

Technical Description

Submitted by Nathan Miller on behalf of Insitu
The Boeing Company
Global Spectrum Management
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PURPOSE

This Experimental License request is required to test and operate an S-Band command and control data link. This requirement supports short term testing of a foreign sale platform and not intended for long term operations inside the U.S.

OPERATIONS DESCRIPTION

The system consists of a Ground Control Station (GCS) communicating with an airborne UAS platform within the Pendleton UAS test range. It is planned for testing the system for a 3-day period at our facility in Bingen, WA and follow up with up to three days of flight testing from the Pendleton UAS test range. Each flight would be approximately 4-6 hours duration.

EQUIPMENT

Ground Control Station

Manufacturer: Freewave Technologies
Frequency Band: 2306-2314 MHz
Emission: 230KF1D
Transmit Output: 5 Watts
Power: 6.6 kilo Watts ERP
Antenna Gain: 33.3 dBi
Antenna Type: 2.7 Meter Parabolic Reflector
Antenna beam width: 3.3 degrees.

Airborne UAS

Manufacturer: Freewave Technologies
Frequency Band: 2306-2314 MHz
Emission: 230KF1D
Transmit Output: 2 Watts
Power: 3.2 Watts ERP
Antenna Gain: 5 dBi
Antenna Type: Omnidirectional dipole antenna

Stop Buzzer

Stop buzzer for this operation is Insitu the Operations Action Center at 509-637-4691.

SCHEDULE

Start Date; April 10, 2022

Stop Date: April 10, 2024

City	State	Latitude	Longitude	Radius (KM)	Station Type
Pendleton UAS Test Range	OR	45-41-21 N	118-50-32 W	2	Fixed Ground Control Station
Pendleton UAS Test Range	OR	45-41-21 N	118-50-32 W	50	Mobile UAS 15,000 Feet Flight Level