Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-096

Issued: 06 July 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:
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 2020-0094R1 dated 27 April 2021.

ATA 52 – Doors – Cargo Door Handle / Locking Mechanism – Inspection / Replacement

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Manufacturer(s):
Airbus Helicopters (AH)

Applicability:
EC 175 B helicopters, all serial numbers, except those on which AH modification (mod) 99A06087 has been embodied in production.

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

Affected part: Right-hand (RH) and left-hand (LH) side cargo doors, all Part Numbers.

The inspection ASB: AH Alert Service Bulletin (ASB) EC175-05A029 Revision 1.

The modification ASB: AH ASB EC175-52A011.

Reason:

An occurrence was reported where, on an EC 175 helicopter, the “LH CARGO DOOR” caution lit in flight. The following on-ground inspection revealed that the cargo door handle was in open position, with the door slightly open, and that it was not possible to properly lock it because the locking mechanism was inoperative.

This condition, if not detected and corrected, may lead to the loss of a cargo door in flight, possibly resulting in damage to, and/or reduced control of, the helicopter.

To address this potential unsafe condition, AH published ASB EC175-05A029 (original issue, later revised) to provide instructions to inspect the locking mechanism of the LH and RH cargo doors. Consequently, EASA issued AD 2019-0255 to require repetitive inspections for correct operation of the locking mechanism of the LH and RH cargo doors, and, depending on findings, accomplishment of applicable corrective action(s).

After that AD was issued, new cases of cargo door handle in open position were reported, occurring before reaching the initially defined inspection threshold. Consequently, AH revised the inspection ASB (R1) to reduce the compliance time for the inspection from 440 flight hours (FH) to 110 FH, and EASA issued AD 2020-0094 (later revised to exclude post-mod 99A06087 helicopters from the Applicability), retaining the requirements of EASA AD 2019-0255, which was superseded, and reducing the threshold for the initial inspection, as well as the repeat inspection interval, to 110 FH. That AD was considered an interim action, pending the development of a dedicated modification.

Since EASA AD 2020-0094R1 was issued, AH published the modification ASB, providing instructions for in-service modification. It was also decided that this mod is necessary to ensure an acceptable level of safety.

For the reason described above, this AD retains the requirements of EASA AD 2020-0094R1, which is superseded, and requires installation of an improved cargo door locking mechanism and cargo door handle. Modification constitutes terminating action for the repetitive inspections required by this AD.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within 110 FH after 12 May 2020 [the effective date of the original issue of EASA AD 2020-0094], or within 440 FH since the last inspection as previously required by EASA AD 2019-0255, whichever occurs first, and, thereafter, at intervals not to exceed 110 FH, inspect the locking mechanism of the LH and RH cargo doors in accordance with the instructions of section 3.B of the inspection ASB.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, deficiencies are detected on any cargo door locking mechanism, before next flight, restore the functionality of that door locking mechanism in accordance with the instructions of section 3.B of the inspection ASB.

Modification:

(3) Within 880 FH or 24 months, whichever occurs first after the effective date of this AD, install the improved cargo door locking mechanism and cargo door handle in accordance with the instructions of section 3 of the modification ASB.

Terminating Action:

(4) Accomplishment on a helicopter of corrective action(s) as required by paragraph (2) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

(5) Modification of a helicopter as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Ref. Publications:

AH ASB EC175-05A029 original issue dated 22 July 2019, or Revision 1 dated 23 March 2020, or Revision 2 dated 29 June 2021.

AH ASB EC175-52A011 original issue dated 29 June 2021.

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 03 August 2021.

2. Enquiries regarding this PAD should be referred to the EASA Safety Airworthiness 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), web portal: https://keycopter.airbushelicopters.com Technical Requests Management, or e-mail: support.technical-airframe.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com.