

Exhibit 1

Tx/Rx antenna is a Prodelin 1251 2.4m offset prime focus unit

Midband Tx gain = 49.2 dBi

Midband Rx gain = 47.6 dBi

Hub mounted transceiver is an 8 watt SSE 8/wkstar

RF Modem is a ComStream CM701 (common Viterbi coding)

Frequency bands for all emissions = 14,000 - 14,500 Mhz

Antenna Polarization for all emissions = H, V

<u>Emission Designator</u>	<u>Max. EIRP</u>	<u>Max. EIRP Dens.</u>	<u>Description</u>
180KG7W	2.48 KW 51.75 34W	35.2	128kBpS, 1/2R, QPSK
538KG7W	7.30 KW 56.44 34W	35.1	384kBpS, 1/2R, QPSK
2M15G7W	1.10 MW 58.23 36W	30.9	1.536mBpS, 1/2R, QPSK
358KG7W	54.64 33W	35.1	128kBpS, 1/2R, BPSK
1M07G7W	1.10 M 58.23 36W	33.9	384kBpS, 1/2R, BPSK
4M30G7W	58.23 36W	27.9	1.536mBpS, 1/2R, BPSK
119KG7W	49.61 30W	34.9	128kBpS, 3/4R, QPSK
358KG7W	54.64 33W	35.1	384kBpS, 3/4R, QPSK
1M42G7W	58.23 36W	32.7	1.536mBpS, 3/4R, QPSK
239KG7W	52.62 32W	34.8	128kBpS, 3/4R, BPSK
717KG7W	57.65 35W	35.1	384kBpS, 3/4R, BPSK
2M85G7W	58.23 36W	29.7	1.536mBpS, 3/4R, BPSK

The above calculations represent the maximum power levels which may be routinely licensed (-14 dBW/4 kHz @ flange) at each emission's necessary bandwidth (1.4 SF) using the 8 watt SSPA. We are requesting the many various emission to give us latitude for testing operations.

The technical representative at the MN Teleport is Dick Becvar (800) 847-8396.

Exhibit 2

The purpose of this installation is to establish a duplex satellite link to demonstrate and experiment with video teleconferencing, Internet, ATM linking and other applications over a geosynchronous satellite. Where the primary focus is advanced applications for military customers.