



Emergency Airworthiness Directive

AD No.: 2022-0251-E

Issued: 14 December 2022

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, 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.303, as applicable] 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 130 helicopters

Effective Date: 16 December 2022

TCDS Number(s): EASA.R.008

Foreign AD: Not applicable

Supersedure: None

ATA 65 – Tail Rotor Drive – Shaft-Line – Check / Measurement

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter

Applicability:

EC 130 T2 helicopters, all serial numbers on which AH modification 079809 has been embodied in production.

Definitions:

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

Affected part: Rotor drive shafts, having Part Number (P/N) 350A34-5010-00 or P/N 350A34-5020-00.

The ASB: AH Emergency Alert Service Bulletin (ASB) EC130-05A042.

The maintenance task: AH EC130 Aircraft Maintenance Manual (AMM) Task 65-11-01,5-1A (“Balancing of the tail rotor drive line”) or AMM Task 65-11-01,5-1B (“Balancing of the tail rotor drive shaft”), as applicable.



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 where, during an inspection by ASB EC130-05A039 (ref. EASA AD 2021-0283R1), a crack was found on the tailboom of an EC130 T2 helicopter. During the preceding flight, the pilot experienced a humming sound and vibrations in the pedals. A subsequent balancing of the tail rotor drive shaft revealed a high vibration level.

This condition, if not detected and corrected, could lead to failure of the tail rotor drive shaft and subsequent loss of yaw control of the helicopter.

To address this potential unsafe condition, as a precautionary/protective measure, AH issued the ASB to provide measurement instructions.

For the reasons described above, this AD requires repetitive checks of the balancing of the tail rotor drive shaft by means of measurement of the vibration level. This AD also requires the reporting of inspection results to AH.

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:

Repetitive Checks:

- (1) For Group 1 helicopters: Within the compliance times specified in Table 1 of this AD and, thereafter, at intervals not to exceed 50 flight hours (FH) measure the vibration level of the tail rotor drive shaft in accordance with the instructions of the ASB.

Table 1 – Tail Rotor Drive Shaft Check (see Note 1 of this AD)

Maintenance Task Status (on the effective date of this AD)	FH Accumulated (on the effective date of this AD)	Compliance Time (see Note 2 of this AD)
The maintenance task has <u>not</u> been accomplished	50 FH or more	Before next flight after the effective date of this AD
	Less than 50 FH	Before exceeding 50 FH, without exceeding 3 months after the effective date of this AD
The maintenance task has been accomplished	50 FH or more after last accomplishment of the maintenance task	Before next flight after the effective date of this AD
	Less than 50 FH since last accomplishment of the maintenance task	Within 50 FH after last accomplishment of the task, without exceeding 3 months after the effective date of this AD



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

Note 2: For the initial check, a single ferry flight without passengers is allowed to a maintenance location, where the actions required by this AD can be accomplished.

Corrective Action(s):

(2) If, during any check as required by paragraph (1) of this AD, the measured vibration level is more than 1,4 inch per second (IPS), before next flight, contact AH to obtain approved instructions, and within the compliance time(s) specified therein, accomplish those instructions accordingly.

Reporting:

(3) If, during any check as required by paragraph (1) of this AD, the measured vibration level is 1,4 IPS or less, within 14 days after the check, report the results to AH. In addition, together with the first reporting action, report to AH the additional information, as specified in paragraph 3.B.2. of the ASB, sub-paragraph '- At first compliance with this ALERT SERVICE BULLETIN:'. This can be done in accordance with the instructions of the ASB.

Terminating Action:

(4) None.

Part(s) Installation:

(5) 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 that, following installation, it is inspected as required by this AD.

Ref. Publications:

AH Emergency ASB EC130-05A042 original issue dated 14 December 2022.

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 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, Keycopter Technical Request Management: TechnicalSupport.Helicopters@airbus.com.

