

[Federal Register Volume 77, Number 205 (Tuesday, October 23, 2012)]
[Rules and Regulations]
[Pages 64706-64709]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2012-25894]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1128; Directorate Identifier 2012-SW-064-AD; Amendment 39-17225; AD 2012-21-09]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

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

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model EC225 helicopters with certain epicyclic modules installed. This AD requires inspecting the epicyclic module for the presence of a through-hole upstream of the magnetic plug. This AD is prompted by a report of a missing through-hole between the integrated collector and the magnetic plug, which would prevent the flow of chips from the integrated collector to the magnetic plug. This could result in the chip-detector system failing to detect deterioration of the main rotor mast lift bearing (lift bearing). These actions are intended to detect a missing through-hole and prevent lift bearing failure and subsequent loss of control of the helicopter.

DATES: This AD becomes effective November 7, 2012.

We must receive comments on this AD by December 24, 2012.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket: You may examine the AD docket 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 AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket

Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD No. 2012-0144-E, dated August 1, 2012 (EAD 2012-0144-E), to correct an unsafe condition for Eurocopter Model EC225 LP helicopters, delivered before August 1, 2012, with an epicyclic module part number (P/N) 332A32-5021-00 or P/N 332A32-5021-01 installed. EASA advises that the main rotor transmission incorporates a metal chip detection system to detect possible metal deterioration inside the assembly. EASA states the tapered housing of the epicyclic module is fitted with a magnetic plug, located downstream of the integrated collector, designed to detect possible deterioration of the lift bearing by attracting any metallic particles or chips suspended in the oil flow. According to EASA, it was reported that the hole joining the integrated collector and the magnetic plug was not a through hole, which prevented oil flow to the magnetic plug. This condition resulted in a functional loss of the magnetic plug to detect any particles or chips which may have been shed by the lift bearing. Because the root cause of the missing through-hole has not been identified, and is still under investigation, it cannot be determined if this unsafe condition is limited to one helicopter. This condition, if not corrected, could result in failure of the main rotor transmission and subsequent loss of control of the helicopter. To address this condition, EAD 2012-0144-E requires inspecting for the presence of a through hole between the integrated collector and the magnetic plug in the epicyclic module. If the through hole is missing, EAD 2012-0144-E requires repetitive inspections of the two rotor revolution (NR) sensors for the presence of any particles.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its 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 EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

Related Service Information

Eurocopter has published Emergency Alert Service Bulletin (EASB) No. 63A011, Revision 0, dated August 1, 2012, for Model EC225 helicopters. The EASB describes procedures to inspect the epicyclic module chip detection system for the presence of a through-hole in the tapered housing. The EASB also describes procedures for a repetitive inspection for any chips on the two NR sensors if the through-hole is not present.

EASA classified this ASB as mandatory and issued EAD 2012-0144-E to ensure the continued airworthiness of these helicopters.

AD Requirements

This AD requires, within 10 hours time-in-service (TIS), inspecting the epicyclic module for a through-hole above the magnetic plug. If the hole is not a through-hole, this AD requires replacing the epicyclic module before further flight.

Differences Between This AD and the EASA AD

If there is not a through-hole in the epicyclic module, the EASA AD requires a repetitive inspection for any chips on the two NR sensors, while this AD requires replacing the epicyclic module.

Costs of Compliance

We estimate that this AD will affect 3 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Inspecting the epicyclic module will require .5 work-hour, at an average labor rate of \$85 per hour, for a cost of \$43 per helicopter, and a total cost to U.S. operators of \$129. If required, replacing the epicyclic module will require 10 work-hours, at an average labor rate of \$85 per hour, and required parts will cost \$554,204, for a total cost per helicopter of \$555,054.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the required corrective actions must be accomplished within 10 hours TIS.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in less than 30 days.

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.

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.

For the reasons discussed, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. 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 airworthiness directive (AD):



2012-21-09 Eurocopter France: Amendment 39-17225; Docket No. FAA-2012-1128; Directorate Identifier 2012-SW-064-AD.

(a) Applicability

This AD applies to Eurocopter France (Eurocopter) Model EC225 LP helicopters, with an epicyclic module, part number (P/N) 332A32-5021-00 or 332A32-5021-01, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a missing through-hole, joining the integrated collector to the magnetic plug. This condition could result in failure of the chip-detector system to detect deterioration of the main rotor mast lift bearing, failure of the lift bearing, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective November 7, 2012.

(d) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 10 hours time-in-service (TIS), inspect the tapered housing of the epicyclic module to determine if there is a through-hole upstream of the magnetic plug.

