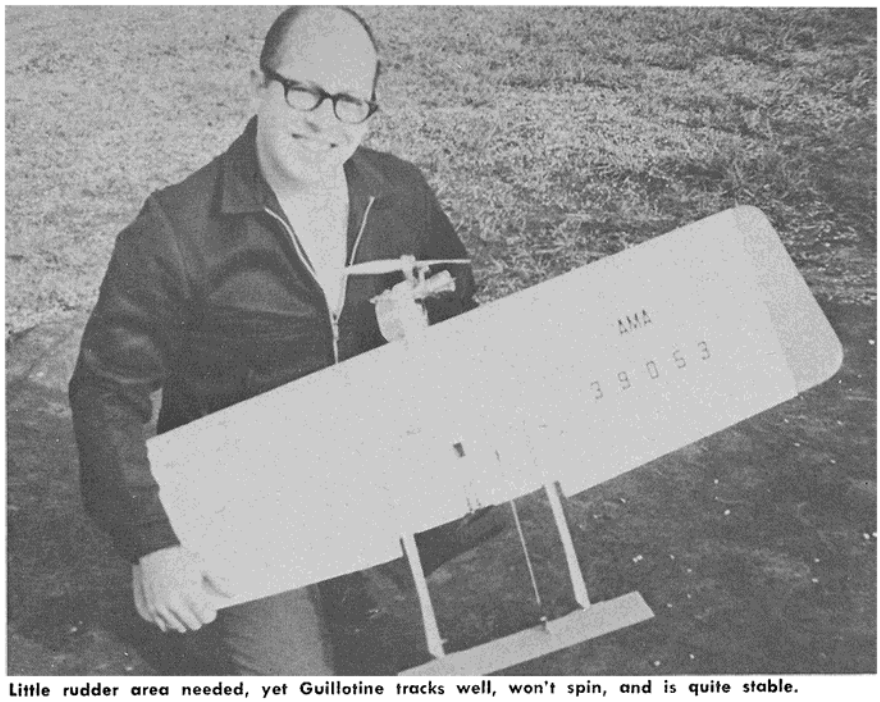
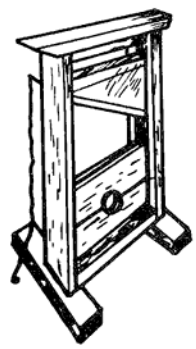


Little rudder area needed, yet Guillotine tracks well, won't spin, and is quite stable.

RC Combat

Guillotine Streamer Cleaner



This bird's larger, thicker wing houses radio within airfoil profile. Maneuverability and glide are fantastic.

ED NILES

THE COMBAT MATCH flown by two RC Voodoos at last year's Toledo Show impressed me more than anything else.

Armed with the enthusiasm that this show generates and the idea of RC Combat, I made a trip to the local hobby shop in search of a kit which could accommodate almost any RC system. The CL Guillotine looked like the right plane because of its large wing area and thick airfoil. The Guillotine was originally designed by John Carr for quick turning and minimal stalling on flight maneuvers. A success in Combat at local contests, it was the winner of four places in the 1970 Nationals.

Working out the RC modifications and building the prototype took only two weeks. The first flight showed that the RC Guillotine was extremely stable and most responsive. Landing this plane was a pleasure since the glide was excellent and positive control could be maintained right up to the stall point (about 9-10 mph). We expected to run into a few problems with the little Enya 19 for power and a reduced stab area; but, to our relief, no difficulties materialized.

In fly-for-fun meets and demonstrations at contests throughout the Midwest, the RC Guillotine has had very good acceptance as an ideal sport plane. It has almost everything a Sunday flier wants: small size, quick and easy construction, excellent stability, maneuverability and low cost. However, it is not a beginner's plane.

The balsa selection is not critical for this plane, so use whatever is left in the shop. Begin construction by cutting out 1/16" and 3/32" ribs and gluing them to the bottom spar. While these are drying, glue the wing tips together. Next, glue the half ribs to the motor mount block, which is a ½ x 1⅛ x 2⅝" notched block. Then glue on the motor mounts, which for safety should be doweled in.

Glue the ribs to the trailing edge, making certain that the trailing edge is parallel to the bottom spar. When this part is set, glue the top trailing edge and the trailing edge braces between each rib. While this assembly is drying, sand and shape a minimal airfoil into the elevator.

Glue the motor mount assembly with zero degree incidence to the wing. No offset is needed. When this is dry, glue the leading edge and top spar into place.

Drill 1/16" holes in the elevator and insert the 1/16" wire, which is then covered with gauze or hinge material and glue well.

Place the ailerons on the plans; mark and notch where the wire is to be inserted. Drill 1/16" holes where the hinge wire is to be located. Place nylon tubing over the 1/16" wire and glue onto the ailerons. Notch the ailerons for 3/32" torque rods, which are expoxied in place. Reinforce the hinges and torque rods with gauze or hinge material.

Moisten the bottom leading edge planking and glue it to all the ribs and spars. When the assembly has dried, repeat this process on the top. Glue both the cap strips and the assembled wing tips in place.

Glue all four radio compartment floor braces in place and then plank the bottom center section of the wing. Next, glue the radio compartment floor and back wall in place.

The side hatch supports are glued flush with the ribs and both hatch cover supports installed. Now plank the top center section from the trailing edge to the radio compartment and along its sides.

Shape, sand and glue on the cowling. If more strength is desired, fiberglass the nose section. Glue on the nylon tube for antenna leadout. Hinge the ailerons to the trailing edge and then glue on the tail booms, using the elevator for alignment. Sand and fit the plywood hatch with small wood screws.

Mount the servos using Kraft sidemount servo trays or servo mounting tape. The servos should be mounted as far forward as possible. The receiver and batteries should be wrapped with ¼" sponge rubber. Mount the fuel tank, using rubber bands to hold it in place.

The aileron response is not critical, but keep the elevator throw to an absolute minimum. No more than ⅜" total throw is recommended. Launch the plane with a slight upward toss. It will maintain any attitude it is put in.

The Guillotine is being kitted by C.M.I. Quality Airplane Kits, 945 65th St., Des Moines, Iowa 50312.

Lots of fun and excitement in a small package. Try one, then come to Toledo for combat.