



## Emergency Airworthiness Directive

**AD No.:** 2016-0243-E

**Issued:** 09 December 2016

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

AIRBUS HELICOPTERS

### Type/Model designation(s):

EC175 B helicopters

**Effective Date:** 13 December 2016

**TCDS Number(s):** EASA.R.150

**Foreign AD:** Not Applicable

**Supersedure:** None

### ATA 55 – Stabilizers – Horizontal Stabilizer Attachment Bolts – Inspection / Clearance Check

#### Manufacturer(s):

Airbus Helicopters

#### Applicability:

EC175 B helicopters, all serial numbers (s/n).

#### Reason:

During a daily inspection of an EC175 B helicopter, a gap was noticed between the horizontal stabilizer and its fitting. The subsequent torque check revealed the loss of torque of the nut. After removal of the nut, the observed clearance was found to be above the maximum allowable value of 0.1 millimetres (mm). During a daily inspection of another helicopter, one of the two horizontal stabilizer attachment bolts was found to be protruding from its seat. At a closer inspection, the bolt was found broken in its threaded section and kept in place by the sealant.

These conditions, if not detected and corrected, could lead to loss of the horizontal stabilizer, possibly resulting in loss of control and consequent loss of the helicopter.

To address these potential unsafe conditions, as a precautionary measure pending completion of the investigation, Airbus Helicopters issued the Emergency Alert Service Bulletin (EASB) 05A014 providing dedicated inspection instructions.



For the reasons described above, this AD requires a one-time measurement and record of the clearance between the horizontal stabilizer and its fitting, repetitive inspections of the affected bolts for integrity and cracks, and repetitive measurement of the tightening torque of the related nuts.

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:

Note 1: For the purpose of this AD, the two bolts, part number M008A5511218, securing the horizontal stabilizer to the tail boom are hereafter referred to as “the affected bolts” in this AD.

Note 2: For the purpose of this AD, Group 1 helicopters are those with s/n listed in Table 1 of this AD. Group 2 helicopters are those with s/n not listed in Table 1 of this AD.

Note 3: Airbus Helicopters Emergency ASB 05A014 is hereafter referred to as “the ASB” in this AD.

Table 1 – Group 1 helicopters s/n

5002	5003	5004	5005	5006
5007	5008	5009	5010	5018

**Torque / Clearance Check and Inspection:**

(1) For Group 1 helicopters: Within 10 flight hours (FH), or within 20 days, whichever occurs first after the effective date of this AD, accomplish concurrently the actions required by paragraphs (1.1), (1.2) and (1.3) of this AD, in accordance with the instructions of Paragraph 3.B.2 of the ASB:

(1.1) Measure and record the tightening torque of the nuts of the affected bolts;

(1.2) Measure and record the clearance between the horizontal stabilizer fitting and the horizontal stabilizer;

(1.3) Remove the affected bolts and inspect the threaded ends for cracks, and visually inspect the assembly area.

**Corrective Action(s):**

(2) If, during the inspections as required by paragraph (1.3) of this AD, any damaged part is found, before next flight, replace that part with a serviceable one in accordance with the instructions of the ASB.

(3) If, during the determination as required by paragraph (1.2) of this AD, a clearance is found, exceeding 0.1 mm, but not greater than 0.7 mm, within 110 FH after the determination, restore the clearance to 0.1 mm or less, in accordance with the instructions of the ASB.



- (4) If, during the determination as required by paragraph (1.2) of this AD, a clearance exceeding 0.7 mm is found, before next flight contact Airbus Helicopters for approved instructions and accomplish those instructions accordingly.
- (5) If, during the inspection as required by paragraph (1.3) of this AD, any crack is found on any affected bolt, before next flight, replace both bolts with serviceable ones in accordance with the instructions of the ASB.
- (6) If, during the inspection as required by paragraph (1.3) of this AD, any affected bolt is found broken on a helicopter, before next flight, replace the horizontal stabilizer and the horizontal stabilizer fitting, and replace both bolts of that helicopter with serviceable ones, in accordance with the instructions of the ASB.

**Repetitive Inspections:**

- (7) Within 10 FH after the effective date of this AD (for Group 2 helicopters), or within 10 FH after accomplishment of the actions as required by paragraph (1) of this AD (for Group 1 helicopters), as applicable, and, thereafter, at intervals not exceeding 10 FH, visually inspect the affected bolts in accordance with the instructions of Paragraph 3.B.3 of the ASB.
- (8) Within 55 FH after the effective date of this AD (for Group 2 helicopters), or within 55 FH after accomplishment of the actions as required by paragraph (1) of this AD (for Group 1 helicopters), as applicable, and, thereafter, at intervals not exceeding 55 FH, measure and record the tightening torque of the nuts of the affected bolts, inspect the threaded ends of each affected bolt in accordance with the instructions of Paragraph 3.B.4 of the ASB, and visually inspect the assembly area.

**Corrective Action(s):**

- (9) If, during any inspection as required by paragraph (7) or (8) of this AD, as applicable, a crack or a broken bolt is found, before next flight, replace both affected bolts with serviceable ones in accordance with the instructions of the ASB.
- (10) If, during any inspection or determination as required by paragraphs (7) or (8) of this AD, as applicable, any damaged part is found, before next flight, replace that part with a serviceable one in accordance with the instructions of the ASB.

**Terminating Action:** None

- (11) Replacing the bolts or parts on a helicopter, as required by paragraph (9) or (10) of this AD, as applicable, does not constitute terminating action for the repetitive actions as required by paragraph (7) and (8) of this AD for that helicopter.

**Reporting:**

- (12) Within 30 days after each inspection, as required by this AD, report the inspection results, including no findings, to Airbus Helicopters. Using the Response Form included in the ASB is an acceptable means to comply with this requirement.

**Ref. Publications:**

Airbus Helicopters Emergency ASB 05A014, original issue dated 07 December 2016.



The use of later approved revisions of this 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](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact:  
Airbus Helicopters – Technical Support Department  
13725 Marignane CEDEX, France  
E-mail: [support.technical-airframe.ah@airbus.com](mailto:support.technical-airframe.ah@airbus.com).

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