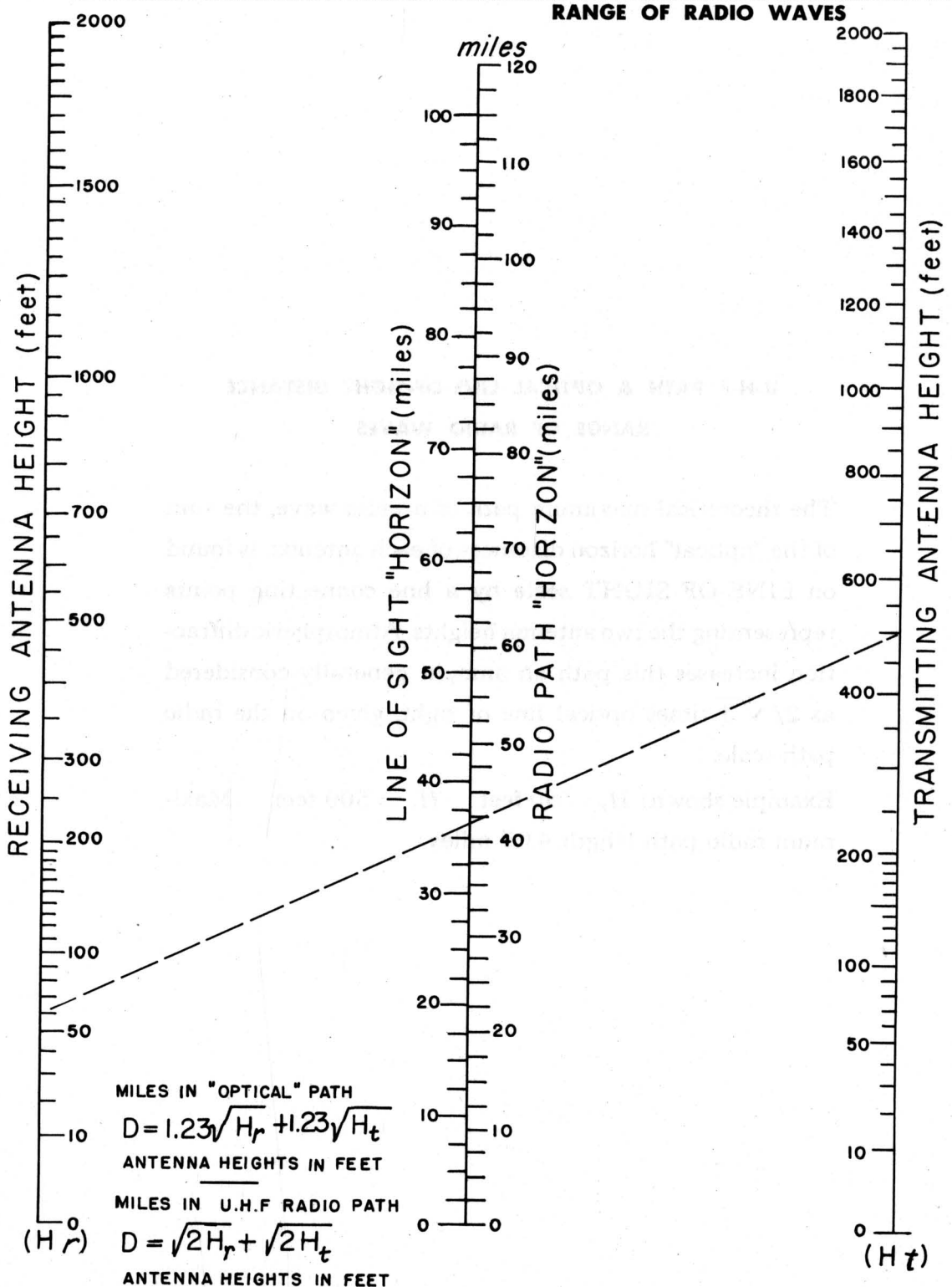




# Technical data

## U-H-F PATH & OPTICAL LINE-OF-SIGHT DISTANCE



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**U-H-F PATH & OPTICAL LINE-OF-SIGHT DISTANCE  
RANGE OF RADIO WAVES**

The theoretical maximum path of a radio wave, the sum of the “optical” horizon distances of each antenna, is found on LINE-OF-SIGHT scale by a line connecting points representing the two antenna heights. Atmospheric diffraction increases this path an amount generally considered as  $2/\sqrt{3}$  times optical line of sight, given on the radio path scale.

Example shown:  $H_r = 60$  feet     $H_t = 500$  feet    Maximum radio path length 41.5 miles