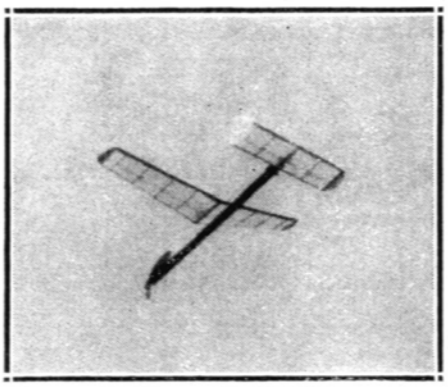
FLY THIS VICTORY STICK

By Louis Bucalo

DUE TO the rubber and gas shortage, the tendency to build smaller ships has increased. To jump into the old "buggy" and chase your ship for a few miles isn't practical anymore. Gasoline rationing also makes it difficult to get to those scarce contests and large flying fields.

Don't get the idea that we're trying to discourage you model builders. Perish the thought! On the contrary, we designed the VICTORY STICK to settle your problems. This ship possesses the good flying characteristics of larger ships without their difficulties. On its very first flight, the VICTORY STICK almost flew out of sight and two-minute flights are frequent. Since actions speak louder than words and most model builders are "Loudspeakers," let's get to work.



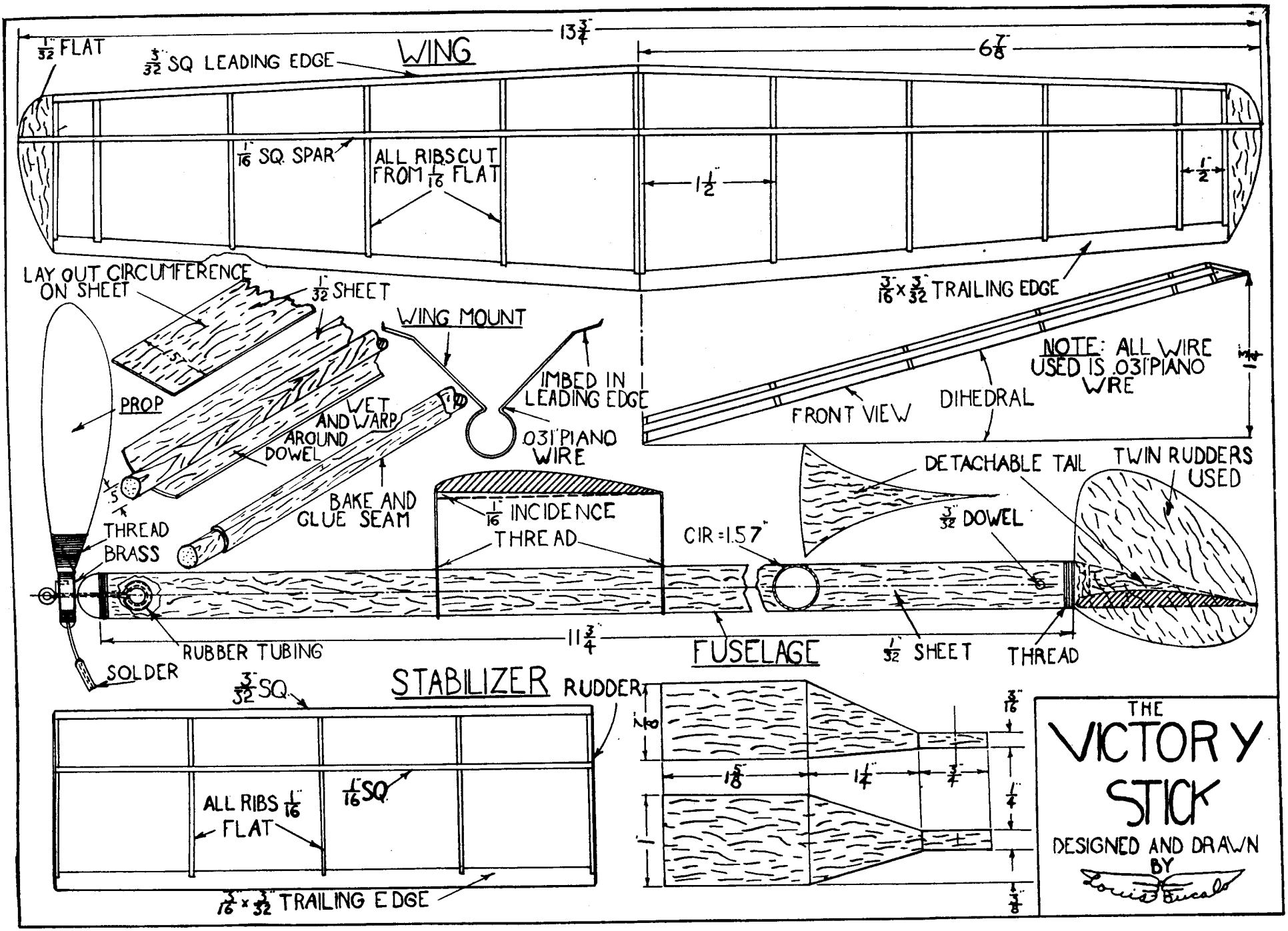
The Victory Stick in Flight

FUSELAGE AND WING

THE FUSELAGE is tubular and made up of carefully sanded 1/32" sheet. By laying out the circumference of the tube (1.57") on 1/32" sheet and boiling it in hot water, we attain a pliable sheet of balsa. Note that this part of fuselage is 11 3/4" long. Warp the sheet around a 1/2" dowel, bake, and glue the seam as shown on the plans. Dope the tube twice and sand carefully after each coat. Cover with tissue and secure 3/32" dowel in place as shown on the plans.

Bind some thread around the ends of the tube to prevent splitting and glue. The rear part of the fuselage is detachable and can be conveniently made from the layout on the plans. Glue a piece of round balsa to the detachable fuselage so that a joint can be made with the tubular part. Secure the two parts together by means of hooks and rubber band.

Wing construction is simple and employs ordinary dihedral with a butt joint. Use the airfoil shown on the plans. Be sure to taper the trailing edge and round off the leading edge. The drawings are self-explanatory, so we presume you have the construction completed by now. Carefully sand all joints before covering wing top and bottom. Wet, allow to dry, and dope twice. The wing mounts are bent from .031"


WING
13 3/4"
6 7/8"
1/32" FLAT
3/32" SQ LEADING EDGE
1/16" SQ. SPAR
ALL RIBS CUT FROM 1/16" FLAT
1 1/2"
1/2"
3/16" x 3/32" TRAILING EDGE
LAY OUT CIRCUMFERENCE ON SHEET
1/32" SHEET
WING MOUNT
IMBED IN LEADING EDGE
.031" PIANO WIRE
PROP
WET AND WARP AROUND DOWEL
BAKE AND GLUE SEAM
1/16" INCIDENCE
THREAD
BRASS
SOLDER
RUBBER TUBING
11 3/4"
FUSELAGE
CIR = 1.57"
DETACHABLE TAIL
TWIN RUDDERS USED
3/32" DOWEL
1/32" SHEET
THREAD
NOTE: ALL WIRE USED IS .031" PIANO WIRE
FRONT VIEW
DIHEDRAL
STABILIZER
3/32" SQ
ALL RIBS 1/16" FLAT
