

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2004-SW-12-AD; Amendment 39-13884; AD 2004-24-08]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Model 206A, B, L, L-1, L-3, and L-4 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the specified Bell Helicopter Textron Canada (BHTC) model helicopters. This action requires an initial inspection and, at specified intervals, certain repetitive checks and inspections of the tail rotor blade (blade) for a deformation, a crack, and a bent or deformed tail rotor weight (weight). Also, this action requires, before further flight, replacing each blade with an airworthy blade if a deformation, a crack, or a bent or deformed weight is found. This amendment is prompted by three reports of skin cracks originating near the blade trailing edge balance weight. This condition, if not detected, could result in blade failure and subsequent loss of control of the helicopter.

DATES: Effective December 16, 2004.

Comments for inclusion in the Rules Docket must be received on or before January 31, 2005.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2004-SW-12-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

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.

SUPPLEMENTARY INFORMATION: This amendment adopts a new AD for the specified BHTC model helicopters. This action requires an initial inspection and certain repetitive checks and inspections of the blade, at specified intervals, for a deformation, a crack, and a bent or deformed weight. Also, this action requires, before further flight, replacing each blade with an airworthy blade if a deformation, a crack, or a bent or deformed weight is found. This amendment is prompted by

three reports of skin cracks originating near the blade trailing edge balance weight. In two reports, a loss of the weight and a strip of material along the trailing edge led to an imbalance and fracture of three of the four tail rotor gearbox attachment bolts. In one of these incidents the gearbox shifted resulting in failure of the drive shaft and loss of yaw control. This condition, if not detected, could result in blade failure and subsequent loss of control of the helicopter.

BHTC has issued Alert Service Bulletin No. 206-04-100 for Model 206A and B and No. 206L-04-127 for Model 206L series helicopters, both Revision B, both dated May 28, 2004. These service bulletins specify checking and inspecting the blades for a deformation, a crack, and a bent or deformed weight and a one-time inspection by Rotor Blades Inc. in Louisiana, USA, and if the blades pass the one-time inspection, adding a "V" at the end of the serial number. The service bulletins also specify replacing any blade with a deformation, a crack, or bent or deformed weight.

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 skin cracks originating near the blade trailing edge balance weight. Two of the occurrences caused a loss of the weight and a strip of material along the trailing edge leading to an imbalance, which caused the fracture of three of the four tail rotor gearbox attachments. One of these occurrences resulted in the gearbox shifting that caused failure of the drive shaft and resulting loss of yaw control. Transport Canada classified the alert service bulletins as mandatory and issued AD No. CF-2004-05R1, dated June 28, 2004, 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 designs registered in the United States. Therefore, the FAA is issuing this AD to detect a blade with a deformation, a crack, or a bent or deformed weight and to prevent blade failure and subsequent loss of control of the helicopter. This AD requires the following for the specified BHTC helicopters with certain blade part numbers and serial numbers:

- Before further flight, unless accomplished previously, and before installing any blade with an affected part number and serial number, cleaning the blade. Then, using a 10X or higher magnifying glass, inspecting both sides of each blade for a deformation, a crack, and a bent or deformed weight.
 - Thereafter, cleaning both sides of each blade and using a 10X or higher magnifying glass, inspecting for a deformation, a crack, and a bent or deformed weight as follows:
 - At intervals not to exceed 12 hours time-in-service (TIS), or
 - At intervals not to exceed 24 hours TIS and checking both sides of each blade for a deformation, a crack, and a bent or deformed weight at intervals not to exceed 3 hours TIS between inspections.
- An owner/operator (pilot) may perform the 3-hour TIS check for deformed or cracked blades and for bent or deformed weights. Pilots may perform these checks because they require no tools, can be done by observation, and can be done equally well by a pilot or a mechanic. However, the pilot must enter compliance with these requirements into the helicopter maintenance records by following 14 CFR 43.11 and 91.417(a)(2)(v).
- Before further flight, replacing each blade with an airworthy blade if you find a deformation, a crack, or a bent or deformed weight.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability and structural integrity of the helicopter. Therefore, inspecting the blade, for a deformation, a crack, and a bent or deformed weight is required before further flight and at short specified time intervals, and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that this AD will:

- Affect 2194 helicopters.
- Take about 1/4 work hour for a blade check or inspection and 3 work hours to replace one blade at an average labor rate of \$65 per work hour.
- Required parts will cost about \$5,848 per helicopter. (The service bulletin states that warranty credit will be given based on hour usage on the blade with remaining life hours and other restrictions.) Based on these figures, the total estimated cost impact of the AD on U.S. operators is \$21,315,807, assuming 226 checks or inspections and replacing one blade on each helicopter in the fleet.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2004-SW-12-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final economic evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

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 adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

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

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-24-08 Bell Helicopter Textron Canada: Amendment 39-13884. Docket No. 2004-SW-12-AD.

