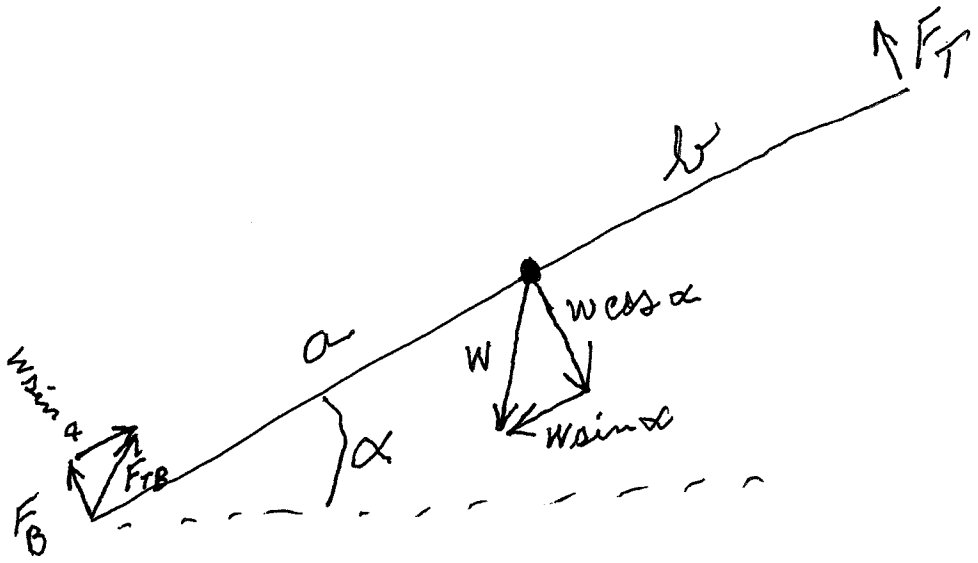
For a detector of weight W and c.g. at distances a and b from its ends.



The top support is frictionless. Bottom is fixed. The rotational torques must balance.

$$F_T = \frac{a W \cos\alpha}{a+b} \qquad F_B = \frac{b W \cos\alpha}{a+b}$$

The bottom support must also balance the $W\sin\alpha$ component. So, the total force on the bottom support is

$$F_{TB}^2 = F_B^2 + (W\sin\alpha)^2$$

$$F_{TB}^2 = \frac{b^2 W^2 \cos^2\alpha}{(a+b)^2} + W^2 \sin^2\alpha$$

at 45° and $a = b$

$$F_T = F_B = \frac{W}{2\sqrt{2}}$$

$$F_{TB}^2 = \frac{W^2}{8} + \frac{W^2}{2}$$

$$= W^2 \frac{5}{8}$$

$$F_{TB} = W\sqrt{\frac{5}{8}}$$

$$= 0.79\,W$$

For A2 which is 688 lbs.

$F_T = 243$ lbs

$F_{TB} = 544$ lbs