EASA	AIRWORTHINESS DIRECTIVE
	AD No : 2008-0077 **[Corrected: 06 May 2008]** **Date: 28 April 2008**

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	ARRIEL 2B turboshaft engines

TCDS Number: EASA E.001

Foreign AD: Not applicable

Supersedure: None

ATA 73	**Engine Fuel & Control – Hydro Mechanical Unit (HMU) – Low Fuel Pressure Switch – Inspection/Replacement**
Manufacturer(s):	Turboméca S.A.
Applicability:	ARRIEL 2B, 2B1 and 2B1A turboshaft engines, all serial numbers These engines are known to be installed on, but not limited to: Eurocopter AS 350 B3 and EC 130 B4 helicopters.
Reason:	Several cases of loss of internal components from the Hydro Mechanical Unit (HMU) low fuel pressure switch Hydra-Electric Part number 9 550 17 956 0 into the fuel system, have been reported on Arriel 2 engines. The loss of internal components from the low fuel pressure switch into the fuel system may lead to a rupture of the HP-LP pumps drive shaft shear pin, and thus to a possible uncommanded In-Flight Shut-Down (IFSD). On a single-engine helicopter, an uncommanded IFSD results in an emergency autorotation landing and in certain conditions may lead to an accident. The evaluation of this condition prompts the issuance of this Airworthiness Directive (AD), which requires the following actions for the HMUs installed on Arriel 2 single-engine applications in order to: ▪ verify the part number of the low fuel pressure switch; ▪ if installed, replace the low fuel pressure switch P/N 9 550 17 956 0 by an IN-LHC low fuel pressure switch P/N 9 550 17 199 0 or P/N 9 550 17 913 0; ▪ in case a Hydra-Electric switch P/N 9 550 17 956 0 is installed or may have been installed on the HMU, verify that no parts are found in the chamber of the HMU body where the base of the low fuel pressure switch has been installed.

	This AD has been republished to correct a typographical error in the Compliance paragraph 2.2, where ' P/N 9 550 17 965 0' has now been replaced with 'P/N 9 550 17 956 0'.
Effective Date:	13 May 2008
Compliance:	Required as indicated, unless accomplished previously: No later than 30 September 2009, accomplish a one-time inspection of the HMU in accordance with paragraph 2 of the Turboméca Mandatory Service Bulletin (MSB) 292 73 2826 to identify the low fuel pressure switch installed on adjusted HMU. **1.** If a Hydra-Electric low fuel pressure switch P/N 9 550 17 956 0 is installed: **1.1** Inspect low fuel pressure switch and chamber of the HMU body. **1.1.1** If any parts from the low fuel pressure switch are missing or found in the HMU chamber, replace the HMU by a new or overhauled HMU equipped with an IN-LHC low fuel pressure switch. **1.1.2** If not, replace only the low fuel pressure switch by an IN-LHC low fuel pressure switch. **2.** If an IN-LHC low fuel pressure switch P/N 9 550 17 199 0 or P/N 9 550 17 913 0 is installed: **2.1** If an IN-LHC low fuel pressure switch has been installed since new, repair or overhaul, no further action is required. **2.2** If a Hydra-Electric switch P/N 9 550 17 956 0 has been or may have been installed: **2.2.1** Inspect the chamber of the HMU body. **2.2.2** If any parts are found in the HMU chamber, replace the HMU by a new or overhauled HMU equipped with an IN-LHC low fuel pressure switch.
Ref. Publications:	Turboméca Mandatory Service Bulletin 292 73 2826 – Original Issue, dated 13 March 2008. 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 accept Alternative Methods of Compliance for this AD. 2. This AD was posted on 20 March 2008 as PAD 08-037 for consultation until 17 April 2008. No comments were received during this period. 3. Enquiries regarding this AD should be referred to the AD Focal Point, 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: 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)