



Airworthiness Directive

AD No.: 2024-0229

Issued: 02 December 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 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:

AIRBUS HELICOPTERS

Type/Model designation(s):

H160-B helicopters

Effective Date: 16 December 2024

TCDS Number(s): EASA.R.516

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0222-E dated 21 December 2023, including its Correction dated 22 December 2023.

ATA 62 – Main Rotor – Swashplate bearing – Inspections

Manufacturer(s):

Airbus Helicopters (AH)

Applicability:

AH H160-B helicopters, all manufacturer serial numbers.

Definitions:

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

Affected part: Swashplate bearings having Part Number (P/N) U623A20T1001.

The ASB: AH Emergency Alert Service Bulletin (ASB) H160-62-32-0001 Issue 002.

Serviceable part: An affected part which is new (not previously installed on a helicopter).

Reason:

There have been several occurrences of premature in-service degradation of the swashplate bearings of H160-B helicopters.



In one case, it has been determined that the use of the wrong grease or the mixing of incompatible greases might have initiated the degradation.

Health Usage Monitoring System (HUMS) of the swashplate bearings has been as effective as other inspections to detect an early degradation of the swashplate bearings, however, the reliability of the HUMS itself has not yet been demonstrated to be sufficient unless additional precautions are taken.

This condition, if not detected and corrected, could lead to failure of the swashplate bearings, possibly leading to reduced control of the helicopter.

To address this potential unsafe condition, AH issued H160-62-32-0001 Issue 001 to provide instructions for additional inspections and to ensure that HUMS data are analysed on a regular basis, to detect degradation of the swashplate bearings. Consequently, EASA published AD 2023-0222-E (later corrected) to require repetitive inspections of the swashplate bearings and repetitive analyses of the data extracted from the HUMS of the swashplate bearings. That AD also provided additional requirements for greasing of the swashplate bearings.

Since that AD was issued, it has been confirmed that the repetitive interval for the check of HUMS vibration overlimit monitoring can be extended, and that specific repetitive flights must be introduced in order to provide the regular status of the HUMS vibration overlimit monitoring.

For the reasons described above, this AD retains the requirements of EASA AD 2023-0222-E, which is superseded, extends some compliance times, and, in addition, requires to fly in conditions where the HUMS vibration overlimit can be monitored.

This AD is still considered to be an interim action, and further AD action may follow.

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:

Inspection(s):

- (1) Within 15 flight hours (FH) or before the next cleaning of the swashplate bearings, whichever occurs first after 25 December 2023 [the effective date of EASA AD 2023-0222-E], and, thereafter, before any cleaning of the swashplate bearings or at intervals not exceeding 15 FH, whichever occurs first, inspect the swashplate bearings in accordance with the instructions of paragraph 4.2 of the accomplishment procedure of the ASB.
- (2) If, following any inspection as required by paragraph (1) of this AD, abnormal grease, as defined in the ASB, is detected, before next flight and, thereafter, at intervals not exceeding 15 FH, do a functional test of the swashplate bearings in accordance with the instructions of the ASB.
- (3) Before next flight after 25 December 2023 [the effective date of EASA AD 2023-0222-E], and, thereafter, at each engine shutdown without exceeding 10 FH between two consecutive engine shutdowns, accomplish a check of the HUMS flight report for reporting of "MR SWASHPLATE: EXCEEDANCE" in accordance with paragraph 4.3 of the accomplishment procedure of the ASB.



- (4) Before next flight after 25 December 2023 [the effective date of EASA AD 2023-0222-E], and, thereafter, at intervals not exceeding 10 FH, accomplish a check of the condition of the HUMS vibration overlimit monitoring for reporting of “MR SWASHPLATE: UNDEFINED” or “MR SWASHPLATE: EXCEEDANCE” in accordance with the instructions of paragraph 4.4 of the accomplishment procedure of the ASB.
- (5) Within 15 FH or 7 days, whichever occurs first after 25 December 2023 [the effective date of EASA AD 2023-0222-E], and, thereafter, at intervals not exceeding 15 FH or 7 days, whichever occurs first, download and analyse HUMS data associated with the swashplate bearings in accordance with the instructions of paragraph 4.5 of the accomplishment procedure of the ASB.
- (6) Within 5 FH after the effective date of this AD and, thereafter, at intervals not exceeding 10 FH, perform one flight to verify the status of the HUMS vibration overlimit monitoring in accordance with the instructions of paragraph 4.6 of the accomplishment procedure of the ASB.

Corrective Action(s):

- (7) If, following any check as required by paragraph (3) or (4) of this AD, as applicable, any discrepancy, as defined in the ASB, is detected, accomplish all the applicable actions in accordance with, and within the compliance time defined in, the ASB. Where the ASB provides instruction to contact AH HUMS support, this AD requires to contact AH for applicable instructions and to accomplish those instructions accordingly.
- (8) If, following any functional check of the swashplate bearings as required by paragraph (2) of this AD, or included in the actions as required by paragraph (7) of this AD, as applicable, any discrepancy is detected, before next flight, replace the Main Rotor Mast assembly in accordance with the instructions of the ASB.

Terminating Action(s):

- (9) None.

Greasing of the Swashplate Bearings:

- (10) From 25 December 2023 [the effective date of EASA AD 2023-0222-E], greasing or re-greasing of the swashplate bearings is allowed, provided it is accomplished using the grease and procedure as specified in paragraph 4.1.3 of the accomplishment procedure of the ASB.
- (11) Before next swashplate bearings lubrication or within 15 FH, whichever occurs first after 25 December 2023 [the effective date of EASA AD 2023-0222-E], identify the grease, which was applied during the last swashplate bearings lubrication, in accordance with the instructions of paragraph 4.1.1 of the accomplishment procedure of the ASB.
- (12) If, following the determination as required by paragraph (11) of this AD, it is determined that the grease used during the last swashplate bearings lubrication is not listed in CM115 type 1, or it is unknown, within 55 FH, fully remove that grease and replace it in accordance with the instructions of paragraph 4.1.2 of the accomplishment procedure of the ASB.



Part(s) Installation:

(13) From 25 December 2023 [the effective date of EASA AD 2023-0222-E], it is allowed to install an affected part on a helicopter, provided it is a serviceable part.

Credit:

(14) Inspection, corrective actions, and greasing accomplished on a helicopter before the effective date of this AD in accordance with the instructions of ASB H160-B 62-32-0001 Issue 001 are acceptable for compliance with the requirements of paragraphs (1) to (5), and (7) to (12) of this AD, as applicable, for that helicopter.

Ref. Publications:

AH Emergency ASB H160-B 62-32-0001 original issue dated 19 December 2023, and Issue 002 dated 25 November 2024.

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. 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 03 January 2025. Only if any comment is received during the consultation period, a Comment Response Document will be published in the [EASA Safety Publications Tool](#), 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: 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 (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: support.technical-airframe.ah@airbus.com.

