November 10, 1999

Federal Communications Commission

Attention: Mr. Joe Dichoso

Ref.: FCC ID: KQL-PKLR2400, 731 CONFIRMATION #: EA95245, CORRESPONDENCE#: 10545

Dear Mr. Dichoso,

Following are the responses to the latest FCC requests. In response to correspondence reference #10545 we incorrectly assumed had been answered:

3. The master transmitter has its time base set to zero at start up and then begins a pseudo-random hop sequence of 77 frequencies. The master transmitter has the control of its timing. If another master transmitter is turned on, it will begin its own pseudo-random hop totally unrelated in time from first. This holds for all other master transmitters whether they are in range or not. If a master hears another master's timing information, the master will change its hopset, keeping and using the same 77 frequencies, in order to avoid hopping on occupied channels of the other master. Both masters now hop individually and independently of the other.

5. The timing of the data and the data is not related to the hopping routines. It is received as a random event. Since it is a purely random event it can occur at any frequency in the hopping pattern and will be transmitted at a random time in the hopping pattern. Therefore, on the average, all frequencies will be used equally for the transmission of data due to the occurrence of two non-time related events. Even short packets that are transmitted infrequently will average out. Short packets are also masked by the weighting of the beacons being transmitted since most of the transmit time will be the beacon times when short packets are transmitted. Continuous data from the interface will be transmitted on each frequency.

6. The beacon is transmitted on every frequency. It is used equally by all 77 frequencies. When the master transmitter has data to send, it will send out a data packet that includes the beacon data along with the system data. Therefore a beacon will not be transmitted at this time.

To provide further clarification on the antennas and uniqueness of connectors per Section 15.203 please refer to the following table:

	Mfr	Model	Freq	Gain	Type	Connector	Dimensions	Installation	Measured EIRP (mW)	RF Dis
1	Centurion	WXE2400	2.4-2.5	2dBi	Omni	MMCX	<2.25"	Integrated	13.2	
2	Maxrad	MFB24008	2.4-2.5	8dBi	Omni	N-F	17"	Professional 20cm min	81.2	
3	Maxrad	BMMG24000MMCX6'	2.4-2.5	unity	Omni-mobile	MMCX	1.75"	Professional 20cm min	20.9	
4	Maxrad	BMMG24000RPSMA12'	2.4-2.5	5dBi	Omni-mobile	R-SMA-M	9"	Professional 20cm min	7.7	
5	AeroComm	NZH2400	2.4-2.5	5dBi	Omni	Integrated	1"x0.3"	Integrated	22.4	
6	Maxrad	MP24013FC	2.4-2.5	13dBi	Panel	TNC-F	8.7x7.9x1.1	Professional 20cm min	138	
7	Maxrad	MUF24005	2.4-2.5	5dBi	Omni-Mobile	R-SMA-M	8.75"	Professional 20cm min	22.4	
8	Centurion	WXR2400SMRP	2.4-2.5	2dBi	Omni	R-SMA-M	<2.25"	User	0.3	

Regarding 15.203 Compliance and SAR Exemption, the only antenna accessible by the end-user is Antenna #8, Centurion WXR2400SMRP, which has a unique connector. All other antennas are integrated or require professional installation.

Antenna #1 – Molded rubber antenna. Only mounting provisions require that it be integrated into the case. Can not be changed by the end-user. Portable applications.

Antenna #2 – High gain omni requires professional installation. Ensure minimum end-user separation of 20cm. Mobile and base station applications.

Antenna #3 – Low gain magnetic mount with 6 foot cable requires professional installation. Ensure minimum end-user separation of 20cm. Mobile applications.

Antenna #4 - High gain magnetic mount with 12 foot cable requires professional. Ensure minimum end-user separation of 20cm. Mobile Applications.

Antenna #5 – Low gain microstrip antenna must be integrated into the product. No access by user. Portable applications.

Antenna #6 – High gain panel antenna requires professional installation. Ensure minimum end-user separation of 20cm. Base station applications.

Antenna #7 – Low gain omni requires professional installation. Ensure minimum end-user separation of 20cm. Mobile and base station applications.

Antenna #8 – Low gain omni can be connected by the end-user with a reverse polarity SMA male connector. Portable applications.

I have added this to the warning section of the manual. I hope this addresses all of the issues. Call me with any questions.

Sincerely,

Daniel A. Miller