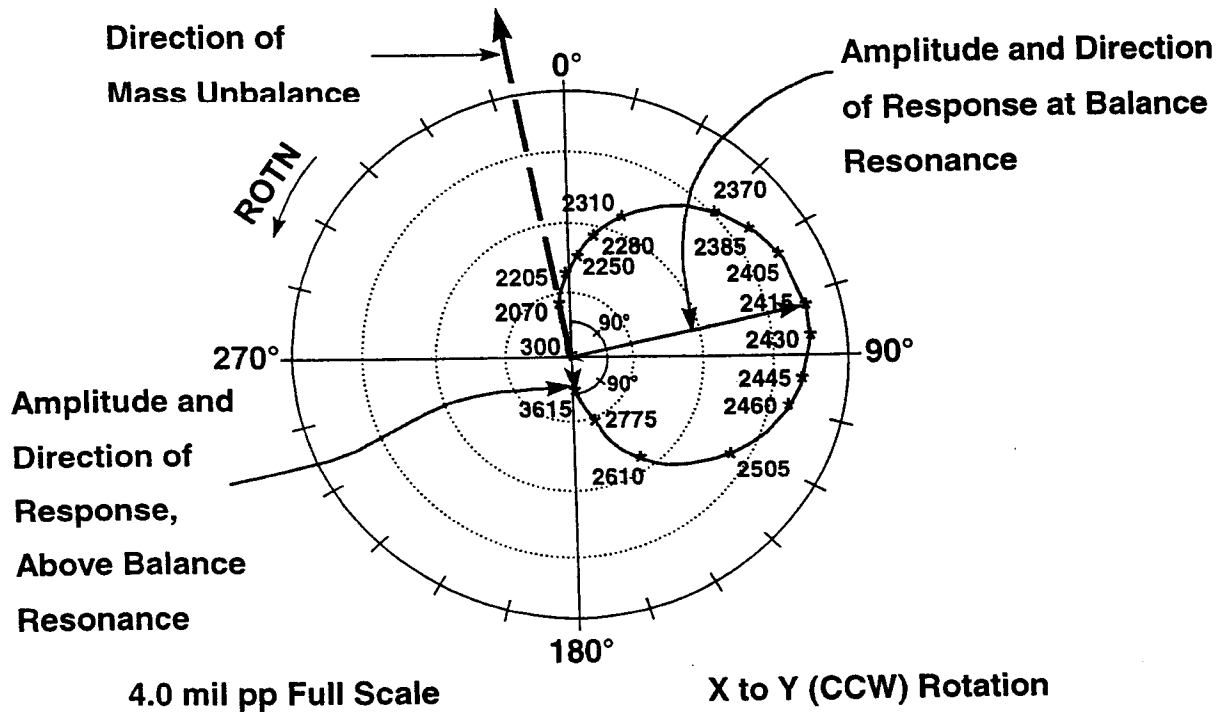
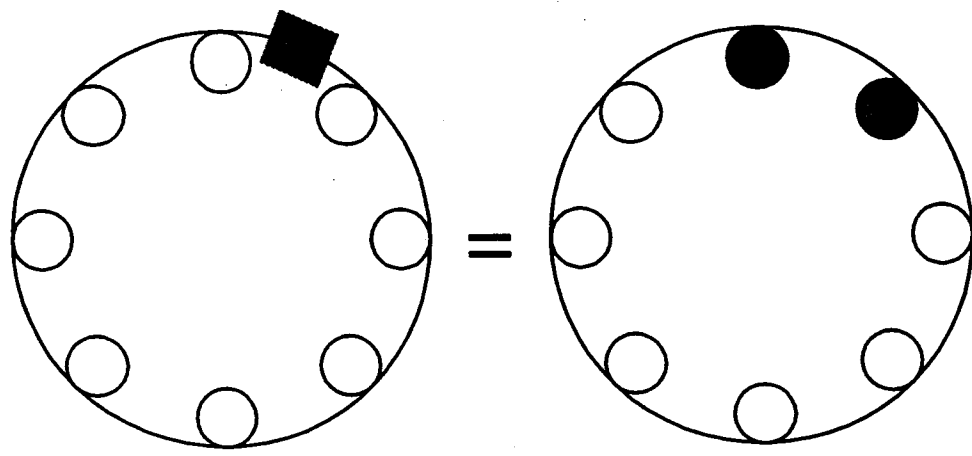


D. The Compensated Polar Plot: The effect of compensating a polar plot is simply to translate the origin of the axes to the slow roll vector. The size and shape of the plot are unchanged.

