THE G. E. "CABINETTE" TAKES WING

A little class A gas job with A big performance -- Easy to build and fly

by FRANK EHLING

WITH a short hop and a bound-this little ship is in the air, standing on its tail climbing skyward. A few seconds later it is a speck in the sky. Be careful to time the motor for less than twenty seconds or you will spend more time looking for the ship than it takes to build a new one.

After many fine flights on a recent trip to the flying field, the timer stuck and allowed the motor to run about twenty seconds. The plane kept climbing till it no longer could be seen, so we went home, sorry that we made that flight but gratified to know how easily this little ship can place among contest winners.

One week later a car drove up and out came a young man with the lost model, the only damage, a small hole in the wing covering. When offered compensation for returning the ship he replied, "All I want is to see that ship perform."

Soon the wing was patched and we started for the flying field. This fellow had never seen a gas model fly and he stood breathless when the ship took off into a steep climb. After a few flights he was a confirmed model fan, and wanted to build a plane like it. A recent letter from him tells that he was successful-his plane has made many fine flights.

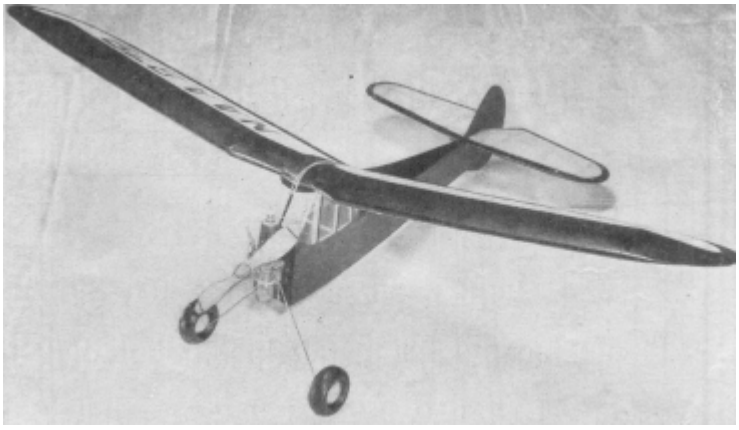
This model fulfills the need of a realistic looking plane that will give a good account of itself when flown in any kind of weather.

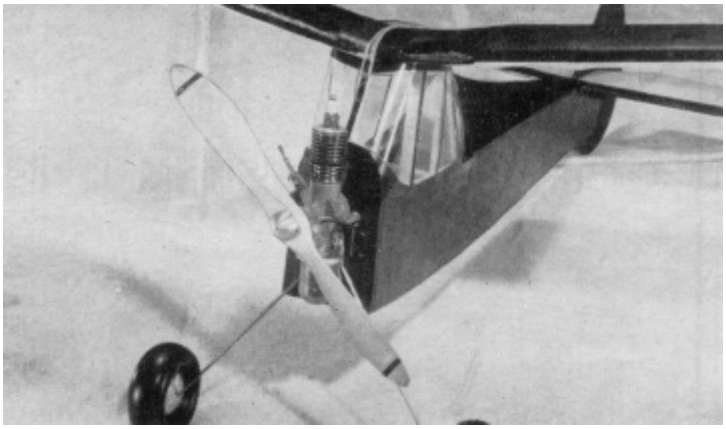
The wing is raised on a high cabin for stability. The cut-out in its leading edge allows the wing to be placed nearer the propeller, thus giving the ship a shorter nose moment arm and added stability.

The plans are shown half size. Any measurement not given call be determined by merely doubling the size shown. The whole plan should be drawn up first: this is easily done with a pair of dividers and ruler. If you prefer, the plans call be enlarged for a class B ship. One of this size has been built and is constantly turning in good flights.

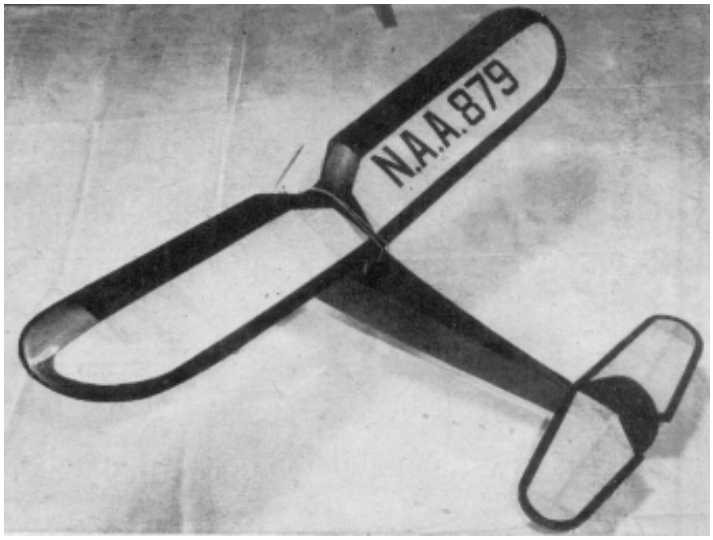
Start the construction by assembling the fuselage sides. The longerons and struts are pinned in place over the full size drawing, placing the pins on both sides of the members but not through them. After the joints are cemented and dry remove the side assembly from the plan. Make both sides in a similar manner.

