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## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. FAA–2008–0071; Directorate Identifier 2006–SW–27–AD; Amendment 39–16291; AD 2010–10–12]**

**RIN 2120–AA64**

## Airworthiness Directives; Bell Helicopter Textron Canada Model 222, 222B, 222U, 230, and 430 Helicopters

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD) for the specified Bell Helicopter Textron Canada (BHTC) helicopters, that currently requires certain checks and inspections of the tail rotor blades. If a crack is found, the existing AD requires replacing the tail rotor blade (blade) with an airworthy blade before further flight. This amendment requires the same checks and inspections of the blades until they are required to be replaced and removes certain serial numbered and specifically coded blades from the applicability of the AD. This amendment is prompted by the approved rework of certain blades and two newly redesigned blades, which, if installed, constitute terminating action for the inspection requirements. The actions specified by this AD are intended to detect a crack in a blade, and to prevent loss of a blade and subsequent loss of control of the helicopter.

**DATES:** Effective July 16, 2010.

**ADDRESSES:** You may get the service information identified in this AD from 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/.*

*Examining the Docket:* You may examine the docket that contains this AD, any comments, and other information on the Internet at *http://www.regulations.gov,* or at the Docket Operations office, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** DOT/FAA Southwest Region, Sharon Miles, ASW–111, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222–5122, fax (817) 222–5961.

**SUPPLEMENTARY INFORMATION:** On February 10, 2005, we issued AD 2005–04–09, Amendment 39–13981 (70 FR 8021, February 17, 2005), that superseded AD 2004–26–11, Amendment 39–13923 (70 FR 7, January 3, 2005), to require certain checks and inspections of the blades. Both AD 2004–26–11 and 2005–04–09 also require replacing any cracked blade before further flight. AD 2004–26–11 was prompted by reports of cracked blades and required certain checks, inspections, and replacements, if necessary. AD 2005–04–09 required the same checks and inspections as AD 2004–26–11 but also added two serial numbers to the applicability and corrected some typographical errors.

Since issuing AD 2005–04–09, the manufacturer has introduced a rework procedure for the affected blades and two newly redesigned blades, which, if installed, constitute terminating action for the inspection requirements. Therefore, a proposal to amend 14 CFR part 39 by superseding AD 2005–04–09 for the specified BHTC model helicopters was published as a Notice of proposed rulemaking (NPRM) in the **Federal Register** on July 28, 2008 (73 FR 43648, July 28, 2008). That NPRM proposed the same checks, inspections, and replacements of the blades. The NPRM also proposed to remove certain serial numbered and specifically coded blades from the applicability of the AD. The NPRM was prompted by the approved rework of certain blades and two newly redesigned blades, which, if installed, constitutes terminating action for the inspection requirements.

Transport Canada, the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on the specified BHTC model helicopters. Transport Canada advises of the discovery of cracked blades during scheduled inspections on three occasions. Two cracks originated from the outboard feathering bearing bore underneath the flanged sleeves. The third crack started from the inboard feathering bearing bore. Investigation found that the cracks originated from either a machining burr or a corrosion site in the bearing bore underneath the flanged sleeves.

BHTC has issued Alert Service Bulletin (ASB) No. 222–04–100, Revision B, for Model 222 and 222B helicopters; ASB No. 222U–04–71, Revision B, for Model 222U helicopters; ASB No. 230–04–31, Revision B, for Model 230 helicopters; and ASB No. 430–04–31, Revision C, for Model 430 helicopters, all dated March 31, 2008. The ASBs specify a visual inspection of the blade root end around the feathering bearings for a crack, not later than at the next scheduled inspection, and thereafter at every 3 flight hours maximum. Further, they describe a visual inspection for a crack, to include removing the blade from the helicopter if a crack is found in the paint, within the next 50 flight hours, and thereafter at every 50 flight hours. In addition, the ASBs state that, on or before December 31, 2008, each blade should be reworked by Rotor Blades, Inc., or exchanged if the blade has less than 4,000 hours TIS or if the blade has 4,000 or more hours TIS, the blade should continue to be repetitively inspected or a replacement blade should be ordered. Transport Canada classified these service bulletins as mandatory and issued AD CF–2004–21R3, dated April 23, 2008, to ensure the continued airworthiness of these helicopters in Canada.

