

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-071

Issued: 24 June 2024

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS HELICOPTERS

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

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: None

ATA 28 – Fuel – Fuel Tanks – Mounting Plates of Fuel Tank Bleed Valves – Inspection / Repair / Replacement / Modification

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) EC175-28-00-0001 Issue 002, including the attached SAFRAN AEROSYSTEMS SB 510571-28-001 Issue 1, which provides details for accomplishment of the required actions.

Affected fuel tank(s): Flexible fuel tanks having Part Number (P/N) 509505-5 (feeder tank 2), P/N 509506-5 (feeder tank 3), P/N 509507-4 (additional tank 1) or P/N 509510-5 (optional tank 6).

Affected part: Bleed valve mounting plates (supports) of affected fuel tanks.



Groups:

Group 1 helicopters are those which, on the effective date of this AD:

- have flown 1 650 flight hours (FH) or less since either, new (date of delivery of the helicopter to its first customer, or date of the first installation of any (installed) affected fuel tank(s) on a helicopter, whichever occurred first) or since the last detailed inspection of the fuel system under tanks accomplished in accordance with AH EC 175 master servicing manual (MSM) task 28/12/00/000/000/000, whichever occurred later; and
- the time since either, new (the date of delivery of the helicopter to its first customer, or the date of the first installation of any (installed) affected fuel tank(s) on a helicopter, which ever occurred first) or since last detailed inspection of each affected fuel tank, whichever occurred later, is not more than 15 months.

Group 2 helicopters are those which are not Group 1.

Reason:

Occurrence were reported on three EC 175 B helicopters where, during maintenance inspections, heavily corroded mounting plates (supports) of the fuel tank bleed valves were found on various installed flexible fuel tanks, long before reaching the threshold as defined in the ALS. Such corrosion could lead to loss of the locking wire of such a bleed valve, causing the valve to unscrew, possibly resulting in in-flight fuel leakage, and decrease of the structural strength of the affected support.

This condition, if not detected and corrected, will increase the chance of a post-crash leakage and fire following an otherwise survivable accident.

To address this potential unsafe condition, AH published the ASB, as defined in this AD, providing instructions to inspect the affected parts of each affected fuel tank, as defined in this AD, for corrosion and, depending on findings, accomplishment of applicable corrective action(s), and to modify each affected part to prevent future corrosion.

For the reason described above, this AD requires inspection and modification of all affected parts and, depending on findings, prior accomplishment of applicable corrective action(s) before embodiment of the modification.

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:

Inspection:

(1) Within the compliance time specified in Table 1 of this AD, as applicable, inspect each affected part in accordance with the instructions of the ASB.



Table 1 – Inspection Threshold

	Compliance Time
Group 1	Within 18 months or before exceeding 1 760 FH, whichever occurs first, since either, new (date of delivery of the helicopter to its first customer, or date of the first installation of the affected fuel tank, whichever occurred first) or since the last detailed inspection of the under tanks of the fuel system in accordance with AH EC 175 MSM task 28/12/00/000/000/000, whichever occurred later.
Group 2	Within 3 months or before exceeding 110 FH, whichever occurs first after the effective date of this AD, but without exceeding 40 months or 3 500 FH since either, new (date of delivery of the helicopter to its first customer, or date of first installation of the affected fuel tank, whichever occurred first) or since the last detailed inspection of the under tanks of the fuel system in accordance with AH EC 175 MSM task 28/12/00/000/000/000, whichever occurred later.

Corrective Action:

(2) If, during the inspection as required by paragraph (1) of this AD, any deficiency is found as specified in the ASB, within the compliance time specified in Table 2 of this AD, accomplish the applicable corrective action(s) as defined in Table 2 of this AD.

Found Corrosion	Corrective Action and Compliance Time (depending on the nature and severity of the corrosion found)
Tightness area is impacted and/or corrosion is detected under the elastomer of the part	Before next flight, replace the affected fuel tank with a serviceable flexible fuel tank in accordance with the instructions of the ASB
Tightness area is not impacted, but visible corrosion is detected, which is not under the elastomer of the part, with a depth of 1.5 mm or less	Before next flight, repair the detected corrosion in accordance with the instructions of the ASB
Tightness area is not impacted, but visible corrosion is detected, which is not under the elastomer of the part and with a depth of more than 1.5 mm	Before next flight, repair the detected corrosion in accordance with the instructions of the ASB and, within 2 months after the repair, replace the affected fuel tank with a serviceable flexible fuel tank, eligible for installation, in accordance with the instructions of the ASB

Table 2 – Corrective Actions and Compliance Times



Modification:

(3) Before next flight after accomplishment of the inspection and corrective actions as required by paragraphs (1) and (2) of this AD, as applicable, modify the affected part(s) in accordance with the instructions of the ASB.

Parts Installation:

(4) From the effective date of this AD, it is allowed to (re)install any affected fuel tank, on a helicopter, provided that, before (re)installation, the affected part of that fuel tank passed the inspection (no discrepancies are found, or applicable corrective actions are accomplished) as required by the paragraphs (1) and (2) of this AD, as applicable, and, thereafter, before next flight, it is modified as required by paragraph (3) of this AD.

Ref. Publications:

AH ASB EC175-28-00-0001 Issue 002 dated 15 May 2024.

SAFRAN AEROSYSTEMS SB 510571-28-001 Issue 1 dated 24 April 2024.

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

Remarks:

- 1. This Proposed AD will be closed for consultation on 22 July 2024.
- 2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.
- For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters (Technical Support) at: Web portal: <u>https://airbusworld.helicopters.airbus.com</u> / Technical Requests Management, or E-mail: <u>TechnicalSupport.Helicopters@airbus.com</u>, or Telephone: +33 (0)4 42 859 789.