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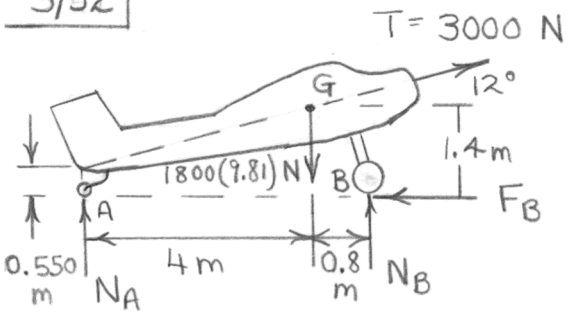

Engine off : $T = 0$, $F_B = 0$

$$\begin{cases} \Sigma M_A = 0: & 1800(9.81)4 - N_B(4.8) = 0 \qquad N_B = 14\,720 \text{ N} \\ \Sigma F_y = 0: & N_A + 14\,720 - 1800(9.81) = 0, \qquad N_A = 2940 \text{ N} \end{cases}$$

$$\Sigma M_A = 0: \quad 1800(9.81)4 - N_B'(4.8) + 3000\cos 12°\,(0.550) = 0$$

$$N_B' = 15{,}050 \text{ N}$$

$$\Sigma F_y = 0: \quad N_A' + 15{,}050 - 1800(9.81) + 3000\sin 12° = 0, \quad N_A' = 1983 \text{ N}$$

$$n_A = \frac{N_A' - N_A}{N_A}(100) = \underline{-32.6\%}, \quad n_B = \frac{N_B' - N_B}{N_B} = \underline{2.28\%}$$