

## Distance horizon-scanner\*

$$\text{Formula: } d_{nm} = 2.21\sqrt{h_m}$$

| Distance to Radar Horizon |          |       |          |       |          |
|---------------------------|----------|-------|----------|-------|----------|
| $h_m$                     | $d_{nm}$ | $h_m$ | $d_{nm}$ | $h_m$ | $d_{nm}$ |
| 2                         | 3,1      | 15    | 8,6      | 40    | 14,0     |
| 4                         | 4,4      | 20    | 9,9      | 45    | 14,8     |
| 6                         | 5,4      | 25    | 11,1     | 50    | 15,6     |
| 8                         | 6,3      | 30    | 12,1     | 55    | 16,4     |
| 10                        | 7,0      | 35    | 13,1     | 60    | 17,1     |

\*) Based on: standard atmosphere 1013.2 mb above sea level, temperature + 15°C.

## First possible detecting of an elevated radar target

$$\text{Formula: } d_{nm} = 2.21 \times (\sqrt{h_m} + \sqrt{h_t})$$

$d_{nm}$  = distance between own scanner – radar-target in nautical miles

$h_m$  = distance between own scanner and sea level in meter

$h_t$  = height of radar target above sea level