

## KELSO BARNETT'S 1/2A TEXACO R/C FLY BABY

By KELSO BARNETT . . . Here's another charming R/C replica of a famous Old Timer model intended for use in SAM 1/2A Texaco contests or just plain old fun flying. So grab your trusty Cox .049 engine, dust it off, and get ready to order your plans . . . you'll want this Pete Bowers classic in your hangar!

### FLY BABY! CATCHY LITTLE NAME, ISN'T IT?

It goes far back in history and was a true old-timer (published as an ROW in April 1945 *Model Airplane News*). Peter Bowers still uses the same fin and rudder shape on his full-size *Fly Baby*. As a matter of fact, the entire plan form, other than the change from high wing to low wing, is almost identical. Change for change's sake is not necessarily good.

My SAM flying partner, Jim Reynolds, and myself were searching my old magazines and John Pond's catalog for good 1/2A Texaco possibilities and up popped the *Fly Baby*. The entire plan is pure Peter Bowers with the exception of the elevator and rudder hinge lines, dihedral braces, and the installation of radiogear.

The wing area is 300 square inches which is just right for an .049 powered two-channel rig with 16.66 ounces of weight as required by the SAM 1/2A Texaco rules. We were both concerned about weight in these small birds. Don't be. Built as shown on the plan with Ace servos, Dorfferr receiver, and a 225 mah battery pack, this model will weigh 17.02 ounces when covered with dyed Silkspan. Most all plastic covering materials will weigh more and give you a much less rigid structure when completed.

*Fly Baby* is a pure joy to fly. In my case, much frustration occurred before first flight because of the "only on Sunday" winds. Jim and I made three trips to Sequin and were blown out so badly that we couldn't even take pictures. On the fourth try, frustration level was so high

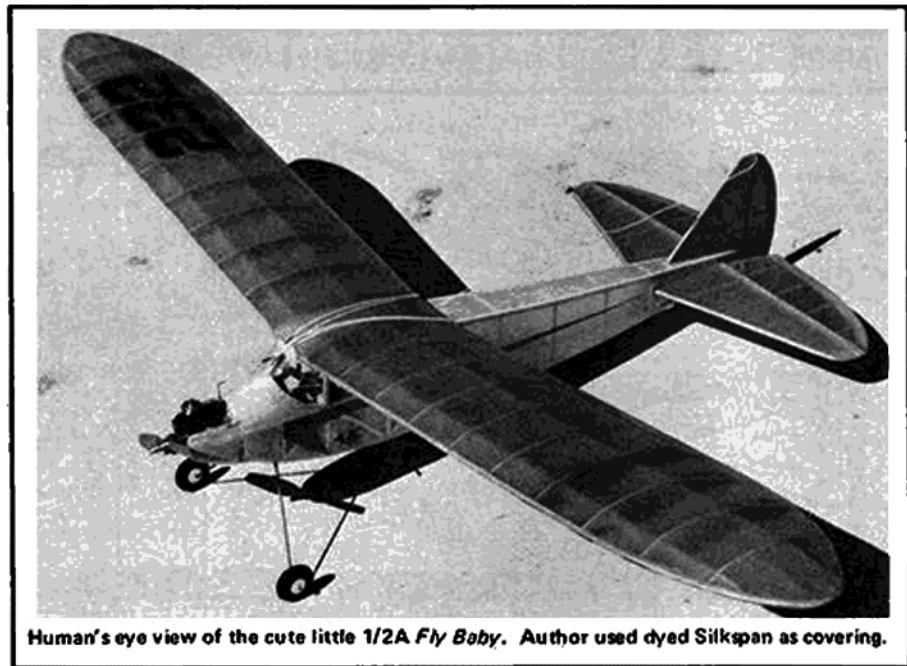
that *Fly Baby* was going to fly, period.

Well, it did. . . . Dodging rain showers, and with a very low ceiling, off went *Fly Baby*, fortunately with only half a tank of fuel (4 cc). It has a good climb rate and is very stable.

The first flight, and all subsequent flights were made with full down trim, leaving the sticks alone, climbing in a large, very open turn with rudder trim only. We would recommend that you do not take your eyes off of the model and

to use a helper, just in case. When the engine quits (you probably won't hear it, but you will notice a dip), bring the elevator trim to best glide, and fly rudder trim only.

Flying is a combination of work and luck. The work arises from coming up with a fuel and propeller combination which will give a four-minute-plus engine run. The rationale for this is as



Human's eye view of the cute little 1/2A *Fly Baby*. Author used dyed Silkspan as covering.

follows. Slowing down the engine and climb rate while reaching the same altitude will give a longer flight. In other words, if you reach 1000 feet in three minutes, you will automatically gain one minute of flight time if you can slow down the engine and reach 1000 feet in four minutes. Reduce nitro content and increase prop size to suit the weather on a given day. On a not too hot day try 10% nitro and an 8-4 prop. Warmer, try 10% nitro and a 7.5-4. Just keep playing until you get it right. The luck comes from good "up air" instead of "dead" or "down air."

If you do lose sight of *Fly Baby* for any period of time (and you will) use rudder and spin down until it becomes visible again. If your neck gets too sore from the upward stare, put the transmitter down and lay on the runway. It's much easier this way.

Construction hints are few and not really required . . . build light and sand well. Please note that the fuselage uprights behind the cabin area are made from 1/8 square, and one side will need to have the uprights spaced 1/16 inch away from the board while the other side will be flush with the board. The landing gear should be fastened to the plywood bulkhead before it is inserted into the fuselage.

The cowling is made from 3/8 balsa sheet formed and sanded to match the nose. Do not forget a good size drain hole in the cowl bottom. When you are happy with its shape, coat the inside of the cowl with two coats of five-minute epoxy thinned to brushing consistency with butyrate thinner. The bottom of the fuselage will look much better if stiff card stock is fitted from the cowl back to the end of the stringer. When covered with Silkspan, coat this area with more thinned epoxy. The small weight increase is a lot better than oil soaking which will occur.

Wing rubber band holders are made from 1/8-inch aluminum tubing sticking out 1/2-inch from each side and front of the cabin.

The original *Fly Baby* was covered with Silkspan, dyed to color, and clear doped. This is about the lightest covering material I have found that will give a rigid structure and resist warping. Dyeing is really easy, and it will be worth your time to try it. Rit or Tintex in the color of your choice will work equally well. My method is to mix the dye in about a quart of water and bring it to a boil on the stove to thoroughly mix the color. Now, pour this mix into two gallons of water (a plastic bucket works well), immerse the Silkspan loosely folded, and stir once in awhile.

When the paper is a little darker than desired, remove and wring out the dye. Then, rinse the paper until the dye will no longer discolor the rinse water. Smooth out the paper, and hang it up to dry. When dry, iron it with a low temperature setting to get it basically smooth. Now, cut your pieces to outline dimension, wet, and cover, when it dries you will have the prettiest covering job you ever saw.

The stabilizer/elevator must be covered and installed before the rear of the fuselage can be closed up, and the rudder installed. There is not much room in the fuselage for the radio installation, so it is easier to put it in prior to covering the fuselage. Here is how I did it: install engine and landing gear; position the battery pack, receiver, and switch; loosely position the servos. Now attach the wing to the fuselage with rubber bands and shift the servos fore and aft to balance at the 40% point, (right between the spars) in a slightly nose heavy condition. Now, permanently mount the servos, cover the fuselage, and enjoy! ●