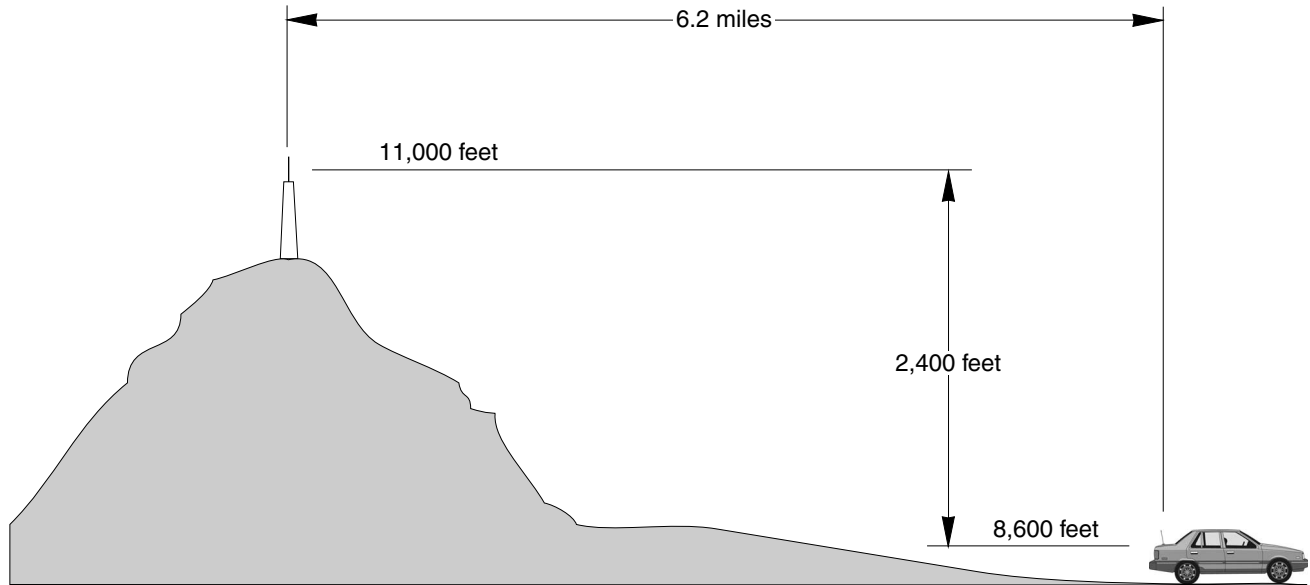


Calculating Downtilt



Formula

$$\text{angle} = \tan^{-1}\left(\frac{(h_1-h_2)}{d}\right)$$

h_1 = Elevation of the base antenna (ft)

h_2 = Elevation of the mobile antenna (ft)

d = Distance (ft)

Example

1 mile = 5,280 ft

6.2 miles x 5,280 = 32,736 ft

2400 ÷ 32,736 = 0.0733138

$\tan^{-1}(0.0733138) = 4.2$ degrees



10511-A