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**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0222; Directorate Identifier 2011-SW-007-AD; Amendment 39-17166; AD 2012-17-03]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter France Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Eurocopter France Model AS350 helicopters. This AD requires installing protection sleeves over certain forward (pitch) servo-control hydraulic hoses. This AD was prompted by an in-flight fire caused by the ignition of hydraulic fluid leaking from a damaged forward servo-control hydraulic hose. This AD's actions are intended to prevent the forward servo-control hydraulic hoses from becoming damaged and leaking hydraulic fluid that could ignite in flight, which could result in loss of main rotor (M/R) control, power loss, structural damage, propagation of fire, and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** 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.

**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, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Matt Wilbanks, Aerospace Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Boulevard, Fort Worth, Texas 76137; telephone (817) 222-5051; e-mail [matt.wilbanks@faa.gov](mailto:matt.wilbanks@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

On March 9, 2012, at 77 FR 14310, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Eurocopter AS350 B, BA, D, B1, B2, and B3 helicopters with a single hydraulic power system and forward (pitch) servo-control hydraulic hoses part

number (P/N) 704A34-412-033 (other reference manufacturer's part number (MP/N) 675-102-05-01) or P/N 704A34-412-035 (other reference MP/N 675-102-06-01) installed. That NPRM proposed to require installing protection sleeves over certain forward servo-control hydraulic hoses. The proposed requirements were intended to prevent the forward servo-control hydraulic hoses from becoming damaged and leaking hydraulic fluid that could ignite in flight. Such an ignition could result in loss of M/R control, power loss, propagation of fire, structural damage, 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 Union, has issued EASA AD No. 2011-0033, dated March 1, 2011 (AD 2011-0033), to correct an unsafe condition for the Eurocopter helicopters. EASA advises that an in-flight fire in the main gearbox compartment occurred on an AS350B2 helicopter. The fire was “caused by ignition of hydraulic fluid leaking from a hydraulic hose, which had been damaged following an electrical fault in a circuit located in the compartment that is not fire protected. An in-flight fire in the main gearbox compartment during a continued flight, when undetected or if a landing could not be performed immediately, can result in loss of hydraulics, shutdown of the engine because of fire effects, and damage to the Main Rotor (MR) control system.” This condition, if not prevented, could lead to loss of M/R control, power loss, structural damage, propagation of fire into the cabin or other compartments, and subsequent loss of control of the helicopter. For these reasons, AD 2011-0033 requires installation of protection sleeves on the affected hydraulic hoses.

## **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

## **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 these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

## **Related Service Information**

Eurocopter has issued Alert Service Bulletin No. 29.00.13, dated July 26, 2010, which specifies installing two siliconed glass wool sleeves over both forward main rotor servo-control hydraulic hoses. EASA classified this ASB as mandatory and issued AD 2011-0033 to ensure the continued airworthiness of these helicopters.

## **Costs of Compliance**

We estimate that this AD will affect 695 helicopters of U.S. Registry and that operators will incur the following costs to comply with this AD:

Disconnecting the servo control hoses, installing the protective sleeves, reconnecting the hoses, and testing for interference requires one work hour at an average labor rate of \$85 per hour. Required parts cost \$212, for a total cost of \$297 for each

helicopter. Based upon these costs, we estimate a total cost to the U.S. operator fleet of \$206,415.

### **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**

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 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):

2012-17-03 **EUROCOPTER FRANCE HELICOPTERS:** Amendment 39-17166;  
Docket No. FAA-2012-0222; Directorate Identifier 2011-SW-007-AD.

#### **(a) Applicability.**

This AD applies to Eurocopter France Model AS350B, AS350BA, AS350D, AS350B1, AS350B2, and AS350B3 helicopters, certificated in any category, with a single hydraulic power system and either of the following forward (pitch) servo-control

hydraulic hoses installed: part number (P/N) 704A34-412-033 (other reference manufacturer's part number (MP/N) 675-102-05-01), or P/N 704A34-412-035 (other reference MP/N 675-102-06-01). Helicopters that have been modified in accordance with modification 074238 are excluded.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as unprotected forward (pitch) servo-control hydraulic hoses, which could become damaged and leak hydraulic fluid that could ignite in flight. This condition could result in loss of main rotor control, power loss, structural damage, propagation of fire into the cabin or other compartments, and subsequent loss of control of the helicopter.

**(c) Effective Date.**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(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 30 days, install sleeve P/N 706A34-402-225 over hydraulic hose P/N 704A34-412-033 and sleeve P/N 706A34-402-224 over hydraulic hose P/N 704A34-412-035 in accordance with Accomplishment Instructions, paragraph 2.B.2, of Eurocopter Alert Service Bulletin No. 29.00.13, dated July 26, 2010.

(2) Do not install an affected hydraulic hose on any helicopter without a sleeve in accordance with paragraph (e)(1) of 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: Matt Wilbanks, Aerospace Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Boulevard, Fort Worth, Texas 76137, telephone (817) 222-5051, e-mail [matt.wilbanks@faa.gov](mailto:matt.wilbanks@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.**

The subject of this AD is addressed in the European Aviation Safety Agency AD EASA AD No. 2011-0033, dated March 1, 2011.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 2900: Hydraulic Power System.

**(i) Material Incorporated by Reference.**

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

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Alert Service Bulletin No. 29.00.13, dated July 26, 2010.

(ii) Reserved.

(3) For Eurocopter 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>.

(4) You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference 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)

Issued in Fort Worth, Texas, on August 16, 2012.

Kim Smith,

Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-21261 Filed 09/05/2012 at 8:45 am; Publication Date: 09/06/2012]