



A handful of fun — the plane, that is!

Designed for weekend flying the Exodus is an excellent choice the beginner

Full Size Timely Plan Available

EXODUS

By Barry Halstead

► We would like to state at the outset of this article that the Exodus is the result of several years of research and development in single channel, rudder only airfoils, moments, and areas. Only we can't.

The truth of the matter is, the Exodus was sketched out on the back of an envelope one night while watching the Johnny Carson show. Conceived in rebellion against the nauseous supremacy of RC ships with slab sides and block windshields, the Exodus started life as a vast expanse of celluloid cabin area around which an airplane developed.

As it turned out, the model was one that could be built in two or three evenings with a minimum of effort and expense, with the additional incentive of at least resembling a full-scale aircraft. There is sufficient room in the fuselage for any of the small, lightweight receivers, a couple of pencils, and the Citizenship SE - 2 escapement.

To prove that the Exodus could be built in two or three evenings even by a beginner, and since our first two prototypes flew OOS (hence, the name Exodus), we gave the templates to RCM's editor. He completed the plane in just under five days which proves our point that any normal person could do it in two or three.

Before digging into the balsa bin, a

point or three to keep in mind: the Exodus is an extremely stable model with excellent sport flying and RC trainer characteristics. Thrust adjustments are built in, and along with CG location, are not particularly critical. However, one thing to keep in mind, as with all small RC jobs, is to keep the weight down! Build and finish for lightness -- the Exodus is rugged and no extra beefing up is necessary.

Begin wing construction by pinning the 1/16" x 1" leading and trailing edge sheeting in place over the plan. Do

Lots of cabin area. Change of pace from slab sided jobs.



Exodus with automatic starter. Manufacturer unknown.

From RCModeler Oct. 1963

the same for the spar. Cement the leading edge to the LE sheeting and give the ribs to the trailing edge, spar, and leading edge. When dry, glue the top leading and trailing edge sheeting in place. If you're building the wing in halves, build the opposite half in the same manner. When completely dry, join the two halves at the proper dihedral angle. When these have set thoroughly, sand the center section and apply a 1" strip of gauze around the joint. Glue on the sheet tips, then sand the entire wing and cover with silkspan. Spray or brush on several coats of thinned, clear butyrate. Allow the dope to cure while you construct the rest of the plane.

Commence construction of the fuselage by gluing the doublers and the 1/8" x 1/4" spruce cabin supports to the fuselage sides. Glue the 1/16" x 3/16" braces to the sides. When dry, cut out and glue in place on the fuselage sides, formers F2, F3, and F4. Check the alignment with a triangle to prevent that "pretzel" look. Drill F1 to accept either the Cox .010 or the Pee-Wee .020. (One or the other--not both) Cement F1 and F5 in place and allow to dry completely. Install your escapement and torque rod, making sure there is no binding, then plank the top and bottom of fuselage. If an integral tank is desired, install it at this point. Plank the nose, then glue on the stab and fin.

Cut a paper template to approximate shape for the windshield and windows, trim as required, then cut out the necessary celluloid and glue in place. (Pactra's C-77 works well for celluloid to balsa joints). Carefully puncture the celluloid for the 1/8" wing hold-down dowels, then install with white glue. Glue the 1/8" sheet pieces to top of former F3. Drill a 1/8" hole in the fuselage for the landing gear dowel. Install. Complete the miscellaneous details included on the plans, sand, and apply clear dope, sanding lightly after two or three coats. The prototype in the picture received a coat or two of white AeroGloss sprayed on plus a bit of red trim. A few feet of black Graph-A-Plan trim tape satisfied our aesthetic senses. Be sure to brush a strip of clear dope over the trim tape to prevent it's lifting off.

Flight testing this weekend warrior is easy. Launch it straight ahead and it should be good for a glide of a hundred feet or so. For the first powered flights, inject a squirt or two of fuel and launch straight ahead. The Exodus is an extremely stable model and should fly right off the board. Any erratic tendencies should be corrected during these initial tests. When satisfied that all is well, fill 'er up and let 'er go.

The Citizenship MDL modular receiver we used is well suited for these small ships, but the Exodus is an excellent free-flight, so make sure your transmitter is turned on!