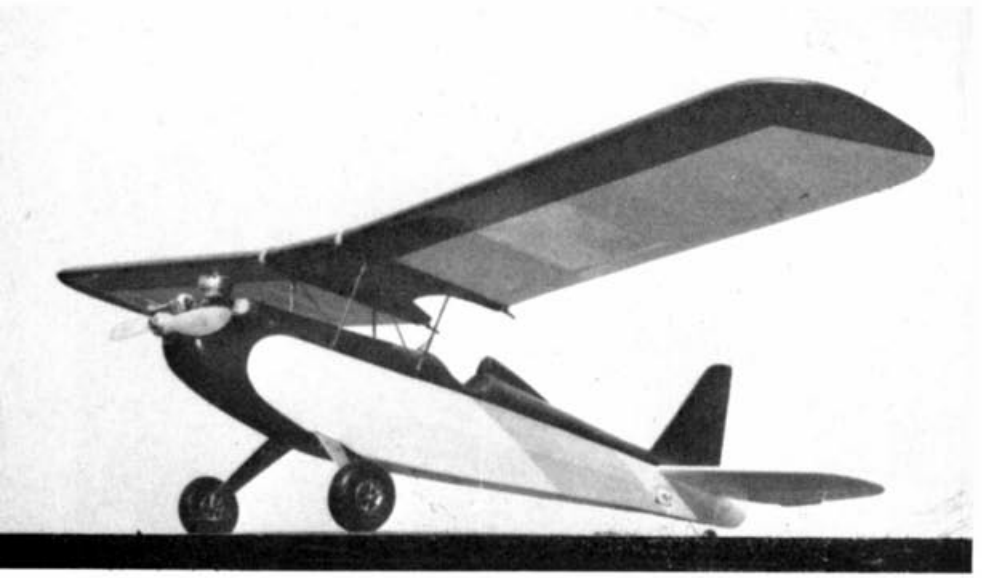
All it needs is a Lewis gun on top of the wing to complete the illusion created by the open cockpit and the wing cut-out. Headrest and finish trim add considerably to the scale effect.

Tow in wheels helps the ground handling of our little single channel bird. Photographer knew how to pose the little machine to capture the excitement that Petite Parasol generates.

petite parasol

DESIGNED BY RALPH FIDANCE, JR., THE PETITE PARASOL IS A DESIGNER'S DREAM OF A GOOD SEMI-SCALE MODEL.



From down under it even looks good, parasol wing mount of piano wire adds to looks as well as its efficiency. Good wire bending and soldering required to get best results from type wing mount.

Designed By Ralph Fidance
Text By Bill Northrop

► If the Petite Parasol happens to look a little bit like a combination of the best features of the Pietenpol Air Camper, the Fairchild 22, Davis DW-1, and Heath Parasol, it's no coincidence. The designer, who admits to having begun life at 40 several years ago, was building models when these ships were the backbone of the pasture flying field era.

In those days, a plane that was built in the garage, in the back yard under a tree, or down in the basement was called a "homebuilt." Nowadays it is called an "Experimental Aircraft," the builder is usually a member of the Experimental Aircraft Association, and the Federal Aviation Agency (FAA) supervises all legal construction work.

The Petite Parasol's designer, as a true aviation enthusiast, made the natural progression from models to full size aircraft. Hanging around the airport, running errands for mechanics and pilots, sweeping out hangars, and occasionally, the reward for these efforts, going along on a check flight, were all a part of his aviation experiences. He went on to earn his pilot's and instructor's licenses, and eventually flew anti-submarine patrol along the Atlantic sea coast with the C.A.P. during WW II.

As an R/C pilot today, Ralph is, by choice, a confirmed single-channel sport flier. Enjoying radio-controlled model airplanes as a hobby rather than allowing it to become a frantic obsession, he prefers to build and fly his own designs, and favors the realism and relaxation of scale-like models flying as near to scale speed as possible.

The Petite Parasol is one of the best of Ralph's efforts. On the ground or in the air, it looks and behaves like a typical homebuilt, er . . . experimental aircraft. For a 42-inch span plane, the rather solid 16½-ounce wing loading of the prototype provides very smooth flight. With the Enya .09 in high but running a little rich, the ship will float along lazily in the traffic pattern, waiting patiently for a chance to drop in for a landing or touch and go.

When making a power on landing, high is maintained until the downwind leg is almost completed. Low motor is hit just before the turn into the base leg. The plane will start to settle as speed falls off. The turn into final approach naturally drops the nose somewhat, but a shot of opposite rudder at the correct moment will bring it up and put you on the glide path.

The plane's attitude in low motor is just about perfect. As it putt-putts down the runway, a couple of waddles on the rudder will drop the tail a little more and flare the glide out just enough to occasionally obtain a 3-point landing. With our (*Continued on next page*)

PETITE PARASOL . . . Continued

grass field, touch and go's must be timed so that high motor is just taking hold as the wheels reach for the ground. Not according to AMA rules, but a heck of a lot of fun!

With the motor leaned out in high, Petite Parasol becomes as lively as a playful kitten, popping through barrel rolls, wing overs, loops, split-Ss, etc., as if it knew what was coming before you play the button. The prototype is equipped with a Babcock Motor Minder throttle control working off third position of an O.S. Minitron compound escapement. Receiver is the Controlair "4" and total battery supply is four pencells in a square DuBro box.

Motor escapement is in the cockpit and linked to the throttle by a wire pushrod. Winding hook is directly below in bottom of fuselage. Rudder pushrod is 1/16″ wire all the way with a World Engines Ny-Link at the escapement, DuBro Kwik-Link on the rudder horn.

