



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-175

Issued: 01 December 2021

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

SAFRAN HELICOPTER ENGINES

Type/Model designation(s):

ARRIUS 1 engines

Effective Date: [TBD - standard: 14 days after AD issue date]

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. This Proposed AD will be closed for consultation on 29 December 2021.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.



4. For any question concerning the technical content of the requirements in this PAD, please contact: SAFRAN Helicopter Engines, S.A. at www.tools.safran-helicopter-engines.com.

