

Airworthiness Directive

AD No.: 2022-0220

Issued: 16 November 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 355, AS 365, SA 365, EC 155, AS 332

and EC 225 LP helicopters

Effective Date: 23 November 2022

TCDS Number(s): EASA.R.002, EASA.R.105 and EASA.R.146

Foreign AD: Not applicable

Supersedure: None

ATA 25 – Equipment / Furnishings – Main Rotor Flight Controls / Shear-Button Safety-Cap – Operational Check

Manufacturer(s):

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

Applicability:

AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N and AS 355 NP helicopters, all serial numbers (s/n) equipped with hoist provisions (hoist fixed parts);

SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, EC 155 B and EC 155 B1 helicopters, all s/n equipped with hoist provisions (hoist fixed parts);

AS 332 C, AS 332 C1, AS 332 L1, AS 332 L2 and EC 225 LP helicopters, all s/n equipped with hoist provisions (hoist fixed parts).

Definitions:

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

Affected handle: Collective pitch handle, installed on pilot and co-pilot collective sticks and having a Part Number (P/N) as listed in Appendix 1 of this AD.



Affected spring: Spring P/N 52641 or P/N 100571 installed on an affected handle, as applicable to the helicopter model.

Serviceable spring: Spring P/N 52641 or P/N 100571 which is new (never previously installed).

The ASB: AH Alert Service Bulletin (ASB) ASB AS355-25.01.38, ASB AS365-25.01.91, ASB EC155-25A160, ASB AS332-25.03.97 or ASB EC225-25A293, as applicable.

Groups: Group 1 helicopters are those that have an affected handle installed. Group 2 helicopters are those that do not have an affected handle installed.

Reason:

An occurrence was reported of an inadvertent activation of the hoist shear-button on the collective pitch handle during a night flight, while the pilot was turning on the headlight adjacent to the shear-button. The shear-button is safeguarded by a safety-cap fitted with a spring, which is designed to maintain the safety-cap in a fully closed or open position. Technical investigation determined that the effect of ageing of the spring may lead to an improper functioning of the safety-cap as effective hoist shear-button protection.

This condition, if not detected and corrected, could lead to an unintended shearing of the hoist cable, possibly resulting in injury to hoisted person(s).

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, to provide applicable instructions.

For the reasons described above, this AD requires an operational check of the hoist shear-button safety-cap and, depending on findings, replacement of the spring. In addition, this AD requires accomplishment of a check upon installation of an affected handle, or a collective stick equipped with an affected handle, on a helicopter.

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

Required as indicated, unless accomplished previously:

Check:

(1) For Group 1 helicopters: Within the compliance time as specified in Table 1 of this AD, as applicable, accomplish an operational check of the hoist shear-button safety-cap of each affected handle in accordance with the instructions of the ASB.

Table 1 – Helicopter Configuration and Compliance Time

Helicopter Configuration (on the effective date of this AD)	Compliance Time
Helicopter with hoist removable parts installed (hoist installed)	Within 50 flight hours (FH) after the effective date of this AD
Helicopter with only hoist fixed parts installed (hoist not installed)	Before installation of hoist removable parts on the helicopter



Corrective Action(s):

(2) If, during the check as required by paragraph (1) of this AD, any deficiency during at least one test, as identified in the ASB, is detected, before next flight, replace the affected spring with a serviceable spring in accordance with the instructions of the ASB.

(3) Accomplishment of the corrective action on a helicopter, as required by paragraph (2) of this AD, can be deferred until 150 FH after accomplishment of the check as required by paragraph (1) of this AD, provided that, before next flight, a locally made limitation placard, prohibiting the hoist use by night, is manufactured and installed in accordance with the instructions of the ASB on that helicopter, all flight crew are informed and, thereafter, the helicopter is operated accordingly. After the accomplishment of the corrective action as required by paragraph (2) of this AD, the limitation placard can be removed from the helicopter.

Part(s) Installation:

(4) For Group 1 and Group 2 helicopters: From the effective date of this AD, installation of an affected handle, or a collective stick equipped with an affected handle, on an helicopter is allowed, provided that, prior to the installation, the affected handle passes the check in accordance with the instructions of the ASB, or the affected handle is a new part (never previously installed on a helicopter).

Ref. Publications:

AH ASB AS355-25.01.38 original issue dated 04 October 2022.

AH ASB AS365-25.01.91 original issue dated 04 October 2022 and Revision 1 dated 03 November 2022.

AH ASB EC155-25A160 original issue dated 04 October 2022.

AH ASB AS332-25.03.97 original issue dated 04 October 2022.

AH ASB EC225-25A293 original issue dated 04 October 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. This AD was posted on 19 October 2022 as PAD 22-136 for consultation until 02 November 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)

E-mail: <u>TechnicalSupport.Helicopters@airbus.com</u>

Airbus World: Technical Request Management: https://airbusworld.helicopters.airbus.com



Appendix 1

Affected Handle - Collective Pitch Handle for Pilot and Co-Pilot Collective Sticks

Helicopter Model	P/N
AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N and AS 355 NP	704A41-1100-60
SA 365 N	704A41-1100-67
	704A41-1100-68
SA 365 N1	704A41-1100-56
	704A41-1100-57
	704A41-1100-67
	704A41-1100-68
	704A41-1100-56
AC 2CE N2	704A41-1100-57
AS 365 N2	704A41-1100-98
	704A41-1100-99
AS 365 N3	704A41-1101-32
EC 155 B and EC 155 B1	704A41-1101-32
AS 332 C	704A41-1100-42
	704A41-1100-50
AS 332 C1	704A41-1100-97
AS 332 L and AS 332 L1	704A41-1100-42
	704A41-1100-97
AS 332 L2	704A41-1101-14
	704A41-1101-30
EC 225 LP	704A41-1101-14