

# Emergency Airworthiness Directive

**AD No.:** 2019-0272-E

**Issued:** 30 October 2019

Note: This Emergency 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:** 01 November 2019

**TCDS Number(s):** EASA.R.508

**Foreign AD:** Not applicable

**Supersedure:** None

**ATA 65 – Tail Rotor – Tail Rotor Hub Body – Inspection / Replacement**
**Manufacturer(s):**

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France

**Applicability:**

EC 120 B helicopters, all serial numbers.

**Definitions:**

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

**Affected part:** Tail rotor (TR) hub body, Part Number C642A0100103.

**Serviceable part:** Affected parts that are new (not previously installed on any helicopter), or have passed (no crack(s) detected) an inspection in accordance with the instructions of the ASB.

**The ASB:** AH EC 120 Emergency Alert Service Bulletin (ASB) 05A020.

**Reason:**

An occurrence was reported where, during an inspection of a TR hub body, a recurrent case of loss of tightening torque on several attachment bolts was found. Following analysis, it was concluded that loss of tightening torque can cause the development of cracks.

This condition, if not detected and corrected, can lead to loss of the TR drive, possibly resulting in the loss of yaw control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, providing inspection and replacement instructions.

For the reason described above, this AD requires repetitive inspections of the affected parts and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires repetitive replacement of the associated attachment bolts, washers, and nuts.

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

Required as indicated, unless accomplished previously:

**Inspection:**

- (1) Within 15 flight hours (FH) or 7 days, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 15 FH or 7 days, whichever occurs first, inspect each affected part in accordance with the instructions of section 3.B.2 of the ASB.

**Corrective Action(s):**

- (2) If, during any inspection as required by paragraph (1) of this AD, any crack is found, before next flight, replace the TR hub body with a serviceable part (as defined in this AD) and the bolts, washers and nuts with new parts, in accordance with the instructions of section 3.B.3 of the ASB, and accomplish a detailed inspection of the TR splined flange in accordance with the instructions of section 1.E.2 of the ASB.
- (3) If, during any inspection of the TR splined flange as required by paragraph (2) of this AD, the condition of the part exceeds the criteria as specified in the applicable Work Card, before next flight, replace the TR splined flange with a serviceable part in accordance with the instructions of section 3.B.4 of the ASB.

**Replacement:**

- (4) Within the compliance time as specified in Table 1 of this AD, as applicable, and, thereafter, during each scheduled 1000-FH inspection, replace the bolts, washers and nuts with new parts in accordance with the instructions of the ASB.

Table 1 – Initial Replacement of Bolts, Washers and Nuts (see Note 1 of this AD)

FH Accumulated	Compliance Time
Less than 9 000 FH	During the next scheduled 1000-FH inspection after the first inspection as required by paragraph (1) of this AD, without exceeding 9 000 FH
9 000 FH or more, or FH unknown	Within 15 FH or 7 days, whichever occurs first after the effective date of this AD



Note 1: Unless indicated otherwise, the FH specified in Table 1 of this are those accumulated by the bolts since new (first installation on a helicopter).

**Parts Installation:**

- (5) 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.

**Terminating Action:**

- (6) None.

**Ref. Publications:**

AH Emergency ASB EC120-05A020 original issue dated 29 October 2019.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
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](mailto: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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters – Aéroport de Marseille Provence, 13725 Marignane CEDEX, France  
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