



EXCALIBUR

# FROM CAMELOT TO SUBURBAN SWINGERS, VERY LITTLE REMAINS UNSCATHED AS WILL DAWSON PROVES THE PEN IS SHARPER THAN EVEN A LEGENDARY SWORD.

One of the terms commonly tossed around in modern day psychology is 'alter ego,' or 'other self.' One of the terms that hasn't been discovered by contemporary headshrinkers is 'author ego.' This term is used to describe that euphoric condition that descends like some ethereal vapor upon a designer after completing each new creation. That creation is, at once, the most unique design ever presented; possessing full-house capabilities; immediately claims one thousand two hundred eighty-eight wins in the last fourteen contests; is definitely not recommended for the beginner; and construction is always straightforward.

Loosely interpreted, those statements mean simply that here is another rounded-off box to encase the radio gear; it loops when full up elevator is given and rolls when the aileron stick is jammed over in the corner. As for its contest 'wins', it was the only machine entered in the Podunk Corners Annual Whoopee Barbecue and Fly-For-Fun Festival, and captured all event categories at least three times. Since it has a low wing and ailerons, it is definitely not for the beginner. And, since balsa, plywood, and silk are used throughout, construction is obviously straightforward.

Now, let's get the author-ego out of the way. The name, 'Excalibur,' obviously refers to the legendary sword stuck in the legendary stone. Since my own flying is, to say the least, legendary, and since my ships usually end up nose down in a pile of stones somewhere, it takes very little imagination to see the derivation of the name. (I bother to explain it only because the so-called 'editor' of this magazine HAS very little imagination!)

The design concepts were arrived at only after a careful study of all of the other worthless features used in today's revolutionary models. A large sheet of drafting paper was taped down to the kitchen floor, and pieces of various aircraft were glued in place. The piece that represented the airfoil was taken from the center-section of a Midwest foam wing. The piece that represented the planform of the wing was taken from a built-up version of

the Midwest unit supplied by Owen Kampen. The piece of tail was stolen from G&K's 'Cobia' design. The other pieces were fitted in between according to Chuck Cunningham's 'R/C Design Made Easy' Formula. So, all you guys, I owe you.

The 'Excalibur' was designed to this particular size to utilize the new Micro-Avionics XL-IC and Orbit Electronics 9.4 ounce systems, and the radio compartment was drawn around Dick Rehling's new two-plus-two servo mount for these systems. The Max .10 was used because it's the best RC engine in the smaller size category, both from a power and a throttle standpoint. Since the Micro and Orbit rigs were not yet available when this 'design' was pasted up on the kitchen floor, I drew in the small Kraft servos. All of the first prototype flights were made with a Kraft Gold Medal rig. When the Micro-Avionics system became available, it was flown in the Excalibur. So, if you own a Micro, Orbit (small), Kraft, or EK, the Excalibur is for you. If you're a beginner, that's your problem. You'll probably stick it in your own pile of stones. But then you'll be able to sit around the shop bull sessions and talk about YOUR latest crash.

Now for the flying. It takes off from any facsimile of level ground and goes where you point it. There is no gyroscope in the cockpit and it won't free flight. It's just like any other multi, Clyde, only smaller. It costs less to build, uses less of that \$4.00-per-board-foot-material-known-as-balsa, and it can be finished in a few evenings. You can leave the wing in place, throw it in the trunk of your new Riviera, and take it to the next PTA meeting so all of your wife's friends will know you play with toy airplanes. (And if those suburban swingers give you a bad time, ask them what THEY do for amusement!)

## Construction

The fuselage has a right and left side. One is longer than the other. It's called right thrust. Cut two sides and use Elmer's Fast Dry Contact Cement to glue the vertical grain doublers in place, leaving vertical slots at the bulkhead positions. Pin the sides down to something that resembles a

