This section of the Federal Register contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510. The Code of Federal Regulations is sold by the Superintendent of Documents.

14 CFR Part 39

RIN 2120–AA64
Airworthiness Directives; Bell Textron Inc. (Type Certificate Previously Held by Bell Helicopter Textron Inc.) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Bell Textron Inc. (Bell) Model 205B helicopters. This AD was prompted by flight testing and fatigue analysis results. This AD requires reducing the life limit of certain tail rotor (T/R) blades and re-identifying them with a new part number (P/N). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective April 13, 2021.

ADDRESSES: For service information identified in this final rule contact, Bell Textron Inc., P.O. Box 482, Fort Worth, TX 76101; telephone 817–280–3391; fax 817–290–6496; or at https://www.bellcustomer.com. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N–321, Fort Worth, TX 76177. Docket No. FAA–2020–0270.

Examiner the AD Docket
You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA–2020–0270; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT:
Kuethe Harmon, Safety Management Program Manager, DSCO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817–222–5198; email kuethe.harmon@faa.gov.

SUPPLEMENTARY INFORMATION:
Discussion
The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Bell Model 205B helicopters with a T/R blade P/N 212–010–750–009 or 212–010–750–105 installed. The NPRM published in the Federal Register on March 25, 2020 (85 FR 16916). Flight testing and fatigue analysis by Bell indicated that these part-numbered T/R blades sustain greater loads when installed on Bell Model 205B helicopters compared to their use on other model helicopters. In the NPRM, the FAA proposed to require, before further flight, reducing the life limit of each affected T/R blade from 5,000 hours time-in-service (TIS) to 2,500 hours TIS; re-identifying the T/R blade P/N on its data plate by vibro-etching to change the last three digits of the existing P/N; creating a component history card or equivalent record; and revising the Airworthiness Limitations section of the existing maintenance manual for your helicopter to annotate the new P/N and revised life limit. Finally, the NPRM proposed to prohibit installing any affected T/R blade that has not met the AD requirements.

The FAA issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to Bell Model 205B helicopters. The SNPRM published in the Federal Register on December 8, 2020 (85 FR 78977). The SNPRM was prompted by a comment received on the NPRM requesting that the applicability paragraph be updated to include newly identified T/R blade part numbers. The FAA determined the NPRM should be revised to include the additional part-numbered T/R blades and the re-identification and life limit requirements for those additional part-numbered T/R blades.

Since the FAA issued the NPRM, Bell Helicopter Textron Inc., has changed its name to Bell Textron Inc. This final rule reflects that change and updates the contact information to obtain service documentation.

Comments
The FAA received no comments on the SNPRM or on the determination of the costs.

Conclusion
The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information

The FAA also reviewed Bell Helicopter Textron Alert Service Bulletin No. 205B–98–27, dated June 1, 1998, for Model 205B helicopters. This service information specifies reducing the life limit of T/R blade P/N 212–010–750–009 and 212–010–750–105 to 2,500 hours TIS and assigning these T/R blades a new dash number by vibro-etching a new P/N on the T/R blade data plate and annotating the historical record card.

Costs of Compliance
The FAA estimates that this AD affects approximately 2 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at $85 per work-hour.

Determining the total hours TIS of a T/R blade, re-identifying the P/N, and
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:


(a) Effective Date
   This airworthiness directive (AD) is effective April 13, 2021.

(b) Affected ADs
   None.

(c) Applicability

(d) Subject

(e) Unsafe Condition
   This AD was prompted by flight testing and fatigue analysis that indicates that these part-numbered T/R blades sustain greater loads when used on Bell Model 205B helicopters compared to their use on other model helicopters. The FAA is issuing this AD to prevent a T/R blade from remaining in service beyond its fatigue life, resulting in failure of the T/R blade and subsequent loss control of the helicopter.

