TECHNICAL DESCRIPTION

The primary function of the BOX System BASE STATION is to transmit downlink commands to a multiplicity of REMOTE UNIT (RU) data acquisition devices. The BASE STATION consists of two elements: Command Unit (CU) and Data Receiver Unit (DRU). The DRU receives the returned uplink data telemetry from the RUs, but the DRU is not capable of stand-alone operation without the CU because it requires reference clock and control from the CU. The complete Base Station is submitted for authorization as a Non-Broadcast Station Transmitter (TNB) for use under Part 90 of the Rules, and the FCC ID label (CU8 BOX-BASE, see Appendix 7) will be affixed to both elements of the Base Station.

Type of Emission:	20k0J2D
Frequency Range:	216 – 220 MHz
Range of Operating Power:	-20 dBm to +40 dBm (0.00001 W to 10 W)
Maximum Power Permitted under Part 90 of the FCC:	350 W
DC Voltages applied to and **DC Currents at final amplifier:**	Drain Voltage: 28 V Drain Current: 1.0 A
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
Command Downlink & Modulation	See Appendix 6
Equipment Identification Label	See Appendix 7
Photographs of Equipment:	See Appendix 8
Data Required by 2.1046 through 2.1057	See Appendix 7