The author launches his Peanut P-47D under the watchful gaze of Jim Hyka, another Peanut enthusiast. This was at Cleveland Free Flight Society indoor meet. Photo by Russ Brown.

We have a trophy winner! Entered in a static scale contest, the "Jug" took First Place.

Peanut P-47D THUNDERBOLT

By DENNIS NORMAN . . . Who can resist the rugged lines of this famous World War II fighter? Even in Peanut form it doesn't appear dainty or delicate. Put the gear "up" and fly it the way it looks best.

• Most flying scale buffs will agree that "flight points" usually go to the guys with the high wing monoplanes. This is particularly true with peanut types. Even so it is hard to resist the sleek, glamorous, aircraft of World War II. The "razorback" Thunderbolt is a subject I have built many times in many sizes. Although flight times never equal those high wing jobs, I have caught 16 inch span Thunderbolts in thermals, and believe me, it is as exciting as any free-flight experience.

With the popularity of the peanuts I had to try a "razorback" with a 13 inch span. My first effort was so over-decorated (the model weighed 21 grams!) that flights never exceeded four or five seconds.

Returning to the proverbial drawing board, I built a second version with strict attention to weight saving. Not only was the structure lightened, but also the model was decorated with tissue as much as possible. A friend (who remains anonymous for his own protection) provided me with one sheet of pre-World War II silver Japanese tissue. This proved quite light and gave the model a good basic color. Further weight saving was gained by the use of colored tissue for the markings, etc.

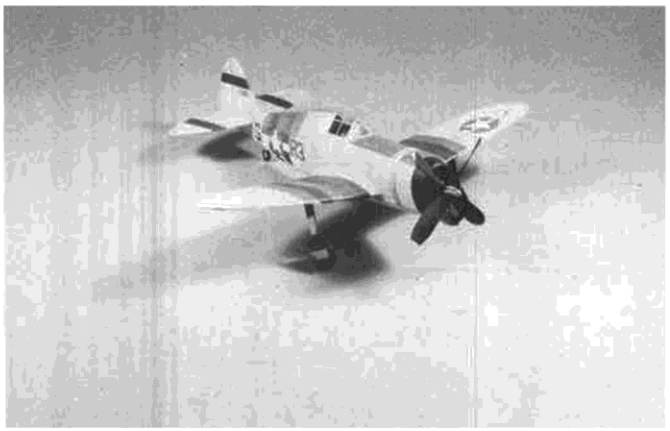
Construction is conventional, with emphasis on low weight. The model is built almost entirely of 1/32 medium, straight-grained, balsa.

FUSELAGE CONSTRUCTION

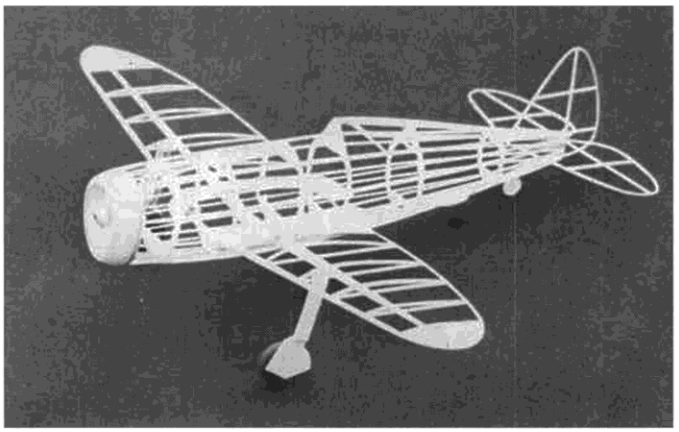
Begin fuselage construction by cutting the top, bottom, and side longerons from 1/32 sheet. The formers (shown in half section on the plan) are cut as single units. Having done so, place 1/32 square balsa braces at the top and bottom of each former for added strength. Notches for longerons should be cut in each former, but stringer notches should not be cut until after the formers are in place on the longerons.

There are several approaches to fuselage assembly, but I prefer to begin by placing the top and bottom longerons on the plan. These are held together with scrap pieces of 1/32 square balsa at the nose and tail. Having done this, I lift them off and then slide the individual formers in place and add the side longerons.

Once the basic assembly is dry, make the 1/32 square stringer notches by gluing a 1/32 wide strip of medium



The ship has been designed with "retractible landing gear!" You pull the struts out of their sockets and put 'em in your pocket!



Framework shot discloses how the model is kept light. Long fuselage provides room for plenty of rubber, and a long motor run.

Walt Mooney decided he wouldn't risk mailing his Peanut entries for the MODEL BUILDER Proxy Peanut contest, but found hand delivery had its complications also. Linstrum photo.

weight sand paper on the edge of a small piece of 1/32 plywood making, in effect, a very small emery board which will "notch" neatly and rapidly. As the wing halves will be joined directly into the fuselage, the stringers passing in the wing root area should be omitted until after the wing is in place.

Strengthen the cockpit for later attachment of the canopy by adding short pieces of 1/16 square strips below the stringers between formers F-4 and F-5. Also, build up the supercharger from either scrap balsa, or styrofoam and, of course, add a motor peg support just ahead of former F-7. The nose is carved from block balsa and hollowed as shown. The prototype was tail-heavy, so leave the nose block fairly thick until you see how the finished model balances.

WING CONSTRUCTION

The wing ribs are cut from 1/32 sheet. The leading edge is also cut from 1/32 sheet and tapered from a width of 3/32 at the center to 1/32 at the tip. The wing tips and trailing edges are formed by soaking 1/32 square balsa strips in hot water and then bending them around a 1/16 cardboard form. The wet strips are attached to the form with small pieces of masking tape and baked in an oven at 250 degrees for 15 minutes. The wing tips are reinforced by filling in the area beyond rib W-6 with scrap 1/32 sheet.

