

As Boris Karloff would say, "while sitting in my laboratory" (Hobby Shop) and discussing the facts of life about model aircraft more especially R/C low wing trainers, some of the local model scientists lamented the lack of variety in low wing trainers. This didn't register with me at the time. Little slow, I am. But when the shop purchased a load of scrap ribs from a model manufacturer, it dawned on me that they would make an excellent low wing trainer wing. They were originally used on a high wing craft. So, with a batch of these and a couple of square pieces of balsa, I began gluing a wing together. I had no plan drawn, just an idea, besides if you mess up you can always say that's the way you planned it. (I do.) As this masterpiece progressed many of these same locals asked what the name was and what it was all about. I kept telling them it was an airplane, but this seemed to disjoint them, so I figured I had better name this bird before they disjointed my nose. While pondering this dilemma, my lady walked in and the flash came and the name appeared. I'm not sure if it was idea or the fact that she effects me that way, but she is a teacher and that's what I named the ship . . . Teacher. Smart, huh? I got that way from dating a teacher. I was going to lay some ten dollar words on you but she hasn't taught me how to spell them yet.

Anyway, with the construction complete I decided to teach with the ship if it did what I thought it would and should do. It was all up to mother nature as to when I would get to test her. In Indiana these favored days can come as a complete surprise or after a long wait. They usually come when you have to work. Sound familiar?

The weather man predicted a good day, so I packed up all my goodies and headed out. We must have taken a wrong turn somewhere, because when I arrived at the field the winds were very mad. But, I had come this far and was not about to be detoured. Besides, like the man said, if it is going to fly it will fly in the wind. I'm not sure if he was a knowledgeable person or some nut who likes to see fat guys crash and burn. I was there to show off, so I couldn't back out. Using the van for protection and it's battery for the starter, Jerry Caldwell, and I started the new Tiger 35 and watched in awe as that engine ran beautifully the first time out of the box. We carried the ship to the highest hump in the field, as it had rained and was a little gooey even for walking. When we arrived in an area where the wind was parting our hair in the middle, we cut her loose. After a short run the ship rose and hovered like a helicopter. The sight of this intrigued me even though the others wanted me to land. I decided that full throttle and up was in order and we were off like a shot, down wind. She came back okay, so we decided to see what she was made of and began putting her through various maneuvers. It flew great. After a safe landing and a few minutes for bull and the regaining of my composure, the wind died some so we put her up again. This time Jerry took the box for a while and he agreed that the ship was a good one. With all this confidence I decided to bring Shirley, my intended, out and give her



PHOTOGRAPHY: JACK SHEEKS

Teacher

By Jack Sheeks

Learn your first low-wing R/C lessons from
this easy to build four-channel ship.

her first lesson. While showing her how each stick controls various movements she asked a good question, "What happens if the motor stops?" I smugly explained that we would merely glide the ship back to the field.

With those famous last words we chopped everything and began our downward leg of the landing pattern and turned toward the field and the runway. We were doing real well, but had forgotten that the wind was mad at us. At touchdown we hit like a ton of bananas, skidding on our nose and breaking one of Top Flites finest props. I never hurt the ship, but my pride was bent and Jerry didn't help by yelling to me from across the field about flaired landings and burying planes. Of course I explained this was all part of the lesson and Shirley should learn not to do this. In a way, it really was a good lesson. I have vindicated myself and the ship now, and it also flies great in normal wind. I have decided not to show off with a new airplane anymore, or else I may have to buy part of the Top Flite Company.

Now that you have read this far, I hope that you like this little R/C trainer. It is like most teachers, it will allow you to do it over and over till you get it right. It's a very rugged little ship.

