Veterans will quickly see traces of the old Smog Hog and Astro Hog in El Cochino — which means "biggest hog of all."

El cochino

A Class C stunter with simple, functional lines uses the best ideas from R/C designs of the last several years.

BOB MORSE

EL COCHINO has been around for quite some time now, the first ship being built in 1963. We enjoyed it then and we're still having a lot of fun with its successors. Despite our "Charley Fumblefingers" approach to contest flying, old El Cochino has kept us pretty well up in standings in the West Coast contests. Our biggest contest showing was at a recent West Coast R/C Champ's meet when we were in third place after the first day's competition. We took care of this by "fine tuning" our engine before the next day's flying and promptly finished in fifth place.

Perhaps we had better get into the design philosophy of the ship and try to impress you all with painstaking effort we've put into shaking our slipstick and rattling our Reynolds' numbers in coming up with this arrangement.

We would like to, but we can't. The truth of the matter is that we've swiped every idea we've seen in the past that appeared to have any merit! You old-timers can see some Smog Hog, some Astro Hog and even a trace or two of Bob Palmers' old G-String in El Cochino. Those of you who understand Spanish will see the reason for our choice of a name (for those of you who don't, El Cochino translated is "the biggest hog of all").

We've streamlined the ship some, reshaped it some to fit the changing radio equipment, inched a "moment" around here and there, but, basically, it is still a fundamental arrangement.

There have been about 20 or so "Cochinos" built in our area, and in all probability, no two of them ever initially flew the same. Of the eight ships I've had in the past five years, a few of them have grooved right off the board and the rest have required some degree of adjusting to get the good flights in. We've seen some ships that are flying the Lazy-J pattern beautifully but go all haywire when trying to do some AMA pattern work. The two most promising villains in this case are the CG and the angle of decalage (that's a long phrase that means the angle between the mean chord lines of the stabilizer and wing). So, if you would like some "on the wire" maneuvers, don't be afraid to fiddle a little with these!

We begin our adjusting with the wing incidence, trying to get it down almost to

Continued on page 65

The designer, shown here with his latest of eight Cochino's — there are 20 in his area — outlines a trimming and adjustment technique for "on-the-wire" maneuvers.

El Cochino

Continued from page 20

the point where lateral instability would begin. With the incidence down to this minimum, the ship really bores, and conversely, increasing the incidence will slow the ship, and, up to a point, it will become quite docile.

Once the incidence is adjusted so the ship is flying as you like it, the CG can be gently adjusted aft to get the stalled spin entry and snap rolls.

Construction is about as easy as a built-up ship can be with only three bulkheads, two side assemblies and top and bottom sheeting in the fuselage. We build the sides using Core Grip contact cement to attach the 1/32 doublers fore and aft, then the engine mounts and #1 and 2 bulkheads are subassembled with the engine bolted in place. One side is then placed on a flat surface; the bulkhead, engine mount assembly is glued and clamped to this side; the opposite side is then glued and clamped to the bulkhead-engine mount assembly, voila, a basic fuselage with an engine that fits its mounts.

The fuselage is completed by adding the top 3/8 inch soft sheeting and the bottom 3/32 inch medium sheeting. With the engine and spinner in place, add the rough nose-shaping blocks and position the ply spinner plate with approximately 1/16 to 1/8 running clearance for the spinner. Pull the engine and rough contour the nose and fuselage to the shapes shown on the plans. Finish the contours with fine sandpaper and you are ready for paint.

The plans show a built-up wing which should pose no problems. It builds quickly on a jig and has proved to be a sturdy, dependable structure. We would emphatically recommend, though, that you use a foam wing (and stab) with 1/16 contest grade sheet covering. We know that it isn't really "building" as such, but if you want an almost foolproof wing, foam is the surest way to get one. We have found that our foam wings, in general, weigh no more than our wood wings and are generally a darn sight straighter. Our units have always come from FOAMCRAFT, but we have included templates so you can hack your own or have your favorite supplier cut one! Makes a good club project too!

In covering a foam wing, we use Contest-grade 1/16 sheet in 4-inch widths and butt-glue five sheets together on a flat board, sanding one side thoroughly smooth after the joints have set. This gives us a panel large enough to cover each wing panel with one sheet and a single operation.

A note about glue. There are hundreds of adhesives on the market today, some good and some bad. Our method is to use white glue or Titebond on all internal structural joints and a sandable cement, such as PACTRA B, on all external joints that require finish sanding.

The aileron control hookup shown provides almost no down aileron and lots of up. We've done this to stop the ship from jumping up when full aileron is applied. At the speed it flies, you've got to get it around pretty quick or you'll be in the next county and that "down" just knocks you all over. With this differential, she'll roll "on the wire."

We've talked about the nice pattern flying that Cochino can do. We haven't mentioned what an excellent trainer it is with six inches added to the span. The wing loading drops to 20 to 21 oz. per square feet and it becomes a gentle flyer, not forgiving, but an easy ship to train on with an instructor beside you.

As you get more proficient with your flying and want to liven things up a bit, go down to Sears and get a patented Cochino wing adjuster, more generally referred to as a hacksaw, and "have at it," trimming the wing span in increments until you feel comfortable flying with the span as shown.

Sometime ago, we read Harold deBolt's discussion of wing fillets and their effect on flying characteristics. Our latest Cochino incorporated rather generous fillets from the high point of the wing aft, and we concur wholeheartedly with Harold's conclusions that the vertical fin and rudder operate far more effectively in the less turbulent airstream provided by the fillets, and we do recommend you try them.

In closing, we know you will enjoy flying this ship, whether you are an almost beginning flyer or an experienced contest addict, it won't let you down!