



# EMERGENCY AIRWORTHINESS DIRECTIVE

---

*This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) with ADs.*

**Number:**

CF-2021-05

**Effective Date:**

21 February 2021

**ATA:**

67

**Type Certificate:**

H-112

**Subject:**

Rotors Flight Control – Collective Controls – Failure of Pilot Collective Stick and Grip Assembly

**Applicability:**

Bell Textron Canada Limited (Bell) model 505 helicopters, serial numbers 65011 and subsequent.

**Compliance:**

Before further flight, unless already accomplished.

**Background:**

Bell has received a report where a pilot collective stick and grip assembly (hereafter called pilot collective stick) fractured above the cabin floor at the junction with the collective jackshaft. This finding occurred prior to engine start during the pilot pre-flight check of flight controls for travel. The exact cause of the failure is still under investigation. Due to the potential for similar failure on other model 505 helicopters, Bell has published Alert Service Bulletin (ASB) 505-21-20 to carry out a one-time inspection to detect cracks that may lead to failure of the pilot collective stick and consequent loss of control of the helicopter.

To prevent failure of the pilot collective stick, Transport Canada issues this AD to mandate its inspection in accordance with ASB 505-21-20. This AD is considered an interim action. Transport Canada may mandate further corrective actions.

**Corrective Actions:**

- A. Carry out a one-time visual inspection and as applicable, a fluorescent penetrant inspection of the pilot collective stick to detect cracking, in accordance with the Accomplishment Instructions of Bell ASB 505-21-20, dated 20 February 2021.
- B. If the pilot collective stick is found to be unserviceable, replace the collective stick with a serviceable part prior to further flight. A serviceable collective stick is a new collective stick or a collective stick with no crack found during the visual inspection or fluorescent penetrant inspection of Corrective Action A. above.

Later revisions of Bell ASB 505-21-20 approved by the Chief, Continuing Airworthiness, Transport Canada, are acceptable for compliance with the requirements of this AD.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 21 February 2021

**Contact:**

Philip Tang, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail [AD-CN@tc.gc.ca](mailto:AD-CN@tc.gc.ca) or any Transport Canada Centre.