PIPSQUEEK

BY WALT REISSIG

Want to draw attention at the local flying field? Think you're a good proportional pilot? Try this .049 powered bomb . . . but don't say we didn't warn you!

FOR years the .049 powered RC ships have necessarily been rather slow flying, boxy looking aircraft, flown mostly rudder only, since they were incapable of lugging around the large heavy radio gear required for more controls. Airtrol's RE-1 has changed this. We now have available six ounces of airborne equipment, that will make these aircraft do everything but talk! While it is true that this still will not give us throttle control, most .049 engines available have no such facility available.

The "Pipsqueek" is a "bomb," and there is no way to tame it! While it is a practical, good performer, it will make jelly out of the knees of the best of proportional pilots! Designed as per the latest pylon and multi concepts, I think that we have come up with a real challenge to those who are looking for a change of pace.

If you are still considering undertaking this project, bend an ear to a few more facts. While the construction is typical and simple, many of the parts are small and difficult to handle. Nearly all of the accessories and fittings such as the fuel tank, bell cranks, push rod ends, etc. have to be custom made, since they are not commercially available. Light weight and warp free construction is mandatory, for you must remember that without a throttle, this is a "do or die" aircraft! Every ounce of excess weight is equivalent to half a pound on your favorite 800 sq. in. multi. As your 'Pipsqueek' is being built, the installation of **every** component must be done correctly. Such items as the engine, fuel tank, battery box, etc., are permanently built into the structure to save weight, and if the engine bolts come loose, or the fuel tank foams, you will have to cut into the model to get at them.

Getting discouraged? Don't be that way! It isn't nearly as difficult as it sounds. It just takes a little longer to build than most 1/2A ships.

So let's grab up a Cox .049 T.D. and a couple of boards of contest balsa and give it a go!

Construction Notes

We believe that this aircraft is only for those with considerable experience, so instead of a step-by-step construction procedure, we will stick to notes of particular interest.

The wing is of conventional construction. Build the frame first, installing the aileron linkage as you go. Make the bellcrank of .040" aluminum, and bend the ends down so that they will just stick through the balsa sheeting. The two small bellcranks are made from micarta or nylon. Solder small washers on the pushrods for keepers. The ailerons are cut out after the sheet covering is on. Drill two holes in the micarta aileron horns so that the epoxy will flow through, holding them securely. All bellcranks are mounted below the 1/16" plywood mounting boards.

No comments should be necessary on the tail surfaces.

Before commencing the fuselage, construct the fuel tank. No commercial tank will fit. The thrust line, wing, and stab, are all at zero angle, so keep this in mind when cutting the fuselage sides. The 3/16" and 1/8" triangular stock will have to be custom made. All fuel proofing of the engine cowl, and tank compartment is a coat of epoxy. Don't forget to hook up the fuel line to the tank and through the firewall, before you seal the tank compartment. Incidentally, did you check that tank for leaks?

The only bad feature to Tatone's fine motor mounts, is that they will often be the source of vibration. The way to eliminate this entirely, is to fasten the mounts to the firewall while the fuel proofing coat of epoxy is still wet.

The finish is important! Keep it light! I used 2 coats of clear on the bare wood, 1 coat of talcum powder and dope, 3 coats of clear dope, and one of color.

When the aircraft is complete check everything carefully! Do not try to hand launch unless you have a 40 M.P.H. wind. A paved surface is almost mandatory for R.O.G. Keep it on the ground until sufficient speed has built up. Make that first turn to the right, since torque gives this airplane a terrific roll rate to the left.

When the engine quits, do the best that you can. It glides very flat and at about Mach 1!