

# **FCC Application for Experimental STA**

File Number: 0620-EX-ST-2014

#### **Exhibit 1: Information on Experiment**

### **Purpose of Experimental STA Request**

SRC is requesting an Experimental Special Temporary Authorization for the purpose of radar waveform testing in a semi-arid environment. Our requested dates are for a six month period ranging from August 1, 2014 through February 1, 2015.

#### Locations

SRC will be operating up to six (6) SRC-3554 Radars between the following two locations:

| Location      | Latitude/Longitude              | Radius of<br>Operation | Number of Radars |
|---------------|---------------------------------|------------------------|------------------|
| Merced CA     | 37°21'40.00"N<br>120°22'40.00"W | 10 km                  | 4                |
| Patterson, CA | 37°23'28.91"N<br>121° 5'7.53"W  | 10 km                  | 2                |

### **SRC-3554 Frequency Requirements**

A single SRHawk (SRC-3554) radar requires only one frequency within the 16.21-16.5 GHz operating band of the system to operate. If more than one radar is used each frequency must be separated by are at least 50 MHz. Our experiment will utilize:

| Location      | Number of Radars<br>to be used (up to) | Number of<br>Frequencies used<br>per Radar | Total Frequencies<br>needed for<br>Experimental STA |
|---------------|--|--|---|
| Merced, CA    | 4                                      | 1  | 4   |
| Patterson, CA | 2                                      | 1  | 2   |

## **Operating Schedule**

The operating schedule SRC will use for the SRC-3554 Radar during the course of the Experimental STA grant is:

| Schedule Times                    | Date                                  |  |
|-----------------------------------|---------------------------------------|--|
| Start Date of Experiment          | August 1, 2014                        |  |
| Stop Date of Experiment           | February 1, 2015                      |  |
| Daily Operation during Experiment | Intermittently Up to 24 hours per day |  |

#### **Interference Mitigation**

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

### **Cease Buzzer Point of Contact**

SRC understands that operation will be on a secondary non-interference basis. In the event interference complaints were to occur, SRC has taken preventative measures to cease and desist from transmission until they can be resolved. SRC has established a Cease Buzzer point



of contact to quickly react with any interference complaints that are the result of our system. The point of contact for the SRC Cease Buzzer is:

| Point of Contact | Telephone Number |
|------------------|------------------|
| Cease Buzzer     | 315-452-8114     |