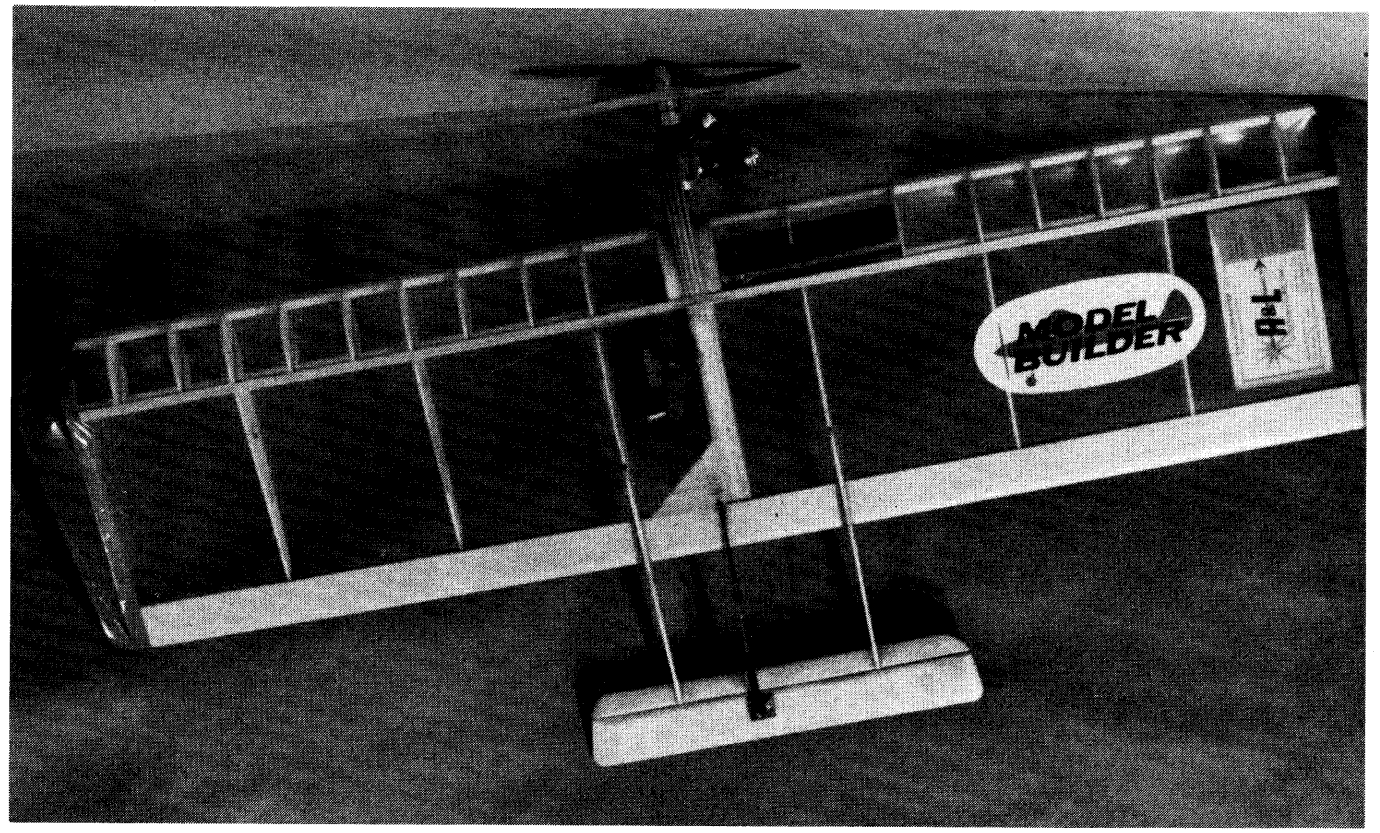
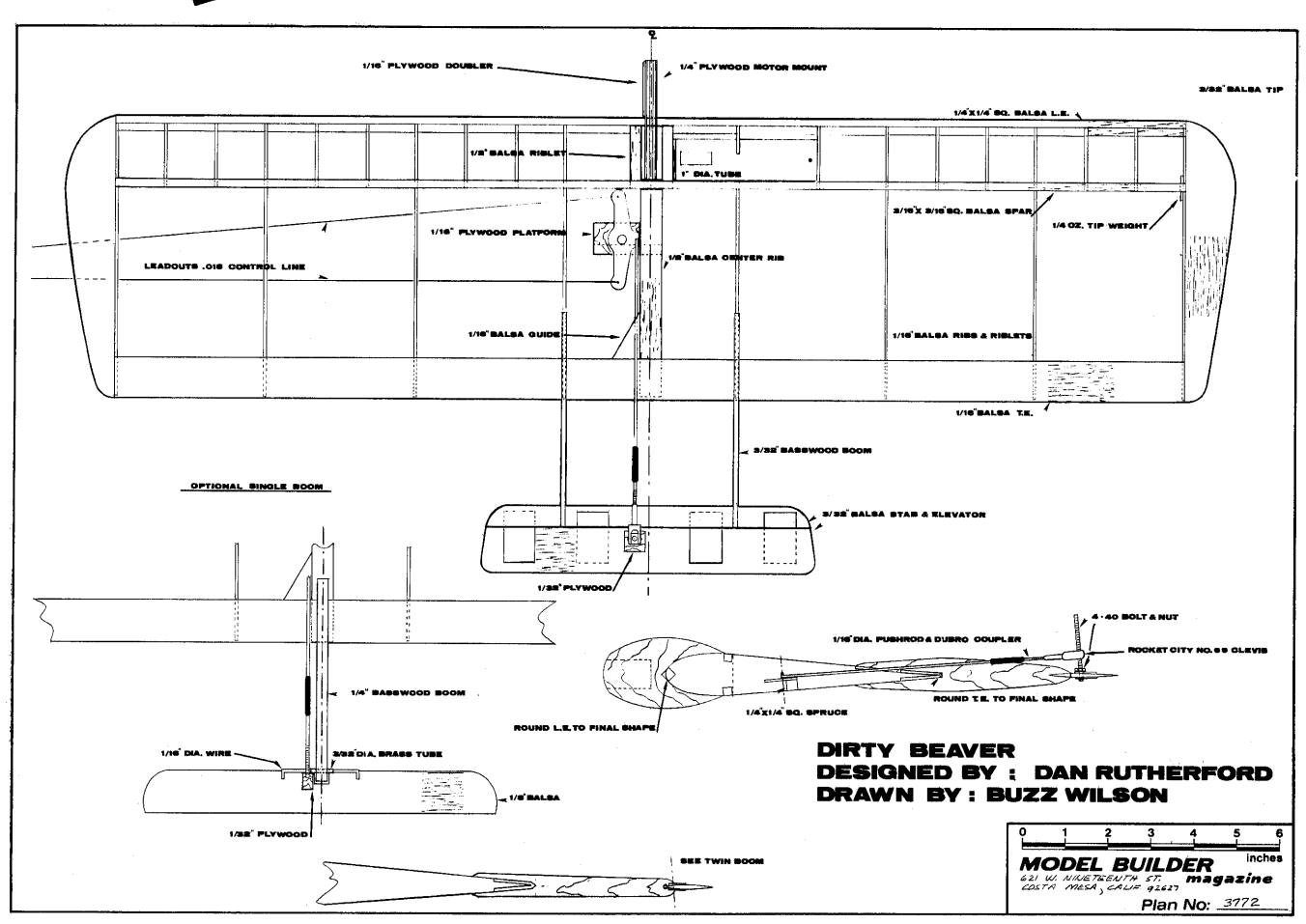
