

BUILD THIS

# Flyabout

by LAWRENCE REITHMAIER

**T**HE FLYABOUT should appeal to both beginner and expert alike because its simple construction and ease with which it can be adjusted, it is an ideal model. Although not primarily designed for contest work it should hold its own with the best. When carefully adjusted it has a skyrocket climb and a very flat glide. This should meet with the approval of the expert.

Whether this is your first gas job or your tenth you will marvel at its stability, for the Flyabout has that old demon spiral dive completely subdued. Due to its inherent stability, motor torque does not effect its performance to a great extent, thus simplifying the construction somewhat since no wing warp or offset motor is required. Its stability also accounts for the ease with which it may be adjusted; it is not very sensitive to minor changes in wing or tail settings.

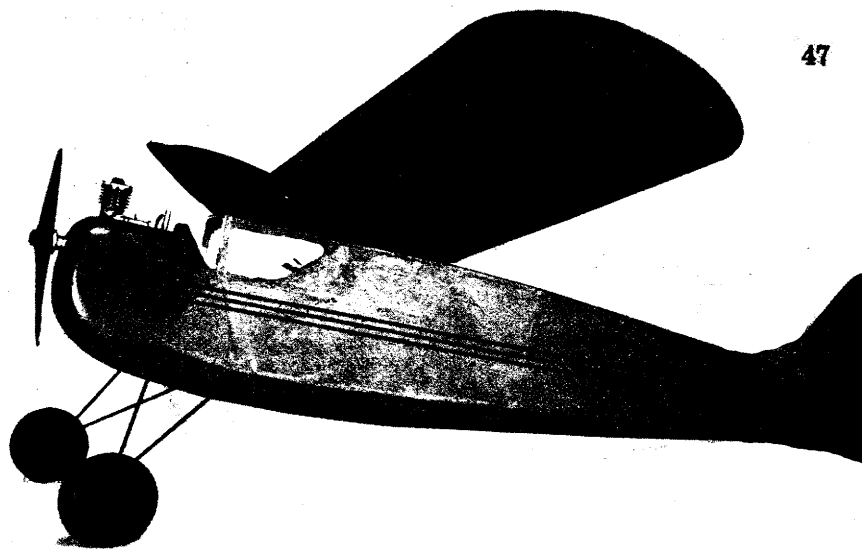
The Flyabout is a consistent and reliable flyer, the original having turned in hundreds of flights with no damage other than a few broken props. It has been flown in high winds, which would "ground" most gas jobs and has proven that it "can take it" by coming through the resulting downwind landings unscathed. You will find the Flyabout to be one of the strongest Class "C" jobs and it comes well under the requirements for this class when powered with any 1/5 or 1/6 horsepower engine. If the plans and the description are carefully followed you should find no difficulty in building and flying the Flyabout.

## Fuselage and Tail

**PLATE 1** should be enlarged to full-size, preferably on a large board. All material for this model is medium hard balsa unless otherwise specified.

The sides of the fuselage are constructed of 1/4" sq. Be sure that all joints are well fitted and use plenty of cement. The sides are then joined together with 1/4" sq. crosspieces. The formers for the bottom of the fuselage are cut out of 1/8" sheet. It is a good plan to cut the slots for the stringers after the formers are cemented in place, thus making better alignment possible. The stringers are 1/8" by 1/4" strips.

The motor mount is 1/8" plywood cut to the shape shown on the plans. This is firmly cemented and nailed to the top longerons and uprights. Aluminum angles, with holes correctly spaced for your motor, are bolted to the plywood. Incidentally, the nose of the model as shown on the plans was designed for a Brown Jr. motor but



This easy-to-construct Flyabout is a consistently good performer.

may have to be changed to accommodate other types of Class "C" engines.

The nose blocks are lightly cemented in place and cut to their correct shapes. After their outside surface is finished they are removed, hollowed out to a 1/4" thickness, and cemented back in place. Blocks "A" may have to be trimmed to suit your motor.

The landing gear is bent up from 1/8" diameter music wire to the dimensions shown. Bind the two struts together at their lower ends with fine wire and solder. The struts are then bound to the fuselage crosspieces with heavy thread and coated with cement. 3 1/2" airwheels are used.

The celluloid for the windows is now cemented in place. The covering is cut to the window shape. A small piece of heavy paper is used for the cowling by the windshield. Bamboo paper is used for covering, using thinned out cement for adhesive. The nose blocks can be covered with tissue. The rudder and stabilizer sections are flat with a rounded leading edge and pointed trailing edge. Soft copper wire is used for the rudder tab hinge. The stabilizer is made in one piece and cemented to the fuselage after both are covered. A small block shaped to carry out the fuselage lines is cemented on top of the stabilizer and the rudder is cemented on top of this. If you intend to fly your model in rough fields it is advisable to add short 1/8" by 1/4" struts from the rudder to the stabilizer as shown on the photographs of the model. The tailskid is made of hard 1/4" sheet.

## Wing Construction and Ignition

**T**HE WING is made in halves and later joined. To assemble the wing, place a rib between the two 1/8" by 1/4" spar cap strips, then insert a 1/16"

by 2-15/16" web, add another rib and web, etc., until there are eight ribs in each wing half. Be sure to allow enough of the 1/8" by 1/4" spars to extend on each end to construct the spar joint and wing tip. The leading and trailing edges and wing tips are now cemented in place on each wing half.

The spar joint pieces are cut out of 1/4" sheet. Each wing half is raised six inches and the spar joint pieces are cemented in place. Be sure that the joints are well fitted and use plenty of cement. The three ribs at the center section are cut in two and cemented on each side of the spar. The leading and trailing edges are joined; the center section is covered with 1/16" sheet. The wing is covered with bamboo paper. Wiring diagrams are as numerous as gas jobs at the Nationals, therefore none was included in the plans. Any standard hook-up can be used. All joints in the wire should be soldered and insulated with tape.

The battery box is made of 1/8" sheet balsa with a spring from an old flashlight on one end. It is held in place on the battery track with rubber. The coil can be taped to one of the crosspieces of the fuselage, since a metal band may interfere with the proper functioning of the coil. The mounting and position of the timer will be determined by its make. A good place to mount it though, is on the crosspieces by the window with its arm protruding through the celluloid.

There should be no side or so-called down thrust and the wing should be free from warps. The wing is held in place with about eight feet of 1/8" flat rubber. The model should balance when held one-third back from the leading edge. Proper balance is achieved by shifting the batteries. The rudder tab is left neutral for the first flight. Set the timer for about ten seconds and run the motor at about one-third throttle. Hand launch the model into the wind. It should fly nearly straight. After the first flight the speed of the motor can be increased and necessary adjustments for climb and circling can be made.

THE END

## PLANS FOR THE FLYABOUT GAS JOB

On Pages 48, 49, 50