Exhibit 1
FCC Form 442, Question 7

A: The complete program of research and experimentation proposed including description of equipment and theory of operation.

This request is for a Part 5 experimental license to operate a transmitting station in the 2200 meter band, 135.700 to 137.800 kHz. The proposed operation of this station is to investigate the performance of small antennas and propagation variances. Also to experiment with low speed digital modes such as binary phase shift keying (BPSK) and frequency shift keying (FSK). Presently there is enough interest in low frequency and operators of low frequency receiving equipment to make the proposed tests more productive. This station will be operated in attended beacon mode. Also two way communications will be attempted with other Part 5 licensee as permitted.

The antenna will be an existing 160 meter balanced fed dipole fed as a "T as shown in antenna sketch No. 1.

Transmitting exciters that will be used will be either commercial, lab quality, synthesized generators or built by licensee. All will be crystal controlled or phased locked to highly accurate frequency references or a GPS locked frequency source. Power amplifiers will be constructed by licensee or commercially made for audio applications. Several lab quality spectrum analyzers are on site to assure the transmitted signal conforms to FCC standards.

B: The specific objectives sought to be accomplished.

The operation of this station will be to investigate the performance of small antennas, propagation variances and to determine usefulness of new digital modes for the low frequency spectrum.

C: How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along line not already investigated.

European operators have used this spectrum for just a few years and have made remarkable progress in understanding and predicting low frequency propagation. The advent of digital modes and digital signal processing has open up many new possibilities for the use of this spectrum. Results of my experiments, signal reports received and operating schedules will be published for public use.

Signed: Joe Dexter McIntyre