Airworthiness Directive

AD No.: 2016-0138R1

Issued: 28 July 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:	Type/Model designation(s):
SAFRAN HELICOPTER ENGINES	ARRIUS 2F engines

Effective Date:	28 July 2016 (same as original issue)
TCDS Number(s):	EASA.E.031
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2016-0138, dated 14 July 2016, which superseded EASA AD 2012-0150 dated 08 August 2012.

SUPERSEDED

ATA 73 – Engine Fuel & Control – Privilege Injector – Replacement

Manufacturer(s):
Safran Helicopter Engines (formerly Turboméca S.A.)

Applicability:
ARRIUS 2F engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France) EC 120 B single-engine helicopters.

Reason:
During inspections carried out at the repair workshop on variants similar to ARRIUS 2F, it was found that some main fuel injectors were totally or partially blocked. Blockage of the injectors may lead to engine flame out during rapid engine deceleration.

This condition, if not corrected, could lead to an uncommanded engine in-flight shut down, possibly resulting in an emergency landing, with consequent damage to the helicopter and injury to occupants.

To initially address this unsafe condition, DGAC France issued AD 1999-233 (A) to require periodical cleaning of the fuel manifold and, depending on cleaning results, its replacement. After that AD was issued, further investigations demonstrated that a periodic flow rate check (water technology) and the cleaning specified in Turbomeca Mandatory Service Bulletin (MSB) N° A319 73 4001 did not meet the expected results (wrong indication and non-sufficient cleaning), and, replacement of the privilege injector pipe only ensures the airworthiness of the engine.

Consequently, EASA issued AD 2012-0150 to require replacement of the privilege injector pipe before exceeding a defined limit of operating hours as specified in Turbomeca MSB N° A319 73 4001 issue K.

Since EASA AD 2012-0150 was issued, Turbomeca transferred the replacement instructions of Turbomeca MSB N° A319 73 4001 into the applicable Airworthiness Limitation Sections (ALS) of the applicable Maintenance Manuals (MM).

Consequently, EASA issued AD 2016-0138, retaining the requirements of EASA AD 2012-0150, which was superseded, and requiring repetitive replacement of the affected privilege injector pipes.

Since that AD was issued, it was discovered that the definition of serviceable privilege injector pipe was incomplete.

For the reasons described above, this AD is revised to modify the definition of serviceable privilege injector pipe, and to update the Design Approval Holder's name, which has recently changed.

Required Action(s) and Compliance Time(s):
Required as indicated, unless accomplished previously:

(1) From the effective date of this AD, before exceeding 400 operating hours (hours accumulated since first installation on an engine), replace each privilege injector pipe, Part Number (P/N) 0 319 73 835 0 and P/N 0 319 73 044 0, with a serviceable part. Replacement of a privilege injector pipe on an engine can be accomplished in accordance with the instructions of Turbomeca ARRIUS 2F Maintenance Manual (MM) No. X 319 L6 301 2, task 73-15-00-900-801.

Note: For the purpose of this AD, a serviceable privilege injector pipe is one that has not exceeded 400 operating hours since first installation on an engine, or since last cleaning by pyrolysis in accordance with ARRIUS 2F Component MM X-73-15-01-2.

(2) From the effective date of this AD, it is allowed to install a privilege injector pipe on an engine, or an engine on a helicopter, provided it is determined that the replacement privilege injector pipe is a serviceable part, as defined in Note 1 of this AD.

Ref. Publications:
Section ALS of Safran Helicopter Engines ARRIUS 2F MM X 319 L6 301 2, dated 13 January 2015.

The use of later approved revisions of this document 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. The original issue of this AD was posted on 08 June 2016 as PAD 16-085 for consultation until 06 July 2016. 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.

4. For any question concerning the technical content of the requirements in this AD, please contact your local Safran Helicopter Engines Support centre, or Safran Helicopter Engines, Support and Services Division, Commercial Department 40220 Tarnos, France, Fax: +33 5 59 74 45 11.