


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2012-0231</b></p> <p><b>Date: 02 November 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 EU 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].</p>		
<p><b>Design Approval Holder's Name :</b> TURBOMECA</p>	<p><b>Type/Model designation(s) :</b> MAKILA 1A2 engines</p>	
TCDS Number:	EASA.E.072	
Foreign AD:	Not applicable	
Supersedure:	None	
<b>ATA 77</b>	<b>Engine Indicating – N2 Sensor Harness – Replacement</b>	
Manufacturer(s):	TURBOMECA	
Applicability:	<p>MAKILA 1A2 engines, all serial numbers.</p> <p>These engines are known to be installed in, but are not limited to, Eurocopter AS 332 L2 helicopters.</p>	
Reason:	<p>An event occurred in which, during start of a MAKILA 1A2 engine, a fluctuation was observed in the N2 speed. Event analysis led to removal and investigation of the N2 harness. During the investigation, corrosion was detected in the harness, inside the cable sheath at the splices with the sensor coils.</p> <p>Further quality investigations performed with the harness supplier led to the conclusion that this occurrence was due to a manufacturing error. N2 sensor harnesses Part Number (P/N) 0 301 52 001 0 having Serial Number (S/N) 691 through 705 inclusive, or S/N 707 through 728 inclusive, or S/N 813 through 844 inclusive, are potentially affected by the same manufacturing discrepancy.</p> <p>This condition, if not corrected, could lead to the inadvertent activation of the 65% N1 (gas generator rating) back up mode and consequently to a significant power loss on one or both engines installed on the same helicopter, potentially resulting in an emergency landing of the helicopter.</p> <p>For the reasons described above, this AD requires replacement of affected N2 sensor harnesses with serviceable parts. This AD also prohibits the</p>	

	installation of an affected N2 sensor harness on an engine.
Effective Date:	16 November 2012
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) For engines equipped with N2 sensor harnesses P/N 0 301 52 001 0 having S/N 691 through 705 inclusive, or S/N 707 through 728 inclusive, or S/N 813 through 844 inclusive, accomplish the following actions, in accordance with the instructions of Turbomeca Mandatory Service Bulletin (MSB) 298 77 0821:</p> <p>(1.1) Affected P/N is installed on each of the 2 (two) engines of the helicopter: within 10 Flight Hours (FH) after the effective date of this AD, replace one N2 sensor harness with a serviceable part, and within 50 FH after the effective date of this AD, replace the second harness with a serviceable part.</p> <p>(1.2) Affected P/N is installed only on 1 (one) engine of the helicopter: within 50 FH after the effective date of this AD, replace the affected N2 sensor harness with a serviceable part.</p> <p>Note: For the purpose of this AD, a serviceable N2 sensor harness P/N 0 301 52 001 0 is defined as a part <u>not</u> having S/N 691 through 705 inclusive, or S/N 707 through 728 inclusive, or S/N 813 through 844 inclusive.</p> <p>(2) After modification of an engine as required by paragraph (1) of this AD, do not install in an engine an N2 sensor harnesses P/N 0 301 52 001 0 having S/N 691 through 705 inclusive, or S/N 707 through 728 inclusive, or S/N 813 through 844 inclusive.</p> <p>(3) After the effective date of this AD, do not install in a helicopter an engine equipped with an N2 sensor harnesses P/N 0 301 52 001 0 having S/N 691 through 705 inclusive, or S/N 707 through 728 inclusive, or S/N 813 through 844 inclusive.</p>
Ref. Publications:	<p>TURBOMECA MSB 298 77 0821 Version A.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> <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: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>For any questions concerning the technical content of the requirements in this AD, please contact: <p>Operator Support &amp; Sales MAKILA  TURBOMECA 40220 TARNOS – FRANCE  Phone: +33 (0)5 59 74 40 28 Fax: +33 (0)5 59 74 45 16 or refer to your nearest TURBOMECA field representative on:  <a href="http://www.turbomeca-support.com">http://www.turbomeca-support.com</a>.</p> </li> </ol>