

EASA	AIRWORTHINESS DIRECTIVE
	AD No : 2007-0098 Date: 10 April 2007
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 : TURBOMECA	Type/Model designation(s) : MAKILA 1 Turbo-shaft engine
TCDS Number : France - TCDS No M10	
Foreign AD : Not applicable	
Supersedure : Not applicable	
ATA 72	Change to Civil Use Following Use by an Operator Not Controlled by a Civil Authority
Manufacturer(s):	TURBOMECA
Applicability:	<ul style="list-style-type: none"> - MAKILA 1A, 1A1 and 1A2 turbo-shaft engines originally assembled by TURBOMECA and having previously been used by an operator engaged in military, customs, police or similar services, and not under the control of a civil Authority. - MAKILA 1A, 1A1 and 1A2 turbo-shaft engines assembled under TURBOMECA licence by another engine manufacturer which has not been under the control of a civil Authority having entered in an arrangement with EASA addressing such engines. <p>These engines are known to be installed on, but not limited to, AS 332 Super Puma helicopters.</p>
Reason:	<p>The manufacturer has advised EASA that helicopters equipped with these engines may be or may have been sold to civil operators.</p> <p>The compliance of MAKILA 1A, 1A1 and 1A2 turbo-shaft engines, identified in the "applicability" paragraph above, with the European rules enabling issuance of an aircraft standard certificate of airworthiness must be checked.</p> <p>Indeed, their configuration, including design changes and repairs, does not necessarily conform to the type definition approved by EASA, and it is possible that these engines were operated outside of the engine certification assumptions. In particular, operating limits approved by EASA may have been exceeded.</p> <p>It should be noted that the life limits for engine critical parts are based on</p>

	<p>normal civil operation cycles.</p> <p>This Airworthiness Directive (AD) defines the conditions for returning these engines to civil service in aircraft operating under a standard certificate of airworthiness, and for issuing an "EASA Form One" attesting the engine's airworthiness.</p>
Effective Date:	24 April 2007
Compliance:	<p>Compliance with this AD is required as indicated, unless already done, from the effective date of this AD.</p> <p>Before a standard certificate of airworthiness is issued to an aircraft in which a MAKILA 1A, 1A1 or 1A2 turboshaft engine, as identified in the applicability paragraph above, is installed, an EASA Form One must be issued for the engine according to the conditions described below.</p> <p>1. General case :</p> <p>Application of Turbomeca service bulletin A298 72 0804 – Issue No. 1 (or any subsequent approved issue) is an acceptable means to get the EASA Form 1.</p> <p>2. Particular case :</p> <p>Other means may be proposed to EASA for approval. In this case, a written request should be sent to EASA (European Aviation Safety Agency, Postfach 10 12 53 D-50452 Köln, Germany). These alternative means must be based on a demonstration of a level of airworthiness compatible with engine certification criteria, equivalent to the one resulting from the application of Turbomeca service bulletin A298 72 0804 – Issue No. 1.</p> <p>In particular, to be acceptable, such a request must include the following justifications demonstrating that the owner or operator:</p> <ul style="list-style-type: none"> - knows the exact engine configuration, its status with respect to the maintenance rules as defined by TURBOMECA (standard, overhauls, repairs, storage, periodical checks, cumulated operating hours and cycles, cumulated time spent over Take-off rating); - is able to know the possible deviations to the TURBOMECA maintenance rules and is able to evaluate the consequences on the engine airworthiness of such deviations; - has checked the conformity of the engine to the appropriate set of drawings (variant, standard, performance); - has identified, if necessary, the parts which are not approved by EASA, and agrees to request EASA that such parts be certified under a STC, under his/her own responsibility, or to replace them with approved parts; - has identified, if necessary, repair schemes which did not receive acceptance from the manufacturer and from EASA, and agrees to request EASA that such repairs be approved, under his/her own responsibility, or to replace the repaired parts with approved parts; - has checked the implementation of the airworthiness data approved by the Authority (Airworthiness Directives, Service Bulletins, life limits, operating limits, calendar limits); - has checked that the engine identification plate is fixed on the engine. <p>Furthermore, the owner or operator must provide, or make available to EASA the following elements:</p>

	<ul style="list-style-type: none"> - the documents from the former operator, concerning inspections and frequencies, repair, overhaul, and storage (conditions/limits), - the operating time and cycle log, - the assessment of any possible event concerning the helicopter and the engine (hard landing, accident, detection of particles on the engine magnetic plug, spectrometric oil analysis problems, engine visual inspection, identification record sheets for accessible accessories and parts, etc.), - the information from the former operator allowing a check to be made that the engine operation was compatible with the reference operating cycle(s) used to determine the civil Authority approved life limits, - demonstration by a test bench run that the engine properly delivers the minimum certified ratings. <p>Receipt of the written acceptance by EASA of this request allows the authorised organisation to issue the EASA Form 1.</p>
Ref. Publications:	TURBOMECA Mandatory Service Bulletin no. A298 72 0804
Remarks :	<ol style="list-style-type: none"> 1. If requested, and with appropriate substantiation, the responsible EASA manager for the engines covered by this AD has the authority to accept alternative means of compliance to the AD. 2. This AD was posted as PAD 07-036 on 01 March 2007 for consultation until 29 March 2007. No comments were received during this 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.eu.int 4. For any questions regarding the technical content of the requirements set out in this Airworthiness Directive, please contact your usual or nearest TURBOMECA technical representative: (refer to http://www.turbomeca-support.com)