



Airworthiness Directive

AD No.: 2021-0012R1

Issued: 25 February 2023

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:

AIRBUS HELICOPTERS

Type/Model designation(s):

AS 332 and EC 225 helicopters

Effective Date: Revision 1: 25 February 2023
Original issue: 25 January 2021

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2021-0012 dated 11 January 2021.

ATA 56 – Windows – Jettisoning System – Modification

Manufacturer(s):

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

Applicability:

AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters, all serial numbers (s/n), except helicopters that have embodied AH modification (mod) 07 28630, mod 332P087142.09 or mod 332P087142.12;

AS 332 L2 helicopters, all s/n, except helicopters that have embodied AH mod 07 28630, mod 332P087140.00 or mod 332P087142.00; and

EC 225 LP helicopters, all s/n, except helicopters that have embodied AH mod 07 28370, mod 332P087140.00, mod 332P087142.00, mod 332P087142.03, mod 332P087142.06, mod 332A087149.00 or mod 332A087149.03.

Definitions:

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

The applicable ASB: AH Alert Service Bulletin (ASB) AS332-56.90.14, ASB AS332-56.00.16, ASB AS332-56.00.18, ASB AS332-56.00.20, ASB AS332-56.00.21, ASB EC225-56A013 Revision 1,



ASB EC225-56A015, ASB EC225-56A016 and ASB EC225-56A017, as applicable to helicopter model and configuration.

Groups: Group 1 helicopters are AS 332 L2 helicopters, s/n 2488, 2503, 2504, 2590, 2643 and 2646; and EC 225 LP helicopters, all s/n, except s/n 2663, 2666, 2670, 2673, 2678 and 2742.

Group 2 helicopters are all other AS 332 L2 and EC 225 LP helicopters.

Group 3 helicopters are AS 332 C, C1, L and L1 helicopters, all s/n.

Reason:

An occurrence was reported where difficulty was experienced in jettisoning a helicopter window requiring the application of an excessive pushing force. Subsequent investigation determined that the associated window seal was in a good condition with no indication of contamination with paint or hardening. However, excessive friction between the window seal and the helicopter airframe was identified to be the root cause of this failure mode.

This condition, if not corrected, could prevent the jettisoning of a window, possibly affecting the evacuation of helicopter occupants during an emergency situation.

To address this potentially unsafe condition, as a temporary measure, EASA issued AD 2016-0049 to require installation of polytetrafluoroethylene (PTFE) skived film on window frames.

After that AD was issued, following investigations carried out on customized VIP cabin windows, EASA issued AD 2018-0039 (later corrected) retaining the requirements of AD 2016-0049, which was superseded, and requiring installation of silicone seals (mod 332P087140.00) on certain identified VIP cabin windows, instead of the PTFE skived film and existing polychloroprene seals.

After that AD was issued, AH developed mod 07 28370, mod 332P087142.00, mod 332P087142.03, mod 07 28630, mod 332P087142.06, mod 332A087149.00 and mod 332A087149.03, applicable to a limited population of helicopters affected by AD 2018-0039 and available for in-service helicopters through the ASB AS332-56.90.14, ASB AS332-56.00.16, ASB EC225-56A013 Revision 1, ASB EC225-56A015, ASB EC225-56A016 and ASB EC225-56A017 and, consequently, EASA first issued AD 2019-0107 and later AD 2020-0061, the latter superseding AD 2019-0107, to require modification of the windows jettisoning system by removing the PTFE skin between the window seal and the helicopter airframe, and installing silicone seals instead of seals currently installed on the helicopter cabin windows.

Since EASA AD 2020-0061 was issued, AH developed a set of modifications applicable to Group 3 helicopters, which were not addressed by that AD and available for in-service helicopters through AH ASB AS332-56.00.18, ASB AS332-56.00.20 and ASB AS332-56.00.21 and EASA issued AD 2021-0012 retaining the requirements of EASA AD 2020-0061, which was superseded, and expanding its Applicability to include more helicopter models.

Since that AD was issued AH determined that the compliance time for modification of windows jettisoning system applicable to Group 3 helicopters, as required by paragraph (2) of this AD, can be extended, provided that the window seals are repetitively inspected until accomplishment of the required modification. Consequently, AH issued Revision 3 of AH ASB AS332-56.00.18, Revision 2 of the AH ASB AS332-56.00.20 and AH ASB AS332-56.00.21, respectively, to reflect this development.



