



THE A. M. A. "PT"

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Full size plans for an outstanding single channel low wing design for .010 power. Excellent Sunday flier on escapement or single channel pulse.

THE AMA "PT" was designed to provide a simple, sturdy, and consistent sport single channel airplane using the Cox Tee Dee .010 engine. It is a model that will provide the sport flier, as well as the complete novice, many air hours of flying pleasure. Its performance is every bit as appealing as its design, and its rugged construction assures its longevity. For the multi pilot looking for a model to fly from the nearby schoolyard . . . why not try the AMA "PT"?

Construction

Wing. The wing is exceptionally rugged and utilizes no spars whatsoever. Begin by cutting out 22 ribs from medium $\frac{1}{16}$ " sheet along with 3 $\frac{1}{16}$ " center section ribs. Stack together and sand. Cut the $\frac{1}{4}$ " square spruce leading edge to proper length for each panel. Pin in place over the plans. Add lower

center section sheeting. Cut the $\frac{3}{4}$ " tapered trailing edge to length and pin in place over each panel. Now pin the ribs and place and glue at the leading and trailing edge of each. Do not put the center section rib in place at this time. Add the $\frac{1}{4}$ " sheet braces at the tip ribs. Rough carve tips to shape and cement in place. When both wing panels are dry, remove from plans, block up for dihedral, then add plywood dihedral braces. Add top center section sheeting. Allow to dry thoroughly. Remove from board, and sand. Add landing gear installation. Reinforce center section joint with fiberglass and resin or fiberglass tape and Hobbyoxy glue. Dope framework and cover with lightweight silkspan.

Fuselage. Cut two fuselage sides from medium $\frac{3}{32}$ " sheet. Cut all formers from $\frac{3}{32}$ " sheet and the firewall from

$\frac{1}{8}$ " ply. Add formers to sides, making sure that fuselage is perfectly aligned. Check for alignment with a draftsman's triangle. Add medium soft balsa blocks behind firewall and trim to shape. Glue stringers in place. Carve top block from soft balsa and hollow as shown. This may be secured with dress snaps or held in place with rubber bands. Add escapement torque rod, using bulkheads as bearing supports. Add balsa sheet support floor above battery area. Add balsa block behind firewall. Sheet fuselage bottom with $\frac{1}{16}$ " sheet aft of wing seat. Sheet wing seat area with $\frac{3}{32}$ " balsa. Set up mount for Tee Dee engine using blind mounting nuts. Add hard balsa cheek blocks. Add $\frac{3}{32}$ " x $\frac{1}{4}$ " stringers.

Fin and Stab. Fin and stab are cut from $\frac{1}{8}$ " medium balsa sheet. Sand an airfoil section into both stab and rudder, then cement rudder to stabilizer. Glue completed assembly to fuselage and add soft balsa block fairings.

Equipment Installation. Two alkaline energizers, a relayless receiver, and a Citizen-Ship SE-2 escapement provide the entire radio installation. Wrap the pencil cells with plastic tape and install in the forward battery area. Pack the relayless receiver in foam and install in the area above the C.G. The escapement is mounted on a $\frac{1}{16}$ " ply former secured to $\frac{1}{8}$ " square balsa rails. Add a small toggle or slide switch in the fuselage side.

Finishing. Sand entire airplane and give two coats of dope. Sand lightly with 400 wet or dry. Entire ship may be covered with tissue or lightweight silkspan if desired, or alternately, only the wing and stringer area of the fuselage covered in this fashion. Finish with several coats of thinned clear butyrate dope and add color trim as desired.

Flying. Balance the AMA "PT" as shown on the plans. Add weight as necessary to achieve this balance when model is supported on the end of two pencil erasers. Add a slight amount of down thrust (2-3 degrees) and about 1-2 degrees right thrust for first power flights. Be sure to strain all Cox Thimble Drome fuel before using. The AMA PT is quite stable, yet responsive to rudder commands. Once you have flown it with escapements, why not try an Adams magnetic actuator for rudder only proportional control. We have found the AMA "PT" to respond beautifully when using a Controlaire 5 relayless receiver, Ace Add-On-Switcher, Adams dual actuator, and two pencil cells. A Min-X 800S Pulsmmitter was used on the transmitting end.

Whatever the configuration (and we imagine some will add elevators for Galloping Ghost control and some real maneuvers), you'll like the good looks and outstanding flying characteristics of Frank Ehling's AMA "PT."