

# A

# Airlight RC

## BASIC BUILDING TECHNIQUES – 'LEARNER' AIRCRAFT:

The techniques here will apply to most of the aircraft on this site, so alternate designs may only show build points applicable to that particular design, rather than repeating generics over and over. Once you have that basics, the designs should be simple enough to build without reference to this document.

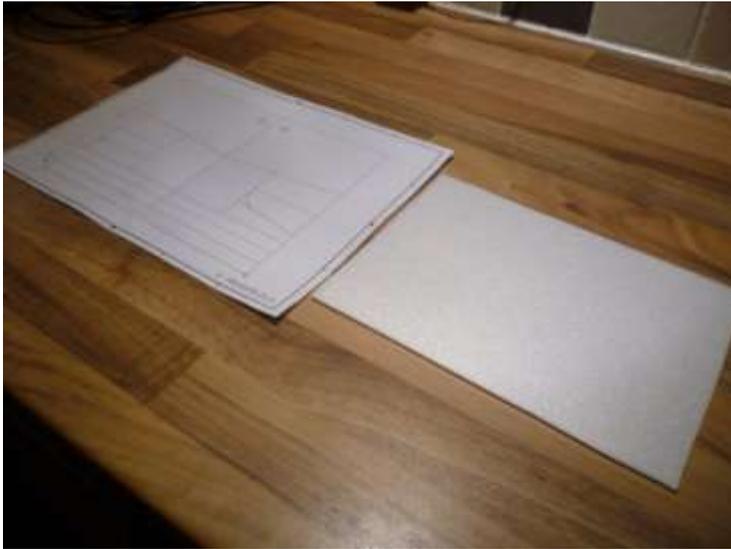
The point of these designs is not to require huge outlays of money to get a flyable model, and this is the basic kit that I use to produce these models:



The list is (clockwise from top left): Cork heat mat, Glue gun 7mm (with modified tip, more later), Green Stix2 roller (removable), Blue Stix2 roller (permanent), scalpel x3 (various blades, but 1 with no.11 blade would be ideal), sharpening block, black fine tipped ink marker, craft knife, Steel rule, wooden block from child's building set, box of matches (for sanding), bamboo pick for making holes (anything round and sharp would do), Glue sticks, spreader (for wiping excess)

As you can see, there is very little that is expensive here or that you may not have an alternative for.

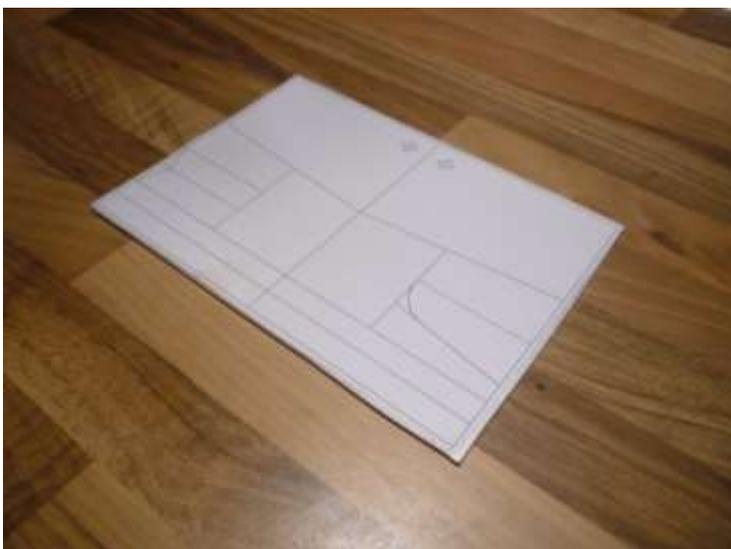
Here's the starting point: Print off the design, and cut out a piece of 2mm Depron that is about 2-3mm larger all round than A5 (i.e. ~ 215 x 155), or see the airlight [website](#) for info on how to get precut pieces.



