



Airworthiness Directive

AD No.: 2022-0005

Issued: 11 January 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, 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

SAFRAN HELICOPTER ENGINES

Type/Model designation(s):

ARRIUS 1 engines

Effective Date: 25 January 2022

TCDS Number(s): EASA.E.080

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:

ARRIUS 1A1 engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aérospatiale) AS355 NP twin-engine helicopters.

Definitions:

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

The ALS: Chapter 05-10 Airworthiness Limitations Section (ALS) of SAFRAN Arrius 1A1 Maintenance Manual, reference X 319 U1 451 2, update no. 17; and Chapter 05-10 ALS of SAFRAN Arrius 1A1 Overhaul Manual, reference X 319 U1 500 2, update no. 21.

The AMP: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated engine. For engines installed on helicopters operated under EU regulation, compliance with the approved AMP is required by Commission Regulation (EU) [1321/2014](#), Part M.A.301, paragraph (c).



New and/or more restrictive tasks: This includes all tasks that are new and all tasks 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/or certification maintenance instructions for the ARRIUS 1A1 engines, which are approved by EASA, are currently defined and published in Chapter 05-10 ALS of the ARRIUS 1A1 Maintenance Manual, reference X 319 U1 451 2, and Overhaul Manual, reference X 319 U1 500 2. These instructions have been identified as mandatory for continued airworthiness.

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

Recently, SAFRAN published the ALS, as defined in this AD, to introduce changes further to the approval of modification M117769 (ALS presentation updated for compatibility with Interactive Electronic Technical Publication (IETP) format).

For the reason described above, this AD requires accomplishment of the actions specified in the ALS.

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) Replace 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 update, 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 Arrius 1A1 Maintenance Manual, reference X 319 U1 451 2, update no. 17, Chapter 05-10 approved on 24 March 2021 (Major Change 10075940).

SAFRAN Arrius 1A1 Overhaul Manual, reference X 319 U1 500 2, update no. 21, Chapter 05-10 approved on 24 March 2021 (Major Change 10075940).

The use of later approved revisions of the above-mentioned 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 01 December 2021 as PAD 21-175 for consultation until 29 December 2021. 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, S.A. at www.tools.safran-helicopter-engines.com.