

EXHIBIT 1

Application for a New Experimental Station
Jerry E. White
2586 Old Pelham Road
Pelham, GA 31779
whitefam@rose.net
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Response to form 442 question 7

The applicant, Jerry E. White, hereby respectfully requests permission to construct and operate a new experimental station to operate on 135.7 to 137.8 kHz and 160 to 190 kHz to conduct research of low frequency communications. The period of research would be 24 months. The applicant would use two homemade transmitters to conduct research. One transmitter will use a crystal oscillator, divider circuit. The second transmitter with a frequency synthesizer and class E design would also be used. The proposed station would use a 15 meter vertical monopole antenna. The requested effective radiated power would be 1 watt. The operation would be a radio beacon using CW Morse code. The applicant is also requesting phone communication on 160 to 190 kHz. The use of the 15 meter antenna with 1 watt effective radiated power is the reason for applying for a part 5 operation.

The applicant plans to conduct studies on loading coil designs with various form materials. Also the effects of local foliage during various seasons, temperatures and weather conditions on low frequency signals, and propagation, both local and distant, during various seasons and time of day would be areas of studies.

The applicant believes that the proposed operation will provide additional information on licensed stations sharing the requested frequencies with unlicensed Power Line Carrier Systems. The Commission stated in it's Report and Order (FCC 03-105) terminating proceedings for an Amateur Radio allocation on the requested frequencies "...we do believe there is potential for some limited operation in these bands under individual experimental licenses. Operation at LF under our experimental license program will allow amateur use to be coordinated with utility companies on a case-by-case basis, and allow empirical data to be developed on the sharing possibilities in this band for future consideration."

Based on the forgoing the applicant respectfully requests the Commission grant permission to construct and operated the proposed new experimental station as described or with modifications deemed necessary by the Commission.

