



$$\begin{aligned}\sum M_E^C &= (F_{B_y} * 47.6797'') + (F_{B_x} * 38.0092'') + (F_C \cos 25.4703'') - (F_D \sin 17.7088'') = 0 \\ &(-2203.96\# * 47.6797'') + (2484.94\# * 38.0092'') + (3159.81\# * 25.4703'') - (F_D \sin 17.7088'') = 0 \\ 69847.7''\# - (F_D \sin 17.7088'') &= 0\end{aligned}$$

$$\begin{aligned}\frac{69847.7''\#}{17.7088''} &= \frac{F_D \sin 17.7088''}{\sin 17.7088''} \\ 3944.24\# &= F_D\end{aligned}$$

$$\begin{aligned}\sum F_x^C &= F_{B_x} + F_C \cos 58.8409' + F_D \sin 7.41678' + F_{E_x} = 0 \\ -2484.94\# + (3159.81\# * \cos 58.8409') + (3944.24\# * \sin 7.41678') - F_{E_x} &= 0 \\ 3061.24''\# - (F_{E_x}) &= 0 \\ 3061.24''\# &= F_{E_x}\end{aligned}$$

$$\begin{aligned}\sum F_y^C &= F_{B_y} + F_C \sin 58.8409' + F_D \sin 7.41678' + F_{E_y} = 0 \\ 2203.96\# - (3159.81\# * \sin 58.8409') + (3944.24\# * \sin 7.41678') + F_{E_y} &= 0 \\ 9.14992\# + F_{E_y} &= 0 \\ 9.14992\# &= F_{E_y}\end{aligned}$$