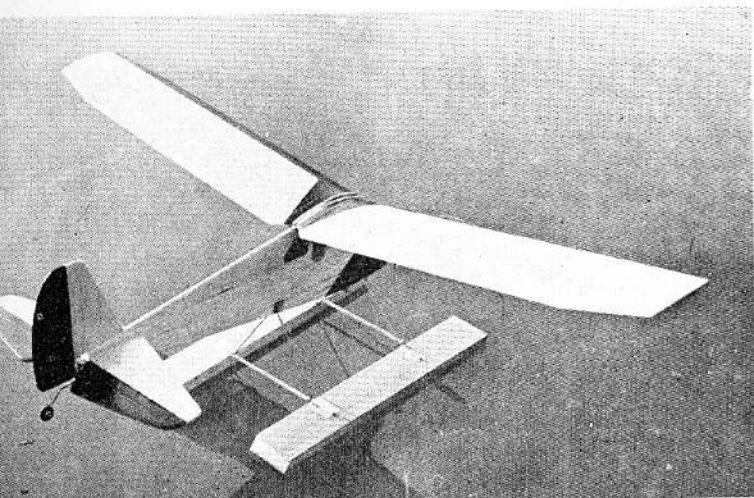


Profile Silvaire

Thin-man version of Luscombe lightplane makes a quickie flier for those .049 engines. All wood construction. For land or sea and, if you are stubborn, ukie, too.



No, the designers don't have a one track mind this month. Ted Strader meet Vern Clements, or vice versa. All at sea, that's us.

by TED STRADER

► As profile models go, well, most of them don't go very far.

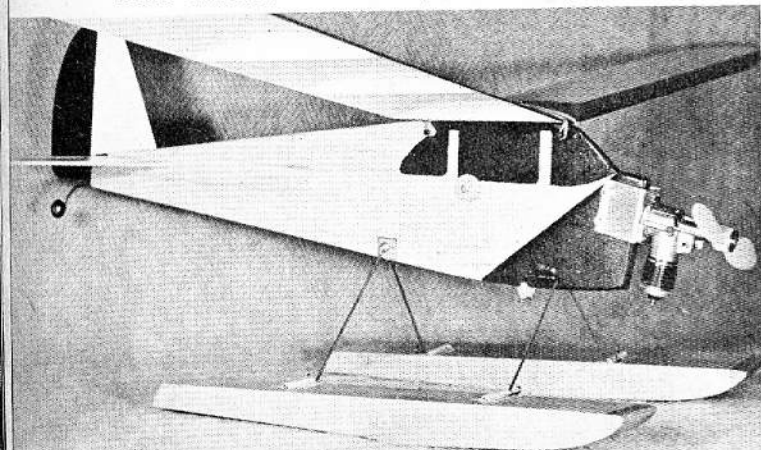
This was our goal in designing a thin version of a one time popular light plane, the Luscombe Silvaire.

Discounting actual drawing and scaling time, our Luscombe was extremely "kwik" to build. Once built it began to show spooky tendencies to out-perform most of our earlier profile attempts. The glide soon indicated that if we were to accomplish our intent of arm chair flying, the .049 would have to be replaced.

We hasten to add that the model will handle an .049 with the greatest of ease if you are the hiking and outdoor type.

For test purposes, we pressed our ole' trusty K&B .035 into service, leaking glo-plug and all. It was a cloudy, mild calm day when the first ROG attempts were made. Three starts later bore fruit, when, with all adjustments made and the .035 protesting the bad plug vehemently, our hero coughed and wheezed itself through a one-wheel takeoff and climbed laborously to a little less than 400 feet.

Designer used a dural mount, bent to shape, for his Cub engine. Blocks cemented to either side, faced with ply, will substitute.



All set for a bit of control-line flying, the wee profile sports two-wheel gear. Note the fixing of the bellcrank, on the side.

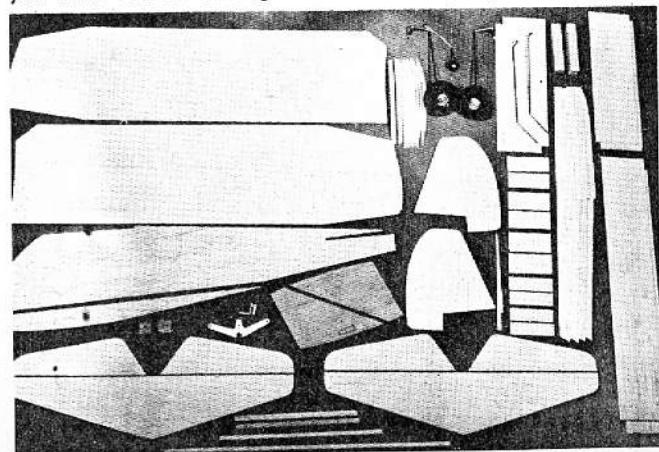
Now, according to plan, the model was then supposed to rewind itself back down and come to rest not more than 150 feet away. Why not? This is a profile model, and profile models aren't supposed to fly too well. At least very few of mine have in the past.