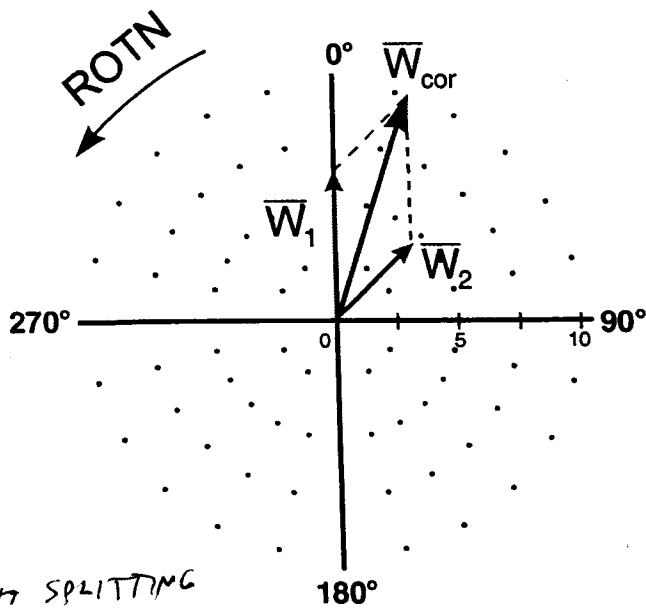


I. Weight Splitting



Desired Weight Placement

Actual Weight Placement



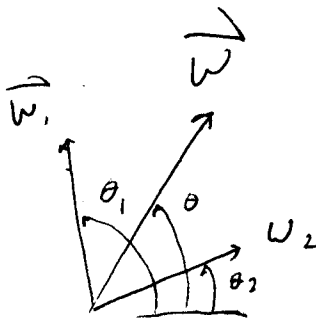
GRAPHICAL EXAMPLE

$\bar{W}_{cor} = 10 \text{ oz} \cdot \text{in} \angle 20^\circ$
 Add Weight W_1 at 0°
 and W_2 at 45°

$\bar{W}_1 = 6.0 \text{ oz} \cdot \text{in} \angle 0^\circ$

$\bar{W}_2 = 4.8 \text{ oz} \cdot \text{in} \angle 45^\circ$

WEIGHT SPLITTING



$\vec{W} = W \angle \theta = \vec{W}_1 + \vec{W}_2 = (w_1 \angle \theta_1) + (w_2 \angle \theta_2)$

UNKNOWN

x: $w_1 \cos \theta_1 + w_2 \cos \theta_2 = W \cos \theta$ (1)

y: $w_1 \sin \theta_1 + w_2 \sin \theta_2 = W \sin \theta$ (2)

CONTINUED ON NEXT PAGE

$$\sin \theta_1 \textcircled{1} - \cos \theta_1 \textcircled{2} \Rightarrow$$

$$W_2 (\sin \theta_1 \cos \theta_2 - \cos \theta_1 \sin \theta_2) = W (\sin \theta_1 \cos \theta - \cos \theta_1 \sin \theta)$$

$$W_2 = \frac{\sin(\theta_1 - \theta)}{\sin(\theta_1 - \theta_2)} W$$

$$\text{SIMILARLY, } \sin \theta_2 \textcircled{1} - \cos \theta_2 \textcircled{2} \Rightarrow$$

$$W_1 = \frac{\sin(\theta_2 - \theta)}{\sin(\theta_2 - \theta_1)} W$$

COULD HAVE GOTTEN DIRECTLY
FROM LAW OF SINES

