Airworthiness Directive

AD No.: 2016-0009

Issued: 13 January 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:	Type/Model designation(s):
TURBOMECA	ARRIEL 1 engines

Effective Date: 27 January 2016

TCDS Number(s): EASA.E.073

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Gas Generator (Module 03) / Piston Shaft Small Diameter Labyrinth – Modification / Replacement

Manufacturer(s):
Turbomeca

Applicability:
ARRIEL 1D and 1D1 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter) AS 350 BB, B1 and B2 helicopters.

Reason:
Some cases of divergent rubbing between the piston shaft small diameter labyrinth and the rear bearing support have been reported.

This condition, if not corrected, could lead to an uncommanded engine in-flight shutdown.

To address this potential unsafe condition, Turbomeca developed a modification (reference Turbomeca Mod TU 357) of the piston shaft that provides an increased clearance between the piston shaft small labyrinth and the rear bearing support. Turbomeca published Service Bulletin (SB) 292 72 1357 to provide instructions for embodiment of this modification in service.

For the reasons described above, this AD requires embodiment of Mod TU 357.

Required Action(s) and Compliance Time(s):
Required as indicated, unless accomplished previously:

(1) For an engine in pre-Mod TU357 configuration, within 4 months after the effective date of this AD, modify the engine by replacing the module 03 with a post-Mod TU357 module 03 in accordance with the instructions of Turbomeca Mandatory SB 292 72 1357 version B (or later).

(2) From 01 May 2016, it is allowed to install a module 03 on an engine, provided it is determined that the module 03 is post-Mod TU 357.

(3) Modification of an engine before the effective date of this AD, in accordance with the instructions of Turbomeca SB 292 72 0357 version A or version B, or Turbomeca SB 292 72 1357 version A, is acceptable to comply with the requirements of paragraph (1) of this AD for that engine.

Ref. Publications:
Turbomeca SB 292 72 1357 version A dated 06 November 2014 or Mandatory SB 292 72 1357 version B dated 12 November 2015.

Turbomeca SB 292 72 0357 version A dated 12 December 2007, or version B dated 21 February 2013.

The use of later approved revisions of these documents 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 14 December 2015 as PAD 15-153 for consultation until 11 January December 2016. 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: Turbomeca, ARRIEL 1 Customer Support,
40220 Tarnos, France
Fax: +33 5 59 74 45 15, or
contact your usual or nearest Turbomeca technical representative at
www.turbomeca-support.com