

Technology and Communications Systems, Inc.
Experimental STA Request
File No. 1539-EX-ST-2026

EXH. 1 - REQUEST FOR EXPERIMENTAL STA

Technology and Communications Systems, Inc. (“TECOMSYS”) hereby requests a six-month experimental STA to perform experimental research and testing utilizing the S Band frequency ranges of 2200.00 -2309.00 MHz and 2356.00-2500.00 MHz associated with RangeHawk modifications¹ of the MQ-9 Air Vehicle to enable upgrades for SkyRange Test Flight. Testing will be both fixed ground and mobile airborne. The fixed stations will be located at (1) Gray Butte Field Airport located in Palmdale, CA, and at (2) the China Lake test area in China Lake, CA. Airborne testing will be between the Gray Butte facility and the China Lake test area (as depicted in **Figure 1**) and will operate within a 150 kilometer radius at a maximum altitude of 30,000 ft AMSL.

Associated Government Contact Information:

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As noted above, testing will be both fixed and airborne and will utilize Silvus Technologies SC44K-0E-235-LBST transmitters communicating with the following antennas with the following parameters:

	Airborne (Silvus Technologies SC44K0E-235-LBST) with Persistent Systems ANT-2013 Antennas	Fixed Ground (Silvus Technologies SC44K0E-235-LBST) with Silvus AS4D15S23 Antennas
Lower Frequency	2200-2309 MHz	2200-2309 MHz
Upper Frequency	2356-2500 MHz	2356-2500 MHz
Power Output	20 Watts	20 Watts
Effective Radiated Power	40 W	632 W
Frequency Tolerance	5 ppm	5 ppm
Transmitted Signal Emission designator(s)	22M6D7W	22M6D7W
Type of Modulating Signal	MIMO Coded OFDM	MIMO Coded OFDM
Digital modulation rate	Maximum Bit Rate of 100 Mbps	Maximum Bit Rate of 100 Mbps
Antenna Gain dBi	3 dBi	15 dBi
Beam Width	n/a	Horizontal- 90° Vertical- 8°

TECOMSYS acknowledges that all experimental operations conducted in the requested bands will be on a non-interference basis and that it will not conduct Jamming, Spoofing, Electronic Attack, and/or Directed Energy Attack under this experimental authorization.

¹ as required under Government contract

The **stop buzzer contact** for this project will be John Fenick, VP Engineering, Tele #949-310-5866, E: jfenick@tecomsys.com.

Figure 1

