European Union Aviation Safety Agency

Airworthiness Directive

AD No.: 2024-0045

Issued: 16 February 2024

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, or Annex Vb Part ML.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 ML.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:

AIRBUS HELICOPTERS

Type/Model designation(s):

AS 332 and EC 225 helicopters

Effective Date: 01 March 2024

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0095 dated 08 May 2023.

ATA 28 – Fuel – Fuel Filter – Inspection

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aérospatiale

Applicability:

AS 332 C, AS 332 C1, AS 332 L, AS 332 L1. AS 332 L2 and EC 225 LP helicopters, all serial numbers, delivered before 15 February 2024.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) AS332-28.00.88 Revision 1 and ASB EC225-28A030 Revision 1, as applicable.

Affected part: Fuel filter Manufacturer Part Number (MP/N) 4020P25-5 (AH P/N 704A44620049).

Serviceable part: An affected part that is new (never installed) or that, before installation, has passed an inspection (no defect found) in accordance with the instructions of the ASB.

Reason:

An occurrence was reported of finding external cracks on the right-hand (RH) side fuel filter bowl, following an engine flame out. Subsequent investigation determined that the cracking may have been initiated by over-torquing of the stirrup thumbscrew during replacement of the fuel filter cartridge.

This condition, if not detected and corrected, could lead to further cases of fuel filter bowl cracking and, in case of dual (both RH and left-hand (LH) sides) filter bowl failure, possibly resulting in in-flight shutdown of both engines with consequent reduced control of the helicopter.

To address this potential unsafe condition, AH issued original issue of AS332-28.00.88 and ASB EC225-28A030, to provide instructions for inspection of the external surface of the affected part. Consequently, EASA issued AD 2023-0095 requiring a one-time inspection of each affected part and, depending on findings, replacement with a serviceable part, as defined in that AD.

Since that AD was issued, new cases of fuel filter bowl cracks were reported on helicopters inspected in accordance with EASA AD 2023-0095. Following investigation of the new cracks, AH published Revision 1 of the ASB, to expand the scope of the inspection of the affected part to its inner surface.

For the reason described above, this AD retains the requirements of EASA AD 2023-0095, which is superseded, expands the requirement of one-time inspection of affected parts, and introduces revised conditions for installation of affected parts.

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

Required as indicated by this AD, unless the actions required by this AD have been already accomplished:

Inspection(s):

(1) Except as specified in paragraph (3) of this AD, within 55 flight hours or 30 days, whichever occurs first after the effective date of this AD, inspect each affected part (RH and LH sides, outer and inner surface) in accordance with the instructions of the ASB.

Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy, as defined in the ASB, is detected on an affected part, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the ASB.

Credit:

(3) The inspection requirement of paragraph (1) of this AD do not apply to an affected part of a helicopter, which has been initially installed on that helicopter as new part (never previously installed) in accordance with the instructions of the ASB at original issue.

Parts Installation:

(4) From the effective date of this AD, it is allowed to install on any helicopter an affected part (RH or LH side), provided it is a serviceable part, as defined in this AD.

Ref. Publications:

AH ASB AS332-28.00.88 Revision 1 dated 15 February 2024.

AH ASB EC225-28A030 Revision 1 dated 15 February 2024.

The use of later approved revisions of the above-mentioned documents 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 Safety 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. 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: Airbus Helicopters (Technical Support), Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Web portal: https://keycopter.airbushelicopters.com > Technical Requests Management, E-mail: TechnicalSupport.Helicopters@airbus.com.