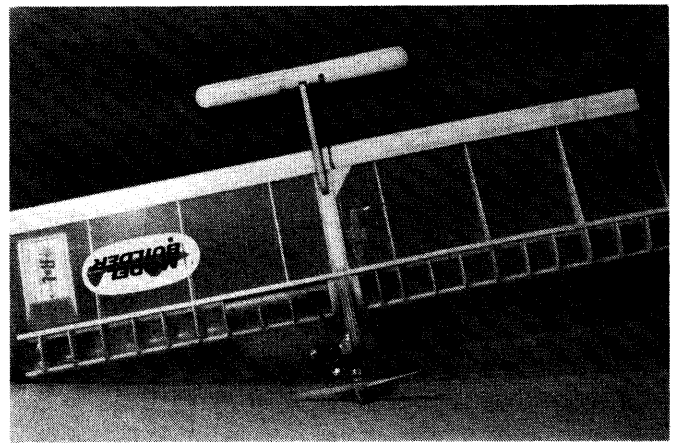
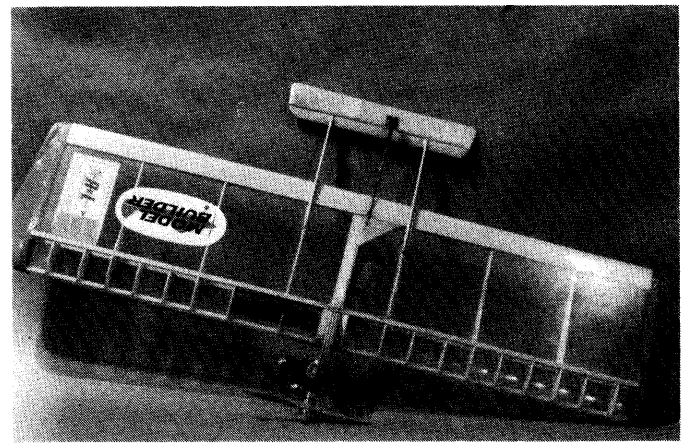


