



No.	CF-2002-23R1	1/2
Issue Date	7 May 2003	

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 593**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone (613) 952-4357.

Number: CF-2002-23R1

Subject: Bell 222, 222B, 222U and 230 - Main Rotor Grips and Pitch Horns

Effective: 20 June 2003

Revision: Supersedes Airworthiness Directive (AD) CF-2002-23.

Applicability: Bell Helicopter Textron Canada (BHTC) Model 222, 222B, 222U and 230 Helicopters equipped with Main Rotor Hub Assemblies part number (P/N) 222-011-101-all dash numbers and P/N 222-012-101-all dash numbers with 1250 or more hours air time in service.

Compliance: As indicated, unless already accomplished

Background: Transport Canada has been advised of three occurrences of cracked main rotor grips and three occurrences of cracked pitch horns. These cracks have been found during routine inspection of the rotor head.

It has been determined that a newly developed enhanced inspection is required at 2500 hours air time in service in addition to the daily check and 25 hour visual repetitive inspection to ensure integrity of the components.

Corrective Actions: **Part 1. Daily check**

Prior to the next flight and at daily intervals thereafter, unless Part 2 or 3 of this AD has been conducted on that day, check the main rotor grips and pitch horns for cracking as per instruction outlined in Part I of the applicable Alert Service Bulletin listed in the accompanying table.

While away from technical support, Part 1 of this AD may be done by a pilot specifically trained and authorized for the task in accordance with Canadian Aviation Regulations (CARs).

Part 2. 25-hour visual inspection.

Within the next 7 days or 10 hours air time after the effective date of this directive, whichever occurs first, and at every 25 hours air time thereafter, perform a visual inspection of the main rotor grips and pitch horns.

The inspection procedure is listed in Part II of the applicable Alert Service Bulletin as listed in the accompanying table.

Helicopter Model	Alert Service Bulletin
222, 222B	222-02-93 Rev. A
222U	222U-02-64 Rev. A
230	230-02-26 Rev. A

Part 3. 2500 hour inspection

- A. Upon reaching 2500 hours air time perform the newly developed 2500 hour inspection on main rotor hub assembly as per Chapter 5, Revision 3 or later revision of the applicable maintenance manual.
- B. Within the next 6 months or 300 hours air time after the effective date of this directive, whichever occurs first, on rotor heads that have accumulated between 2500 and 4500 hours air time, perform the newly developed 2500 hour inspection on main rotor hub assembly as per Chapter 5, Revision 3 or later revisions of the applicable maintenance manual.

If a crack is found, replace the failed part before the next flight.

Authorization: For Minister of Transport



Robin Lau
Acting Chief, Continuing Airworthiness

Contact: Mr. Bogdan Gajewski, Continuing Airworthiness, Ottawa, telephone (613) 952-4450, facsimile (613) 996-9178 or e-mail gajewsb@tc.gc.ca or any Transport Canada Centre.

