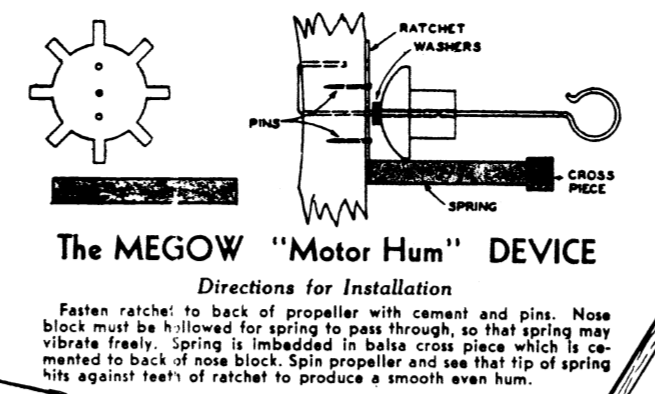
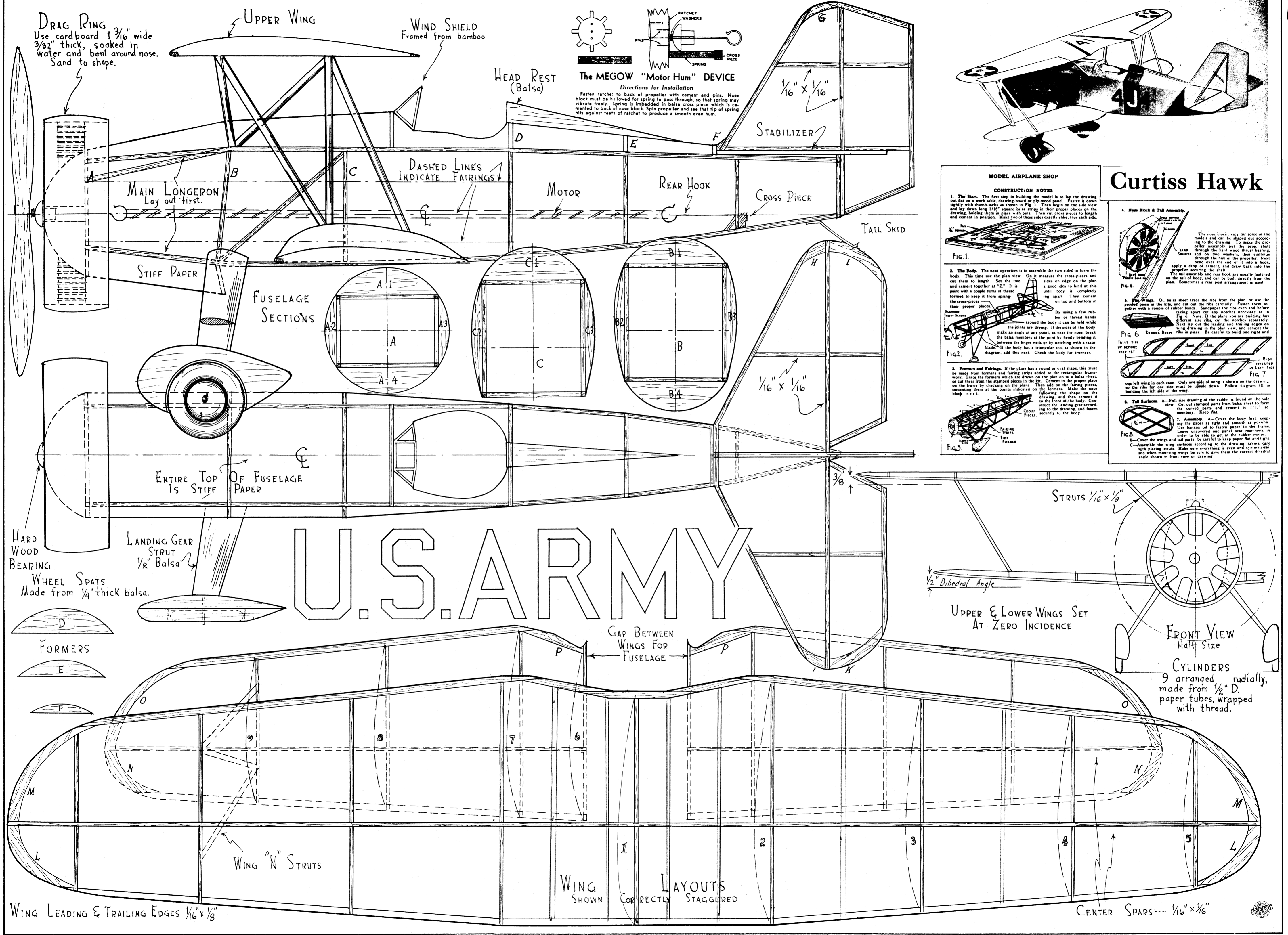


