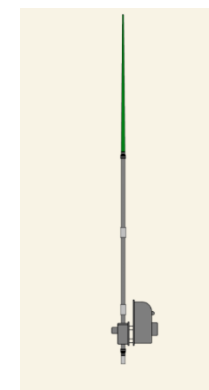


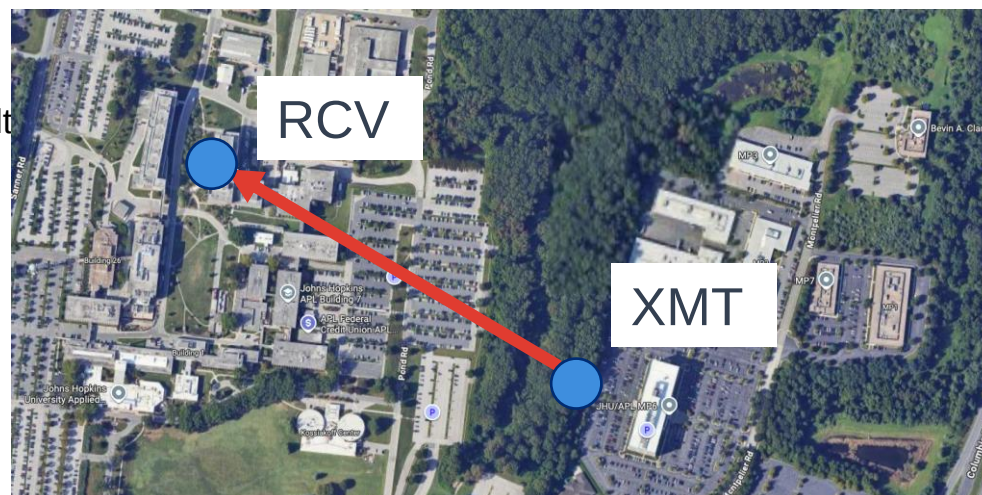
JHU/APL STA Application

- Experiment STOP BUZZER: Quincy Flint, 240-592-6825, 240-302-8345
- Objective:
 - Transmit a low-power HF waveform from an antenna located at MP6 to receive-only antennas located on the roof of building 17.
- 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)
 - We will use a FlexRadio Flex-6700 transmitting via a SteppIR BigIR Mark IV antenna and receive using SDRPlay receivers on building 17
 - Both the transmit and receive node are stationary.
 - Transmit will occur from the SteppIR antenna located near the north parking lot of MP6 and the receive will occur in building 17.
 - Experiment will be 1-hour at most with intermittent broadcasts
 - Transmissions are short, one-second bursts.
- Location Details:
 - Transmit: MP6 (39.163, -76.892)
 - Receive: Building 17
- Emission Details (include for each signal if multiple)
 - Peak output power: 15 W
 - Peak ERP: 10 W
 - Frequency: 6.75-7.25 MHz
 - Tolerance: +/- 100 Hz
 - Bandwidth: 8 kHz
 - Signal Type: BPSK
- FCC License Request Dates:
 - Date needed: 09/06/2026-03/06/2027



Antenna Description:

- Antenna >6m above ground? **Yes**
- Directional? **No**
- Manufacturer: **SteppIR**
- Model #: **BigIR Mark IV**
- Polarization: **Vertical**
- 3-dB Beamwidth: N/A
- Orientation in horizontal plane: N/A
- Orientation in vertical plane: N/A



Antenna Sketch

