

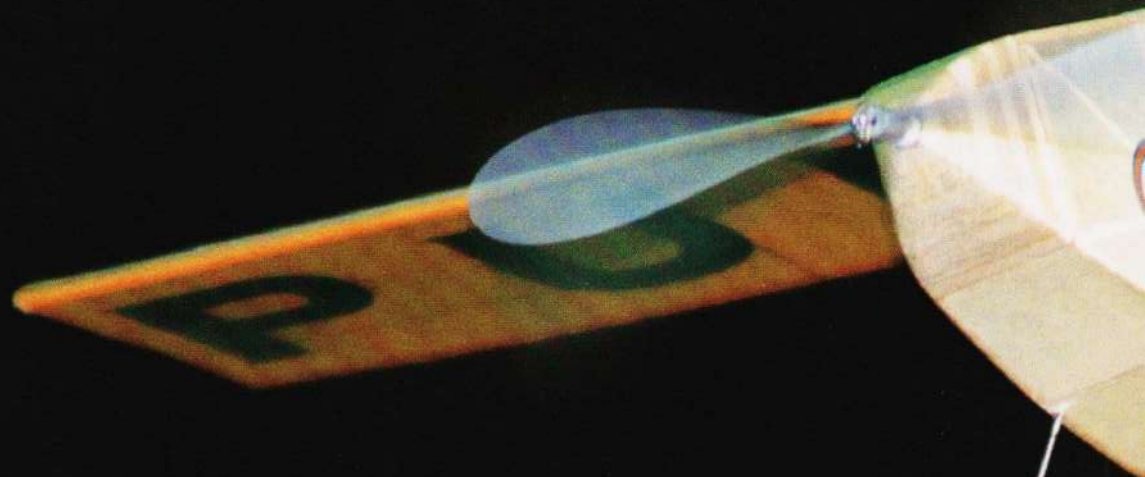
# Just a “Pudgey” Bostonian

By Steve Higginson

Photos by Brian Furutani and Schuyler Higginson

*Cute with classic style, “Pudgey” is a pint-sized package of performance that will knock your socks off!*

For complete Bostonian Class Rules,  
See Bonus Coverage for Issue 920 at:  
[www.aeromodeller.com](http://www.aeromodeller.com)



**T**he Bostonian class was developed to be fun, simple to build and emulate the designs (to some level) of real aircraft. Since those humble beginnings, the class has evolved into a full-fledged AMA event category. Over the years, Bostonians have become very popular in both the U.K. and U.S. and have begun to spread their wings over rest of the world.

By definition, a Bostonian model has a 16-inch maximum wingspan and a fuselage length not to exceed 14 inches. The fuselage must be built-up to enclose an imaginary box 1.5 x 2.5 x 3.0 inches in size. It must have an undercarriage, and all flying surfaces must be covered on both sides. A Bostonian monoplane has to weigh at least 14 grams

without its rubber motor, and bi-planes, tri-planes and others must weigh in at 20 grams. These weight minimums tend to encourage reasonably robust structures that put up with ham-fisted builders like me and allow them to take a fair amount of day-to-day punishment.

The Bostonian movement encourages cartoon-like features of real aircraft, so you'll find many whimsical designs that promote the prime objective of the class... FUN! Bostonian models are an excellent choice for beginners because of their ease of building, ruggedness and tractable flying characteristics.

I am drawn to Bostonians for all these reasons and more. They are fun, sometimes hysterical in design, and all of the models I have seen fly were generally good performers. My inspiration for

Pudgey came from a number of directions. I always loved the pot-bellied design of the Lockheed Loadstar/Hudson and the kidney bean-shaped vertical tail plane design made me think of Boston Baked Beans (the thought process of a misdirected mind). The rest of the design evolved from there.

In the true spirit of the Bostonian, the structure is simple and direct with very few curves (no pun intended) thrown at the builder. The laminated rudder surrounds are simple once you have one or two under your belt. In fact, most modellers who master laminations rarely revert to the accepted splicing method once the strength and weight savings benefits have been realised.

