



Airworthiness Directive

AD No.: 2015-0223

Issued: 16 November 2015

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 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 AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

TURBOMECA

Type/Model designation(s):

ASTAZOU XIV engines

Effective Date: 30 November 2015

TCDS Number(s): EASA.E.075

Foreign AD: None

Supersedure: Not applicable

ATA 72 – Engine – Third Stage Turbine Wheel – Inspection

Manufacturer(s):

Turbomeca

Applicability:

ASTAZOU XIV B and XIV H engines, all serial numbers, if fitted with a third stage turbine wheel part number (P/N) 0 265 25 700 0 or 0 265 25 706 0, and incorporate Turbomeca modification (mod) AB 173 or mod AB 208.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Aerospatiale, Sud Aviation) SA 319 B (Alouette III) and SA 342 J (Gazelle) helicopters.

Reason:

During the overhaul of an ASTAZOU XIV engine, a crack was detected on the front face of the third stage turbine wheel between two balancing plugs. The cause of the crack is probably linked to a geometric singularity, likely caused by the transformation operation aimed at introducing expansion slots between the blades during embodiment of Turbomeca mod AB 173. Although there is only one known case of this type of crack, and although it was detected, the possibility exists that additional parts have the same geometric singularity.



This condition, if not detected and corrected, may lead to failure of a turbine blade and its associated piece of rim, possibly resulting in an uncommanded in-flight shut-down and/or release of high energy debris.

Prompted by these findings, Turbomeca issued Service Bulletin (SB) 283 72 0811 to provide inspection instructions to detect any potential geometric singularity.

For the reasons described above, this AD requires a one-time inspection of the front face of third stage turbine wheel, and, depending on findings, accomplishment of the applicable corrective actions.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

- (1) Within 1 000 engine hours (EH) after the effective date of this AD, accomplish an in-shop inspection of the front face of the third stage turbine in accordance with the instructions of Turbomeca SB 283 72 0811.
- (2) If, during the inspection as required by paragraph (1), a discrepancy (as defined in Turbomeca SB 283 72 0811) is detected, before release to service of the engine, accomplish the applicable corrective action(s) in accordance with the instructions of Turbomeca SB 283 72 0811.

Ref. Publications:

Turbomeca SB 283 72 0811 Version A dated 25 August 2015.

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 approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 12 October 2015 as PAD 15-132 for consultation until 09 November 2015. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: Operator Support ASTAZOU - TURBOMECA 40220 TARNOS – FRANCE
Telephone: +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>.

