**EXPERIMENTATION DESCRIPTION**

Lakeland Communications intends to manufacturer a line of antenna systems for the FM Broadcast band in the United States and abroad. We need the experimental license to test new designs of antenna systems for quality of coverage, field strength and coverage. Data derived from this experimentation will be used to compute antenna system gains and performance as well as assuring compliance with FCC tolerances.

Our testing is generally very short to verify pattern and performance of new and current designs. To verify no interference will be caused, we utilize an engineering software with an updated database. This allows our engineers to study a particular frequency prior to operation as well as model the performance of the antenna system. We later will use this data to compare to the “real world” performance exhibited by the system to “proof” the system. We understand that if interference is inadvertently caused, we must cease operation immediately.

Post production research will allow eventual sales of our antenna designs to the industry for use on translators boosters and current NCE stations.

The antennas conform with basic RF theory of operation. Our designs however perform better in multi-path situations and lower AGL installations while reducing sky wave and downward radiation.

Our new antenna systems will substantially lower the cost of new station installations and upgrades due to our light-weight yet rugged designs.

All transmission equipment with the exception of the antenna system will be FCC certified or verified and will not create interference we provide antennas based off of j-pole, folded diople, Rototiller, vertical, circular, etc. A general license covering all Types of polarization is needed. Our test facility is not located near Local airports and no intererference to other services is expected. We Understand that if such intereference should ever occur we will cease The transmisission immediatly upon notification. A general frequency Search using updated search program data files has been performed to Insure no interference will be caused to any existing services.