EASA AD No.: 2021-0222



Airworthiness Directive

AD No.: 2021-0222

Issued: 06 October 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: Type/Model designation(s):

AIRBUS HELICOPTERS AS 332 helicopters

Effective Date: 20 October 2021

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0295 dated 05 December 2019.

ATA 53 – Fuselage – Main Gearbox Suspension Bar Attachment Fittings and

Screws – Inspection

Manufacturer(s):

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

Applicability:

AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters, all manufacturer serial numbers.

Definitions:

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

Affected parts: Attachment screws and fittings fastening the rear main gearbox (MGB) suspension bars, right-hand and left-hand side, to the fuselage; and attachment screws and fitting, fastening the front MGB suspension bar to the fuselage.

The applicable ASB: AH Alert Service Bulletin (ASB) AS332-53.02.05 Revision 2 or ASB AS332-53.02.07 Revision 1, as applicable to the helicopter serial number.

Groups: Group 1 helicopters are those which, before the effective date of this AD were not inspected and corrected in accordance with original issue or Revision 1 of AH ASB AS332-53.02.05 or original issue of AH ASB AS332-53.02.07, as applicable. Group 2 helicopters are those which, before the effective date of this AD, were inspected and corrected in accordance with original issue or Revision 1 of AH ASB AS332-53.02.05 or original issue of AH ASB AS332-53.02.07, as applicable.



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Reason:

Occurrences were reported of finding corrosion on the affected parts. Subsequent investigation determined that during maintenance visits of an identified batch of helicopters between September 2012 and April 2019, application of compound sealant on MGB suspension bar attachment screws may not have been accomplished in accordance with the approved maintenance data.

This condition, if not detected and corrected, could lead to structural failure of the MGB attachment screws, with consequent detachment of MGB suspension bars, possibly resulting in loss of control of the helicopter.

To address this unsafe condition, AH issued original issue of ASB AS332-53.02.05 and ASB AS332-53.02.07 to provide inspection instructions for the affected parts. Additionally, AH also introduced corrective measures to ensure that the affected maintenance organisation(s) apply compound sealant in accordance with approved maintenance data. Consequently, EASA issued AD 2019-0295 to require a one-time inspection of the affected parts and, depending on findings, accomplishment of applicable corrective action(s). That AD also required reporting of findings to AH.

Since that AD was issued, a significant number of reports was received about corrosion findings on the affected parts. Prompted by this development, AH issued the applicable ASB, as defined in this AD, introducing instructions for repetitive inspections.

For the reasons described above, this AD retains the requirement of EASA AD 2019-0295, which is superseded, and requires repetitive inspections.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For all helicopters: Within the compliance times defined in paragraph 1.E.2 of the applicable ASB, except as specified in paragraph (2) of this AD, and, thereafter at intervals not to exceed the values as defined in paragraph 1.E.2 of the applicable ASB, inspect each affected part and its frame bores in accordance with the instructions of the paragraph 3.B.2 of the applicable ASB.
- (2) For Group 1 helicopters: Where the applicable ASB specifies a compliance time 'following receipt of Revision 0 of this ASB', this AD requires compliance within the specified compliance time after 19 December 2019 [the effective date of EASA AD 2019-0295].

For Group 2 helicopters: Where the applicable ASB specifies a compliance time 'following receipt of Revision 1 or Revision 2 of this ASB', this AD requires compliance within the specified compliance time after the effective date of this AD.



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Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) of this AD, any discrepancy is detected as specified in the applicable ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the paragraph 3.B.2 of the applicable ASB.

Terminating Action:

(4) None.

Reporting:

(5) If, during any inspection as required by paragraph (1) of this AD, any discrepancy is detected as specified in the applicable ASB, within 30 days after that inspection, report the inspection results to AH. This can be accomplished by using the Feedback Form included as Appendix 4 of the applicable ASB.

Ref. Publications:

AH ASB AS332-53.02.05 original issue dated 18 April 2019, or Revision 1 dated 02 March 2020, or Revision 2 dated 19 August 2021.

AH ASB AS332-53.02.07 original issue dated 21 October 2019, or Revision 1 dated 19 August 2021.

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. This AD was posted on 23 August 2021 as PAD 21-128 for consultation until 20 September 2021. No comments were received during the consultation period.
- 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 <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), web portal:
 https://airbusworld.helicopters.airbus.com or E-mail: support.technical-airframe.ah@airbus.com and TechnicalSupport.Helicopters@airbus.com.

