



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0872; Directorate Identifier 2013-SW-012-AD]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Eurocopter France Model AS332C, AS332L, AS332L1, AS332L2, EC225LP, and SA330J helicopters with a certain tail rotor control turnbuckle (turnbuckle) installed. This proposed AD would require inspecting the turnbuckles for corrosion or a crack, and depending on the results, either replacing the turnbuckle or treating the turnbuckle for corrosion. This proposed AD is prompted by a report that a turnbuckle had failed because of corrosion. The proposed actions 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: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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 proposed AD, the foreign authority’s 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 proposed 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: 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.

SUPPLEMENTARY INFORMATION:

Comments Invited

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 might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, 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 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 proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

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. 2013-0081, dated March 26, 2013, to correct an unsafe condition for the 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. EASA advises that this likely caused the corrosion. This condition, if not detected and corrected, could lead to failure of a tail rotor control turnbuckle, resulting in loss of control of the tail rotor and subsequent loss of control of the helicopter.

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.

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 its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

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.

Proposed AD Requirements

This proposed AD would require:

For helicopters delivered before March 1, 2013, within 110 hours time-in-service (TIS) or 3 months, whichever occurs first, and at intervals not to exceed 12 months thereafter, inspecting the turnbuckles for corrosion or a crack. The delivery date is the date the helicopter left Eurocopter's manufacturing plant in France and is the date on the helicopter's identification plate.

For helicopters delivered on or after March 1, 2013, within 12 months, and at intervals not to exceed 12 months thereafter, inspecting the turnbuckles for corrosion or a crack.

If there is corrosion or a crack on the tappings or middle hole of the internal surface of the turnbuckle, or if there is corrosion with a depth of more than 0.3 mm or a crack on the external surface of a turnbuckle, removing the turnbuckle from service before the next flight.

If corrosion is present at or less than a depth of 0.3 mm on the turnbuckle's external surface, before the next flight, treating the affected turnbuckle to prevent corrosion and then removing the treated turnbuckle from service within 6 months from the date the part is treated for corrosion.

Differences between this Proposed AD and the EASA AD

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

Costs of Compliance

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

- Inspecting the tail rotor control turnbuckles for corrosion or a crack would require 4 work-hours for a labor cost of \$340. Parts would cost \$148 for a total cost of \$488 per helicopter, \$22,448 for the U.S. fleet.
- Treating the turnbuckle to prevent corrosion would 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 would not require additional labor costs because it can be done as part of the inspection. Parts would 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 products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed 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);
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 proposed 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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

EUROCOPTER FRANCE: Docket No. FAA-2013-0872; Directorate Identifier 2013-SW-012-AD.

(a) Applicability

This AD applies to Eurocopter France (Eurocopter) 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) Comments Due Date

We must receive comments by [INSERT DATE 60 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, 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 permit

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.

(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 European Aviation Safety Agency (EASA) AD No. 2013-0081, dated March 26, 2013. You may view the EASA AD in the AD docket on the Internet at <http://www.regulations.gov>.

(i) Subject

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

Issued in Fort Worth, Texas on September 27, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2013-24942 Filed 10/23/2013 at 8:45 am; Publication Date: 10/24/2013]