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**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0872; Directorate Identifier 2013-SW-012-AD;  
Amendment 39-17784; AD 2014-05-11]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by  
Eurocopter France) (Airbus Helicopters)**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Airbus Helicopters Model AS332C, AS332L, AS332L1, AS332L2, EC225LP, and SA330J helicopters with a certain tail rotor control turnbuckle (turnbuckle) installed. This AD requires inspecting the turnbuckles for corrosion or a crack, and depending on the results, either replacing the turnbuckle or treating the turnbuckle for corrosion. This AD was prompted by a report that a turnbuckle had failed because of corrosion. The actions of this AD are intended to detect corrosion or a crack on a turnbuckle and prevent the failure of a turnbuckle, loss of control of the tail rotor 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 Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.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, the European Aviation Safety Agency (EASA) 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:** Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

On October 24, 2013, at 78 FR 63429, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an

AD that would apply to Eurocopter France (now Airbus Helicopters) Model AS332C, AS332L, AS332L1, AS332L2, EC225LP, and SA330J helicopters with a turnbuckle, part number (P/N) 330A27-5031-20, installed. The NPRM proposed to require inspecting the turnbuckles for corrosion or a crack, and depending on the results, either replacing the turnbuckle or treating the turnbuckle for corrosion. The proposed requirements were intended to detect corrosion or a crack on a turnbuckle and prevent the failure of a turnbuckle, loss of control of the tail rotor and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2013-0081, dated March 26, 2013, issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA published AD No. 2013-0081 to correct an unsafe condition for Eurocopter Model SA330J, AS332C, AS332C1, AS332L, AS332L1, AS332L2, EC225LP helicopters equipped with tail rotor control turnbuckles, part number 330A27-5031-20. EASA advises that one of the two turnbuckles installed on the tail rotor's yaw flight control cables failed on a helicopter because of corrosion. The subsequent investigation revealed a lack of Mastinox sealant coating between both sides of the turnbuckle's internal tappings and the interface screws of the end-fitting components of the yaw flight control cables. To address this condition, EASA issued AD No. 2013-0081, which requires repetitive inspections of each turnbuckle and, depending on the results, either replacing the turnbuckle or treating the turnbuckle for corrosion. EASA revised its AD and issued AD No. 2013-0081R1, dated June 20, 2013, to clarify some of the requirements.

Since we issued the NPRM, Eurocopter France changed its name to Airbus Helicopters. This AD reflects that change and updates the contact information to obtain service documentation.

### **Comments**

We gave the public the opportunity to participate in developing this AD, but we received no comments on the NPRM (78 FR 63429, October 24, 2013).

### **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 designs and that air safety and the public interest require adopting the AD requirements as proposed except for the minor change previously described. This change is consistent with the intent of the proposals in the NPRM (78 FR 63429, October 24, 2013) and will not increase the economic burden on any operator nor increase the scope of the AD.

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

The EASA AD applies to Eurocopter Model AS332C1 helicopters. This AD does not because Model AS332C1 helicopters are not type certificated in the United States.

### **Related Service Information**

On March 14, 2013, Eurocopter issued Alert Service Bulletin (ASB) No. EC225-05A031 for Model No. EC225LP helicopters; ASB No. AS332-05.00.95 for Model

AS332C, AS332C1, AS332L, AS332L1 and AS332L2 and for military Model AS332B, AS332B1, AS332F1, AS332M and AS332M1 helicopters; and ASB No. SA330-05.98 for Model SA330J and military Model SA330Ba, SA330Ca, SA330Ea, SA330H, SA330L, SA330Jm, SA330S1 and SA330Sm helicopters. Eurocopter reports that a tail rotor control turnbuckle ruptured because of corrosion. The damage was discovered during a flight-control check after the main gearbox was replaced. An investigation revealed that Mastinox sealant was missing between the turnbuckle tappings and end-fittings and led to the formation of galvanic corrosion. To prevent a turnbuckle from splitting, Eurocopter called for checking all tail rotor control turnbuckles for cracks and corrosion every 12 months. On June 5, 2013, Eurocopter revised all of the ASBs with Revision 1 to clarify a requirement.

