

## Analysis of Signal Levels At Ground Level

W237CD FIGURE 3

Translator H AGL	143	
Translator ERP	10	
Translator channel	237	
Translator HAAT		
Interference Contour	95	
Highest signal on ground	93.59	<b>Adequate Choice</b>

Depression Angle, Degrees	Relative Field	ERP Watts	dBk	Distance to the Ground in Kilometers	Free Space Signal
90	0.000	0.0000	-395.3	0.1430	-271.53
85	0.001	0.0000	-84.0	0.1435	39.83
80	0.005	0.0002	-66.8	0.1452	56.86
75	0.015	0.0022	-56.6	0.1480	66.91
70	0.034	0.0115	-49.4	0.1522	73.90
65	0.064	0.0415	-43.8	0.1578	79.14
60	0.108	0.1159	-39.4	0.1651	83.20
55	0.165	0.2711	-35.7	0.1746	86.41
50	0.235	0.5539	-32.6	0.1867	88.93
45	0.319	1.0153	-29.9	0.2022	90.87
40	0.412	1.6996	-27.7	0.2225	92.28
35	0.513	2.6304	-25.8	0.2493	93.19
30	0.616	3.7958	-24.2	0.2860	93.59
25	0.717	5.1380	-22.9	0.3384	93.44
20	0.809	6.5517	-21.8	0.4181	92.66
15	0.888	7.8941	-21.0	0.5525	91.05
10	0.949	9.0062	-20.5	0.8235	88.15
5	0.987	9.7423	-20.1	1.6407	82.51
4	0.992	9.8344	-20.1	2.0500	80.61
3	0.995	9.9065	-20.0	2.7323	78.15
2	0.998	9.9583	-20.0	4.0975	74.65
1	0.999	9.9896	-20.0	8.1937	68.65
0.1	1.000	10.0000	-20.0	81.9330	48.65

### Notes:

Antenna radiation center above ground (meters):	143
Maximum ERP (watts) at 0° Depression angle:	10

Free Space Signal =  $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$

Bext TFC-2K 2 bay 0.5 wave spaced