


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2009-0136</p> <p>Date: 23 June 2009</p> <p>Note: This Airworthiness Directive (AD) 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>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.301] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p>Type Approval Holder's Name :</p> <p>Turboméca</p>	<p>Type/Model designation :</p> <p>ASTAZOU XIV turboshaft engines</p>	
<p>TCDS Number : DGAC France M3</p>		
<p>Foreign AD : Not applicable</p>		
<p>Supersedure : None</p>		
ATA 72	Engine Rotating Assembly – Third Stage Turbine Wheel – Inspection / Removal	
<p>Manufacturer:</p>	<p>Turboméca</p>	
<p>Applicability:</p>	<p>All Astazou XIV E and XIV H turboshaft engines fitted with a third stage turbine wheel that incorporates modification AB 173 or modification AB 208.</p> <p>These engines are known to be installed on, but not limited to, Eurocopter Alouette III SA 319 B and Gazelle SA 342 J helicopters.</p>	
<p>Reason:</p>	<p>Investigation of an uncommanded in-flight shut down (IFSD) revealed that a third stage turbine wheel rupture was not contained by the turbine casings. The released portion consisted of a turbine blade together with the rim piece immediately below the blade. The rim piece was bounded by two adjacent axial slots and a fatigue crack that had developed between the holes in which the slots terminate. The slots and holes, which are closed by riveted plugs, were introduced by modification AB 173 in order to improve the vibration characteristics of the turbine wheel. Modification AB 208 brings an improvement to modification AB 173 by changing only the riveting detail.</p> <p>Although this is the only known such event, and although it resulted just in an uncommanded IFSD with no damage to the aircraft, the possibility exists that additional events may occur, potentially involving damage to the aircraft.</p> <p>Turboméca has therefore issued Mandatory Service Bulletin (MSB) 283 72 0804, which requires inspection of the affected turbine wheels in</p>	

	order to detect cracks of the type that led to the reported event. To address the unsafe condition, this AD mandates inspection of the third stage turbine wheels and removal of any damaged wheel.
Effective Date:	07 July 2009
Required Actions and Compliance Time:	<p>Required as indicated, unless accomplished previously:</p> <p>(1) For any given 3rd stage turbine wheel which accumulates 2 000 Total Cycles or more before 01 February 2011:</p> <p>(1.1) before 01 February 2011, do a dye penetrant inspection on the rear face of the 3rd stage turbine wheel as instructed in paragraph 2 of Turboméca MSB 283 72 0804 Version B.</p> <p>(1.2) If any crack indication is found, before further flight, remove the engine from service and send it to a Turboméca qualified repair centre.</p> <p>(2) Inspections and corrective actions done before the effective date of this AD in accordance with Version B of Turboméca MSB 283 72 0804 satisfy the requirements of paragraph (1) of this AD.</p> <p>Note: Schedule the inspections such that priority is given to wheels with the greatest number of cycles since new (CSN).</p>
Ref. Publications:	<p>Turboméca Mandatory Service Bulletin 283 72 0804 Version B.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p> <p>Turboméca ASTAZOU XIV B Maintenance Manual 283 00 936. Turboméca ASTAZOU XIV H Maintenance Manual 283 02 933. Turboméca ASTAZOU XIV B-H-M Overhaul Manual X 283 72 500 2.</p>
Remarks :	<ol style="list-style-type: none"> If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. This AD was posted on 07 May as PAD 09-053 for consultation until 04 June 2009. No comments were received during the consultation period. Enquiries regarding this AD should be referred to the Airworthiness Directorates, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. For any question concerning the technical content of the requirements in this AD, please contact: Operator Support ASTAZOU - Turboméca 40220 TARNOS – FRANCE Phone: +33 (0)5 59 74 40 00 Fax: +33 (0)5 59 74 45 15 or refer to your nearest TURBOMECA technical representative on http://www.turbomeca-support.com.