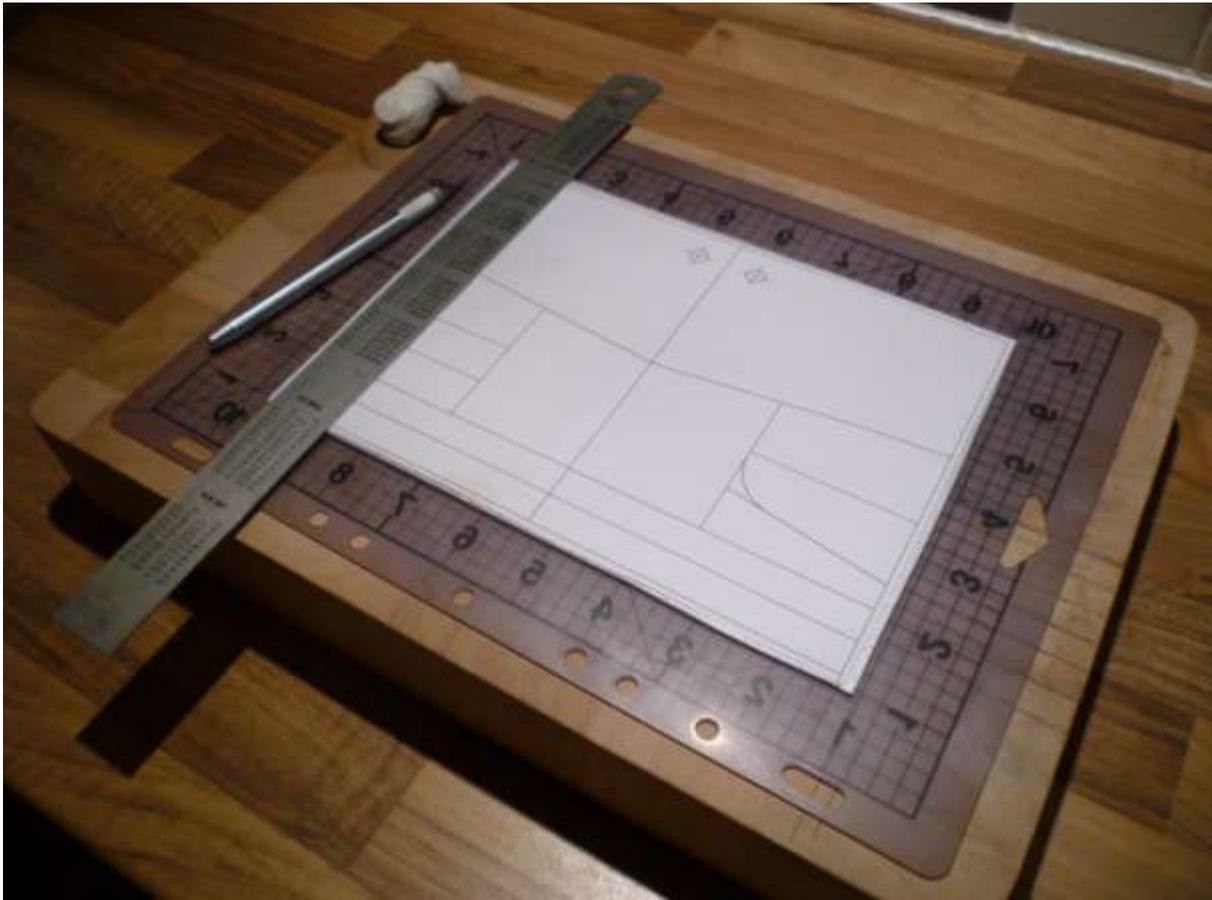
Use your choice of removable sticky , applied to the *rear* of the design in the middle of the pieces (look through the paper at a bright object to see the lines).



