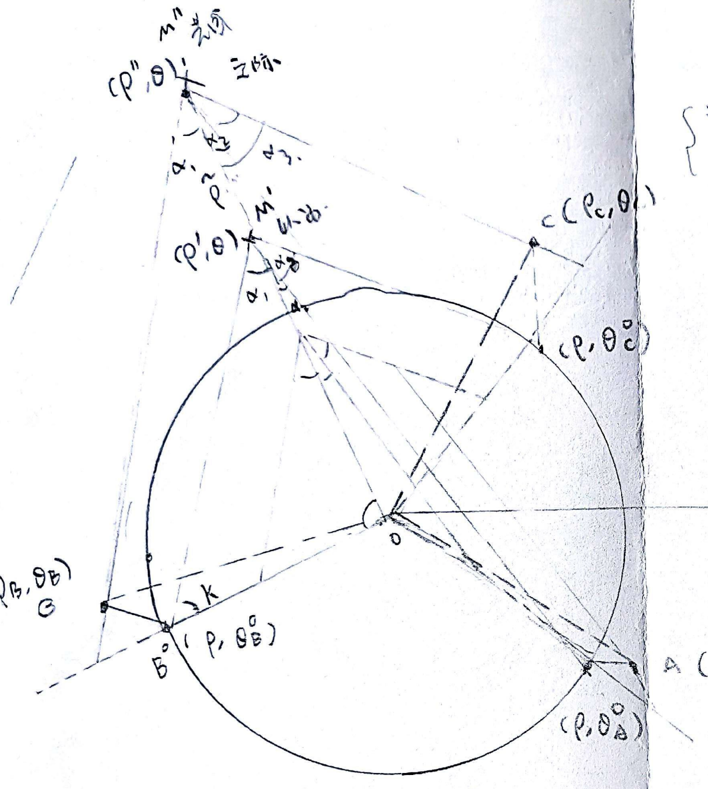
偏离机.

(ρ, θ_Δ^0)

(ρ', θ')

$\theta' = \theta$

ρ'



Q3. 飞行偏差模型.

① 被偏机知自己位置.

$K(\theta) = |\min\{2\pi - \theta, \theta\}|$

$\left\{\begin{array}{l} \Rightarrow \text{在圆外机} \Rightarrow \text{实际半}(\rho' < \rho'') \text{ 以为离圆近} \\ \Rightarrow \text{圆内} \Rightarrow (\rho' > \rho'') \end{array}\right\} \Rightarrow$ 以它已在圆内走

(已知)

求偏差 $\tilde{\rho} = \rho'' - \rho'$

由向间也.

$\angle K = \pi - ((\theta_B^0 - \theta) + \alpha_1)$

∴ 在 $\triangle B^0 M' O$ 中.

$$\frac{\rho}{\sin\alpha_1} = \frac{\rho'}{\sin\angle K}$$

$$\Rightarrow \rho' = \frac{\sin\angle K}{\sin\alpha_1} \cdot \rho$$

$$= \frac{\sin(\theta_B^0 - \theta + \alpha_1)}{\sin\alpha_1} \cdot \rho$$

同理 $= \rho' = \dfrac{\sin(\min\{2\pi - (\theta_A^0 - \theta), \theta_A^0 - \ldots\} + \alpha_2)}{\sin\alpha_2} = \dfrac{\sin(K(\ldots}{\sin\alpha\ldots}$

$$\rho' = \frac{\sin(K(\theta_C^0 - \theta) + \alpha_3)}{\sin\alpha_3} \cdot \rho$$