

A STUDY OF GULLS AT THE SEASHORE GAVE LOUIS GARAMI THE INSPIRATION FOR THIS A-1 SPECIAL HE NOW OFFERS YOU STICK MODELERS. BUILD IT, AND WE'RE SURE YOU'LL AGREE WITH THE AUTHOR THAT THIS BIRD IDEA IS THE REAL STUFF, AND NO FOOLIN'. IN FACT, THIS JOB GOES OUR FEATHERED FRIENDS ONE BETTER —FOR IT CAN BE FLIGHT-ADJUSTED IN THE CELLAR.

Garami's Gull-Wing

By Louis Garami

WATCHING the gulls soar overhead is educational and interesting, but just take a look at what too much watching did to me this month. The last time I was gazing at these super-soarers I simply had to go home and blaze away at the sheet balsa with my trusty razor blade. After the balsa butchery was finished and this critter finally rolled off the assembly line, the first few tests proved two things. First, that the birds know their onions about flying. Second, that they had given me an idea for a swell stick model.

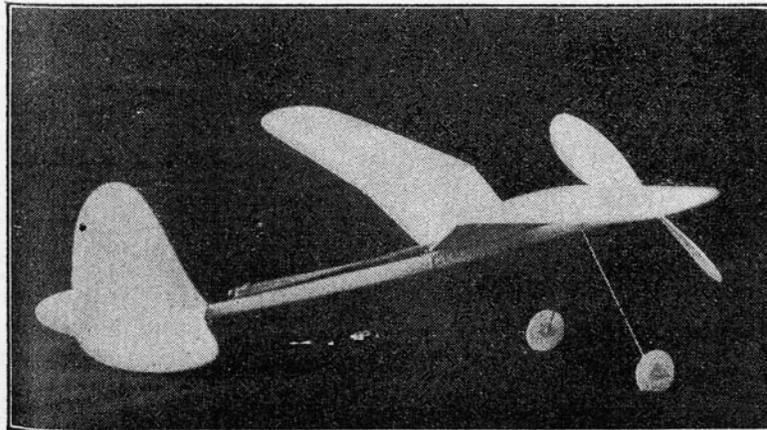
Have you ever seen a gull poised for flight on a sandy beach? We think you'll have to admit that this is a pretty swell imitation. Note the slender, bird-like lines which make this little ship the beautiful flyer she is.



In this model, good looks are combined with excellent flying qualities, and the all balsa construction insures simplicity and ruggedness. So let us digest the instructions carefully before wielding a knife or knocking the open glue bottle off the workbench.

FUSELAGE AND PROPELLER

THE motor stick is cut out of 1/8" sheet balsa. Use medium strength, crossgrained wood, which can be recognized by its freckled surface. This type of wood does not bend easily, so it is highly recommended for parts where rigidity is required. Note that the front part of the stick is a separate little piece set in and glued. Sandpaper the top and bottom round and taper the last 5" from the bottom up, leaving a flat spot for the tail group. The usual aluminum tubing is used for a thrust bearing and is secured with plenty of cement.



This rear-quarter view gives you a look-in on the tail surfaces and the graceful angle at which the wings are set. Give her a few winds and watch her soar into the air for a long, easy flight.

Since all the wire parts are of the same gauge (.028) they can be made up and wiped off the slate at this early stage of the construction. The landing gear and wing clips should fit the stick snugly but not too tight. Cement the landing gear and rear hook in position. With the aid of a pair of dividers mark out the wheels, using the same crossgrained wood as you used for the stick. Cut and sandpaper them into shape. Do not forget to cement the aluminum tubing in the hub, because, using balsa wheels without bearings, you will be losing the wheels at every flight.

For the propeller use a medium block 6" by 1 1/8" by 3/4". After the blank is shaped, start to carve it at the hubs and work toward the tips. The prop should be about 1/16"

thick at the tips. A large copper washer and a small eyelet cemented in the center hole will finish the prop. Now insert the motor shaft into the aluminum tubing and prop, which have a small washer between them, and cement it.