The box-fuselage is constructed in the usual way. To make the





“ *A cold day in December 2011 at the MCAS Tustin Air Station, in Tustin California, proved to be Pudgey's best indoor day. Best flight of the day: 3 min. 37 sec.* ”

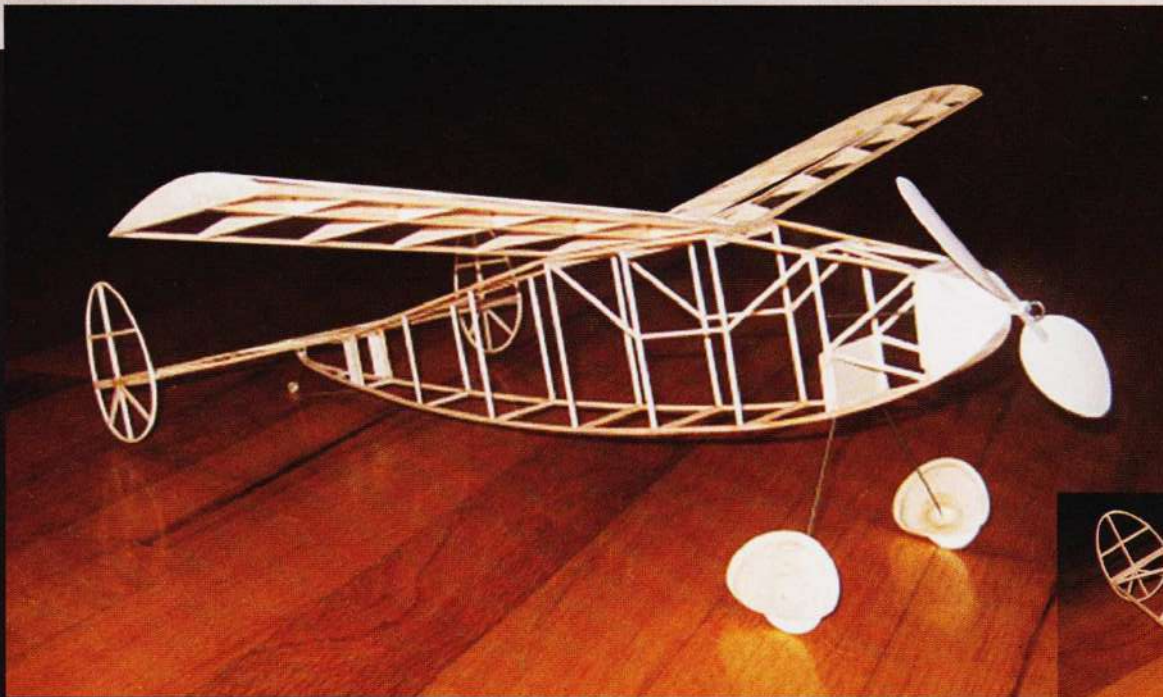
extreme curve in the lower longerons at the tail end and less extreme curve at the nose, I split the 1/16" sq. strip down the middle and soaked the wood in hot water. I made a cardboard form for the rear shape and used push-pins to gently bend the wood to shape and then let it dry before gluing. This method presented no problems.

Once the fuselage sides are built and dry, invert the sides over the top view and insert the three F-2 wing cradle cross-members in their assigned places and glue the adjacent bottom cross-members making sure the fuselage is square and true. Glue the fuselage sides together at the tail post and then insert and glue the remaining cross-members again,

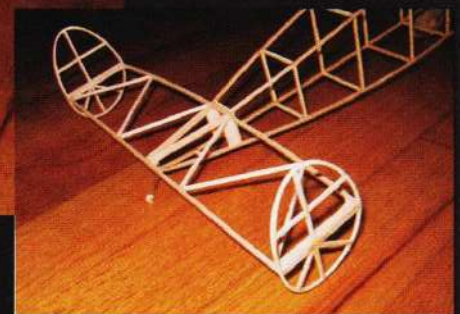
making sure the fuselage is square and true.

