

Submitted by Allen S Lindsay, SR on behalf of Insitu
 The Boeing Company
 Global Spectrum Management
 P.O. Box 3707 MC: 1K-105
 Seattle, WA 98124-2207
 425-237-9168 Office

Why a Special Temporary Authorization is necessary:

Insitu is requesting a Special Temporary Authorization (STA) to support UAS testing at the Fort Bragg, NC UAS test range using the Scan Eagle platform.

Operation Description:

The radio frequency equipment listed below will be used to support command and control, video downlink, Detect and Avoid Radar, ATC transponder and other data link operations.

The below tables list the radio frequency equipment specifications, including frequency band of operation, transmitter output power, emissions, antenna types and gains, and maximum ERP.

Start Date: 2/8/2021

Stop Date: 8/8/2021

Frequency Data	
Transmit	1370-1390 MHz
Transmitter Data	
Transmitter Model	P-501X005
Transmitter Manufacturer	Freewave Technologies
Transmitter Power Output	1 Watt
Antenna Gain	0 dB
Antenna Type	Center-Fed Half-Wave Dipole (Vertical)
Power Output ERP	1 Watt
Emission Data	
Emissions	230KF1D

Table 1 – Freewave C2 Aircraft Data

Frequency Data	
Transmit	2200-2290 MHz 2360-2390 MHz
Transmitter Data	
Transmitter Model	Bandit
Transmitter Manufacturer	L-3
Transmitter Power Output	2 Watts
Antenna Gain	0 dB
Antenna Type	Monopole
Power Output ERP	2 Watts
Emission Data	

Emissions	18M5F9W, 9M58G1D, 4M79G1D, and 2M40G1D
-----------	--

Table 2 – L-3 Bandit Payload Aircraft Data

Frequency Data	
Transmit	1090 MHz
Transmitter Data	
Transmitter Model	Ping 200S
Transmitter Manufacturer	uAvionix
Transmitter Power Output	229 Watts
Power Output ERP	442 Watts
Emission Data	
Emissions	8M24M1D
Frequency Tolerance	2020 Hz

Table 5 – uAvionix Transponder Aircraft Data

Frequency Data	
Transmit	1370-1390 MHz
Transmitter Data	
Transmitter Model	P-501X005
Transmitter Manufacturer	Freewave Technologies
Transmitter Power Output	5 Watt
Antenna Gain	23 dB
Antenna Type	1.8 Meter Parabolic Reflector Ant. Vert. Beamwidth: 8 degrees Ant. Horz. Beamwidth: 8 degrees
Power Output ERP	608 Watts
Emission Data	
Emissions	230KF1D

Table 6 – Freewave C2 Ground Control Station Data

Table (8) lists the locations/areas of operations, as well as the station class of the operation.

City	State	Latitude	Longitude	Radius (KM)	Station Type
Fort Bragg	NC	35° '15.07"N	79°21'30.92"W	2	FX/MO/Airborne 15,000 Feet Altitude

Table 8 – Location Data

Stop Buzzer POC:

Stop Buzzer for this operation is Insitu Operations Action Center at 509-493-4691.