



## Airworthiness Directive

**AD No.:** 2019-0109

**Issued:** 20 May 2019

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 332 helicopters

**Effective Date:** 03 June 2019

**TCDS Number(s):** EASA.R.002

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2015-0153R1 dated 09 November 2015.

## ATA 64 – Tail Rotor – Rotor Blades – Inspection / Modification

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### Manufacturer(s):

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

### Applicability:

AS 332 C, AS 332 L, and AS 332 L1 helicopters, all serial numbers, if equipped with tail rotor (TR) de-icing installation unit Part Number (P/N) 204ZP01Y01 and TR blades P/N 332A12-0055-XX, where XX represents any dash number (also known as type A10), except helicopters that have embodied AH modification (mod) 0728358, mod 332P084154.00, or mod 332P679435.00 in production.

### Definitions:

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

**Affected part:** TR blades, having P/N 332A12-0055-XX, where XX represents any dash number (also known as type A10).

**The inspection ASB:** AH Alert Service Bulletin (ASB) AS332-05.01.02 Revision 2.

**The applicable modification ASB:** AH ASB AS332-30.00.85 (equivalent to mod 0728358) and ASB AS332-30.90.86 (equivalent to mod 332P084154.00), as applicable.



**Reason:**

An occurrence was reported where, following a flight during which the de-icing system of the helicopter was operated, TR blades were overheated with consequent damage after application on ground of alternating-current ground power unit (AC GPU) external power source 115V/400 Hz. Subsequent analysis determined that a power supply box failure (stuck in a “closed” position) caused the uncontrolled power supply to the TR blade de-icing system. In this event, during the preparation for flight with the rotors stationary, the flight crew was able to detect the smell coming from the TR, disconnected the electrical power supply and noticed that the TR blades were damaged by overheat.

This condition, if not detected and corrected, could lead to structural damage of TR blades, possibly resulting in significant vibrations and reduced control of the helicopter.

To address this potential unsafe condition, AH issued the inspection ASB to provide instructions for inspection of the TR blades. Consequently, EASA issued the Emergency AD 2015-0153-E (later revised) to require inspections of the affected parts and, depending on findings, accomplishment of applicable corrective action(s).

Since AD 2015-0153R1 was issued, AH developed production mod 0728358, mod 332P084154.00 and mod 332P679435.00, providing design changes to prevent unintended power supply to the TR blade de-icing system and ensuring that the affected power supply remains under full control of the pilot. AH also issued the applicable modification ASB to provide in-service modification instructions. AH mod 332P679435.00 was only embodied on a limited number of AS 332 L1 helicopters in production.

For the reasons described above, this AD retains the requirements of EASA AD 2015-0153R1, which is superseded, and additionally requires modification of a helicopter, which constitutes terminating action for the repetitive inspections of the affected parts.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) From 27 July 2015 [the effective date of EASA AD 2015-0153-E], before each engine start after any of the events as specified in paragraph (1.1) or (1.2) of this AD, inspect each affected part in accordance with the instructions of paragraph 3.B.2 of the inspection ASB.
  - (1.1) Application of an AC GPU external power source 115V/400 Hz with the rotor stationary after the de-icing system was operated (in-flight or on ground).
  - (1.2) Application of an AC GPU external power source 115V/400Hz with the rotor stationary after accomplishment of the TR de-icing system test (with spinning or stationary rotor).

**Corrective Action(s):**

- (2) If, during any inspection as required by paragraph (1) of this AD, any discrepancy is detected, as defined in the inspection ASB, within the compliance time specified in the inspection ASB, and



in accordance with the instructions of paragraph 3.B.2 of the inspection ASB, accomplish the applicable corrective action(s).

**Credit:**

- (3) Inspection(s) and corrective action(s) accomplished on a helicopter before the effective date of this AD in accordance with the instructions of AH ASB AS332-05.01.02 at original issue or Revision 1 is acceptable to comply with the requirements of paragraphs (1) and (2) of this AD for that helicopter.

**Modification:**

- (4) Within 1 500 flight hours or 24 months, whichever occurs first after the effective date of this AD, modify the helicopter in accordance with the instructions of the applicable modification ASB.

**Terminating Action:**

- (5) Modification of a helicopter as required by paragraph (4) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

**Ref. Publications:**

AH ASB AS332-05.01.02 original issue dated 22 July 2015, or Revision 1 dated 05 November 2015, or Revision 2 dated 16 April 2019.

AH ASB AS332-30.00.85 original issue dated 16 April 2019.

AH ASB AS332-30.90.86 original issue dated 16 April 2019.

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 18 April 2019 as PAD 19-070 for consultation until 16 May 2019. 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](mailto: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](#).
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



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