Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-069

Issued: 10 May 2021

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:
AIRBUS HELICOPTERS

Type/Model designation(s):
AS 332 helicopters

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Revision: This AD supersedes EASA AD 2019-0064R1 dated 19 December 2019.

ATA 52 – Doors – Cabin Lateral Sliding Plug Door Emergency Jettisoning System – Inspection / Modification

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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 manufacturer serial numbers, if equipped with a cabin lateral sliding plug door modified in accordance with AH modification (mod) 0722338, except helicopters that have embodied Eurocopter mod 0725366 or AH mod 0723667 in production, or have embodied Eurocopter AS 332 Service Bulletin (SB) No. 52.00.28 (any revision), or Aerospatiale AS332 SB No. 52.26 (any revision), as applicable, in service.

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

The inspection ASB: AH Alert Service Bulletin (ASB) AS332-52.00.56.

The modification ASB: AH ASB AS332-52.00.59 Revision 4.

Affected part: Jettisoning mechanism of the cabin lateral sliding plug doors, left-hand (LH) and right-hand (RH) sides.

Reason:

An occurrence was reported where, during scheduled inspection of an affected part, the cabin lateral sliding plug door failed its emergency jettisoning test. Subsequent investigation of the affected mechanism revealed that the cable of the jettison handle interfered with the cable clamps.

This condition, if not detected and corrected, could lead to jamming of the cabin lateral sliding plug door jettisoning mechanism, preventing jettisoning of the affected door in an emergency situation, possibly obstructing the evacuation of occupants.

To address this potential unsafe condition, AH issued the inspection ASB to provide inspection instructions. Consequently, EASA issued AD 2017-0022 to require repetitive inspections of the affected parts, and, depending on finding(s), accomplishment of applicable corrective action(s). Eurocopter had previously developed mod 0725366, available for in-service installation through AS332 SB No. 52.00.28, introducing an improved design of the affected parts for helicopters equipped with machined frames, which provided terminating action to the repetitive inspections required by that AD.

After that AD was issued, EASA determined that mod 0723667, previously developed by Aerospatiale, modifying the rotation of the cabin lateral sliding plug door jettison latches and available for in-service installation through AS332 SB No. 52.26, provided an alternative terminating action to the repetitive inspections as required by that AD. Additionally, to adapt embodiment of mod 0725366 for helicopters equipped with metal sheet frames and machined frames, AH developed mods 332A081738.00 and 332A081738.01, which was made available for in-service installation through ASB AS332-52.00.59, modifying the release system of the cabin lateral sliding plug doors of these helicopters. Finally, AH previously developed mods 0726176, 0726749 and 0728042, also available for in-service installation through AH ASB AS332-52.00.59, whose purpose was to reinforce the cabin lateral sliding plug door lower rail and jettison system's lower retractable stop. Consequently, EASA issued AD 2019-0064 (later revised), retaining the requirements of EASA AD 2017-0022, which was superseded, and required modification of the release system of the cabin lateral sliding plug doors, which constituted terminating action for the repetitive inspections. That AD also provided acceptable alternative modification methods.

Since that AD was issued, feedback collected from operators indicated that the instructions provided by Revision 3 (and earlier issues) of AH ASB AS332-52.00.59 were not suitable for all possible helicopter configurations. Prompted by these comments, AH issued the modification ASB, as defined in this AD, providing updated instructions for installation of the relevant mods. Additionally, the in-service fleet risk level was reviewed and this led to the conclusion that the compliance time for modification of the affected helicopters can be extended.

For the reasons described above, this AD retains the requirements and acceptable alternative modification methods of EASA AD 2019-0064R1, which is superseded, but requires the use of improved modifications installation instructions, as specified in the modification ASB. This AD also extends the compliance time for modification of the affected helicopters.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

(1) During the next jettisoning test of the cabin lateral sliding plug door, or within 110 flight hours (FH), whichever occurs first after 22 February 2017 [the effective date of EASA AD 2017-0022], and, thereafter, during accomplishment of each maintenance task listed in paragraph 1.E.2 of the inspection ASB, inspect the affected parts in accordance with the instructions of section 3 of the inspection ASB.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any discrepancy is detected, as described in the inspection ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of section 3 of the inspection ASB.

Modification:

(3) Within 825 FH or 40 months, whichever occurs first after the effective date of this AD, modify the release system of each cabin lateral sliding plug door in accordance with the instructions of section 3 of the modification ASB.

(4) Modification of a helicopter in accordance with the instructions of Eurocopter AS322 SB No. 52.00.28 (at any revision) or Aerospatiale AS332 SB No. 52.26 (at any revision), as applicable, is an acceptable alternative method to comply with the requirements of paragraph (3) of this AD for that helicopter.

Terminating Action:

(5) Accomplishment on a helicopter of corrective action(s) as required by paragraph (2) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

(6) Modification of a helicopter as required by paragraph (3) of this AD, or as specified in paragraph (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Credit:

(7) Modification of a helicopter, before the effective date of this AD in accordance with the instructions of AH ASB AS332-52.00.59 at original issue, or Revision 1, or Revision 2, or Revision 3, as applicable, is an acceptable method to comply with the requirements of paragraph (3) of this AD for that helicopter.

Ref. Publications:

Eurocopter AS 322 SB No. 52.00.28 original issue dated 15 December 1994, or Revision 1 dated 29 April 1998.

AH ASB AS332-52.00.56 original issue dated 30 January 2017.

AH ASB AS332-52.00.59 original issue dated 19 December 2018, or Revision 1 dated 22 February 2019, or Revision 2 dated 21 June 2019, or Revision 3 dated 17 December 2019, and Revision 4 dated 05 May 2021.

Aerospatiale AS 332 SB No. 52.26 original issue dated 31 October 1991.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 07 June 2021.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, 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.