(i) Remove the magnetic plug and support from the housing.

(ii) Determine if the hole above the magnetic plug is a through-hole as shown in figures 1 and 2 to paragraph (e)(1)(ii) of this AD.

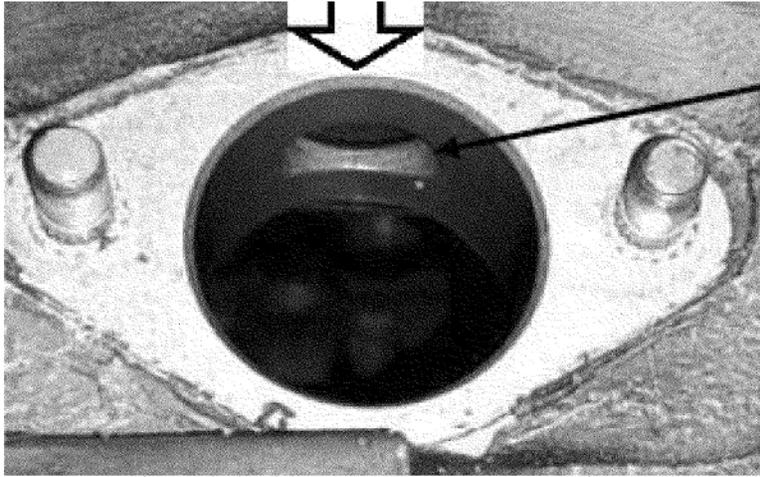


Figure 1 to paragraph (e)(1)(ii)

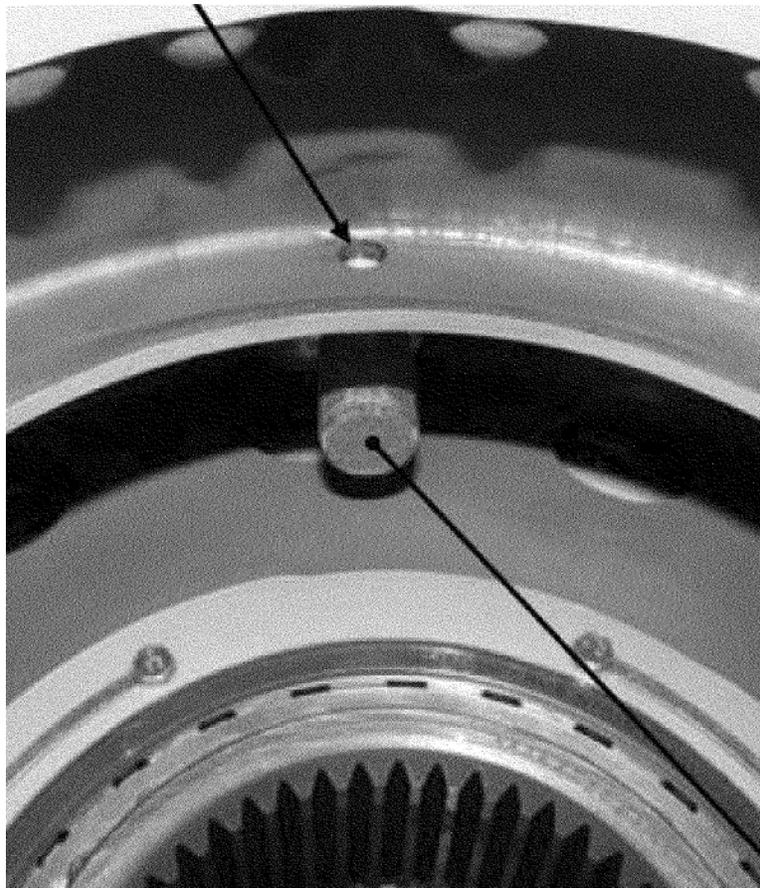


Figure 2 to paragraph (e)(1)(ii)

(2) If the hole above the magnetic plug is not a through-hole, before further flight, replace the epicyclic module with an airworthy epicyclic module.

(3) Do not install an epicyclic module, P/N 332A32-5021-00 or 332A32-5021-01, on any helicopter unless it has been inspected as required by this AD.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

(1) Eurocopter Emergency Alert Service Bulletin No. 63A011, Revision 0, dated August 1, 2012, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>.

You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency AD No. 2012-0144-E, dated August 1, 2012.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6320: Main Rotor Gearbox.

Issued in Fort Worth, Texas, on October 15, 2012.

Lance T. Gant,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.