



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0522; Directorate Identifier 2013-SW-018-AD;**

**Amendment 39-17487; AD 2013-10-51]**

**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 publishing a new airworthiness directive (AD) for Eurocopter France Model AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters. This AD requires, before further flight, determining whether a single hydraulic main or tail rotor servo-control is installed on your helicopter. If a certain servo-control is installed, before the further flight, this AD requires replacing that servo-control. This AD was prompted by the discovery of excessive axial play detected on bearings installed on certain single hydraulic main and tail rotor servo-controls (servo-control). The excessive play could cause the distributor slide valve to jam in its sleeve. This condition could result in jamming the hydraulic flight controls, necessitating that the pilot cut off hydraulic power. This action would increase the pilot's workload, resulting in possible loss of helicopter control.

**DATES:** This AD becomes effective to all persons [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except those persons to whom it was

made immediately effective by Emergency AD No. 2013-10-51, issued on May 9, 2013, which contains the requirements of this AD.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 15 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this 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 AD, the European Aviation Safety Agency (EASA) 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:** Michael Hemann, Transportation Safety Analyst, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [michael.hemann@faa.gov](mailto:michael.hemann@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**

On May 9, 2013, we issued Emergency AD 2013-10-51 (Emergency AD), which requires, before further flight, determining whether a certain servo-control is installed on your helicopter. If a certain servo-control is installed, before the further flight, the Emergency AD requires replacing that servo-control with an airworthy servo-control. The Emergency AD was prompted by AD No. 2013-0095-E, dated April 16, 2013, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for the helicopters listed in the first paragraph of this section. EASA advises that for helicopters with single hydraulic main and tail servo-controls, this condition, if not detected and corrected, could lead to a friction point in the flight controls and increase the pilot workload. The pilot would consequently need to cut off the hydraulic power and follow the procedures specified in the applicable Section 3 of the Rotorcraft Flight Manual.

Many of the non-compliant servo-controls were installed by the manufacturer under certain part and serial numbers. Others were repaired or overhauled from September 27, 2012, through January 30, 2013, by UTC Aerospace Systems in Monroe, North Carolina. Since we issued the Emergency AD, we have discovered that the servo-control's component history card or equivalent record may list "Goodrich Corporation" as the repair and overhaul facility, instead of "UTC Aerospace Systems," as United Technologies Corporation formed UTC Aerospace Systems in 2012 after acquiring Goodrich Corporation. We have added this information to the Required Actions section of this AD. Also, the language in the Alternative Methods of Compliance section of the Emergency AD did not include the proper introductory sentence, so we have added that sentence in this AD. These changes do not change the scope or increase the burden from those in the Emergency AD.

## **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.

## **Related Service Information**

Eurocopter has issued one Emergency Alert Service Bulletin (EASB) with four numbers, all dated April 15, 2013. EASB No. 67.00.60 is for Eurocopter Models AS350B, AS350BA, AS350BB, AS350B1, AS350B2, AS350B3, AS350D, and military helicopter Model AS350L1; EASB 67.00.36 is for military helicopter Models AS550A2, AS550C2, AS550C3, and AS550U2; EASB 67.00.41 is for Models AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP; and EASB 67.00.27 is for military helicopter Models AS555AF, AS555AN, AS555SN, AS555UF, and AS555UN. Models AS350C and AS350D1 are also type certificated in the United States but were not listed in the EASB. Model AS350BB is not type certificated in the United States. The EASB states that during acceptance tests of a servo-control, the supplier noticed that the servo-control input lever bearing's play value exceeded the specified value. This condition leads to excessive misalignment between the lever and the distributor slide, the EASB reports. This condition could create a "friction point" on the flight controls. To eliminate the risk of this friction point appearing on the flight controls, Eurocopter specifies that all servo-controls with a non-compliant input lever bearing be replaced and returned to the manufacturer.

## **AD Requirements**

This AD requires, before further flight, inspecting the servo-control's component history card or equivalent record to determine if it has a certain part number (P/N) and serial number (S/N) or if the servo-control was repaired or overhauled from September 27, 2012, through January 30, 2013, by UTC Aerospace Systems or Goodrich Corporation in Monroe, North Carolina.

If either condition exists, this AD requires inspecting the servo-control's identification plate to determine if it has the letter "B." If it has the letter "B," no further action is required.

If the identification plate has no letter "B," this AD requires inspecting all sides of the external race of the servo-control's bearing to determine if it has any visible marking. If there is a marking, before further flight, this AD requires replacing the servo-control with an airworthy servo-control.

If there is no marking, this AD requires inspecting the bearing's sealing flange to determine if it is marked with "RWG Germany 60-5593." If it is marked with "RWG Germany 60-5593," no further action is required.

If the sealing flange has not been marked with "RWG Germany 60-5593," before further flight, this AD requires replacing the servo-control with an airworthy servo-control.

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

We require, before further flight, inspecting the servo-control's component history card or equivalent record to determine if it has a certain P/N and S/N; or if it was repaired or overhauled from September 27, 2012, through January 30, 2013, by UTC Aerospace Systems or Goodrich Corporation in Monroe, North Carolina. EASA requires within 10 flight hours or 10 days, whichever occurs first, verifying whether a certain bearing is fitted in the servo-control.

