



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 23-125

Issued: 17 November 2023

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):

AS 350, EC 130 and EC 120 helicopters

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

TCDS Number(s): EASA.R.008 and EASA.R.508

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2021-0168 dated 16 July 2021.

ATA 31 – Indicating / Recording Systems – Control Unit – Inspection

Manufacturer(s):

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

Applicability:

EC 130 B4 helicopters, all serial numbers (s/n); and

EC 120 B helicopters, all s/n; and

AS 350 B2 and AS 350 B3 helicopters, all s/n.

Definitions:

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

The protective ASB: AH Alert Service Bulletin (ASB) EC130-05A036, ASB AS350-05.01.00 and ASB EC120-05A023, as applicable.

The corrective ASB: AH ASB EC130-25A158, ASB AS350-25.04.87 and ASB EC120-25A031, as applicable.



Affected part: Control units having a Part Number as listed in section 1.A.1. of the protective ASB.

Serviceable part: An affected part that is new (not previously installed), or that, prior to installation, has passed an inspection (no defects found, or defects corrected) and has been cleaned in accordance with the instructions of the protective ASB.

Groups: Group 1 helicopters are those that have an affected part installed and are fitted with Emergency Floatation System (EFS).

Group 2 helicopters are those that are not Group 1 helicopters.

Reason:

During a flight on an EC 130 B4 helicopter, a strong burnt smell followed by smoke occurred in the cockpit, triggering visual and aural alarms. The investigation determined that the root cause of this event was a short circuit inside the relevant affected part, probably generated by the presence of foreign object damage and/or dust. Failure of an affected part could affect multiple systems including EFS, a system that is intended to minimize the effects of a survivable emergency water landing. Due to the design similarity, this condition can also exist or develop on EC 120 and on certain AS 350 helicopters.

This condition, if not detected and corrected, could lead to loss of multiple systems, including EFS, possibly resulting in reduced control of the helicopter, or failure to activate EFS during an emergency water landing.

To address this potential unsafe condition, AH issued the protective ASB providing inspection and cleaning instructions. Consequently, EASA published AD 2021-0168 to require, for certain helicopters, a one-time inspection and cleaning of the affected parts and, for other helicopters, repetitive inspections and cleaning of the affected parts; and, depending on findings, accomplishment of applicable corrective action(s). That AD also included requirements for (re)installation of affected parts.

Since that AD was published, it was determined that the unsafe condition can only develop, if the helicopter is equipped with EFS. Consequently, AH designed a modification (MOD), consisting of moving the EFS activation button out of SMS block, and published the corrective ASB for in-service embodiment. In addition, the maintenance manual of all helicopters was updated with the scheduled maintenance (cleaning) of the affected part.

For the reasons described above, this AD partially retains the requirements of EASA AD 2021-0168, which is superseded, and requires modification of certain helicopters, and concurrently with that modification, amendment of the Rotorcraft Flight Manual (RFM).

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

Required as indicated, unless accomplished previously:

Cleaning / Inspection:

- (1) For Group 1 helicopters: Within the compliance time as specified in Table 1 of this AD, as applicable, clean and inspect the affected part in accordance with the instructions of sections 3.B.2 and 3.B.3 of the protective ASB.



Table 1 – Inspection (see Note 1 of this AD)

Flight Hours (FH) Accumulated	Compliance Time
900 FH or less	Before exceeding 1 200 FH
More than 900 FH	Within 300 FH or 12 months, whichever occurs first after 30 July 2021 [the effective date of EASA AD 2021-0168]

Note 1: Unless specified otherwise, the FH indicated in Table 1 of this AD are those accumulated by the helicopter on 30 July 2021 [the effective date of EASA AD 2021-0168] since first flight.

Repetitive Inspections:

- (2) Within 1 320 FH after the inspection as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 1 320 FH, clean and inspect the affected part in accordance with the instructions of sections 3.B.2 and 3.B.3 of the protective ASB.

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, discrepancies are detected as identified in the protective ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the protective ASB, or modify that helicopter in accordance with the instructions of the corrective ASB. After the modification, that helicopter is effectively considered to be a Group 2 helicopter.

Modification:

- (4) For Group 1: Within 36 months after the effective date of this AD, modify the helicopter in accordance with the instructions of the corrective ASB.
- (5) Concurrently with modification of a helicopter as specified by paragraph (3) of this AD, or as required by paragraph (4) of this AD, amend the applicable RFM of that helicopter in accordance with the instructions of the corrective ASB, inform all flight crews, and, thereafter, operate the helicopter accordingly.

Terminating Action:

- (6) Modification of a helicopter, as specified by paragraph (3) of this AD, or as required by paragraph (4) of this AD, constitutes terminating action for the repetitive inspection as required by paragraph (2) of this AD for that helicopter.

Part(s) Installation:

- (7) For Group 1 helicopters:
- (7.1) From the effective date of this AD, before modification of a helicopter, as specified in paragraph (3) or as required by paragraph (4), it is allowed to (re-)install on that helicopter an affected part, provided the part is a serviceable part, as defined in this AD.
- (7.2) After modification of a helicopter, as specified in paragraph (3) or as required by paragraph (4) of this AD, re-installation of an EFS is allowed on that helicopter, provided



that helicopter remains modified as specified by paragraph (3) of this AD, or as required by paragraph (4).

- (8) From the effective date of this AD, modification of a Group 2 helicopter into a Group 1 helicopter is allowed, provided that, concurrently with that modification, the helicopter is modified as specified by paragraph (3) of this AD, or as required by paragraph (4) of this AD.

Ref. Publications:

AH ASB EC130-05A036 original issue dated 31 March 2021, or Revision 1 dated 25 October 2023.

AH ASB No. AS350-05.01.00 original issue dated 31 March 2021, or Revision 1 dated 25 October 2023.

AH ASB EC120-05A023 original issue dated 31 March 2021, or Revision 1 dated 25 October 2023.

AH ASB EC130-25A158 original issue dated 25 October 2023.

AH ASB AS350-25.04.87 original issue dated 25 October 2023.

AH ASB EC120-25A031 original issue dated 25 October 2023.

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 15 December 2023.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
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 [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 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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters Customer Support, Telephone +33 (0)4.42.85.97.89, Fax + 33 (0)4.42.85.99.66, E-mail: Airframe.Technical-Support@airbus.com, Technical Request Management: TechnicalSupport.Helicopters@airbus.com.