22 1/2" W/S

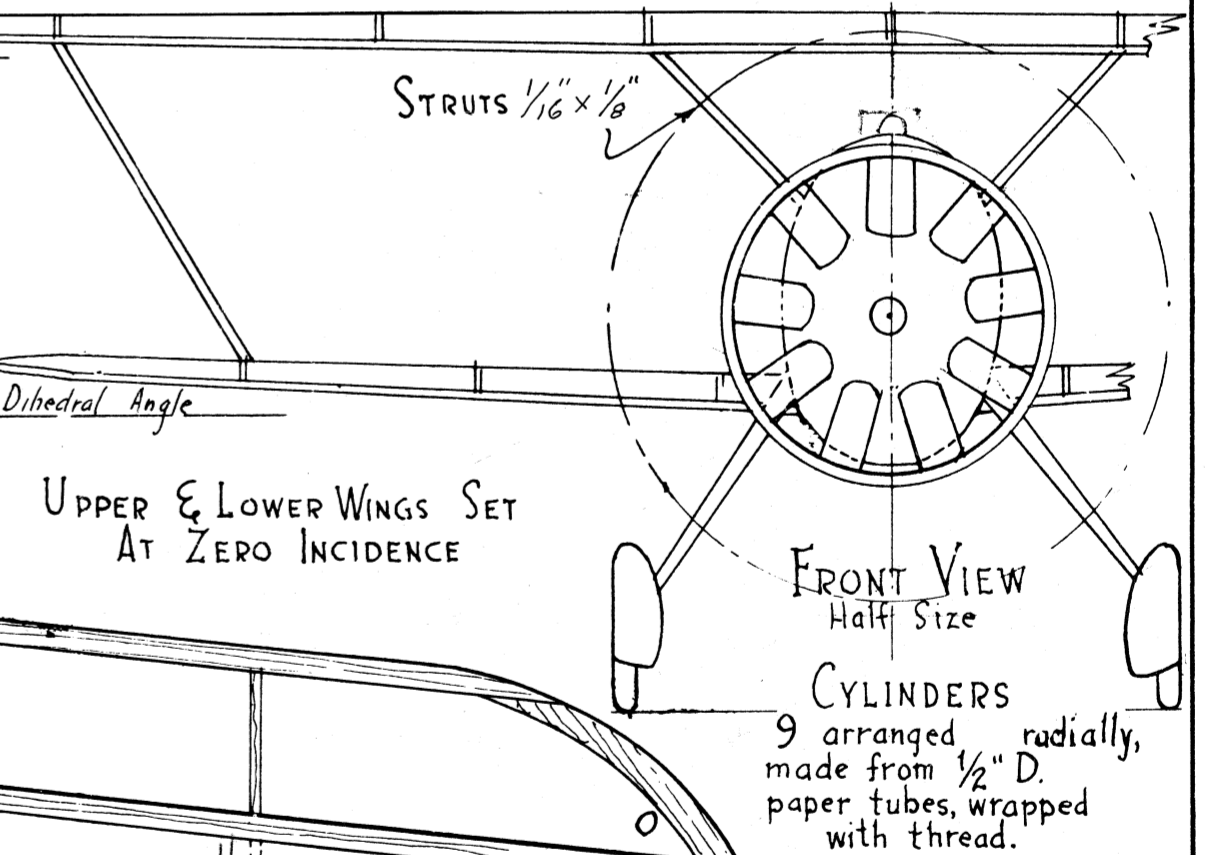


### MODEL AIRPLANE SHOP

## Curtiss Hawk

**CONSTRUCTION NOTES**

- The Start.** The first step in building the model is to lay the drawing out flat on a work table, drawing board or plywood panel. Fasten it down tightly with thumb-tacks, as shown in Fig. 1. Then begin on the side view and lay down long 1/16" square balsa strips in their proper places on the drawing, holding them in place with pins. Then cut cross pieces to length and cement in position. Make two of these sides exactly alike, trace each side.
- The Body.** The next operation is to assemble the two sides to form the body. This time use the plan view. On it measure the cross-pieces and cut them to length. Set the two sides on edge on the plan and cement together at "Z". It is a good idea to bind at this point with a couple turns of thread and cement to keep it from springing apart. Then cement the cross-pieces in their proper places. By using a few rubber bands around the body it can be held while the joints are drying. If the sides of the body make an angle at any point, as near the nose, break the balsa members at the joint by firmly bending it between the finger nails or by notching with a razor blade. If the body has a triangular top, as shown in the diagram, add this next. Check the body for trueness.
- Formers and Fairings.** If the plane has a round or oval shape, this must be made from formers and lashing strips added to the rectangular framework. Trace the formers which are drawn on the plan on to a balsa sheet, or cut them from the stamped pieces in the kit. Cement in the proper place on the frame by checking on the plan. Then add on the lashing pieces, cementing them at the points indicated on the drawing. Make the nose following the shape on the drawing, and then cement it to the front of the body. Construct the landing gear according to the drawing, and fasten it securely to the body.
- New Block & Tail Assembly.** The main block may for some of the models and can be shaped out according to the drawing. To make the propeller assembly, cut the prop shaft through the hard wood thrust bearing. Insert on two washers, then continue through the hub of the propeller. Next bend over the end of it into a hook. The tail assembly and rear hook are usually fastened on the tail of body, and can be built directly from the plan. Sometimes a rear post arrangement is used.
- The Wings.** On balsa sheet trace the ribs from the plan, or use the printed piece in the kit, and cut out the ribs carefully. Fasten them together with a couple of rubber bands. Sandpaper the ribs even and before taking apart, cut any notches necessary, as in Fig. 6. Note: If the plane you are building has different size ribs, cut the notches separately. Next lay out the leading and trailing edges on wing drawing in the plan view, and cement the ribs in place. Be careful to build one right and one left wing in each case. Only one side of wing is shown on drawing, so the ribs for one side must be upside down. Follow diagram 7B in building the left side of the wing.
- Tail Surfaces.** A full size drawing of the rudder is found on the side view. Cut out stamped parts from balsa sheet to form the curved parts and cement to 1/16" members. Keep flat.
- Assembly.** A—Cover the body first, keeping the paper as tight and smooth as possible. Use banana oil to fasten paper to the frame. Leave uncovered one panel near rear-hook in order to be able to get at the rubber motor. B—Cover the wings and tail parts; be careful to keep paper flat and tight with placing struts. Make sure everything is even and symmetrical; and when mounting wings be sure to give them the correct dihedral angle shown in front view on drawing.



A "NO-DRILLS" F-11-C2 for Indoor Flying