DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Bell Helicopter Textron, Inc. (Bell) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Bell Model 214B, 214B–1, and 214ST helicopters with a certain tail rotor hanger bearing (bearing) installed. This AD requires inspecting the bearing to determine whether an incorrectly manufactured seal material is installed on the bearing. This AD is prompted by a report that certain bearings were manufactured with an incorrect seal material that does not meet Bell specifications. The actions specified by this AD are intended to prevent loss of bearing grease, failure of the bearing, and subsequent loss of control of the helicopter.

DATES: This AD becomes effective June 19, 2013.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of June 19, 2013.

We must receive comments on this AD by August 5, 2013.

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 Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280–3391; fax (817) 280–6466; or at http://www.bellcustomer.com/files/. 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:

James Blyn, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222–5762; email 7–AVS–ASW–1706faa.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

We are adopting a new AD for Bell Model 214B, 214B–1, and 214ST helicopters with certain bearings installed. Bell was notified by a supplier that all part number 214–040–606–005 and 214–040–606–101 bearings delivered between May 2011 and June 2012 were manufactured with incorrect seal material. The incorrect seal material does not meet Bell’s operating and environmental temperature specifications and under extreme heat could result in seal failure and grease loss from the bearing. The incorrect seal material is black in color; the correctly manufactured bearings have a red/orange to brown colored seal.

FAA’s Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other helicopters of these same type designs.

Related Service Information

Bell has issued Alert Service Bulletin (ASB) 214–13–74, Revision A, dated March 25, 2013, for Model 214B and 214B–1 helicopters, serial number (S/N) 28001 through 28070, and ASB 214ST–13–90, Revision A, dated March 25, 2013, for Model 214ST helicopters, S/N 28101 through 28200. Both ASBs describe procedures for determining whether any bearing with incorrect seal material is installed on the helicopter and for inspecting any installed bearing with incorrect seal material every 10 hours time-in-service (TIS). Both ASBs also specify replacing any bearing with incorrect seal material that is leaking grease or damaged. Finally, the ASBs specify replacing any bearing with incorrect seal material within 500 hours TIS or by December 31, 2013.

AD Requirements

This AD requires:

• Inspecting each bearing within 10 hours TIS to determine whether the bearing has correct seal material.
• If a bearing has incorrect seal material, inspecting the bearing at intervals not to exceed 10 hours TIS for leakage, slung grease, or damage.
• If there is leakage, slung grease, or damage, before further flight, replacing the bearing with an airworthy bearing that does not have a black seal, which would be terminating action for the requirements of this AD.

Differences Between This AD and the Service Information

The Bell ASBs specify 25 hours TIS for the initial inspection, while this AD requires inspecting within 10 hours TIS. The ASBs specify replacing any bearing with black seal material within 500 hours TIS or by December 31, 2013. This AD requires repetitive inspections of the bearing the bearing is replaced with an airworthy bearing that does not have a black seal.
Interim Action

We consider this AD to be an interim action. We are currently considering whether the replacement of the defective bearing, which will constitute a repetitive inspection required by this AD action. However, the planned compliance time for the replacement of the bearing would allow enough time to provide notice and opportunity for prior public comment on the merits of the replacement.

Costs of Compliance

We estimate that this AD will affect 26 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. At an average labor cost of $85 per hour, inspecting the bearings would require about 2.5 work hours, for a cost per helicopter of $213 and a cost of $5,538 for the fleet. Replacing a defective bearing would require about 3 work hours, and required parts would cost $1,372 per bearing, for a cost per helicopter of $1,627.

According to Bell’s service information some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Bell. Accordingly, we have included all costs in our cost estimate.

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, a very short time period based on the average flight hour utilization rate of these helicopters. 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):


(a) Applicability

This AD applies to Bell Model 214B helicopters, serial number (S/N) 28001 through 28070, Model 214B–1 helicopters, S/N 28001 through 28070, and Model 214ST helicopters, S/N 28101 through 28200, with a tail rotor hanger bearing (bearing), part number (P/N) 214–040–606–005 or 214–040–606–101 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a bearing with incorrect seal material, which could fail under extreme temperature or environmental conditions, resulting in loss of tail rotor control and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective June 19, 2013.

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time.