WINGS AND TAIL GROUP

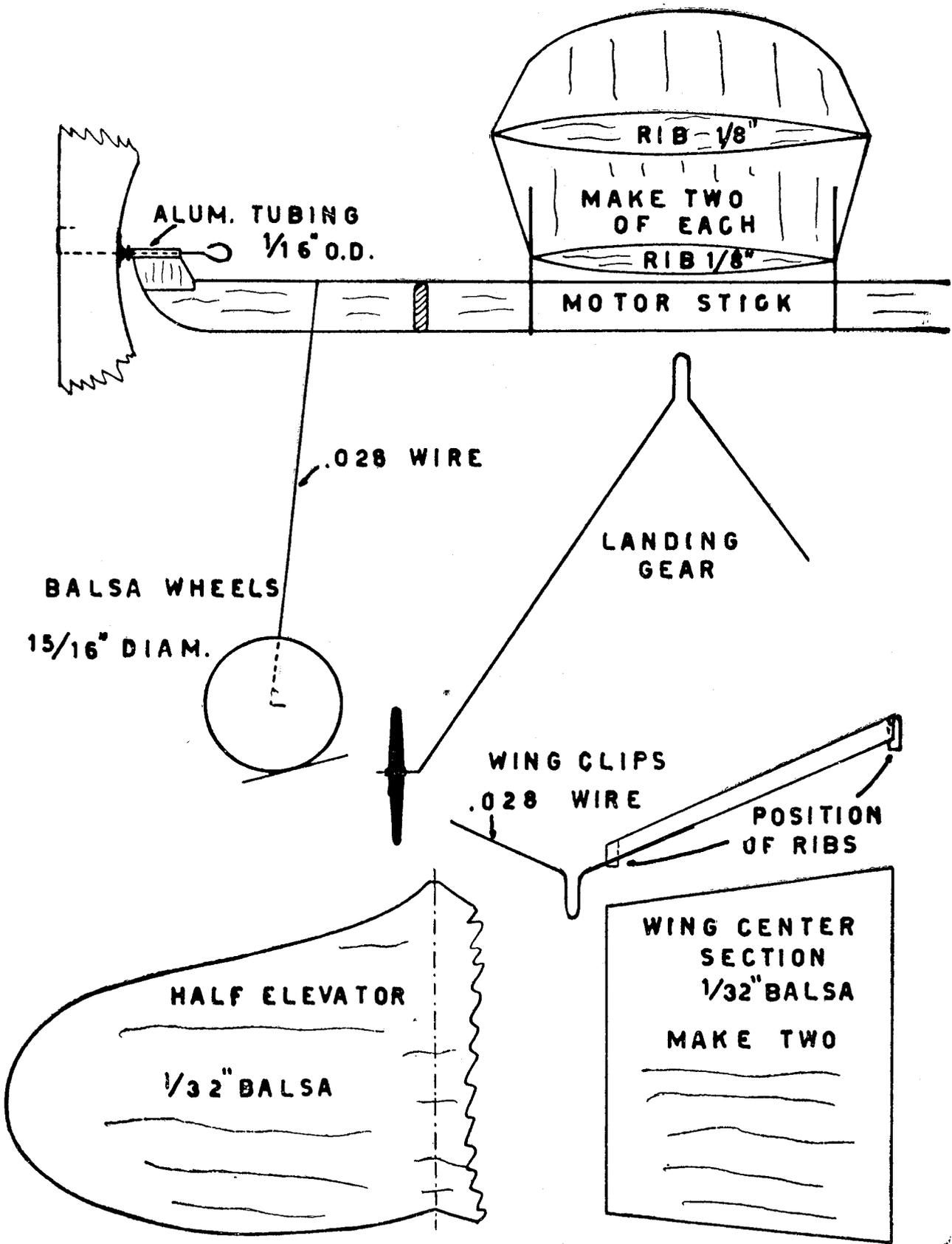
IN order to make the complete model weigh .3 ounce (weight of the original) you will have to make the wings and tail surfaces as light as possible. Choose a soft 1/32" sheet for this purpose. The best way to test balsa wood for softness is to hold it between the thumb and forefinger and apply a slight pressure. If it has a rubbery reaction the wood is soft, and by practising this every time you purchase material it will be easy to compare the different grades.

