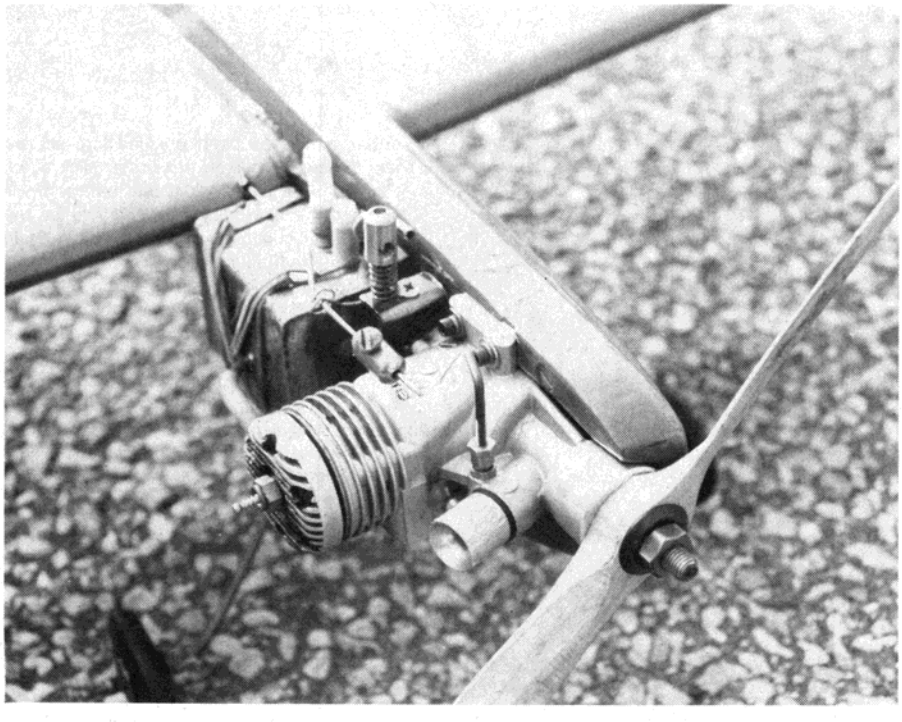
PHOTOGRAPHY: BLAIR MONAGLE

There seems to be an event common to most controline racers. The *Big Quickie* exemplifies that type of racing called Big Goodyear in New Jersey. The event uses .35's but they're not as fast as Slow Rat.

Big Quickie

By John Ross

Formula C/L racing is fun and competitive. This "Big Goodyear" is among the best.



The SuperTigre G-21, a favorite of many racers is the motive power for the *Big Quickie.* However, it's only one important part of a complete "racing system" where the sum of *all* the parts creates a winner.

While I was at the Nationals in Massachusetts this past summer, I had a chance to talk with several people who like to race controline airplanes. They were from all parts of the country. One event, that we all seemed to have in common, was a limited type of racing for .35 size engines. The rules were different, depending upon the region, but they were all saying the same thing. The flyers like to race .35's but didn't want to go as fast as Slow Rat.

The *Big Quickie* was designed for the formula we use for this type of racing here in New Jersey which is called Big Goodyear. The planes must resemble a Goodyear racer and have a two wheel landing gear. We use a two ounce gas tank and 100 lap heats with a 200 lap final. No pit stops are required. The most popular race plan is to try for 50 laps per tank and go as fast as you can. The leaders in Big Goodyear are coming in at about ten minutes flat for 200 laps. Our racer is patterned after the *Lil Quickie* Formula One racer designed by George Owl and built in the early 1970's. The *Quickie* makes a most attractive racer that flies well. Many are seen in 1/2A and .15 racing events. As far as good flying goes, the *Big Quickie* is second to none.

The construction of the *Big Quickie* is pretty straightforward except for the aluminum engine mount plate. The original *B.Q.* used this set-up and the front end is still like new after three years of intensive racing and test sessions. Make sure that you get a piece of hard aluminum and secure it to the maple mounts with wood screws and epoxy. The engine mount bolt holes are drilled and tapped right into the maple mounts and use 3/4 inch bolts. The shut-off can also be mounted to this aluminum plate.

