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-2026-52

Effective Date:

30 October 2026

ATA:

63

Type Certificate:

H-107

Subject:

Main Rotor Drive System – Radial Machining Marks on the Surface of the Mast Inner Diameter.

Applicability:

Bell Textron Canada Limited (Bell) model 429 helicopters, serial numbers 57001 through 57447, 57449 through 57517, 57519, 57521, 57525 through 57527 and 57529.

Compliance:

As indicated below, or unless already accomplished.

Background:

Bell has identified a manufacturing quality escape affecting mast assembly of the main rotor of model 429 helicopters. The mast assembly of the main rotor, Part Number (P/N) 429-040-040-105, exhibited radial machining marks on the surface of the mast inner diameter. This condition, if present, reduces the fatigue life of the mast.

To mitigate this risk, Bell has published Alert Service Bulletin, ASB 429-26-74, to perform one-time inspection of the mast assembly. Bell has introduced an Airworthiness Limitation (AWL) as the result of fatigue assessment that revealed the need for new restrictive AWLs on certain life-limited components than initially proposed.

This AD, CF-2026-52, requires operators to identify affected parts and replace them with a serviceable part in accordance with the AWL. Bell has introduced changes to the Chapter 4 - Airworthiness Limitations Schedule (ALS) of the Bell Maintenance Planning Information (MPI) document BHT-429-MPI Issue 006, wherein one new AWL was introduced.

Failure to replace these life-limited components according to the AWL could result in an unsafe condition. This AD mandates the new airworthiness life limit in addition to the requirements of ASB 429-26-74.

Corrective Actions:

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

Affected part: Mast assembly that are inspected in accordance with ASB429-26-74, dated July 6, 2026, that exhibits radial machining marks on the surface of the mast inner diameter, P/N 429-040-040-105, -105S.

Serviceable part: Mast assembly that has been inspected in accordance with ASB429-26-74, dated July 6, 2026, and does not exhibit radial machining marks on the surface of the mast inner diameter, P/N 429-040-040-105, -105S. P/N 429-040-040-109FM with less than 5000 hours in service is also serviceable.

Part I – Verification of P/N and hours in service

Review aircraft technical records to determine the in service part hours of the mast assembly, P/N 429-040-040-105, -105S.

Part II – One time inspection

Perform the one-time inspections as per accomplishment instructions in Bell ASB 429-26-74, dated July 2, 2026, or later revisions approved by Chief of Continuing Airworthiness, Transport Canada, and as per the following schedule.

A. For masts assembly with less than 5000 hours in service: within 200 hours airtime or 6 months, whichever occurs first, after the effective date of this AD.
B. For masts with 5000 hours or more in service: within 200 hours airtime or 2 months, whichever occurs first after the effective date of this AD. For affected parts with more than 5000 hours in service, remove the mast assembly and replace it with a serviceable part before next flight.

If no machining marks found, Part III of this AD is not applicable.

Part III – Replacement of mast assembly

If machining marks are found on the mast assembly. Re-identify the mast assembly in accordance with ASB429-26-74, dated July 6, 2026. Update the mast assembly technical records to reflect the change in part number.

Thereafter, follow the discard times as per the AWLs contained in the Chapter 04, Airworthiness Limitations Schedule Issue 6, dated June 06 2026 of Bell Model 429 Maintenance Planning Information BHT-429-MPI, Issue 21, dated June 09, 2026, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada. Non-conforming masts re-identified under P/N 429-040-040-109FM must be tracked for an airworthiness life of 5000 hours airtime under P/N 429-040-040-109.

Operators can install mast assembly, P/N 429-040-040-109FM, with less than 5000 hours in service.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 16 October 2026

Contact:

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