



# AIRWORTHINESS DIRECTIVE

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*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-2022-46

**Effective Date:**

26 August 2022

**ATA:**

32

**Supplemental Type Certificate:**

SH01-9

**Subject:**

Landing Gear – Forward Crosstube – New Airworthiness Limitation

**Applicability:**

Bell Textron Inc. model 204B, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, and 412 EP helicopters which are modified in accordance with Transport Canada Supplemental Type Certificate (STC) SH01-9 and installed with Dart Aerospace Ltd. high gear forward crosstube part number (P/N) D212-664-101/-101B.

Note: The above-mentioned crosstubes are also approved under Federal Aviation Administration (FAA) STC SR01298NY, and European Union Aviation Safety Agency (EASA) STC IM.R.S.01304.

**Compliance:**

Within 30 days from the effective date of this AD, unless already accomplished.

**Background:**

Two in-service failures of Dart Aerospace Ltd. (Dart) forward crosstube P/N D212-664-101 have been reported on Bell 412 helicopters. The forward crosstube fractured during landing. Both failures were due to fatigue damage, involving forward crosstubes which have accumulated more than 20 000 landings.

If a forward crosstube fails without timely mitigating action from the pilot during landing, the helicopter body would contact the ground causing significant damage to the fuselage and potential injury to the occupants.

To address this unsafe condition, Dart has issued Revision 12 of Chapter 4, Airworthiness Limitations of the Instructions for Continued Airworthiness (ICA) ICA-D212-664, to introduce a new airworthiness life limit for forward crosstube P/N D212-664-101/-101B.

This AD mandates the new airworthiness life limit introduced in Chapter 4 of Dart ICA-D212-664, which has been identified as mandatory action for continued airworthiness.

**Corrective Actions:**

- A. Amend Chapter 4, Airworthiness Limitations of Dart ICA-D212-664, by inserting Revision 12, dated 30 September 2021. This revision introduces an airworthiness life limit of 20 000 landings for forward crosstube P/N D212-664-101/-101B.
- B. Remove from service P/N D212-664-101/-101B forward crosstubes with more than 20 000 landings.
- C. The use of superseding or later revisions of the Airworthiness Limitations, approved by Transport Canada, is acceptable for compliance with the requirements of this AD.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Philippe Ngassam  
Director, National Aircraft Certification  
Issued on 12 August 2022

**Contact:**

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