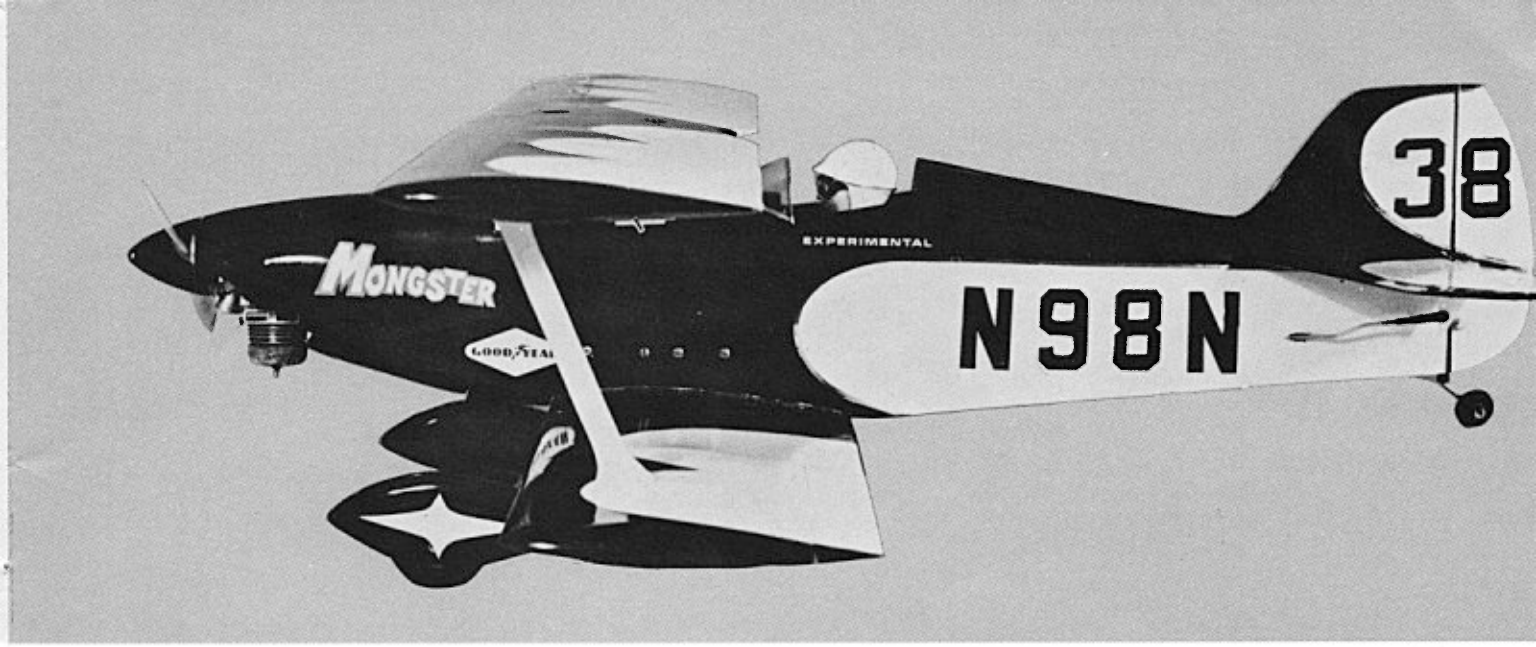


THAT LITTLE MONGSTER!

Even if you don't intend to fly it, you should build this little jewel for your best girl friend's charm bracelet. Model is of a winning full size biplane racer, and it has inherited all of the abilities of it's big brother. Designer is current Quarter Midget Champion. **By Ed Nobora**

● Did you ever get turned on by a wing spar? That may . . . *does* sound kind of silly, but that's what happened to this editor upon opening the plans that Ed Nobora sent us of his semi-scale quarter midget Mongster.

The first thing we noticed on the plan was a little 14 inch stick of 1/16 inch balsa jokingly labled "front spar, 4 req'd!" As we continued looking it was discovered that the joke was on us. Here was a little bracelet charm sized airplane . . . not for novelty, but a Gung-Ho, all-out racing biplane that could hold its own in the rapid Quarter Midget Pylon racing traffic.

