

[Federal Register: August 5, 2010 (Volume 75, Number 150)]
[Rules and Regulations]
[Page 47201-47203]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr05au10-11]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0713; Directorate Identifier 2009-SW-63-AD; Amendment 39-16369; AD 2010-15-03]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Model EC 130 B4 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the specified Eurocopter France helicopters. This action requires inspecting certain electrical harnesses for damage and if damage is found, repairing the electrical harness; protecting the electrical harness from damage; installing harness clamp blocks; and inspecting each fairing attachment screw to determine the length and replacing attachment screws, if they exceed a certain length. This amendment is prompted by a report of an in-flight incident that led to the inflation of the emergency floatation gear (emergency floats) and the activation of various warnings. The actions specified in this AD are intended to prevent interference between an electrical harness and the lower structure fairing attachment screws. Damage to an electrical harness by a lower structure fairing attachment screw could lead to short-circuiting of various warnings, inflation of the emergency floats during flight, and subsequent loss of control of the helicopter.

DATES: Effective August 20, 2010.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 20, 2010.

Comments for inclusion in the Rules Docket must be received on or before October 4, 2010.

ADDRESSES: Use one of the following addresses to submit comments on this AD:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may get the service information identified in this AD 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>.

Examining the Docket: You may examine the docket that contains the AD, any comments, and other information on the Internet at <http://www.regulations.gov>, or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located in Room W12-140 on the ground floor of the West Building at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: DOT/FAA Southwest Region, George Schwab, Aviation Safety Engineer, ASW-112, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5114, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION:

Discussion

This amendment adopts a new AD for Eurocopter France 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. This action requires, within 10 hours time-in-service (TIS), removing the lower forward right-hand, left-hand, and center lower structure fairings (fairings); inspecting each electrical harness for chaffing, tears, holes, or other damage at the location of each attachment screw and repairing any damage; protecting electrical harnesses by wrapping them with electrical tape; installing harness clamp blocks; and inspecting each attachment screw to determine the length and replacing any attachment screw that is longer than 14mm. This amendment is prompted by a report of an in-flight incident in which an attachment screw that secures the right-hand lower center fairing damaged the electrical harness and caused several short circuits, resulting in the described incident. This condition, if not detected, could lead to inflation of the emergency floats during flight, and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2006-0344 R1, dated May 10, 2007, to correct an unsafe condition for Eurocopter France Model EC 130 B4 helicopters. EASA advises that their AD was initially issued as an Emergency AD, following a report of an in-flight incident which led to activation of various warning lights and inflation of the emergency floats. The pilot was able to land the helicopter without damage. EASA AD No. 2006-0344 R1 revises EASA Emergency AD 2006-0344-E, dated November 13, 2006.

Related Service Information

Eurocopter France has issued Emergency Alert Service Bulletin (EASB) No. 88A001 R1, dated April 17, 2007, which specifies procedures for detecting and correcting interference between an electrical harness and a fairing attachment screw. The EASA classified this EASB as mandatory and issued AD No. 2006-0344 R1, dated May 10, 2007, to ensure the continued airworthiness of these helicopters.

FAA's Evaluation and Unsafe Condition Determination

This helicopter has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, their technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by the EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of this same type design.

Differences Between This AD and the EASA AD

This AD requires inspections by a qualified mechanic rather than checks, which may be conducted by a pilot. Also, this AD requires contacting the FAA, Safety Management Group, ASW-112, instead of contacting Eurocopter France to define a certain customized repair solution before returning the helicopter to flight configuration if 4 or more electrical wires or cables need repair. Additionally, this AD uses the term "hours time-in-service" instead of "flight hours".

FAA's Determination and Requirements of This AD

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD is being issued to prevent, on helicopters post MOD 073774, any interference between an electrical harness and an attachment screw. Embodiment of a modification in accordance with Eurocopter drawing 350A085342 is considered to be a temporary solution to be applied rapidly in order to ensure that there is no interference. Embodiment of a modification in accordance with Eurocopter Drawing 350A085340 is the permanent solution. The EASA AD has been revised to provide additional information that MOD 073591 also is a permanent solution and has been incorporated on new helicopters. This AD requires removing the fairings; inspecting each electrical harness for any chaffing, tear, hole, or other damage at the location of each attachment screw and repairing any damage; protecting electrical harnesses by wrapping them with electrical tape; installing harness clamp blocks; and inspecting each attachment screw to determine the length and replacing any that are longer than 14mm.

Accomplish the actions by following specified portions of the EASB described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability of the helicopter. Therefore, inspecting each electrical harness for damage at the location of each attachment screw and repairing any damage, if found; protecting the electrical harness by wrapping with electrical tape; installing harness clamp blocks; and inspecting each attachment screw to determine the length and replacing any that are longer than 14mm, are required within 10 hours time-in-service (TIS), a short compliance time, and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Costs of Compliance

We estimate that this AD will affect about 13 helicopters of U.S. registry. We also estimate that it will take about 12 work-hours per helicopter to remove the lower structure fairings; inspect an electrical harness for interference and damage; repair an electrical harness, if necessary; shorten the attachment screws; install harness clamp blocks; and reinstall the lower fairings. The average labor rate is \$85 per work-hour. Required parts will cost about \$120 per helicopter. Based on these figures, we estimate the cost of this AD on U.S. operators is \$1,140 per helicopter, \$14,820 for the entire fleet.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2010-0713; Directorate Identifier 2009-SW-63-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the docket Web site, you can find and read the comments to any of our dockets, including the name of the individual who sent the comment. You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD. See the AD docket to examine the economic evaluation.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:



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.

Issued in Fort Worth, Texas, on July 8, 2010.

Scott A. Horn,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.