



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-2021-34

Effective Date:

5 November 2021

ATA:

53

Type Certificate:

H-92

Subject:

Fuselage – Tailboom – Lower Skin Cracking

Applicability:

Bell Textron Canada Limited (Bell) model 407 helicopters, serial numbers 53000 through 53900, 53911 through 54166, 54300 and subsequent.

Compliance:

As indicated below, unless already accomplished.

Background:

Bell has received a report of a crack on the tailboom lower skin part number (P/N) 407-030-801-111 on a Bell 407 helicopter model. The crack was located on the lower aft corner of the left-hand cutout of the horizontal stabilizer at Boom Station 120.75. An investigation revealed that the crack initiated due to fatigue damage at one of the rivets that attaches a nutplate to the skin.

This condition, if not corrected, could affect the structural integrity of the tailboom.

To address this unsafe condition, Bell has issued a revision to the Chapter 4 Airworthiness Limitations Schedule (ALS) of the Maintenance Planning Information (MPI) manual to introduce a new inspection zone below the left-hand-side (LHS) horizontal stabilizer cutout for all Bell model 407 tailboom assemblies. This AD mandates the revised instructions contained in Bell 407 MPI Chapter 4, which have been identified as mandatory actions for continued airworthiness.

Corrective Actions:

For the purpose of this AD, the following definition applies:

The applicable ALS: Bell 407 MPI Chapter 4, ALS, Issue 3, dated 21 June 2021, or later revisions approved by Transport Canada.

From the effective date of this AD, perform the following actions, as specified in the applicable ALS for the helicopter model and configuration:

- A. Replace each component before exceeding the applicable airworthiness life limit.
- B. Accomplish all applicable maintenance tasks within the defined thresholds and intervals. Initial compliance (phase-in period) with the new or revised tailboom assembly inspection tasks must be achieved at the next tailboom assembly scheduled inspection, from the effective date of this AD.
- C. Where the task that is specified in the applicable ALS is an inspection task, if a defect is found during the inspection, within the compliance time specified in the applicable ALS, perform the specified corrective action(s) in accordance with the ALS or the documents that are referenced in the ALS. If no compliance time is identified in the ALS, perform the specified corrective action(s) before further flight.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 22 October 2021

Contact:

Audrey Vézina-Manzo, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.