10-125 dated 02 September 2010, Revision 1 dated 04 April 2011.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p> <p>BO105 Maintenance Manual, Chapter 11, Sections 11-12 through 11-19, including revised Table 11-2 (pages 4 and 5 of ASB BO105-10-125 R1) and picture 11-14 (page 6 of ASB BO105-10-125 R1).</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. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.</li><li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification 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 14 22 89 76, Facsimile: + 49 (0) 906 71-4111.</li></ol>
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