If you'll permit a relative old-timer a moment of reflection: Upon looking at this diminutive little R/C bipe, we had to stop and think back on the tremendous progress R/C has made in just 18 years. Back in those superregen, gas tube, relay-switching days, the whole idea of a 28-1/2 inch R/C airplane would have been considered as unlikely as a Buck Rogers or Flash Gordon adventure (Remember though, the artists depicted gals wearing short shorts and boots. They were w ay ahead of the fashion designers).

So much for that. Let's get back to the present. The Mongster is a model of Californian Dallas Christian's biplane racer. The big (?) one has been a consistant winner and was National Champion in 1969.

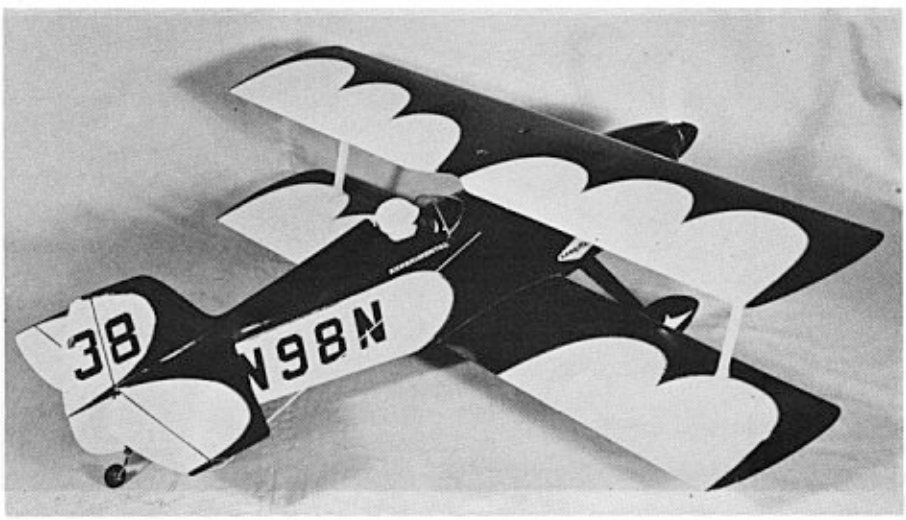
For those who wish to fight the degeneration to P-51's, Ballerinas and Midget Mustangs, without having to sacrifice chances of winning a race, the Mongster is an excellent choice. Paradoxically, Ed Nobora kept his as a back-up plane during 1971, never racing it. When he finally put it up for a timed run, it was only tenths of a second slower than his championship P-51, (now kitted by J & J Industries), the ship he had been flying all season.

The wing thickness on the Mongster meets either of the two current rules requirements, being both 10% *and* 5/8 inch thick. Scale is 2 inches to the foot! Yes, the full size one will clear a 15 foot wide fence opening with 2-1/2 inches to spare at each tip!

If you're all hopped up and ready to build, try it mentally first. That is, go through the construction step by step in your mind, making note of steps that take precedence over others so you won't build youself into a corner.

In selecting balsa, stick pretty much to medium soft or contest grade. Let the plywood take care of the stress areas. The minimum allowed weight is 2-1/2 pounds, so your target is one ounce over that!

