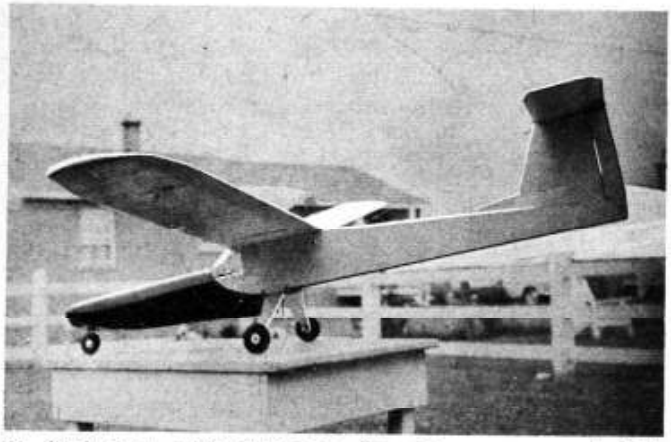
he now familiar NACA planing-tail hull insures excellent hops off water, reduces air drag. On sport fuel, runs to 150 feet.

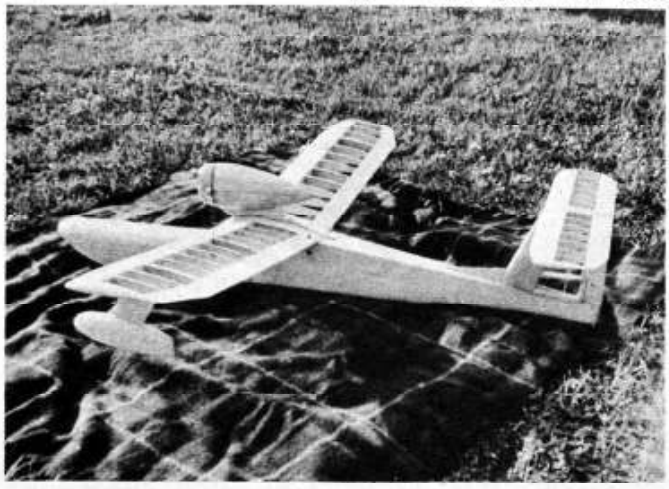
A tried and true flying boat for engines of .15 to .23 displacement, this water bird will give spectacular take-offs and many a smooth flight.

FLAMINGO



For land duty, gear straps on. Take-offs are arrow straight. Wing tip floats detach for operations over nasty terra firma.

The structure is simple, though plans look tough—just because they are well detailed. With flippers, really flares out ROW.



by A. G. LENNON

►The Flamingo utilizes the planing-tail-hull formulae. It is of rugged design, and weighs 70 ozs., with a wing loading of 20 ozs. to the square foot. It has sustained one crash landing involving a chimney and a tree with minor damage.

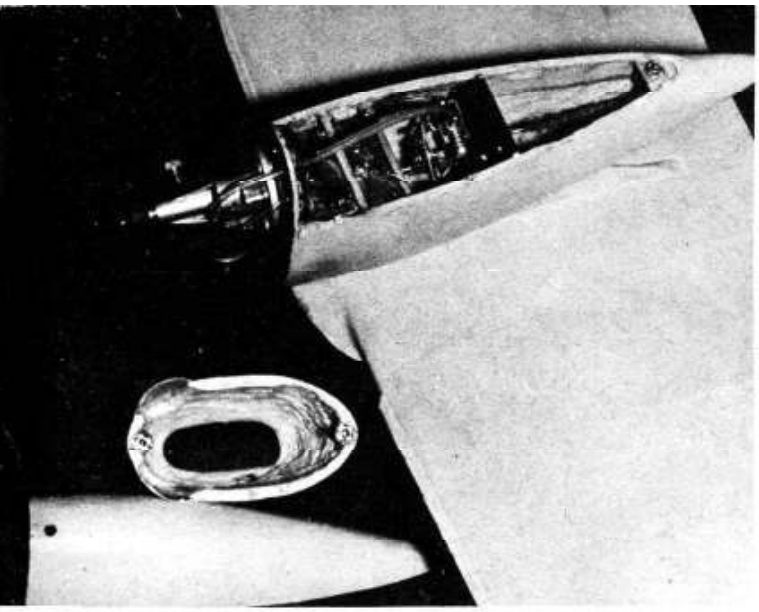
The original was powered with a .15 Torpedo and this is the minimum power recommended. A .19 or .23 motor can also be used. The nacelle as drawn will accommodate all 3 sizes, although with the .15 a ⅛" thicker thrust adjustment block will be needed. Motors should be installed with adaptor plates for firewall mounting and beam mounting legs removed. Props recommended are 9" D 6" P for the .15 and 10" D 6" P for the .19. With the Babcock motor-control unit, high speed revs of 8500 RPM and low speed of 4000 RPM were obtained with the .15.