Cut two of each wing blank and of each rib. The tops of the smaller ribs have to be bevelled as shown in the plan and the center sections glued on and held in place by a couple of pins. The bigger ribs are placed right under the seam of the two sections of the wings. Glue and pin, comparing them with each other and with the plan which shows the amount of dihedral. Now cut the tail surfaces out of the same sheet and sandpaper them smooth, remembering to make the small cutout on the back of the rudder. In this way it is easier to make adjustments in either direction without cracking the wood.

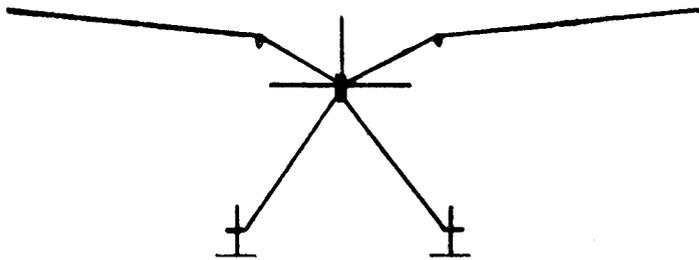
Line up the elevator and rudder with the aid of model pins and cement them. Complete the whole job by placing the wing clips in position and gluing the finished wings on them. They can be checked over for accurate alignment later and corrected by bending the wire clips slightly.

FLYING

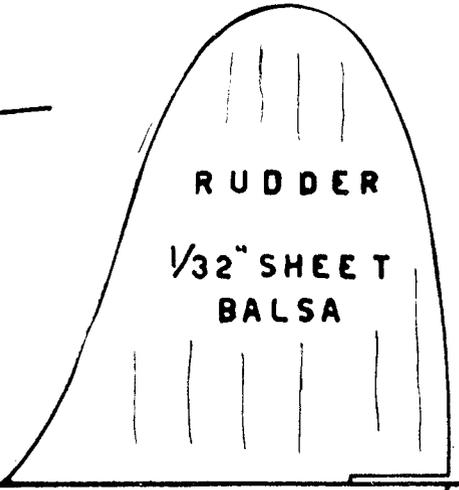
THE model can be adjusted very nicely indoors—in the cellar if the weather outdoors happens to be rough at the time of completion. With a loop of 1/8" rubber for power, she travels quite slowly, so you can rough her around a bit without damage. Shift the wing back and forth until a flat glide is obtained, then wind her up about 40 times for a take-off. She should rise to two or three feet and land gracefully. Then she is ready to be taken outside for a real flight. And how about sending F. A. a "shot" of your ship?



FRONT VIEW



RUDDER
1/32" SHEET
BALSA

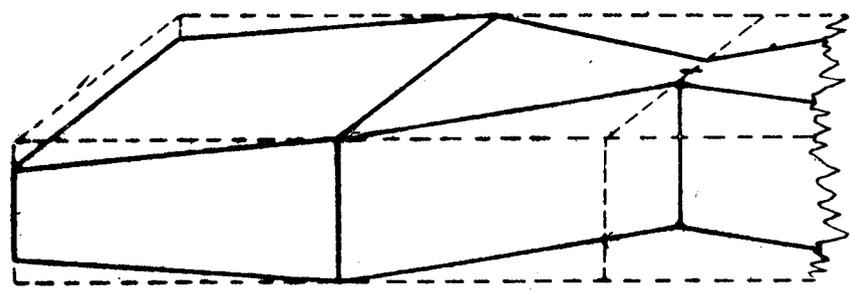


1/8" x 3/8"

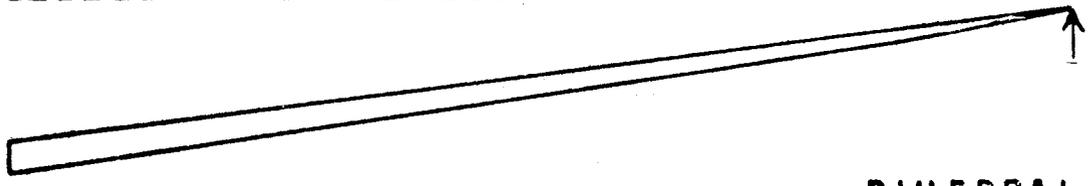
1/16" sq. BAMBOO



PROP BLOCK
6" x 3/4" x 1 1/8"



DIHEDRAL 1 3/4"



WING BLANK
1/32" BALSA

MAKE TWO

