

# **Airworthiness Directive**

AD No.: 2024-0064R1

**Issued:** 18 March 2024

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, or Annex Vb Part M.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 M.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: Type/Model designation(s):

AIRBUS HELICOPTERS EC 175 B helicopters

Effective Date: Revision 1: 21 March 2024 (same as original issue)

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: This AD revises EASA AD 2024-0064 dated 14 March 2024. The original issue of

this AD superseded EASA AD 2021-0178R2 dated 30 January 2023 and EASA AD

2022-0099 dated 01 June 2022.

# ATA 55 - Stabilizers - Horizontal Stabilizer - Replacement

## Manufacturer(s):

Airbus Helicopters (AH)

#### **Applicability:**

EC 175 B helicopters, all serial numbers.

#### **Definitions:**

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

The ASB: AH EC175 Emergency Alert Service Bulletin (ASB) 05A020 Revision 6.

The inspection ASB: AH EC175 Emergency ASB 05A030.

The modification ASB: AH ASB EC175-55A009.

**Affected part(s):** Horizontal stabilizers (HS) having Part Number (P/N) M551H1B01056, P/N M551H1D01056, P/N M551H1G01056, P/N M551H1G01056, P/N M551H1C01056, P/N M551H1E01056, P/N M551H1E01056, P/N M551A1101103, or P/N M551A1A01103; HS fittings having P/N M536A3401102; and bolts having P/N M008A5511218.



**Serviceable part(s):** HS, HS fittings and bolts, eligible for installation, that are not an affected part (as defined in this AD).

**Groups:** Group 1 helicopters are those on which AH modification (mod) 99A05341 has never been embodied, neither in production nor in service.

Group 2 helicopters are those which have been modified as required by AD 2021-0178R2, but on which, after that modification, an affected part has been reinstalled.

Group 3 helicopters are those which do not have any affected part installed.

#### Reason:

During a daily inspection, a crack was found in the skin of the HS and on the HS main spar of an EC 175 B helicopter.

This condition, if not detected and corrected, could lead to the loss of the HS, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the inspection ASB, as defined in this AD, providing instructions to inspect the main spars of all HSs for cracks. Consequently, EASA issued Emergency AD 2019-0148-E to require repetitive inspection of all HSs and, depending on findings, their replacement.

After that AD was issued, AH developed mod 99A05341, which permanently addresses the above-described potential unsafe condition, and which was embodied in the production of new helicopters. Consequently, EASA issued AD 2019-0148R1 to reduce the Applicability by excluding such post-mod 99A05341 helicopters.

After that AD was issued, mod 99A05341 was decided to be necessary for all helicopters to ensure an acceptable level of safety, and, therefore, AH published the modification ASB, as defined in this AD, providing instructions for in-service modification. Consequently, EASA issued AD 2021-0178, later revised, retaining the requirements of AD 2019-0148R1, which was superseded, and requiring in addition modification of all affected helicopters by installing a reinforced HS and stabilizer rod assemblies.

After EASA AD 2021-0178R1 was issued, it was determined that, due to a delayed production of the required mod kits, the modification required by that AD could not be accomplished on all the affected helicopters within the defined compliance time, and EASA issued AD 2021-0178R2 to extend the compliance time for modification (replacement) of all affected HSs accordingly.

Since that AD was issued, production issues have been solved and the availability of serviceable parts, as defined in this AD, to modify all affected helicopters has been confirmed. It was also noted that AD 2021-0178R2 does not prohibit reinstallation of an affected part after modification of a helicopter in accordance with the instruction of the modification ASB.

Consequently, EASA published AD 2024-0064, retaining the requirements of EASA AD 2021-0178R2, which was superseded, and, in addition, prohibiting (re)installation of any affected part.



Modification of a helicopter in accordance with the instruction of the modification ASB, that requires replacement of each affected HS, constitutes also terminating action for the inspection requirements of EASA AD 2022-0099, which was consequently also superseded by that AD.

Group 2 helicopters are defined in this AD, to specify the required actions for those helicopters which are modified as required by AD 2021-0178R2, but on which, after modification, any affected part has been reinstalled. However, according to data available to EASA and AH, no Group 2 helicopters are known to be in service on the issue date of this AD.

