



Peanut-of-the-Month is this little known Mexican fighter plane from World War I, the Microplano Veloz. How about that?

PHOTOS BY FUDO TAKAGI

PEANUT GALLERY

MICROPLANO VELOZ by WALT MOONEY

Three-views are nice to have, but in the case of a rare bird, one sometimes must resort to a little calculated fudging in order to produce a set of building plans. Being a fudger from way back, Walt had no difficulties.

Several months ago I purchased a copy of the 1919 issue of *Janes All the Worlds Aircraft*. Like I always do when I get another source of 3-views, I went through it to see if there were any interesting designs for a model or two.

Hola! Que Tal? There was a real interesting airplane. A biplane fighter designed and built in Mexico during the last year of WW I. Now I'd never seen a Mexican biplane from this era, so it immediately took my eye. It was a very simple aircraft to model, with a different configuration, while still retaining that vintage look.

Unfortunately there was no 3-view .. but wait a minute! There were good photos, one of them an exact side view, and another of the airplane uncovered, showing lots of detail and all the cross sections. The others give a good look at the wing and tail planform. Also, all the important dimensions are there.

Sooooo, in the best tradition of military intelligence, and with a great deal more to go on than one usually gets for

that type of job (many years ago I did a little of this aircraft evaluation for real), I developed the 3-view and the Peanut Scale version shown here. Intentional deviations (also called "premeditated inaccuracies") from scale include the

addition of dihedral and an enlarged horizontal tail.

The model is quite easy to build. Its fuselage is simply a square box structure without formers or stringers. The wings are built using a leading and a trailing



Plane's rather angular lines are sharply contrasted by the circular rudder. Walt found that said rudder had to be increased in size to eliminate Dutch roll. See text.

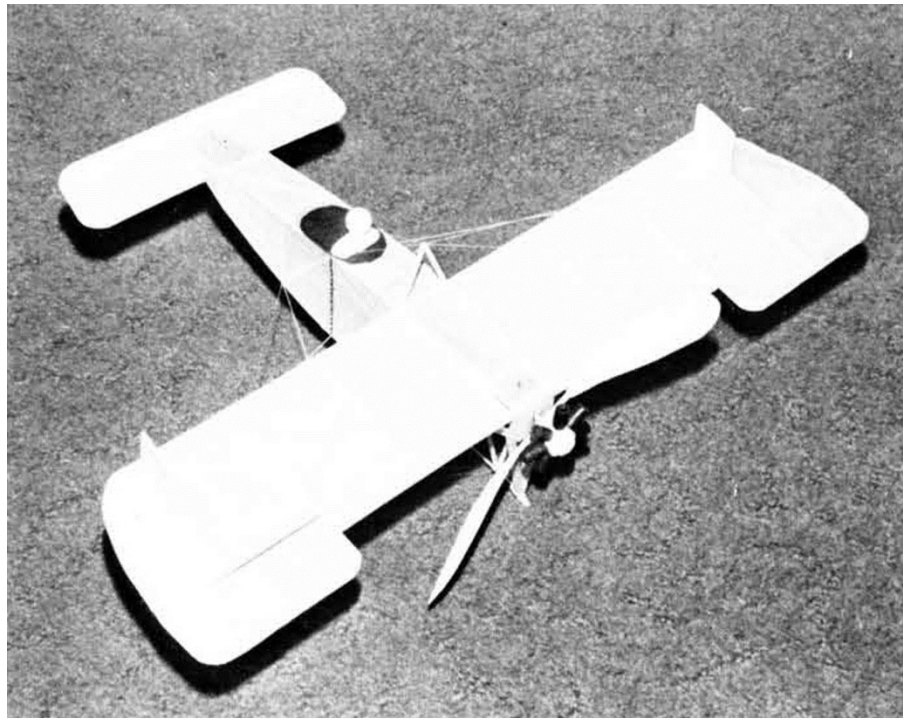
edge and ribs between. The horizontal tail is conventional and the vertical is made from sheet. The nose is filled with balsa sheet on the sides and bottom and the top nose uses a thicker piece carved to shape.

It is really the details of this model that make it different and therefore interesting. For instance, the tailskid is made of three pieces as a tripod with its apex towards the ground. The wings have no stagger, that is, they are directly above one another. There are only two interplane struts on each side but the front strut is nearer the fuselage than the rear one. The lower wing leading and trailing edge is actually below the body. The vertical tail is a circular disc with a notch in it to clear the fuselage.