(f) Compliance
   Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions
   (1) Before further flight:
      (i) Determine the total hours time-in-service (TIS) of each T/R blade and remove from service each T/R blade that has accumulated 2,500 or more hours TIS. For each T/R blade that has accumulated less than 2,500 hours TIS, do the following:
         (ii) Re-identify the P/N on the T/R blade data plate by vibro-etching to change the last three digits of the existing P/N as follows:
            (C) For T/R blade P/N 212–010–750–113, re-identify the P/N as 212–010–750–117FM.
            (D) For T/R blade P/N 212–010–750–133, re-identify the P/N as 212–010–750–135FM.
            (iii) Create a component history card or equivalent record to reflect the change in P/N for each T/R blade, and establish a life limit of 2,500 hours TIS.
      (2) Thereafter, except as provided in paragraph (f), no alternative life limits may be approved for T/R blade P/N 212–010–750–009, P/N 212–010–750–105, P/N 212–010–750–113, or P/N 212–010–750–133.
   (2) After the effective date of this AD, do not install a T/R blade P/N 212–010–750–009, P/N 212–010–750–105, P/N 212–010–750–113, or P/N 212–010–750–133 on any Model 205B helicopter unless the part number has been changed and the life limit reduced in accordance with this AD.
   (4) After the effective date of this AD do not install a T/R blade P/N 212–010–750–109, P/N 212–010–750–111, P/N 212–010–750–135, P/N 212–010–750–135FM, or P/N 212–010–750–135FM on any Model 205B helicopter unless the life limit has been reduced in accordance with this AD.

(h) Special Flight Permit
   Special flight permits are prohibited.

(i) Alternative Methods of Compliance (AMOCs)
   (1) The Manager, DSCO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD. Information may be emailed to: 9-ASW-190-COS@faa.gov.
   (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/ certificate holding district office.

(j) Related Information
   (1) For more information about this AD, contact Kuethe Harmon, Safety Management Program Manager, DSCO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817–222–5198; email Kuethe.harmon@faa.gov.
   (2) For service information identified in this AD, contact Bell Textron Inc., P.O. Box 482, Fort Worth, TX 76101; telephone 817–280–3391; fax 817–280–6466; or at https://www.bellcustomer.com. You may view service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N–321, Fort Worth, TX 76177.

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

updating the helicopter records takes about 1 work-hour for each T/R blade, for an estimated cost of $170 per helicopter and $340 for the U.S fleet.

Replacing a T/R blade takes about 8 work-hours and parts cost about $29,110 for an estimated cost of $29,790 per T/R blade.

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, 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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.
The FAA is adopting a new airworthiness directive (AD) for certain Pratt & Whitney Division (PW) PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090–3 model turbofan engines. This AD was prompted by the in-flight failure of a 1st-stage low-pressure compressor (LPC) blade on a PW4077 model turbofan engine resulting in an engine fire during flight. This AD requires performing a thermal acoustic image (TAI) inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. The FAA previously sent an emergency AD to all known U.S. owners and operators of these engines and is now issuing this AD to address the unsafe condition on these products.

This AD is effective March 24, 2021. Emergency AD 2021–05–51, issued on February 23, 2021, required the immediate adoption of the emergency AD, which requires performing a TAI inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. The FAA sent the emergency AD to all known U.S. owners and operators of these engines. That action was prompted by the in-flight failure of a 1st-stage LPC blade on a PW4077 model turbofan engine resulting in an engine fire during flight. This condition, if not addressed, could result in 1st-stage LPC blade release, damage to the engine, and damage to the airplane.

The FAA is issuing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.


This AD requires performing a TAI inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection.

The FAA considers this AD to be an interim action. The FAA anticipates that further AD action will follow.

For further information contact: Carol Nguyen, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7655; fax: (781) 238–7199; email: carol.nguyen@faa.gov.

SUPPLEMENTARY INFORMATION:

On February 23, 2021, the FAA issued Emergency AD 2021–05–51 (the emergency AD), which requires performing a TAI inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. The FAA sent the emergency AD to all known U.S. owners and operators of these engines. That action was prompted by the in-flight failure of a 1st-stage LPC blade on a PW4077 model turbofan engine resulting in an engine fire during flight. This condition, if not addressed, could result in 1st-stage LPC blade release, damage to the engine, and damage to the airplane.

The FAA is issuing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

The FAA considered inspection and removal of those blades that fail inspection to be an urgent safety issue. Inspection of the 1st-stage LPC blade for cracks must be accomplished before further flight after the effective date of this AD. These conditions still exist, therefore, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).