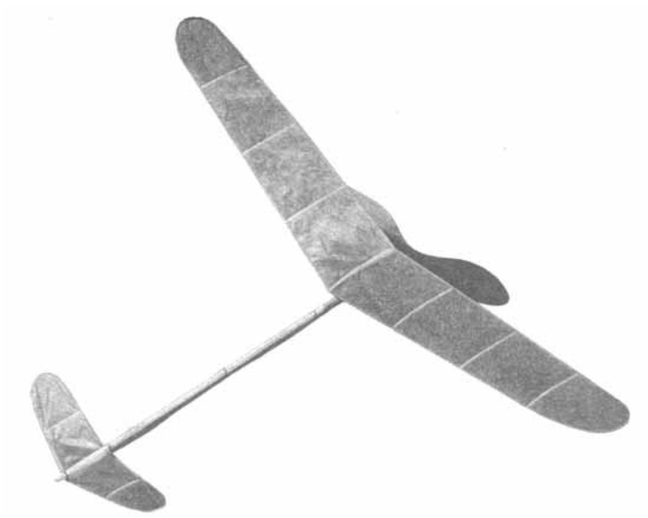
BABY DRAKE

By Ed Yulke

TOO WINDY FOR OUTDOOR FLYING?
TRY THIS MIDGET PUSHER FOR PARLOR CONTESTS.
IT'S EASILY BUILT AND FUN TO FLY.



SOME months ago our experiments with gas-powered canards became quite annoying because of the time necessary to make changes and do a little repair work on crack-ups. Someone suggested indoor models as aerial guinea pigs on which all sorts of fanciful notions could be tried. It wasn't that our gas models weren't successful, but that the experimental bug couldn't be killed -- even with Flit.

The first two indoor models built were much too heavy; their wooden parts were cut down from gas-model balsa and they were wired with .020 music wire. As a final touch, the props looked like butter paddles! A second and lighter design was laid out, the plans of which are before you. The ship is of simple construction and, since the sizes of materials used are on the plans, a few construction notes are enough for even the most inexperienced modeler.

Use firm but not hard balsa for the motor stick; cement the cans, front hook and thrust bearing tightly. A few turns of fine silk thread will be needed on the front hook and thrust bearing. Very soft indoor wood can be used for the wing and stabilizer. The tips are formed by dipping the strips into boiling water and pinning them down over the plan to dry. Make all wing ribs the same length and trim the trailing edge to the lengths necessitated by the tapered wing. All wire parts can be made of .010 music wire, which is easily bent to shape with round-nose pliers.

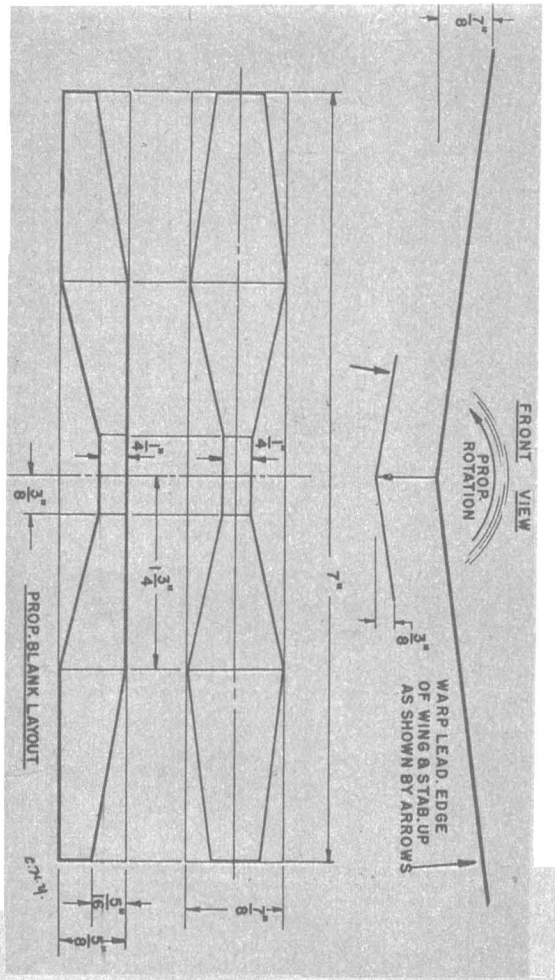
The propeller can be either carved from a block of the dimensions shown or purchased from a local shop. It requires infinite patience to sand one to paper thinness; since the prop can make or break a model, spend as much time as is needed to sand the blades down to where one can see light evenly over the whole blade area. Chapters of some of the latest books on model building give information on laying out and carving a good indoor prop and furnish everything but the elbow grease.

