

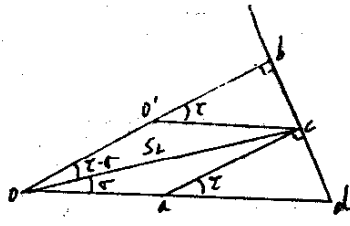
for point c = s.c

$$\overline{oa} = \overline{oc}$$

$\Delta o b d$

$$\overline{bc} = S_L \sin(\tau - \sigma) = \overline{oc} \sin \tau$$

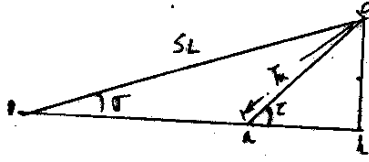
$$\overline{oc} = \frac{S_L \sin(\tau - \sigma)}{\sin \tau} = \overline{oa}$$



$\Delta o c k$

$$Y = S_L \sin \sigma = T_k \sin \tau$$

$$T_k = S_L \frac{\sin \sigma}{\sin \tau}$$



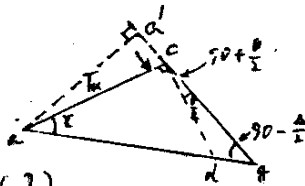
$\Delta a c g$

$$\frac{T_k}{\sin(90 - \frac{\Delta}{2})} = \frac{\overline{ag}}{\sin(\theta + \frac{\Delta}{2})}$$

$$\overline{ag} = T_k \cdot \frac{\sin(\theta + \frac{\Delta}{2})}{\sin(90 - \frac{\Delta}{2})}$$

$(\sin(90 + \frac{\Delta}{2}) = \cos \frac{\Delta}{2})$
 $(\sin(90 - \frac{\Delta}{2}) = \cos \frac{\Delta}{2})$

$$= S_L \frac{\sin \sigma}{\sin \tau} \cdot \frac{\cos \frac{\Delta}{2}}{\cos \frac{\Delta}{2}}$$



$$\overline{aa'} = T_k \sin(90 - \frac{\Delta}{2}) = \overline{ag} \sin(90 - \frac{\Delta}{2})$$

$$\overline{ag} = T_k \frac{\sin \frac{\Delta}{2}}{\cos \frac{\Delta}{2}}$$

此處
全
圖

$\Delta M c e$

$\overline{ce} \parallel \overline{af}$

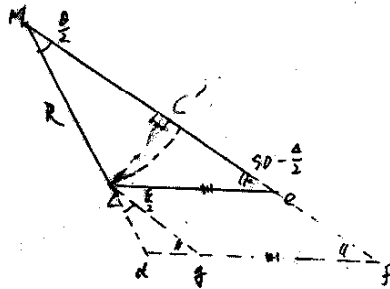
$$\angle c e m = \angle d f e = 90 - \frac{\Delta}{2}$$

$$\frac{\overline{ce}}{\sin \frac{\Delta}{2}} = \frac{R}{\sin(90 - \frac{\Delta}{2})}$$

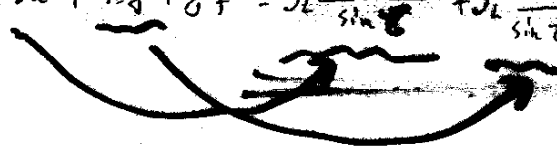
$$\overline{ce} = R \cdot \frac{\sin \frac{\Delta}{2}}{\sin(90 - \frac{\Delta}{2})} = R \cdot \frac{\sin \frac{\Delta}{2}}{\cos \frac{\Delta}{2}}$$

$\square c e f g$ 為平行四邊形

$$\therefore \overline{ce} = \overline{gf} = R \cdot \frac{\sin \frac{\Delta}{2}}{\cos \frac{\Delta}{2}}$$



$$T = \overline{oa} + \overline{ag} + \overline{gf} = S_L \frac{\sin(\tau - \sigma)}{\sin \tau} + S_L \frac{\sin \sigma \cos \frac{\Delta}{2}}{\sin \tau \cos \frac{\Delta}{2}} + R \cdot \frac{\sin \frac{\Delta}{2}}{\cos \frac{\Delta}{2}}$$



此處全圖

$\Delta o o' c$

$$\frac{S_L}{\sin(180 - \tau)} = \frac{\overline{oc}}{\sin(\tau - \sigma)}$$