A dihedral stub spar is cut from 1/32 plywood and glued to the spar of the right half of the wing while it is still attached to the plan. The stub spar is then attached to the left half of the wing, after the two halves are joined with the fuselage. As shown on the plan, the wing's leading edge should touch former F-3 and its trailing edge should rest on small supports glued to either side of the bottom longeron. With the wing in place, add the remaining stringers and fill in the wing root area with 1/32 sheet. The Thunderbolt's wing root did, of course, make use of small fillets, and these may be built up from soft sheet balsa once the wing is in place.

I prefer to hand launch peanut types, but the landing gear is useful for both display and stability. My preference is gear of the plug-in type so that it can be removed (again saving weight) when flying. The sockets, you will note, are made from 1/32 sheet, and are positioned on the inside of ribs W-3

TAIL SURFACES

Both horizontal and vertical tail surfaces are built entirely of 1/32 square. The outlines are made like the wing tips; thoroughly soaked strips are formed around cardboard templates and then baked. Build over the plans, adding spars and ribs.

LANDING GEAR

As noted the landing gear is of the "plug-in" variety. Use 0.015" wire for the main gear and a pin for the tail wheel. The main wheels are laminated from sheet balsa or styrofoam with 1/16 outside diameter aluminum tubing for a hub. Excellent ideas on making scale wheels can be found in the book *Flying Scale Models of World War II*, published by MODEL BUILDER.

COVER AND FINISHING

As mentioned, I built this model twice. The first version was covered with white tissue which was then sprayed with olive drab and gray. This proved

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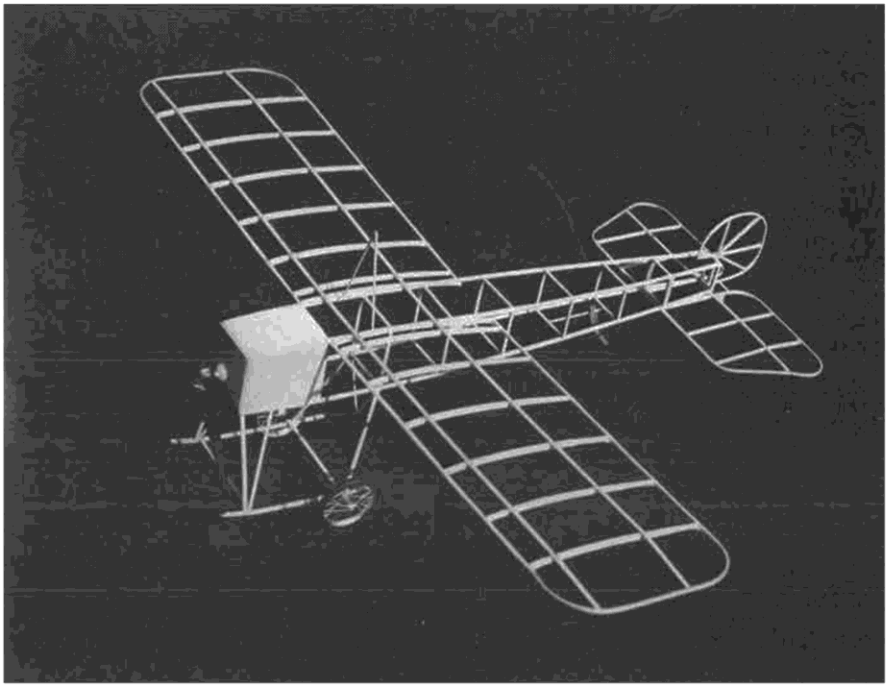

Here are the bones for next month's Peanut, the Uruguayan Castaibert IV. How's that for coming up with something unusual!? Design shows Bleriot influence. By Walt Mooney, natch.

Peanut . . . . . *Continued from page 43*

entirely too heavy. The second version used silver tissue. This, of course, is almost impossible to find, but finishing the model in all white or with a very lightly sprayed coat of silver Floquil should give a light, but pleasing result.

A number of articles and pamphlets have been prepared on the Thunderbolt, but I found the "Aircram Aviation Series" Booklet No. 2, "Profile Publication" No. 7, and "Camouflage and Markings" No. 15, contain a wealth of color scheme ideas.

I am particularly attracted to invasion stripes as a way of "dressing up" the model. The black stripes are easily done with tissue, but the white is a problem. I use white tissue strips which are lightly coated with Polly-S latex paint to highlight them. The insignias are traced onto dark blue tissue and then doped to the model. The "stars and bars" are then painted with Polly-S. The antenna is cut from 1/64 plastic card, painted and positioned after the model is covered.

I believe that a flying scale model should have a pilot and this model is no exception. Here the pilot is carved from styrofoam (it can not only be carved, but also molded with the head of a pin) purchased from Micro X Products, P.O. Box 1063, Lorain, Ohio 44055.

The cockpit floor is filled in with bond paper, which is sprayed black prior to installation. The cockpit canopy is vacu-formed. The canopy frames are cut from tissue strips and adhered with clear dope after the canopy is joined to the model, using contact cement. The cooling flaps are cut from bond paper, spray painted, and attached. All panel lines and control surface separations are made with thin strips of black tissue.

FLYING

For indoor flying, use one loop of 1/16 Pirelli, 15 inches long. For outdoor flights, two loops are probably best (I fudge a bit here because the model shown has not yet been flown outdoors). Make the normal flight adjustments with elevator, rudder, and thrust line, then find those guys with the Piper Cubs and give them a run for their money! ●