EASA PAD No.: 21-023



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-023

Issued: 16 February 2021

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: Type/Model designation(s):

AIRBUS HELICOPTERS EC 120 B helicopters

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

TCDS Number(s): EASA R.508

Foreign AD: Not applicable

Supersedure: None

ATA 64 - Tail Rotor - Blades - Inspection

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:

The ASB: AH Alert Service Bulletin (ASB) EC120-64A003.

Affected part: Tail rotor blades (TRB), obtained by forging, having Part Number (P/N) C642A0300102 (all s/n), P/N C642A0300103 (all s/n), P/N C642A0300104 (all s/n) or P/N C642A0300105 (with s/n lower than M30500, except those listed in Appendix 4.D of the ASB).

Serviceable part: A TRB which is not an affected part; or an affected part that, following an inspection (dimensional check) in accordance with the instructions of paragraph 3.B.2 of the ASB, has been classified as Category A, which includes those listed in Appendix 4.D of the ASB.



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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:

During the investigation related to an accident reported on an EC 130 B helicopter, geometrical non-conformities were observed in the TRB root section. Considering the similarity of design and production requirements for EC 120 B TRB, affected parts (as defined in this AD) have been inspected and geometrical non-conformities were found.

This condition, if not detected and corrected, may lead to crack initiation and consequent TRB failure, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB to provide instructions to inspect the affected parts at the drain hole section.

For the reasons described above, this AD requires a one-time inspection (dimensional check) to verify TRB conformity, and, depending on findings, replacement of each affected part classified as Category B. This AD also prohibits rework, repair or modification of TRB at the critical section.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) For Group 1 helicopters: Within the applicable compliance time as identified in Table 1 of this AD, or within 24 months after the effective date of this AD, whichever occurs first, inspect each affected part in accordance with the instruction of the ASB.

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

| Flight Hours (FH) | Compliance Time

Accumulated Flight Hours (FH)	Compliance Time
1 500 FH or less	Before exceeding 2 050 FH
More than 1 500 FH	Within 550 FH after the effective date of this AD

Note 1: Unless otherwise stated, the FH in Table 1 of this AD are those accumulated by an affected part since its first installation on a helicopter.

Corrective Action:

(2) If, during the inspection as required by paragraph (1) of this AD, an affected part is determined to be Category B, as defined in the ASB, before next flight, replace that affected part with a serviceable part, as defined in this AD, in accordance with the instruction of the ASB.

In-Service Rework, Repair, Modification:

(3) From the effective date of this AD, do not accomplish any rework, repair or modification of an affected part and on a serviceable part in the affected area of the blade assembly root. For this purpose, the affected areas are defined in the applicable Aircraft Maintenance Manual, Chapter 6-4, Task 64-21-00, 6-9.



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Part(s) Installation:

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

Ref. Publications:

AH ASB EC120-64A003 original issue dated 09 February 2021.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

- 1. This Proposed AD will be closed for consultation on 16 March 2021.
- 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 <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 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 Aéroport de Marseille Provence, 13725 Marignane Cedex, France, Telephone: +33 (4) 42 85 97 97, Fax: +33 (4) 42 85 99 66,

E-mail: support.technical-airframe.ah@airbus.com,

Web portal: https://keycopter.airbushelicopters.com > Technical Requests Management.