(e) Required Actions

(1) Within 10 hours time in service (TIS): (i) Inspect each bearing to determine whether the seal material is correct, as described in the Accomplishment Instructions, Part 1—Inspection, paragraphs 1.a. through 2. and Figure 1 of Bell Alert Service Bulletin (ASB) 214–13–74, Revision A, dated March 25, 2013, for Model 214B and 214B–1 helicopters and ASB 214ST–13–90, Revision A, dated March 25, 2013, for Model 214ST helicopters.

(ii) For each bearing with black seal material, before further flight and thereafter at intervals not to exceed 10 hours TIS, inspect the bearing for leakage, slung grease, or damage. If there is any leakage, slung grease, or damage, before further flight, replace the bearing with an airworthy bearing with red/orange to brown color seal material.

(2) Replacing a bearing with an airworthy bearing with the correct red/orange to brown color seal material terminates the inspection requirements of this AD.


(f) Special Flight Permits

Special flight permits are prohibited.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: James Blyn, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222–5762; email 7-AVS-ASW-170@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
We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model BD–100–1A10 (Challenger 300) airplanes. This AD was prompted by reports of failure of a}

screw cap or end cap of the hydraulic system accumulator while on the ground, which resulted in loss of use of that hydraulic system and high-energy impact damage to adjacent systems and structures. This AD would require inspecting for the correct serial number of a certain hydraulic system accumulator, and replacing affected hydraulic system accumulators with new or serviceable accumulators. We are issuing this AD to prevent failure of a screw cap or end cap and loss of the related hydraulic system, which could result in damage to airplane structure and consequent reduced controllability of the airplane.

**DATES:** This AD becomes effective July 9, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 9, 2013.

**ADDRESSES:** You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:**


**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on September 6, 2012 (77 FR 54846). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

Seven cases of on-ground hydraulic accumulator screw cap/end cap failure have been experienced on CL–600–2B19 aeroplanes, resulting in loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure. To date, the lowest number of flight cycles accumulated at the time of failure has been 6991.

Although there have been no failures to date on any BD–100–1A10 aeroplanes, accumulators similar to those installed on the CL–600–2B19 are installed on them. The affected part numbers (P/Ns) of the accumulators installed on BD–100–1A10 are 9000095–1 (Auxiliary Hydraulic System accumulator), 08–60219–001 (Inboard Brake accumulator), and 08–60218–001 (Outboard Brake accumulator).

A detailed analysis of the calculated line of trajectory of a failed screw cap/end cap for the accumulator has been conducted, resulting in the identification of areas where systems and/or structural components could potentially be damaged. Although all of the failures to date have occurred on the ground, an in-flight failure affecting such components could potentially have an adverse effect on the controllability of the aeroplane.

This [TCRA] directive provides the initial action by mandating the replacement of the Auxiliary Hydraulic System accumulators that are not identified by the letter “E” after the serial number on the identification plate. Further corrective actions are anticipated to rectify similar safety concerns with the Inboard and Outboard Brake accumulators.

You may obtain further information by examining the MCAI in the AD docket.

**Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

**Request To Change Precipitating Event Language**

Bombardier asked that the language specifying that the NPRM (77 FR 54846, September 6, 2012) was prompted by “auxiliary hydraulic accumulator failure due to end cap or screw cap” be changed. Bombardier stated that there is no record of such auxiliary hydraulic accumulator failure and added that the failures occurred on accumulators having a similar design. Bombardier asked that the word “auxiliary” be removed from the NPRM.

We agree with the commenter for the reason provided. We have removed the word “auxiliary” from the Summary section and paragraph (e) of this AD.

**Request for Clarification of Effective Date of AD**

Bombardier asked if the compliance time in paragraphs (g)(1) and (g)(3) of the NPRM (77 FR 54846, September 6, 2012) should refer to the date of Bombardier Service Bulletin 100–29–14, dated December 16, 2010, instead of the effective date of the AD. Bombardier stated that there is a significant difference between the release date of that service information and the effective date of the AD.

We acknowledge the commenter’s concern and provide the following clarification. We do not agree that the compliance time should correspond to the release date of Bombardier Service Bulletin 100–29–14, dated December 16, 2010. We do not intend to ground airplanes, but that the identification of the release date of this service information is used. Therefore, we must provide a