1/16" SQ
3/16" x 3/32" TRAILING EDGE
RUDDER
1 5/8"
1 1/4"
3/16"
1/4"
3/8"
THE VICTORY STICK
DESIGNED AND DRAWN BY
Louis Bucalo

piano wire to the shape shown on the plans. Imbed the cant hooks of the front wing mount onto the leading edge and imbed the cant hooks of the rear mount in the trailing edge.

Glue the mounts to the wing with several light coats of dope. Slip the fuselage through the holes in the mounts and place wing in the position shown on the plans. Bind the thread around the necks of the mounts.

TAIL SURFACES

CONVENTIONAL construction is used on the stabilizer. Round out the 3/32" square leading edge and taper the trailing edge. Cut ribs of 1/16" sheet to the airfoil shown on the plans. Use hard wood for the 1/16" sq. spar. Before covering sand stabilizer which is covered top and bottom. Wet the paper lightly and allow to dry well before doping at least twice.

The rudders are cut from 1/32" sheet to the shape shown. The rudders are doped once and sandpapered. Glue the rudders to the stab. Glue the stab to the detachable part of the fuselage, making sure neither negative nor positive angle is given.

The nose block is cut from hard balsa or an ordinary nose plug can be used if wood is added to its shank. No rubber bands or hooks are needed to hold the nose block on if a tight fit is made.

The propeller block is cut from medium hard balsa to the dimensions shown. Make a high pitch prop, care-fully sanding to a thin airfoil. Note folder. Dope the prop with clear dope only and balance with solder as shown. The prop shaft is bent to the shape shown from .031" piano wire. (Note washers) Rubber tubing is put around the hook to safeguard the rubber.

The motor is made up of four strands of 1/8” flat rubber, 14" long. Put the rubber in the ship after lubricating it with green soap and glycerine.

FLYING THE MODEL

SMALL SHIPS are easy to adjust if directions are followed and they react to the slightest adjustment readily. Select a calm day for flying. The wing should be at the center of gravity of the fuselage. Glide until a flat angle is obtained. Put the left turn in the rudders so that the craft glides in tight left circles. Plenty of right thrust will make the ship climb slightly to the right and almost straight up. For adjusting use only 200 winds, but for long flights, pack in 650 winds with a winder.

After adjusting the VICTORY STICK you will probably build nothing but VICTORY size ships. Arrange with your friends to have your own VICTORY CONTESTS. You can hold them in nearby small parks or lots. Victory is certain with the VICTORY STICK!

THE END

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