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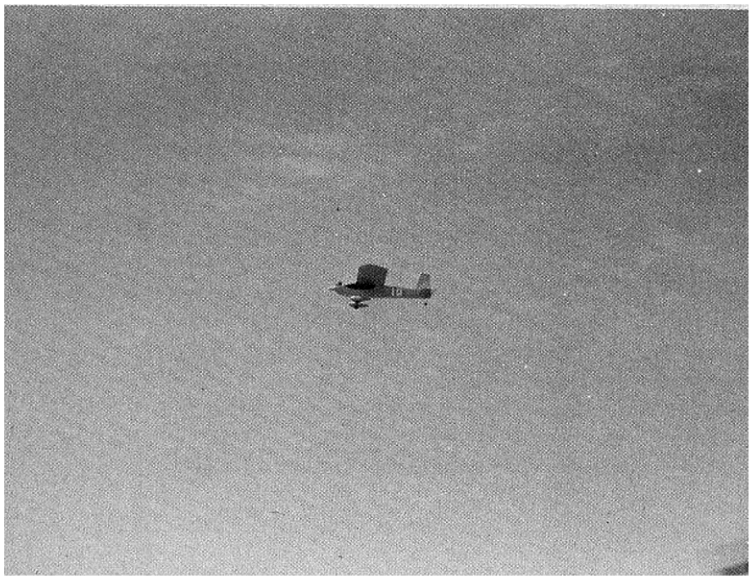
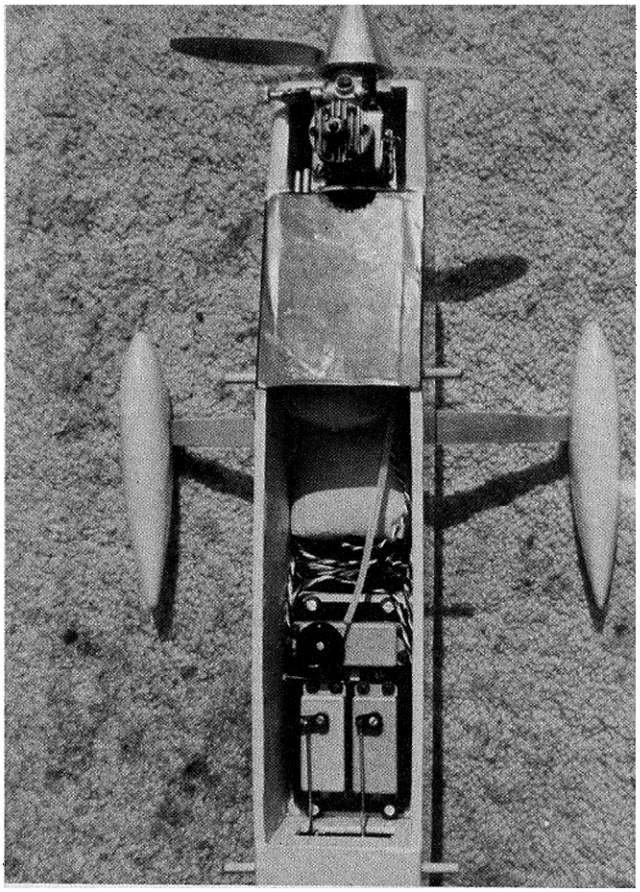
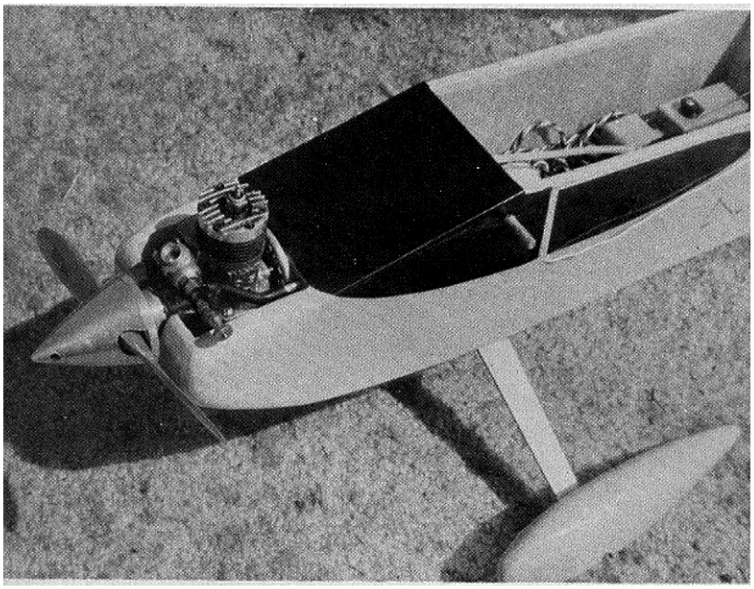
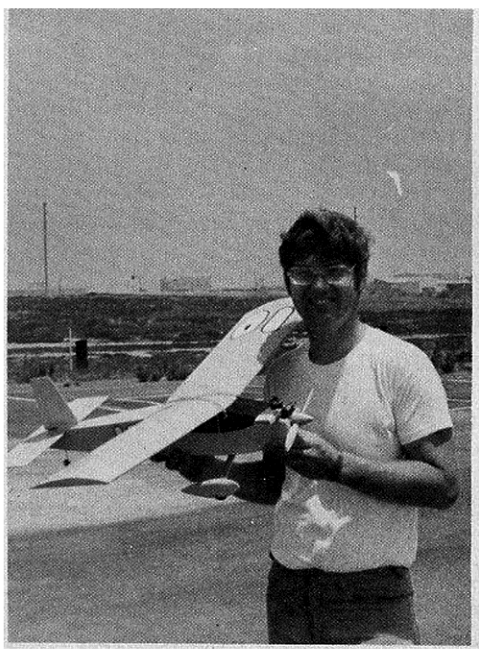
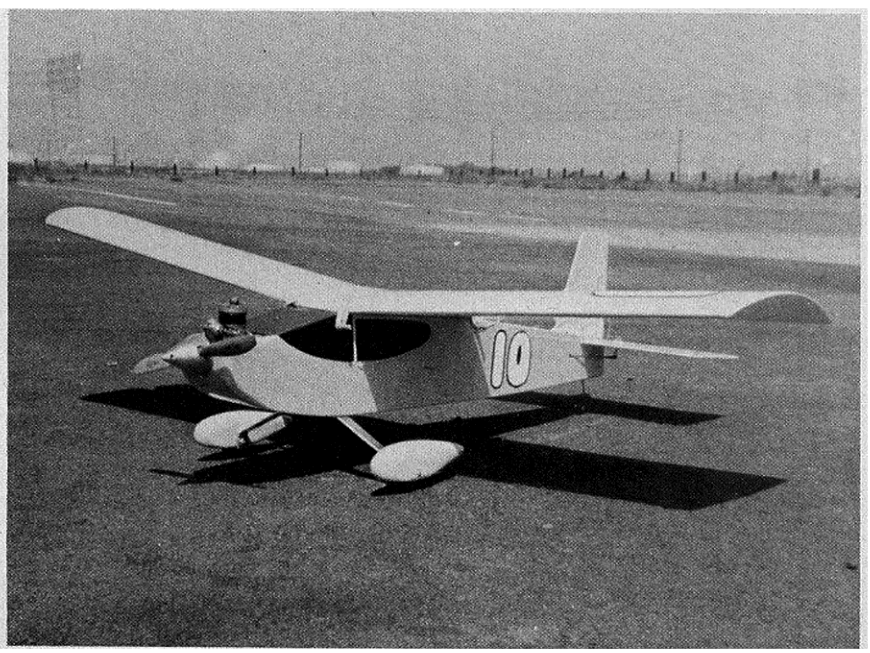






