13/4/2020

triangolo OCS

$$\frac{OC}{\sin\eta} = \frac{CS}{\sin(\pi/2 + \varepsilon)}$$

$$OC = R_T$$

$$CS = R$$

$$\frac{R_T}{\sin\eta} = \frac{R}{\cos\varepsilon}$$

$$\frac{R_T}{R} = \frac{\sin\eta}{\cos\varepsilon} = \sin\rho$$

$$\sin\eta = \sin\rho\cos\varepsilon$$

$$\gamma + \eta + \pi/2 + \varepsilon = \pi$$

$$\gamma = \pi/2 - \eta - \varepsilon$$

$$DB = OC \sin\lambda$$

$$= BS \operatorname{tg}\eta$$

$$BS = CS - CB =$$

$$= R - OC\cos\lambda =$$

$$= R - R_T \cos\lambda =$$

$$= R\left(1 - \frac{R_T}{R}\cos\lambda\right) =$$

$$= R\left(1 - \sin\rho\cos\lambda\right)$$

$$R_T \sin\lambda = R(1 - \sin\rho\cos\lambda)\operatorname{tg}\eta$$

$$\frac{R_T}{R}\sin\lambda = (1 - \sin\rho\cos\lambda)\operatorname{tg}\eta$$

$R \searrow \sin\rho$

$$\operatorname{tg}\eta = \frac{\sin\rho\sin\lambda}{1 - \sin\rho\cos\lambda}$$

$$\frac{OS}{\sin\alpha} = \frac{OC}{\sin\gamma}$$

$$OS = D \qquad OC = R_1$$

$$D = R_1 \frac{\sin\alpha}{\sin\gamma}$$