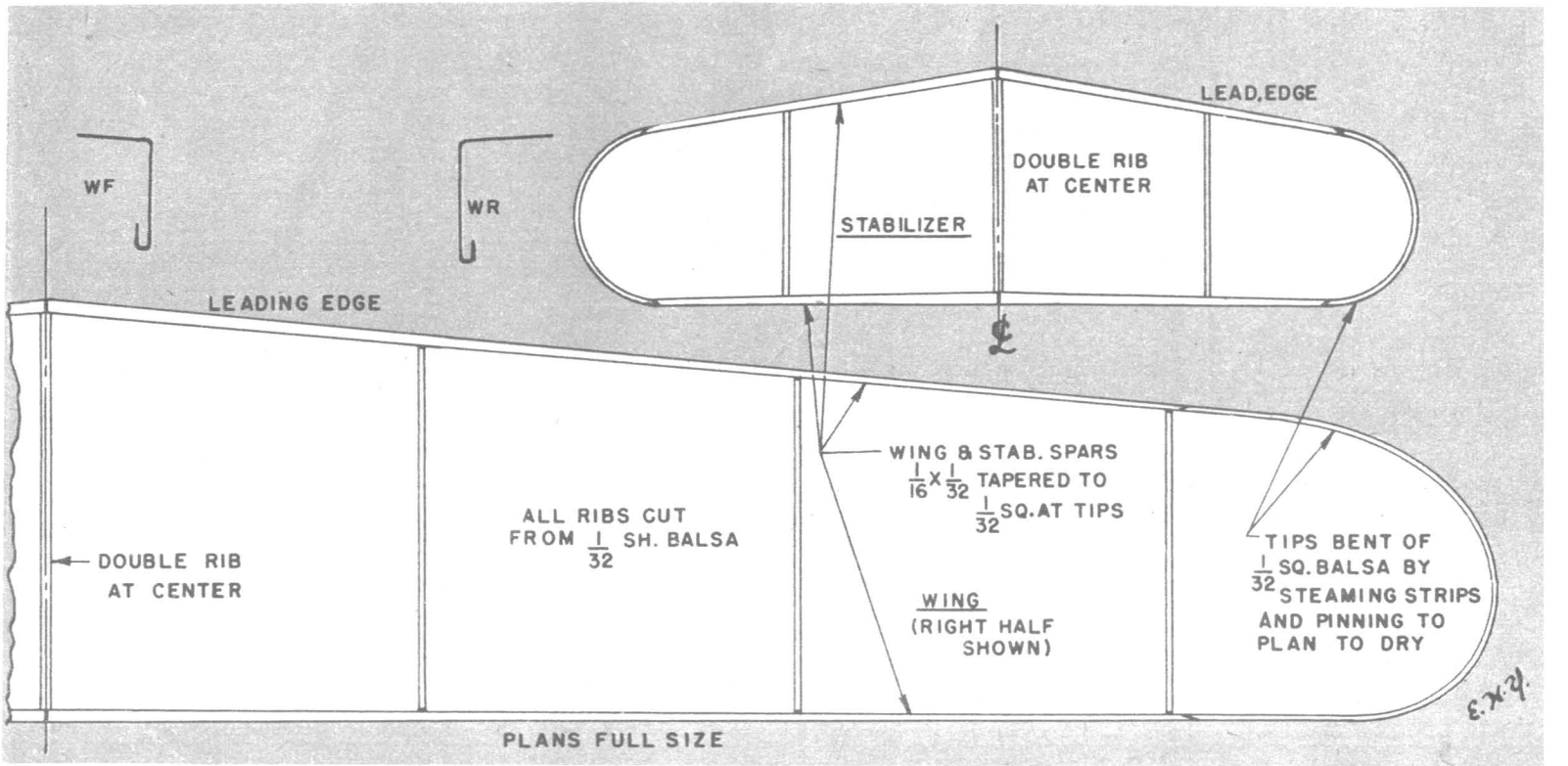
If the superfine covering needs ironing, wait until the paper has cooled before applying it to the frames. As it cools, the paper tends to stretch and pick up humidity from the air.

