

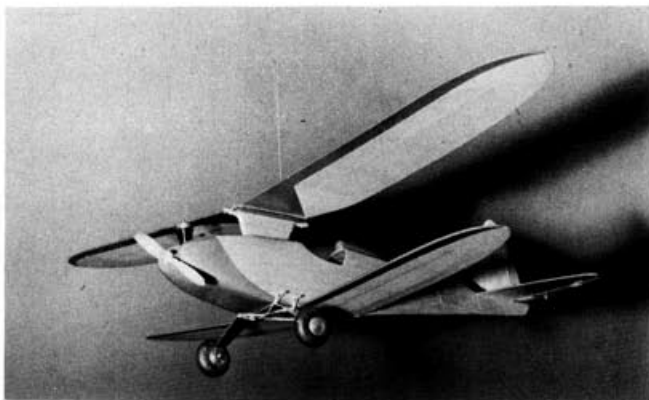
Sandwich type wing pylon, 3/32" ply core capped with 1/8" sheet. Strutless, easy to build.

### Full Size "Special Edition" Plan Available!

Leading and trailing edges are sheeted, make a warp resistant structure, light, neat, flyable.

# No, It's not a "Fowl Flyer" . . . THE "CHICKEN HAWK"

Ted Strader's 1/2A R/C actioneered biplane!



► If there's one thing we've learned about true biplane fans through the years it's that they have long memories! Hazy, but long! This fact stood out like the proverbial sore digit when we unveiled the hero of this construction epic at a local club meeting.

Several of the fellows were giving it the usual and required 3W Tests (Wrinkle, Weight & Warp Tests) when it happened. I could see him elbowing through the crowd. He had that odd split-vision stare peculiar to all biplane fans that allows them to see two wings on anything. He also seemed to have a chip on his shoulder (it was a balsa

chip . . . and that's the worst kind). Why the chip was there became almost immediately evident. (We forgot to mention that biplane fans are also loyal . . . with long but hazy memories) "That design looks familiar!" . . . No hello, how are ya? . . . just "That design looks familiar!" This hearty greeting was quickly followed by "I saw a biplane in a magazine a while back that looks like that one. "Is that where you got the idea?" Now you'll have to admit, this is a shaky way to win friends and influence club members!

This story has an equally shaky ending. Friend biplane-critic summoned a

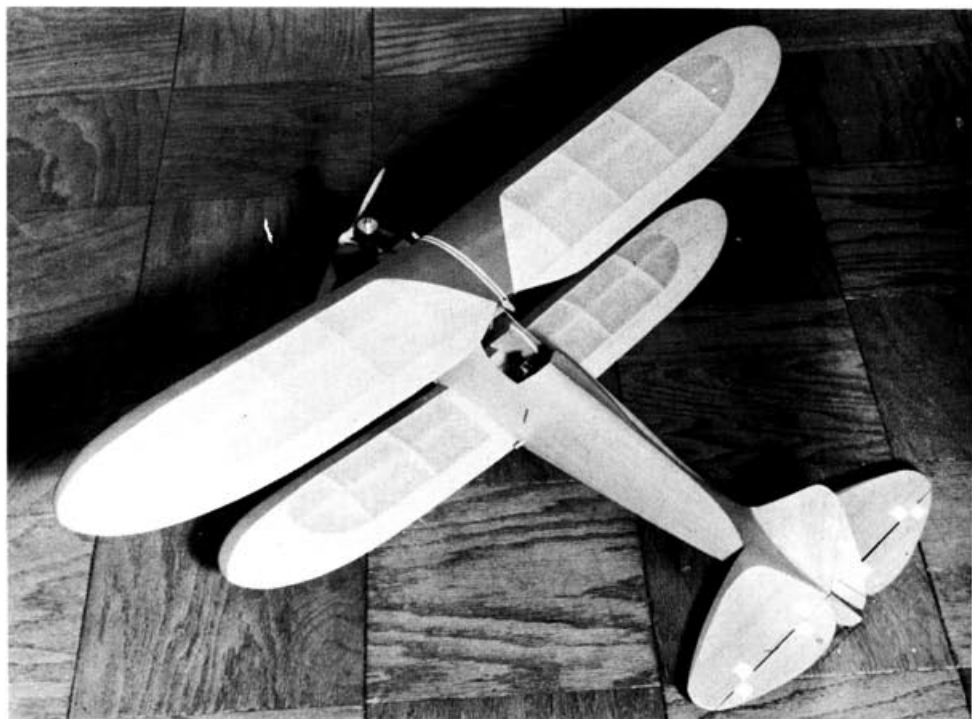
cohort to ask him what the name of that biplane was in "the magazine". The cohort thought for a moment and replied it was called a "Duet". I tried to explain that I had also designed the "Duet" and hadn't seen any great similarity between the two. My disgruntled audience merely shrugged and ended our meeting with "Sure!" As it turned out this modeler has a large crush on the "Duet" and felt that even if I did design it, any attempt to use any part of it in another biplane made me guilty of plagiarism. Woe is me!

Actually I haven't looked at the  
(Continued on Page 33)



Dural type gear, Hobby Shop variety. Use as is.

Ecktronic "Courier" Receiver, relayless variety. Babcock Escapement, right-left-up-down.



# CHICKEN HAWK

(Continued from Page 15)

plans or even pictures of the "Duet" for almost two years. But I'll have to admit that, in the final analysis, there is a resemblance. So, sue me. This word play did take place . . . give or take a little. But that's not the important point in our construction story. The important feature from a modeling standpoint is performance and we're sure you'll find the "Chicken Hawk" worth the little extra effort needed to bring it into being. Balancing is easy with the equipment outlined and arranged according to plan. Additional gear, such as extra batteries can be arranged between formers No. 2 and No. 3 without disturbing the balance.