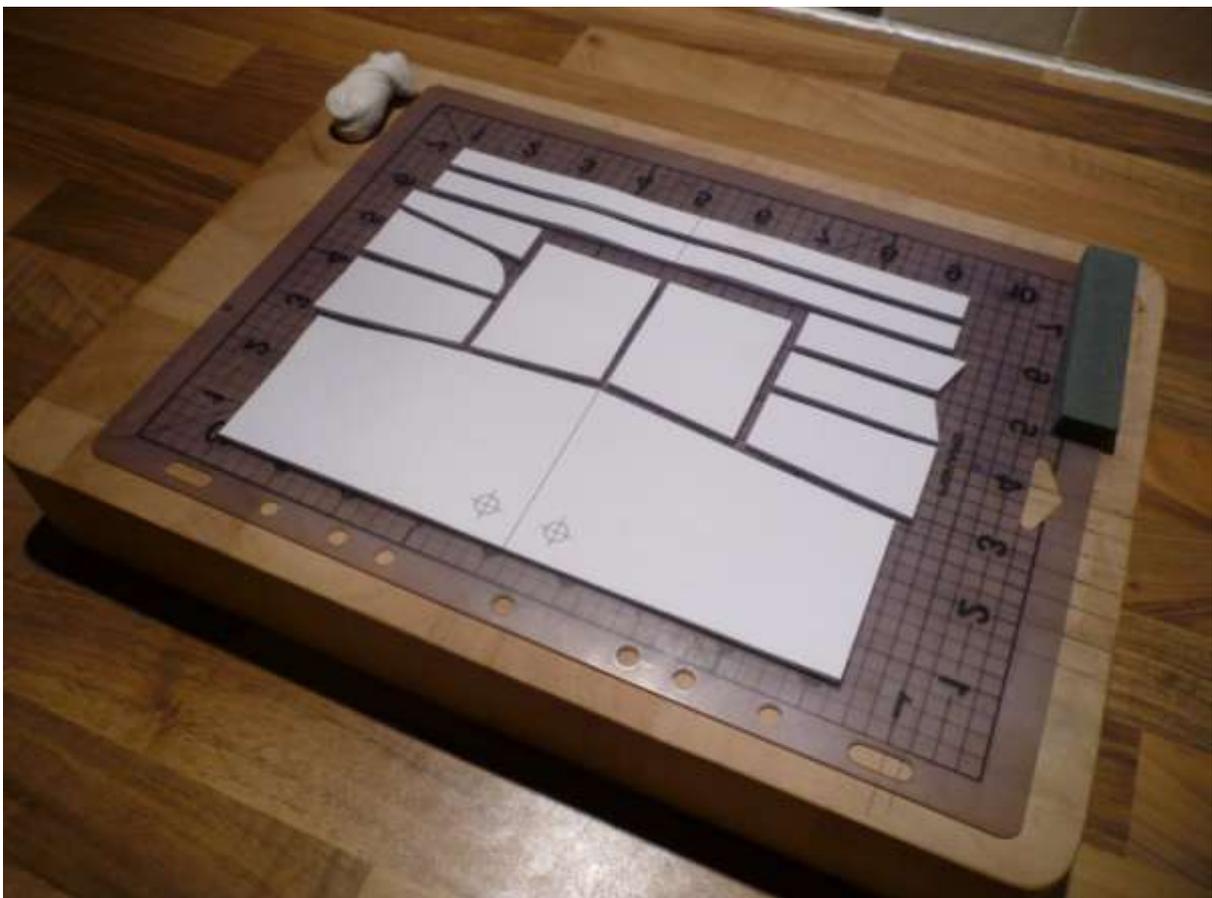
Stick the design to the Depron, smoothing out and pressing down firmly but not forcibly (Depron will dent easily).



