

Airworthiness Directive

AD No.: 2022-0053

Issued: 23 March 2022

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.301, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Type/Model designation(s):

AIRBUS HELICOPTERS

EC 120 and EC 130 helicopters

Effective Date: 06 April 2022

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

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Skid-Type Landing Gear – Inspection

Manufacturer(s):

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

Applicability:

EC 130 T2 and EC 130 B4 helicopters, all serial numbers (s/n); and

EC 120 B helicopters, all s/n.

Definitions:

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

Affected part: An EC 130 B4 and EC 130 T2 landing gear assembly having part number (P/N) 350A41-0077-0201, P/N 350A41-0080-1102, P/N 350A41-0080-1103, P/N 350A41-0081-0201, P/N 350A41-0082-0101 or P/N 350A41-0082-0102, except those having a date of first installation on a helicopter on 16 February 2022 or later; and

An EC 120 B landing gear assembly having P/N C321A2106102, P/N C321A2501101, P/N C321A2501102, P/N C321A2601051AA, P/N C321A2601051CA or P/N C321A2601052, except those having a date of first installation on a helicopter on 16 February 2022 or later.



If the date of its first installation on a helicopter is unknown, a landing gear assembly must be considered as an affected part.

Affected part sub-assembly: Front and rear crossbeam, and left-hand (LH) and right-hand (RH) skid assembly, having a P/N as identified in the ASB, except those having a date of first installation on a helicopter on 16 February 2022 or later.

Serviceable part: An affected part and an affected part sub-assembly, which have passed (no defect found) an inspection in accordance with the instructions of the ASB; or an affected part and an affected part sub-assembly, that, following an inspection in accordance with the instructions of the ASB, have been repaired in accordance with AH approved repair instructions; or a landing gear assembly, front and rear crossbeam, and LH and RH skid assembly which is not an affected part.

The ASB: AH Alert Service Bulletin (ASB) EC130-32A013 and AH ASB EC120-32A014, as applicable.

Non-standard helicopter operation: Helicopter operation as defined in AH Master Servicing Manual chapter 5.6 "Specific and severe atmospheric operating conditions".

Standard helicopter operation: Any helicopter operation which is not a non-standard operation, as defined in this AD.

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

Reason:

An occurrence was reported of corrosion found on an affected part of an EC 130 helicopter.

This condition, if not detected and corrected, could lead to collapse of the landing gear, possibly resulting in damage to the helicopter and/or injury to occupants.

Due to design similarity, the landing gear assemblies of EC 120 B helicopters could also be affected by this potential unsafe condition.

To initially address this potential unsafe condition, AH issued ASB EC130-05A035 providing instructions to inspect a limited batch of helicopters. Following subsequent investigation, AH determined that additional helicopters must be inspected and issued the ASB, as defined in this AD, providing inspection instructions.

For the reasons described above, this AD requires a one-time inspection of the external (visual) and internal (borescope) landing gear tubes for presence of corrosion and/or crack(s), and, depending on findings, accomplishment of applicable corrective action(s).

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

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

Required as indicated, unless accomplished previously:



Inspection:

(1) For Group 1 helicopters: Within the compliance time specified in Table 1 of this AD, as applicable, inspect the external and internal tubes of the affected part in accordance with the instructions of the ASB.

Table 1 – Inspection

Helicopter Operation	Date of First Installation on a Helicopter (see Note 1 of this AD)	Compliance Time [After the effective date of this AD, unless specified otherwise]
Only Standard	15 February 2016, or before	Within 27 months
Non-standard	From 16 February 2016 until 15 February 2022 inclusive	Within 27 months or 7 years since first installation of an affected part on an helicopter, whichever occurs first
Non-standard	15 February 2016, or before	
Unknown	Any	Within 13 months
Any	Unknown	

Note 1: When the affected part sub-assemblies have different dates of first installation on a helicopter, the oldest date of first installation must be used.

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, any crack or leafing/exfoliant corrosion, as defined in the ASB, is found on an affected part, before next flight, contact AH for approved repair instructions, and within the compliance time(s) specified therein, accomplish those instructions accordingly.
- (3) If, during the inspection as required by paragraph (1) of this AD, corrosion, except leafing/exfoliant corrosion, is found on an affected part, before next flight, remove the corrosion from the affected area and measure the residual thickness of the affected part subassemblies in accordance with the instructions of the ASB.
- (4) If, during the measurement as required by paragraph (3) of this AD, the residual thickness of an affected part sub-assembly does not meet the acceptability criteria as specified in Table 3 of the ASB, before next flight, contact AH for approved repair instructions, and within the compliance time(s) specified therein, accomplish those instructions accordingly.
- (5) Replacing an affected part sub-assembly of a helicopter which does not meet the acceptability criteria specified in Table 3 of the ASB, or on which crack(s) or leafing/exfoliant corrosion have been found, with a serviceable part, is an acceptable method to comply with the requirements of paragraphs (2) or (4) of this AD, as applicable, for that helicopter. This can be accomplished in accordance with the instructions of the applicable Aircraft Maintenance Manual.



Credit:

(6) Inspection and corrective action(s), accomplished on EC 130 B4 or EC 130 T2 helicopters before the effective date of this AD in accordance with the instructions of AH ASB EC130-05A035 Revision 01, are acceptable to comply with the requirements of paragraphs (1), (2), (3) and (4) of this AD, as applicable, for that helicopter.

Reporting:

(7) Within 30 days after the inspection as required by paragraph (1) of this AD, or within 30 days after the effective date of this AD, whichever occurs later, report the inspection results to AH. This can be accomplished using the Appendix of the ASB.

Part(s) Installation:

(8) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected part, or an affected part sub-assembly, on any helicopter, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

AH ASB EC130-32A013 original issue dated 15 February 2022.

AH ASB EC120-32A014 original issue dated 15 February 2022.

AH ASB EC130-05A035 Revision 01 dated 10 December 2020.

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 posted on 21 February 2022 as PAD 22-016 for consultation until 21 March 2022. No comments were received during the consultation period.
- 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 <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 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



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