All the struts on the model were cut out of 1/64 inch thick plywood. Hard 1/32 inch sheet will also do, but the Sig plywood works great. The front cabane strut is a "W" in front view. This was assembled over the plans before attaching it to the upper wing. The forward landing gear struts are attached to the lower wing structure and the rear ones are cemented to the fuselage bottom longerons just behind the wing.

The wire landing gear is made to lay just along the outside of the forward gear struts. It is not bonded to the struts and is therefore free to flex in a hard landing. Hungerford (FH) wheels were used because they look so good.

Engine details make the front end worthwhile. Make up the valve covers from scrap balsa. Make the exhaust stacks from aluminum tubing. If the tubing you have is brittle, and kinks or cracks when you try to bend it, anneal it (make it soft so it bends easier). To do this, first light a candle. Now, run the tubing through the candle flame until the tube is completely covered with soot. Let it cool . . . wipe off the soot with a tissue,



Interesting Blériot canard built by Bill Young, Bakersfield, California. We'll be presenting the construction article on this great flying Peanut in a near future issue.

and proceed to bending. This annealing technique really works, I learned it from watching an experienced metalsmith as he used this technique to a much larger scale in order to form the first aluminum cowl for the prototype Helio Courier, 23 years ago. He used an acetylene torch to soot up the panels and anneal them whenever they got work-hardened by his forming tools.

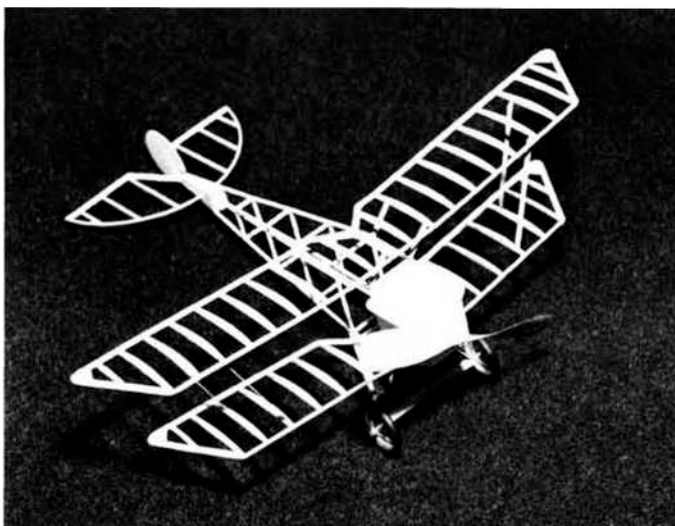
The propeller used is one of the North Pacific plastic ones, cut to size, and a Peck-Polymers nylon thrust bearing is used in the nose block.

Wings built like my model have a ten

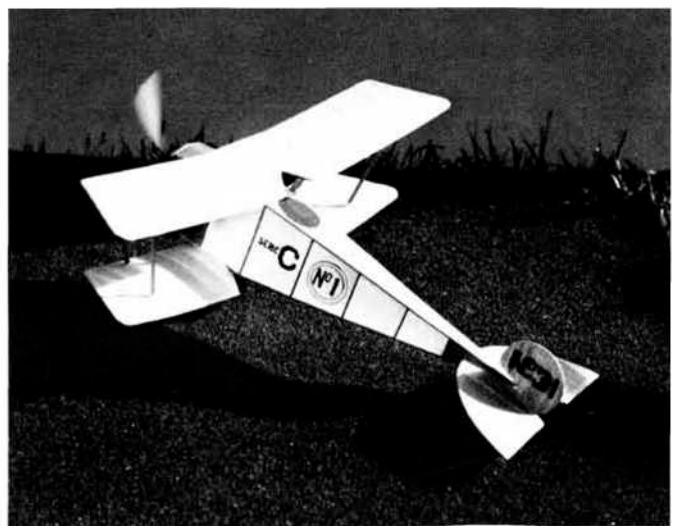
dency to bow up as the dope shrinks. If this offends you, add a 1/16 inch square spar notched into the top surface of the wings. If your model wallows in flight, consider making a larger vertical tail.

(Bill: The vertical tail has been enlarged from the plans by J /8 inch in diameter. it is still a little too small. Model Dutch rolls some, i would recommend a rudder 1/4 inch in diameter larger than shown on the plans.)

As for the numbers, don't ask me why the fuselage has a No. 1 and the tail has a No. 31. That's what the photos of the real plane show, so I put it on the model. "And that's the truth!" BBrrazzzzzzzzzzt!!!! #



Bones of the Veloz display the easy construction resulting from its squarish lines. You may want to add a spar to top surfaces of wings.



Walt has no explanation for the difference in numbers on the rudder and the fuselage side. Maybe the painter got tired , just left off the 3.