



RCM QUICKIE 200

RCM introduces a whole new concept in Half-A Racing . . . the Quickie 200, a racer with the proper dimensions for stability and penetration. Fast, economical with smooth take-offs and grease-on landings.

BY RONALD SHEAN.

Editor's Preface: When the Quickie 200 was first submitted to us to consider for publication by its author, Ronald P. Shean of Paramount, California, a member of the BIRD'S Club, we were impressed with the simplicity of construction as well as the comments we had heard concerning this ship from local pylon fliers. For this reason, we decided to build the RCM prototype shown in the photographs accompanying this article. This prototype was extensively tested by both Dick Kidd and myself, using a stock Cox TD .051 engine, a Kirn-Kraft pressurized .051 with bored out venturi and special needle valve, and a non-pressurized Kirn-Kraft Cox TD .049 with Cox muffler. During these test flights, we became more and more impressed with the performance capabilities of this little ship that took only two evenings to construct. All test flights were performed with an RS Systems radio using two servos and a 225 mah battery pack. Standard Cox "red-can" fuel was used for all test flights. During the testing period, we loaned the aircraft to RCM staffer, Bill O'Brien, who took it to various fields and put it through its paces for local fliers - all of whom were as impressed as we were with its capabilities as a racing aircraft and with its high performance stunt potential. Following this, we got together with RCM's racing editors, Don Dombrowski and Fred Reese, and they, in turn, put the Quickie 200 through its paces. During these flights, too numerous to even count, we shifted the C.G. position several times, increased and decreased aileron and elevator throws, and checked the ship for handling characteristics every time a change was made. As originally presented to us, the C.G. was further forward than is shown on the plans accompanying this article. This, in turn, necessitated a greater degree of elevator throw which did not enable the aircraft to groove as well as the more rearward C.G. position shown on the plan coupled with the resultant decrease in elevator throw. Fred Reese demonstrated this quite capably by flying the aircraft for almost an entire tank full of fuel no higher than approximately five feet off the ground. Yet, for those who are not interested in racing, this ship is capable of axial rolls both horizontal and vertical, vertical eights, inverted flight, inside and outside loops, and just about anything else you'd care to perform. Its speed is in the 65 mph range and ranks with the best 1/2A midgets in the field. Yet, it grooves like its larger pattern and racing counterparts, with absolutely no bad characteristics. It is extremely easy to land and take-off, and can stand a great deal more abuse than its larger and heavier cousins. Our prototype was built entirely with Hot Stuff, covered with yellow Solarfilm and trimmed with MonoKote trim sheets and DJ's Striping Tape. The ailerons and elevators were connected with Solarfilm hinges with the edges sealed with a thin coating of K & B clear Superpoxy. Following the test flights that went on for a period of several months, Don Dombrowski and Fred Reese drew up the set of rules for the RCM Quickie 200 races which you will find in this issue of RCM. We predict that this will be one of the most popular club racers throughout the country, and one which will add a great deal of enjoyment as a club racing activity. It is easy and quick to build, inexpensive, and uses components that are readily available throughout the country. Its performance equals or surpasses almost any of its counterparts available today. Even if you are not interested in racing, you'll find the RCM Quickie 200 an exciting high performance stunt ship — and we'll bet that you'll soon be entering the next Quickie 200 race in your area! - - - Don Dewey

Have you ever given 1/2A Pylon Racing a try? Did you give up on it because the little tiger was too wild to control, refused to track, was impossible to take-off, and most landings were really a controlled crash?

Or, perhaps, did you discover that with certain areas of the country, 1/2A Pylon Racing was going the route of Formula 1 with reworked, hopped-up engines, 60% nitro fuel, super special props, and all the other speed merchant gimmicks that took racing out of the reach of the average flier?

According to the 1/2A Pylon Racing rules, the planes must "look like" a full size plane that has raced or was built to race. The wing must be 7/8" thick, have a constant chord and no taper. The major drawback to these rules is that the short fuselage required to achieve the "look like" feature is largely responsible for the poor tracking these racers so often exhibit, not to mention the fact that most of them have to be hand-launched.

The solution is a simple, light, strong, boxy, lean racer with dimensions which will ensure good flying qualities — a club racer similar to the Quickie 500, Toad, or RCM 15-500. In other words, the RCM Quickie 200!

The Quickie 200 is not a scaled down Quickie 500 but is a lean "look like" 1/2A Racer with dimensions set for flying right. It is fast, cheap to build and fly, safe to race, quick building, and almost indestructible. Stability and penetration are excellent, take-off is quick and easy, and grease-on landings a sight to see. When powered by a Cox Babe Bee or Golden Bee, the RCM Quickie 200 is quite docile and becomes a great low wing trainer.

