

[Federal Register Volume 76, Number 96 (Wednesday, May 18, 2011)]
[Rules and Regulations]
[Pages 28637-28639]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2011-11795]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-1228; Directorate Identifier 2009-SW-12-AD; Amendment 39-16693; AD 2011-10-12]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Model AS350B, B1, B2, B3, BA, and EC130 B4 Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the specified Eurocopter France (ECF) helicopters. This AD results from a mandatory continuing airworthiness information (MCAI) AD issued by the aviation authority of the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. The superseding MCAI AD states that several engine flameouts have involved failure of the 41-tooth pinion in the engine accessory gearbox. Each affected helicopter had a starter-generator manufactured by one company. Investigation revealed the torque damping system of the starter-generator was inoperative due to incorrect adjustment that caused bending stresses on the 41-tooth pinion. Failure of the pinion causes the engine fuel pump to stop operating, resulting in an engine flameout. The EASA AD requires a new adjustment procedure to optimize the performance of the specified starter-generator damping assembly. This AD is intended to prevent failure of a pinion and a fuel pump, engine flameout, and subsequent loss of control of the helicopter.

DATES: This AD becomes effective on June 22, 2011.

The incorporation by reference of certain publications is approved by the Director of the Federal Register as of June 22, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://regulations.gov> or in person at the Docket Operations office, U.S. Department of Transportation, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 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 972-641-3460, fax 972-641-3527, or at <http://www.eurocopter.com>.

Examining the AD Docket: The AD docket contains this Final rule, the Notice of proposed rulemaking (NPRM), the economic evaluation, any comments received, and other information. The street address and operating hours for the Docket Operations office (telephone 800-647-5527) are in the ADDRESSES section of this AD. Comments will be available in the AD docket shortly after they are received.

FOR FURTHER INFORMATION CONTACT: DOT/FAA Southwest Region, Ed Cuevas, ASW-112, Aviation Safety Engineer, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone 817-222-5355, fax 817-222-5961.

SUPPLEMENTARY INFORMATION:

Discussion

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to the specified ECF helicopters on December 6, 2010. That NPRM was published in the Federal Register on December 21, 2010 (75 FR 79988). That NPRM proposed to require within 110 hours time-in-service or 3 months, whichever occurs first:

- Modifying and marking the Aircraft Parts Corporation (APC) starter generator; and
- Before installing an APC starter-generator with a part number (P/N) of 150SG122Q or 200SGL130Q, complying with the requirements of the proposed AD.

You may obtain further information by examining the MCAI AD and any related service information in the AD docket.

Comments

By publishing the NPRM, we gave the public an opportunity to participate in developing this AD. However, we received no comment on the NPRM or on our determination of the cost to the public. Therefore, based on our review and evaluation of the available data, we have determined that air safety and the public interest require adopting the AD as proposed.

Related Service Information

ECF has issued Alert Service Bulletin (ASB) No. 80.00.07, Revision 1, dated February 6, 2009, for the Model AS350B, BA, BB, B1, B2, and B3 helicopters; and ASB No. 80A003, Revision 1, dated February 6, 2009, for the Model EC130 B4 helicopters. The Model AS350 BB helicopter is not type certificated in the United States. These ASBs specify disassembly of the damping system, replacing the Belleville springs (cup springs) and the self-locking nut, and aligning the shaft damping system of the APC starter-generator.

The actions described in the MCAI AD are intended to correct the same unsafe condition as that identified in the service information.

Differences Between This AD and the MCAI AD

The MCAI AD refers to flight hours instead of hours time-in-service.

Costs of Compliance

We estimate that this AD will affect about 847 helicopters. We also estimate that it will take about 3 work-hours per helicopter to modify the starter-generator. The average labor rate is \$85 per work-hour. ECF states in its ASBs that one nut (P/N 150SG1071, \$36.12) and two springs (P/N 150SG1093, \$29.14 each) are required for the P/N 150SG122Q starter-generator and one nut (P/N

150SG1071, \$36.12) and two springs (P/N 200SGL1093, \$33.64 each) are required for the P/N 200SGL130Q starter-generator. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$299,749 (\$215,985 for labor and \$83,764 for parts), assuming that both starter-generators are evenly distributed in the fleet and that the entire fleet is modified.

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 helicopters identified in this rulemaking action.

Regulatory Findings

We 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.

Therefore, I certify this AD:

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 and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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. The FAA amends § 39.13 by adding the following new AD:



2011-10-12 Eurocopter France: Amendment 39-16693; Docket No. FAA-2010-1228; Directorate Identifier 2009-SW-12-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective on June 22, 2011.

Other Affected ADs

- (b) None.

Applicability

(c) This AD applies to Model AS350B, B1, B2, B3, BA, and EC130 B4 helicopters with ARRIEL engines with Aircraft Parts Corporation (APC) starter-generators, part number (P/N) 150SG122Q or P/N 200SGL130Q, without "004" marked on the identification plate, installed, certificated in any category.

Reason

(d) The mandatory continuing airworthiness information (MCAI) AD states that several engine flameouts involved failure of the 41-tooth pinion in the engine accessory gearbox that caused the engine fuel pump to fail. Each affected helicopter had an APC (currently UNISON) starter-generator installed. Investigation revealed the torque damping system of the starter-generator was inoperative. The EASA AD requires a new adjustment procedure to optimize the performance of the specified starter-generator damping assembly. The required actions are intended to prevent failure of a pinion and a fuel pump, engine flameout, and subsequent loss of control of the helicopter.

Actions and Compliance

(e) Within 110 hours time-in-service (TIS) or 3 months, whichever occurs first, unless already accomplished, do the following:

(1) Replace the cup springs and fan nut, functionally test the damping system, and after this modification, mark "004" on the identification plate of the APC starter generator, as depicted in Figures 1 and 2, and by following the Accomplishment Instructions, paragraph 2.B.2., of Eurocopter Alert Service Bulletin (ASB) No. 80.00.07, Revision 1, dated February 6, 2009, for the Model AS350B, BA, B1, B2, and B3 helicopters; or ASB No. 80A003, Revision 1, dated February 6, 2009, for the Model EC130 B4 helicopter.

(2) Before installing an APC starter-generator with P/N 150SG122Q or P/N 200SGL130Q, comply with the requirements of this AD.

Differences Between This AD and the MCAI AD

- (f) The MCAI AD refers to flight hours instead of hours time-in-service.

Other Information

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, Attn: DOT/FAA Southwest Region, Ed Cuevas, ASW-112, Aviation Safety Engineer, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone 817-222-5355, fax 817-222-5961, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) EASA AD No. 2009-0027, dated February 18, 2009, which supersedes and cancels EASA AD No. 2009-0004, dated January 12, 2009, contains related information.

Joint Aircraft System/Component (JASC) Code

(i) The JASC Code is 2435: Starter-Generator.

Material Incorporated by Reference

(j) You must use the specified portions of Eurocopter Alert Service Bulletin No. 80.00.07, Revision 1, dated February 6, 2009; or Eurocopter Alert Service Bulletin No. 80A003, Revision 1, dated February 6, 2009, to do the actions required.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, TX 75053-4005, telephone 972-641-3460, fax 972-641-3527, or at <http://www.eurocopter.com>.

(3) You may review copies at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Fort Worth, Texas 76137; 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/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on April 28, 2011.
Scott A. Horn,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.