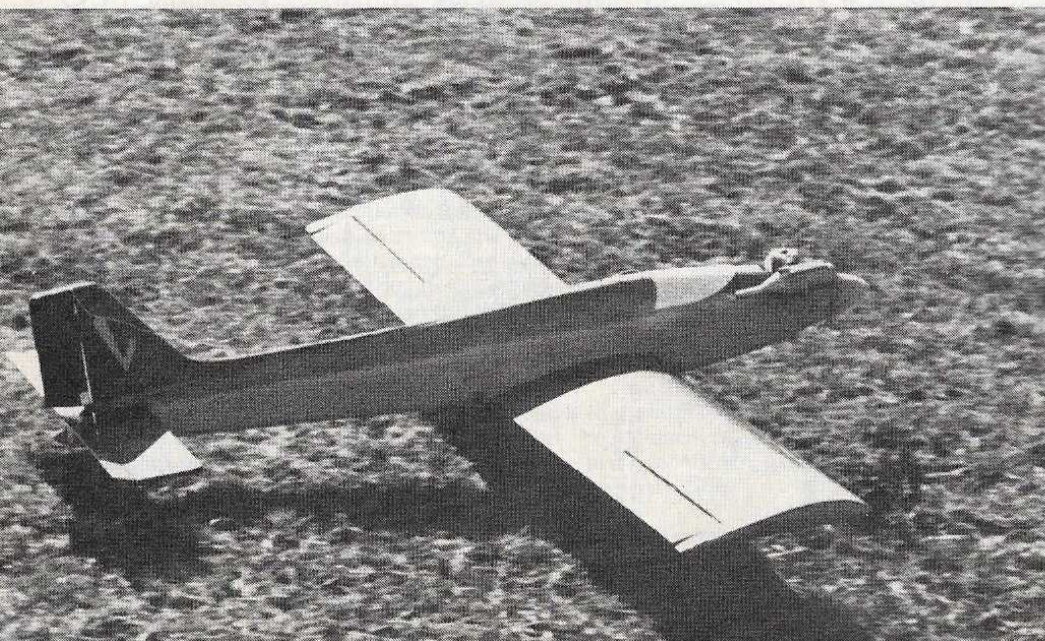
Construction

Since this ship has no dark secrets of construction and uses one basic wing rib, begin

by cutting out the ribs or buying them like we did. Since the wing is the heart of any model be sure to build this straight or you will do tricks in the air before you are ready. Set the ribs on the spar over the plan. We build one wing half at a time. Hot Stuff them together, adding the top spar next. Glue the bottom 1/16" rear planking into place, aligning the ribs so the trailing edge stays straight. Then the top planking in the rear is added. Now comes the leading edge and the landing gear blocks with the 1/16" doublers for the gear. Glue the top and bottom leading edge planking into place next with white glue and Hot Stuff to hold the edges while drying. The testy part comes next, cutting the barn door ailerons into the wing. It's not hard if you have a new #11 blade for you knife and a sharp Xacto saw. Eyeball the plans and mark the trailing edge with a ball point pen. Make the forward cuts first, then the horizontal ones. After the aileron is free, cut the excess away from the aileron so you can install the leading and trailing edges into the aileron. Glue the 1/4" trailing edge stock into place, cutting to final size after it is dried. Install the plywood floor into the aileron for the control horn and seal it up with 1/4" balsa and the false rib by the control. Hinge this and slide it into place for now. Install the controls and the bellcrank floor, and hook them up with quick links, making sure they work smoothly. Cap strip the rest



Jack Sheeks prepares for flight with Teacher (**above**). This plane is designed to be a low wing trainer. Super Tigre .35 nestles in nose of Teacher (**below left**). The plane shows off its clean and simple lines (**below right**). Teacher on early test hop (**bottom left**). Teacher Shirley Ann Jester holds trainer which has been dubbed with her profession's moniker (**bottom right**).



of the wing adding the tip and anything we have forgotten. Now you can turn the plan over and do it again, this time adding the dihedral braces. I epoxied the wing halves together, then used light weight celastic to hold all this stuff together. You can Monokote this now or later, but don't glue the hinges in permanently until this is complete.

The stab and rudder is easy, so cut them out, sand to shape, fit the hinges and set them aside for installation. Now bend the landing gear including the tail wheel, mounting it on the 1/16" plywood floor.

The fuse can now be tackled by cutting the fuse sides out and gluing the 1/16" plywood doublers into place. Saw the firewall out and install the Dave Brown motor mount onto it. Epoxy this and the second plywood former into place. While this is setting up, cut the rest of the body formers from 1/8" balsa and install them as soon as you can, pulling the rear of the fuse together as you go. Next install the fuel tank along with the dowels for the wing hold down.

Now comes the throttle cable, push rods for the rear controls, along with the tail skid and the stab. Hook the controls up temporarily.

The bottom block is next on the agenda along with the rear tail block. The turtle deck is next by gluing the 1/8" sides on first, sanding them straight with a long block so you can install the upper block. Carve and sand this to shape. Nose blocks are next along with the filler blocks where you goofed and created gaps. Carve and sand this section so the engine fits along with the muffler. Now that you think you have your ship just about finished, go back over the steps and see if you forgot anything. Epoxy the rudder on, it will be of value later. Now you can final sand the ship and cover it with Monokote, or whatever, and glue the hinges in permanently. We installed a six channel Futaba for guidance and the whole mess came out weighing less than 3 1/2 lbs.

Now that we are through warming the wax in your ears, why not give the Teacher a chance to prove that low wing trainers are really okay and easy to fly.

