



FCC Experimental License Application

The Oneida County Griffiss International Airport (RME) New York UAS Test Site respectfully requests an experimental license for our SRC, Inc. LSTAR SRC-1494(V)2 AN/TPQ-49 radar. This AN/TPQ-49 radar was previously licensed with callsign WJ2XXZ, but that record has expired. There are no changes in operating parameters for this new license. The purpose of our request is continued testing of the AN/TPQ-49 radar as part of a multi-layered detect-and-avoid solution for the New York UAS Test Site. An experimental license is being requested because SRC, Inc. is still in the process of getting the AN/TPQ-49 radar approved as a certified radar.

The FAA has approved the Frequency Coordination Request for this radar, with tracking number TRK 261061. The FAA requested blanking between 19-69 degrees in reference to true north. NYUASTS is capable of accepting this blanking.

Type of Application (FCC Form 442 Question #12): Oneida County Griffiss International Airport (RME) New York UAS Test Site is a non-federal government entity. The Test Site is owned and operated by County of Oneida, State of New York.

Describe Scan Strategy (Antenna Section)

Antenna is vertically polarized and electronically scanned 360 degrees in 15 degree sectors. Radar is capable of operating from 0 to 360 degrees in azimuth.

Pulse Characteristic (IE Interlace Pattern, Stagger, Jitter etc.,)

Modulation is Non-Linear FM, the compression ratio is not constant across the pulse duration.

If the system operates over several frequencies or frequency hops, please describe (Emission Information):

RF Channeling capability: Single frequency operation, non-hopping, 1 MHz selectable steps beginning at 1215 MHz through 1390 MHz.

Additional Information (Additional Comments):

The AN/TPQ-49 radar is a surveillance radar that provides continuous 360 degree surveillance for radiolocation of airborne objects using a non-rotating, electronically steered antenna. The radar is capable of operating anywhere within 1215 MHz through 1390 MHz at 1 MHz steps. The antenna can be sector blanked in 15 degree increments.

The AN/TPQ-49 radar will be used to support situational awareness at the New York UAS Test Site.

The period of time requested for the experimental license is 24 months.

The AN/TPQ-49 radar is located at 43°13'37"N 75°24'23"W and the radius of operation is 3 km.