



Airworthiness Directive

AD No.: 2016-0180

Issued: 13 September 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS HELICOPTERS

Type/Model designation:

EC120 B helicopters

Effective Date: 27 September 2016

TCDS Number(s): EASA.R.508

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2008-0177-E, dated 19 September 2008.

ATA 25 – Equipment & Furnishings – Emergency Floatation Gear Lighting and Ancillary Control Unit (LACU) Pushbutton – In-Flight Check / Replacement

Manufacturer:

Airbus Helicopters (formerly: Eurocopter)

Applicability:

EC120 B helicopters, all serial numbers.

Reason:

Several operators have reported unreliability of the latching pushbuttons on the Lighting/Ancillary Control Unit (LACU), Part Number (P/N) 040101AB. One of these pushbuttons, the "FLOAT ARM", is used to arm the emergency floatation gear to allow ditching in case of emergency.

If the "FLOAT ARM" pushbutton does not latch in the depressed position, the emergency floatation gear cannot be armed, which constitutes an unsafe condition for flights over water.

Investigations have revealed the failure is likely to be due to the improper bonding of these pushbuttons.

Prompted by these reports, Eurocopter issued Emergency Alert Service Bulletin (ASB) EC120 N° 04A007, and EASA issued Emergency AD 2008-0177-E, requiring amendment of the Rotorcraft Flight Manual (RFM) and a repetitive functional check of the "FLOAT ARM" pushbutton. No terminating action for the repetitive functional checks was available on the effective date of that AD.



Recently, Airbus Helicopter designed an improved LACU, having a pushbutton of different design, which constitutes terminating action for the repetitive functional checks.

Furthermore, it was identified that the applicability of the AD must also include helicopters equipped with LACU P/N 040101BA, which is equipped with the same pushbutton as the LACU P/N 040101AB.

For the reason described above, this AD retains the requirements of EASA AD 2008-0177-E, which is superseded, expands its applicability, and requires modification of the LACU, as terminating action for the repetitive functional checks.

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

Required as indicated, unless accomplished previously:

Note: for the purpose of this AD, an “affected LACU” is a LACU having P/N 040101AB, or P/N 040101BA, and that is not marked with “ASB31A008”.

- (1) For a helicopter equipped with an affected LACU (see Note of this AD), within the compliance time as identified in Table 1 of this AD, as applicable to LACU P/N, amend the applicable RFM to incorporate the following repetitive in-flight functional checks to be performed before each flight over water, inform all flight crews and, thereafter, operate the helicopter accordingly:

Arm the emergency floatation gear by pressing the LACU "FLOAT ARM" pushbutton and reduce speed in accordance with Flight Manual Supplement 9.17.

- If both lights of the pushbutton remain lit, continue the flight.
- If one or both lights of the pushbutton do not remain lit, FURTHER FLIGHT OVER WATER IS PROHIBITED and only a single ferry flight without passengers is allowed to return the helicopter to a location where corrective action can be taken.

The RFM amendment, as required by this paragraph, may be accomplished by inserting a copy of this AD, or by inserting a copy of Paragraph 2.B.2 of Eurocopter Emergency ASB EC120 N° 04A007, into the RFM.

Table 1 – Compliance Time

LACU P/N	Compliance Time
040101AB	Before next flight after 19 September 2008 [the effective date of AD 2008-0177-E]
040101BA	Within 14 days after the effective date of this AD

- (2) In case of failure of a "FLOAT ARM" pushbutton of an affected LACU, before next flight over water, install a serviceable “FLOAT ARM” pushbutton P/N 045004A111A in accordance with the instructions of Airbus Helicopter Emergency ASB EC120 N° 04A007, or of Aircraft Maintenance Manual, Task 31-42-00, 8-2, revision 2015.10.15.



- (3) Replacement of the pushbutton on a helicopter as required by paragraph (2) of this AD does not allow removing the RFM amendment, required by paragraph (1) of this AD, from the RFM of that helicopter.
- (4) Within 13 months after the effective date of this AD, modify and re-identify any affected LACU (see Note of this AD) by installing a pushbutton P/N 304-2500-00 in accordance with the instructions of Airbus Helicopters ASB EC120-31A008. Compliance with this requirement is an acceptable method to comply with the requirement of paragraph (2) of this AD.
- (5) After modification of a helicopter, as required by paragraph (4) of this AD, it is allowed to remove the RFM amendment, required by paragraph (1) of this AD, from the RFM of that helicopter.
- (6) Do not install on any helicopter an affected LACU (see Note of this AD), or a "FLOAT ARM" pushbutton having P/N 045004A111A, as required by paragraph (6.1) or (6.2) of this AD, as applicable.
 - (6.1) For a helicopter that, on the effective date of this AD, has an affected LACU installed: After modification of that helicopter as required by paragraph (4) of this AD.
 - (6.2) For a helicopter that, on the effective date of this AD, does not have an affected LACU installed: From the effective date of this AD.
- (7) Installation on a helicopter of a LACU, approved after the effective date of this AD, is equal to compliance with the requirements of paragraph (4) of this AD for that helicopter, provided the conditions as specified in paragraphs (7.1) and (7.2) of this AD are met.
 - (7.1) The LACU must be approved by EASA, or approved under Airbus Helicopter DOA; and
 - (7.2) The installation must be accomplished in accordance with helicopter modification instructions approved by EASA, or approved under Airbus Helicopter DOA.

Ref. Publications:

Eurocopter EASB EC120 N° 04A007, Revision 0, dated 18 September 2008, or Airbus Helicopter EASB EC120 N° 04A007 Revision 1, dated 30 June 2016;

Airbus Helicopters ASB N° EC120-31A008, Revision 0, dated 30 June 2016.

The use of later approved revisions of these 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 01 July 2016 as PAD 16-096 for consultation until 15 July 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.



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

4. For any question concerning the technical content of the requirements in this AD, please contact:
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