

Technical Description

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Operation Description

This experimental license application is being filed in lieu of a STA extension for FCC call sign WF9XLV. This supports research and development for a DoD solicitation for Close Range Unmanned Aircraft Systems (UAS), Intelligence, Surveillance and Reconnaissance (ISR) Services

L-Band Mobile Airborne and Fixed Ground Equipment

Manufacturer:	Persistent Systems
Model:	Wave Relay
Frequency Band:	1359 - 1381 MHz
Emission:	22M0D1D
Frequency Tolerance:	20 ppm
Ground Output Power:	766 Watts ERP
Airborne Output Power:	2 Watts ERP
Ground Antenna Gain:	1 dB
Airborne Antenna Gain:	24 dB
Ground Antenna Type:	Parabolic
Airborne Antenna Type:	Dipole
Ground Antenna Polarization:	Vertical
Airborne Antenna Polarization:	Circular

S-Band Mobile Airborne and Fixed Ground Equipment

Manufacturer:	Persistent Systems
Model:	Wave Relay
Frequencies:	2390 - 2489 MHz
Emission:	22M0D1D
Frequency Tolerance:	20 ppm
Ground Output Power:	3049 Watts ERP
Airborne Output Power:	2 Watts ERP
Ground Antenna Gain:	1 dB
Airborne Antenna Gain:	30 dB
Ground Antenna Type:	Parabolic
Airborne Antenna Type:	Dipole
Ground Antenna Polarization:	Vertical
Airborne Antenna Polarization:	Circular

C-Band Mobile Airborne and Fixed Ground Equipment

Manufacturer:	Persistent Systems
Model:	Wave Relay
Frequencies:	4411 - 4789 MHz
Emission:	22M0D1D
Frequency Tolerance:	20 ppm
Ground Output Power:	2475 Watts ERP
Airborne Output Power:	2 Watts ERP
Ground Antenna Gain:	1 dB
Airborne Antenna Gain:	36 dB
Ground Antenna Type:	Parabolic
Airborne Antenna Type:	Dipole

Ground Antenna Polarization: Vertical
Airborne Antenna Polarization: Circular

Equipment is not intended for sale to DoD/Government. Demonstration purposes only.

DoD Contract Information

Experimental license will be used in support of ongoing research and development of NAVAIR Services Contract N00019-12-D-0011 (29 FEB 2012).

Stop Buzzer

Stop buzzer for this operation is a 24-7 staffed number at 509-637-4691.

Location

Boardman Bombing Range, Morrow, OR
45-44-52N 119-48-11W
NAD83
Radius of operation is 20 kilometers
Flight Level: 3,000 feet