For the reasons described above, this AD is revised to add an alternative method to modification of windows jettisoning system required by paragraph (2) of this AD for Group 3 helicopters.

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

Required as indicated, unless accomplished previously:

Modification:

- (1) For Group 1 and Group 2 helicopters: Within the compliance time as defined in Table 1 or Table 2 of this AD, as applicable to helicopter Group and helicopter operation, modify the windows jettisoning system in accordance with the instructions of the applicable ASB.

Table 1 – Modification of Windows Jettisoning System for Group 1 Helicopters

Helicopter Operation	Compliance Time (whichever occurs first after 30 May 2019 [the effective date of EASA AD 2019-0107])
not operated over water	250 flight hours (FH) or 6 months
operated over water	110 FH or 6 months

Table 2 – Modification of Windows Jettisoning System for Group 2 Helicopters

Helicopter Operation	Compliance Time (whichever occurs first after 31 March 2020 [the effective date of EASA AD 2020-0061])
not operated over water	250 FH or 6 months
operated over water	110 FH or 6 months

- (2) For Group 3 helicopters: Within 25 months after 25 January 2021 [the effective date of this AD at original issue], modify the windows jettisoning system in accordance with the instructions of the applicable ASB.

Related Action:

- (3) After modification of a helicopter as required by paragraph (1) or (2) of this AD, or as specified by paragraph (4) of this AD, as applicable, that helicopter is no longer affected by the requirements of EASA AD 2018-0039R1.

Alternative Method:

- (4) For Group 3 helicopters: The modification of the window jettisoning system, as required by paragraph (2) of this AD, can be deferred to a later compliance time specified in Table 3 of this AD, as applicable to helicopter operation, provided that during the extension period additional inspections and, depending on findings, correction actions, specified in paragraphs (5) and (6) of this AD, are accomplished.



Table 3 – Alternative Compliance Time

Helicopter Operation	Compliance Time (After 25 January 2021 [the effective date of this AD at original issue])
not operated over water	Within 48 months and 146 days
operated over water	Within 36 months and 109 days

- (5) For Group 3 helicopters: Within 100 FH or 12 months, whichever occurs first after the effective date of this revised AD and, thereafter at intervals not to exceed 100 FH or 12 months, whichever occurs first, inspect the window seals in accordance with the instructions of Revision 3 of AH ASB AS332-56.00.18 or Revision 2 of AH ASB AS332-56.00.20 or Revision 2 of AH ASB AS332-56.00.21, as applicable to helicopter configuration.
- (6) If, during any inspection, as required by paragraph (5) of this AD, any damage is detected, before next flight replace the damaged window seal in accordance with the instructions of Revision 3 of AH ASB AS332-56.00.18 or Revision 2 of AH ASB AS332-56.00.20 or Revision 2 of AH ASB AS332-56.00.21, as applicable to helicopter configuration.
- (7) Modification of the helicopter, as specified by paragraph (4) of this AD, constitutes terminating action for repetitive inspections specified by paragraph (5) of this AD for that helicopter.

Ref. Publications:

AH ASB AS332-56.00.16 original issue dated 10 February 2020.

AH ASB AS332-56.00.18 original issue dated 23 September 2020, or Revision 1 dated 28 April 2021, or Revision 2 dated 03 March 2022, or Revision 3 dated 24 February 2023.

AH ASB AS332-56.00.20 original issue dated 23 September 2020, or Revision 1 dated 03 March 2022, or Revision 2 dated 24 February 2023.

AH ASB AS332-56.00.21 original issue dated 23 September 2020, or Revision 1 dated 03 March 2022, or Revision 2 dated 24 February 2023.

AH ASB AS332-56.90.14 original issue dated 10 April 2019.

AH ASB EC225-56A013 Revision 1 dated 10 February 2020.

AH ASB EC225-56A015 original issue dated 10 February 2020.

AH ASB EC225-56A016 original issue dated 10 February 2020.

AH ASB EC225-56A017 original issue dated 10 February 2020.

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. The original issue of this AD was posted on 25 September 2020 as PAD 20-146 for consultation until 23 October 2020. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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), Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management, E-mail: support.technical-dyncomp.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com.

