(1) If no cracking is found, and the edge-to-edge length of all clevis holes is less than or equal to 0.218 inch: Within 6,000 flight hours after the effective date of this AD, replace the bellcrank, or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (2) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.218 inch, but is less than or equal to 0.248 inch: Within 6,000 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (3) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.248 inch, but is less than or equal to 0.278 inch: Within 1,200 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank, or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (4) If any cracking is found, or any clevis hole edge-to-edge length exceeds 0.278 inch: Before further flight, replace the bellcrank with a new bellcrank, or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (i) Actions for Certain Other Model DHC–8– 400 Series Airplanes
For Model DHC–8–400, –401, and –402 airplanes that have accumulated more than 15,000 total flight hours as of the effective date of this AD: Within 600 flight hours after the effective date of this AD, measure the edge-to-edge length of all clevis holes of the bellcrank, and inspect each bellcrank for cracking using liquid penetrant or eddy current inspection method; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (1) If no cracking is found, and the edge-to-edge length of all clevis holes is less than or equal to 0.218 inch: Within 1,200 flight hours after the effective date of this AD, rework the bellcrank, or replace the bellcrank with a new bellcrank or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012. (2) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.218 inch, but is less than or equal to 0.248 inch: Within 6,000 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank, or with a serviceable bellcrank with bushings having part number 82710297–101 installed, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–27–55, Revision A, dated February 22, 2012.
promoted by the manufacture of certain freewheel aft bearing caps without a lubrication channel to allow oil flow into the aft bearing support assembly. The actions of this AD are intended to prevent failure of the freewheel unit and subsequent loss of control of the helicopter.

DATES: This AD is effective December 5, 2013.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of December 5, 2013.

ADDRESSES: For service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101, telephone (817) 280–3391, fax (817) 280–6466. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Moacham 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 NPRM, proposed to amend 14 CFR part 39 to replace or rework certain freewheel aft bearing caps without a lubrication channel to allow oil flow into the aft bearing support assembly, replacing the sprag, retainer, and the aft seal, and visually inspecting the remaining freewheel unit for a missing channel. Also, the NPRM proposed to require, if the channel is missing, before further flight, replacing the cap assembly with an airworthy cap or reworking and reidentifying the existing cap by using a vibrating stylus to add the letter “R” to the serial number of the reworked cap. The proposed requirements were intended to prevent failure of the freewheel unit and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. CF–2004–17R1, dated February 11, 2005 (AD No. CF–2004–17R1), issued by TCAA, which is the aviation authority for Canada. AD No. CF–2004–17R1 requires replacing or reworking freewheel assemblies on the Bell Model 206L–4 and 407 helicopters. TCAA advises of a manufacturing oversight where a lubrication channel was not machined into the aft bearing cap of some freewheel units to allow oil flow into the aft bearing support assembly. TCAA states that lack of lubrication may adversely affect the durability and potentially the function of the freewheel unit.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (78 FR 37158, June 20, 2013).

FAA’s Determination

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, TCAA, its technical representative, has notified us of the unsafe condition described in its AD. We are issuing this AD because we evaluated all information provided by TCAA 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.

Differences Between This AD and the TCAA AD

This AD differs from the TCAA AD as follows:

• We do not use a calendar time, which has already passed.
• We require all affected helicopters to comply within 50 hours TIS; the TCAA AD has different compliance times as stipulated by the calculated average engine start cycle count, identified in the applicable alert service bulletin (ASB), and a 300-hour TIS terminating action for modifying all affected helicopters.
• We do not require referencing compliance with the ASBs as does the TCAA AD, and we do not require you to provide an affected cap for rework to Bell Tennessee nor require the original cap to be reworked by Bell Tennessee.
• We do not require any action on “spare” parts not installed on a helicopter but would require, before installing any replacement bearing support assembly, ensuring that the rework has been done.

Related Service Information

Bell has issued ASB No. 206L–04–129 for the Model 206L–4 and ASB No. 407–04–66 for the Model 407, both Revision A, and both dated December 1, 2004, which specify identifying the affected freewheel aft bearing caps. The ASBs provide separate procedures, depending on whether helicopters are “not exclusively used for training” or “exclusively used for training,” for replacing or reworking the freewheel cap assembly and replacing the output shaft, part number (P/N) 406–040–517–101, and sprag and retainer, P/N 406–040–580–103. TCCA classified these ASBs as mandatory and issued AD No. CF–2004–17R to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate there are 212 Model 206L–4 helicopters and 540 Model 407 helicopters of U.S. registry; however, we estimate that only 80 helicopters are affected by this AD. We estimate that operators may incur the following costs in order to comply with this AD: It will take about 16 work hours to replace the freewheel unit for all the affected parts at an average labor rate of $85 per work hour. Required parts will cost about $21,600 per helicopter. Based on these figures, we estimate the total cost per helicopter will be $22,900, and the total cost of the AD on U.S. operators will be $1,836,800.

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 (49 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

§ 39.13 [Amended]

1. The authority citation for part 39 continues to read as follows:

Authority: 40 U.S.C. 106(g), 40113, 44701.

§ 39.13 (a) Applicability

This AD applies to Model 206L–4 and 407 helicopters, with a freewheel aft bearing cap (cap), part number (P/N) 406–040–509–101, with a serial number with a prefix of “A-” and Nos. 1833 through 1912, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as certain caps being manufactured without a lubrication channel to allow oil flow into the aft bearing support assembly, which could result in failure of the freewheel unit and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 5, 2013.

(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

Within 50 hours time-in-service (TIS):

(1) Remove and disassemble each freewheel assembly.

(2) Replace the sprag and retainer (item 7), the output shaft (item 10), and the aft seal (item 3), as depicted in Figure 2 of Bell Alert Service Bulletin (ASB) No. 206L–04–129 for the Model 206L–4 and ASB No. 407–04–66 for the Model 407, both Revision A and both dated December 1, 2004.

(3) Visually inspect the remaining freewheel part details for a missing channel. If the channel is missing, replace or rework the cap assembly by following the instructions depicted in Figure 3 of ASB 206L–04–129 or ASB 407–04–66, as applicable for your model helicopter. Using a vibrating stylus, mark the letter “R” at the end of the serial number on the cap assembly.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Eric Haight, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, Fort Worth, Texas 76137, telephone (817) 222–5110, email: eric.haight@faa.gov.

(2) For operations conducted under a 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or in the case of a certificate holding district office before the local flight standards district office or lacking a principal inspector, the manager of the local flight standards district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF–2004–17R1, dated February 11, 2005.

You may view the TCCA AD at http://www.regulations.gov.

Issued in Fort Worth, Texas, on October 1, 2013.

Kim Smith, Director, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2013–25310 Filed 10–30–13; 8:45 am]