

EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE	
	PAD No.: 15-122	
	Date: 14 September 2015	
<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		ARRIEL 2 engines
TCDS Number:	EASA E.001	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 73	Engine Fuel & Control – Hydro-Mechanical Metering Unit – Additional Check Valve and Constant Delta Pressure Valve Diaphragm – Replacement	
Manufacturer(s):	Turbomeca	
Applicability:	<p>ARRIEL 2E and 2N engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, Airbus Helicopters AS 365 N3 and Airbus Helicopters Deutschland MBB-BK 117 D-2 helicopters.</p>	
Reason:	<p>Fuel flow non-conformities were found during reception tests of ARRIEL 2E Hydraulic Mechanical Metering Unit (HMU). Investigation and instrumented tests revealed instabilities on the additional check valve. These instabilities lead to hydraulic pulses. All HMU installed on ARRIEL 2E and 2N engines could present these instabilities.</p> <p>This condition, if not corrected, could lead to life reduction of the delta pressure valve diaphragm, and consequently, an uncommanded engine power increase, or an uncommanded in flight shutdown, possibly resulting in an emergency landing.</p> <p>To address this unsafe condition, Turbomeca certified a new additional check valve with modification (Mod) TU 193 and issued Mandatory Service Bulletin (MSB) 292 73 2193 with instructions to replace the adjusted high/low pressure (HP/LP) fuel pump and metering valve assembly (also known as HMU) with a post-Mod TU193 unit and to replace the constant delta pressure valve diaphragm.</p>	

	For the reasons described above, this AD requires replacement of the constant delta pressure valve and embodiment of Mod TU 193.
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) For an engine in pre-Mod TU 193 configuration, before exceeding 880 HMU operating hours since new, or during the next “800 hours periodical engine inspection”, whichever occurs first after the effective date of this AD, modify the engine by replacing the HMU with a serviceable HMU (see Note 1 of this AD) and replace the constant delta pressure diaphragm in accordance with the instructions of Turbomeca MSB 292 72 2193.</p> <p>Note 1: For the purpose of this AD, a serviceable HMU is one that embodies Mod TU 193.</p> <p>(2) After modification of an engine as required by paragraph (1) of this AD, it is allowed to install a replacement HMU on that engine, provided the HMU is a serviceable one (see Note 1 of this AD).</p>
Ref. Publications:	<p>Turbomeca MSB 292 73 2193 version A dated 16 July 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 12 October 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: Turboméca S.A., ARRIEL 2 Customer Support 40220 Tarnos, France Fax: +33 5 59 74 45 15, or your usual or nearest TURBOMECA technical representative (refer to http://www.turbomeca-support.com).