## The Purpose of Modification for Call Sign: WJ2XJX File Number: 0269-EX-CN-2018

## • The Modification

The modifications to the application with Call Sign: WJ2XJX File Number: 0269-EX-CN-2018 are as the following:

- 1. The frequencies of the transmitters used in all three locations have been changed from: 3.3GHz-3.8GHz to 3.2GHz-3.8GHz.
- 2. Continuing and extending the OET experimental license for another 24 months starting from this modification request date (2019/11/21).

## • The Purpose of Modification

- 1. The purpose of the frequency modification is: the transmitter uses a customer ASIC for transmitting very low power FSK RF signal (<1mW at the transmitter antenna input). The carrier frequency can be adjustable to be limited to the frequency range as requested. Due to ASIC fabrication process variation, we measured and found that the 2<sup>nd</sup> batch of the ASIC frequency has shifted slightly from 3.3GHz to 3.2GHz, a 3% change. We would like to accommodate this change in our FCC OET experimental license for the BrainGate2 project IRB approval.
- 2. The purpose of continuing and extending license for another 24 months is: due to the successful outcome of the 1<sup>st</sup> batch of the device used on research participants, we are continuing built the 2<sup>nd</sup> batch of the device to be used on more research participants for validation and verification of the BrainGate2 Neural Interface System (NIS). We anticipate 24 months will be a proper time window for completing this phase.