

Exhibit 1
American Radio Relay League, Incorporated
Experimental License Application

The purpose of this experimental license is twofold: (1) to demonstrate, preparatory to a request for an additional spectrum allocation for the Amateur Service near 5 MHz, the propagation differences between the existing amateur allocations at 3.5-4.0 MHz and 7.0-7.3 MHz on the one hand, and those of the 5 MHz band on the other; and (2) to demonstrate that amateur operation in the 5 MHz band can be conducted without interference to incumbent users. The band 5100-5450 kHz is allocated worldwide to the Fixed and Mobile services. The experiments will be conducted in the 50 kHz segment of this band which is determined to have the least number of active stations at a given time. Initial monitoring studies have revealed that this band offers the greatest potential for amateur operation on a non-interference basis to incumbent users relative to other frequency bands in the vicinity of 5 MHz.

This experimental authorization is sought as the result of two NTIA studies, Special Publication 94-31, *U.S. National Spectrum Requirements, Projections and Trends*, U.S. Department of Commerce, March, 1995; and Special Publication 96-332, *High Frequency (3-30 MHz) Spectrum Planning Options*, U.S. Department of Commerce, November, 1996, which included future spectrum needs for the Amateur Service.

The experimental authorization would include certain specific Part 97 licensees as participants in the course of experimentation. They are listed on Exhibit 2, attached.

Operation would be by RTTY and data emission modes authorized pursuant to Section 97.309(a) of the Commission's rules governing the Amateur Service, and by single-sideband voice, under the same technical limitations applied to such operation in Section 97.307 of the Commission's rules. Power would be limited to 100 watts TPO. Antennas would be similar at each participant station. These would consist of multiband trap wire dipole or similar antennas for each participant. The antennas would be in horizontal or inverted-vee configuration at heights of up to 50 feet AGL, and operate in the amateur 40 and 80-meter bands, and as well in the proposed 5 MHz segment.

Operation by the participants will consist of short duration transmissions to determine propagation characteristics. Any interference to or from another service on a given frequency will cause immediate termination of operation on that frequency and the contact will move to a predetermined alternative frequency, or to an amateur frequency or Internet IRC location. Monthly reports of propagation findings and any instances of interference will be assembled by each participant during the test period and forwarded to the American Radio Relay League, Inc.; such reports will be available to the Commission upon request at any time.