

JHU/APL STA Application

- Experiment Point of Contact: Justin Zobel
- Background: This Special Temporary Authority (STA) License Application covers research initiated by the Johns Hopkins Applied Physics Lab.
- Objective:
 - Verify the performance of an experimental geolocation system
- Experiment Description: The Johns Hopkins Applied Physics Laboratory (JHUAPL) is a University Associated Research Center (UARC) that conducts basic research for the United States Government (USG)
 - There will be two stationary receivers and a stationary transmitter
 - All nodes will be ground-based and fixed
 - This experiment will take place on the JHU/APL campus
 - Testing will last for approximately 4 hours
 - A single 10-20 μ s pulse will be manually triggered approximately every 10 minutes (1.67 – 3.33 μ s)
- Location Details:
 - 39° 9' 53.22538" N, 76° 53' 54.23803" W
 - Stationary emitter
 - Address: 11100 Johns Hopkins Rd, Laurel, MD 20723
- Emission Details (include for each signal if multiple)
 - Peak output power: 27.85 dBm
 - Peak ERP: 27.85 dBm
 - Frequency of operation: 2915 – 3085 MHz
 - Frequency Tolerance: $\pm 5 \times 10^{-10}$
 - Signal Bandwidth: is 20 MHz
 - Signal Type: 10-20 μ s linear frequency modulated pulse
- FCC License Request Dates:
 - August 7th, 2021 – September 30th, 2021



Antenna Description:

- Antenna >6m above ground? N
- Directional? N
- Manufacturer: L-com
- Model #: HG2406DPU
- Polarization: Dual
- 3-dB Beamwidth: 360° H, 28° V
- Orientation in horizontal plane: 0°
- Orientation in vertical plane: 0°