Applicability: Model 206A, B, L, L-1, L-3, and L-4 helicopters, with a tail rotor blade (blade) with the following part number (P/N) and serial number (S/N) installed, certificated in any category.

Model 206A & B; Blade, P/N 206-016-201-133, S/N with prefix "CS" and no "V" suffix	Model 206A, B, L, L-1, L-3, & L-4, Blade, P/N 206-016-201-131, S/N with prefix "CS" and no "V" suffix	
1381 through 1442	7000 through 7018	10174 through 10218.
1492 through 1517	7020 through 7043	10220.
1520 through 1542	7045 through 7050	10232.
1550	7052 through 7132	10235.
1556	7134 through 7246	10237 through 10241.
1560	7248 through 7270	10244.
1562	7272 through 7277	10245.
1564 through 1567	7279 through 7339	10248.
1569 through 1606	7342 through 7368	10250 through 10264.
1609	7784	10266 through 10268.
1611	7786	10270 through 10274.
1612	7788	10276 through 10278.
1614 through 1631	7790 through 7796	10280 through 10282.
1633 through 1675	7798 through 7819	10284 through 10292.
1677	7821 through 7833	10296.
1678	7835 through 7839	10300 through 10330.
1680 through 1682	7841 through 8001	10332.
1684 through 1787	8003 through 8026	10333.
1789 through 1803	8029 through 8061	10335 through 10347.
1810 through 1812	8064 through 8117	10349.
1814	8119	10351 through 10359.
1816	8121 through 8139	10363 through 10365.
1820	8142 through 8176	10367.
1823 through 1831	8178 through 8262	10373.
1834 through 1836	8264 through 8294	10374.
1838	8298 through 8368	10377 through 10385.
1840 through 1844	8370 through 8375	10387 through 10408.
1846	8378 through 8416	10410.
1848 through 1882	8419	10414 through 10417.
1884 through 1887	8421	10419 through 10427.

1889 through 1893	8425 through 8428	10430.
1896 through 1898	8430 through 8438	10432.
1900	8440	10437.
1904	8441	10438.
1909 through 1912	8443	10442 through 10445.
1915	8445 through 8447	10458 through 10466.
1916	8449 through 8606	10469.
1919 through 1921	8608 through 8622	10470.
1924	8624 through 8626	10474.
1928 through 1931	8628 through 8632	10476 through 10478.
1933	8635 through 8653	10480 through 10487.
1934 through 1939	8655 through 8686	10489 through 10491.
1943	8690	10493 through 10495.
1945	8692 through 8700	10497 through 10503.
1947	8703 through 8715	10505 through 10588.
1948	8717 through 8722	10591 through 10606.
1952 through 1957	8724 through 8742	10608 through 10610.
1960	8745 through 8828	10612 through 10620.
1962 through 1965	8830 through 8835	10623.
	8838 through 8840	10624.
	8842 through 8881	10631 through 10655.
	8883 through 9032	10657 through 10669.
	9034 through 9139	10672.
	9141 through 9198	10673.
	9200	10676 through 10678.
	9202 through 9302	10680 through 10683.
	9304 through 9339	10685.
	9341 through 9371	10687.
	9373 through 9411	10689 through 10702.
	9413	10707.
	9415 through 9417	10712.
	9419 through 9496	10715.
	9498 through 9585	10730.
	9587 through 9594	10732 through 10734.
	9596 through 9618	10736.
	9621 through 9629	10738.
	9632 through 9642	10739.
	9645 through 9651	10746.
	9653 through 9673	10750.
	9675 through 9707	10756.
	9709 through 9724	10760.
	9727 through 9731	10761.
	9733 through 9735	10765.
	9737 through 9739	10770.
	9741 through 9748	10774 through 10776.
	9751 through 9785	10778.
	9787	10781.
	9788	10783 through 10785.
	9790 through 9792	10792.
	9795 through 9847	10794.

