TECHNICAL DESCRIPTION

The primary function of the BOX System REMOTE UNIT (RU) is to transmit uplink data telemetry to the BASE SRATION, after acquiring said data from seismic (geophysical) sensors in response to downlink commands from the Base Station transmitter. The RU also includes a receiver for reception of the downlink commands from the Base Station transmitter, but the receiver portion is not separable from the RU. The RU is submitted for authorization as a Non-Broadcast Transmitter (TNB) for use under Part 90 of the Rules, with FCC ID CU8 BOX-RU (see Appendix 7).

Type of Emission:	20k0J2D
Frequency Range:	216 – 220 MHz
Range of Operating Power:	-40 dBm to +27 dBm (0.0000001 W to 0.5 W)
Maximum Power Permitted under Part 90 of the FCC:	350 W
DC Voltages applied to and **DC Currents at final amplifier:**	Drain Voltage: 12 V Drain Current: 400 mA
Function of each Active Semiconductor Device:	See Appendix 1
Tune-Up Procedure:	See Appendix 2
Circuit Diagrams:	See Appendix 3
Description of Circuits for:	
• **Determining & Stabilizing Frequency:**	See Appendix 4
• **Suppression of Spurious Radiation, for Limiting Modulation and for Limiting Power:**	See Appendix 4
Operating Manual;	See Appendix 5
Equipment Identification Label	See Appendix 6
Photographs of Equipment:	See Appendix 6
Modulation Techniques:	
Data Required by 2.1046 through 2.1057	See Appendix 7