

Description of Research Project

File Number: 0012-EX-PL-2012

Form 442 Confirmation Number: EL535853

Description:

The experimental license is being requested because the research we are conducting would be enhanced through use of unique transmission waveforms (e.g., for communications, radar, and sensing purposes). FCC-compliant transmission sources that we can purchase off the shelf do not adequately provide such waveforms. Examples include modified chirp waveforms for synthetic aperture radar, modified waveforms for ground penetrating radar, modified waveforms to enhance RF sensing functions, waveforms to support sounding of space-polarization channels, and waveforms for optimizing space polarization MIMO power efficiencies.

Note: Modulating signals are "arbitrary", but usually OFDM, BPSK, CPFSK, QPSK, Filtered Gaussian Noise, Chirp.