There is one small catch to the Petite Parasol. No fiberglass fuselage or foam wing is available. It must be built entirely out of balsa "sticks," "skinny boards," and blocks. If you're ready to face this ordeal, let's get on with it.

Fuselage sides, with 3/32″ balsa and 1/32″ ply doublers in place, are first assembled with bulkheads F-1, F-2, and F-3. After this basic structure is carefully aligned and dry, formers F-4, F-5, F-6 can be glued in place, followed by F-4A, F-5A, F-10 and the tapered tail block. Now add the rear cabane strut mount and the ⅛″ ply landing gear base.

The cabane struts should be made up next out of 3/32″ and 1/16″ inch diameter music wire. After installing the front and rear main struts with aluminum or nylon landing gear clamps, bind the 3/32″ dia. wing mounts and the 1/16″ dia. "N" braces in place with fine copper wire. Align everything properly and solder in place (*Tsk! Tsk! Imagine going to all that trouble for anything but a biplane. R/C Ed.*)

Once the struts are in place, the motor mounts installed, and a fuel tank added (A Perfect one ounce does fine in the prototype), the top half of the fuselage may be finished and covered with 1/16 inch sheet. Build the removable hatch in place, not forgetting to place Saran or wax paper between F2-A & B and F3-A & B so that the hatch *will* be removable.

While we're on a "don't forget" kick, install 4-40 blind nuts under the motor mounts *before* gluing in the chin block.

All side stringers may now be added except the bottom longeron strip. This will be added after the radio installation is completed and the bottom of the fuselage has been covered with 1/16″ sheet.

Any 1/16″ thick flat aluminum alloy landing gear, giving about a 9″ tread, may be used. Unless the aluminum is unusually stiff, a 3/32″ music wire brace should be bent to fit snugly along the bottom side. The ends of the wire provide axles for the 2¼″ pneumatic wheels. Landing gear clamps are used to hold the wire in place.

The fact that the landing gear is bolted permanently in place may seem a little disturbing to those of you who have always strapped the gear on with rubber bands and dowels. Both the designer and this writer firmly believe that in the long run, when a model is clobbered, more damage is done by a loose landing gear on the rampage than by one that is put on to stay.

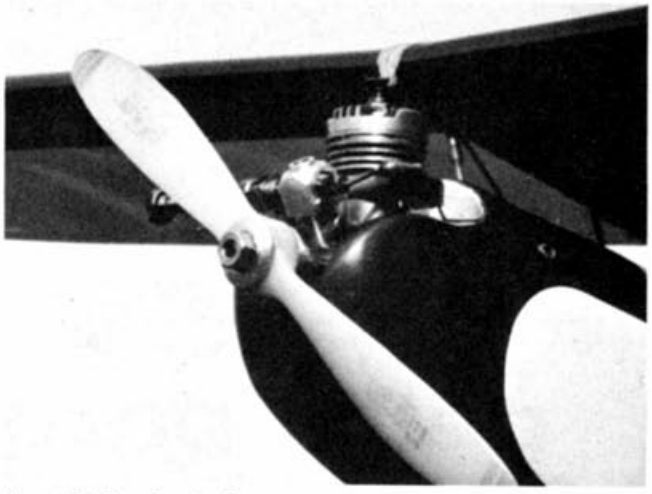
The tail section construction is self-explanatory. It is important to select extra light balsa, however, in order to avoid the necessity of carrying useless nose weight.

Wing construction is also straight-forward. The important thing is to avoid warps. Allow full drying time while panels are pinned down and keep a watchful eye during covering and doping.

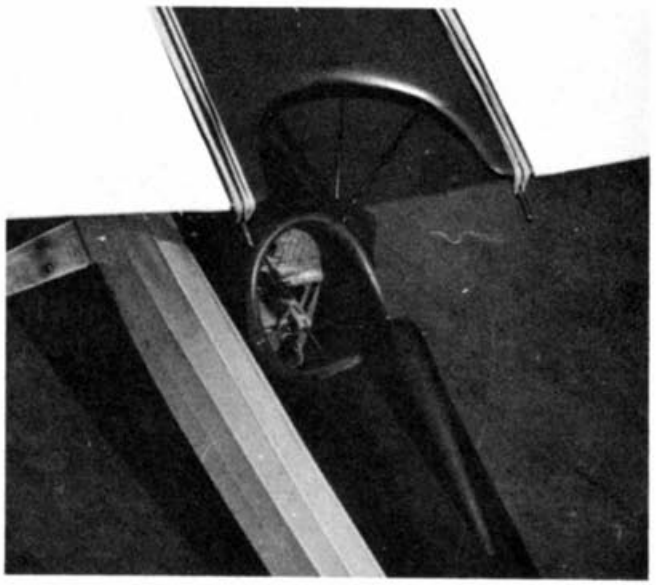
The original model was covered with Silron after sealing all framework with 3 to 4 coats of dope. Following 5 or 6 coats of thinned clear,

(*Continued on page* 50)

Another view of the parasol on the tarmac, flying is what it does best.



Enya .09 TV engine is plenty power for those extra stunts in Class 1.



Engine throttle escapement is easily accessible through cockpit opening.

Petite Parasol

(*Continued from page* 28)

the finish colors of white and metallic blue were brushed on. Kampel dope was used throughout.

The Petite Parasol is a rugged yet cute little sport plane and will provide many hours of relaxing, hobby type fun for anyone that builds it.

Hmmm, let's see now . . . blow it up by 1¾, drop a "glitcher" in the radio compartment, and hang about half a cubic inch on the nose. . . .!!