POW WOW

by BOB PALMER

Those new, tougher, stunt rules call for a better airplane than ever. And this, cousin, is just the ship you need to look good at contests during coming season.

Gross weight of only two pounds, combined with a wing area of 432 sq. in., not including flaps, means smoother flying around tighter maneuvers. Despite light weight, finish is a point maker.

If you have seen the new stunt rules, you’ll know that stunts are tighter and start in the vertex of the 8’s. This calls for a better airplane, more practice, and possibly longer lines, for with longer lines, the more distance you have between the maximum 45° and the ground. Pow Wow has an area of 432 sq. in., not including flaps, and weighs 2 lb. At this weight, however, it is not advisable to use under 60 ft. lines. I use 60 ft. lines myself and notice a little wing wobbling if the engine gets set off a little rich. This is caused by excessive line drag.

You will notice by the wood call-outs on the drawing that a minimum of thickness is required. This was necessary to have a light aircraft. It will pay off in good tight stunts and square corners. I have cut down the flap movement and increased the chord, resulting in less slowdown in stunts and giving tighter stunts, although this is caused partly by light weight.

The landing gear may seem to be too far back to the average modeler, but actually it is in its right place for good take-off and especially for landings. The model has never nosed over in either take-off or landing.

The wing is thick and its high point moved forward. This produces good lift and diminishes the stalling point needed for better performance. Care in making a rounded nose on the leading edge will give better results.

I have moved the tail up on this model to clear any irregular air flow from the deflected flaps and after flying the model, I believe it pays off. Good responsive controls are maintained through all the stunts.

Bellcrank floor should be of two thicknesses of plywood where the bolt hold down is and cemented several times to insure its staying put.

I decided not to use tape hinges on this model. To make a model pop well or do very good square corners, it is very necessary to have the controls work freely. They should move at the slightest touch: no delayed action. With taped hinges—unless great care in doping and painting is taken—the modeler will have trouble. I have built a good many models and there are very few models that I have had in which the controls worked freely when the model was new. It seems that after the model has been flown for a while, the hinges loosen up because the fuel gets into them. I used tubing in this model, and music wire, drilling out the tubing a bit to be sure of no binding and to facilitate lining up. As a result, the controls moved freely from the start.

I think the drawing is complete and clear enough for you to go ahead and start building. But please do select the materials well, using firm, soft, light wood. I know you will be satisfied with this model to help you get those stunts down to the present AMA rules. Good luck!

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