

Exhibit # 4:

As per page 551 of the Code of Federal Regulations, 47, Parts 0 to 19, Revised as of October 1, 2000, on Telecommunications, the following first, second and third symbols are appropriate for the UNICORN™ antenna system experimental frequency allocation Electronic Filing:

First Symbol:- In the quiescent mode, a sequence of unmodulated pulses is emitted at a constant Pulse Repetition Frequency (PRF) whose rate is consistent with the radial range of the UNICORN™-system sphere-of-safety. UNICORN™ is a “sing-around” radar system that changes its PRF according to the radial-range position and radial-range rate of the first (i.e., closest) “target” contact it encounters. Consequently, the first symbol should be “P” to indicate emission of a sequence of unmodulated pulses.

Second Symbol:- As a short-range radar system, UNICORN™ does not transmit communication information as modulation on its sequence of pulses. Therefore, the second symbol should be “0” to indicate no modulating signal beyond a consistent pulsing of the carrier.

Third Symbol:- Again, UNICORN™, as a radar location and closing velocity estimation system instead of an information communication system, should be “N” to indicate that no information is transmitted.

These “P”, “0”, and “N” emission symbols apply to all frequencies and all antenna test sites (i.e., Brockton, MA, Dewitt, NY and Herndon, VA). The emissions are each sequentially emitted as pulsed CW with a 2 MHz band-width but allowing for an additional 0.5 MHz bandwidth as a guard band on both the upper and lower sides. This is done to account for any pulse rise-time and fall-time spectrum spreading down to at least the – 20-dB power-spectrum level; thereby accounting for a total 3 MHz bandwidth allocation. Any drift of the carrier at any frequency will be insignificant so that N/A has been denoted as the tolerance required into the appropriate the slot in the form used for the FCC Electronic Filing.

The mean and peak powers of the intended operational UNICORN™ when in a quiescent mode, respectively, are 1 watt (mean) and 62 watts (peak). The transmitter antenna configuration has 0-dB array gain so that the ERP, respectively, is 1 watt (mean) or 62 watts (peak). However, during experimental tests at all of the antenna test sites, at every one of the desired frequencies, the electric-field strength will be considerably reduced. It is assumed that a field-strength meter will be used to ensure meeting a known safety margin of interference. To ensure this, the electric-field strength measured at the stated 1 kilometer radius from the experimental UNICORN™ antenna must be at least equal to or below the electric-field strength expected at the intended minimum 2.5 nautical mile radius of the sphere-of-safety of an operational UNICORN™ system.

As a consequence, the emitted mean power and peak power both are expected to be diminished by at least $(2.5 \text{ nautical mile}/1 \text{ Kilometers})^2 = (4,633 \text{ meters}/1,000 \text{ meters})^2 = 21.46:1$ (namely, 13.3 dB) less than their respective operational counterparts. This means that the mean power and the peak power, respectively, must be reduced to levels somewhat below 46.6 milliwatts (i.e., – 13.3 dBW) and 2.89 watts (i.e., + 4.6 dBW) during experimental evaluation of the UNICORN™-antenna designs. Both of these mean and peak microwave-power levels are believed to be miniscule compared with normal EM-interference levels that are tolerable at any of the desired frequencies. Once again, in all cases, the “P”, “0” and “N” emission characteristics also will remain the same.

It also is to be noted that the receiver antenna – either polyhedral dielectric sectors or microwave horn – configuration provides the requisite directionality. Hence, receive array gain (and not transmit array gain) is derived to enhance the performance of the UNICORN™ system. For this reason, a 0-dB transmitter antenna gain is used to compute the ERP. As a consequence, the mean and peak ERPs appropriate to antenna test range experimentation with UNICORN™-antenna designs also will be equal to or less than 46.6 milliwatts (i.e., – 13.3 dBW) and 2.89 watts (i.e., + 4.6 dBW), respectively.