



Airworthiness Directive

AD No.: 2014-0076R3

Issued: 30 November 2021

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):

AS 350 and AS 355 helicopters

Effective Date: Revision 3: 07 December 2021
 Revision 2: 27 August 2020
 Revision 1: 28 October 2016
 Original Issue: 27 March 2014

TCDS Number(s): EASA.R.008 and EASA.R.146

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2014-0076R2 dated 20 August 2020.

ATA 53 – Fuselage – Rear Structure Junction Frame Reinforcement Angles – Inspection

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale

Applicability:

AS 350 B, BA, BB, B1, B2, B3 and D helicopters, and AS 355 E, F, F1, F2, N and NP helicopters, all serial numbers, if an affected part, as defined in this AD, is installed, except helicopters on which AH modification (MOD) 073232 or MOD 073922 has been embodied in production, or AH AS350 Service Bulletin (SB) No. 53.00.58 and AS355 SB No. 53.00.34, as applicable, have been embodied in service.

Definitions:

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

Affected part: Junction frames, reinforced in accordance with AH MOD 073215, or equipped with at least one reinforcement angle, having Part Number (P/N) 350A08.2493.21 or P/N 350A08.2493.23, following the repair carried out in accordance with MRM (Mechanical Maintenance and Repair Manual) Work Card 53.10.22.772 or Aircraft Maintenance Manual (AMM) Task 53-31-00, 8-5.



The applicable ASB: AH AS350 Emergency Alert Service Bulletin (ASB) No. 05.00.70 and AS355 ASB No. 05.00.62, as applicable.

The applicable modification SB: AH AS350 SB No. 53.00.58 and AS355 SB No. 53.00.34, as applicable.

Reason:

During the inspection of several AS 355 helicopters, cracks were found in the reinforcement angles of the rear structure / tail boom junction frame. Subsequent investigation revealed that cracks were initiated on the non-visible surface of the angle (surface in contact with the frame).

This condition, if not detected and corrected, could lead to further crack propagation and subsequent loss of the tail boom, resulting in loss of the helicopter.

To address this potential unsafe condition, AH issued the applicable ASB, as defined in this AD, to provide inspection instructions. Consequently, EASA issued Emergency AD 2014-0076-E (later revised) to require repetitive inspections of the affected area and, depending on findings, replacement of affected parts.

After EASA AD 2014-0076R1 was issued, AH developed an optional modification and issued the applicable modification SB for in-service modification, which allowed to cancel the repetitive inspections. Consequently, EASA published AD 2014-0076R2 to introduce an optional modification which constituted terminating action for the repetitive inspections as required by that AD.

Since EASA AD 2014-0076R2 was issued, it was determined that AS 350 NP helicopters on which MOD 073922 has been embodied in production should be excluded from the Applicability, and AH issued ASB No. 05.00.62 Revision 2 to reflect this development.

For the reason described above, this AD is revised accordingly.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance time as defined in Table 1 of this AD, and, thereafter, at intervals not to exceed 10 flight hours (FH), inspect the affected part in accordance with the instructions of paragraph 3.B.1 of the applicable ASB.

Table 1 – Inspection Threshold (see Note 1 of this AD)

FH accumulated	Compliance Time
Less than 640 FH	Before exceeding 650 FH, but not before accumulating 640 FH
640 FH or more	Within 10 FH after 27 March 2014 [the effective date of the original issue of this AD]



Note 1: Unless specified otherwise, the FH indicated in Table 1 of this AD are those accumulated by the helicopter, on 27 March 2014 [the effective date of the original issue of this AD], since installation of MOD 073215, or since installation of a reinforcement angle, as applicable.

- (2) Within 165 FH after the initial inspection as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 165 FH, inspect the affected part in accordance with the instructions of paragraph 3.B.2 of the applicable ASB.
- (3) Accomplishment of the first inspection as required by paragraph (2) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD.

Corrective Action(s):

- (4) If, during any inspection as required by paragraph (1) or (2) of this AD, cracks are detected, before next flight, contact AH for approved instructions for corrective action(s) and accomplish those instructions accordingly.

Terminating Action(s):

- (5) Modification of a helicopter in accordance with the instructions of the applicable modification SB, as defined in this AD, constitutes terminating action for the repetitive inspections as required by paragraph (2) of this AD for that helicopter.
- (6) Modification of a helicopter in accordance with the instructions of the applicable modification SB also constitutes terminating action for the inspections as required by DGAC France AD F-2004-035 (EASA approval number 2004-2107) or DGAC France AD F-2004-036 (EASA approval number 2004-2108), as applicable, for that helicopter.

Ref. Publications:

AH AS350 ASB No. 05.00.70 dated 24 March 2014, or Revision 1 dated 27 July 2020, or Revision 2 dated 24 November 2021.

AH AS355 ASB No. 05.00.62 dated 24 March 2014, or Revision 1 dated 27 July 2020, or Revision 2 dated 24 November 2021.

AH SB No. AS350-53.00.58, Revision 1, dated 27 July 2020.

AH SB No. AS355-53.00.34 dated 27 July 2020.

The use of later approved revisions of these 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.



3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
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 [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 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.
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Customer Support, Telephone +33 (0)4.42.85.97.89, Fax + 33 (0)4.42.85.99.66, E-mail: Airframe.Technical-Support@airbus.com, Keycopter Technical Request Management: TechnicalSupport.Helicopters@airbus.com.