9849 through 9928	10798.
9930 through 9937	10799.
9940 through 9942	10806 through 10808.
9944 through 9952	10811.
9955 through 9972	10814 through 10822.
9974 through 9989	10824.
9991 through 9995	10825.
9997 through 10004	10829.
10006 through 10009	10831.
10011	10917.
10013 through 10018	10923.
10021 through 10030	10931.
10034	10936.
10036 through 10057	10937.
10061 through 10082	10940.
10090 through 10092	10943.
10094 through 10100	10945.
10116	10947.
10119	10948.
10121	10964.
10123 through 10134	10965.
10136 through 10140	10973.
10142 through 10144	10982.
10146 through 10172	10985.
	10986.

Compliance: Required as indicated.

To prevent blade failure and subsequent loss of control of the helicopter, do the following:

(a) Before further flight, unless accomplished previously, and before installing any blade with a P/N and S/N listed in the applicability section of this AD, clean the blade. Using a 10X or higher magnifying glass, inspect both sides of each blade for a deformation, a crack, and a bent or deformed weight in the area shown in Figure 1 of this AD.

Note 1: Paint irregularities on the blade may indicate a crack.

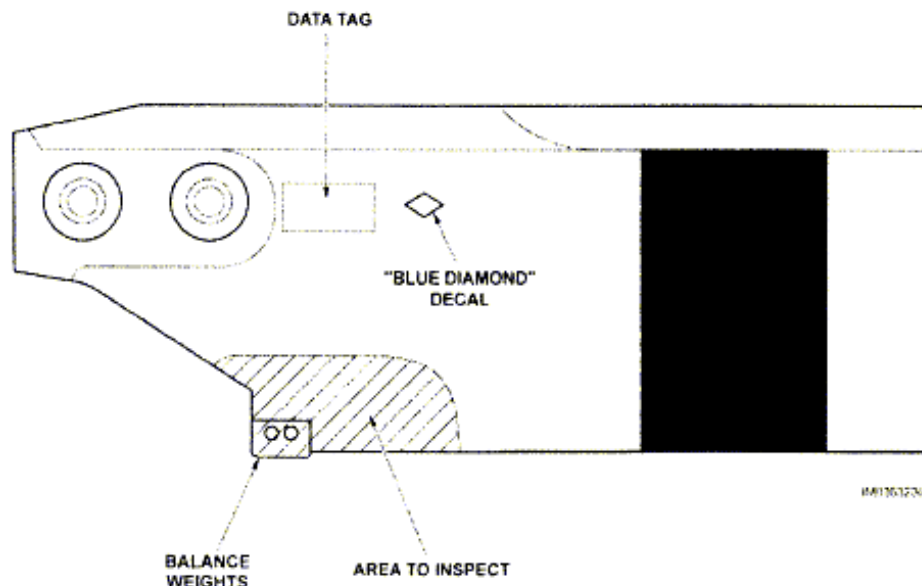


Figure 1. Tail rotor blade inspection.

(b) After doing paragraph (a) of this AD, at the following intervals, clean both sides of each blade and do either paragraph (1) or (2) as follows:

(1) At intervals not to exceed 12 hours time-in-service (TIS), using a 10X or higher magnifying glass, inspect both sides of each blade for a deformation, a crack, and a bent or deformed weight in the area shown in Figure 1 of this AD, or

(2) Inspect and check both sides of each blade for a deformation, a crack, and a bent or deformed weight in the area shown in Figure 1 of this AD as follows:

(i) Using a 10X or higher magnifying glass, inspect at intervals not to exceed 24 hours TIS, and

(ii) Check at intervals not to exceed 3 hours TIS between the inspections required by paragraph (b)(2)(i) 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 sections 43.11 and 91.417(a)(2)(v).

(c) Before further flight, replace any blade that has a deformation, a crack, or a bent or deformed weight with an airworthy blade.

Note 2: Bell Helicopter Textron Alert Service Bulletin No. 206-04-100 for Model 206A and B and No. 206L-04-127 for Model 206L series, both Revision B, both dated May 28, 2004, pertain to the subject of this AD.

(d) 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 Safety Management Group, Rotorcraft Directorate, FAA, for information about previously approved alternative methods of compliance.

(e) This amendment becomes effective on December 16, 2004.

Note 3: The subject of this AD is addressed in Transport Canada (Canada) AD No. CF-2004-05R1, dated June 28, 2004.

Issued in Fort Worth, Texas, on November 22, 2004.
Kim Smith,
Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.
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BILLING CODE 4910-13-P