Welcome to the simple Weight and Balance App

This app was created to give pilots of small planes a quick and easy way to do W&B calculations. Right now it’s just aimed at 4-seat aircraft.

**Getting started**

When you first start the app, you’ll see an empty aircraft screen. Press the ‘+’ button to add a new aircraft.

If you’ve already created aircraft, just tap on the one you want to use.

**Setting up an aircraft**

Make sure you’re on the ‘Edit’ tab. Fill out the form, entering the Basic Empty Weight and arm, the arms for the front and rear seats, the maximum baggage and fuel capacity (in gallons), and their respective arms. There are also fields for TKS fluid and a portable oxygen system. I fly a Cirrus SR22 which has both. If your plane doesn’t, just leave them blank.

IMPORTANT – make sure you enter the ARM values (the distance of the load from the reference datum, in inches) and not the MOMENT values. Your POH will have them.

Once you’ve setg up the basic parameters for the aircraft, you need to put in the acceptable CG envelope. To do this, push the “envelope” button.

The envelope screen consists of a table of envelope points which, taken together, represent the acceptable CG envelope for your plane. You can find the data in the POH. The order of the envelope points matters. You need to enter the points in a clockwise direction starting at the bottom left hand side of the envelope and working your way around. Once you’ve entered 3 or more points, the graph at the bottom of the screen will show you the envelope, which will help you visualize it. When you’re done, the graph should look like the one in your POH.

You should only have to set up your plane once…the app will remember it.

You can set up as many planes as you like.

**Loading an aircraft**

Select the Load Aircraft tab. Now simply enter the weight of your pilot, copilot, 2nd row passengers, bags, fuel (in gallons), and use the switches to indicate if you have TKS fluid and oxygen on board. The graph at the bottom of the page, together with the on-screen messages will show you the result of the W&B calculation.

That’s it! Safe flying.

Adam