

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 Number (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.

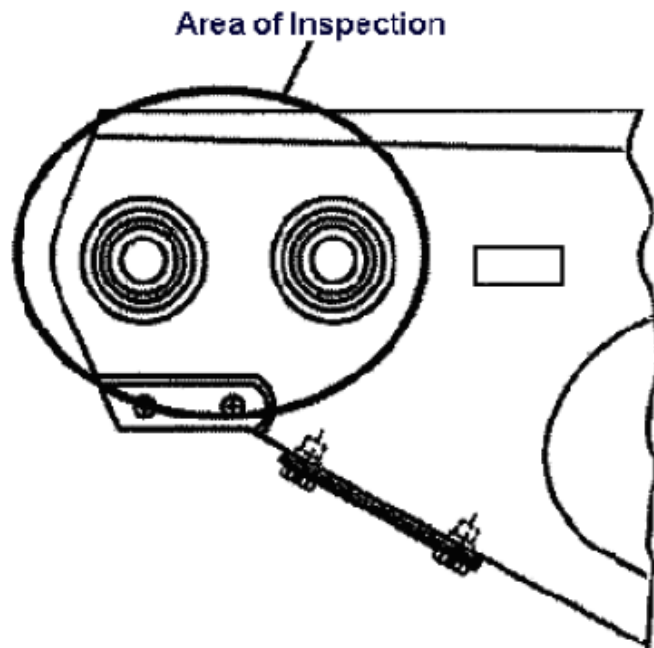
Exception 3: Blades identified with an "R" code in the square block below the P/N field of the Data Plate have already been modified and no further actions are required by this AD.

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.