



U.S. Department of Transportation

Federal Aviation Administration

Airworthiness Concern Sheet

Date: 05/06/2025

<p>Reply to: Name: James Guo Title: Aviation Safety Engineer Office: AIR-772 Street Address: 3960 Paramount Blvd, Suite 100 City, State, ZIP: Lakewood, CA 90712 Telephone: 562-627-5357 Electronic Mail: james.guo@faa.gov Subject Line: Bell 206L-Series - ACS</p>	<p>Make: Bell Textron Canada Limited Model / Series: 206L, 206L-1, 206L-3, 206L-4 Serial Numbers: All Serial Numbers Reason for Airworthiness Concern: In-flight Abnormal Vertical Vibration</p>
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Federal Aviation Administration (FAA) Description of Airworthiness Concern

The FAA has received reports of severe vertical vibrations on Bell 206L helicopters. These events are inconsistent in their repeatability. In addition, post-flight inspections have not identified any failure that caused the vibration event.

Reports indicate the vibration subsides once additional load is applied on the main rotor by increasing collective. The vibration may worsen with a low friction set on the collective. The FAA is aware of at least one event where continued vibration resulted in substantial damage to the helicopter's tailboom, but the aircraft was able to land safely. The NTSB is investigating the event which was assigned NTSB number WPR24LA319. A preliminary report has been released.

The FAA is investigating this concern.

Request for Information

The FAA is interested in receiving any information on occurrences of in-flight abnormal vertical vibrations and the conditions/configurations of the rotorcraft at the time of the event. This includes any or all of the following information for new and past unreported events:

- Configuration of the rotorcraft
 - Specific series of L-model (L, L-1, L-3, or L-4)
 - Any installed modifications or replacement parts (e.g., STC main or tail rotor blades, PMA tension torsion straps, etc.)
 - Aircraft weight when the event occurred
 - Number of passengers
 - Center of gravity location
 - Maintenance friction setting for the collective
 - Fuel weight when the event occurred
- Flight conditions during the vibration event
 - Airspeed
 - Altitude
 - Maneuver being performed (e.g., climb, level flight, descent, etc.)
 - Weather conditions such as wind speed and direction, or any observed turbulence
- Date of the vibration event
- Action(s) performed by the pilot in response to the vibration event
- Any findings after the event that may have resulted from or attributed to the vibration (e.g., missing trim tab, failed structure, etc.)

Please provide any other information you feel may be helpful for us to consider as part of our evaluation.

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owners/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve Airworthiness Directive (AD) action or a Special Airworthiness Information Bulletin (SAIB), or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type club comments.

Attachments:

- Service Difficulty Report
- Accident/Incident Data System
- Service Letter / Bulletin
- Special Airworthiness Information Bulletin
- Federal Aviation Administration or National Transportation Safety Board Safety Recommendation
- Airworthiness Directive
- Alternate Means of Compliance
- Risk Analysis

Transmittal:

- Federal Aviation Administration
- Airplane Owners and Pilots Association
- Experimental Aircraft Association
- Type Club
- Type Certificate Holder
- Other:
 - Vertical Aviation International (VAI)
 - Air Medical Operator Association (AMOA)
 - Airborne Public Safety Association (APSA)

Response Requested By:

- Emergency (10 days)
- Alert (30 days)
- Information (90 days)