



## Airworthiness Directive

**AD No.:** 2022-0083

**Issued:** 11 May 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):

ARRIEL 2 engines

**Effective Date:** 25 May 2022

**TCDS Number(s):** EASA.E.001

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2018-0273 dated 13 December 2018.

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

### Manufacturer(s):

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

### Applicability:

ARRIEL 2D, 2E, 2H, 2L2 and 2N engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale) AS 350 B3 (H125) and EC 130 T2 (H130) helicopters; Airbus Helicopters Deutschland GmbH MBB-BK117 D-2 (EC 145 T2 or H145) helicopters; Korea Aerospace Industries LAH and LCH helicopters; and AVIC Aircraft Industry Group AC312E helicopters.

### Definitions:

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

**The applicable ALS:** Chapter 05-10 of SAFRAN ARRIEL 2 Overhaul Manual X292 R1 500 2 update 23; Chapter 05-10 of SAFRAN ARRIEL 2D Maintenance Manual (MM) X292 R1 450 2 update 23; Chapter 05-10 of SAFRAN ARRIEL 2E MM X292 R2 300 2 update 19; Chapter 05-10 of SAFRAN ARRIEL 2H MM



X292 2H 450 2 update 8; Chapter 05-10 of SAFRAN ARRIEL 2L2 MM X292 2L 450 2 update 1; and Chapter 05-10 of SAFRAN ARRIEL 2N MM X292 N2 450 2 update 14, as applicable.

**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 helicopter. For affected ARRIEL 2 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 and limitations:** This includes all tasks and limitations that are new and all tasks for which a threshold or interval was reduced, which were introduced into the applicable ALS since the previous Revision of the applicable ALS that is currently incorporated in the AMP.

**Reason:**

The airworthiness limitations and maintenance tasks for the SAFRAN ARRIEL 2D, 2E, 2H, 2L2 and 2N engines, which are approved by EASA, are currently defined and published in the applicable SAFRAN ARRIEL 2 MM. These instructions have been identified as mandatory for continued airworthiness.

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

Previously, EASA issued AD 2018-0273, requiring the actions described in the Chapter 05-10 of SAFRAN ARRIEL 2D MM X292 R1 450 2 and Chapter 05-10 of Overhaul Manual X 292 R1 500 2, both issue 16, Chapter 05-10 of ARRIEL 2E MM X292 R2 300 2 issue 12, and Chapter 05-10 of ARRIEL 2N MM X292 N2 450 2 issue 7, as applicable.

Since that AD was issued, SAFRAN published the applicable ALS, as defined in this AD, introducing new and/or more restrictive tasks and limitations.

For the reason described above, this AD retains the requirements of EASA AD 2018-0273, which is superseded, and requires accomplishment of the actions specified in the applicable 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 applicable ALS, as applicable to 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 applicable ALS) during accomplishment of any task as required by paragraph (1) of this AD, within the compliance time specified in the applicable ALS, accomplish the applicable corrective action(s) in accordance with SAFRAN



approved 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 applicable 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 applicable ALS, as applicable to 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 revision of the applicable ALS, 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 applicable ALS, as applicable to engine configuration, within the compliance times as specified in the applicable 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 applicable ALS, as applicable to engine model and 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 that engine. 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 actions is recorded for demonstration of AD compliance on a continued basis.

**Ref. Publications:**

SAFRAN ARRIEL 2 Chapter 05-10 Overhaul Manual X292 R1 500 2 update 23 dated 30 December 2021.

SAFRAN ARRIEL 2D Chapter 05-10 MM X292 R1 450 2 update 23 dated 30 December 2021.

SAFRAN ARRIEL 2E Chapter 05-10 MM X292 R2 300 2 update 19 dated 30 December 2021.

SAFRAN ARRIEL 2H Chapter 05-10 MM X292 2H 450 2 update 8 dated 30 December 2021.

SAFRAN ARRIEL 2L2 Chapter 05-10 MM X292 2L 450 2 update 1 dated 30 December 2021.

SAFRAN ARRIEL 2N Chapter 05-10 MM X292 N2 450 2 update 14 dated 30 December 2021.



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 published on 07 April 2022 as PAD 22-042 for consultation until 05 May 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](mailto: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 your nearest SAFRAN Helicopter Engines technical representative, or connect to [www.tools.safran-helicopter-engines.com](http://www.tools.safran-helicopter-engines.com).