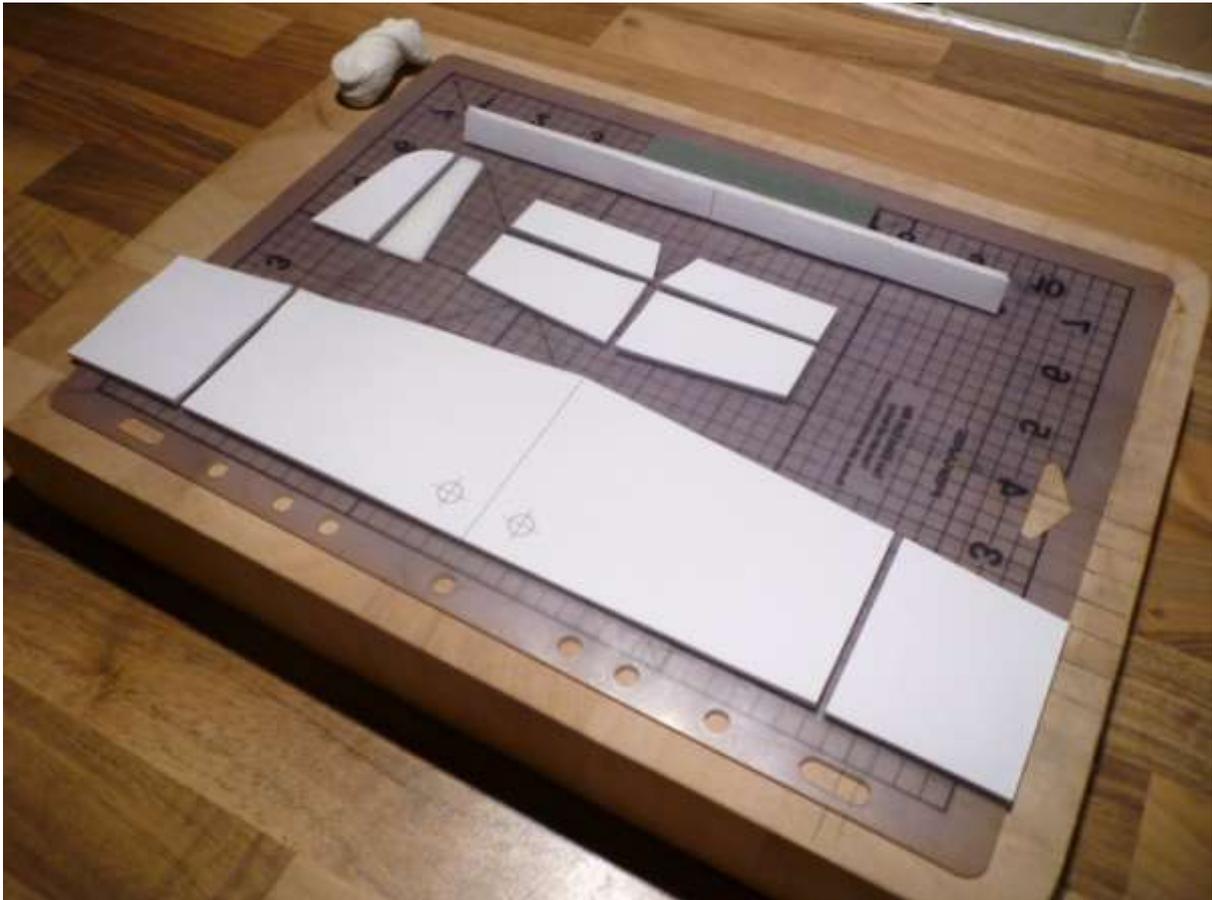
Using a cutting board of some type, cut the parts out using the scalpel and a metal rule or straight edge (you don't need to measure anything, so it can be anything with a hard straight edge).



You will then have the basic parts for the aircraft. You can see that some of the angled and radiused edges have been trimmed already.



You will then begin the joining of the parts, using your choice of permanent fixing. The parts laid out like this show the positions of the pieces before bonding.



The elevators will be hinged to the tailplane using hinge tape or similar, as will the rudder to the fin. These will require preparation prior to this though, to allow the range of movement for flight. I would suggest prepping the control surfaces for movement even if you only wish to make a 'chucker' for now, as they can be immobilised for neutral flight using tape, and easily released later if you wish to add controls. On the midwing, you can see the 2 positions indicated for the elevator and rudder servos. These are quite forward on the wing, as you will not want to place these near the back to do balancing requirements. Balancing should only take the minimum possible amount of ballast, so as not to add unnecessary weight for flight. If you are adding controls, you will find the control kit will mostly need to be mounted up front, to prevent unbalancable drooping at the rear.