

Submitted by Joel Thorsheim  
The Boeing Company  
Frequency Management Services  
P.O. Box 3707 MC: 1K-105  
Seattle, WA 98124-2207  
425-234-4287 Office

**Operation Description:**

A command and control data link will be established to communicate between the ground station and an unmanned aircraft. The unmanned aircraft will be obtaining experimental certification through the FAA 8130.34D process and all airborne operations will be approved through the 7711-1 COA process.

Tables 1 and 2 list the equipment specifications, including frequency band of operation, transmitter output power, emissions, antenna types and gains, as well as maximum ERP. Table 3 lists the locations that are being requested.

<b>Frequency Data</b>	
Transmit Frequencies	5031.1625 MHz 5039.3325 MHz
<b>Transmitter Data</b>	
Transmitter Model	Freewave
Transmitter Manufacturer	Freewave Technologies
Transmitter Power Output	10 Watt
<b>Antenna Data</b>	
Power Output ERP	25 Watts ERP
Antenna Type	Dipole
Antenna Gain	6 dBi
<b>Emission Data</b>	
Emission Designator	230KF1D

**Table 1 – Ground Equipment Data**

<b>Frequency Data</b>	
Transmit Frequency Band	5031.1625 MHz 5039.3325 MHz
<b>Transmitter Data</b>	
Transmitter Model	Freewave
Transmitter Manufacturer	Freewave Technologies
Transmitter Power Output	1 Watt
<b>Antenna Data</b>	
Power Output ERP	1.7 Watts ERP
Antenna Type	Monopole Omni Patch Antenna
Antenna Gain(s)	2 dBi 4.3 dBi
<b>Emission Data</b>	
Emission Designator	230KF1D

**Table 2 – Airborne Equipment Data**

<b>City</b>	<b>State</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Radius (KM)</b>	<b>Station Type</b>
Glasgow	MT	48-24-46 N	106-31-34 W	3.7 km	Mobile 500 foot AGL

**Table 3 – Location Data**

**Operation Dates:**

Start Date: March 24, 2020  
Stop Date: August 24, 2020

**Stop Buzzer POC:**

Stop Buzzer for this operation will be Chris Eisele at 509-637-5310.