Since AD 2024-0064 was issued, it has been determined that HS fitting P/N M536A3401105 had been erroneously incorporated in the definition of Affected part(s). This AD is revised to correct the definition of 'Affected part(s)'.

## 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:

### Repetitive Inspections:

- (1) For Group 2 helicopters: Within 5 FH since last detailed visual inspection (DVI) of the attachment area of the affected HS in accordance with the instructions of section 3 of the ASB, or before next flight after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 5 FH, accomplish a DVI of the attachment area of the affected HS in accordance with the instructions of section 3 of the ASB.
- (2) For Group 2 helicopters: Within 55 FH since the last measurement and recording of the tightening torque of the nuts of the affected bolts, including determination of the torque loss in comparison with the value measured during the latest inspection, or the nominal maximum value, as applicable, in accordance with the instructions of section 3 of the ASB, or before next flight after the effective date of this AD, whichever occurs later, measure and record the tightening torque of the nuts of the affected bolts, including determination of the torque loss in comparison with the value measured during the latest inspection, or the nominal maximum value, as applicable, in accordance with the instructions of section 3 of the ASB.
- (3) For Group 2 helicopters: Within 55 FH since last inspection of the affected HS and affected fittings in accordance with the instructions of section 3 of the ASB, or before next flight after the effective date of this AD, whichever occurs later, inspect the affected HS and affected fittings in accordance with the instructions of section 3 of the ASB.

# **Corrective Action(s):**

(4) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, any discrepancy as defined in the ASB is detected, before next flight, modify the helicopter in accordance with the instructions of section 3 of the modification ASB.

# **Modification:**

(5) For Group 1 helicopters: Before 30 June 2023 [as required by EASA AD 2021-0178R2] or within 2 400 FH after 06 August 2021 [the effective date of EASA AD 2021-0178], whichever occurs



first, modify the helicopter by replacing each affected part with a serviceable part in accordance with the instructions of section 3 of the modification ASB.

(6) For Group 2 helicopters: Within 10 flight hours (FH) since last inspection of the HS main spar in accordance with the instructions of section 3.B of the inspection ASB, or before next flight after the effective date of this AD, whichever occurs later, modify the helicopter by replacing each affected part with a serviceable part in accordance with the instructions of section 3 of the modification ASB.

## **Terminating Action:**

(7) For Group 2 helicopters: Modification of a helicopter as required by paragraph (6) of this AD constitutes terminating action for the repetitive inspections as required by the paragraphs (1), (2) and (3) of this AD for that helicopter.

## Part(s) Installation:

(8) For Group 1, Group 2 and Group 3 helicopters: From the effective date of this AD, do not install an affected part on any helicopter.

#### **Ref. Publications:**

AH EC175 Emergency ASB 05A020 original issue dated 27 March 2018, or Revision 1 dated 03 June 2019, or Revision 2 dated 25 July 2019, or Revision 3 dated 10 May 2021, or Revision 4 dated 20 December 2021, or Revision 5 dated 28 February 2022, or Revision 6 dated 30 May 2022.

AH EC175 Emergency ASB 05A030 original issue dated 20 June 2019, or Revision 1 dated 10 May 2021, or Revision 2 dated 24 January 2022.

AH ASB EC175-55A009 original issue dated 11 May 2021, or Revision 1 dated 30 September 2021, or Revision 2 dated 17 October 2022, or Revision 3 dated 10 January 2023, or Revision 4 dated 11 May 2023.

The use of later approved revisions of the above-mentioned documents 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. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 11 April 2024. Only if any comment is received during the consultation period, a Comment Response Document will be published in the <a href="EASA Safety Publications Tool">EASA Safety Publications Tool</a>, in a compressed ('zipped') file, attached to the record for this AD.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.



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 <u>EU aviation safety reporting system</u>. 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.

 For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support) at:
Web portal: https://airbusworld.helicopters.airbus.com / Technical Requests Management, or

E-mail: TechnicalSupport.Helicopters@airbus.com, or Telephone +33 (0)4.42.85.97.89.