



Airworthiness Directive

AD No.: 2022-0224

Issued: 21 November 2022

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

SAFRAN HELICOPTER ENGINES

Type/Model designation(s):

Makila 2A1 engines

Effective Date: 05 December 2022

TCDS Number(s): EASA.E.006

Foreign AD: Not applicable

Supersedure: None

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations Section – Amendment

Manufacturer(s):

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

Applicability:

Makila 2A1 engines, all serial numbers.

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

Definitions:

For the purpose of this AD, the following definitions apply:

The ALS: SAFRAN Makila 2A1 reference X 298 U3 460 2 Maintenance Manual (MM), Airworthiness Limitations Section (ALS) Update 16.

The AMP: The Aircraft Maintenance Programme (AMP) contains the tasks on the basis of which the scheduled maintenance is conducted to ensure the continuing airworthiness of each operated engine. For an engine installed on a helicopter operated under EU regulations, the operator or the owner ensures compliance with the AMP as stipulated in Commission Regulation (EU) [1321/2014](#).



New and/or more restrictive tasks and limitations: This includes all tasks and limitations that are new and all tasks and limitations for which a threshold or interval was reduced, which were introduced into the ALS (as defined in this AD) since the previous ALS revision that is currently incorporated in the AMP.

Reason:

The airworthiness limitations and certification maintenance requirements for Makila 2A1 engines, which are approved by EASA, are currently defined and published in the SAFRAN Makila 2A1 MM ALS. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Since the original issue of the ALS, life limits and maintenance tasks for newly designed parts have been introduced in the ALS, as defined in this AD.

Previously, EASA issued EASA AD 2014-0059R1 to require, for pre-mod TU59 Makila 2A and 2A1 engines, repetitive inspections of the high pressure (HP) fuel pump/metering valve and the module M01 drive gear.

Since that AD was issued, SAFRAN published the ALS, including the repetitive inspections addressed by EASA AD 2014-0059R1.

For the reasons described above, this AD takes over the requirements of EASA AD 2014-0059R1 for Makila 2A1 engines, and requires accomplishment of the actions specified in the ALS.

In addition, EASA AD 2022-0223 has been issued for Makila 2A engines, taking over the requirements of EASA AD 2014-0059R1, which, consequently, became obsolete and is cancelled.

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

Required as indicated, unless accomplished previously:

Maintenance Tasks and Replacement of Life Limited Parts:

- (1) From the effective date of this AD, accomplish the following actions, as specified in the ALS, as applicable, depending on engine configuration:
 - (1.1) Remove each component before exceeding the applicable life limit; and
 - (1.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks.

Corrective Action(s):

- (2) In case of finding discrepancies (as defined in the ALS) during accomplishment of any task as required by paragraph (1) of this AD, within the compliance time specified in the ALS, accomplish the applicable corrective action(s) in accordance with the applicable SAFRAN maintenance documentation. If no compliance time is identified in the ALS, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified in the ALS, before next flight, contact SAFRAN for approved instructions and accomplish those instructions accordingly.



AMP Revision:

- (3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations, tasks and associated thresholds and intervals described in the ALS, as applicable, depending on engine configuration.

Credit:

- (4) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks and life limitations as specified in a previous ALS revision, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for a helicopter to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable, depending on engine configuration, within the compliance times as specified in the ALS to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable, depending on engine configuration, into the AMP to comply with paragraph (3) of this AD.

Recording AD Compliance:

- (5) When the AMP of a helicopter has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for the engine(s) installed on that helicopter. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Ref. Publications:

SAFRAN Makila 2A1 reference X 298 U3 460 2 MM ALS Update 16 dated 30 August 2022.

The use of later approved revisions of the above-mentioned 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 20 October 2022 as PAD 22-138 for consultation until 17 November 2022. 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. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than



those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact SAFRAN Helicopter Engines at www.tools.safran-helicopter-engines.com.

