



Airworthiness Directive

AD No.: 2016-0016R1

Issued: 12 January 2017

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:

SAFRAN HELICOPTER ENGINES

Type/Model designation(s):

MAKILA 2 engines

Effective Date: Revision 1: 19 January 2017
Original Issue: 20 January 2016

TCDS Number(s): EASA.E.006

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0016 dated 15 January 2016.

ATA 72 – Engine – Power Turbine Module 04 Bearing Supply Swivel Union – Torque Check

Manufacturer(s):

SAFRAN Helicopter Engines (formerly Turbomeca, S.A.)

Applicability:

MAKILA 2A and MAKILA 2A1 engines, all serial numbers, except those that embody SAFRAN Helicopter Engines modification (mod) TU 85.

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 commanded in-flight shut down following low oil pressure warning. In both cases, the nut attaching the swivel union to the power turbine module 04 was found completely loose. After further investigation, it was determined that the application of Turbomeca Service Bulletin (SB) N° 298 79 2831 may have led to incorrect torque application or loosening of the nut.

This condition, if not detected and corrected, could lead to an engine fire, possibly resulting in an emergency landing.



Prompted by these occurrences, Turbomeca published Mandatory Service Bulletin (MSB) N° 298 79 2835 to provide instructions to check the tightening torque on the nut attaching the swivel union to the power turbine module 04 and EASA issued AD 2016-0016 to require a one-time torque control of the affected nut.

Since that AD was issued, SAFRAN Helicopter Engines developed mod TU 85, introducing a lock wire on the nut attaching the swivel union to the power turbine module 04, which eliminates the need to accomplish the torque check.

For the reason described above, this AD is revised to exclude engines in post-mod TU 85 configuration from the Applicability.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected engine is an engine on which Turbomeca SB N° 298 79 2831 is embodied.

Check:

- (1) For an affected engine, within 7 days or 30 engine hours, whichever occurs first after 20 January 2016 [the effective date of this AD at original issue], apply the torque on the nut attaching the swivel union to the power turbine module 04 in accordance with the instructions of Turbomeca/SAFRAN Helicopter Engines MSB N° 298 79 2835 (any version).

Condition for installation of an affected engine on a helicopter:

- (2) From 20 January 2016 [the effective date of this AD at original issue], it is allowed to install an affected engine on a helicopter, provided that, before installation of that engine, the nut attaching the swivel union to the power turbine module 04 of that engine is torqued in accordance with the instructions of Turbomeca/SAFRAN Helicopters Engines MSB N° 298 79 2835 (any version).

Ref. Publications:

Turbomeca MSB N° 298 79 2835 Version A dated 15 January 2016, or SAFRAN Helicopters Engines Version B dated 05 December 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.



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 your nearest SAFRAN Helicopter Engines technical representative or connect to www.tools.safran-helicopter-engines.com.

