



A Textron Company

## OPERATION SAFETY NOTICE

**GEN-22-51**

20 January 2022

**TO: All owners and operators of Bell helicopters**

**SUBJECT: POTENTIAL 5G C-BAND WIRELESS BROADBAND INTERFERENCE WITH RADIO (RADAR) ALTIMETER EQUIPMENT**

The release of the Federal Aviation Administration (FAA) Airworthiness Directive (AD) [2021-23-13](#) and the Transport Canada Civil Aviation (TCCA) AD [CF-2021-53](#), identifying potential operational risks of certain 5G C-Band wireless frequencies (3.7 to 3.98 GHz) being deployed and the effect on installed radio altimeters have raised some concern from our Bell owners/operators.

Prior to the release of the ADs, the FAA had released the Special Airworthiness Information Bulletin (SAIB) [AIR-21-18](#) and TCCA released the Civil Aviation Safety Alert (CASA) [2021-08](#) with additional information and operational recommendations.

This Operation Safety Notice (OSN) is to provide additional information and the Bell position with regards to the operational restrictions discussed in both the FAA and the TCCA AD's. The *Italic* text below, extracted from the AD's, is followed by the Bell position for the Bell models and type of operations that are potentially affected by the 5G C-Band frequencies.

The ADs are *applicable to all helicopters, certificated in any category, equipped with a radio altimeter. When operating in U.S. airspace, where the following operations requiring a radio altimeter are prohibited in the presence of 5G C-Band wireless broadband interference as identified by Notice To Air Missions (NOTAM):*

- *Performing approaches that require radio altimeter minimums for rotorcraft offshore operations. Barometric minimums must be used for these operations instead.*
  - This could potentially affect all Bell helicopter models performing Instrument Flight Rule (IFR) approaches during offshore operations.

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Approved for public release.

- *Engaging hover autopilot modes that require radio altimeter data.*
  - The 412EPI and 412EPX variants with the optional Enhanced Hover Hold (EHH) Kit installed could potentially be affected when engaging the EHH mode.
  - The 412EP with the optional 4-axis Automatic Flight Control System (AFCS) Kit installed could potentially be affected when engaging the RADALT Hold mode.
  
- *Engaging Search and Rescue (SAR) autopilot modes that require radio altimeter data.*
  - Only the 412EP model with the optional SAR Modes Kit installed and using the SAR autopilot mode, during operations over water, could potentially be affected.
  
- *Performing takeoffs and landings in accordance with any procedure (Category A, Category B, or by Performance Class in the Rotorcraft Flight Manual or Operations Specification) that requires the use of radio altimeter data.*
  - This could potentially affect the 206L4-T, 212, 222, 222B, 222U, 230, 412 (all variants), 427, 429, and 430 helicopter models performing Category A takeoffs and landings.

Since the release of the ADs, but prior to the publication of this OSN, the FAA has released NOTAMs identifying areas of potential concern. Bell recommends owners/operators to verify if they will be operating in an area with potential restricted operations identified per those NOTAMs.

The requirement of the ADs is for owners/operators to insert the Figure 1 of the ADs, or a copy of the AD, into the Limitations section of the applicable Rotorcraft Flight Manual (RFM) for pilot awareness of the flight restrictions. Bell will not be revising the Limitations section of the various Bell helicopter model RFMs to include information related to the ADs.

On 13 January 2022, the FAA published the approved Exemption No. 18973 (Regulatory Docket No. [FAA-2021-1028](#)) following a petition for exemption submitted by the Helicopter Association International (HAI). The FAA Exemption applies only to part 119 certificate holders authorized to conduct Helicopter Air Ambulance (HAA) operations under part 135, subpart L, and includes certain conditions and limitations for the use of the Exemption. If HAA operators are interested in petitioning the FAA for the use of the Exemption, refer to the requirements defined in the Regulatory Docket No. [FAA-2021-1028](#).

Bell continues to work with our radio altimeter suppliers to obtain data concerning the impact of 5G C-Band interference on radio altimeter equipment. Once the equipment susceptibility has been assessed and solutions are in place, Bell will submit Alternate Means Of Compliance (AMOC) requests to the applicable Civil Aviation Authorities requesting alleviation to the published ADs. If Bell receives approval for the AMOCs, these will be distributed to our owner/operators through the distribution of our service directives.

If during operations owners/operators experience 5G C-Band interference with installed radio altimeter equipment, please report the following details to Product Support Engineering (PSE) at [productsupport@bellflight.com](mailto:productsupport@bellflight.com):

- In the Subject line of the email write “helicopter model (serial number) - OSN GEN-22-51” (Example: 429 (57300) – OSN GEN-22-51)
- In the body of the email, include the following information:
  - Company Name
  - Contact Name
  - Helicopter model
  - Helicopter serial number
  - Total time since new (TTSN) of the helicopter
  - Area where interference was experienced (i.e. city/town, state, and position (latitude/longitude) if available)
  - Description of the interference (i.e. date of occurrence, duration, effect on aircraft systems, and type of terrain)
  - During what operational maneuver the interference was experienced (i.e. takeoff, landing, turning or circling, hover, level flight, etc...)
  - Altitude the helicopter was at (Above Ground Level (AGL)) when the interference was experienced
  - Estimated altitude, distance, and bearing of the 5G tower relevant to the helicopter when the interference was experienced
  - Installed radio altimeter equipment on the helicopter (i.e. supplier name, part number, and serial number)

The FAA has created a website where more information on the 5G and Aviation Safety is available. Details can be found at <https://www.faa.gov/5g>.

For any questions regarding this letter, please contact:

Bell Product Support Engineering  
Tel: 1-450-437-2862 / 1-800-363-8023 / [productsupport@bellflight.com](mailto:productsupport@bellflight.com)