We require, before further flight, replacing a non-airworthy servo-control with an airworthy servo-control. EASA requires replacing a non-airworthy servo-control with an airworthy servo-control within 50 flight hours or 120 days, whichever comes first, after checking the servo-control for “free-travel.” If a “friction point” is detected, EASA requires replacing the servo-control with an airworthy servo-control before further flight.

### **Costs of Compliance**

We estimate that this AD affects 937 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 single hydraulic main and tail servo-control’s component history card or equivalent record requires minimal labor costs and no parts. The per-helicopter and fleet costs are minimal.

Determining whether the identification plate is marked with a “B” requires 1 work-hour and no parts. Labor costs total \$85 per helicopter.

Inspecting the servo-control’s bearing to determine if it is non-conforming requires 3 work-hours and no parts. Labor costs total \$255 per helicopter.

Replacing the servo-control with an airworthy servo-control requires 3 or 5 work hours, depending on what servo-control is being replaced. Parts cost \$10,461 or \$10,561, also depending on the servo-control being replaced. Labor costs are \$255 or \$425 for total per-helicopter cost of \$10,716 or \$10,986.

### **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 previously described unsafe condition can adversely affect the controllability of the helicopter and the required corrective actions must be accomplished before further flight.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment before issuing this AD were impracticable and contrary to the public interest and good cause existed for making Emergency AD 2013-10-51 effective immediately on May 9, 2013 to all known U.S. owners and operators of the specified Eurocopter France model helicopters. These conditions still exist and the Emergency AD is hereby published, with minor changes, in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons.

#### **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):

2013-10-51 **EUROCOPTER FRANCE**: Amendment 39-17487; Docket No. FAA-2013-0522;  
Directorate Identifier 2013-SW-018-AD.

**(a) Applicability.**

This AD applies to Eurocopter France (Eurocopter) Model AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters, certificated in any category.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as excessive play that could cause the distributor slide valve to jam in its sleeve. This condition could result in jamming of the hydraulic flight controls, necessitating that the pilot cut off hydraulic power. This action would increase the pilot's workload, resulting in possible loss of helicopter control.

**(c) Effective Date.**

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD No. 2013-10-51, issued on May 9, 2013, which contains the requirements of this AD.

**(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) Before further flight, inspect the single hydraulic main and tail servo-control's (servo-control) component history card or equivalent record to determine if it has a part number (P/N) and serial number (S/N) listed in the Appendix, paragraph 4.A, of Eurocopter Emergency Alert

Service Bulletin No. 67.00.60 (EASB No. 67.00.60) or No. 67.00.41 (EASB No. 67.00.41), both dated April 15, 2013, as appropriate for your model helicopter; or was repaired or overhauled from September 27, 2012, through January 30, 2013, by UTC Aerospace Systems or Goodrich Corporation in Monroe, North Carolina.

(2) If the servo-control does have a P/N and S/N listed in paragraph 4.A of EASB No. 67.00.60 or EASB No. 67.00.41, as appropriate for your model helicopter, or if the servo-control was repaired or installed from September 27, 2012, through January 30, 2013, by UTC Aerospace Systems or Goodrich Corporation in Monroe, North Carolina, inspect the servo-control to determine whether the identification plate is marked with a “B” as shown in the Appendix, paragraph 4.B, of EASB No. 67.00.60 or EASB No. 67.00.41, as appropriate for your model helicopter. If it is marked with a “B,” no further action is required.

(3) If the identification plate is not marked with a “B,” inspect all sides of the external race of the servo-control’s bearing to determine if it has any marking shown as (b) in Detail A of Figure 1 of EASB No. 67.00.60 or EASB No. 67.00.41, as appropriate for your model helicopter. If there is any marking, before further flight, replace the servo-control with an airworthy servo-control.

(4) If there is no marking on the sides of the external race, inspect each bearing sealing flange to determine if it is marked with “RWG Germany 60-5593” as shown as (d) in Detail C of Figure 2 of EASB No. 67.00.60 or EASB No. 67.00.41, as appropriate for your model helicopter. If there is “RWG Germany 60-5593” marking at least partially visible on a flange of the bearing, no further action is required.

(5) If there is no “RWG Germany 60-5593” marking at least partially visible on a flange of the bearing, before further flight, replace the servo-control with an airworthy servo-control.

**(f) Special flight permits.**

Special flight permits may be permitted only for taking a helicopter to a repair station to meet the requirements of this AD.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Hemann, Transportation Safety Analyst, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [michael.hemann@faa.gov](mailto:michael.hemann@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. 2013-0095-E, dated April 16, 2013. You may view the EASA AD at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-0522.

**(i) Subject.**

Joint Aircraft Service Component (JASC) Code: 6730, Rotorcraft Servo System.

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

(1) The Director of the Federal Register approved the incorporation by reference 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 EASB No. 67.00.60, dated April 15, 2013.

(ii) Eurocopter EASB No. 67.00.41, dated April 15, 2013.

Note 1 to paragraph (j)(2): Eurocopter EASB No. 67.00.60, dated April 15, 2013, and Eurocopter EASB No. 67.00.41, dated April 15, 2013, are co-published as one document along with Eurocopter EASB No. 67.00.36, dated April 15, 2013, and Eurocopter EASB No. 67.00.27, dated April 15, 2013, which are not incorporated by reference in this AD.

(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 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 June 13, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-16682 Filed 07/15/2013 at 8:45 am; Publication Date: 07/16/2013]