For racing, however, the only competition engine available now is the Cox TD .049-.051 which makes all the racers about even — on the ground. In the air you can race on equal terms with the hot shots! As a club racer, and with the RCM Quickie 200 rules presented in this issue of RCM, this little ship has a lot going for it. It flies the pylons with all the zip and thrills of its big brothers but at a lower cost and safer speeds.

FUSELAGE

Cut the fuselage parts from 3/32" medium sheet balsa including all tail surfaces. Cut out the plywood formers and the 1/32" plywood doublers. If you prefer, 1/16" balsa sheet applied with epoxy cross-grained to the fuselage sides is a good substitute for the 1/32" plywood. Install the Tatone or Kraft .049 engine mount on the firewall. If you have a Tatone mount with only two holes, drill a third mounting hole in the bottom of the mount for extra rigidity.

Attach the landing gear to bulkhead F-2 before assembly. If using a bolt-on wing,

QUICKIE 200

Designed By: Ronald Shean

TYPE AIRCRAFT

1/2A Club Racer

WINGSPAN

35 Inches

WING CHORD

6 1/8 Inches

TOTAL WING AREA

214 Square Inches

WING LOCATION

Low Wing

AIRFOIL

Semi-Symmetrical

WING PLANFORM

Constant Chord

DIHEDRAL, EACH TIP

1/2 Inch

O.A. FUSELAGE LENGTH

27 Inches

RADIO COMPARTMENT AREA

(L) 6 1/4" X (W) 2" X (H) 1 3/4"

STABILIZER SPAN

12 Inches

STABILIZER CHORD (incl. elev.)

3 3/4 Inches (Average)

STABILIZER AREA

45 Square Inches

STAB AIRFOIL SECTION

Flat

STABILIZER LOCATION

Top of Fuselage

VERTICAL FIN HEIGHT

4 1/4 Inches

VERTICAL FIN WIDTH (incl. rudder)

3 1/2 Inches (Average)

REC. ENGINE SIZE

.049-.051 Cubic Inch

FUEL TANK SIZE

2 Ounce Sullivan

LANDING GEAR

Conventional

REC. NO. OF CHANNELS

Two

CONTROL FUNCTIONS

Elevator and Ailerons

BASIC MATERIALS USED IN CONSTRUCTION

Fuselage	Balsa, and Ply
Wing	Ace Mini-Foam Constant Wing #13L192
Empennage	Balsa
Weight Ready-To-Fly	23 Ounces
Wing Loading	15.43 Oz./Sq. Ft.

drill a 1/8" hole in bulkhead F-2 for the wing dowel. Sand, dust, and cover the tail surfaces with Solarfilm or any one of the iron-on films of your choice. The control surfaces can be sewed on using 1/2A control line or heavy carpet thread, dabbing each stitch with dope to anchor the thread. Sewn hinges are easy, durable, and do not leave a high drag hinge gap. Use a fairly small needle and, for those who cannot thread a needle, there is an eyeless needle available! For extra strength, smear dope or glue over the proposed hinge area of the tail surface before covering. If you prefer, Solarfilm or MonoKote hinges can also be used.

The 2 oz. Sullivan Slant Tank fits perfectly into the hatch with ample space left for stuffing a foam wrapped 225 mah battery behind it.

