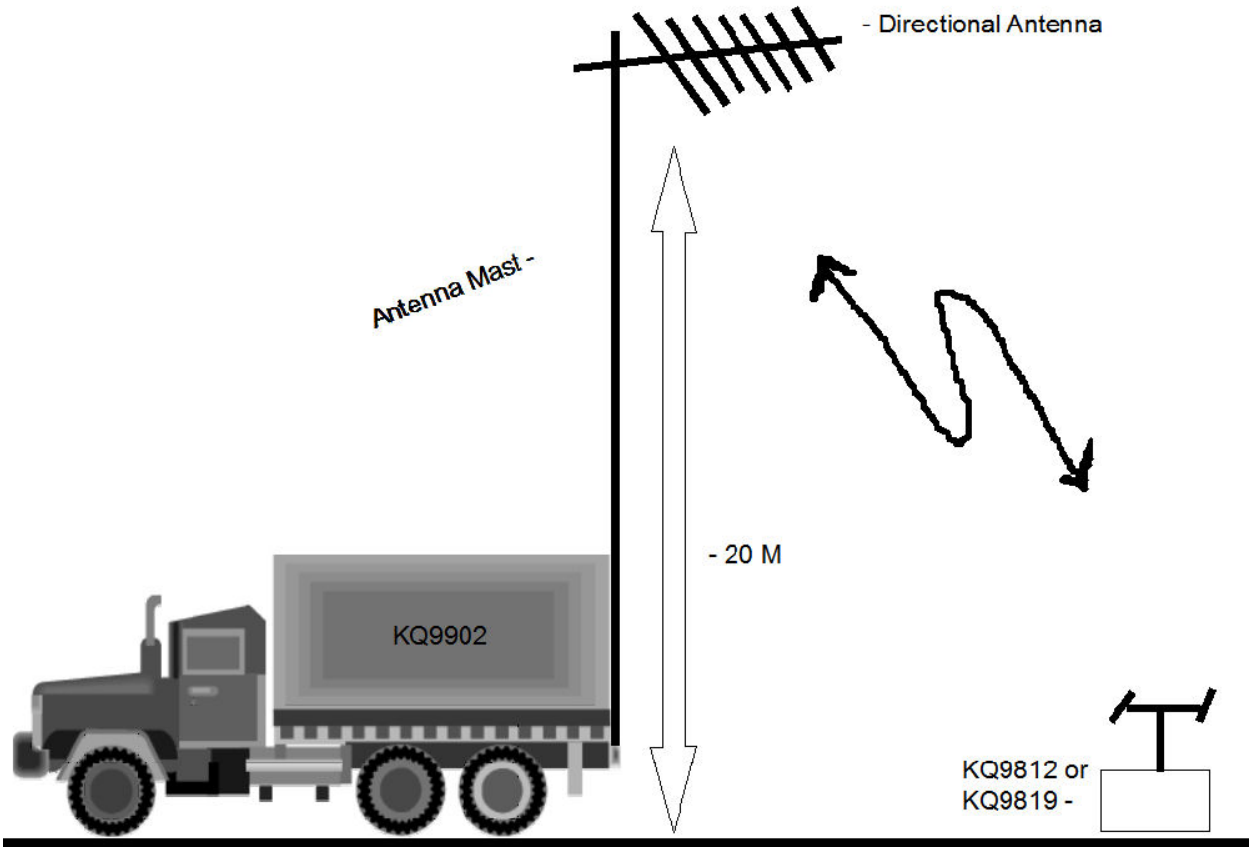
EXHIBITION 1

An Experimental Radio Telemetry Antenna Set

The antenna used by the radio telemetry equipment KQ9902 is set on a portable antenna tower in an experimental test. The portable antenna tower is installed on a TRUCK. The antenna height is 20 meters above ground for all testing. All experimental test sites are selected to be remote as possible, such as hilly areas with trees. They are usually located in the countryside, mountain area and suburb. So in general, such selected testing sites are far away from airport or aircraft landing area.

The used antenna is manufactured by Cushcraft Corporation. It is a 7-element direction antenna with a 6.86 dBd (or 9 dBi) gain. It operates at frequency of 216 – 220 MHz with a 2:1 VSWR bandwidth of 5MHz.

Below is a vertical profile sketch of set antenna in the experimental radio equipment.



EXHIBITION 2

The description: The objectives of proposed experimentation study and of experimental equipment

Pro Xplor Services Inc. is an exploration company in the geophysical petroleum survey area. It provides a very high-quality seismic geophysical services that enables accurate and cost-efficient oil and gas exploration. The Pro Xplor Services, Inc. customers require that such services be extremely accurate, highly reliable and rapidly delivered. To meet these needs, Pro Xplor maintains the specialized equipment and skilled field personal to acquire, evaluate and provide to clients massive volumes of premium seismic geophysical survey data.

Pro Xplor Services, Inc. bought the oil seismic survey equipment, KQ9812, KQ9819 and KQ9902 etc. from Sercel, Inc. a number of years ago. Now Sercel, Inc. no longer manufactures or supports Radio Seismic Telemetry equipment used in geophysical petroleum surveys. The equipment such as KQ9812, KQ9819 and KQ9902 are requiring upgrades to meet performance standards. It should be noted that many semiconductor parts used in above the equipment are obsolete. Some parts of the circuits require upgrade redesign. This upgraded and improved equipment require testing to verify the performances. The Pro Xplor Services, Inc. Experimental License Application will be used for accomplish such specific objectives.

The experimental program will use upgraded equipment KQ9812, KQ9819 and KQ9902. In the improved transmitter of above equipment, the transmit frequency source uses a VCO Phase lock loop design. The frequency range is 216 – 230 MHz. Adopting TCXO meets requirement of frequency tolerance of 5ppm. The transmitter modulation scheme still uses frequency modulation.

The equipment KQ9812 and KQ9819 are the remote units which are spread out in the experimental area. (During the experimental testing sometimes only KQ9912s are used, sometimes both KQ9812s and KQ9819s are used.) Truck mounted vibrator equipment is used to simulate seismic effect. The equipment KQ9812 and KQ9819 units adopt (collect) and store this data. The equipment KQ9902 is a center station used for collecting/recording data, there is only one of these in the experimental area. The equipment KQ9902 communicates with equipment KQ9912 or KQ9919, commanding it to send back adopted data in a very short time (ms). Such experimental testing is used to check the Transmitter and Receiver's design specifications.

Such experimental testing area is not wide. In general, it is about 15 -25 kilometers distance. The KQ9812 or KQ9819 uses a two-element Yagi antenna or an Omni direction antenna which is set at 1 – 1.5 meters high above ground. Such antenna has a power gain of 0.8 – 1.0 dBd (2- 2.5 dBi). The equipment KQ9902 is set at center of experimental testing area to communicate with the KQ9812 or KQ9819 units.

The equipment KQ9902 uses a 7-element direction antenna manufactured by Cushcraft Corporation. Such antenna operates at frequency of 216 – 220 MHz with a 2:1 VSWR bandwidth of 5 MHz and has a power gain of 6.8 – 7.2 dBd or 9 dBi. All equipment used in experimental testing has a fixed operational, under 45 Effective Radiated Power.