But we're getting ahead of our story . . . we're flying high with a ship that hasn't been built yet! That can be corrected with the proper amount of  $\frac{1}{16}$ " sheet, a dab of glue, some pins and a little patience. Shall we?

**FUSELAGE:**  $\frac{1}{16}$ " medium weight balsa was used throughout on the original. With the proper amount of juggling you can get both fuselage sides out of one 4" sheet. We used 3" stock and spliced just above the bottom wing along the line shown on the plans.

Use a little care to be sure both side pieces match . . . including the slots which align the bulkheads. If 3" stock has been used for the sides, cement the splice pieces in place before marking the side outlines. This will help assure the accuracy of the lower wing position which is a critical point . . . or could be if the angle of attack should differ too much from the plans. Next cut out the  $\frac{1}{16}$ " sheet doublers and cement in place.

Layout the bulkheads and cut to outline. Applying a little cement skin to both sides of each bulkhead will help when you come to cutting out the areas through which the control rods pass.

An easy way to lay the groundwork for correct alignment is to cement former 5 in place and pin the fuselage sides together at the rear. A rubber band will draw the side in to the outline of No. 5. Next cement the  $\frac{1}{2}$ " sheet balsa piece which makes up the forward fuselage bottom from the leading edge of the bottom wing to the

(Continued on Page 38)

nose. With the sides pinned securely to this piece, install the  $\frac{3}{32}$ " ply firewall and the  $\frac{1}{16}$ " ply formers 2, 3 and 4. Here again rubber bands will help draw the fuselage sides in to conform to the former's outlines. Don't hesitate to apply hot water directly onto the wood at these bend areas. Use a tissue or paper towel to apply the hot water at the spots that need it.

Now the remaining formers—6, 7 & 8—can be cemented into place. Rubber bands will come in handy here, too, plus a little more hot water. To get the area over former 8 to sweep up into a gentle flow toward the fin, we used hot water as a start and applied some snap type clothes pins to

force the wood to shape. Needless to say, the fin and stabilizer should be cemented in place prior to this bit of business.

The fuselage top from the cockpit to fin can be cemented in place now. This leaves only the forward top and rear bottom pieces to be installed.

We advise cementing the top wing mount platform onto the pylon strut prior to setting it into its location between formers 2 and 4. This way it can be accurately checked to be certain the platform is perfectly perpendicular to the pylon before it becomes a permanent part of the fuselage.

When dry, and before the  $\frac{1}{8}$ " outer pylon sandwich sheets are added, cement the basic pylon assembly in place. Cut and install the  $\frac{3}{32}$ " sheet fuselage top piece between formers 2 and 4. Then, before the cement is dry on both the pylon and top piece, fit the  $\frac{1}{8}$ " pylon sandwich pieces into place to check for accuracy of pylon attitude. These  $\frac{1}{8}$ " sheet pieces do not have to be cemented in place at this time, but they do serve as good alignment guides.

The  $\frac{1}{2}$ " sheet nose pieces can be cut, fitted and cemented into place. The radio hatch cover can be cut and hinged in place also. The fuselage rear bottom  $\frac{1}{16}$ " sheet can be positioned after control rods have been installed. Finish-sanding can be done once everything, except the headrest, has been cemented in place. The headrest should be finish-sanded before cementing it in its proper place. To get the outline of the nose section, refer to the forward former outlines. Installing the lower wing dowels and the plywood landing gear backstop will just about complete the fuselage, except for paint.

**WINGS:** To aid construction, mark rib locations faintly on both wing's bottom leading and trailing sheets.

Pin down bottom wing sheets of one wing panel at a time and cement the  $\frac{1}{8}$ " sheet spar in place. Next cement ribs and plywood dihedral brace in place. Sand the outer edge of the bottom assembly slightly to make a better joint with the top sheeting. Cement top sheeting in place. When dry, pin the first panel of each of the top and bottom wings in position against the bottom sheets of the opposite panel. Prop each finished panel up to effect dihedral, then complete these panels in the same manner.

**FINISH:** After a thorough job of fine sanding, your "Chicken Hawk" is ready for its finish of Jap tissue and dope. The wings get the tissue and the rest gets dope. We topped it off with four coats of clear on both the wings and fuselage. Two coats of red trim finished the job.

**EQUIPMENT:** Power is supplied by a Cox .049 Baby Bee. For radio equipment we are using an Ecktronics "Courier" receiver and a Babcock escapement for up-down-left & right. Two pencells supply the juice. The plans will explain our method for spring loading the control surfaces. This is about the simplest solution to a somewhat knotty problem we've been able to come up with.

**FLYING:** First, let's test glide our Hawk. We've all heard of the models which "flew right off the board". This is usually a somewhat exaggerated world we'd all like to live in where models are concerned. We've come close to this . . . closest, perhaps, with

the "Nomad". Within about three test glides it was gliding like we figured it should. The first two weren't bad, but still either a bit nose or tail heavy. For some sheer stroke of luck . . . and I wish I could explain scientifically why, the "Chicken Hawk" hit its stride on the first toss. No changes, no adjustments . . . and I'm sure it'll never happen again. Certainly never with that most difficult of all birds to trim, a bipe.

So we feel that you'll probably have less trouble and more success with your "Chicken Hawk" than normally encountered. Balance your model as shown and go for the long flat glide. Then, go for the clouds. Good Luck and Good Flying. Keep in touch. ●

