



## Airworthiness Directive

**AD No.:** 2015-0209R1

**Issued:** 20 April 2016

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):

MAKILA 2 engines

**Effective Date:** Revision 1: 27 April 2016  
Original issue: 30 October 2015

**TCDS Number(s):** EASA.E.006

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2015-0209 dated 16 October 2015.

## ATA 72 – Engine – Centrifugal Diffuser Ferrule – Inspection

### Manufacturer(s):

TURBOMECA

### Applicability:

MAKILA 2A and MAKILA 2A1 engines, all serial numbers, if Turbomeca modification (Mod) TU 52 is embodied in production, or modified in service by Turbomeca Service Bulletin (SB) 298 72 2052.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter) EC 225 LP helicopters.

### Reason:

Two occurrences were reported of crack initiation on a ferrule of diffuser Part Number (P/N) 0298210100, which propagated and led to the ferrule rupture. The investigation shows that in both cases, the ruptured ferrule contacted and punctured the main fuel supply line, resulting in a fuel leak.

This condition, if not detected and corrected, could lead to an engine fire, consequently triggering an uncommanded engine in flight shut down, possibly resulting in an emergency landing.



Prompted by these occurrences, Turbomeca published Mandatory Service Bulletin (MSB) N° 298 72 2832 to provide repetitive inspection instructions.

Consequently, EASA issued AD 2015-0209 to require repetitive borescope inspections of the affected diffuser and, depending on findings, accomplishment of the applicable corrective action(s).

Since that AD was issued, Turbomeca demonstrated that the interval for the repetitive inspection could be extended.

For the reason described above, this AD is revised and extends the interval for the borescope inspection.

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

Required as indicated, unless accomplished previously:

- (1) Within the compliance times specified in the Table of Turbomeca MSB N° 298 72 2832, or within 30 engines hours (EH) after 30 October 2015 [the effective date of this AD at original issue], whichever occurs later, as applicable, and, thereafter, at intervals not to exceed 300 EH, accomplish a borescope inspection of the ferrule of diffuser P/N 0298210100 in accordance with the instructions of Turbomeca MSB N° 298 72 2832 Version B (or later).

Note: A non-cumulative tolerance as defined in Turbomeca MSB N° 298 72 2832 may be applied to the actions specified in paragraph (1) of this AD.

- (2) If, during any inspection as required by paragraph (1) of this AD, any discrepancy, as defined in Turbomeca MSB N° 298 72 2832, is detected, before next flight, accomplish the applicable corrective actions in accordance with the instructions of Turbomeca MSB N° 298 72 2832 Version B (or later).
- (3) Accomplishment of corrective action(s) on an engine, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that engine.
- (4) A borescope inspection of the ferrule of diffuser P/N 0298210100 accomplished, before 30 October 2015 [the effective date of this AD at original issue], in accordance with the instructions of Turbomeca MSB N° 298 72 2832 Version A is acceptable to comply with the initial borescope inspection as required by paragraph (1) of this AD.

**Ref. Publications:**

Turbomeca MSB 298 72 2832 Version A dated 03 September 2015, or Version B dated 12 October 2015, or Version C dated 15 April 2016.

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. The original issue of this AD was posted on 11 September 2015 as PAD 15-123 for consultation until 09 October 2015. The Comment Response Document can be found at <http://ad.easa.europa.eu>.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: Turbomeca, S.A., MAKILA Customer Support, 40220 Tarnos, France, Fax: +33 5 59 74 45 16, or contact your nearest technical representative at [www.turbomeca-support.com](http://www.turbomeca-support.com).