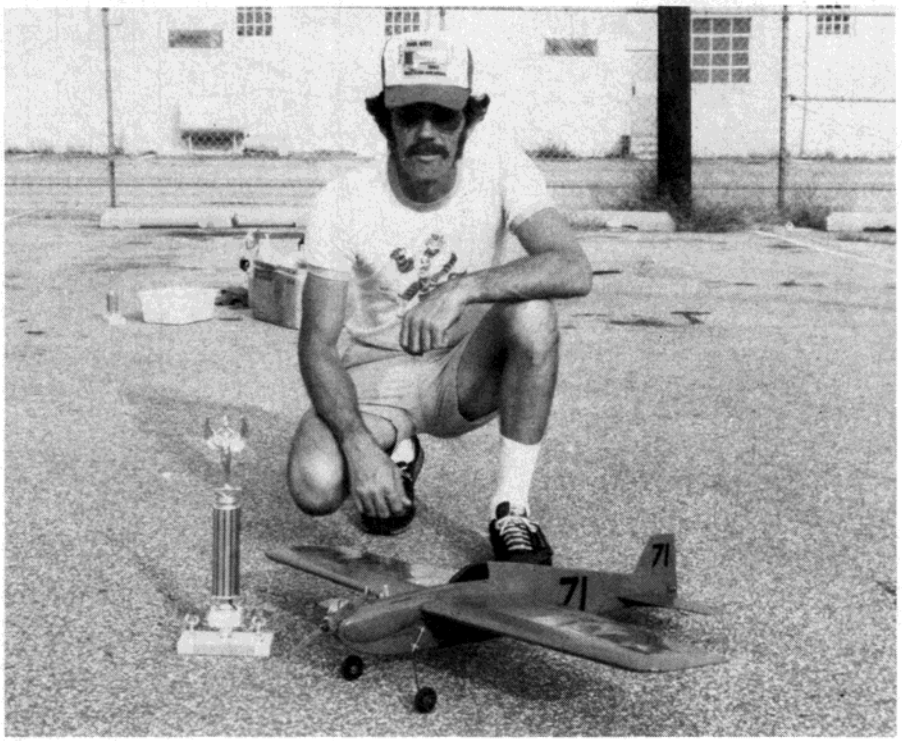
I would strongly recommend that you use epoxy for all of the fuselage construction and the joining of wing and tail sections. I use a putty made of epoxy and micro-balloons for filling all of the gaps at the wing/fuse and tail/fuse joints and also use it for moderate fillets. They will never crack and they will take epoxy paint well. Don't forget to use the 1/2 x 1/4 spruce in the fuselage. During a race, you should be catching the model while it is still moving and the spruce will give some extra insurance against a broken fuselage.

The original model is finished with one coat of Hobbypoxy White Undercoater with a coat of red on top; the wings are covered with red MonoKote™. This simple procedure produced a nice looking plane which has proven very durable.

There is one more thing that I have neglected to mention concerning the air frame construction. You needn't be too worried about building an ultralight model. Select medium wood that will be durable and try to make the neatest joints possible. The wear and tear on these types of models is quite severe. It takes a lot of flying to work out a solid racing system and if you don't build the plane strong enough, it will be worn out before you go racing. Most of these racers weigh in around two pounds and some are as heavy as 2 1/2 pounds.

Racing system

The *Big Quickie* will provide you with an attractive, good flying and solid model to build your racing system around. What do I mean by racing system? It is the airframe, tank, engine, propeller, fuel, pilot, and pitman all working together to produce the quickest



Look out "Bad Bud", John Ross, our author is gonna get you. By the looks of that trophy, it may be soon. Big Goodyear affords any number of individualistic approaches to the solution of a similar goal — victory.

race time, time after time.

Assuming that we now have a proper airplane with wheels that won't fall off, pushrods with foolproof connections between the bellcrank and elevator, and a shut-off that works reliably and positively, we can think about a fuel tank that will run consistently throughout the entire supply. We have used the Uniflo type of tank made from the Perfect, large rectangular tank. These can be cut to any capacity and the shape is right for Big Goodyear racing. Mount the tank securely and make sure that it runs steady before you go racing.