flat surface and glue the triangular longerons in place with Titebond Glue. Next, cement the 1/8" square uprights in place, using Ambroid Glue. When everything is thoroughly dry, lay one side down on your reasonably flat surface and glue the two main bulkheads in place with HobbyPox Glue. Check for trueness with a right angle. When the glue has set, cement the other fuselage side in place. When this much has dried, glue the firewall and firewall braces in place with Sears Filled Epoxy. Then pull the tail together and glue with Sig Epoxy. Let this whole assembly dry for a while, then turn the fuselage upside-down and glue it to the 1/4" balsa top sheet using Elmer's White Glue. Glue the bottom block in place after the nose blocks are secured, as well as the one piece, 1/8" sheet behind the wing. Also, trial fit your Tatone mount and engine and spinner combination and fit the small filler pieces that enable you to contour the fuselage to fair into the spinner. I would recommend removing your engine before you attempt the hacking and carving bit since balsa shavings may be neat for your pet mouse but they're hell on the inside of engines. (I can just hear Crusty Clarence's comments if he received an engine back full of balsa shavings! Or a pet mouse.) (The prototype used a HobbyPox Easy-Does-It cowl.) You really don't have to use all of those different adhesives, but I happened to have a little of each lying around the shop.

When it comes to the plans, the so-called Art Editor of this magazine couldn't figure out my plans and there's an error at the tail section. The plans show the top sheet coming straight back to the stab with a small filler piece on each side of the rudder. Tain't so. The 1/4" top sheet is sanded down in a gradual taper until it is the same thickness as the stab — one-eighth inch thick. Glue on the stab, fin, and ridiculous dorsal. I say 'ridiculous' since it gives you all of the side area everybody says is necessary for sustaining good knife-edge flight. Hogwash. If you were to put added side area on a plane where it would actually do you some good in knife-edge maneuvers, you'd have to have it



D & R's new servo tray, as used in the Excalibur. Dick Rehling made first servo trays in use in U.S. New one a beauty!

up front, NOT in back. Having excessive side area aft of the wing has a tendency to drop the nose, not vice versa. And if you want to know who said so, I did.

The wing should be built on an A-Justo-Jig, if you have one. If you don't, get one. It's the keenest thing since the last time that gal walked down Wall Street! The wing shouldn't be too hard to figure out. It has a right and a left side which join together in the middle. It has ribs, fore and aft sheeting, center sheeting, capstrips, bellcranks, pushrods, a servo compartment, and all that good stuff. The prototype had no dihedral, whatsoever, so that I could use 36" sheets and strips without cutting them. You can use dihedral if you must, but you won't have that keen, head-on appearance that looks like a drooping wet noodle in a windstorm.

The wing was covered with yellow Solarfilm from Canadian Solarfilm. This is a material made in England that is a heat-shrinkable plastic type of thing with built-in color. It is extremely pliable and heats around compound curves with complete ease. It takes very little heat and can be applied over a framework that has a couple of coats of dope, if you so desire. The RCM decal was obtained in the mail from the secretary of the Editor of RCM in lieu of an answer to a letter I wrote him. I used it to cover a tear in the wing. I was going to get even with him, for not answering my letter, by covering the plane with the full-color centerspreads from American Aircraft Modeler, but their ink runs when you put dope on it.

Sand the whole airplane well. (BEFORE you Solarfilm it, dummy!) Paint, dope, scrape, Easy-Did-It, MonoKote, Solarfilm, Citizenship-

plastic-it or whatever you want to do to cover up the balsa. Install the landing gear, engine, radio, and what have you. And the DuBro wheels. Make sure the wing and stab are 0-0. The engine is 0 degrees down and a twitch to the right (which is built-in). The CG should be where shown on the plans. I could have shown you some of the details of installation but I sent the plane to Dewey for his appraisal and he never sent it back.

I got another decal in the mail, instead.

### Flying

Use a 7/4 prop, or something like it, fire it up, and point it down the runway. Once airborne, you'll find it flies at a comfortable pace with the O.S. .10. With a .15, it's something else, again. It'll do just about anything you ask of it with either engine. In spades.

So there you have it. You'll probably never hear from me again because some forward thinking kit manufacturer will instantly appreciate the sales potential of this fantastic flying machine, will kit it, and I'll become too famous and rich to ever talk to you again. So, don't look for ME at your crummy field, Bernie Murphy.

Keep your rudder true. ●

A handful of pleasure - Micro Avionics 9.4 oz. XL-IC radio. Excalibur fits it like a glove.

