

Airworthiness Directive

AD No.: 2022-0012R1

Issued: 30 June 2022

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 ML.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 ML.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 AS 332 helicopters

Effective Date: Revision 1: 07 July 2022

Original issue: 07 February 2022

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: This revised AD supersedes DGAC France AD 88-097-034(B)R2 dated

05 October 1988.

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations / Mechanical Part Torque Cycles – Re-calculation / Replacement

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:

The ASB: AH Alert Service Bulletin (ASB) AS332-01.00.76.

Affected part: Mechanical part(s) defined by Part Number (P/N) in Tables 2, 3, 4, 5 and 6 of section 4 'Appendix' of the ASB; and mechanical part(s) defined by P/N in Appendix 1 of this AD.

Serviceable part: Affected part(s), as defined in this AD, for which the (re-)calculated service life (expressed in flight hours (FH) or torque cycles (TC), as applicable) has not exceeded the applicable service life limit defined in Tables 2, 3, 4, 5 and 6 of section 4 'Appendix' of the ASB; or mechanical



part(s), eligible for installation, which is/are not listed by P/N in Tables 2, 3, 4, 5 and 6 of section 4 'Appendix' of the ASB, nor in Appendix 1 of this AD.

Groups: Group 1 helicopters are those that have one or more affected part(s) installed. Group 2 helicopters are those that do not have an affected part installed. Group 3 helicopters are those that have an affected part installed which is defined by P/N in

Appendix 1 of this AD.

Reason:

Following a review of the maintenance instructions, it was determined that different methods are used to record the TC for certain parts which can be installed on AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters compared to the methods used to record the TC on AS 332 L2 and EC 225 LP helicopters. The method used on AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters could lead to underestimation of the TC accumulated by an affected part

This condition, if not corrected, could lead to exceedance of the service life limit, possibly resulting in structural failure of an affected part and loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, providing a methodology to establish or (re-)calculate the already recorded TC, as applicable, and the determined service life limits, expressed in TC, applicable to each affected part (in addition to the already established service life limits in FH).

For the reasons described above, EASA issued AD 2022-0012 to require (re-)calculation of the TC of each affected part and, depending on the result of (re-)calculation, replacement with a serviceable part.

Since that AD was issued, it was determined that the ASB instructions supersede those of AS3232 SB No. 01.23. Consequently, this AD is revised to supersede DGAC France AD 88-097-034(B)R2, which has become redundant.

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

Required as indicated, unless accomplished previously:

(Re-)calculation of TC:

- (1) For Group 1 helicopters: Within 6 months after 07 February 2022 [the effective date of the original issue of this AD], (re-)calculate the TC accumulated by each affected part and update the helicopter Log-Cards in accordance with the instructions of section 3.B.1 of the ASB.
- (2) After (re-)calculation of the TC as required by paragraph (1) of this AD, calculate the TC accumulated by each affected part on a continued basis in accordance with the instructions of section 3.B.2.b of the ASB.

Replacement:

(3) For Group 1 helicopters: Before exceeding the applicable (re-)calculated service life limit of each affected part, as specified in section 3.B.2.a of the ASB and as defined by FH or TC in



section 4 'Appendix' of the ASB, as applicable, replace each affected part with a serviceable part. This can be accomplished in accordance with approved maintenance instructions.

(4) For Group 3 helicopters: Within 6 months after 07 February 2022 [the effective date of the original issue of this AD], replace each mechanical part, having a P/N listed in Appendix 1 of this AD, with a serviceable part. This can be accomplished in accordance with approved maintenance instructions.

Operational Restriction:

(5) For Group 1 helicopters: After 07 February 2022 [the effective date of the original issue of this AD], operation of an affected part defined by P/N in Table 6 of section 4 'Appendix' of the ASB, is allowed, provided that the part is used with an average frequency not exceeding 4 TC per FH between two overhauls or over the service life of the part, as applicable.

Part(s) Installation:

- (6) For Group 1, Group 2 and Group 3 helicopters: From 07 February 2022 [the effective date of the original issue of this AD], it is allowed to install on any helicopter an affected part, as defined in this AD, provided that the TC for that affected part are (re-)calculated as required by this AD, and the part is a serviceable part, as defined in this AD.
- (7) Do not install on any helicopter an affected part defined by P/N in Appendix 1 of this AD, as required by paragraph (7.1) or (7.2) of this AD, as applicable:
 - (7.1) For Group 1 and Group 2 helicopters: From 07 February 2022 [the effective date of the original issue of this AD].
 - (7.2) For Group 3 helicopters: After replacement of mechanical parts as required by paragraph (4) of this AD.

Ref. Publications:

AH ASB AS332-01.00.76 original issue dated 16 December 2021.

The use of later approved revisions of the above-mentioned 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 original issue of this AD was posted 22 December 2021 as PAD 21-185 for consultation until 19 January 2022. 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</u> 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 (Technical Support), Aéroport de Marseille Provence, 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66 Web portal: https://airbusworld.helicopters.airbus.com or E-mail: TechnicalSupport.Helicopters@airbus.com.

Appendix 1
Mechanical parts referred to in paragraph (4) of this AD

Part Name	P/N
	330A31-1222-05
Main rotor shaft	330A31-1222-06
	330A31-1222-08
	330A31-1222-09
Main Gearbox support -	330A38-0100-29
Flexible mounting plate	330A38-0100-33