

Purpose of Experimental License Request

An Experimental Authorization is requested for the purpose of radar detection testing to support BNSF’s work with the FAA Pathfinder program to study the use of unmanned aerial vehicles beyond line-of-sight.

Locations

Operation of 1 (1) SRC-3554 Radar at each of the following locations:

Location	Latitude/Longitude	Radius Of Operation	Number Of Radars
Fort Sumner, NM	34° 24' 27.2" N 104° 18' 04.1" W	10km	1
Fort Sumner, NM	34° 28' 53.1" N 104° 15' 05.2" W	10km	1

SRC-3554 Frequency Requirements

A single SRHawk (SRC-3554) radar requires only one frequency within the 16.21-16.50 GHz operating band of the system to operate. If more than one radar is used each frequency must be separated by at least 50 MHz. Our experiment will utilize:

Location	Number Of Radars to be used (up to)	Number of Frequencies Used Per Radar	Total Frequencies needed for Experimental STA
Fort Sumner, NM	1	1	1
Fort Sumner, NM	1	1	1

Operating Schedule

The operating schedule that will be used for the SRC-3554 Radar during the course of the Experimental grant is:

Schedule Times	Date
Daily Operation during Experiment	Intermittently up to 24 hours per day

Interference Mitigation

The SRC-3554 radar can blank transmissions from 0 to 360 degrees in azimuth if necessary to protect other services that may be operating.

Cease Buzzer Point Of Contact

In the event interference complaints were to occur, SRC/Gryphon Sensors has taken preventative measures to cease and desist from transmission until they can be resolved. The POC for Cease Buzzer for Gryphon:

Point Of Contact	Telephone Number
Cease Buzzer	Primary (626) 302-7858 Secondary (315) 452-8114