Assemble the two sides by cementing the firewall and the stern post in place; the latter is the rearmost upright member of the fuselage shown on the plans. Hold the joints together with pins while they dry. Next the cross members, top and bottom, can be put in place; also the cabin structure which is built up with formers and a keel that runs from its rear to the front of the fin. While the glue of the joints is drying make sure the frame is not warped and that the whole structure is in proper alignment.





No larger than some rubber powered models and of simple construction but with the looks and zip of large planes



Next cement the cabin celluloid windows in place, after which the landing gear and motor mounts can be properly formed and assembled to the front bulkhead. The ignition then can be installed, located as shown in the drawings. When this is done sand the whole structure lightly. The paper covering may then be applied.

When building the wing first cut out all parts to the proper shape, including the spars, ribs, leading and trailing edges and miscellaneous parts. Assemble half the wing at a time by mounting the ribs on the spars at the proper place.

Next cement the leading and trailing edges and curved tips in place. When both halves are done join them together with the splices shown in the drawing, making certain that the wing has the proper dihedral; that is, each wing tip should be raised 2-3/4" from a horizontal line through the leading edge at the wing center. The tips are made from 1/16" sq. bamboo, both tips being made at the same time to insure uniformity.

When all of this is completed cover the center section and then the leading edge with 1/32" sheet balsa. Sand the whole wing carefully and add a little more cement to all joints that may need it.

The wing is now ready for covering. This is done by cutting the paper with a 3/8" margin all around. Apply to the wing by starting at the center and progressively cementing it to each rib as you proceed outward toward the tip. The paper should be drawn tightly from center to tip. Then the leading and trailing edges may be cemented down and the excessive paper trimmed around the edges.

The stabilizer construction is similar to the wing and is likewise covered.

The rudder is cut from a balsa sheet and sanded to a streamline crossection. It is best to dope and finish this part before it is cemented in the assembly.

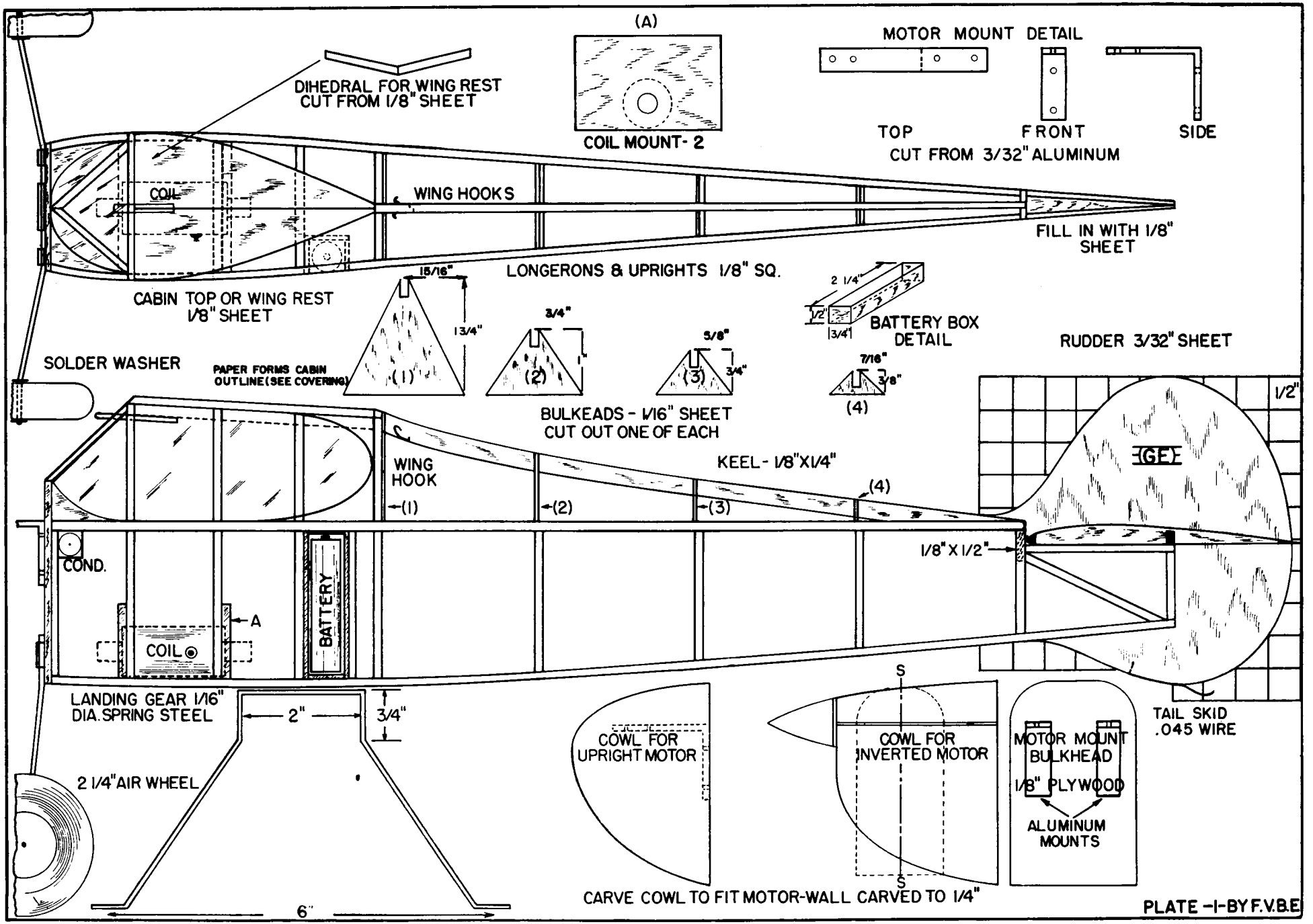
The sub-rudder, beneath the fuselage, is made the same as the fin above, except that a wire tail skid is cemented to its lower edge. When these are completed cement them in place on the fuselage.

