EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2011-0147

Date: 05 August 2011

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):
TURBOMECA		MAKILA 1 engines
TCDS Number:	EASA.E.072	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 77	Engine Indicating – N2 Sensor Harness – Replacement	
Manufacturer(s):	TURBOMECA	
Applicability:	MAKILA 1A2 engines, all serial numbers. These engines are known to be installed in, but not limited to, EUROCOPTER AS 332 L2 helicopters.	
Reason:	A helicopter experienced an inadvertent activation of the 65% N1 (gas generator speed) back up control mode. The subsequent technical investigations carried by Turbomeca revealed that an N2 (power turbine speed) sensor harness wire crimping discrepancy was at the origin of this event. Further quality investigations performed with the supplier led to the conclusion that N2 sensor harnesses Part Number (P/N) 0 301 52 001 0 whose Serial Numbers (S/N) are between S/N 242 and S/N 339 inclusive are potentially concerned by the same manufacturing discrepancy. This condition, if not corrected, could lead to the inadvertent activation of the 65% N1 back up mode and consequently to significant power loss on one or both engines installed on the same helicopter, potentially resulting in an emergency landing of the helicopter. For the reasons described above, this AD requires replacement of affected N2 sensor harnesses with serviceable parts. This AD also prohibits the installation of non serviceable N2 sensor harnesses on an engine.	

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Effective Date:	19 August 2011	
Required action(s)	Required as indicated, unless accomplished previously:	
and Compliance Time(s):	(1) For engines equipped with N2 sensor harnesses P/N 0 301 52 001 0 whose S/N are between S/N 242 and S/N 339 inclusive, accomplish the following actions, in accordance with the instructions of Turbomeca Mandatory Service Bulletin 298 77 0817:	
	(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.	
	(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.	
	(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 whose S/N is between S/N 242 and S/N 339 inclusive unless this part is serviceable.	
	(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 whose S/N is between S/N 242 and S/N 339 inclusive unless this part is serviceable.	
	<u>Definition</u> :	
	For the purpose of this AD, a serviceable N2 sensor harness P/N 0 301 52 001 0 is:	
	 a part <u>not</u> having a S/N between S/N 242 and S/N 339 inclusive; 	
	 or a part having a S/N between S/N 242 and S/N 339 inclusive which has been checked by Turbomeca and on which "SB 0815" is marked on the identification plate. 	
Ref. Publications:	Turbomeca Mandatory Service Bulletin 298 77 0817 Version A.	
	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.	
Remarks :	If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.	
	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.	
	 Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 	
	For any questions concerning the technical content of the requirements in this AD, please contact:	
	Operator Support & 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 http://www.turbomeca-support.com .	

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