This model has beautiful flight characteristics. Turns are smooth, penetration is good and the climb with the .15 surprisingly good The design is clean for a flying boat, but the hull, nacelle and wing floats add plenty of drag so that the power-on, power-off transition is hardly noticeable. Water take-offs run to approximately 150 ft. without use of high-power fuel.

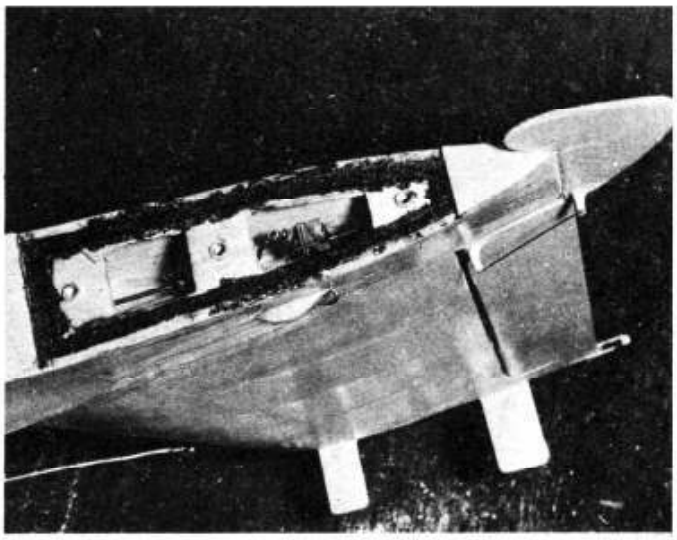
Radio and escapement equipment is all Babcock. Receiver is the BCR-3; the primary escapement the Babcock Mark II Super Compound, operating rudder and giving up-elevator. Flaring the water landings with up-elevator are a never to be forgotten thrill. The Babcock Universal Motor Control Escapement is used for motor control, high and low speed.

The original design of the Flamingo did not include a water rudder. However, when taxiing at low speed on the water, the air rudder is ineffective. A balanced water rudder, as shown, was installed and after several trial sizes had been tested, this one proved satisfactory. Its

Continued on next two pages



And here is K & B .15 inverted on a radial mount, tank, Babcock motor-control escapement, the rubber extending inside nacelle.



Balanced water rudder enables jazzy steering in H2O—it's a must. Black material is rubber sealing to prevent any leakage.

use is highly recommended if motor control is installed.

HULL: Cut out and assemble all bulkheads; ¼" sq. and rails. Do not omit block #21. Cut out front and rear portions of the hull sides and join. Add ¼" sq. and side rails to hull sides in the cabin area. Note doubler. Join sides in cabin area with ¼" square. Add bulkheads, top windshield former, windshield post and block #21 at stern. Plank bottom at rear, noting access hatches. Add step former L and draw in sides to lower bulkheads #4-5-6, add sternpost M to form pointed step.

Add keel and stringer of forebody. Plank forebody bottom. Install bonding to nose wheel tubing. Check installation of battery and radio chassis and install rear ply block. Install plywood escapement mounts and ⅛" ply for rear wing rubber hook mount and sloping bulkhead 8A.