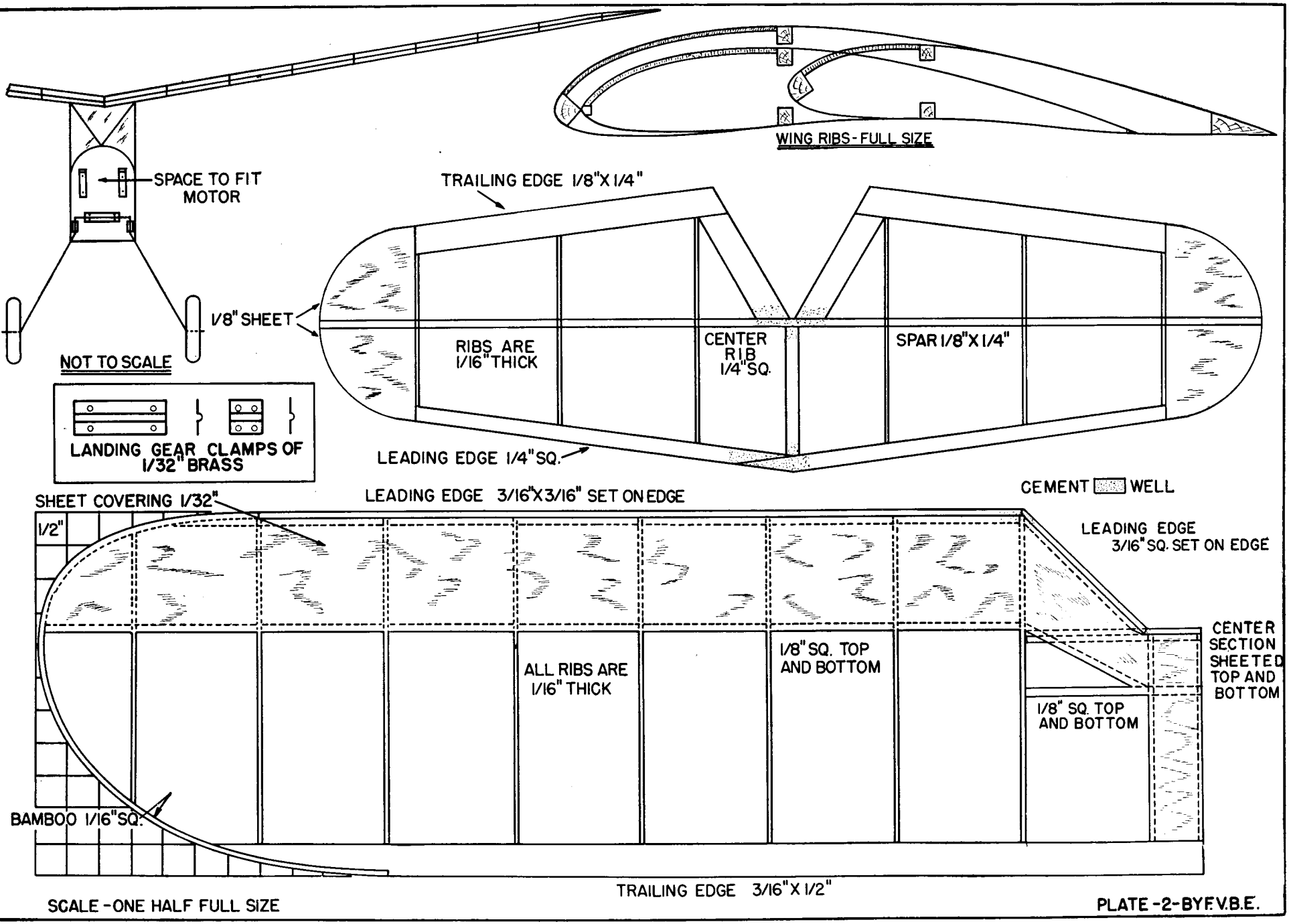
Now carefully check over all your work and if completed to your satisfaction apply clear dope to all surfaces. While the dope is still wet check the wing and tail surfaces for warp, holding them in the correct position until the dope dries.

