

[Federal Register Volume 76, Number 117 (Friday, June 17, 2011)]  
[Rules and Regulations]  
[Pages 35346-35348]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2011-14248]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2011-0551; Directorate Identifier 2009-SW-013-AD;  
Amendment 39-16714; AD 2011-12-07]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter France Model SA-365C, SA-365C1, SA-365C2, SA-365N,  
SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 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 (Eurocopter) helicopters. This action requires visually inspecting the adhesive bead between the bushing and the Starflex star (Starflex) arm for a crack, a gap, or loss of the adhesive bead, inspecting the Starflex arm ends for delamination, and replacing the Starflex if any of these conditions are found. This amendment is prompted by three cases of deterioration of a Starflex arm. In two of these cases, the deterioration caused high amplitude vibrations in flight, compelling the pilot to make a precautionary landing. The actions specified in this AD are intended to prevent failure of the Starflex, high-amplitude vibrations in flight, and subsequent loss of control of the helicopter.

**DATES:** Effective July 5, 2011.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 5, 2011.

Comments for inclusion in the Rules Docket must be received on or before August 16, 2011.

**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:** Jim Grigg, Aerospace Engineer, FAA, Rotorcraft Directorate, Safety Management Group (ASW-112), 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222-5126; fax: (817) 222-5961.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2008-0165, dated August 28, 2008 (AD No. 2008-0165), which supersedes EASA Emergency AD No. 2006-0321-E, dated October 18, 2006, to correct an unsafe condition for the Eurocopter Model SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters. EASA issued AD No. 2008-0165 as a result of the issuance of Revision 3 of Eurocopter Emergency Alert Service Bulletin (EASB) Numbers 05.00.51, 05.35, 05.28, and 05.00.21 (military only). EASA advises that their AD was issued following three reported cases of deterioration of a Starflex arm end. They state that in two of these cases, the deterioration caused high amplitude vibrations in flight, compelling the pilot to carry out a precautionary landing. EASA further states that if the Starflex arm end fails, high-amplitude vibrations could make it difficult to control the helicopter.

### **Related Service Information**

Eurocopter has issued one EASB, which applies to four different series helicopters, each with a different EASB number: No. 05.00.51 for the 365N series; No. 05.35 for the 366G1; No. 05.28 for the 365C series; and No. 05.00.21 for non-type certificated military helicopters; all Revision 3, and all dated August 18, 2008. This EASB specifies "checks of the bushes" installed on Starflex arm ends and reduces the interval between successive checks "in order to be able to detect any bush bonding failure or distortion of a Starflex arm end as rapidly as possible." EASA classified this EASB as mandatory and issued AD No. 2008-0165 to ensure the continued airworthiness of these helicopters.

### **FAA's Evaluation and Unsafe Condition Determination**

These helicopters have been approved by the aviation authority of member states of the European Union and are 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 their AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type designs. Therefore, this AD is being issued to prevent the failure of the Starflex, high amplitude vibrations in flight, and subsequent loss of control of the helicopter. This AD requires, within 10 hours time-in-service (TIS) and thereafter at intervals not to exceed 10 hours TIS, visually inspecting the adhesive bead between the bushing and the Starflex arm for a crack, a gap, or loss of the adhesive bead, inspecting the Starflex arm ends for delamination, and replacing the

Starflex if any of these conditions are found. 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 structural integrity and controllability of the helicopter. Therefore, the actions described previously are required at very short TIS intervals, 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.

### **Differences Between This AD and the EASA AD**

We have reviewed the EASA AD, and our AD differs from the EASA AD as follows:

- The EASA AD uses the term "check." We instead use the term "inspect."
- The EASA AD uses the terms "bush" and "bushes." We instead use the terms "bushing" and "bushings."
- The EASA AD uses the term "flying hours." We instead use the term "time-in-service."

### **Costs of Compliance**

We estimate that this AD will affect about 37 helicopters of U.S. registry. We also estimate that it will take about 0.25 work-hour per helicopter to inspect the Starflex arm end, and 10 work-hours to remove and replace the Starflex star, if necessary. The average labor rate is \$85 per work-hour. Required parts will cost about \$33,794. Based on these figures, we estimate that the total annual cost of this AD on U.S. operators is \$50,369, assuming 20 inspections are conducted on each helicopter and assuming one Starflex star is replaced each year.

### **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-2011-0551; Directorate Identifier 2009-SW-13-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:



**2011-12-07 Eurocopter France (Eurocopter):** Amendment 39-16714; Docket No. FAA-2011-0551; Directorate Identifier 2009-SW-013-AD.

**Applicability:** Models SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters; certificated in any category.

**Compliance:** Within 10 hours time-in-service (TIS), and thereafter at intervals not to exceed 10 hours TIS.

To prevent the failure of the Starflex star (Starflex) arm, high amplitude vibrations in flight, and subsequent loss of control of the helicopter, accomplish the following:

(a) Visually inspect the adhesive bead between the bushing and the Starflex arm for a crack, a gap, or loss of the adhesive bead, and inspect the Starflex arm ends for delamination in accordance with the Accomplishment Instructions, paragraph 2.B.1 and 2.B.2 of Eurocopter Emergency Alert Service Bulletin (EASB) No. 05.00.51 for the 365N series helicopters, No. 05.35 for the 366G1 model helicopter, or No. 05.28 for the 365C series helicopters, all Revision 3, and all dated August 18, 2008.

Note 1: The one Eurocopter EASB contains four different service bulletin numbers: No. 05.00.51, No. 05.35; and No. 05.28 for the model helicopters affected by this AD; and No. 05.00.21 for non-type certificated military helicopters.

(b) If there is a crack in the shockproof paint around the entire adhesive bead where the Starflex arm joins the bushing (as shown in Figure 2 of the applicable EASB), a gap between the adhesive bead and the bushing (as shown in Figure 3 of the applicable EASB), delamination of a Starflex arm end (as shown in Figure 4 of the applicable EASB), or loss of adhesive bead (as shown in Figure 5 of the applicable EASB), replace the Starflex before further flight.

(c) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Safety Management Group, Attn: DOT/FAA Southwest Region, Jim Grigg, ASW-112, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5126; fax: (817) 222-5961, for information about previously approved alternative methods of compliance.

(d) The Joint Aircraft System/Component (JASC) Code is 6200: Main Rotor System.

(e) The inspection shall be done in accordance with the specified portions of Eurocopter France Emergency Alert Service Bulletins No. 05.00.51, No. 05.35, or No. 05.28. All three of the Alert Service Bulletins are Revision 3 and all are dated August 18, 2008. 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

This amendment becomes effective on July 5, 2011.

Note 2: The subject of this AD is addressed in European Aviation Safety Agency AD No. 2008-0165, dated August 28, 2008.

Issued in Fort Worth, Texas, on May 25, 2011.

Kim Smith,  
Manager, Rotorcraft Directorate,  
Aircraft Certification Service.