Submitted by Joel Thorsheim on behalf of Insitu
The Boeing Company
Frequency Management Services
P.O. Box 3707 MC: 2T-22
Seattle, WA 98124-2207
206-544-6066 Office

Why an Experimental License is Necessary:

An experimental license is required to support testing of the Fortem DAA R20 radar.

Operation Description:

Test low weight, low power prototype radar. This ultra-small SWaP-C radar has been designed to enable UAVs to detect and avoid other airborne vehicles, thus allowing them to safely fly Beyond Line of Sight. The radar provides an Aeronautical Radionavigation Service

Table (1) lists the aircraft terminal specifications, including frequency band of operation, transmitter output power, emissions, antenna types and gains, as well as maximum ERP. Figure (1) is a diagram of the aircraft terminal configuration.

Frequency Data	
Transmit	15400 - 15700 MHz
Transmitter Data	
Transmitter Model	DAA - R20
Transmitter Manufacturer	Fortem Technologies, Inc.
Transmitter Power Output	2 Watts
Power Output ERP	30 Watts
Emission Data	
Emissions	300MF0N
Modulation	FMCW PRF 1Khz
Frequency Tolerance	0.00009400 %

Table 1 – Aircraft Terminal Data

Table (2) lists the locations/areas of operations, as well as the station class of the operation.

City	State	Latitude	Longitude	Radius (KM)	Station Type
Bingen	WA	45-42-23N	121-27-29W	5	Fixed/Ground
Boardman Bombing Range	OR	45-44-54N	119-47-38W	50	Mobile/Air

Table 2 – Location Data

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