



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-2025-60

Effective Date:

8 December 2025

ATA:

53

Type Certificate:

H-107

Subject:

Fuselage – Tail Rotor Gearbox Support Assembly to Tailboom Attachment Discrepant Rivets

Replacement:

Supersedes AD CF-2021-15, issued 28 April 2021.

Applicability:

Bell Textron Canada Limited (Bell) model 429 helicopters, serial numbers 57001 and subsequent.

Compliance:

As indicated below, unless already accomplished.

Background:

Transport Canada and Bell received multiple in-service reports of failed rivets at the joint between the tailboom skin and the tail rotor gearbox support assembly part number (P/N) 429-034-701-101 or P/N 429-035-705-101. In-service reports also revealed that a quality escape resulted in a gapping condition between the tailboom skin and the tail rotor gearbox support fitting at some locations around the joint, and that rivets of inadequate grip length have been installed at the affected joint.

Investigations are ongoing to determine the root cause of the failed rivets.

Failed rivets at the affected joint, if not detected and corrected, could lead to progressive deterioration of the joint structural integrity, potentially resulting in the detachment of the tail rotor gearbox support assembly from the fuselage and consequent loss of control of the helicopter.

To address this unsafe condition, TCCA had released AD CF-2021-15 that mandated the accomplishment of inspections as detailed in the Bell Alert Service Bulletin (ASB) 429-19-47, Revision B, dated 27 January 2021. It provided accomplishment instructions for the initial and repetitive general visual inspection (GVI) and detailed inspection (DET) of the affected rivets at the joint between the tailboom skin and the tail rotor gearbox support assembly, and replacement of the discrepant rivets, as required. The ASB also required repair if an excessive gap ($>0.005"$ or $>0.127\text{mm}$) was found between the tail rotor gearbox support and the tailboom skin during inspections.

Following a report of numerous failed rivets discovered within the repetitive inspection interval mandated by AD CF-2021-15, Bell has revised the ASB 429-19-47 to Rev C on May 6th, 2025 to increase the frequency of repetitive inspections until a terminating action is introduced and to request that operators record whether the rivets were failed or of improper length while performing the inspection. This AD mandates the reduction of the Part II (repetitive inspection) interval.

This AD is considered an interim action and further AD action may follow.

Corrective Actions:

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

The ASB: Bell ASB 429-19-47, Revision C, dated 06 May 2025, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part I – Applicable to Model 429 Helicopters, serial numbers 57002 through 57210, 57212 and subsequent - Initial Inspection

1. Perform an inspection of the rivets at the tail rotor gearbox support assembly to tailboom joint for signs of failed rivets or rivets of inadequate grip length in accordance with the Accomplishment Instructions of the ASB and the following compliance times:
 - a. For helicopters that have accumulated less than 300 hours air time or 12 months since entry into service: within 100 hours air time or 3 months upon reaching 300 hours air time or 12 months since the effective date of this AD, whichever occurs first.
 - b. For helicopters that have accumulated 300 hours air time or 12 months or more since entry into service: within 100 hours air time or 3 months since the effective date of this AD, whichever occurs first.
 - c. For helicopters that have replaced or reinstalled the tail rotor gearbox support assembly P/N 429-034-701-101 or P/N 429-035-701-101 and have accumulated less than 300 hours air time or 12 months since the replacement or reinstallation: within 100 hours air time or 3 months upon reaching 300 hours air time or 12 months since the replacement or reinstallation, whichever occurs first.
 - d. For helicopters that have replaced or reinstalled the tail rotor gearbox support assembly P/N 429-034-701-101 or P/N 429-035-701-101 and have accumulated 300 hours air time or 12 months or more since the replacement or reinstallation: within 100 hours air time or 3 months since the effective date of this AD, whichever occurs first.
2. If discrepant rivets are detected as specified in Part I Paragraph 5, 6 or 7 of the ASB, before further flight, replace or repair the affected parts in accordance with the Accomplishment Instructions of the ASB.
3. Inspections carried out in accordance with Part I of Bell ASB 429-19-47 Revision B, dated 27 January 2021 (mandated by AD CF-2021-15), prior to the effective date of this AD, satisfies the requirements of Part I of this AD.

Part II – Applicable to model 429 helicopters, serial numbers 57001 and subsequent – Repetitive Inspections

Repeat the inspection in accordance with Part II of the Accomplishment Instructions of the ASB, per the following schedule:

1. For helicopters that have accumulated less than 50 hours air time since the last inspection in accordance with Part I or Part II of AD CF-2021-15 or Part I of this AD, as of the effective date of this AD: prior to accumulating 100 hours air time or 1 month since the effective date of this AD, and thereafter every 100 hours air time or 3 months, whichever comes first.
2. For helicopters that have accumulated between 50 and 350 hours air time since the last inspection in accordance with Part I or Part II of AD CF-2021-15 or Part I of this AD, as of the effective date of this AD: within the next 50 hours air time or 1 month since the effective date of this AD, and thereafter every 100 hours air time or 3 months, whichever comes first.
3. For helicopters that have accumulated more than 350 hours air time since the last inspection in accordance with Part I or Part II of AD CF-2021-15 or Part I of this AD, as of the effective date of this AD: prior to accumulating 400 hours air time or 1 month since the effective date of this AD, and thereafter every 100 hours air time or 3 months, whichever comes first.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Matthew Weeks
Acting Chief, Continuing Airworthiness
Issued on 24 November 2025

Contact:

Varun Karthik S, Continuing Airworthiness, Ottawa, telephone 888-663-3639, or e-mail
TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.