EXHIBIT 1

PARTICULARS OF OPERATION (ITEM 4)

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
159.000	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.005	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.010	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.015	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.020	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.025	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.030	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.035	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.040	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.045	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.050	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.055	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.060	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.065	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.070	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.075	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.080	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.085	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.090	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.095	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.100	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.105	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.110	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.115	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.120	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.125	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.130	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.135	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.140	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.145	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.150	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.155	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.160	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.165	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.170	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.175	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.180	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.185	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.190	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.195	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

NOTE 1: Modulating signal is an unmodulated pulse having a pulse width of 15-30 milliseconds and a pulse period of 800-1200 milliseconds

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
159.200	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.205	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.210	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.215	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.220	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.225	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.230	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.235	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.240	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.245	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.250	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.255	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.260	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.265	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.270	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.275	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.280	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.285	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.290	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.295	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.300	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.305	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.310	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.315	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.320	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.325	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.330	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.335	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.340	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.345	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.350	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.355	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.360	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.365	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.370	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.375	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.380	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.385	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.390	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.395	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
159.400	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.405	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.410	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.415	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.420	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.425	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.430	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.435	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.440	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.445	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.450	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.455	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.460	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.465	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.470	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.475	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.480	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.485	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.490	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.495	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.500	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.505	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.510	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.515	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.520	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.525	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.530	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.535	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.540	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.545	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.550	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.555	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.560	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.565	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.570	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.575	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.580	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.585	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.590	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.595	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
159.600	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.605	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.610	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.615	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.620	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.625	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.630	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.635	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.640	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.645	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.650	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.655	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.660	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.665	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.670	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.675	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.680	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.685	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.690	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.695	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.700	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.705	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.710	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.715	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.720	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.725	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.730	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.735	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.740	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.745	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.750	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.755	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.760	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.765	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.770	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.775	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.780	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.785	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.790	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.795	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
159.800	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.805	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.810	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.815	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.820	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.825	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.830	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.835	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.840	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.845	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.850	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.855	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.860	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.865	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.870	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.875	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.880	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.885	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.890	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.895	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.900	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.905	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.910	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.915	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.920	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.925	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.930	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.935	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.940	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.945	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.950	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.955	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.960	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.965	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.970	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.975	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.980	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.985	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.990	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
159.995	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
160.000	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.005	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.010	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.015	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.020	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.025	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.030	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.035	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.040	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.045	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.050	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.055	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.060	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.065	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.070	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.075	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.080	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.085	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.090	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.095	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.100	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.105	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.110	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.115	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.120	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.125	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.130	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.135	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.140	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.145	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.150	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.155	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.160	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.165	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.170	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.175	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.180	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.185	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.190	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.195	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
160.200	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.205	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.210	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.215	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.220	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.225	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.230	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.235	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.240	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.245	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.250	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.255	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.260	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.265	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.270	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.275	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.280	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.285	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.290	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.295	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.300	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.305	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.310	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.315	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.320	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.325	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.330	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.335	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.340	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.345	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.350	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.355	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.360	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.365	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.370	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.375	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.380	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.385	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.390	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.395	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
160.400	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.405	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.410	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.415	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.420	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.425	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.430	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.435	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.440	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.445	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.450	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.455	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.460	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.465	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.470	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.475	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.480	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.485	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.490	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.495	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.500	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.505	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.510	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.515	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.520	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.525	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.530	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.535	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.540	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.545	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.550	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.555	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.560	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.565	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.570	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.575	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.580	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.585	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.590	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.595	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
160.600	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.605	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.610	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.615	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.620	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.625	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.630	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.635	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.640	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.645	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.650	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.655	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.660	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.665	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.670	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.675	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.680	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.685	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.690	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.695	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.700	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.705	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.710	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.715	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.720	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.725	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.730	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.735	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.740	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.745	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.750	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.755	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.760	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.765	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.770	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.775	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.780	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.785	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.790	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.795	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 1

FREQUENCY (MHz) (A)	OUTPUT POWER (B)	ERP (C)	(D)	EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
160.800	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.805	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.810	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.815	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.820	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.825	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.830	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.835	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.840	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.845	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.850	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.855	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.860	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.865	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.870	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.875	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.880	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.885	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.890	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.895	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.900	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.905	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.910	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.915	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.920	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.925	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.930	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.935	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.940	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.945	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.950	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.955	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.960	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.965	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.970	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.975	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.980	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.985	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.990	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
160.995	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0
161.000	15 mW	0.9 mW	PEAK	2K00PON	NOTE 1	2.0

EXHIBIT 2

METHOD USED TO DETERMINE NECESSARY BANDWIDTH (ITEM 4G)

The wildlife tracking transmitters proposed herein transmit an unmodulated pulse having a pulse width of 15-30 milliseconds. The specific shape of the pulse is not defined by the manufacturer. Therefore, using the formula for necessary bandwidth defined in Section 2.202(g) of the FCC Rules and Regulations for an unmodulated pulse emission

$$B_n = 2K \div t$$

And letting $K = 10$
$t = 15$ msec

Results in $B_n = 1333$ Hz

Rounding up to allow a margin for error results in $B_n = 2$ kHz

EXHIBIT 3

RESEARCH PROJECT (ITEM 9)

The California Department of Fish and Game studies wildlife populations to monitor such factors as infant survival, natural adult mortality (predation, disease, etc), habitat quality and quantity, and range (geographic area). To minimize the effects of human interaction, most of these studies are conducted by placing a low-power transmitter on the animal(s) of interest and "tracking" it over a period of time. In some cases, both prey and predator are "tracked" simultaneously to monitor their interaction. The wildlife tracking transmitters proposed herein will be used to permit expansion of the studies currently in progress and to allow new studies to be conducted in the same area (or nearby areas) with minimal interference between studies.

The Department of Fish an Game estimates there are over 700 wildlife telemetry transmitters currently in operation within California monitoring several different animal species. Several new studies have been proposed which would require "tracking" 30-200 animals in the same geographic area simultaneously. The frequencies currently identified in Section 90.25(f) of the FCC Rules and Regulations are inadequate to support these large population studies for the following reasons:

1. The wildlife transmitter emits an unmodulated signal, thus the only way to identify specific animals is to assign each a different RF channel.

2. The receivers used in the studies are specialized items of equipment which must be portable, must operate in the field under primitive conditions, must be capable of "locking" onto a specific RF signal, and must be capable of field programming to different RF signals. The wildlife tracking receivers currently used by the Department of Fish and Game are limited in the RF bandwidth over which they may be operated. Since they currently use the 159.225 MHz to 159.465 MHz portion of the band for their wildlife tracking operations, we propose expanding that band to permit operation between 159.000 MHz and 161.000 MHz.

Assuming use of 5 kHz channel spacing (as proposed herein), then the currently authorized 159 MHz band will permit only 49 animals to be tracked simultaneously in the same area. This is inadequate for the large population studies being proposed. This proposal will provide 400 channel assignments which would allow a 200 animal study to be conducted using every other channel to minimize adjacent channel interference problems. It will also allow several non-related studies to be conducted in the same (or adjacent) area with minimal interference between the study groups.

Modern wildlife tracking transmitters emit an unmodulated pulse (as opposed to the AM or FM carrier permitted under Section 90.25) as a means of reducing the average power output of the transmitter. By reducing the average power output, the "life" of the transmitter can be increased and/or the size of the battery can be decreased, thereby minimizing the effects of the transmitter on the animal's behavior.