

EMERGENCY AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

www.faa.gov/aircraft/safety/alerts/

DATE: September 14, 2007

AD #: 2007-19-52

Send to all U.S. owners and operators of Bell Helicopter Textron Canada Limited (BHTC) Model 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430 helicopters, certificated in any category, with certain part-numbered and serial-numbered tail rotor blades installed.

This Emergency Airworthiness Directive (AD) is prompted by three incidents in which tail rotor blade (blade) tip weights were slung from blades during flight, causing significant vibration. The failures have occurred on blades being returned to service from Rotor Blade, Inc. (RBI), from as short as 12 minutes since repair to as long as 400 hours time-in-service. An investigation indicates that tip weights were missing the adhesive applied during the weight-and-balance process on these blades. This condition, if not detected and corrected, could result in loss of the blade tip weight, loss of a blade, and subsequent loss of control of the helicopter.

We have reviewed the following Bell Helicopter Textron Alert Service Bulletins (ASB):

- No. 206-07-116, dated September 11, 2007, for BHTC Model 206 A/B series helicopters;
- No. 206L-07-148, dated September 11, 2007, for BHTC Model 206L series helicopters;
- No. 222-07-106, Revision A, dated September 13, 2007, for BHTC Model 222 and 222B helicopters;
- No. 222U-07-77, Revision A, dated September 13, 2007, for BHTC Model 222U helicopters;
- No. 230-07-38, Revision A, dated September 13, 2007, for BHTC Model 230 helicopters;
- No. 407-07-81, dated September 11, 2007, for BHTC Model 407 helicopters;
- No. 427-07-18, dated September 11, 2007, for BHTC Model 427 helicopters; and
- No. 430-07-41, Revision A, dated September 13, 2007, for BHTC Model 430 helicopters.

All of the ASBs contain a letter from RBI indicating that certain blades processed by RBI may be missing the adhesive applied to the tip weight screws during the weight and balance process.

Transport Canada, the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on these helicopter models. Transport Canada advises of three reports of balance weights departing from the blades during flight. They also advise that they determined in the investigation that the unsafe condition results from the loss of the tip weights and that the failure can occur at any time. Transport Canada classified the ASBs as mandatory and issued AD No. CF-2007-21, dated September 13, 2007, to ensure the continued airworthiness of these helicopters in Canada.

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.

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD requires, before further flight, removing and replacing each affected blade with an airworthy blade. The actions must be accomplished by following specified portions of the ASBs described previously.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

2007-19-52 BELL HELICOPTER TEXTRON CANADA LIMITED: Directorate Identifier 2007-SW-36-AD.

Applicability: Model 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430 helicopters, with a tail rotor blade (blade) having a part number and serial number as listed in the following Bell Helicopter Textron Alert Service Bulletins (ASB), installed, certificated in any category.

ASB No.	Revision	Date	Helicopter Model
206-07-116		September 11, 2007	206A and 206B
206L-07-148		September 11, 2007	206L, L-1, L-3, and L-4
222-07-106	A	September 13, 2007	222 and 222B
222U-07-77	A	September 13, 2007	222U
230-07-38	A	September 13, 2007	230
407-07-81		September 11, 2007	407
427-07-18		September 11, 2007	427
430-07-41	A	September 13, 2007	430

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of a blade tip weight, loss of a blade, and subsequent loss of control of the helicopter, accomplish the following:

(a) Before further flight, replace any affected blade with an airworthy blade with a serial number not listed in the applicability section of this AD.

(b) 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, Regulations and Guidance Group, FAA, ATTN: Sharon Miles, Fort Worth, Texas 76193-0111, telephone (817) 222-5122, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(c) Special flight permits will not be issued.

(d) Copies of the applicable service information may be obtained from Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272.

(e) Emergency AD 2007-19-52, issued September 14, 2007, becomes effective upon receipt.

Note: The subject of this AD is addressed in Transport Canada (Canada) AD No.CF-2007-21, dated September 13, 2007.

FOR FURTHER INFORMATION CONTACT: Sharon Miles, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Guidance Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5122, fax (817) 222-5961.

Issued in Fort Worth, Texas, on September 14, 2007.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.