EASA AD No.: 2020-0151-E



# **Emergency Airworthiness Directive**

AD No.: 2020-0151-E

**Issued: 09 July 2020** 

Note: This Emergency 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: Type/Model designation(s):

SAFRAN HELICOPTER ENGINES ARRIEL 1 engines

Effective Date: 10 July 2020 TCDS Number(s): EASA.E.073

Foreign AD: Not applicable

Supersedure: None

## ATA 72 – Engine – Module 03 / Stage 2 High Pressure Turbine Disc – Replacement

### Manufacturer(s):

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

#### **Applicability:**

ARRIEL 1B, 1C, 1C2 and 1D1 engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale) AS 350 B, BA, BB, B1 and B2, AS 365 and SA 365 (all models, except AS 365 N3) helicopters.

#### **Definitions:**

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

**Affected part:** Stage 2 High Pressure (HP) turbine discs, having Part Number (P/N) 0292250400 and s/n J915AD, J918AD, J919AD, J921AD, J923AD, J924AD, J926AD or J927AD. Affected parts are installed on engines which have SAFRAN modification (mod) TU347 embodied, but do not have mod TU365 embodied.

Serviceable part: A Stage 2 HP turbine disc which is not an affected part, as defined in this AD.

The MSB: Safran Helicopter Engines Mandatory Service Bulletin (MSB) 292 72 0860.



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**Groups:** Group 1 engines are those that have an affected part installed. Group 2 engines are those that do not have an affected part installed.

#### **Reason:**

Positive segregation (freckles) was detected on Stage 2 HP turbine discs manufactured from a certain block of material. Other parts manufactured from that same block of material may also be affected by this non-conformity.

This condition, if not corrected, could lead to HP turbine disc failure and result in high-energy debris release, with consequent damage to, and reduced control of, the helicopter.

To address this unsafe condition, SAFRAN issued the MSB, as defined in this AD, to identify affected HP turbine discs and provide instructions for replacement.

For the reason described above, this AD requires replacement of affected parts with serviceable parts, and prohibits re-installation of affected parts.

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

Required as indicated, unless accomplished previously:

#### Replacement:

(1) For Group 1 engines: Within 25 flight hours after the effective date of this AD, replace each affected part with a serviceable part in accordance with the instructions of the MSB.

#### Parts Installation:

(2) For Group 1 and Group 2 engines: From the effective date of this AD, do not install an affected part on any engine.

#### **Ref. Publications:**

SAFRAN MSB 292 72 0860 original issue dated 08 July 2020.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

#### **Remarks:**

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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 <u>EU aviation safety</u>



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<u>reporting system</u>. 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: <a href="https://www.tools.safran-helicopter-engines.com">www.tools.safran-helicopter-engines.com</a>.