But this little clown hadn't been paying attention! For there, before a pair of unbelieving eyes, was beginning to vanish one cherished engine, some of Testors best balsa and a varied assortment of heterogeneous parts that, from a distance, looked somewhat like an airplane.

A few feet shy of a mile later, our hero was discovered resting unceremoniously between two furrows of plowed ground. Stifling an urge to plant it on the spot we returned to the scene of the crime and promptly changed engines.

With our equally revered K&B .020 up front it was now possible to accomplish what was originally intended; to fly from an easy chair! The rest of the afternoon was spent hand launching and then watching as the little craft wound its way up to a height of about 100 feet and then glide in almost the exact path back down and land not over 150 feet away. This was fun! Construction of the Luscombe Silvaire follows a (Continued on page 53)

Be your own prefabber! Cut out all the sheet-balsa parts before you start. Careful sanding for smoothness—got yourself a deal.



Profile Silvaire

(Continued from page 18)

pattern similar to any other profile. A few hints might help the newer members of the hobby.

The biggest time saver would be to cut out all parts before actual construction begins. This way you won't be stopped from building another part while one part is drying on the plans.

Those who have four- and six-inch stock can ignore the splice lines on the plans. The fuselage splice is well reinforced by the two 1/16" plywood nose doublers. A splice in the wing sheeting should be arranged so as to occur on the trailing edge half of the curvature where it will be the flattest.

FUSELAGE: Lay flat and cement the two fuselage pieces to be spliced. When dry,

cement the plywood nose doublers in place and clamp securely. The $\frac{1}{4}$ " square strips for the wing-rest can be cemented and pinned in place. This should be allowed to dry thoroughly.

WINGS: If $1/16$ " wing sheeting is to be spliced, it can be done at the same time the ribs are partially installed. Cement the two sections of each wing panel to be spliced together, pinning well to make a good seam. Next, attach the wing ribs in their proper location, upside down, cementing them only at the rear tip (trailing edge) for the time being. When seam and cemented portion of ribs are dry, remove and turn over. Apply cement to the rest of rib curvature and pin down sheeting so as to assume the desired airfoil section. When dry, trim away that portion of center section rib that is protruding, block up and join wings at their root. A strip of gauze will add tremendous strength when installed at the dihedral break.

TAIL SECTION: The rudder (fin) and stabilizer should offer no challenge. However, a decision should now be made as to whether this is to be a combo model or strictly free flight. If a U/C version is desired, then plans will have to be made for hinges at the elevator break. Though we have never flown ours as a U/C model, the adjustable elevator has been most helpful in trimming our model for desired flight pattern. You may have to add some lead weight to the nose. Just a thought.

Whichever you choose, the basic construction is the same. Both, or all, parts of the tail are made like a sandwich with the filling being in the form of a sheet-balsa framework, cemented first to one side of the outer sheet covering and, when dry, covered by the other sheeting. It is very strong and warpproof.

PONTOONS: For those who desire to go all the way, we have shown a pair of pontoons that will help you to qualify for the "soakin' wet society." About the only word applicable here is to make certain they are waterproof. Brass tubing, secured by gauze strips, act as retainers, with the wire hooks imbedded in each float for holding in place with rubber bands.

GENERAL: With all parts built and dry, the next step is to sand off the rough edges preparatory to final assembly. This would be a good time to decide upon the type of landing gear you desire. In all our flights and the complete destruction of one fuselage (we tried to catch it on the fly. Honest!) the landing gear has never bent out of shape. Therefore we would strongly urge you to consider the very little time involved in cutting and sewing the pieces of brass tubing required for this type. Once decided, the rest of the parts can be installed, cemented, and made ready for the finish coat.

FINISH: The original model had two coats of very thin dope applied first. In painting the wings, it is well to dope the under side first. Using very fine sandpaper, remove the rough spots caused by the dope, lifting the loose fibres of balsa. Now apply at least one more coat of heavy dope. Trim is up to the individual.

An engine mount, fashioned of light dural, is now mounted with two bolts to the nose section and your favorite engine mounted in place. Balance according to the plans. If there are no warps, your model should take a nice flat glide to a place of rest about 25 feet in front of you. The engine can be slid back or forth to complete the flight trim.

Except for a few details on the plans for flying, other than free flight, you're in business! Don't fill the tank too full until you have the flight pattern trimmed to your liking.