

## Guidelines for the use of the Revised GFA Form W1 for weighing of Sailplanes and Powered Sailplanes.

Form W1 has been substantially revised to incorporate lessons learned and to allow for the weighing of powered sailplanes (motor gliders) using 3 pad scales. The new form can be identified by the date (Nov 2008) in the top right corner. Please discard any superseded Form W1's that you may have. Note that Form W2 is unchanged.

### **Marks**

A box is provided for "Other marks". This is intended for those few gliders which have markings other than the VH registration letters (foreign gliders for example).

### **Equipment list**

The equipment list has been expanded so that just about everything we can think of has a place to record it.

You should be careful when weighing any glider to make sure you know what was in it at the time of weighing. Items such as oxygen bottles, water bags and tail parachutes are often left out, either in error or deliberately, to get a lower empty weight. If the operator wants these items left out make sure the placards in the glider clearly state that these items are not included in the weight and balance placard/s. In extreme cases you may have to provide two sets of W&B data, one with the items installed and one with them removed.

### **Weighing models**

A few sailplane types weighed on mainwheel and tailwheel / bumper actually have the mainwheel ahead of the wing root leading edge datum. This has given rise to some mistakes as in using the old form dimension "a" becomes negative. Also cases have occurred where dimension "b" was taken from the datum instead of between the fulcrums. Dimension b is **always** between fulcrums in all models.

The new W1 provides for **Model 1a**, where the main wheel is ahead of the datum and a box is provided to insert "a + b". This is intended mainly to act as a reminder not to measure "b" wrongly.

Where an aircraft has its main wheel position at, or very close to, the empty C of G position it is strongly recommended to use **Model 3**.

### **Tricycle Undercarriage**

For tricycle undercarriage motor gliders (Grob, Dimona etc.), provision has been made for the use of three pad weighing equipment. G<sub>1</sub> left and right boxes have been provided for tail draggers (models 1 & 1a) and G<sub>2</sub> left and right boxes for nose draggers (model 2). For ordinary single wheel gliders the "left" and "right" boxes are just ignored.

### **Main Pins**

The main pin/s may be included in the wing structure weight unless otherwise stated in the manufacturer's maintenance manual. A box is provided for entry of this item unless the manual indicates they are part of the non-lifting parts total.

Note: Form W2 remains unchanged at this time. Please report any problems or possible improvements to the GFA.

Forward completed forms W1 and W2 to: [returns@glidingaustralia.org](mailto:returns@glidingaustralia.org).