

Exhibit 4

ANTENNA #3 **(For New STA Requirements at Litchfield, NH)**

The following information is provided with respect to the operations proposed under Antenna #3 (.46 km Radius Around 42-48-22 N.Lat.; 071-25-33 W.Long.) (Litchfield, NH):

1. Directionality of Antennas

The Antenna Registration specifies “Yes” in response to the questions: “Is a directional antenna used?”. Although certain of the antennas are directional, certain of the antennas involved in the subject experiment are not directional in nature. Therefore, the following breakdown of antenna groupings is set forth to provide an accurate understanding of the directionality of the antennas involved in the experiment:

A. Non-Directional (Omni-directional) Antennas

Manufacturer	Model #	Quantity	Gain (Nominal)	3dB BW E (Vertical)	3dB BW H (Horizontal)
Shakespeare	229B	2	-15 to +5 dBi	OMNI	N/A
Sanders	1/4Mon	4	-5.2 dBi	OMNI	N/A

B. Directional Antennas

Manufacturer	Model #	Quantity	Gain (Nominal)	3dB BW E (Vertical)	3dB BW H (Horizontal)
Sanders	BRD	1	-30 to -5dBi	35°	N/A

C. Note Regarding Output Power/ERP Figures

Antenna efficiency has been assumed to be 100%. Therefore, the transmitter power and the radiated power are reported as equal (i.e., both the Output Power and the ERP are reported as “.007 W”). In practice the antenna efficiency and cable loss between the transmitter and the antenna will be considered and the transmitter power adjusted to achieve the approved output radiated power level.

D. Note Regarding “Mean” Power Designation

In the attached form, the power levels are reported as a “Mean” value. The transmitter will not be left on continuously due to the nature of the experiment and the need to physically reposition the unit under test between measurements, cycle through frequencies, change elevation angles of the transmit antenna, etc. where the transmit power is reduced to zero. The actual duty cycle of the transmit system is approximately 7%. Mean power is therefore a more accurate representation of the applicant’s proposed activity.

E. Transmitting Equipment

Each of these transmitters is non-experimental in nature:

Manufacturer	Model	Quantity
Fluke	Fluke 6060	1
HP	HP8341	1
HP	HP8643A	2
HP	HP8340B	2
HP	HP8662A	1
HP	HP8671A	1
HP	HP8753A	2
HP	HP8753D	2
HP	HP8753E	2
HP	HP8510B	1
HP	HP8510C	1
Agilent	E8257D	1

F. Additional Signal Amplification

Due to the low gain of the transmit antennas, an additional signal amplification may be utilized as follows:

Power Amplifiers	Model	Frequency Band	Power Output	Quantity
OPHIR	5069	.5MHz to 500MHz	8W	1
OPHIR	5094	1MHz to 1000MHz	3W	1
ENI	510L	1.7MHz to 500MHz	9.5W	2
ENI	603L	.8 MHz to 1000MHz	3W	1
ENI	550L	1.5 MHz to 400 MHz	50W	1
Amplifier Research	5W1000	1MHz to 1000MHz	50W	1