

The "Sportster" Gas Model

Plans and Suggestions That Will Enable
You to Build a Simple But Fine Flying
Gas Engine Model

DUPLICATED FROM THE ORIGINAL DRAWINGS
AND DATA THROUGH THE COURTESY OF LOUIS
P. LOUTREL

THIS model was test-flown in Van Cortlandt Park, New York, in April, 1935. When we reached the field it was fairly calm but had started to rain. By the time everything was in readiness, the model was "plenty wet." However, we decided to fly it or "bust" (the model). Just then it was suggested that I adjust the rudder so that the model would circle. I was sorry later that I hadn't used a little thought before setting that rudder.

The motor started easily and we released the model with a prayer on our lips. After bouncing over the ground for about fifty feet the model started to lift. When it reached an altitude of six inches a gust of wind got under the wing and lifted the model to about twenty feet. At that altitude it started to "sizzle" around in an honest-to-goodness vertical bank. Right then and there I thanked my lucky stars that I had used the small rudder.

If it hadn't been for that,

than a dozen times without the slightest damage from flying it. The average "take off" distance is about six feet.

The following is a list of hints that will help construct the model.

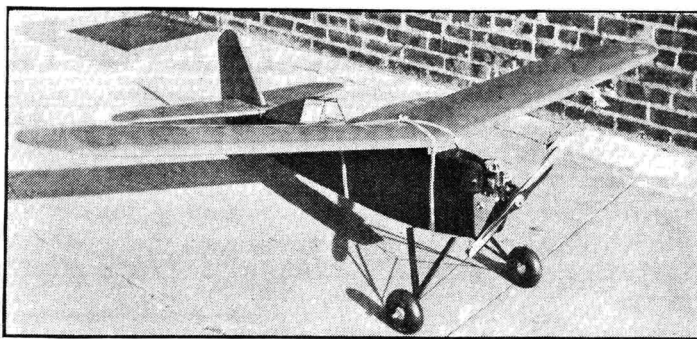
(1) Wherever possible steam the spruce to shape in order to lessen the strain on the cement.

(2) Dowel and bind every joint in the fuselage and use two or three coats of cement.

(3) Take care to have the stabilizer parallel to the thrust line.

(4) Use plenty of cement on all the wing joints.

(5) Use whatever method you have found best to fasten the wing halves together but be sure that each wing tip is $6\frac{1}{2}$ " from the table top.



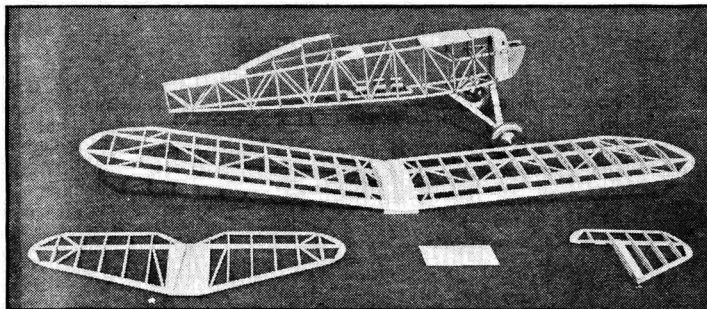
The finished model, a steady flier powered by a G.H.Q.-Loutrel engine

By JULIUS UNRATH

the rudder would have caused the model to "flip" over on its side and dive into the ground. As it was it came down a little too fast for comfort. It made a three point landing (a wing tip, one wheel and stabilizer tip) which nearly caused our collapse. After almost having his nose cut off by the propeller, my "grease-monkey" cut the switch. Inventory of the damage amounted to a very dirty and muddy wing tip and a splintered landing gear fairing. The "Sportster" was again adjusted,

this time with the rudder straight for we realized that the torque would cause the model to circle. The model then made its first successful flight; four minutes with $3/16$ oz. of gas.

After being completely recovered and fitted with "air wheels" the "Sportster" was taken to the Eastern States meet at Hadley field. Here we learned the model circled on the "take-off" WHICH caused it to fly into the crowd that gathered around the runway. One of the enthusiasts sat or jumped (I couldn't tell which) on the model and tore half the cabin away and about a square foot of paper off the wing. In spite of this, we carried the model to the roadway, called a timer and with $\frac{1}{2}$ oz. of gas in the tank, released the "Sportster" on its longest flight to date. The motor "cut out" about five minutes after the take-off. Thirteen minutes and fifty seconds later after following the model in a car, we saw it land safely in front of a farmhouse. That day the "Sportster" was flown more



The uncovered parts of the model are simple but strong

(6) The landing gear is wire faired with spruce. It is a split-axle type with rubber or spring for shock cord.

(7) The motor mount is duralumin ($\frac{1}{2}$ " 90° angle).

(8) Don't offset your motor in any way.

(9) Before covering your model, balance it by placing the coil and batteries in the proper position.

(10) Bamboo paper was used on the original model but silk is recommended because it doesn't crack as easily.

Excess detail was omitted in the drawing to give the model builder a chance to use his own ingenuity and originality. General dimensions should be adhered to but the motor mount, landing gear, etc., may be constructed to suit the builder.