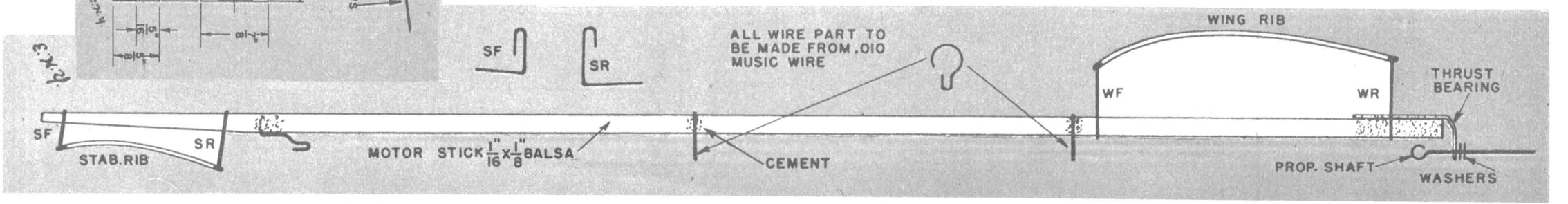
The diagram should be studied carefully before the model is adjusted for flight. Turn is achieved by "washing in" (warping the leading edge up and the trailing edge down) the side of the stabilizer that will be on the outside of the desired turn. For a left-hand circle, the right-hand stabilizer is washed in. Do not wash out the other half of the stabilizer, for that will increase the difficulty of adjusting the model for smooth flight. The mounting clips were designed to give the correct stabilizer setting. The wing on the inside of the turn will have to be washed in to prevent the possibility of a spiral dive under full power. The motor should be a single loop of 1/16” lubricated flat, brown rubber.

The model can easily be lightened for contest competition by building a hollow motor stick, lightening the structure of the wing and covering the ship with microfilm. The model even as presented here may turn in a flight of two or three minutes in a suitable place.

Scanned From Feburary 1943
Air Trails


PROP. BLANK LAYOUT
FRONT VIEW
PROP. ROTATION
WARP LEAD. EDGE OF WING & STAB. UP AS SHOWN BY ARROWS
7"


WF
WR
LEAD. EDGE
DOUBLE RIB AT CENTER
STABILIZER
LEADING EDGE
DOUBLE RIB AT CENTER
ALL RIBS CUT FROM 1/32 SH. BALSA
WING & STAB. SPARS 1/16 X 1/32 TAPERED TO 1/32 SQ. AT TIPS
WING (RIGHT HALF SHOWN)
TIPS BENT OF 1/32 SQ. BALSA BY STEAMING STRIPS AND PINNING TO PLAN TO DRY
PLANS FULL SIZE


SF
SR
ALL WIRE PART TO BE MADE FROM .010 MUSIC WIRE
WING RIB
WF
WR
THRUST BEARING
SF
SR
STAB. RIB
MOTOR STICK 1/16" X 1/8" BALSA
CEMENT
PROP. SHAFT
WASHERS