FLIPPER

By VIC SMEED

This Spritely .020 Job is Shown for Escapement Use
But it Would Make a Honey for R O Proportional

Photo of Flipper shows pleasing semi-scale biplane lines. Identical wings make for simplicity of building. Spring loaded T05 Actuator will work for proportional with relayless receiver with two batteries.

For compact size the biplane is a natural—this little model is only 18 inches in span, but packs in practically one square foot of wing area, slightly over if the tail plane is added, for a total weight of 9 1/2 ounces. Nearly 50% of the weight is for the radio.

The prototype gets quite a hustle on with the .020, and an .010 would fly reasonably, especially if the radio weight could be trimmed a fraction. The large tail plane is adequate for safe free flight, Flipper having been designed as a dual purpose originally.

CONSTRUCTION

The construction offers no problems. First cut and laminate where necessary all formers, also fuselage sides, cementing doublers in place, and bend under carriage to shape. Make up the center-section struts and cement securely in place, taking care to align accurately. Sew the under carriage F3, then assemble fuselage sides to the front group of bulkheads, i.e., the parallel section. When dry draw the tail ends together and insert remaining formers.

INSTALLATION

At this stage install the radio gear. You may care to build the escapement in or arrange it so that it can be inserted and removed through the hatch in the fuselage bottom. Cut, sand and fit the tail plane and rudder and complete linkage and all wiring. (The foregoing is also true if you are going to use an actuator.) The fuselage bottom is now sheeted and the top planked. The planking can be carried down to the fin/tail plane junction neatly. Add inside nose pieces and sand completed body. Cover with tissue, dope and fuel proof as required, then add the windshield. It is easier to cover the fuselage if the center-section dowels and the wing platform are added after covering.

The wings are straight forward, but use hard 1/4" square for dihedral basis and cement them well. Sheet center-section, cover with tissue, then add low wing fairing box.

Fit wheels and motor, free all fuselage hatches, insert the escapement rubber, receiver and batteries and check for all up weight and balance point as shown on the drawing. It may be possible to re-stow equipment to correct C. G. position, though it should not be too far out. The model tends to turn left without side thrust, so include the side thrust shown. It is quite sensitive on the rudder, but stable enough to fly itself back out of trouble, provided you have a few feet of altitude.

RADIO

The proto-type Flipper carried a relayless receiver. This drove an Elmic Conquest escapement and the whole system was powered by two U7 cells wired in series to get 3 volts. Most of the small relayless type of receivers available will fit.

—Courtesy Radio Control Models and Electronics

On the next two pages we present the full size plans for Flipper. You can gently lift the pages out or slightly bend the staples to help remove.

Use colored tissue to cover and clear dope to help save on weight for this 1/8 A fun ship.