TABLE II

Computation of Signal Level
49 METERS ABOVE GROUND
K208BV CH 262D
ENID OKLAHOMA

JUNE, 2004

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal	dB Loss for Reflection	Signal Strength dBu
90	0.097	1.1761	-29.3	0.0270	109.0	2.47	106.5
85	0.122	1.8605	-27.3	0.0271	111.0	2.47	108.5
80	0.164	3.3620	-24.7	0.0274	113.4	2.47	111.0
75	0.219	5.9951	-22.2	0.0280	115.8	2.47	113.3
70	0.282	9.9405	-20.0	0.0287	117.7	2.47	115.3
65	0.346	14.9645	-18.2	0.0298	119.2	2.47	116.7
60	0.402	20.2005	-16.9	0.0312	120.1	2.47	117.6
55	0.433	23.4361	-16.3	0.0330	120.3	2.47	117.8
50	0.433	23.4361	-16.3	0.0352	119.7	2.47	117.2
45	0.398	19.8005	-17.0	0.0382	118.2	2.47	115.8
40	0.315	12.4031	-19.1	0.0420	115.4	2.47	112.9
35	0.180	4.0500	-23.9	0.0471	109.5	2.47	107.1
30	0.010	0.0125	-49.0	0.0540	83.2	2.47	80.8
25	0.212	5.6180	-22.5	0.0639	108.3	2.47	105.8
20	0.439	24.0901	-16.2	0.0789	112.8	2.47	110.3
15	0.659	54.2851	-12.7	0.1043	113.9	2.47	111.4
10	0.842	88.6205	-10.5	0.1555	112.6	2.47	110.1
5	0.959	114.9601	-9.4	0.3098	107.7	2.47	105.2

Notes:

Antenna radiation center above ground (meters):   27
Maximum ERP (watts) at 0° Depression angle: 125
Free Space Signal = 106.92 -20*log(distance in km) + dBk
Relative field based on 2 bay full wavelength interbay spacing antenna.