

Airworthiness Directive Cancellation Notice

AD No.: 2024-0218R1-CN

Issued: 17 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: T

Type/Model designation(s):

SAFRAN HELICOPTER ENGINES ARRIUS 2F and 2R engines

Effective Date: 17 March 2025

TCDS Number(s): EASA.E.031

Foreign AD: Not applicable

Cancellation: This Notice cancels EASA AD 2024-0218R1 dated 19 December 2024.

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

Manufacturer(s):

SAFRAN Helicopter Engines (SAFRAN), formerly Turboméca

Applicability:

ARRIUS 2F and ARRIUS 2R engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France) EC 120 B helicopters, and Bell Textron Canada Ltd 505 helicopters.

Definitions:

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

The MSB: SAFRAN Mandatory Service Bulletin (MSB) 319 72 4853.

Affected part: High pressure (HP) turbine blade having Part Number (P/N) 2 319 40 A5X 0 (ARRIUS 2F) or P/N 2 319 40 A64 0 (ARRIUS 2R), and an s/n as listed in Appendix 1 of the MSB.

Serviceable part: A HP turbine blade, eligible for installation in accordance with SAFRAN instructions, that is not an affected part; or an affected part that has not exceeded 4 500 engine cycles (EC) for P/N 2 319 40 A5X 0 (ARRIUS 2F engines) or 9 000 EC for P/N 2 319 40 A64 0 (ARRIUS 2R engines) 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-conformant porosity rate can have an effect on the mechanical strength of the HP turbine blade, causing its premature rupture.

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

To address this potential unsafe condition, SAFRAN issued the MSB version B, providing instructions for implementation of the reduced use limit of the affected parts and for the replacement of affected parts before exceeding the reduced use limit. Consequently, EASA issued AD 2024-0218 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 parts can be increased. Subsequently, SAFRAN issued MSB version C, increasing the use limits from 2500 EC to 4500 EC (ARRIUS 2F engines) and from 5000 EC to 9000 EC (ARRIUS 2R engines), and EASA AD 2024-0218 was revised accordingly.

Since EASA AD 2024-0218R1 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 2024-0218R1 does not qualify as an unsafe condition.

For the reason described above, EASA AD 2024-0218R1 is no longer necessary and can be cancelled.

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

None.

Ref. Publications:

SAFRAN SB 319 72 4853 version B dated 10 October 2024, or version C dated 12 December 2024.

Remarks:

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