The plane may be made very colorful and impressive-looking by trimming it with colored dope.

Flying this little plane is "as easy as eating." First glide it, being sure it has correct balance and turns to the right in about a 50 ft. circle. This may be regulated by warping the rudder slightly to the right. Test the model by starting the motor and hand-launching it very gently into the wind. Do not push it-actually the wind should lift the model from your grasp. This procedure allows the model to assume normal flight angle when starting. Adjust the model until flights are satisfactory. Be sure however that in the test flights the motor runs only for 4 or 5 seconds; after this real flights can be made with longer motor runs.

V I C T 0 R Y


(A)
COIL MOUNT- 2
MOTOR MOUNT DETAIL
TOP
FRONT
SIDE
CUT FROM 3/32" ALUMINUM
DIHEDRAL FOR WING REST
CUT FROM 1/8" SHEET
COIL
WING HOOKS
FILL IN WITH 1/8"
SHEET
LONGERONS & UPRIGHTS 1/8" SQ.
CABIN TOP OR WING REST
1/8" SHEET
15/16"
13/4"
(1)
3/4"
1"
(2)
5/8"
3/4"
(3)
2 1/4"
1/2"
3/4"
BATTERY BOX
DETAIL
7/16"
3/8"
(4)
RUDDER 3/32" SHEET
SOLDER WASHER
PAPER FORMS CABIN
OUTLINE(SEE COVERING)
BULKEADS - 1/16" SHEET
CUT OUT ONE OF EACH
WING
HOOK
KEEL - 1/8"X1/4"
(1)
(2)
(3)
(4)
1/8"X1/2"
1/2"
GE
COND.
A
COIL
BATTERY
TAIL SKID
.045 WIRE
LANDING GEAR 1/16"
DIA. SPRING STEEL
2"
3/4"
2 1/4" AIR WHEEL
6"
COWL FOR
UPRIGHT MOTOR
S
COWL FOR
INVERTED MOTOR
S
MOTOR MOUNT
BULKHEAD
1/8" PLYWOOD
ALUMINUM
MOUNTS
CARVE COWL TO FIT MOTOR-WALL CARVED TO 1/4"
PLATE -I- BY F.V.B.E


WING RIBS - FULL SIZE
SPACE TO FIT MOTOR
TRAILING EDGE 1/8"X 1/4"
1/8" SHEET
RIBS ARE 1/16" THICK
CENTER RIB 1/4" SQ.
SPAR 1/8"X 1/4"
LEADING EDGE 1/4"SQ.
NOT TO SCALE
LANDING GEAR CLAMPS OF 1/32" BRASS
CEMENT WELL
SHEET COVERING 1/32"
LEADING EDGE 3/16"X 3/16" SET ON EDGE
1/2"
LEADING EDGE 3/16" SQ. SET ON EDGE
CENTER SECTION SHEETED TOP AND BOTTOM
ALL RIBS ARE 1/16" THICK
1/8" SQ. TOP AND BOTTOM
1/8" SQ. TOP AND BOTTOM
BAMBOO 1/16"SQ.
TRAILING EDGE 3/16"X 1/2"
SCALE - ONE HALF FULL SIZE
PLATE -2- BY F.V.B.E.