Airworthiness Directive

AD No.: 2022-0038

Issued: 07 March 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, 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):
SA 365 and AS 365 helicopters

Effective Date: 21 March 2022

TCDS Number(s): EASA.R.105

Foreign AD: Not applicable

Supersedure: None

ATA 65 – Tail Rotor – Pitch Control Rod Bearing – Inspection / Replacement

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Manufacturer(s):
Airbus Helicopters (AH), formerly Aerospatiale, Sud Aviation

Applicability:
SA 365 C1, C2, C3 and AS 365 N helicopters, all manufacturer serial numbers.

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

The ASB: AH Alert Service Bulletin (ASB) SA365-05.35 and AS365-05.00.83, as applicable.

Affected part: Dual bearings, having Part Number (P/N) 360A33-4052-00, for installation on the control rod of a tail rotor gearbox (TGB) P/N 365A33-4000-00/01/02 or P/N 365A33-5000-00, as applicable.

Serviceable part: An affected part that is new (never previously installed).

Reason:
Several occurrences of damaged TGB control rod dual bearings were reported on a different TGB design. EASA issued several ADs for that unsafe condition, requiring various repetitive inspections, corrective actions and modification. Since those ADs were issued, analysis has shown that

degradation of the TGB control rod dual bearings cannot be excluded for the TGB design installed on SA 365 C1, C2, C3 and AS 365 N helicopters.

This condition, if not detected and corrected, could lead to loss of yaw control of the helicopter.

To address this potential unsafe condition, AH published the ASB, as defined in this AD, providing instructions for inspection and replacement.

For the reasons described above, this AD requires repetitive inspections of the TGB magnetic plug at reduced intervals, the use of new criteria for particle assessment and, depending on findings, replacement of the TGB or of the double bearing, as applicable.

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

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

Required as indicated, unless accomplished previously:

Magnetic Plug Inspections / Particle Assessment:

(1) Within 25 flight hours (FH) since the last magnetic plug inspection and, thereafter, at intervals not to exceed 10 FH, accomplish a magnetic plug inspection in accordance with the instructions of paragraph 3.B.2 of the ASB (see Note 1 of this AD).

Note 1: Helicopters that are under close monitoring on the effective date of this AD must continue the close monitoring procedure up to the first inspection as required by paragraph (1) of this AD.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, particles are found on the magnetic plug detector that are outside the limits as defined in Work Card 20-08-01-601 (MTC), before next flight, replace the TGB in accordance with the instructions of paragraph 3.B.2 of the ASB.

(3) If, during any inspection as required by paragraph (1) of this AD, particles (including abrasion-type particles), as defined in the ASB, are found on the magnetic plug detector that are within the limits as defined in Work Card 20-08-01-601 (MTC), within 25 FH after that inspection, accomplish a metallurgical analysis of all particles collected in accordance with the instructions of paragraph 3.B.2 of the ASB.

(4) If, during the analysis as required by paragraph (3) of this AD, material M50 (also designated AMS6490 or 80DCV40) particles are detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of paragraph 3.B.2 of the ASB.

Terminating Action:

(5) None.

Part(s) Installation:

(6) From the effective date of this AD, it is allowed to install an affected part on any helicopter, provided that, following installation, the part is inspected and corrected as required by this AD.

Ref. Publications:

AH ASB SA365-05.35 original issue dated 07 February 2022.

AH ASB AS365-05.00.83 original issue dated 07 February 2022.

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. 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 – Aéroport de Marseille Provence, 13725 Marignane Cedex, France
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