



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-2024-44

Effective Date:

2 January 2025

ATA:

22

Type Certificate:

H-112

Subject:

Auto Flight – Wire harness chafing

Applicability:

Bell Textron Canada Limited (BTCL) model 505 helicopters, serial numbers 65011 through 65383, 65386, 65387, 65394, 65401, 65407, 65413, 65415, and 65430

Compliance:

As indicated below, unless already accomplished.

Background:

BTCL was made aware of possible harness chafing in certain locations between basic and supplemental aircraft wiring and the structure. Potential fouling occurs under the floor starting at the forward canted bulkhead Station (STA) 65 to the aft bulkhead at STA 180, including all structural frames and areas in between (STA 65, 82, 98, 109, 127, 146, 155 and 180).

Chafing of the subject wiring could lead to a short to ground, commanding the engine to idle which has been determined to introduce an unsafe condition.

The corrective actions specified within this AD are considered as interim actions and will be revised once a final corrective action has been released by BTCL.

Corrective Actions:

1. Within the next 50 hours air time or 30 days, whichever occurs first from the effective date of this AD, conduct a detailed visual inspection (DVI) of the wire harnesses at the locations specified in the Accomplishment Instructions of BTCL Alert Service Bulletin (ASB) 505-22-32, dated 24 October 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
2. After the initial inspection required under corrective action 1 above, repeat the DVI of the wire harnesses in accordance with corrective action 1 at intervals not exceeding 300 hours air time.
3. If wire damage is found through corrective action 1 or 2 above, before further flight, repair the damaged wires/bundles, identify and correct the source of the chafing in accordance with the accomplishment instructions of BTCL ASB 505-22-32, dated 24 October 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 19 December 2024

Contact:

Grant Walker, 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.