



Airworthiness Directive

AD No.: 2019-0209

Issued: 23 August 2019

Note: This 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:

SAFRAN HELICOPTER ENGINES

Type/Model designation(s):

MAKILA 1 engines

Effective Date: 01 September 2019

TCDS Number(s): EASA.E.072

Foreign AD: Not applicable

Supersedure: None

ATA 71 – Power Plant – Control and Monitoring Harness – Identification / Replacement

Manufacturer(s):

SAFRAN Helicopter Engines (SAFRAN), formerly Turboméca

Applicability:

MAKILA 1A and MAKILA 1A1 turboshaft engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale) AS 332 C, C1, L and L1 helicopters.

Definitions:

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

Affected part: Control and monitoring harnesses, as identified by serial number (s/n) in Appendix 1 of this AD. Appendix 1 also identifies the engines on which the affected parts were known to be installed.

Serviceable part: Any control and monitoring harness that is not an affected part.

The SB: SAFRAN Mandatory Service Bulletin (SB) A298 71 0827 version A.



Groups: Group 1 helicopters are twin engines helicopters having both engines equipped with an affected part. Group 2 helicopters are twin engines helicopters having only one engine equipped with an affected part.

Reason:

An occurrence was reported of in-flight activation of the "85%NG" backup law. Following investigation, a control and monitoring harness was identified to be incorrectly stripped and crimped, which was determined to have been the cause of the event. A batch of affected parts was identified. If two engines on a helicopter are fitted with non-compliant harnesses, the untimely switching into the back up mode "85% NG" could occur on both engines during the same flight.

This condition, if not corrected, could lead to a significant power loss, possibly resulting in reduced control of the helicopter.

To address this unsafe condition, SAFRAN issued the SB to provide instructions to identify and replace the potentially non-conforming harnesses.

For the reasons described above, this AD requires replacement of each affected part in service. This AD also prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Corrective Action(s):

- (1) For Group 1 helicopters:
 - (1.1) Within 10 flight hours or 30 days, whichever occurs first after the effective date of this AD, replace one of the two affected parts with a serviceable part, as defined in this AD, in accordance with the instructions of section 2 of the SB.
 - (1.2) Within 4 months after the effective date of this AD, replace the remaining affected part with a serviceable part, as defined in this AD, in accordance with the instructions of section 2 of the SB.
- (2) For Group 2 helicopters: Within 4 months after the effective date of this AD, replace the affected part with a serviceable part, as defined in this AD, in accordance with the instructions of section 2 of the SB.

Parts installation:

- (3) For all engines: From the effective date of this AD, do not install an affected part on any engine.

Engine Installation:

- (4) From the effective date of this AD, it is allowed to install an engine on any helicopter, provided that, prior to installation, it is determined that no affected part is installed on that engine.



Ref. Publications:

SAFRAN Mandatory SB A298 71 0827 version A dated 25 July 2019.

The use of later approved revisions of the above-mentioned 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
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 [EU aviation safety reporting system](#).
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 www.tools.safran-helicopter-engines.com.



Appendix 1 – List of affected Control and Monitoring Harnesses serial numbers (s/n)

Control and Monitoring Harness s/n	Engine	Engine s/n
140EL	MAKILA 1 A1	9174
142EL	MAKILA 1 A1	9175
143EL	MAKILA 1 A1	2696
144EL	MAKILA 1 A1	2325
165EL	MAKILA 1 A1	9191
166EL	MAKILA 1 A1	9192
167EL	MAKILA 1 A1	2893
168EL	MAKILA 1 A1	9190
169EL	MAKILA 1 A1	9156
174EL	MAKILA 1 A1	9195
176EL	MAKILA 1 A1	9200
177EL	MAKILA 1 A1	9198
178EL	MAKILA 1 A1	9202
179EL	MAKILA 1 A1	9199
185EL	MAKILA 1 A1	9206
186EL	MAKILA 1A1	2253
187EL	MAKILA 1A1	2304
188EL	MAKILA 1A1	2048
189EL	MAKILA 1A1	1585
210EL	MAKILA 1A1	9217
211EL	MAKILA 1A1	1224
212EL	MAKILA 1A1	9218
213EL	MAKILA 1A1	2260
214EL	MAKILA 1A1	2248
215EL	MAKILA 1A1	130
216EL	MAKILA 1A1	2276
217EL	MAKILA 1A1	2257
218EL	MAKILA 1A	215
219EL	MAKILA 1A1	9219
220EL	MAKILA 1A1	9223
221EL	MAKILA 1A1	9221
222EL	MAKILA 1 A1	9220
223EL	MAKILA 1 A1	2322
224EL	MAKILA 1 A1	9222