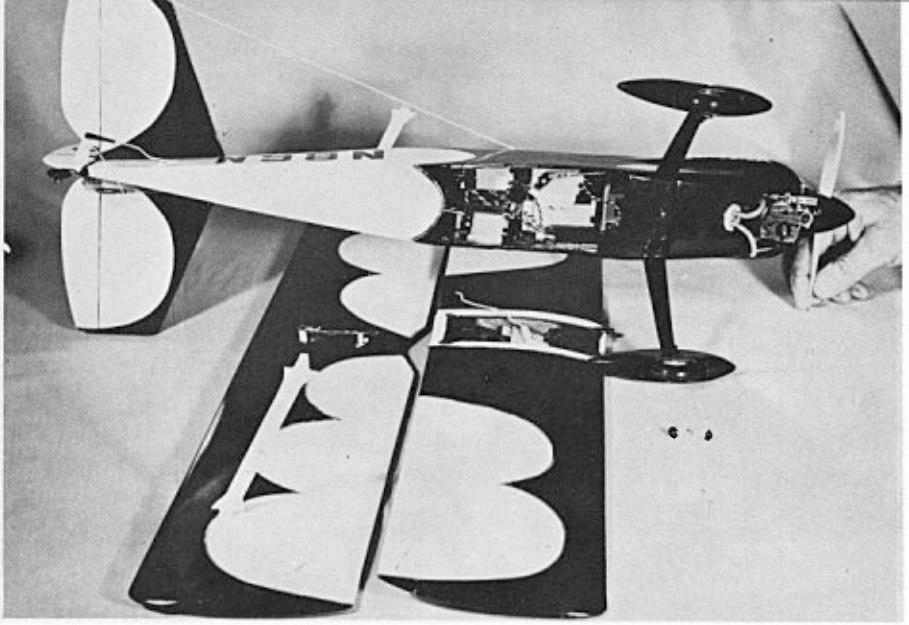
Plan your tank location carefully. As



Whether you're interested in Quarter Midget racing or not, if you dig biplanes, this little jewel should grab you. No station wagon needed to go flying, the span is only 28-1/2 inches.



The Mongster's designer, Ed Nobora, dressed for Ohio winter flying. Ed current QM champ.



The Mongster's radio installation makes use of coupled rudder and ailerons. Note coupling link attached to aileron bellcrank. Arrangement saves space and weight. Wing struts plug in.

shown on the plans, it's a little low for an engine that is not on pressure. The original uses a Fox .15 with the needle valve spray bar filed for more intake area and a pressure fitting in the center of the backplate. This combination has provided a dependable low idle . . . very important in meeting the rules requirements.

Somewhat reminiscent of the old Curtiss Schnieder Cup racing biplanes, the top wing of the Mongster sits on a central pylon rather than being supported by cabane struts. The outer struts are more for looks than anything else (on the model) and merely plug into slots. A dot of silicone rubber on each tab keeps them in place, yet they are removable.

The edges of the tail surfaces should not just be sanded round, but rather, dig up some more elbow grease and taper them to as streamline a shape as possible. Remember, a few minutes extra work here and there, may save you some winning seconds around the pylons!

Wings and tail on the original models were with Monokote. The fuselage was finished with silk and dope.

To save weight, mechanical coupling of rudder and aileron were employed in the Mongster, though with small servos, this is not necessary. If a separate rudder servo is used, hinge the whole rudder. If coupled rudder and aileron are used, only the bottom half of the rudder needs to be hinged. Do not exceed the recommended control surface movements.

In flight trimming, start with the zero surface settings and engine offsets shown on the plans. If the ship balloons under power but has a flat glide, add downthrust to the engine. If ballooning continues, shim up the trailing edge of the top wing at the rear nylon hold-down bolt.

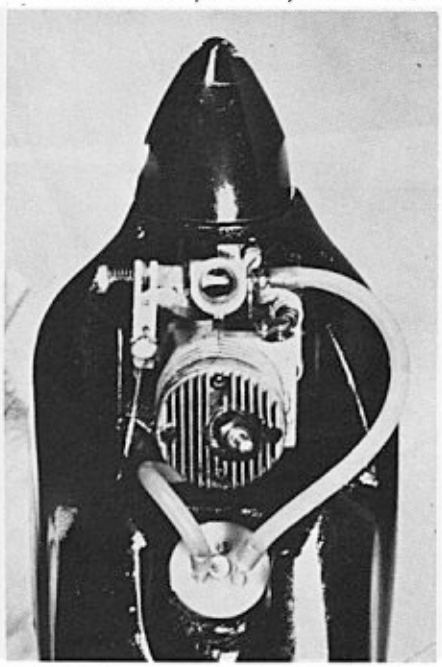
When trimmed out properly, the Mongster is a solid airplane to fly, with no bad habits. Dead-stick glide is not exactly floating, but it is steady and the ship will mush in without falling off into a snap roll. Ground handling is excellent, with no tendency to ground loop on take off.

So . . . Double your wings and
Double your fun
Build a Mongster
And finish Number One!

Any questions? Write to Ed Nobora, 6265 Chase Drive, Mentor, Ohio 44060●



Mongster's name is yellow Monokote on red Monokote background. Pylon strut simplifies top wing mounting. Pilot is 2 inch scale Williams Bros., engine is Fox 15 modified, on pressure.



This shot shows how spray bar was filed down to enlarge air intake. Sullivan slant tank handy.