

## The absolute best way to cg your big, heavy, or bulky plane.

This method will work on any size plane (if the scales are accurate enough for a light weight plane), this works great on a planes that weigh too much to put on a CG machine.

Have the plane RTF minus fuel. Find an area where you can put the nose of the plane up against a wall. Prop up the tail wheel till the fuse is sitting level (use a level, you may temporarily remove the hatch/canopy).

Once the plane is sitting level, place some masking tape directly under all the wheels (should be three), draw a thin line where the center of the wheel is on the tape (you're marking on the tape).

Now measure from the wall to the lines on the tape (be careful to be very accurate).

Sample numbers:

Left side main - 20 inches

Right side main - 20 inches

Tail wheel - 65 inches

Place a scale directly under each wheel (keep the plane level if you only have one scale and rotate it between wheels).

Sample weights:

Left side main - 7lbs

Right side main - 7lbs

Tail wheel - 5lbs

Now its just a simple math problem to find where the CG sits right now on the plane.

Weight x ARM = Moment

$$20 \times 7 = 140$$

$$22 \times 9 = 140$$

$$65 \times 5 = 325$$

Now add the totals:

$$\text{Weights } 7 + 7 + 5 = 19 \text{ lbs}$$

$$\text{moments } 140 + 140 + 325 = 605$$

Divide the total moments by the total weights.

$$605 \text{ divided by } 19 = 31.84$$

The number 31.84 represents inches back from the tip of the spinner and where the CG is currently. Make adjustments and figure again until you find the sweet CG you're looking for.