

# **Emergency Airworthiness Directive**

AD No.: 2024-0202-E

Issued: 22 October 2024

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, or Annex Vb Part M.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 M.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:**

Type/Model designation(s):

SAFRAN HELICOPTER ENGINES

**ARRIUS 2F engines** 

Effective Date: 24 October 2024

TCDS Number(s): EASA.E.031

Foreign AD: Not applicable

Supersedure: None

## ATA 73 - Engine Fuel & Control - Fuel Control Unit - Replacement

### Manufacturer(s):

SAFRAN Helicopter Engines (SAFRAN), formerly Turboméca

#### **Applicability:**

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

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France) EC120 B single-engine helicopters.

### **Definitions:**

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

The MSB: SAFRAN Mandatory Service Bulletin (MSB) 319 73 4854 version A.

**Affected part:** Fuel control unit (FCU) having Part Number (P/N) 0 319 87 010 0, and an s/n as listed in Appendix 1 of this AD, except those which have been inspected and repaired, as applicable, in accordance with the instructions of the MSB.

**Serviceable part:** An FCU, eligible for installation in accordance with SAFRAN instructions, that is not an affected part.



**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:**

An occurrence was reported of an uncommanded in-flight shut-down (IFSD) of an ARRIUS 2F engine, followed by a hard landing. The following investigation revealed that this engine IFSD was due to a missing lubricating and balancing groove on one of the bearings of the FCU fuel pump, due to a non-conforming manufacturing process. The subsequent quality analysis identified a population of FCUs possibly concerned by this incorrect manufacturing process

This condition, if not corrected, could result in a significant reduction of the control of a single engine helicopter.

To address this potential unsafe condition, SAFRAN issued the MSB, providing instructions for the removal of affected parts and their return to a SAFRAN Repair Centre for inspection and compliance restoration.

For the reasons described above, this AD requires the replacement of the affected parts with serviceable parts, and prohibits (re)installation of affected parts.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

#### Replacement:

(1) For Group 1 engines: Within 15 flight hours or 30 days, whichever occurs first after the effective date fo this AD, replace the affected part with a serviceable part in accordance with the instructions of the MSB.

### Part(s) Installation:

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

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

SAFRAN MSB 319 73 4854 version A dated 21 October 2024.

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 Safety Information Section, Certification Directorate. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.

- 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 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 your nearest SAFRAN Helicopter Engines technical representative, or connect to <a href="https://www.tools.safran-helicopter-engines.com">www.tools.safran-helicopter-engines.com</a>.

# Appendix 1 - Affected Parts

FCU serial numbers
36072
36077
36078
36083
47014
47021
47064
47065
47067
47068
47070
47075
47079
47092
47093
244M
469M