

Scan Eagle UAV Global Microwave Systems Video Downlink Twentynine Palms

The Boeing Company

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by

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Description

This license is required to conduct ScanEagle UAV operations during several Marine Corps military exercises. This is specifically for video downlink.

Why an Experimental License is Necessary

The Boeing Company originally submitted the frequency request to the navy to support this request. The Navy responded that because this is in a civil frequency band and the equipment does not have approved DoD frequency allocation. The frequency allocation paperwork (DD Form 1494) has been submitted to the Navy for processing but not yet approved.

Purpose of Operation

Transmit a video downlink from the ScanEagle UAV platform to a receive only terminal during Marine Corps exercises.

Test Description

This operation will involve the use of the Global Microwave Systems NT Series transmitter to Transmit a video downlink from the ScanEagle UAV platform to a receive only terminal during Marine Corps exercises. **Only two frequencies are required for use from the list of 16 specific frequencies provided in the STA.** The operations will include altitudes from ground to 10,000 feet with a radius of 35 kilometers. The Global Microwave Systems transmitter operating parameters are listed in Table 1. The timeframe will begin in September 01, 2008, and continue through September, 2009. Flights will be conducted periodically as required to support objectives.

AN/ARC-210 Parameters	
Frequency Band	2300 MHz to 2500 MHz
Emission	16M00F1W
Antenna Type	Dipole Winglet
Antenna Gain	0 dB
Antenna Horizontal Beam Width	360 degrees
Antenna Polarization	Non Directional
EIRP	2 Watts
Transmitter Mean Power	2 Watts

Table 1

Frequencies, Power and Emission

Note: Only two frequencies are required for use from the list of 16 specific frequencies.

Frequency	Emission	RF Power	Station Class
2312.5 MHz	16M00F1W	2 Watts	MO
2347.5 MHz	16M00F1W	2 Watts	MO
2352.5 MHz	16M00F1W	2 Watts	MO
2357.5 MHz	16M00F1W	2 Watts	MO
2364.5 MHz	16M00F1W	2 Watts	MO
2370.5 MHz	16M00F1W	2 Watts	MO
2382.5 MHz	16M00F1W	2 Watts	MO
2387.5 MHz	16M00F1W	2 Watts	MO
2411 MHz	16M00F1W	2 Watts	MO
2434 MHz	16M00F1W	2 Watts	MO
2453 MHz	16M00F1W	2 Watts	MO
2463 MHz	16M00F1W	2 Watts	MO
2473 MHz	16M00F1W	2 Watts	MO
2486 MHz	16M00F1W	2 Watts	MO
2490 MHz	16M00F1W	2 Watts	MO
2495 MHz	16M00F1W	2 Watts	MO

Schedule for Development Work

September 1, 2008 to September, 2009

Intermittently

Location

Marine Corps Installation Twentynine Palms, CA

342811N1160501W

Surface to 10,000 Feet

Stop Buzzer Contact Information

The "Stop Buzzer" point of contact is:

Mark Laville, (206) 854--9178