This AD differs from the ASB in that it requires, on or before 90 days after the effective date of the AD, replacing all affected blades with airworthy blades that are not subject to the inspection requirements, without differentiating between blades based on hours TIS. Additionally, this AD does not require operators to send their blades to Rotor Blades, Inc. for rework.

These helicopter models are manufactured in Canada and are type certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral

agreement. Pursuant to the applicable bilateral agreement, Transport Canada has kept the FAA informed of the situation described above. The FAA has examined the findings of Transport Canada, reviewed all available information, and determined that AD action is necessary for products of these type designs that are certificated for operation in the United States.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed. However, we have inserted the Joint Aircraft System/Component Code into this AD for informational purposes. We have determined that this change will neither increase the economic burden on any operator nor increase the scope of this AD.

We estimate that this AD will affect 156 helicopters of U.S. registry, and the required actions will take:

- About 0.25 work hour for a pilot check, and 2 work hours for a maintenance inspection, at an average labor rate of $80 per work hour, and
- About 6 work hours to remove and replace the blade. Required parts will cost about $13,410 per blade, assuming one blade per helicopter is replaced each year. Based on these figures, we estimate the cost of this AD on U.S. operators is $3,090,360, assuming each helicopter requires 200 pilot checks and 12 maintenance inspections prior to replacing a blade on or before the compliance date for all affected helicopters.

**Regulatory Findings**

We have 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 above, I certify that the 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); and

3. 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. See the AD docket to examine the economic evaluation.

**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.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

**Adoption of the Amendment**

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing Amendment 39–13981 (70 FR 8021, February 17, 2005), and by adding a new airworthiness directive (AD), Amendment 39–16291, to read as follows:

**2010–10–12 Bell Helicopter Textron Canada**: Amendment 39–16291. Docket No. FAA–2008–0071; Directorate Identifier 2006–SW–27–AD. Supersedes AD 2005–04–09, Amendment 39–13981, Docket No. FAA–2005–20107.

*Applicability:* The following helicopter models, with a listed helicopter serial number (S/N) and a listed part-numbered tail rotor blade (blade) installed, that does not have an excepted S/N or code, certificated in any category.

| Helicopter model | Helicopter S/N | Blade Part No. (P/N) |
|---|---|---|
| 222 | 47006 through 47089 | 222–016–001–123, –123M, –127, -127M, –131, –135, –139M, –141M, except those P/Ns with S/Ns listed in Exceptions 1 and 2 or the "R" code described in Exception 3. |
| 222B | 47131 through 47156 | 222–016–001–123, –123M, –127, -127M, –131, –135, –139M, –141M, except those P/Ns with S/Ns listed in Exceptions 1 and 2 or the "R" code described in Exception 3. |
| 222U | 47501 through 47574 | 222–016–001–123, –123M, –131, –139M, except those P/Ns with a S/N listed in Exception 2 or the "R" code described in Exception 3. |
| 230 | 23001 through 23038 | 222–016–001–123, –123M, –131, –139M, except those P/Ns with a S/N listed in Exception 2 or the "R" code described in Exception 3. |
| 430 | 49001 through 49107 | 222–016–001–123, –123M, –131, –139M, except those P/Ns with a S/N listed in Exception 2 or the "R" code described in Exception 3. |

*Exception 1:* Blade, P/N 222–016–001–135 or –141M, S/N A–1502, A–1503, A–1504, A–1505, A–1507, A–1508, A–1509, A–1510, A–1556, A–1557, A–1558, A–1560, A–1561, A–1574, A–1635, A–1636, A–1828, A–1829, and S/Ns with a prefix of "A" and a number greater than 1829 have the intent of this proposal accomplished prior to delivery and no further action is required by this AD.

*Exception 2:* Blade, P/N 222–016–001–131 and –139M, S/N A–2049, A–2055, A–2060, A–2070, A–2071, A–2085, and S/Ns with a prefix of "A" and a number greater than 2085 have the intent of this proposal accomplished prior to delivery and no further action is required by this AD.

