

40-meter NVIS Dipole

Antenna Parameters

Apex Height - 23 feet from ground

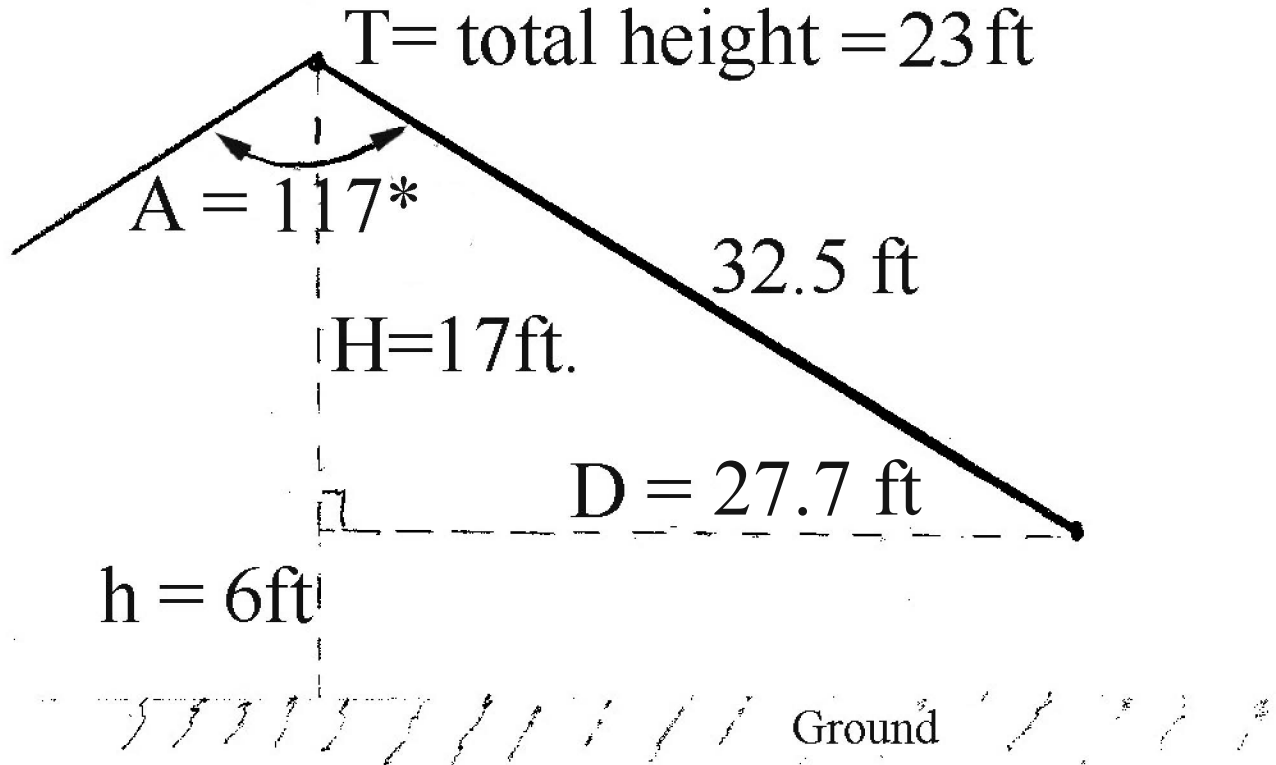
End Height - 6 feet from ground

Antenna wire – Two legs, 32.5' 14-gauge Flexweave with PE insulation (.023")

Desired Resonant Frequency – 7.150 MHz

Feedline - 50 ft RG213 with 1:1 current Balun

Soil conditions - Dry sand with water table at 10 feet



Find A $\sin A/2 = D/32.5\text{ ft}$; $\cos A/2 = 17/32.5$; $A = 117^*$

Find D $D = \sin A/2 \times 32.5\text{ ft} = 27.7\text{ ft}$

For later: $H = \cos A/2 \times 32.5\text{ ft} = 17\text{ ft}$ Also: $T = H + h$