

TIPS from a CHAMP

HOW TO BUILD MODEL AIRPLANES

by Ronnie Thorsen

Editor's Note: Fifteen-year-old Ronnie Thorsen of Portland has been bed-ridden most of his life with recurrent attacks of rheumatic fever. But that hasn't dampened his enthusiasm for model airplane building which he does with such skill that last year his plane, flown by a friend, took first place in the junior division of the Plymouth International Model Plane Contest at Detroit against a field of several hundred contestants. With plans for another entry this year, Ronnie tells in this series of articles how to get started in one of the fastest growing hobbies in aviation.

CHAPTER FIVE

Balancing and Adjusting

For every model plane maker, there is a feeling of satisfaction that comes when his model is finally completed and ready to fly. Let's say that you have spent hours of time in planning and constructing a neat design and everything is all finished up to the point of actual trying it out. What will be your next step? You won't want to wind up your prop or start your engine and let 'er go into the wild blue yonder without knowing just what is going to happen. You'd be the luckiest builder in the country if your plane had perfect flight qualities without any adjustments being necessary.

Consider that you have selected a sound design to begin with and that you built your model carefully, following all instructions. There the big difference between getting top quality flight performance or maybe a disappointing crack-up will depend on how you adjust your model for flight. Patience plays a big part in proper adjusting.

Remember that before trying a power flight, test glide your model. By studying gliding characteristics and making proper adjustments you'll soon be getting real fun out of owning a successful little plane. Keep in mind that if you don't know what your craft will do on every flight, it isn't adjusted. Before the model leaves your hand for the first glide, see that you have selected a breezeless day in order to test accurately. There are a few simple checks of balance and alignment which will go far toward preventing future headaches.

Look at your model first from above. Check to see that wings and tail are in alignment with each other and with the plane as a whole. Naturally, misalignment here will cause poor flying. Take another look directly head on and correct anything out of line.

Now check the ship's balance by supporting it beneath the wing with your fingers. Balance points vary according to plane designs and more accurate adjustment using weights fore or aft may be necessary later. Your plans will usually indicate where the plane should balance. Unless it does balance, at least roughly, at this point, it would be unwise to attempt flying.

Take a look at the way your propeller "tracks." When viewed from the sides, does it seem to wobble? Maybe the center hole in the prop hasn't been drilled true. Maybe the hole for the shaft is too large or perhaps the bearing for the prop shaft is faulty. These are things to consider, should you have trouble here.

Having checked alignment and balance, let's have a look at the actual test glide and see what we can learn by doing this. Con-

duct your test glide over grass, keeping in mind a possible crash landing. Most modelers hold the fuselage well back of the wing, and push the craft with the nose aimed at a point on the grass about 25 to 30 feet ahead.

If there is any stalling tendency, try moving the wing back. A diving tendency is corrected by moving the wing forward. Sometimes it is made advisable to raise the leading edge a wing to correct diving or to raise the trailing edge to correct a stalling position.

Some models having fixed wings and tail have to be altered to correct stalling by adding weight such as solder or BB shot in a small box cemented within the plane's nose. In most cases, addition or more weights cuts the performance and is to be avoided if possible.

Adjustments in most cases are dependent on what is to be expected of the plane. If your model is to be a good flyer, there will be a problem of making it operated within a certain area. We don't want to have to hunt for a plane that disappears from sight, so let's adjust our model so on a power flight it will circle and remain in our immediate area. A slight turn is desirable in most models. This may be accomplished by twisting the rudder. For every 30 feet forward the ship should turn about ten feet to the right and when completed, the craft should glide in circles about 70 feet in diameter.

Generally speaking, adjusting and aligning is an extremely important part of good model performance. Experience will add much to your skill in preparing planes for flight. In competitive meets it is easy to see why modelers must have all the bugs out of their planes and keep them in top shape. The best performers in the country will be at Detroit this summer and you can just bet that they got there only because their planes did exactly what was expected of them at the preliminary state contests.

(With this article, I conclude my series, and I hope that I have helped you in your modeling. It is modeling that keeps me going from day to day, and I think it should be even greater joy to a boy who is able to be outdoors all the time.)

LOCAL NEWS

Zada's Beauty Shop will be closed from August 1 to 30.

Mr. & Mrs. C. A. Dimond, Portland were brief callers here Sunday, en route to Portland after a trip over central Oregon. Mr. Dimond is one of the owners of Paper Mills Agency of Oregon, wholesale paper merchants.

Mr. and Mrs. George Asdel and children, of Port Orford, were callers in this area Friday. Mr.

Asdel is owner and founder of Oregon Coast Berry Co., propagators of blueberries. He told the Pilot he had quite a number of customers here and in the Smith River area.

Mrs. C. H. Barnes and daughter, Mrs. Miriam Norton, were hostesses for a dinner party in honor of Wesley E. Gurr, Sunday. Other guests were Mr. and Mrs. Donald Ault and son, Gary. Mrs. Barnes and her daughter are now living at Smith River, in their home, recently completed.

E. H. Grootendorst and sons were Grants Pass visitors, Saturday, to see the annual glad show, staged at that place. They complained of the terrific heat on their return home.

Miss Edith Ott, who has been spending her annual vacation in this area, will leave Saturday for Portland. She was a former resident of this vicinity.

R. G. Sabin, county sheriff, while a visitor in Brookings last week, told the Pilot he had become a land owner in this area, when he completed the purchase of the Farmer place up the Chetco River. Mr. Sabin intimated he would start a dude ranch in the future.

Rev. E. C. Hicks, pastor of the Smith River Methodist church, was business caller here Wednesday morning. He recently returned from a three-weeks trip to Salem and Portland to visit friends and relatives.

Mrs. Hilda Hallowell of Grants Pass spent the week-end visiting her brother-in-law and sister, Mr. and Mrs. Elmer Kennedy.

NOTICE

FOR BIDS

Notice is hereby given that the undersigned will receive sealed bids to and including September 6th, 1949, at the office of the County Clerk of Curry County, for the conversion of our wood furnace to oil furnace and installing fuel tank.

The right to reject any and all bids is hereby reserved. County Court, Curry County, Oregon, By Oleta A. Walker, Clerk. A4-14

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