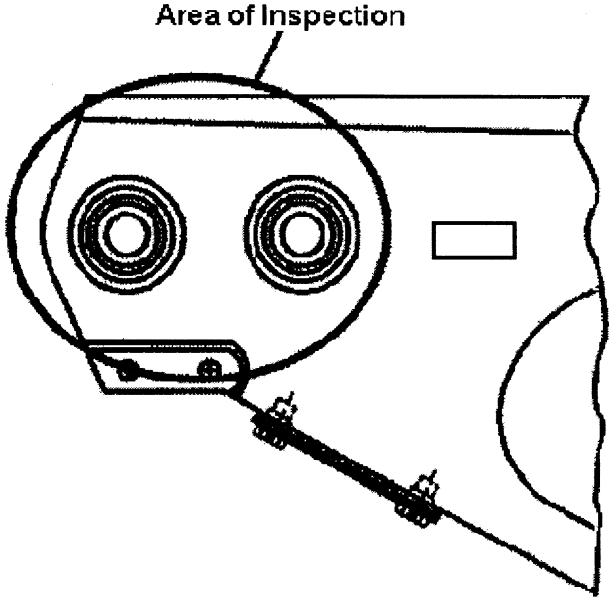
*Exception 3:* Blades identified with an "R" code in the square block below the P/N field of the Data Plate have already been modified and no further actions are required by this AD.

**Note 1:** New blades, P/N 222–016–001–139 and –141, with no letter on the Data Plate after the P/N, are not subject to the requirements of this AD.

*Compliance:* Required as indicated.

To detect a crack in a blade, and to prevent loss of the blade and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 3 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 3 hours TIS, clean and visually check both sides of each blade for a crack in the paint in the areas shown in Figure 1 of this AD. An owner/operator (pilot), holding at least a private pilot certificate, may perform this visual check and must enter compliance with this paragraph into the helicopter maintenance records by following 14 CFR 43.11 and 91.417(a)(2)(v).




P/N 222-016-001 – all dash numbers
Figure 1
Blade Inspection Area

**Note 2:** Bell Helicopter Textron Alert Service Bulletin (ASB) No. 222–04–100, Revision B, for Model 222 and 222B helicopters; ASB No. 222U–04–71, Revision B, for Model 222U helicopters; ASB No. 230–04–31, Revision B, for Model 230 helicopters; and ASB No. 430–04–31, Revision C, for Model 430 helicopters, all dated March 31, 2008, contain guidance on the subject of this AD.

(b) If the visual check required by paragraph (a) of this AD reveals a crack in the paint, before further flight, remove the blade and follow the requirements in paragraphs (c)(2) through (c)(3)(ii) of this AD.

(c) Within the next 50 hours TIS, unless accomplished previously, and thereafter at intervals not to exceed 50 hours TIS, clean the blade by wiping down both surfaces of each blade in the inspection area depicted in Figure 1 of this AD using aliphatic naphtha (C–305) or detergent (C–318) or an equivalent. Using a 10X or higher power magnifying glass, visually inspect both sides of the blade in the areas depicted in Figure 1 of this AD.

(1) If a crack is found, even if only in the paint, before further flight, remove the blade from the helicopter and proceed with the following:

(2) Remove the paint on the blade down to the bare metal in the area of the suspected crack by using plastic media blasting (PMB) or a nylon web abrasive pad. Abrade the blade surface in a span-wise direction only.

**Note 3:** PMB may cause damage to helicopter parts if untrained personnel perform the paint removal. BHT–ALL–SPM, chapter 3, paragraph 3–24, contains guidance on the subject of this AD.

(3) Using a 10X or higher power magnifying glass, inspect the blade for a crack.

(i) If a crack is found, replace the blade with an airworthy blade before further flight.

(ii) If no crack is found in the blade surface, refinish the blade by applying one coat of epoxy polyamide primer, MIL–P–23377 or MIL–P–85582, so that the primer overlaps the existing coats just beyond the abraded area. Let the area dry for 30 minutes to 1 hour. Then, apply one sealer coat of polyurethane, MILC85285 TYI CL2, color number 27925 (semi-gloss white). Reinstall the blade.

**Note 4:** BHT–ALL–SPM, chapter 4, contains guidance on painting the blade.

(d) On or before 90 days after the effective date of this AD, replace any affected serial-numbered blade with an airworthy blade that has a S/N that is not subject to, or has been excepted from, the requirements of this AD. Installing an airworthy blade that is not subject to the requirements of this AD, or has been excepted from the requirements of this AD, including those blades with an "R" code in the square block below the part number field of the Data Plate, constitute a terminating action for the requirements of this AD.