Cross-laminate 1/8" balsa to construct the nose block. Cut the nose plug to fit snugly into the nose opening and glue it to the nose block. When dry, fit and sand the nose block assembly to the shape on the plan and carefully sand it flush to the fuselage. Bend the undercarriage from 1/32" M.W





*With care taken and good wood selection, the simple airframe structure of Pudgey is light and very strong. Note the Ikara 6" indoor propeller. This prop proved to be too fragile when bumping into indoor obstacles so a well-balanced 6" Peck prop was finally settled on.*



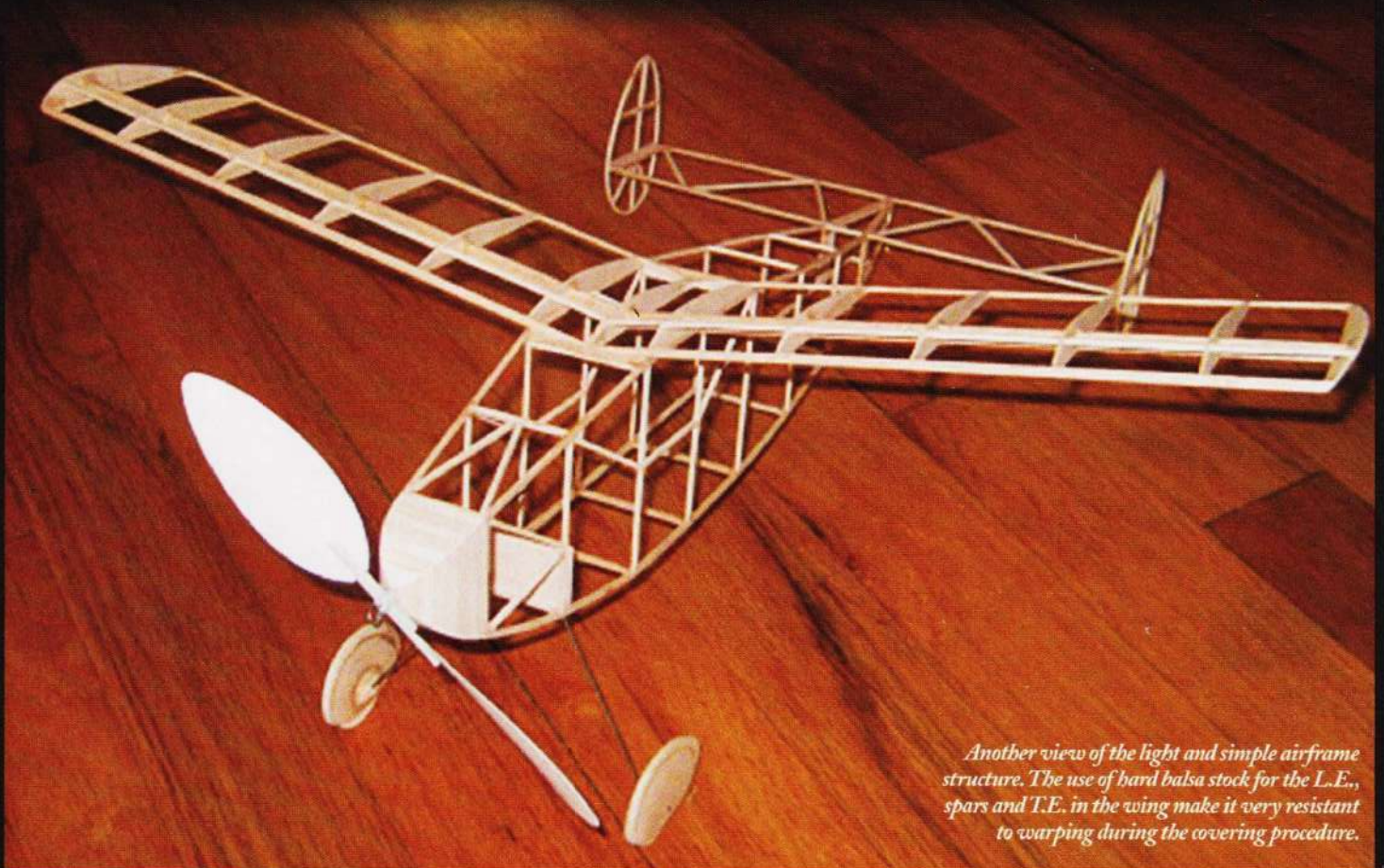
*Although the rudder and tail plane assembly structure is light, diagonal bracing makes the flight surfaces warp free after covering.*

to the pattern on the plan and sandwich it between two F-1 formers and glue into the fuselage at the point indicated on the plans.

