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Why this Modification is Necessary:

This modification request is being submitted to add C-Band Command and Control frequencies to FCC Experimental License Call Sign WK2XUB. There are no changes to the location or any other technical parameters.

FAA Comments:

COMMENTS: THIS FAA COORDINATION IS TO FACILITATE THE TRANSITION OF WK2XUB (SCAN EAGLE 3) FROM 5060-5070 MHZ TO 5030-5040 MHZ, AND THE USE OF SINGLE DISCRETE CHANNELS IN LIEU OF A 10 MHZ BAND ASSIGNMENT. PER INSITU REQUEST, THE FAA HAS APPROVED THREE FREQUENCIES WITHIN THE 5030-5040 MHZ BAND. **HOWEVER, PLEASE INFORM FCC THAT FAA REQUIRES THAT EACH FREQUENCY (5030.1625 MHZ, 5035.2475 MHZ, 5038.9045 MHZ) MUST HAVE ITS OWN NG SERIAL NUMBERS.** CHANNEL SELECTION IS BASED UPON THE WIDEST AVAILABLE CHANNEL SPACING (205 KHZ), ACKNOWLEDGING THAT THE CURRENT RADIO BANDWIDTH (250 KHZ) IS NOT RTCA/MOPS COMPLIANT. FUTURE EXPANSION OF OPERATION MAY REQUIRE CHANGING OF CHANNELS TO AVOID RADIO FREQUENCY INTERFERENCE FROM OTHER USERS, INCLUDING FCC GRANT WI2XHD

Operation Description:

The radio frequency equipment listed below will be used to support command and control 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.

Frequency Data	
Transmit	5030.1625 MHz 5035.2475 MHz 5038.9045 MHz
Transmitter Data	
Transmitter Model	MM2-M13 + Frequency Converter
Transmitter Manufacturer	Freewave Technologies + Nuwaves
Transmitter Power Output	1 Watt
Antenna Gain	5 dBi
Antenna Type	Dipole (Vertical)
Power Output ERP	2 Watt
Emission Data	
Emission	230KF1D

Table 1 – Freewave C-band C2 Aircraft Data

Frequency Data	
Transmit	5030.1625 MHz 5035.2475 MHz 5038.9045 MHz
Transmitter Data	
Transmitter Model	MM2-M13 + Frequency Converter
Transmitter Manufacturer	Freewave Technologies + Nuwaves
Transmitter Power Output	10 Watt
Antenna Gain	33.3 dBi
Antenna Type	1.2 Meter Parabolic Reflector 3.5 degrees HPBW 360 degrees in azimuth 0 to +70 degrees elevation
Power Output ERP	13,200 Watts
Emission Data	
Emission	230KF1D

Table 2 – Freewave C-Band C2 Ground Control Station Data