

Airworthiness Directive

AD No.: 2019-0009

Issued: 22 January 2019

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 175 B helicopters

Effective Date: 05 February 2019

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Nose Landing Gear A-Frame / Airframe Junctions – Inspection

Manufacturer(s):

Airbus Helicopters (AH)

Applicability: EC 175 B helicopters, all manufacturer serial numbers.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) No. EC175-05A026.

Affected part: Nut retainers, Part Number (P/N) EN2948-100 and trailing arm pins, P/N M322G00T1306.

Serviceable part: An affected part that is new, or before installation has passed an inspection (no defects found) in accordance with the instructions of the ASB.

LC: Landing cycles, as defined in AH maintenance documentation.



Reason:

Some occurrences have been reported of finding broken trailing arm pins that connect the nose landing gear (NLG) A-frame to the airframe. The subsequent investigation revealed that trailing arm pins failed in correspondence of the anti-rotation devices mating with the airframe, thereby compromising the locking function of the affected parts, which could screw off and separate.

This condition, if not detected and corrected, could lead to NLG separation from the supporting structure, possibly resulting in a compromised landing capability, damages to the helicopter and injuries to the occupants.

To address this potential unsafe condition, AH has published the ASB to provide inspection instructions.

For the reason described above, this AD requires repetitive inspections of the NLG A-frame / airframe junctions to measure the distance "D" between the shouldered bushes of the A-frame and the end of each trailing arm pin, inspections of the affected parts for gaps, and, depending on findings, accomplishment of the applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Within 60 LC or 30 days, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 60 LC, inspect the NLG A-frame / airframe junctions and the affected parts in accordance with the instructions of the ASB.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, the measured distance "D" is found to exceed the allowable values specified in the ASB, or a gap is detected between the affected parts, before next flight, replace each affected part with a serviceable part in accordance with the instructions of the ASB, or contact AH for approved temporary repair instructions and accomplish those instructions accordingly.
- (3) Within 6 months after the accomplishment of the temporary repair, as required by paragraph
 (2) of this AD, or within 10 days after receipt of the replacement parts, whichever occurs first, replace each affected part with a serviceable part in accordance with the instructions of the ASB.

Terminating Action:

(4) None.

Reporting:

(5) Within 30 days after the first inspection as required by paragraph (1) of this AD, and within 30 days after each time during any later inspection, the measured distance "D" is found to exceed the allowable values specified in the ASB, or a gap is detected between the affected parts, send a report to AH. Using the 'Response Form' of the ASB is an acceptable method to comply with this reporting requirement.



Ref. Publications:

AH ASB No. EC175-05A026 original issue dated 20 December 2018.

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 Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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</u> <u>reporting system</u>.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support) at, Web portal: <u>https://keycopter.airbushelicopters.com</u> Technical Requests Management, or E-mail: <u>support.technical-airframe.ah@airbus.com</u>

