Tools for Indoor Flying Models

This video will show commonly used tools for constructing flying models and balsa wood devices. The intent is to show a complete array of tools with the understanding that no single project will require all of these. The use of a kit, the components in the kit and the specific rules for the event will have a significant impact on what is needed. How these tools are used will be shown in subsequent construction videos.

The following will be useful for almost every project: A building board which is a flat piece of material that will accept pins. A piece of an acoustic ceiling tile or cork board works well for this purpose. Plans are placed on the board which is then covered with waxed paper. Single edge razor blades, and or a #11 Hobby Knife with extra blades, Pins (either push or beaded head style), Sandpaper (180 & 320 grit), Emory boards, Sanding blocks, a Glue Stick, Glue, Glue applicator, Waxed paper, Poster Board, Tape, Straight-edge/Metric ruler/scale.

You will also need to have access to a scale or balance that can measure to 0.1 grams and ideally 0.01 grams. Your Science or Chemistry Lab should have one of these.

Depending on the event, rules and your building preferences the following items can be worthwhile to have on hand: Razor saw for cutting cross grain or thicker balsa, spruce basswood and plywood, a Balsa stripper, Spray adhesives, Rubber cement, lacquer thinner, acetone (often Nail Polish remover), a caliper (dial or Vernier) to measure the thickness of wood and the width of strips, a wire cutter, a wire bender, needle nose pliers, a pin vise with #67 drills.

Many of these tools are very sharp so care needs to be taken especially when handling and using razor blades, knives, pins and similar items.