

Emergency Airworthiness Directive

AD No.: 2023-0222-E

Issued: 21 December 2023
[Correction: 22 December 2023]

Note: This Emergency 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: 25 December 2023

TCDS Number(s): EASA.R.516

Foreign AD: Not applicable

Supersedure: None

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.

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 bearing of H160-B helicopters.

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

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.

Vibration health monitoring (VHM) of the swashplate bearing has been as effective as other inspections to detect an early degradation of the swashplate bearings, however, the reliability of the VHM itself has not yet been demonstrated to be sufficient unless additional precautions are taken.

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, to provide instructions for additional inspections and to ensure that VHM data is analysed on a regular basis, to detect degradation of the swashplate bearing.

For the reasons described above, this AD requires repetitive inspections of the swashplate bearing and repetitive analyses of the data extracted from the VHM system of the swashplate bearing. This AD also provides additional requirements for greasing of the swashplate bearings.

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

This AD is republished to correct the P/N in the definition of 'Affected part'.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 15 flight hours (FH) or before the next cleaning of the swashplate bearing, whichever occurs first after the effective date of this AD, and, thereafter, before any cleaning of the swashplate bearing or at intervals not exceeding 15 FH, whichever occurs first, inspect the swashplate bearing 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 bearing in accordance with the instructions of the ASB.
- (3) Before next flight after the effective date of this AD, and, thereafter, after each flight, accomplish a check of the VHM 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 the effective date of this AD, and, thereafter, at intervals not exceeding 5 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 the effective date of this AD, and, thereafter, at intervals not exceeding 15 FH or 7 days, whichever occurs first, download and analyse HUMS data associated with the swashplate bearing in accordance with the instructions of paragraph 4.5 of the accomplishment procedure of the ASB.

Corrective Action(s):

- (6) 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 as 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.
- (7) If, following any functional check of the swashplate bearing as required by paragraph (2) of this AD, or included in the actions as required by paragraph (6) 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):

- (8) None.

Greasing of the Swashplate Bearing:

- (9) From the effective date of this AD, greasing or re-greasing of the swashplate bearing 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.
- (10) Before next swashplate bearing lubrication or within 15 FH, whichever occurs first after the effective date of this AD, identify the grease, which was applied during the last swashplate bearing lubrication, in accordance with the instructions of paragraph 4.1.1 of the accomplishment procedure of the ASB.
- (11) If, following the determination as required by paragraph (10) of this AD, it is determined that the grease used during the last swashplate bearing 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:

- (12) From the effective date of this AD, it is allowed to install an affected part on a helicopter, provided it is a serviceable part.

Ref. Publications:

AH Emergency ASB H160-B 62-32-0001 original issue dated 19 December 2023.

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 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.
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.

