

Understanding a Multipath

By G8MNY

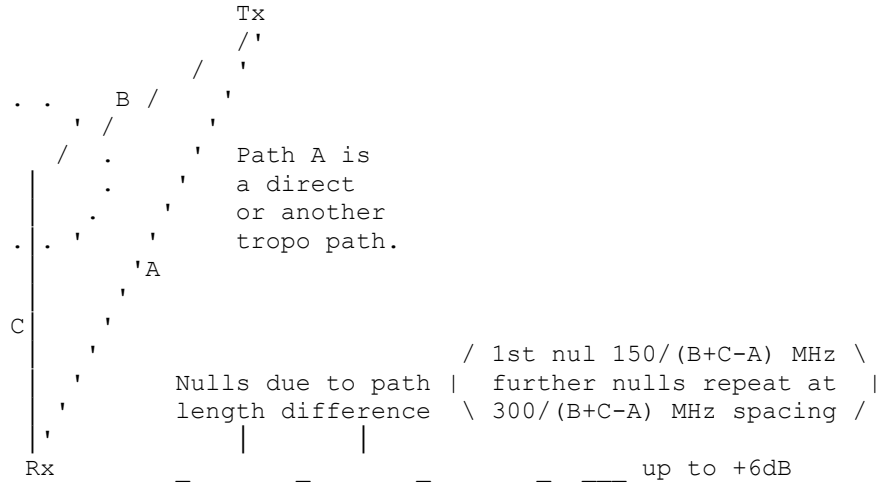
(New Feb 06)

(8 Bit Graphics use code page 437 or 850)

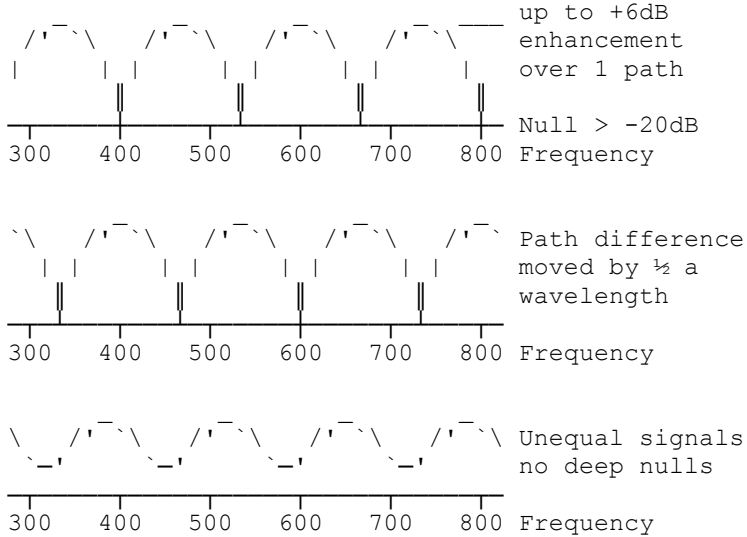
If you Rx a RF signal by more than 1 path this is what you get..

Reflection or tropo refraction. The angle BC is proportional to frequency with refraction or defraction.

path length = B+C

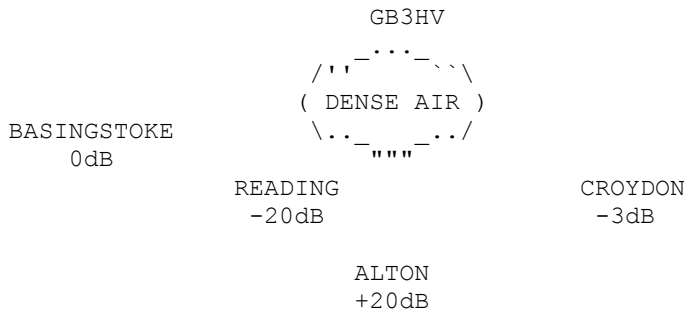


The affect of reflection, refraction or defraction due to the anomaly is the make the tropo beam heading appear to change with frequency! Of cause as the anomaly moves causing the path lengths to change all the null spot frequencies slide up or down as well, changes in dual path amplitude will cause the null depth to change, from not detectable to extreme nulling.



LENS EFFECTS

My experience with a group of well scattered users of 23cm GB3HV ATV repeater at High Wycombe, may put more light on the subject. During a Wx front it became apparent that large lens of heavy damp air was moving through many viewers Rx paths....



Signal were lost in some palaces & much enhanced in others by getting on for

± 20dB as the Wx front moved west to east. Most sites saw the effect over an hour or so.

Why don't U send an interesting bul?

73 de John G8MNY @ GB7CIP