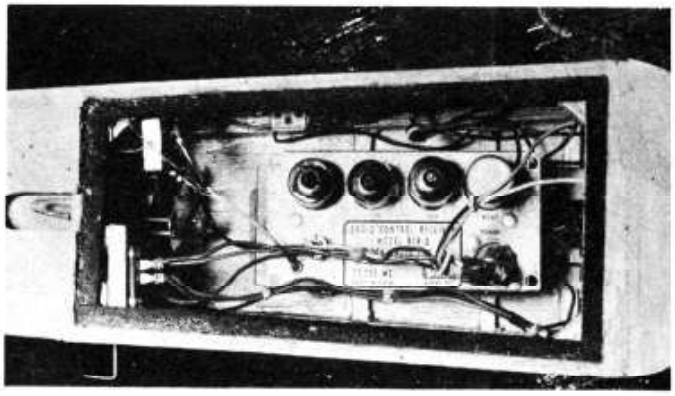
Install escapement, control rods, rear rubber hook, elevator pull rod, rudder linkage and ¼" escapement rubber motor. Bond all metal parts as shown. Install afterbody top deck planking and access hatches. Add noseblock to bulkhead #1 and carve to shape.

FIN & RUDDER: Assemble fin and rudder. Make sure push rod holes in rudder ribs are on the correct side of rudder. Check alignment of top and bottom ribs carefully since they establish angular relationship of tailplane. Install fin on fuselage and add rudder. Install water rudder at this point.

WINGS: Construction is straightforward. Note that dihedral break is not parallel fore and aft. Assemble center section and then add outer panels at correct dihedral. Wing-float mount ribs can be assembled as a sub assembly to be installed during wing construction. Wing panels should be assembled on an absolutely flat surface to insure accurate alignment for true flight.

TAILPLANE & ELEVATORS: Straightforward. Note hinges on top surface only. Since leading edge of elevators butts against trailing edge of stabilizer, no down travel stop is necessary. Note the ply saddles on the fin and the locating dowels which plug into openings in the 1/32" sheet stabilizer covering. These are essential to keep the elevator properly located to avoid any fouling of the elevator control linkage which could render all controls inoperative.

NACELLE & COWL: These are shaped from solid blocks hollowed out. Bottom of the nacelle is slotted to take the nacelle strut which butts against the nacelle floor. The strut also engages in a slot in the rear firewall plywood. Lower end of the strut plugs in between the two center ribs of the wing. In assembly check all alignments. Cowl and nacelle top cover rear are held in place with large



RC experts might hide the wires but this, author's first radio attempt, was howling success. Babcock receiver fits real snug.

dress snaps. Front of the nacelle cover is held with a simple wire clip attached to motor hold-down bolt and balsa lugs prevent sideways shifting of the top.

Gill vents in the cowl are cut and shaped from any thin soft aluminum and cemented to the cowl. Balsa behind the cowl is cut away (see detail photo) to permit free exit of cooling air.

