

EASA	AIRWORTHINESS DIRECTIVE	
	AD No.: 2008-0115R1	
	Date: 27 November 2008 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].P		
Type Approval Holder's Name : ROLLS-ROYCE TURBOMECA Ltd	Type/Model designation(s) : RTM 322-01/9 and RTM 322-01/9A turbo-shaft engines	
TCDS Number : EASA.E.009		
Foreign AD : Not applicable		
Supersedure: This AD revises EASA AD 2008-0115, dated 17 June 2008.		
ATA 72	Engine – Compressor Module – Replacement	
Manufacturer(s):	Rolls-Royce Turbomeca Ltd	
Applicability:	RTM 322-01/9 and RTM 322-01/9A turboshaft engines, all serial numbers. These engines are known to be installed on, but not limited to, NH Industries NH90 (military) helicopters.	
Reason:	<p>The deterioration of the abradable layer bonded to the front bearing housing, subsequent cabin bleed air contamination and low oil pressure indication have led, on Turbomeca TM333-2B2 engines, to a commanded engine in-flight shut-down (IFSD). The deterioration consists of separation of the abradable layer from the surface to which it is bonded.</p> <p>The same bonding process is also applied to abradable layers on components within the Compressor Module (M01) of the RTM322-01/9 and RTM-01/9A.</p> <p>The affected components are the front bearing housing and first stage diffuser hub. A similar deterioration to that seen on the Turbomeca TM333-2B2 engine may also cause cabin air bleed contamination, low oil pressure indication and/or IFSD. In the case of a dual engine IFSD, this could result in the helicopter making an emergency landing in autorotation mode.</p> <p>Following the development of a revised bonding process, which includes rework of affected components, this revision 1 is issued to introduce the incorporation of the associated RRTM modifications C3068 and C3069 as an acceptable means to comply with the requirements of this Airworthiness Directive (AD).</p> <p>For the reason stated above, this AD requires either the removal and replacement of the affected Compressor Modules or incorporation of both RRTM modifications C3068 and C3069.</p>	

Effective Date:	01 July 2008
Required action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p><u>RTM322-01/9 turboshaft engines</u></p> <ul style="list-style-type: none"> ▪ Within 20 operating hours but not later than 4 weeks after the effective date of this AD, if both engines installed on a given helicopter are equipped with a Compressor Module M01 listed in Table 001 of the Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin EMSBP-M3-A-72-31-00-03A-A-A, replace one engine with an engine not equipped with a Compressor Module on the list or replace one Compressor Module with a Compressor Module not on the list, in accordance with the instructions in the referenced Emergency Mandatory Service Bulletin. ▪ Within 500 operating hours but not later than 18 months after the effective date of this AD, if only one engine installed on a given helicopter is equipped with a Compressor Module M01 listed in Table 001 of the Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin EMSBP-M3-A-72-31-00-03A-A-A, replace the engine with an engine not equipped with a Compressor Module on the list or replace the Compressor Module with a Compressor Module not on the list, in accordance with the instructions in the referenced Emergency Mandatory Service Bulletin. <p><u>RTM322-01/9A turboshaft engines</u></p> <ul style="list-style-type: none"> ▪ Within 20 operating hours but not later than 4 weeks after the effective date of this AD, if both engines installed on a given helicopter are equipped with a Compressor Module M01 listed in Table 002 of the Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin EMSBP-M3-A-72-31-00-03A-A-A, replace one engine with an engine not equipped with a Compressor Module on the list, in accordance with the instructions in the referenced Emergency Mandatory Service Bulletin. ▪ Within 500 operating hours but not later than 18 months after the effective date of this AD, if only one engine installed on a given helicopter is equipped with a Compressor Module M01 listed in Table 002 of the Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin EMSBP-M3-A-72-31-00-03A-A-A, replace the engine with an engine not equipped with a Compressor Module on the list, in accordance with the instructions in the referenced Emergency Mandatory Service Bulletin. <p>When the engine or Module 01 has been removed, it must be sent to an approved repair centre in accordance with the instructions in the referenced Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin.</p> <p>ALTERNATE MEANS OF COMPLIANCE</p> <p>The use of a replacement engine (for the RTM322-01/9 and RTM322-01/9A) or a replacement Compressor Module (for the RTM322-01/9) incorporating both RRTM modifications C3068 and C3069 is acceptable to comply with the requirements of this AD.</p> <p>Note: For the purpose of this AD Operating Hours may be considered equivalent to Flight Hours and either may be used in the determination of replacement or modification times of the Engine / Compressor Modules.</p>
Ref. Publications:	<p>Rolls-Royce Turbomeca Emergency Mandatory Service Bulletin EMSBP-M3-A-72-31-00-03A-A-A initial issue and issue 002.</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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.2. The original AD was posted on 13 May 2008 as PAD 08-057 for consultation until 10 June 2008. No comments were received during the consultation period.3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu.4. For any question concerning the technical content of the requirements in this AD, please contact your usual or nearest TURBOMECA technical representative (refer to http://www.turbomeca-support.com).
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