## **EASA** AIRWORTHINESS DIRECTIVE AD No: 2006 - 0141 Date: 29 May 2006 No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry. Type Approval Holder's Name: Type/Model designation(s): **TURBOMECA** ARRIUS 2F turboshaft engine TCDS Number: France M22 Foreign AD: Not applicable Supersedure: DGAC CN F 2005-122, EASA approval No. 2005-6069 **ATA 79** Oil – Replacement of check-valve piston o-ring **TURBOMECA** Manufacturer(s): ARRIUS 2F turboshaft engine without modification Tf75 embodied. Applicability: ARRIUS 2F equip EC 120B 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 (i.e.: check-valve piston without o-ring). On ARRIUS 2F, an interruption of the engine lubrication may lead to an uncommanded in-flight shutdown. Effective Date: 09 June 2006

Compliance:	The following actions are made mandatory, unless already done, from the effective date of this AD:
	A. Replace the check-valve piston o-ring according to paragraph 2 of Mandatory Alert Service Bulletin N° A319 79 4802 within the next 50 operating hours if the number of operating hours is greater than:
	<ul> <li>300 hours for engines operating with HTS-class oil and engines for which the history of the oils used is not available or engines which used to operate with HTS-class oil and which no longer do so;</li> </ul>
	<ul> <li>450 hours for engines operating with STD class-oil since their introduction into service.</li> </ul>
	B. Repeat operation of § A:
	<ul> <li>every 300 hours for engines operating with HTS-class oil and engines for which the history of the oils used is not available or engines which used to operate with HTS-class oil and which no longer do so;</li> </ul>
	<ul> <li>every 500 hours for engines operating with STD class-oil since their introduction into service.</li> </ul>
Ref. Publications:	TURBOMECA Mandatory Alert Service Bulletin No A319 79 4802 Update N°1 or later approved revisions.
Remarks :	<ol> <li>If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.</li> </ol>
	<ol> <li>This AD was posted as PAD 06-105 for consultation on 19 April 2006 with a comment period until 15 May 2006. No comment was raised during the consultation period.</li> </ol>
	<ol> <li>Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point - Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> </ol>
	<ol> <li>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</li> </ol>