The Quickie is not a beginners airplane, but a Quarter Midget disguised as a high wing sport ship. Prototypes have been built as light as 2 lbs., 2 oz. and, with a Max .15, have held their own with .60 sized ships. The photos on this page show different views of the author's original Quickie, #10. Even with that small rudder, the roll rate is quick to say the least!





QUICKIE

A High Performance Sport Plane Designed For .09 To .15 Engines And Two Or Three Channel Radios. By Fred Reese.

The "Quickie" is a high performance sport plane designed to respond to rudder as if it had ailerons. Roll response is truly axial and is achieved without the additional aileron servo, linkage and attendant weight. The generous dihedral and tall rudder give the Quickie positive roll response. The large rudder does **not** allow "hands off" recovery from a spiral as does a trainer and the Quickie **must be flown at all times** just as you would a normal pattern ship. The Quickie is, in reality, a Quarter Midget racer disguised as a high wing cabin monoplane. Its dimensions meet all current Quarter Midget rules except for the scale part. Actually, with a few slight changes to the tail shape, it could be called a "Midget Monocoupe" which did race. With a .15, the Quickie is quite fast and can race with all the .60 powered beasts or other Quarter Midget racers. It is **not** an aircraft for the inexperienced flyer, despite its configuration!

In spite of its racing heritage, the Quickie was really intended for weekend fun flying. Ground handling is excellent as is its slow landing speed. Landings are a real joy and touch-and-go's are really easy. The high wing configuration allows it to be easily hand launched, if needed. If you fly from a rough field it might be desirable to use nylon bolts or rubber bands to attach the landing gear.

