



Airworthiness Directive

AD No.: 2018-0142R1

Issued: 09 December 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: Revision 1: 16 December 2019
Original issue: 06 July 2018

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Revision: This AD revises EASA Emergency AD 2018-0142-E dated 04 July 2018.

ATA 25, 30, 53 – Equipment & Furnishings / Ice and Rain Protection / Fuselage – Dual Hoist Removable Parts or De-icing System – Removal

Manufacturer(s):

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

Applicability:

AS 332 C, AS 332 C1, AS 332 L, AS 332 L1 helicopters, all manufacturer serial numbers, if equipped with dual hoist installation and de-icing system, except those that have AH modification (MOD) 0722907 installed in production.

Definitions:

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

The ASB: AH AS332 Emergency Alert Service Bulletin (ASB) 01.00.91.

Reason:

During the first flight of an AS 332 L helicopter after a retrofit re-installing the de-icing system, a phenomenon involving vibrations around the 12 Hz frequency was observed. Subsequent flight tests determined that this vibration is due to the specific helicopter configuration, involving riveted main frames X3855 and X5295 (pre-MOD 0722907), additional weight created by parts of the rotor de-icing system on the main rotor head (the distributor and de-icing harnesses) and removable parts (hoist arm and hoists) of the dual hoist installation.



This condition, if not corrected, could potentially generate divergent aeromechanic coupling between the helicopter structure and the rotor, possibly resulting in mechanical failure of structural parts and/or loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, along with the Safety Information Notice No. 3234-S-67, and EASA issued Emergency AD 2018-0142-E to require removal of removable parts of the dual hoist installation, or removal of the de-icing system.

After this AD was issued, AH accomplished additional flight tests and demonstrated that AS 332 L and AS 332 L1 helicopters are free from 12 Hz vibratory phenomenon when limiting the operational flight envelope and Vne (never-exceed speed). Consequently, AH issued the AS332 Emergency ASB 01.00.96, applicable to AS 332 L and AS 332 L1 helicopters only, retaining the requirements of the ASB and providing, as an alternative method to removal of the parts of the dual hoist installation or of the de-icing system, instructions for specific Rotorcraft Flight Manual (RFM) limitations of the operational flight envelope and Vne of these two helicopter models. Consequently, AH also revised the ASB to remove from the applicability AS 332 L and AS 332 L1 helicopters which are now addressed by the AS332 Emergency ASB 01.00.96.

For the reasons described above, this AD is revised to introduce RFM Amendment and locally made placard installation as an optional alternative method for AS 332 L or AS 332 L1 helicopters to comply with the requirements of this AD.

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

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

Required as indicated, unless accomplished previously:

Removal:

- (1) Before next flight after 06 July 2018 [the effective date of the original issue of this AD], remove the removable parts of the dual hoist installation, or remove the de-icing system in accordance with the instructions of section 3 of the ASB or AS332 Emergency ASB 01.00.96 as applicable to helicopter model.

Alternative Method of Compliance:

- (2) Amendment of the RFM of a AS 332 L or AS 332 L1 helicopter by inserting Appendix 4A, 4B or 4C of the AS332 Emergency ASB 01.00.96, as applicable to helicopter model and configuration, and installation of locally made placard on the instrument panel, in accordance with the instructions of the AS332 Emergency ASB 01.00.96, is an acceptable alternative method to comply with the requirements of paragraph (1) of this AD for that helicopter.

Ref. Publications:

AH AS332 Emergency ASB 01.00.91 original issue dated 03 July 2018, or Revision 1 dated 04 December 2019.

AH AS332 Emergency ASB 01.00.96 original issue dated 04 December 2019.



The use of later approved revisions of 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 Programming and Continued Airworthiness 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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: : Airbus Helicopters (Technical Support), web portal: <https://keycopter.airbushelicopters.com> Technical Requests Management, or e-mail: support.technical-airframe.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com

