Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 20-006

Issued: 15 January 2020

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):
EC 130 B4 helicopters

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

TCDS Number(s): EASA.R.008

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0001 dated 10 January 2019.

ATA 52 – Doors – Sliding Door Opening Mechanism – Inspection / Modification

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Manufacturer(s):
Airbus Helicopters (AH), formerly Eurocopter

Applicability:
EC 130 B4 helicopters, all serial numbers.

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

Affected part: Left-hand (LH) side cabin sliding doors latch.

Serviceable part: An affected part on which Airbus modification (MOD) 075105 has been embodied.

The ASB: AH Alert Service Bulletin (ASB) EC130-05A031.

The modification ASB: AH ASB EC130-52A022.

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

Reason:

A number of occurrences have been reported concerning in-flight detachment of LH side cabin sliding doors from EC 130 helicopters. In some of these cases, impact damage was observed on main rotor blades. These events are associated to a degradation of the sliding door locking mechanism. In-flight opening/closing of the cabin sliding doors is a contributing factor and can accelerate the degradation of the locking mechanism.

This condition, if not detected and corrected, could lead to further events of in-flight detachment of a cabin LH sliding door, possibly resulting in damage to the helicopter and injury to persons on the ground.

Prompted by these findings, AH issued the ASB, providing inspection instructions to check the correct operation of the sliding door locking mechanism by measuring the load required to open it. Consequently, EASA issued AD 2019-0001 to require repetitive inspections and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, it was determined that a design deficiency was a contributing factor to these occurrences and, prompted by this finding, AH developed MOD 075105 to improve tightening of the sliding door latch. Consequently, AH issued the modification ASB to provide instructions to modify the installation of the sliding door receptacle. This modification has been determined to provide terminating action for the repetitive visual inspections as required by EASA AD 2019-0001.

For the reason described above, this AD retains the requirements of EASA AD 2019-0001, which is superseded, and requires accomplishment of the applicable terminating action.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For Group 1 and Group 2 helicopters: Within 165 flight hours (FH) after 24 January 2019 [the effective date of EASA AD 2019-0001], and, thereafter, at intervals not to exceed 660 FH, check the load required to operate the sliding door opening mechanism in accordance with instructions of paragraph 3.B.1 of the ASB.

(2) For Group 1 helicopters: Within 165 FH after the initial inspection as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 165 FH, inspect the markings of the attachment screws of the rear LH upper catch in accordance with the instructions of paragraph 3.B.3 of the ASB.

Corrective Action(s):

(3) For Group 1 and Group 2 helicopters: If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, before next flight, adjust the rear LH upper catch in order to increase the load required to operate the sliding door opening mechanism, in accordance with the instructions of paragraph 3.B.2 of the ASB.

(4) For Group 1 helicopters: If, during any inspection as required by paragraph (2) of this AD, discrepancies are detected, before next flight, inspect the rear LH upper catch in accordance with the instructions of paragraph 3.B.4 of the ASB and, depending on findings, replace the anchor nuts of the rear LH upper catch in accordance with the instructions of paragraph 3.B.5 of the ASB.

Modification:

(5) Within 165 FH or 6 months, whichever occurs first after the effective date of this AD, modify the helicopter in accordance with the instructions of the modification ASB.

Terminating Action:

(6) Modification of a helicopter as required by paragraph (5) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (2) of this AD for that helicopter.

(7) Modification of a helicopter as required by paragraph (5) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Parts Installation:

(8) From 24 January 2019 [the effective date of EASA AD 2019-0001], it is allowed to install an affected part on a helicopter, provided that the load required to operate the sliding door opening mechanism is above the threshold defined in the ASB and that, following installation, the helicopter is inspected and modified as required by this AD.

(9) After modification of a helicopter as required by (5) of this AD, it is allowed to install on that helicopter an affected part, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

AH ASB EC130-05A031 original issue dated 10 December 2018, or Revision 01 dated 12 December 2019.

AH ASB EC130-52A022 original issue dated 12 December 2019.

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 29 January 2020.

2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters – Aéroport de Marseille Provence, 13725 Marignane Cedex, France,
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Web portal: https://keycopter.airbushelicopters.com > Technical Requests Management.