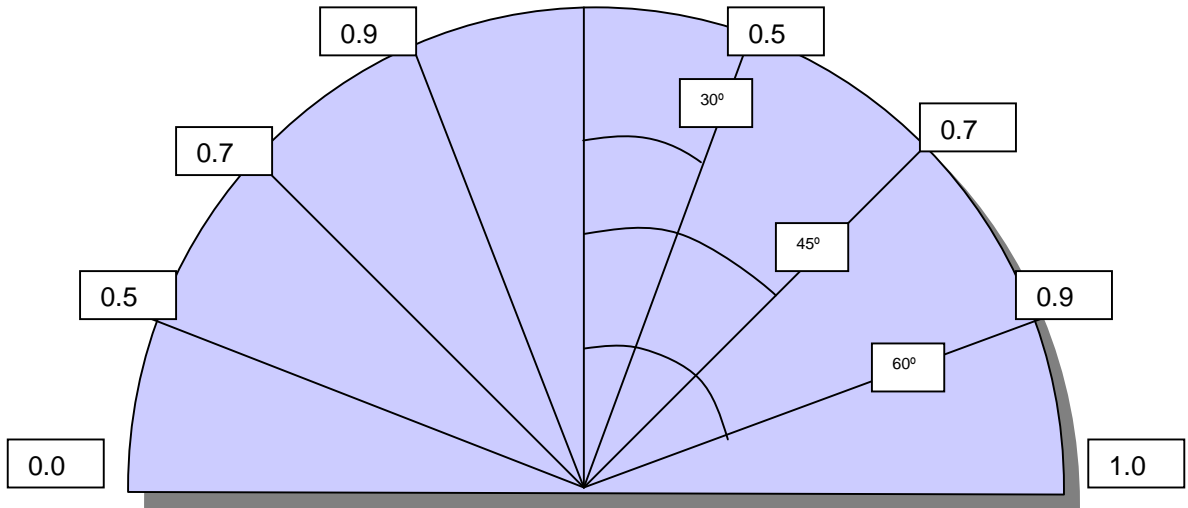


**WIND ASSESSMENT PRIOR TO TAKE-OFF**  
**& USING MAX DRIFT FOR HEADING TO FLY**

Surface Wind x Cosine of Angle  
For  
Headwind Component

Surface Wind x Sine of Angle  
For  
Crosswind Component



Eg - Rwy 27  
 $W/V = 240/15$   
 $270 - 240 = 30^\circ = 0.9$   
 H/W Component =  $15\text{kts} \times 0.9 = 13.5\text{kts}$

Eg - Rwy 27  
 $W/V = 240/15$   
 $270 - 240 = 30^\circ = 0.5$   
 X/W Component =  $15\text{kts} \times 0.5 = 7.5\text{kts}$

By calculating **Max Drift** we can calculate drift at altitude for cross country flight.

Eg. Track = 050°     $W/V = 120/25$  at cruise altitude    IAS = 100kts

**Max Drift** =  $\frac{25 \times 60}{100} = 15^\circ$

$120 - 050 = 70^\circ = 0.9$

$15 \times 0.9 = 13.5^\circ$  drift angle to the right

Therefore HDG to fly =  $050 + 13.5 = 063^\circ$

Ground Speed =  $100 + (25 \times 0.5) = 112$  Kts