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Attachment to Special Temporary Authority Request 0108-EX-ST-1999

Please note the modulation format for the transmission consists of the following:

Basic Data Rate	64 kbps
FEC	0.5
Framing	1.6 kbps
Total	129.6 kbps

This data is spread using a chipping rate 5 times the data rate. This is done to reduce the off axis emissions to CCIR levels on the 1 Meter diameter antenna.

Chipping rate	5
BT Product	1.2
Composite Rate	648 kbps
Occupied BW	777.6 khz

This spread signal is applied to a BPSK modulator for transmission.

Please note that in order to meet link budgets for transmitted power the Lease Bandwidth of the transponder will need to be 3.6 MHz.