### **Costs of Compliance**

We estimate that this AD affects 46 helicopters of U.S. Registry and that labor costs average \$85 a work-hour. Based on these estimates, we expect the following costs:

- Inspecting the tail rotor control turnbuckles for corrosion or a crack requires 4 work-hours for a labor cost of \$340. Parts cost \$148 for a total cost of \$488 per helicopter, \$22,448 for the U.S. fleet.
- Treating the turnbuckle to prevent corrosion require 1 work-hour for a labor cost of \$85. The cost of parts is minimal for a total cost of \$85 per helicopter.
- Replacing the turnbuckle requires no additional labor costs because it can be done as part of the inspection. Parts cost \$173 for a total cost of \$173 per helicopter.

### **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):

2014-05-11 **Airbus Helicopters (Type Certificate Previously Held by Eurocopter France)**: Amendment 39-17784; Docket No. FAA-2013-0872; Directorate Identifier 2013-SW-012-AD.

**(a) Applicability**

This AD applies to Model AS332C, AS332L, AS332L1, AS332L2, EC225LP, and SA330J helicopters with a tail rotor control turnbuckle (turnbuckle), part number (P/N) 330A27-5031-20, installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as failure of a turnbuckle. This condition could result in loss of the tail rotor control and subsequent loss of helicopter control.

**(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) For helicopters delivered before March 1, 2013, within 110 hours time-in-service (TIS) or 3 months, whichever occurs first, and for helicopters delivered on or after March 1, 2013, within 12 months, and thereafter for all helicopters at intervals not to exceed 12 months, using a light source visually inspect the tappings, middle hole, and external surface of each turnbuckle for corrosion or a crack. Indications of corrosion include dirt, a bulge, faded paint, a powdery deposit, or a pit that is white or red in color.

(i) If there is corrosion or a crack on the tappings or middle hole of the internal surface of a turnbuckle, replace the turnbuckle before further flight.

(ii) If there is a crack on the external surface of a turnbuckle, replace the turnbuckle before further flight.

(iii) If there is corrosion on the external surface of the turnbuckle, remove the corrosion, recondition the surface, and measure the corrosion depth in accordance with paragraph 3.B.2.b.2 of Eurocopter Alert Service Bulletin (ASB) No. EC225-05A031, ASB No. AS332-05.00.95, or ASB No. SA330-05.98, all Revision 1, and all dated June 5, 2013, as applicable to your model helicopter, except that you are not required to interpret the results per ASB paragraph 1.E.2.

(A) If the measured corrosion depth is greater than 0.3 mm, replace the turnbuckle before further flight.

(B) If the measured corrosion depth is 0.3 mm or less, do the following:

(1) Before further flight, treat the turnbuckle for corrosion in accordance with paragraph 3.B.2.c of ASB No. EC225-05A031, ASB No. AS332-05.00.95, or ASB No. SA330-05.98, all Revision 1, and all dated June 5, 2013, as applicable to your model helicopter.

(2) Within 6 months from when the turnbuckle is treated for corrosion, replace the turnbuckle.

(2) After installation of a turnbuckle, P/N 330A27-5031-20, with greater than 0 hours TIS, before next flight accomplish the actions of paragraph (e)(1) of this AD.

**(f) Special Flight Permits**

Special flight permits are prohibited.

**(g) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [robert.grant@faa.gov](mailto:robert.grant@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.

**(h) Additional Information**

The subject of this AD is addressed in the European Aviation Safety Agency (EASA) AD No. 2013-0081, dated March 26, 2013 and EASA AD No. 2013-0081R1, dated June 20, 2013. You may view the EASA ADs on the Internet at <http://www.regulations.gov> in Docket No. FAA 2013-0872.

**(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6700, Rotorcraft Flight Control.

**(j) 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. EC225-05A031, Revision 1, dated June 5, 2013.

(ii) Eurocopter Alert Service Bulletin No. AS332-05.00.95, Revision 1, dated June 5, 2013.

(iii) Eurocopter Alert Service Bulletin No. SA330-05.98, Revision 1, dated June 5, 2013.

(3) For Eurocopter service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

(4) You may view this service information at 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/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on February 20, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

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