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-2025-21

Effective Date:

6 May 2025

ATA:

62

Type Certificate:

H-92, H103

Subject:

Main Rotor – Expandable Blade Bolt incorrect heat treatment

Applicability:

Bell Textron Canada Limited (BTCL) model 407 helicopters, All Serial Numbers

Bell Textron Canada Limited (BTCL) model 427 helicopters, All Serial Numbers

Compliance:

Within 30 hours air time or 30 days, whichever occurs first, after effective date of this AD, unless already accomplished.

Background:

BTCL was informed that some expandable blade bolts, part number (PN) 406-310-103-103, might not have received the correct heat treatment.

The incorrect heat treatment may result in stress corrosion cracking of the affected blade bolts, leading to a detachment of the main rotor blade and loss of helicopter control.

Corrective Actions:

For the purposes of this AD, the following definitions apply:

For BTCL Model 407:

The ASB: BTCL Alert Service Bulletin (ASB) 407-24-137 initial release, dated 17 July 2024, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.

For BTCL Model 427:

The ASB: BTCL Alert Service Bulletin (ASB) 427-24-47 initial release, dated 7 August 2024, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.

1. Remove affected main rotor blade bolts, PN 406-310-103-103, with serial numbers as listed in Table 1 below and replace with serviceable expandable blade bolts in accordance with accomplishment instructions in the ASB.

Table 1 – List of Affected Main Rotor Expandable Blade Bolts (406-310-103-103) Serial Numbers

SLFS9386	SLFS9387	SLFS9388	SLFS9389	SLFS9390
SLFS9391	SLFS9392	SLFS9393	SLFS9394	SLFS9395
SLFS9396	SLFS9397	SLFS9398	SLFS9399	SLFS9400
SLFS93401	SLFS9402	SLFS9403	SLFS9404	SLFS9405

2. As of the effective date of this AD, it is prohibited to install main rotor expandable blade bolts, PN 406-310-103-103 with serial numbers as listed in Table 1 above on BTCL model 407 and 427 helicopters, all serial numbers.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 22 April 2025

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.