



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-2025-35

Effective Date:

18 July 2025

ATA:

08

Type Certificate:

H-112

Subject:

Levelling and Weighing – Aft Moveable Ballast Box Assembly Door Hinge Failure

Replacement:

Supersedes AD CF-2025-17, issued 20 March 2025.

Applicability:

Bell Textron Canada Limited (Bell) model 505 helicopters, serial numbers 65011 and subsequent with ballast kit Part Number (P/N) SLS-706-201-001 installed.

Compliance:

As indicated below, unless already accomplished.

Background:

Bell has discovered possible plastic deformation and/or improper pin engagement in the knuckles of the door hinge on the aft movable ballast box assembly (P/N: SLS-706-201-007). Ballast weights escaping the ballast box have a high potential of striking the tail rotor assembly, resulting in damage and/or departure of tail rotor blades, loss of tail rotor thrust, and severe vibrations that would lead to loss of control of the helicopter.

To mitigate the unsafe condition, emergency AD CF-2025-17 prohibited installation of the ballast weights in the aft ballast box while a terminating action was developed. This AD implements the ballast box modification in Part II as a terminating action to allow use of the ballast weights to resume. This AD also corrects an error in the kit part number in the applicability section. Bell has published Alert Service Bulletin (ASB) 505-25-44, Revision A, dated 26 June 2025, that now includes instructions to modify the aft movable ballast box.

Corrective Actions:

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

The applicable ASB: Bell ASB 505-25-44 Revision A, dated 26 June 2025, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part I – Use of weights prohibited in aft movable ballast box SLS-706-201-007

1. Before further flight, remove ballast weights in accordance with the accomplishment instructions in Part I of the applicable ASB.
2. As of the effective date of this AD, the use of the ballast weights within the aft movable ballast box assembly P/N SLS-706-201-007 is prohibited.

Part II – Modification of aft movable ballast box door assembly SLS-706-201-021

1. Within 100 hours air time or 90 days, whichever comes first, modify the ballast box door assembly in accordance with the accomplishment instructions in Part II of the applicable ASB.

Modification of the affected ballast box in accordance with Part II of this AD constitutes a terminating action to the requirements of Part I of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 4 July 2025

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