Cross-laminate three layers of 1/32" x 1 1/8" x 1 1/8" sheet to make two balsa

wheel blanks. Turn the blanks using a Dremel™ tool to make two 3/32" x 1-inch dia. wheels. Insert 1/16" O.D. x 1/8" L aluminium tubing through the center hole making sure it is perpendicular

to the flat side of the wheel and glue with CA. Wheel pants are optional but they sure make Pudgey look snappy. Cut the center (WP-2) from 1/8" sheet and cut two (WP-1) 1/32" sheet sides to glue on



*Another view of the light and simple airframe structure. The use of hard balsa stock for the L.E., spars and T.E. in the wing make it very resistant to warping during the covering procedure.*



either side of WP-2. Once dry, carefully sand to a streamline shape. Cut and shape two WP-3 wheel pant supports from soft 1/8" sheet. Locate and drill a 1/32" dia. hole in each wheel pant for the undercarriage wire. Glue WP-3 to the fuselage side of each wheel pant (be sure you make one for each side.) During final assembly, the wheel pants will secure the wheels and keep them from coming off.

Build the tail plane and rudders flat on the plan using 1/16" sq. stock and laminated rudder frames. If laminating scares you, make two rudders from light 1/32" C-grain balsa. Cut all wing ribs from medium weight A/B grain balsa making sure all are exact to size. The flat bottom airfoil makes the wing assembly a snap. Select hard 1/16" sq. stock for the L.E., 1/16" x 3/16" hard stock for the spar and hard 1/16" x 1/8" stock for the T.E.

Slot the T.E. for the correct rib spacing and build the wing flat on the plan making sure the two center ribs are set at the proper dihedral angle set by the root rib dihedral gauge. After sanding the wing smooth, cut through the L.E., spar and T.E. and sand the root ribs flush. Pin one wing panel down flat, block up the other wing panel 2 3/4", and glue the dihedral joint.

Cover your Pudgy with Japanese tissue in the usual manner and trim to suit your taste. Finish with Nitrate dope thinned 100% with Nitrate thinner. If you have the means, use a small spray gun or air brush to control excessive dope coverage. I like to keep final finish to 2 coats to keep overall weight down.

Final assembly is very straightforward:



*Pudgy scoots along in front of the massive Tustin airship hangar doors. Just imagine those doors are a good fifty yards in the distance.*

The wing glues to the wing cradle; the rudders glue to the ends of the tail plane; and the tail plane assembly is glued to the fuselage, making sure all is square and level. Slide the wheels inside the wheel pants and guide each onto the undercarriage wire. Glue securely only at WP-3 so the wheels will turn freely. Using the windscreen pattern from the plan, test fit it to the fuselage before cutting your clear acetate. When you're satisfied with the fit, cut the windscreen from clear acetate and glue it to the fuselage with canopy glue.

The original Pudgy weighs in at exactly 14 grams without rubber and flies quite nicely indoors with one 18" loop of 3/32" Tan II rubber. For spirited outdoor flying, I use a 20" loop of 1/8" Tan II rubber. To date, her best flight indoors in a CAT I site is 87 seconds and in a CAT IV site, 3 min. 37 sec. However, her outdoor performance is sweet in decent air and turns in consistent 2-3 minute flights. I am sure once you have built a Pudgy Bostonian you will continue to explore much more of what the Bostonian class has to offer. ●

*Fresh from the doping shed, Pudgy is so pretty here. Whimsical, yet racy with just a hint of classic design.*



*After a full year and a half, Pudgy hides her battle scars well and still flies great whenever called upon.*

