

EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE	
	<p>PAD No.: 15-045</p> <p>Date: 16 April 2015</p> <p>Note: This Proposed Airworthiness Directive (PAD) 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>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>		
Design Approval Holder's Name:		Type/Model designation(s) :
TURBOMECA		RTM 322 engines
TCDS Number:	EASA.E.009	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 76 Engine Controls – Electrical Wiring Harness – Modification		
Manufacturer(s):	Turbomeca, S.A.	
Applicability:	<p>RTM 322-01/9 and RTM 322-01/9A engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, NH Industries NH90 (military) helicopters.</p>	
Reason:	<p>Over the last few years, the RTM322 fleet experienced a number of standby captions linked to the Inlet Guide Vane (IGV) / Variable Stator Vane (VSV) resolver. The results of the technical investigations concluded that it is prevalent in hot and sandy environment. Although standby caption resulting from single lane failure in the Engine Electronic Control Unit would not affect engine operation, recent field survey showed increasing occurrence rate of single lane failure of IGV / VSV resolver.</p> <p>The investigation also identified the backing-off of ES2/3 harness connectors, in particular the IGV / VSV resolver connectors, as the cause of the in-service events. This disconnection is most likely due to the high level of wear within the ratchet mechanism. The wear is considered to be the result of repeated assembly and disassembly of the connectors which enabled ingress of foreign matter and self-generating debris. In case both IGV / VSV resolver lanes fail on the same engine during a single flight, this would result in the loss of IGV / VSV control, likely to cause a compressor surge.</p> <p>This condition, if not corrected, may lead to an uncommanded engine In-Flight Shut-Down (IFSD), possibly resulting in an emergency landing.</p>	

	<p>To address this potential unsafe condition, Turbomeca issued Mandatory Service Bulletin (MSB) MSBP-M3-A-76-10-10-02A-A-A , providing instructions for installation of a wire lock on the four IGV / VSV connectors (two IGV / VSV resolver connectors and two IGV / VSV actuator connectors), for engines operating in a hot and sandy environment.</p> <p>For the reasons described above, this AD requires installation of a wire lock on the IGV / VSV connectors.</p>
Effective Date:	[TBD: 14 days after Final AD issue date]
Required action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 630 engine hours (EH) after the effective date of this AD, accomplish the following actions:</p> <p>(1.1) Determine the engine history and operating conditions.</p> <p>(1.2) If the engine operates, or has been operated, in a sandy environment (see Note 1), or the operating conditions and/or operational history of the engine cannot be determined, modify the engine by installing a wire lock on the IGV / VSV connectors in accordance with the accomplishment instructions of Turbomeca MSBP-M3-A-76-10-10-02A-A-A.</p> <p>Note 1: The applicable MSB provides a definition of a “sandy environment”.</p> <p>(2) After modification of an engine, as required by paragraph (1.2) of this AD, each time the IGV / VSV connectors are disconnected on that engine (see Note 2), before next flight after re-connection of the IGV / VSV connectors, install a wire lock on the IGV / VSV connectors.</p> <p>Note 2: The applicable MSB provides a list of tasks that require connection and/or disconnection of the IGV / VSV connectors.</p> <p>(3) For an engine for which it has been determined, as required by paragraph (1) of this AD, that it does not operate in, and has never been operated in, a sandy environment (see Note 1 of this AD), if, at any time after the effective date of this AD, the type of mission or geographical operating area in which the engine is operated changes, within 630 EH after such a change, accomplish the actions as specified in paragraph (1.1) and, depending on determination, paragraph (1.2) of this AD.</p> <p>(4) From the effective date of this AD, do not install an engine on a helicopter, unless in compliance with the requirements of this AD.</p>
Ref. Publications:	<p>Turbomeca MSBP-M3-A-76-10-10-02A-A-A Issue 1 dated 24 March 2015.</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"> 1. This Proposed AD will be closed for consultation on 14 May 2015. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: Operator Support & Sales RTM322 - TURBOMECA 40220 TARNOS – France Telephone: +33 (0)5 59 74 40 00, Fax: +33 (0)5 59 74 45 15, or contact your nearest TURBOMECA field representative on http://www.turbomeca-support.com.