

Airworthiness Directive

AD No.: 2021-0168

Issued: 16 July 2021

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):

AS 350, EC 130 and EC 120 helicopters

Effective Date: 30 July 2021

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

Foreign AD: Not applicable

Supersedure: None

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) that have embodied modification (MOD) 073537 in production; and

EC 120 B helicopters, all s/n; and

AS 350 B2 and AS 350 B3 helicopters, all s/n that have embodied MOD 073273 in production, except those that have also embodied MOD 074280 in production.

Definitions:

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

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

Affected part: Control units having a Part Number as listed in section 1.A.1. of the applicable 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 applicable 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 have an affected part installed and are not fitted with EFS.

Group 3 helicopters are those that do not have an affected part installed and are fitted with EFS.

Group 4 helicopters are those that do not have an affected part installed and are not fitted with EFS.

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 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 applicable ASB providing inspection and cleaning instructions.

For the reasons described above, this AD requires, 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). This AD also includes requirements for (re)installation of affected parts.

This AD is considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Cleaning / Inspection:

- (1) For Group 1 and Group 2 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 applicable ASB.



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

Group	Flight Hours (FH) Accumulated	Compliance Time
1	900 FH or less	Before exceeding 1 200 FH
	More than 900 FH	Within 300 FH or 12 months, whichever occurs first after the effective date of this AD
2	600 FH or less	Before exceeding 1 200 FH
	More than 600 FH	Within 600 FH or 24 months, whichever occurs first after the effective date of this AD

Note 1: Unless specified otherwise, the FH indicated in Table 1 of this AD are those accumulated by the helicopter on the effective date of this AD since first flight.

Repetitive Inspections:

- (2) For Group 1 helicopters: 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 applicable ASB.

Additional Requirements:

- (3) For Group 3 and Group 4 helicopters: From the effective date of this AD, it is allowed to embody on any helicopter AH EC 120 Service Bulletin 31-004, provided that, before exceeding 1 200 FH after that embodiment, the affected part is cleaned and inspected in accordance with the instructions of sections 3.B.2 and 3.B.3 of the applicable ASB, and that, thereafter, for modified Group 3 helicopters only, the affected part is cleaned and inspected at intervals not to exceed 1 320 FH in accordance with the instructions of sections 3.B.2 and 3.B.3 of the applicable ASB.

Corrective Action(s):

- (4) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, as applicable, discrepancies are detected as identified in the applicable ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable ASB.

Terminating Action:

- (5) None.

Part(s) Installation:

- (6) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to (re-)install on any helicopter an affected part, provided the part is a serviceable part, as defined in this AD.
- (7) For Group 3 and Group 4 helicopters: From the effective date of this AD, it is allowed to install on any helicopter an affected part (which will move the helicopter into Group 1 or 2, as applicable), provided the part is a serviceable part, as defined in this AD, and that, following installation, it is cleaned and inspected as required by this AD.



Ref. Publications:

AH ASB EC130-05A036 original issue dated 31 March 2021.

AH ASB No. AS350-05.01.00 original issue dated 31 March 2021.

AH ASB EC120-05A023 original issue dated 31 March 2021.

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. This AD was initially posted on 27 April 2021 as PAD 21-058 for consultation until 27 May 2021, and republished on 25 June 2021 as PAD 21-058R1 for additional consultation until 09 July 2021. The Comment Response Documents can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this PAD.
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 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.

