

PROPOSED PROGRAM OF EXPERIMENTATION

Applicant is a start-up company engaged in the design and development of radio transmitter and receiver equipment. The instant program of experimentation focuses on the transmission of digital audio and data in the 2500-2690 MHz frequency band. This band is currently allocated for use by Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS) licensees to provide "wireless cable" entertainment and educational television programming. Applicant does not hold any MDS or ITFS licenses.

Applicant proposes to modify the equipment identified in the attached application to operate in the MDS/ITFS frequency band. Once the equipment is modified, Applicant will identify various locations across the country in which to conduct its experiments. Locations will be chosen based on a variety of factors including topography, population density, predominant weather conditions, and frequency and site availability. Antennas will be mounted on existing towers or buildings and will not extend the overall height of these existing structures.

The primary objective of the experiments is to design, develop and optimize radio transmitting and receiving equipment to provide new and enhanced one-way and two-way fixed and mobile audio and data services. Services currently offered in the requested frequency bands have generally been limited to one-way video transmissions. Applicant believes that its program of experimentation will result in the development of equipment capable of providing advanced digital audio and two-way data services, thereby greatly enhancing the current state of radio art. In particular, the program of experimentation will include the following:

- (1) analysis of the propagation characteristics of the radios under various topographic and climatic conditions;
- (2) field strength surveys at various geographic locations to calibrate the performance of the radios; and
- (3) analysis of the data collected in the field studies to further modify and optimize the radios;
- (4) demonstration of the technical and performance characteristics of the radios to potential investors and purchasers; and
- (5) testing of the equipment to enable FCC type acceptance and production of the equipment.

The program of experimentation will be conducted by personnel qualified in the radio art. Due to the need to analyze the equipment under varying conditions, applicant seeks authority to conduct its experiments on a nationwide basis within the continental United States. Prior to operating any transmitting equipment, applicant will (1) obtain the consent of any licensee whose frequencies Applicant may be using, (2) comply with all FCC rules governing interference protection for any co-channel licensees, (3) notify the FCC Engineer-in-Charge of the radio district where the experiments will be conducted of the exact location, time and duration of the experiments and (4) satisfy any other pre-conditions to operation imposed by the Commission.

Applicant will use every precaution to ensure that its RF transmissions will not cause harmful interference to existing licensees. Applicant will utilize the lowest practical radiated power consistent with its program of experimentation.

Applicant specifically certifies that it will not, at any time during the course of its experimentation, provide commercial service to the public. All operations using the requested frequencies will be for experimental purposes only. Applicant will fully comply with the technical standards and operating requirements set forth in Part 5 of the Commission's Rules. In the event that antenna heights exceed 6 meters above ground, Applicant will comply with the tower marking, lighting, and other requirements set forth in Part 17 of the Commission's Rules.

Applicant further understands that the requested frequencies may not be the best suited to the experimental work to be carried on, that the requested frequencies need not be allocated for any service that may be developed as a result of the experimental operation, that any frequencies that may be assigned are subject to change without advance notice or hearing, that any authorization issued pursuant to this application may be cancelled at any time without notice or hearing, and that the Commission is not obligated by the results of the experimental program to make provision in its rules for applicant's type of operation on a regularly licensed basis.

Upon grant of the instant application, Applicant can and will proceed immediately with its program of experimentation

For the foregoing reasons, Applicant submits that it has demonstrated that its proposed program of experimentation has a reasonable promise of substantial contribution to the radio art and submits that a grant of the application will serve the public interest and convenience.