WING

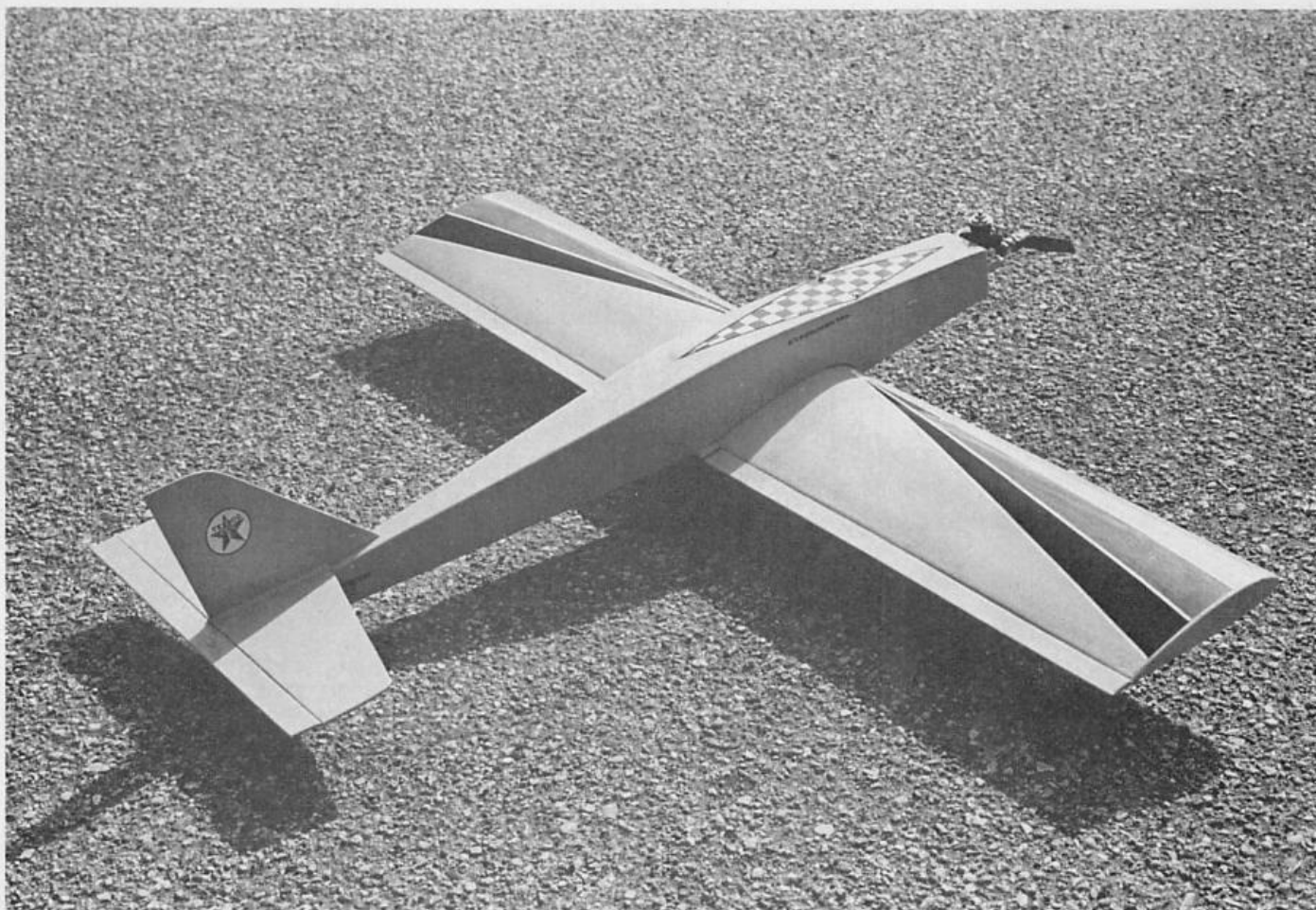
Follow the instructions included with the Ace constant chord wings. Ailerons will work very well with the dihedral called out for in the Ace foam wing instruction sheet. If you take out the dihedral, the ship will roll better but is slightly less stable. I would recommend using 1/2" dihedral under each tip. Aileron and elevator surface deflections should be as shown on the plans. Be sure to cover the ailerons before sewing on, or otherwise installing, your hinges.

All servos can be installed with Rocket City servo tape. Coat the wood surfaces with epoxy and let dry before applying servo tape. Apply monofilament tape or strong cloth tape to the bottom of the wing as per the Ace foam wing instructions before covering the wing with Solarfilm. A 7" spar of 1/16" plywood was epoxied into a worn out and badly dented wing and preserved the life of the wing for many more hours.

FLYING

Balance the wing and check the entire aircraft for the proper C.G. as shown on the plans. Use a fuel of at least 20% nitro and set the engine for high rpm's but keep it as rich as possible. A Cox 5 1/4 prop is a good size for the first flight. Release the ship into the wind and you will find that it will ROG in about 30 feet in a wings level climb. After trimming it out, try a loop, roll, Immelman, Split S, outside loop or what have you. The RCM Quickie 200 is surprisingly agile and has good penetration even in fairly high winds. And, for 1/2A Club Racing, its stability around the pylons at 15 feet altitude makes it a fun racer for even the first year RC'er. The 2 ounce tank gives a flight time of approximately 8 minutes.

Try the RCM Quickie 200 and you're going to find out that good things come in small packages. It may just change your entire attitude about the performance potential of small aircraft. □



FULL SIZE PLANS AVAILABLE — SEE PAGE 151

