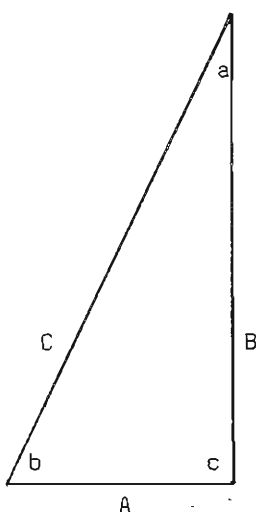# EXPLANATION AND SAMPLE CALCULATIONS

OF INTERFERENCE AT GROUND LEVEL FOR WCKN

A=distance from tower base
B=elevation of antenna above ground minus 2 meters (head height)
C=slant distance (hypotenuse)
b=depression angle

A(m)	B(m)	arc cos A/B (Dep Angle(b))	Rel Field	Watts	Dist to Interfering Contour (m)
8.6	86.4	84.3	0.194	9.4	18.2
17.2	86.4	78.5	0.287	20.6	27.3
25.9	86.4	72.6	0.363	32.9	36.0
34.6	86.4	66.4	0.466	54.3	41.0

Note: At distances from the base (A) greater than 34.6 meters, the hypotenuse is greater than 90.8 meters which is the distance to the interfering contour at full power (250 watts).