EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2008-0170 **Date: 25 September 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 Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive 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	ARRIUS 2F turbo-shaft engine

TCDS Number :	France N° M22
Foreign AD :	Not applicable
Supersedure :	None

ATA 73	**Engine Fuel & Control - Lubrication Unit - Modification**
Manufacturer(s):	Turbomeca
Applicability:	ARRIUS 2F turbo-shaft engines, all serial numbers, which do not embody modification Tf75. These engines are known to be installed on, but not limited to, Eurocopter EC120B helicopters.
Reason:	Investigations of incidents which occurred on ARRIUS 2 turboshaft engines have revealed the interruption of engine lubrication further to oil passage blockage within the lubrication unit check valve. This blockage comes from the excessive swelling of the check valve piston o-ring. The level of swelling of the o-ring depends on the class of the oil used (Standard (STD) or High-Thermal Stability (HTS)) and the engine operating time. This phenomenon only affects ARRIUS 2F engines which do not embody modification Tf75. Blockage of check valve may result in a bearing damage caused by a lack of lubrication to the bearings which may lead to an uncommanded or commanded in-flight shutdown which, on a single-engine helicopter, leads to an emergency autorotation landing. This Airworthiness Directive is issued to eliminate the possibility of a check valve blockage due to an excessive swelling of the check valve piston o-ring, by mandating the replacement of the current check valve piston by a check valve with seal-free piston.

Effective Date:	09 October 2008
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: No later than 31 May 2009, replace check valve piston and remove preformed packing in accordance with the instructions specified within Turbomeca Service Bulletin n° 319 79 4075.
Ref. Publications:	TURBOMECA Service Bulletin n° 319 79 4075 The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks :	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 12 August 2008 as PAD 08-090 for consultation until 29 August 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 questions concerning the technical content of the requirements in this AD, please contact: ARRIUS 2 Customer Support TURBOMECA - 40220 Tarnos, France FAX + 33 5 59 74 45 15