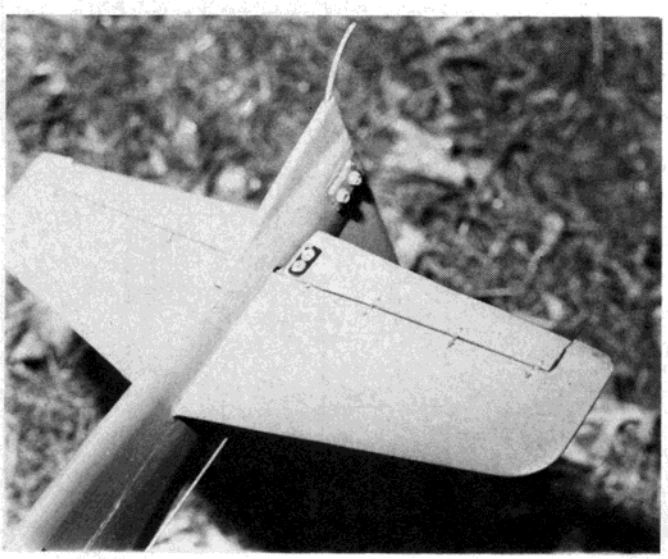
Naturally, you will want to have the "meanest" engine the rules will allow. In our case, that boils down to the familiar G-21 35 Super Tigre that the combat flyers used to dig holes in the ground with. Even though this engine is not in production anymore, there are still plenty of them around and parts are relatively inexpensive. Bear in mind that any engine will need to be developed in your racer in order to make the most of it. You must learn how it re-starts best and the correct head spacing for the fuel and type of prop you are using. You must adjust the head so that the engine will not blow the glow plug, even if it goes lean for part of the race. All the air speed you have worked for will be for naught if you blow the plug during a race.

Once you get the engine running consistently, you can find the right prop. We have learned a lot about this by testing what seemed like hundreds of props over the years. We have found that you need a prop with 8½ diameter. A racing style blade such as a Zinger 8½-7, Rev-Up, Pylon Series, or Top Flite Pylon all work well! The pitch can be selected by trying them.

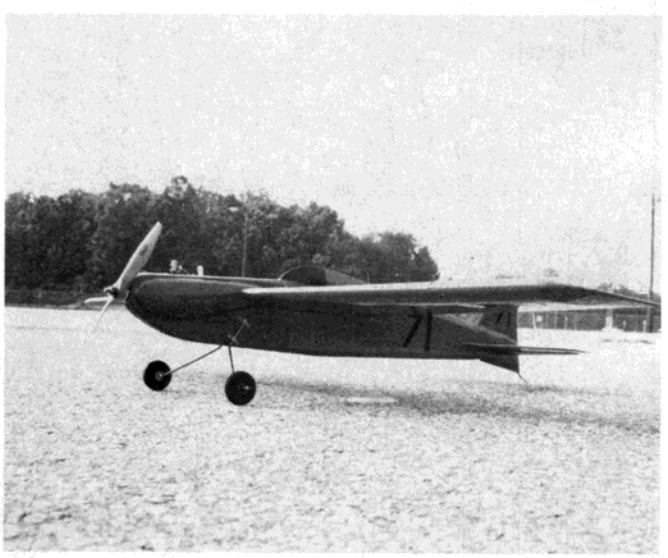
For a long time, we used to go out and time our speed by flying in the most efficient way. That is, by turning in the circle as if the handle was the center. When we went to a race, our models seemed to sound a bit sick and the air speeds were off by up to two seconds. It dawned on us that in a race, we are not pivoting, but rather are walking around in about a three foot circle. Back to the test circle.

I discovered that the prop we were using slowed down 1.5 seconds per seven laps when walking the three foot circle while a prop with less pitch and slightly less top speed only lost one second while walking and was faster than the first prop under the same conditions! I also tried cutting down the nitro in my fuel. Top speed dropped from 17.4 to 18.8. The result was less top end but a much steadier run. These two changes resulted in a much better race time. My previous best was 10:55.2, and after the test session I have just described, I turned a time of 10:06.3 for 200 laps. The reason I described this event is to encourage you to experiment in order to achieve the best results in a race type situation and not just to shoot for the highest speed for seven laps. It has also been valuable to write down test results so that I can look for patterns of previous sessions to try for improvement.

Strangely enough, we have not yet beaten the best times of our arch rival, who we shall call "Bad Bud" for want of a better name. By systematic development, we have come much closer. His whole racing set-up is different than ours and that points out the nice part about this sport. Two or more highly, individualistic approaches to a common goal can achieve similar results if you are willing to work out the bugs until you get it right. Enjoy building the *Big Quickie* and enjoy racing.



Wear and tear on Big Goodyear models is severe so make sure all joints are solid and the linkages secure.



Patterned after the Formula One *Lil Quickie* of George Owl, The *Big Quickie* is an attractive racer which flies well. Construction is straightforward.