For more docile flying a Max .10 or an Enya .09 will give very good performance though not as spectacular as a .15. The Quickie is an ideal airplane for one of the two channel brick systems and an .09 or possibly a .15, although throttle control is desirable when a .15 is used. If you are flying near houses or buildings, use a muffler. I use a Murphy Muffler on mine and I cannot detect any loss of performance. It is just quieter.

The Quickie was also designed to build up quickly with all of the structure reduced to a minimum and utilizing plywood in areas of stress. 5-Minute epoxy was used for all of the fuselage construction except for contact cement on the doublers. Titebond was used for the basic wing construction.

Let's begin with the wing as it only takes a short time and while it is drying you can start the fuselage. First, make up two sheets of 1/16" x 8" x 36". Pin one of the sheets down to a flat surface and mark off the rib locations. Pin down and glue the ½" square leading edge and the 1/16" x 3/8" filler strip. Glue down all of the ribs including the center two. These two ribs should be about 1/16" apart and angled slightly for the dihedral. When all of the ribs have dried, fit the top sheet and trim away any excess wood and bevel the trailing edge. Use Titebond and lots of pins and weights to glue the top sheet down over the ribs. While the wing is drying, build the fuselage.

Cut the fuselage sides and all of the doublers and mark the locations for the firewall and bulkhead. Coat all pieces with contact cement and press firmly together when the cement has dried. Be sure to leave a slot between the doublers for the firewall. Epoxy the firewall and bulkhead to one side and, when set, add the other fuselage side. Epoxy the 1/16" plywood forward cabin top and cabin bottom. Add the 1/8" plywood landing gear mount in a puddle of epoxy to the cabin floor. Pull the tail together, add the 1/16" balsa crossgrain sheeting and the 1/16" plywood tailwheel piece to the rear of the fuselage. Add the ¼" sheet to finish the front of the fuselage. Sand the fuselage to final shape. Cut out the tail surfaces from medium hard 1/8" sheet balsa. Slide the stabilizer into the slot in the fuselage and glue. Sand two pieces of ¼" square x 3" to triangle cross-section to be used as vertical fin braces. Epoxy these and vertical fin to top of the fuselage.

Remove all of the pins from the wing and cut the wing in half between the two center ribs. Use a large sanding block and bevel the two wing halves to give 4" total dihedral. Join the two wing halves with epoxy. Use waxed paper and blocks to insure the proper dihedral. Add the 1/8" dowel to the trailing edge in the center to protect the wing from the rubber bands. To strengthen the center joint I used a 3" wide strip of Celastic which is distributed by Sig. For those who haven't used Celastic, it is quick and not as messy as is fiberglass. Celastic is cloth empregnated with powdered plastic. When the material is dipped into butyrate thinner or acetone, everything fuses and bonds to the balsa. When dry, it can be sanded and painted. Fiberglass or gauze and glue would work equally well. Add the tip blocks, shape the leading edge and sand everything. The wing is ready for finishing. I used Super MonoKote on my prototypes and Don Dewey used Solarfilm on his. Either Hobbypoxy or Superpoxy would also be a good choice.

When all is finished and trimmed, bolt on the landing gear (Hallco B105-3 or similar) and engine mount. Bend the 1/16" piano wire tail gear except for the bend at the top. Solder a washer on the wire as shown on the plan. Drill a 1/16" hole up through the fuselage bottom and out the top at the base of the rudder. Slide the tail gear up through the fuselage and bend the wire back 90 degrees at the top. The tail gear slides into a hole drilled into the rudder and, after hinging, the rudder horn is bolted over the wire to prevent it from breaking out. Do not angle the tail wheel back any further than is shown on the plan as it increases the loads put on the rudder during taxiing or landing.

Install the fuel tank so that the pick-up and vent tubes pass through the firewall where shown on the plan. I used an SS-4 Sullivan slant tank which really gives long flights on a Max .15. The battery pack is wrapped in foam and placed in a Baggie and positioned under the fuel tank. Now just stuff the rest of the radio gear in the airplane and rubber band the pushrods to the rear sides of the fuselage and check the CG. Position the servos as needed to get the proper CG location. Epoxy two pieces of ½" square spruce or pine across the fuselage as servo bearers. Install the pushrods, throttle linkage, switches, engine, etc., and you are ready to fly. Use a 7/6 prop on a .15 or a 7/4 on an .09 or .10. Set both the rudder and elevator to move only 5/16" in each direction which is minimum servo movement. Make sure all surfaces are straight with the trim levers centered.

FLYING: Just imagine that the Quickie has ailerons and go fly. The model presents no problems and is really a lot of fun. Use a fairly long approach on landing as the Quickie can really be slowed down until it touches down on all three wheels.

Do it! □

By H.E
RCModeler
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