DIRTY DAN'S "DIRTY BEAVER"



FULL SIZE PLANS AVAILABLE – SEE PAGE 112





By DAN RUTHERFORD . . . Originally meant to be a "tuner upper" for the hot-shot combat flier, this model fits right in to a new event that is rapidly gaining popularity . . Half-A Combat!

● Although .049 Combat planes have, as a rule, been completely ignored by most serious Combat fliers, I would hope that anybody interested in Combat will build and fly a Dirty Beaver.

The DB is in no way related to what you would consider to be just another .049 Combat plane. The plans and pics show the obvious; the plane is very light, plus being cheap and quick to build. What is not so obvious is the fact that a DB can be punched into the ground without much (if any) damage. Even if the DB is broken, it is easy to fix, as all of the structure is readily accessible. Center section sheeting turns out to be a pain to install, and just makes repair of the bent plane more difficult.

Also not too obvious is the flying abilities of the DB. The plane will turn very tightly and quickly. Consecutive loops are super, quick, and successive reversals of direction are also super. "Wiggles" are the planes strong point, and allow you to really show-biz the folks with maneuvers that are extremely difficult to follow.

I could go on with an outrageous description of the DB's proven superiority as a Combat plane, but won't. Just think about this for a bit. About a year ago, Charlie Johnson (Yawnson) came out and said that .049 Combat was the lowest form of Combat and wasn't worth bothering with. I disagreed with that, and to show the "California Flash" that he was wrong, I shipped him a complete Dirty Beaver (ready to fly with engine, lines, handle, etc., all he had to do was put fuel in the bladder) and told him to try it out. Charlie did a complete 180 on his impressions of .049 Combat. He found that a proper .049 Combat plane can set even the most experienced Combat flier back a bit, with performance that is regarded as possible only with 35 size (AMA Combat) planes.

