


EASA	AIRWORTHINESS DIRECTIVE
	<p style="text-align: center;">AD No : 2006 - 0142</p> <p style="text-align: center;">Date: 29 May 2006</p>
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 2B and 2K turboshaft engines
TCDS Number: France M20	
Foreign AD : Not applicable	
Supersedure : Supersede DGAC CN F 2005-159, EASA approval No. 2005-6223	
ATA 79	Oil – Replacement of Check-Valve Piston O-Ring
Manufacturer(s):	TURBOMECA
Applicability:	<p>ARRIUS 2B1/2B1A/2B1A_1/2B2/2K1/2K2 turboshaft engines without modification Tu122 embodied.</p> <p>(ARRIUS 2B1/2B1A/2B1A_1 and 2B2 equip EC135 T1 and T2 rotorcraft).</p> <p>(ARRIUS 2K1 and 2K2 equip A 109 Power and A 109 LUH rotorcraft).</p>
Reason:	<p>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 2 engines which do not embody modification Tu122 (<i>i.e.: check-valve piston without o-ring</i>)</p> <p>A simultaneous interruption of the lubrication on both engines may lead to a double non-commanded in-flight shutdown. The oil usually being the same on both engines, available data put into evidence that this risk has to be considered and that measures to restore the level of safety have to be imposed on ARRIUS 2 engines without modification Tu122 embodied.</p>

Effective Date:	09 June 2006
Compliance:	<p>The following actions are made mandatory, unless already done, from the effective date of this AD :</p> <p>A. Replace the check-valve piston o-ring according to paragraph 2 of Alert Service Bulletin No A319 79 2832 (ARRIUS 2B1/2B1A/2B2) or Alert Service Bulletin No A319 79 2833 (ARRIUS 2K1/2K2) within the next 50 operating hours if the number of operating hours is greater than:</p> <ul style="list-style-type: none"> ▪ 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; ▪ 450 hours for engines operating with STD class-oil since their introduction into service. <p>B. Repeat operation of § A:</p> <ul style="list-style-type: none"> ▪ 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; ▪ every 500 hours for engines operating with STD class-oil since their introduction into service.
Ref. Publications:	<ul style="list-style-type: none"> ▪ TURBOMECA Mandatory Alert Service Bulletin No A319 79 2832 Update N°1 or later approved revisions. ▪ TURBOMECA Mandatory Alert Service Bulletin No A319 79 2833 Update N°1 or later approved revisions.
Remarks :	<ol style="list-style-type: none"> 1. 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. 2. This AD was posted as PAD 06-106 for consultation on 19 April 2006 with a comment period until 15 May 2006. No comment was raised during the consultation period. 3. Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point - 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