



Walt's son Doug built this replica of a Piper Vagabond that Walt once owned, and for which he still holds fond memories.

PEANUT GALLERY

By WALT MOONEY. Our Peanut of the Month is a special favorite of the designer... he owned a full scale version for a period of time. Be sure also to note Walt's dissertation on scale scoring, it's a good one!

• The Vagabond was manufactured by Piper in the late 1940's and was an attempt to produce an extremely economical two place side-by-side airplane. It had as few frills as possible. For instance, there were no shock absorbers on its rigid landing gear, there were no stringers on its square steel tube fuselage, there was a single door on the right side, and there was a single set of controls for the pilot only.

The little airplane was a delight to fly . . . it was faster than a Cub on the same power, and with the smaller wing, was less affected by gusts and cross winds on the ground. I owned one, and loved the little bird. It flew stably and landed easily. It would cruise at 87 mph while burning only three-and-a-half gallons an hour. I've regretted selling it since the day it flew (Hit of my sight).

So, the model you see is of N4314H, a red and white and black exercise in aeronostalgia.

The low aspect ratio wing makes the model

a good one for the small Peanut Scale, and the one photographed is capable of 30 second flights indoors and whatever the god of the thermals dishes up outside.

Wood sizes are all such that a beginner can handle them without too much trouble. An experienced builder can decrease the sizes or thicknesses of the wood and build a lot lighter model that would be capable of much longer flight times.

The construction of the model follows the most usual practice so a construction article is not necessary. Certain points should be mentioned as follows:

The fuselage has a square cross section except at the very front end where it is narrower at the bottom than the top. Unless you build a very light model, the forward cowling can be made of block balsa cemented to the structure and carved to cross section, thus eliminating formers and the necessity of wrap-cowl.

The model shown needed some nose

weight to balance it, so a little more weight and strength won't hurt.

All the wing ribs arc built up as rib R2, except the two ribs, R1, at the center. The spar is cut out and the two center ribs arc slipped over it. Then build one wing half at a time over the plans, using one sixteenth square for the bottom of the R2 ribs and slicing the tops around a pattern from sheet.

Cement the landing gear fairings to the fuselage but not to the wire. With the wire free to flex the wheels can take an impact without putting the load into the fairings and fuselage structure.

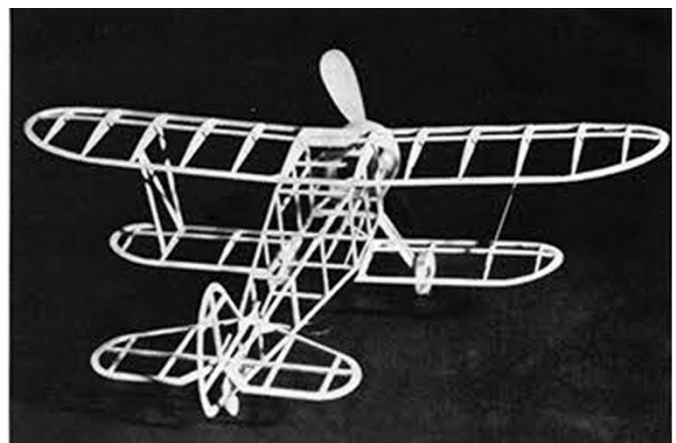
The thrust bearing is one of the Peck Polymer nylon ones, and the propeller is atrimmed plastic one from a North Pacific Sleek Streak ready-to-fly.

Three intentional deviations from exact scale were made and are indicated on the plans.

The horizontal tail area was increased, the dihedral angle was increased, and the



Generous flying surfaces make the Vagabond an excellent choice for Peanut scale. Note "grain" in the prop. Inked hinge lines nice touch.



Here's a bit of a "teaser." It's the framework of Walt's subject for next month, the beautiful Waco SRE biplane.

landing gear was lengthened so a larger propeller could be used for R.O.G. flights.

Model articles for things like this Vagabond tend to be repetitive, so for a little variation I want to expound my views on scale rules and judging.

For my background, so you can determine what credence you want to put on my opinions, I have been building models for 39 years. I have built all types of models, display, FF, CL, HL, TL, RC, and scale. I have placed several times, and won once in FF scale at the Nats. I set a National record in Clipper Cargo at Dallas. I have been a scale judge several times at the Flightmaster's annual for R/C and I have also judged stunt and combat at several U/C contests. Scale is what I like best.

I believe that modeling is fun and that it is a good hobby for anyone, but especially for kids to get into. Therefore I would like to see rules that would not discourage beginners. Basically, this requires the minimum of rules and the simplest of judging systems.

At the present time, according to my own experience, the AMA scale judging system is so complex that the most conscientious, hardest trying judge cannot do an objective job. All those numbers just serve to provide an opportunity for numerical errors and to obscure the objective of the judging which is simply to determine which model is better than the other. At several contests I've attended, after the prize awarding, errors in arithmetic have been found that changed the results. This should never happen, but is bound to continue with these complex rules.

My suggestion for scale judging is to simply rank the models visually. Put the best model on one end of a lineup and the poorest on the other. Arrange the others according to quality in between. Now the judge can more easily be objective because he only had to compare two models at a time and there are no chances for arithmetic errors. The judging of 30 models can be done in this fashion in less than twenty minutes. With the present AMA rules it takes that long to add, multiply, and check the numbers for five models.

Once the models are lined up they simply get their position as a rank number. *(This procedure has been used in R/C pylon with complete success for around 2 years, wen)*

Naturally, a modeler who has a long flying model likes rules that will let it win, while at the same time, a modeler who has a super scale model that does not fly too long wants the rule to favor his type of model. For almost as long as I can remember (and probably since the dawn of time), there have been complaints about rules that favor one side or type.

Therefore I believe that rules should favor neither. In the case of flying scale, FLYING and SCALE should have equal weight. To do this, the models simply need to be ranked by their flying ability. The best flying model getting first rank, or one point for flight, and the second best two points, etc. Interestingly, any kind of flight judging can be used; duration, power to glide ratio, judging for similarity to full scale realism . . . whatever.

Now you add the model's scale rank and flight rank together and the model with the lowest total wins. No one has trouble adding two simple numbers together so arithmetic has been removed as a problem.

Of course, the ranking system can easily result in ties. This is solved simply by deciding ahead of time whether the model with the best scale rank or best flight rank will take the tie. This could even be done at the contest by taking a vote from the entrants, "All those in favor of flights taking the tie raise their right hands."

This system probably won't make everyone happy, but it will certainly keep flying scale from becoming one sided. Neither the super scale ship nor the super flight ship will have an inordinate advantage. I've noticed over the years that it is these two types that tend to discourage entry in scale contests.

The really sharp builders and flyers will still win the contests and this is as it should be because they put the challenge and the motivation in front of the rest of us.

I wouldn't consider this on a National scale, but in a local club where there are only one or two experts, you can handicap them by giving a winning model one rank point. After two or three wins, the expert will have to build a new model to compete in his club contest. This will eliminate the discouraging aspect of having the same model clean up in all the club contests.