With that in mind, I want to say (if it's not already obvious) that the DB is not just a good .049 Combat plane, it is a good *Combat* plane, regardless of the size of the engine hung on the front. So, although the DB may be most attractive to those interested in getting into Combat, or younger fliers who are bucks-down and simply can't afford the bigger planes, it was actually designed by and for serious Combat fliers interested in doing a lot of Combat flying . . . and doing it without going broke or dipping into the season's supply of AMA Combat planes.

I imagine that should be enough propoganda to throw at you, let's go into building a stock of DB's.

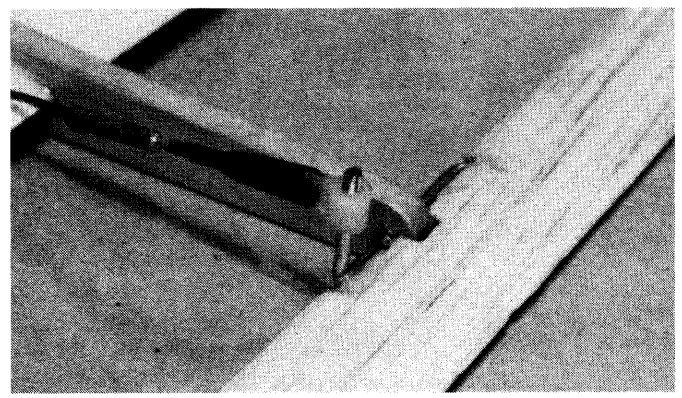
Check over the plans and get enough materials with which to build. The DB is quick to build, so being held up by not having enough wood or whatever is annoying. Notice the span, and that there will be a bit of waste if you use 36 inch wood. Sorry about the waste, but the DB is designed for performance, not economy at any cost. If you want, the span can be cut by an inch and 48 inch stock for the LE, TE and spars will eliminate waste. Your choice, but I recommend leaving the design as is, using the scraps as expensive epoxy stir sticks.

A template can be made of 1/16 ply and this used to cut ribs, one at a time, with a super-zoot Uber Skiver knife. Personally, I cut 1x7 rectangles of 1/16 and 1/2 inch balsa. Eight pieces of 1/16 and one of 1/2 are required per plane. A neat stack is made of these 9 pieces of wood, and all the ribs are cut in one quick session on the jig saw. Be sure to cut the ribs complete with spar slots, LE and TE notches.

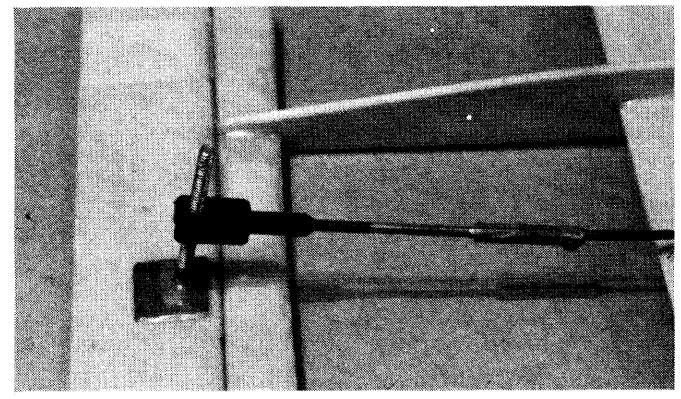
Remove the 1/2 inch rib from the stack and cut in the 1/4 square slot for the spruce bellcrank mount. The ribs are all ready to install when this is done.

Whack a couple of TE pieces out of 1/16 balsa. As long as your lungs are already full of balsa dust, go ahead and cut out all of the wood pieces required. Makes the actual assembly of the plane go a bunch faster. Don't forget the false ribs.

I suppose that you should decide which tail assembly to use before getting too far into this. The plans show two ways to do it . . . they both work just



Single boom version, as shown directly above, is stabilizerless (!). Elevator hinges directly on boom. Note variation of "Dial-A-Turn".



Twin-boom version. Both are shown on plans. Gee, Dan, what about that sloppyblob of solder on the connector sleeve!