



A Textron Company

## **INFORMATION LETTER**

**GEN-22-155**

23 March 2022

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

**SUBJECT: USE OF BELL RECOMMENDED VIBRATION ANALYSIS AND BALANCING EQUIPMENT**

Helicopter vibration levels need to be monitored and diagnosed on a regular basis to identify any possible imbalance, damage, or misalignment of the helicopter dynamic and structural components. Rotor track and balance is usually done following routine maintenance, after specific component changes, following new equipment installations, when the flight crew suspect an increase in vibration levels or for other reasons. To perform this maintenance the use of helicopter vibration analysis and balancing equipment will be required.

Many different manufacturers of vibration analysis and balancing equipment exist, and the equipment can be purchased from various sources. The Bell recommended vibration analysis and balancing equipment is listed in Chapter 18 of the applicable Maintenance Manual for each helicopter model. Bell has acquired a lot of experience over the years and has created charts, script files and coefficients which are continually being revised and improved. They are model specific and have proven to be efficient in limiting the number of flights required to achieve satisfactory rotor track and balance results. All Bell recommended vibration analysis and balancing equipment use Bell developed charts, script files and coefficients.

Although it may be possible to achieve successful rotor track and balance using vibration analysis and balancing equipment from a different manufacturer, on some occasions, the use of the Bell recommended vibration analysis and balancing equipment may be the only option. Some helicopter models may share similar rotor systems but have a different airframe which will affect how a rotor is tuned. The use of model specific charts, script files and coefficients ensure recommended moves work as expected. Not all vibration equipment manufacturers have model specific charts, script files and coefficients which can make it difficult or even impossible to achieve satisfactory rotor track and balance results. In addition, if the data is not collected with Bell recommended vibration analysis and balancing equipment, Product Support Engineering (PSE) and

Customer Support Engineering (CSE) may not have the ability to do an in depth review of the helicopter vibration data. This may limit the level of technical support Bell can provide for rotor track and balance.

With most of the Bell recommended vibration analysis and balancing equipment, it is possible to download the vibration data and send it by e-mail to PSE for review and analysis. This is the preferred and most efficient method for PSE to support customers with helicopter rotor track and balance issues.

Take note that the latest script files version for all helicopter models can be found at <https://www.bellcustomer.com/>

For any questions regarding this letter, please contact:

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