

Airworthiness Directive

AD No.: 2020-0247

Issued: 10 November 2020

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):

EC 120 B helicopters

Effective Date: 17 November 2020

TCDS Number(s): EASA.R.508

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Skid Tubes – Inspection
ATA – Rotorcraft Flight Manual – Section Limitations – Amendment
Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France

Applicability:

EC 120 B helicopters, all serial numbers (s/n).

Definitions:

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

Autorotation landing: Power-off landing with touchdown completed.

Affected part: Left-hand (LH) and right-hand (RH) skid tubes, having Part Number (P/N) C321A2107101 (LH), P/N C321A2108101 (RH), P/N C321A2107102 (LH), P/N C321A2108102 (RH), P/N C321A2502102 (LH), or P/N C321A2503102 (RH), installed on landing gear having P/N C321A2101053, P/N C321A2101054, P/N C321A2501051 or P/N C321A2601053.

Serviceable part: A landing gear skid tube which is not an affected part; or an affected part having accumulated less than 1 450 autorotation landings since its first installation on a helicopter; or an

affected part having accumulated less than 1 450 autorotation landings since last accomplishment of the corrective action(s) as required by paragraph (4) of this AD.

The ASB: AH EC120 Emergency Alert Service Bulletin (ASB) 05A022.

Groups: Group 1 are helicopters having s/n 1482, 1568, 1573, 1596, 1600, 1601, 1605, 1606, 1609, 1610, 1611, 1612, 1613, 1615, 1616, 1617, 1620, 1622, 1623, 1624, 1625, 1626, 1628, 1630, 1631, 1635, 1637, 1638, 1641, 1643, 1645, 1646, 1647, 1648, 1649 or 1650. Group 2 helicopters are all other s/n.

Reason:

Cracks have been reportedly found on landing gear skid of a helicopter with a high number of autorotation landings. Similar cracks have been found on other helicopters, also having accumulated a high number of autorotation landings.

This condition, if not detected and corrected, could lead to failure of the landing gear skid, possibly resulting in rollover of the helicopter after a hard landing and consequent injury to occupants.

To address this potential unsafe condition, AH published the ASB to provide inspection instructions of the affected parts, and to define a temporary weight limitation until these inspections are implemented.

For the reason described above, this AD requires amendment of the applicable Rotorcraft Flight Manual (RFM), repetitive inspections of the affected parts and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

RFM Amendment:

- (1) For Group 1 helicopters: Before an affected part exceeds 1 450 autorotation landings since first installation on a helicopter (see Note 1 of this AD), or before next flight after the effective date of this AD, whichever occurs later, amend the applicable RFM in accordance with the instructions of paragraph 1.E of the ASB, inform all flight crews and, thereafter, operate the helicopter accordingly.

Note 1: For the purpose of this AD, if the number of autorotation landings of an affected part is unknown, it must be assumed to be above 1 450.

Repetitive Inspections:

- (2) For Group 1 helicopters: Before an affected part exceeds 1 450 autorotation landings since first installation on a helicopter (see Note 1 of this AD), or before next flight after the effective date of this AD, whichever occurs later, and, thereafter, before each first flight of the day, accomplish an external visual inspection of that affected part in accordance with the instructions of paragraph 3.B.2 of the ASB.



- (3) For Group 1 helicopters: Before an affected part exceeds 1 400 autorotation landings since its first installation on a helicopter (see Note 1 of this AD), or within 3 months after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not exceeding 13 autorotation landings, accomplish an internal borescope inspection of that affected part in accordance with the instructions of paragraph 3.B.2 of the ASB.

Corrective Action(s):

- (4) If, during any inspection as required by paragraph (2) or (3) of this AD, as applicable, discrepancies are detected, as defined in the ASB, before next flight, contact AH for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.
- (5) Replacing each affected part on a helicopter with a serviceable part is an acceptable alternative method to comply with the requirements of paragraph (4) of this AD for that helicopter.

RFM Amendment Removal:

- (6) After accomplishment of the initial internal borescope inspection of affected parts on a helicopter, as required by paragraph (3) of this AD, remove the RFM amendment, previously inserted as required by paragraph (1) of this AD, from the RFM of that helicopter. After amendment of the RFM, inform all flight crews and operate the helicopter accordingly.

Terminating Action:

- (7) Accomplishment of the initial internal borescope inspection of all affected parts on a helicopter, as required by paragraph (3) of this AD, constitutes terminating action for the external visual inspections as required by paragraph (2) of this AD for that helicopter.

Parts Installation:

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

Ref. Publications:

AH EC120 Emergency ASB 05A022 original issue dated 20 October 2020.

The use of later approved revisions of the above-mentioned document 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 Programming and Continued Airworthiness 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: support.technical-dyncomp.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com.