(e) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Safety Management Group, FAA, ATTN: Sharon Miles, Aviation Safety Engineer,

FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222–5122, fax (817) 222–5961, for information about previously approved alternative methods of compliance.

(f) The Joint Aircraft System/Component (JASC) Code is 6410: Tail Rotor Blades.

(g) This amendment becomes effective on July 16, 2010.

**Note 5:** The subject of this AD is addressed in Transport Canada (Canada) AD CF–2004–21R3, dated April 23, 2008.

Issued in Fort Worth, Texas, on April 28, 2010.

**Mark R. Schilling,**

*Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.*

[FR Doc. 2010–11071 Filed 6–10–10; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. FAA–2010–0512; Directorate Identifier 2010–NE–21–AD; Amendment 39–16332; AD 2010–13–01]**

**RIN 2120–AA64**

## Airworthiness Directives; Microturbo Saphir 20 Model 095 Auxiliary Power Units (APUs)

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by the European Aviation Safety Agency (EASA) to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

The turbine wheel, part number (P/N) 095–01–015–03, of the SAPHIR 20 Model 095 APU is a life-limited part. Microturbo had determined through "fleet leader" testing and inspection that the published life limit of this turbine wheel should be reduced to 9,000 cycles. Use of the turbine wheel beyond 9,000 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

For the reasons described above, EASA AD 2008–0084 required the implementation of the new life limit on the affected parts and the replacement parts that had exceeded the new life limit.

Microturbo has now determined that the life limit of the turbine wheel should be further reduced to 4,225 cycles. Use of the turbine wheel beyond 4,225 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

We are issuing this AD to prevent an uncontained burst of the APU turbine that could liberate high-energy fragments resulting in injury and damage to the aircraft.

**DATES:** This AD becomes effective July 16, 2010.

We must receive comments on this AD by July 26, 2010.

**ADDRESSES:** You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov* and follow the instructions for sending your comments electronically.
- *Mail:* U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

### 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 regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is the same as the Mail address provided in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; *e-mail: michaelschwetz@faa.gov;* telephone (781) 238–7761; fax (781) 238–7170.

**SUPPLEMENTARY INFORMATION:**

### Discussion

EASA, which is the Technical Agent for the Member States of the European Community, has issued AD 2010–0079, dated April 26, 2010 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

The turbine wheel, part number (P/N) 095–01–015–03, of the SAPHIR 20 Model 095 APU is a life-limited part. Microturbo had determined through "fleet leader" testing and inspection that the published life limit of this turbine wheel should be reduced to 9,000 cycles. Use of the turbine wheel beyond 9,000 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

For the reasons described above, EASA AD 2008–0084 required the implementation of the new life limit on the affected parts and the replacement parts that had exceeded the new life limit.

Microturbo has now determined that the life limit of the turbine wheel should be further reduced to 4,225 cycles. Use of the turbine wheel beyond 4,225 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

For the reasons described above, this AD, which supersedes EASA AD 2008–0084, requires the implementation of the new life limit on the affected parts and the replacement of parts that had exceeded this new limit. This AD also extends the scope to include the P/N 095–01–015–20 turbine wheel, which is physically identical to the P/N 095–01–015–03 turbine wheel but is manufactured using a revised process (approved by EASA).

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

### Relevant Service Information

Microturbo has issued Service Bulletin 095–49–17, dated March 16, 2010. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### FAA's Determination and Requirements of This AD

This product has been approved by the aviation authority of EASA and is approved for operation in the United States. Pursuant to our bilateral agreement with France, they have notified us of the unsafe condition described in the MCAI and service information referenced above. 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 products of the same type design. This AD requires removal of turbine wheels P/N 095–01–015–03 or P/N 095–01–015–20, before exceeding the new reduced life limit of 4,225 cycles-in-service, and replacement with a new or serviceable part.

### FAA's Determination of the Effective Date

Since no domestic operators use this product, notice and opportunity for public comment before issuing this AD are unnecessary. Therefore, we are adopting this regulation immediately.

### Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and