



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-105

Issued: 21 August 2024

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:

AIRBUS HELICOPTERS

Type/Model designation(s):

EC 175 B helicopters

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

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0009 dated 22 January 2019.

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

Manufacturer(s):

Airbus Helicopters (AH)

Applicability:

EC 175 B helicopters, all manufacturer serial numbers, except those on which AH modification (mod) 99A06182 and mod 99A06187 have been embodied in production.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) EC175-05A026.

The SB: AH Service Bulletin (SB) 32-20-0001.

Affected parts: Tab washers (nut retainers), having P/N EN2948-100, and trailing arm pins, having P/N M322G00T1306 (MP/N AIR146066).



Serviceable part: An affected part that is new (never installed before), or which before installation has passed the inspection (no defects found) in accordance with the instructions of the ASB, as defined in this AD.

Reason:

Occurrences were reported, where in the (left-hand and/or right-hand) couplings between the A-frame of the nose landing gear (NLG) and the airframe structure of the helicopter trailing arm pins were found with broken slots. Subsequent investigation revealed that these arm pins, which serve as anti-rotation device, got damaged at the location of the two slots that secure the pin against rotation, compromising the locking function of the trailing arm pin.

This condition, if not detected and corrected, could lead to unscrewing of a coupling and detachment of the NLG A-frame from the structure, possibly resulting in compromised landing capability, damage to the helicopter and injury to occupants.

To address this potential unsafe condition, AH published ASB EC175-05A026 (original issue) to provide instructions for inspection and applicable corrective action(s). Consequently, EASA issued AD 2019-0009 to require repetitive inspections of the couplings between the NLG A-frame and the airframe and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, AH issued the SB, as defined in this AD, to introduce a design change, replacing the affected trailing arm pin (defined in this AD as an affected part) with a pintle pin, that ensures a permanent locking function, preventing the affected NLG couplings to unscrew (rotate).

Consequently, AH revised the ASB to provide instructions for modification of each helicopter on which a broken trailing arm pin has been reported.

For the reason described above, this AD retains the inspection requirements of EASA AD 2019-0009, which is superseded, reduces the Applicability, and requires modification of certain helicopters.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection(s):

- (1) Before exceeding 60 landing cycles (LC), as defined in the AH maintenance documentation, or within 30 days, whichever occurs first after 05 February 2019 [the effective date of EASA AD 2019-0009], and, thereafter, at intervals not to exceed 60 LC, inspect the NLG A-frame / airframe junctions and the affected parts, as defined in this AD, 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, and/or a gap is detected between the trailing arm pin and the screw and/or the tab washer (nut retainer), before next flight, replace that affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the ASB; or contact AH for approved temporary repair instructions and, within



the compliance time specified therein, accomplish those instructions accordingly. Modification, before next flight, of a helicopter in accordance with the instructions of the SB is an acceptable alternative method for compliance with this paragraph.

- (3) Within 6 months after accomplishment of a temporary repair, as required by paragraph (2) of this AD, replace that affected part with a serviceable part in accordance with the instructions of the ASB. Modification, within the aforementioned compliance time, of a helicopter in accordance with the instructions of the SB is an acceptable alternative method for compliance with this paragraph.

Modification:

- (4) Unless already accomplished as referenced in paragraph (2) or (3) of this AD, within the compliance time as defined in Table 1 of this AD, as applicable, modify the helicopter in accordance with the instructions of the SB.

Table 1 – Compliance Time for Modification

| | Compliance Time, (flight hours (FH) or calendar date, whichever occurs first) |
|--|--|
| For helicopters on which, at the effective date of this AD, no slot(s) of any NLG trailing arm pin had ever been found broken | Within 1760 FH or 2 years after the first detection of a broken slot of any trailing arm pin |
| For helicopters on which (before the effective date of this AD) one or more NLG trailing arm pins with a broken slot(s) were found | Within 1760 FH or 2 years after the effective date of this AD |

Terminating Action:

- (5) Modification of a helicopter in accordance with the instructions of the SB constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Ref. Publications:

AH ASB EC175-05A026 original issue dated 20 December 2018, or Revision 1 dated 10 July 2024.

AH SB 32-20-0001 Issue 001 (original issue) dated 11 April 2024.

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

Remarks:

1. This Proposed AD will be closed for consultation on 18 September 2024.



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 [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 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 (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://airbusworld.helicopters.airbus.com> / Technical Requests Management, or Telephone +33 (0)4 42 85 97 89, or E-mail: TechnicalSupport.Helicopters@airbus.com or support.technical-airframe.ah@airbus.com.

