

2010-15-03 Eurocopter France: Amendment 39-16369. Docket No. FAA- 2010-0713; Directorate Identifier 2009-SW-63-AD.

Applicability: Model EC 130 B4 helicopters that have been modified in accordance with MOD 073774, and have not had MOD 073591 nor the modification specified in Eurocopter Drawing No. 350A085340 incorporated, certificated in any category.

Compliance: Required within 10 hours time-in-service (TIS), unless accomplished previously.

To detect interference and prevent damage to an electrical harness by a lower structure fairing attachment screw (attachment screw), which could lead to short-circuiting of various warnings, inflation of the emergency floatation gear (emergency floats) during flight, and subsequent loss of control of the helicopter, accomplish the following:

- (a) Remove the lower forward right-hand, left-hand, and center fairings.
- (b) Inspect each electrical harness for chaffing, a tear, a hole, or other damage at the location of each attachment screw as depicted in Details B, C, and D in Figure 1 in Eurocopter Emergency Alert Service Bulletin No. 88A001 R1, dated April 17, 2007 (EASB), and as shown at point (a) in Figure 2 and Figure 3 in the EASB.
 - (1) If there is no chaffing, tear, hole, or other damage to the electrical harness at any attachment screw:
 - (i) Determine the length of each attachment screw that secures the fairings. Replace any attachment screw that is longer than 14mm with an airworthy attachment screw, part number (P/N) A0164TK050S014X;
 - (ii) Install the spacer on the electrical harness in accordance with paragraph 2.B.3.a. of the Accomplishment Instructions of the EASB;
 - (iii) Relocate the electrical harness on the cable holders in accordance with paragraph 2.B.3.b. of the Accomplishment Instructions of the EASB; and
 - (iv) Install the harness clamp blocks in accordance with paragraph 2.B.4. of the Accomplishment Instructions of the EASB.
 - (2) If there is chaffing, a tear, a hole, or other damage to an electrical harness at the location of an attachment screw, remove any protective tape from the electrical harness as shown at point (b) in Figure 2 of the EASB and inspect the insulation on each electrical wire and cable strand for chaffing, a tear, a hole, or other damage at the attachment screw location.
 - (i) If there is no chaffing, tear, hole, or other damage to the insulation on any wire or cable strand, wrap the electrical harness with protective tape and comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.
 - (ii) If there is chaffing, a tear, a hole, or other damage to the insulation on any electrical wire or cable strand, but the electrical wire or cable strand is not damaged, wrap the electrical wire or cable strand that has damaged insulation with protective tape and wrap the electrical harness with protective tape, then comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

(c) If 3 or less electrical wires or cable strands in the same immediate area are damaged:

(1) Repair each damaged electrical wire or cable strand with an extension lead, P/N E0541-10, in accordance with the Appendix to the EASB; test the electrical continuity of the repaired electrical wire or cable strand using an ohmmeter, continuity test light, or equivalent device; and functionally test the system affected by the repair;

(2) Wrap the electrical harness with protective tape; and

(3) Comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this AD.

(d) If 4 or more electrical wires or cable strands in the same immediate area are damaged:

(1) Contact the Safety Management Group, Rotorcraft Directorate, FAA, ATTN: George Schwab, Aviation Safety Engineer, 2601 Meacham Blvd., Fort Worth, Texas, 76137, telephone (817) 222-5114, fax (817) 222-5961, for an approved electrical conductor repair procedure; and

(2) Comply with (b)(1)(i) through (b)(1)(iv) of this AD.

(e) Reinstall the fairings.

(f) Contact the Manager, Safety Management Group, Rotorcraft Directorate, FAA, ATTN: George Schwab, Aviation Safety Engineer, 2601 Meacham Blvd., Fort Worth, Texas, 76137, telephone (817) 222-5114, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(g) The Joint Aircraft System/Component (JASC) Code is 3297: Landing Gear System Wiring.

(h) The inspections, modifications and repairs, if needed, shall be done in accordance with the specified portions of Eurocopter Emergency Alert Service Bulletin No. 88A001 R1, dated April 17, 2007. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, TX 75053-4005, telephone (800) 232-0323, fax (972) 641-3710, or at <http://www.eurocopter.com>. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(i) This amendment becomes effective on August 20, 2010.

Note: The subject of this AD is addressed in European Aviation Safety Agency (France) AD No. 2006-0344 R1, dated May 10, 2007, which revises European Aviation Safety Agency Emergency AD No. 2006-0344-E, dated November 13, 2006.