Airworthiness Directive

AD No.: 2020-0049

Issued: 09 March 2020

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:
AIRBUS HELICOPTERS

Type/Model designation(s):
EC 175 B helicopters

Effective Date: 23 March 2020
TCDS Number(s): EASA.R.150
Foreign AD: Not applicable
Supersedure: None

ATA 28 – Fuel System – Fuel Tank – Inspection/Replacement

Manufacturer(s):
Airbus Helicopters (AH)

Applicability:
EC 175 B helicopters all serial numbers.

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

The ASB: AH Alert Service Bulletin (ASB) EC175-28A006.

Test: Test A is a feeder tank test accomplished in accordance with the instructions of paragraph 3.B.1.a of the ASB; Test B is a feeder tank test accomplished in accordance with the instructions of paragraph 3.B.1.b of the ASB.

Affected tank: Feeder tank 2 Part Number (P/N) 509505-5 and feeder tank 3 P/N 50506-5, except those that, following last installation on a helicopter, passed (no defects found) Test A or Test B, as defined in this AD.

Serviceable tank: Any feeder tank which is not an affected tank; or an affected tank that, before next flight after installation, passed (no defected found) Test B, as defined in this AD.

Affected fuel booster pump: Fuel booster pump of an affected tank**.**

Groups: Group 1 helicopters are those that have an affected tank installed. Group 2 helicopters are those that do not have an affected tank installed.

Reason:

An occurrence has been reported of an EC 175 B helicopter experiencing an uncommanded engine shut down on ground, with both fuel booster pumps OFF. Investigation results determined that this event was caused by a defective feeder tank connection, allowing air ingestion into the fuel line when the booster pumps are OFF.

This condition, if not detected and corrected, could lead to an in-flight engine shut down in case of booster pumps failure, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, AH published the ASB, providing instructions for inspection of the fuel feeder tanks.

For the reason stated above, this AD requires a one-time inspection (test) of the affected tanks and, depending on findings, replacement.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) For Group 1 helicopters: Within 110 flight hours (FH) after the effective date this AD, accomplish either Test A or Test B for each affected tank in accordance with the instructions of the ASB.

Corrective Action(s):

(2) If, during the test as required by paragraph (1) of this AD, it is determined that a single affected tank is installed on a helicopter, within 880 FH or 12 months, whichever occurs first after the effective date of this AD, replace that affected tank with a serviceable tank, as defined in this AD, in accordance with the instructions of the ASB.

(3) For a Group 1 helicopter, equipped with a single affected tank, passing Test B for that affected tank is acceptable to comply with the requirement of paragraph (2) of this AD.

(4) If, during the test as required by paragraph (1) of this AD, it is determined that two affected tanks are installed on a helicopter, before next flight, replace those affected tanks with serviceable tanks, as defined in this AD, in accordance with the instructions of the ASB.

Operational Limitation:

(5) For Group 1 helicopters: From the effective date of this AD, do not operate a helicopter having an affected fuel booster pump inoperative – notwithstanding the allowance of the MMEL task 28-22-01 “Fuel booster pump”, on the basis of which the operator MEL is made.

(6) For Group 1 helicopters: After replacement of affected tank(s) with serviceable tank(s) on a helicopter, or after having passed Test A or Test B for affected tank(s), as applicable, that helicopter is effectively a Group 2, for which the operational limitation of paragraph (5) of this AD is not applicable.

Parts Installation:

(7) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter a feeder tank, provided it is a serviceable tank, as defined in this AD.

Ref. Publications:

AH ASB EC175-28A006 original issue dated 17 February 2020.

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: Airbus Helicopters (Technical Support) at:,
Web portal: https://keycopter.airbushelicopters.com Technical Requests Management, or
E-mail: support.technical-dyncomp.ah@airbus.com.