

# Airworthiness Directive Cancellation Notice AD No.: 2024-0207R1-CN Issued: 10 March 2025

Note: This Airworthiness Directive (AD) Cancellation Notice (CN) 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.

# **Design Approval Holder's Name:** SAFRAN HELICOPTER ENGINES

Type/Model designation(s): ARRIEL 1 engines

Effective Date: 10 March 2025

TCDS Number(s): EASA.E.073

- Foreign AD: Not applicable
- Cancellation: This Notice cancels EASA AD 2024-0207R1 dated 11 December 2024, including its Correction dated 12 December 2024.

## ATA 72 – CANCELLED: Engine – Gas Generator First Stage High Pressure Turbine Blades – Replacement

## Manufacturer(s):

SAFRAN Helicopter Engines (SAFRAN), formerly Turboméca

## Applicability:

ARRIEL 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K, 1K1, 1S and 1S1 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, Sud Aviation) AS 350 B, BA, BB, B1 and B2, AS 365 and SA 365 (all models, except AS 365 N3) helicopters; Airbus Helicopters Deutschland (formerly Eurocopter Deutschland, Messerschmitt-Bölkow-Blohm) MBB-BK117 C1 and MBB-BK117 C2, Leonardo (formerly AgustaWestland, Agusta) A109K2, and Sikorsky S-76A helicopters.

## **Definitions:**

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

The MSB: SAFRAN Mandatory Service Bulletin (MSB) 292 72 0867.

**Affected part:** First stage high pressure turbine (HPT1) blade having Part Number (P/N) 2 292 25 A1Z 0, and an s/n as listed in Appendix 1 of the MSB.



**Serviceable part:** An HPT1 blade, eligible for installation in accordance with SAFRAN instructions, that is not an affected part; or an affected part that has not exceeded 7 500 N1 engine cycles (EC) (defined as "C1" in the relevant SAFRAN Maintenance Manual) since first installation.

#### Reason:

An investigation revealed that a change in the casting manufacturing process of the affected part had an effect on the porosity rate in the root of those parts.

A non-compliant porosity rate can have an effect on the mechanical strength of the HPT1 blade, causing its premature rupture.

This condition, if not corrected, could lead to an uncommanded in-flight shutdown of the engine which may result in a significant reduction of the control of a helicopter.

To address this potential unsafe condition, SAFRAN issued the MSB, providing instructions for implementation of the reduced life limit of the affected parts and for the replacement of affected parts before exceeding the reduced use limit. Consequently, EASA issued AD 2024-0207 to require the replacement of the affected parts with serviceable parts and to provide condition for installation of affected parts.

After that AD was issued, it has been determined that the reduced use limit of the affected part can be increased from 6 000 EC to 7 500 EC, and SAFRAN issued the MSB 292 72 0867 version B, addressing this development. Subsequently, EASA AD 2024-0207 was revised accordingly.

Since EASA AD 2024-0207R1 was issued, further investigation and tests demonstrated that the non-compliant rate of porosity has no impact on the use limit of the affected parts, and the subsequent risk re-assessment has determined that the safety issue addressed by EASA AD 2024-0207R1 does not qualify as an unsafe condition.

For the reason described above, EASA AD 2024-0207R1 is no longer necessary and can be cancelled.

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

None.

## **Ref. Publications:**

SAFRAN SB 292 72 0867 version A dated 11 October 2024, or version B dated 05 December 2024.

#### **Remarks:**

- 1. Enquiries regarding this AD-CN should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 2. For any question concerning the technical content of this AD-CN, please contact your nearest SAFRAN Helicopter Engines technical representative, or connect to <u>www.tools.safran-helicopter-engines.com</u>.