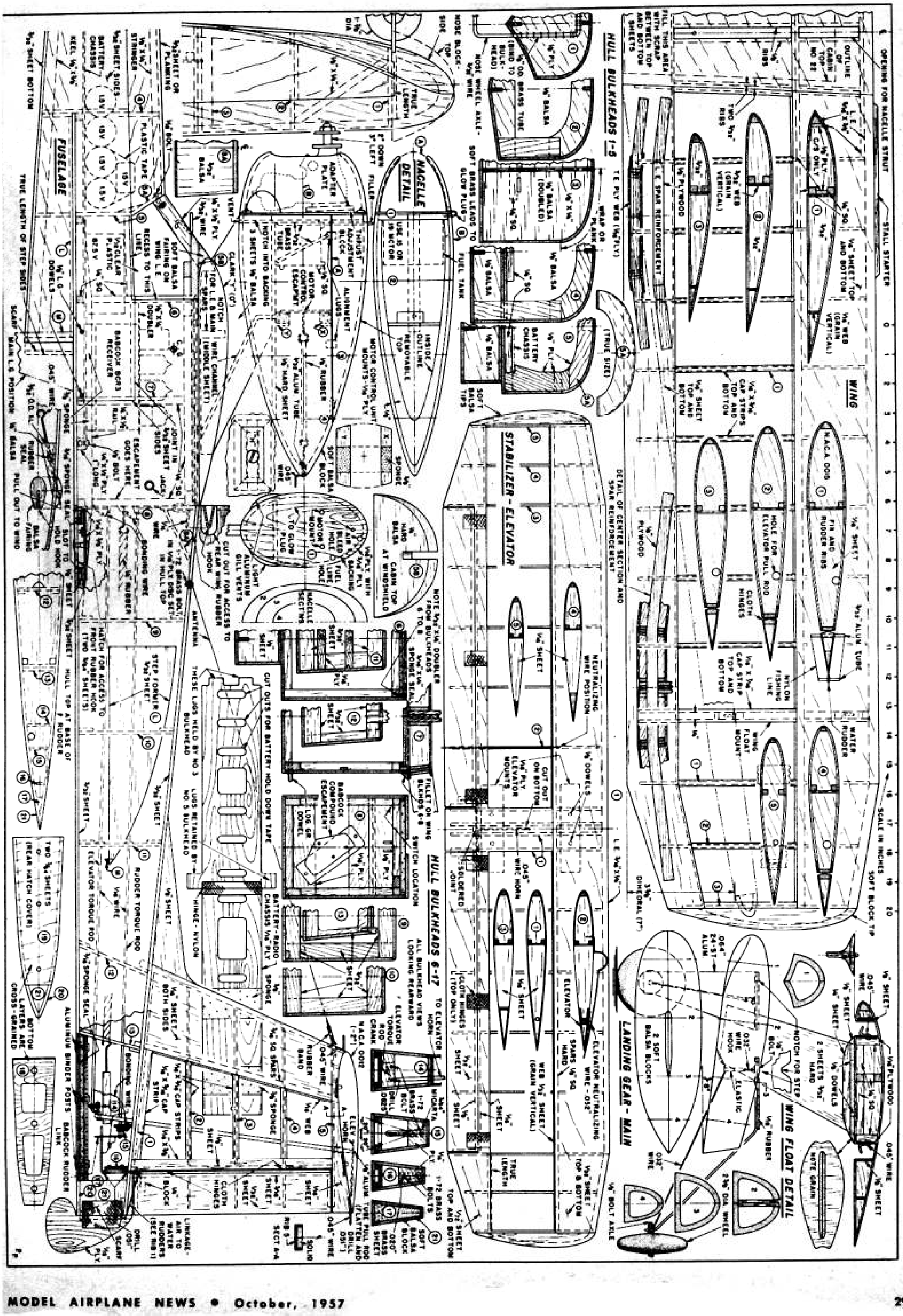
Note the soft brass wire to glow plug and one motor mount bolt projecting from side of firewall. The author uses two alligator clips taped to a small block of wood, one above and one below. Block is ¼"x⅜"x1⅜". Alligator jaw levers are opposed so that both clips may be opened at once by pressing with forefinger and thumb. This makes a firm contact between battery leads and glow-plug wires that is simple to engage and remove.

Note wire channel in the middle lamination of the nacelle strut. This permits leading motor control escapement and bonding wires into the hull beneath the wing. (See Radio & Escapement Installation).

WING TIP FLOATS: Shape and hollow from soft balsa blocks. Install struts and top fairing and dowels which plug into openings in wing underside. Top of float strut and fairing may be silk reinforced for added strength.

COVERING: The author used silk, with 6 coats of Testor's butyrate dope. Black and orange-yellow were colors, the latter for visibility.

SEALS: Do not overlook seals beneath the wing and at the access hatches and points where the switch and rubber hook wires project. Seal the phono-jack opening with a pencil eraser. Oil the control rods and linkage before installation to avoid rust. Use 3M Rubber Cement to bond sponge in place for mounting receiver etc. and rubber to top of main landing gear. (*Continued on page* 47)



FULL SIZE PLANS AVAILABLE. SEE PAGE 56.