



This little peanut is a natural flier on CO-2 or rubber. A little small for a dethermalizer, so have your track shoes handy just in case!

PEANUT-BRITISH HOMEBUILT By Walt Mooney

Our man of unlimited sources found a natural for scale free flight in the little Ord-Hume O-H 7 English homebuilt. Walt has given this peanut scale a split personality by showing how to install CO-2 or rubber power.

This little model of a small English homebuilt is an ideal configuration for a Peanut Scale. It has a high wing, with low aspect ratio and adequate dihedral. It has a tall squarish fuselage and a relatively large tail. The model also has a longish nose and tail. All of the above characteristics fit it well for a career as a Peanut. A three-view of the O.H. 7 can be found in JANE'S The Worlds Aircraft Tor 70-71.

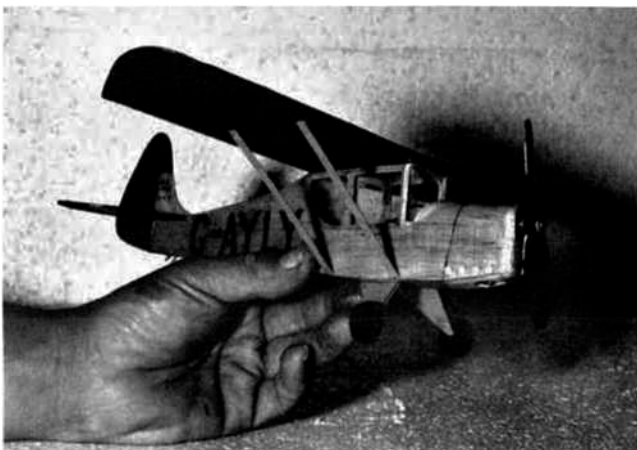
The model shown in the photographs was originally built as a rubber powered Peanut and after about six months of successful flying, indoors and out, it was converted to CO-2 power using one of Bill Brown's delightful little engines. It

differs from the plans in several minor places. First, the wing has a single spar and sheet ribs. The wing on the plans has two spars and sliced ribs which will give a lighter wing and better support for the strut attach points on the lower surface of the wings. Second, the plans show scale dihedral. The model's dihedral was put in by eye and as luck would have it, it's a little less than scale. The plan model should mm out a little more spirally stable than the original.

Best time indoors with a 10 inch loop of 3 mm Perelli is 42 seconds. Outdoors with a loop of 4 mm it will exceed a minute easily, and although thermals



Just to prove our Peanut Vendor isn't totally hung up on the little ones, here he is with the 3rd place trophy at the NAR Jumbo meet.



Walt's hand gives an idea of the diminutive size of this little cutie pie. Peanut scale is getting tremendous following. Who'll be first with R/C?



Long flights may be had by using CO-2 power, since only a minimum rate of consumption is required to keep the O.H. airborne.

don't really count, it has twice flown for more than 15 minutes, which is good if you like the exercise of chasing it. After conversion to CO-2 it has averaged more than a minute and a half with several flights of over two minutes and two officials of over four minutes at the last Orbiteers scale contest.

The license number on the side of the model is my imagination, I don't actually know what the real series of letters is, so I used a little license, if you'll pardon the pun, to come up with these.

The structure of the rubber powered version is so much the old standard system that only the differences from standard practice will be discussed. Hard 1/32nd sheet can be used for the struts and landing gear fairings if that's all that is available; however, on the model shown, they are 1/64th Sig plywood. Cement the landing gear fairings to the bottom of the fuselage but not to the landing gear wire. This leaves the wheel and wire free to flex and will save your structure.

The sides of the cowl are 1/32nd sheet cemented to the outside of the main frame. The top cowl is also 1/32nd sheet carefully wrapped around Formers 1 and 2. The bottom of the cowl is carved from 1/8th sheet balsa. Note the shape of the propeller hook. This shape seems to work as well as the "S" hook type and is much easier to bend. The shock absorbers shown on the plan were never installed on the model in the photos, but are on the airplane.

Peanut Scale rules do not require R.O.G. takeoffs, so a Williams Brothers propeller can be used as is. If you want your model to take off, however, it will have to be shortened. All the flight times quote for the rubber power version were wound with an indoor winder so don't forget a winding loop at the propeller.

Build the wing by pinning the leading and trailing edges to the plan and cementing the 1/16th square rib bottoms in place. Cut out the two spars and starting with the left hand wing cement them in place on top of the rib bottoms. Slice the rib tops, using a cardboard template for a guide, and cement them in place on the left panel. Fit and cement the tip in place on the left panel. When this is dry, cut the leading and trailing edges for the left hand dihedral break and elevate the tip so the spars can be cemented to the center rib bottoms. Cement the Left dihedral breaks and cut the right ones in the leading and trailing edges. Now further raise the left wing so the spars can be cemented to the rib bottoms on the right hand panels.

Cement the rib tops in place and the right hand tip can be installed. After this assembly is dry, sand the leading edge round and taper the trailing edge as shown in the side view.

If a CO-2 model is to be constructed, make the body structure from 1/32nd sheet balsa. (The rubber powered fuselage can be made this way if desired, it was on the photo model.) With the exception of the fuselage, all the rest of the model is identical with the rubber powered version. The basic differences are all due to the motor installation. Make the basic fuselage structure using two rectangular formers in the cabin area. (See the front view for their shape.) Cover the fuselage top and bottom with 1/32nd sheet with the grain crosswise to the fuselage. Install a hard 1/16th doubler between the landing gear struts in the fuselage bottom to support the filler connection. Install the link at the angle shown so solid CO-2 will not flow into the engine. Cut the motor mount from one sheet of 1/16th ply and one sheet of 1/16th balsa. They may have to be fitted and trimmed depending on the exact shape of the upper cowl sheeting. Mount the engine to the ply with pins and bend them over on the back side. Cement the mounts in place making sure that the engine is properly aligned with no thrust line offsets. Finally put the cowl bottom in place leaving a hole for access to the engine. The scale cowling holes should be used to provide an airflow over the engine.

The model should balance 3/4th of an inch behind the wing leading edge.