

Airworthiness Directive

AD No.: 2021-0048

Issued: 16 February 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:

AIRBUS HELICOPTERS

Type/Model designation(s):

AS 350, EC 130, AS 355, AS 365 and SA 365 helicopters

Effective Date: 02 March 2021

TCDS Number(s): EASA.R.008, EASA.R.105 and EASA.R.146

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Pitch Rod Upper Links – Marking / Inspection
Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aérospatiale.

Applicability:

AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS 350 B2, AS 350 B3, AS 350 D, EC 130 B4 and EC 130 T2 helicopters, all serial numbers (s/n);

AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N and AS 355 NP helicopters, all s/n; and

SA 365 C1, SA 365 C2, SA 365 C3, SA 365 N, SA 365 N1, AS 365 N2 and AS 365 N3 helicopters, all s/n.

Definitions:

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

The applicable ASB: AH Alert Service Bulletin (ASB) AS350-05.01.01, ASB EC130-05A037, ASB AS355-05.00.85, ASB SA365-05.34 and ASB AS365-05.00.82, as applicable.

Reason:

An occurrence was reported where increased vibration was experienced by the crew of an AS 365 helicopter during flight. Subsequent investigation determined a total loss of tightening torque of

one screw connecting the main rotor (MR) pitch rod to the horn of its upper link, which had led to abnormal wear of the screw and consequently increased the vibrations coming from the MR control chain to the pilot's flight controls. The MR pitch rod upper link installation is identical on AS 350, EC 130, AS 355, SA 365 and AS 365 helicopters.

This condition, if not corrected, could lead to loss of one or more MR pitch rod upper links, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the applicable ASB to introduce alignment markings on the MR pitch rod upper links to visualise any rotation of the screw, washer or nut due to loss of torque. The applicable ASB also provides instructions for inspection of the MR pitch rod upper links.

For the reason described above, this AD requires the application of alignment markings on, and repetitive inspections of, the MR pitch rod upper links and, depending on findings, the accomplishment of applicable corrective action(s). The repetitive inspections may be aligned with the regular MR visual inspections.

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

Required as indicated, unless accomplished previously:

Markings:

- (1) Within the compliance time as specified in Table 1 of this AD, apply markings on the screw, washer, nut and horn on both sides of each MR pitch rod upper link in accordance with the instructions of Section 3.B.2.a of the applicable ASB.

Table 1 – Markings

Helicopter Model	Compliance Time (after the effective date of this AD)
SA 365 C1, SA 365 C2, SA 365 C3, SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3	Within 100 flight hours (FH)
AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS 350 B2, AS 350 B3, AS 350 D EC 130 B4 and EC 130 T2 AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N, AS 355 NP	Within 150 FH

Inspections:

- (2) Within 10 FH after applying the markings as required by paragraph (1) of this AD and, thereafter, at intervals not to exceed 10 FH, accomplish a visual inspection of the two alignment markings on each MR pitch rod upper link in accordance with the instructions of Section 3.B.2.b of the applicable ASB.



Corrective Action(s):

- (3) If, during any inspection as required by paragraph (2) of this AD, the markings on one or both sides of a MR pitch rod upper link are found misaligned, before next flight, accomplish the applicable corrective action(s) on that upper link in accordance with the instructions of Section 3.B.2.c of the applicable ASB.

Terminating Action:

- (4) None.

Ref. Publications:

AH ASB AS350-05.01.01 original issue dated 09 February 2021.

AH ASB EC130-05A037 original issue dated 09 February 2021.

AH ASB AS355-05.00.85 original issue dated 09 February 2021.

AH ASB SA365-05.34 original issue dated 09 February 2021.

AH ASB AS365-05.00.82 original issue dated 09 February 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. 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 (Technical Support) at:
Airbus World - Technical Request Management: <https://airbusworld.helicopters.airbus.com>,
E-mail: support.technical-dyncomp.ah@airbus.com.

