

BUD NOSEN MODELS

AERONCA "CHAMP"

BUILDING INSTRUCTIONS

FUSELAGE

Begin fuselage construction by building two identical sides using 1/4" square balsa over shaded areas over shaded areas on side view.

Add cabin parts FA-1 to FA-5 and F-13. With both sides complete, pin down over top view from F-2 to F-4 only. (If work bench will allow, leave sides from, about 1" back of F-2 Forward hanging over edge.)

Add all 1/4" cross members aft of cabin area along with floor, floor gussets, F10, F-8, Dash, Wing Mounting blocks, etc.

Add sides, dowels and F-7. (If wing strut anchors are used as shown, they must be installed before sides are added.)

When dry, remove from plan, and add rear main gear strut, F2A - F6.

If tank compartment is used as shown, cut a hole in F-1 on lines. Use a 12 ounce square tank.

Build up motor mount as shown.

Build the cowl as shown, building the left half first. Then add and build right Side directly to the left.

Cowl can be fastened to the body by using sheet metal screws through C-2 and into F-1, installing through holes in front of cowl. Be sure to cut air vent in bottom rear of Cowl for hot air to escape.

STAB, ELEVATOR, FIN AND RUDDER

Build directly over plan using parts shown. We do advise the use of dual or split pushrod to elevators to avoid flexing. Support the rod well for same reason

WING

Wing construction is in three pieces, with self aligning aluminum tubing. The use of 2" by 6-32 bolts to fasten the wing to the fuselage and also lock the tubing together, has proven simple and effective. Wing tubing is not a tight fit and will allow for small differences in construction and cutting.

Build right half of wing directly over the plan on a flat surface. Do not remove from plan until webbing, top sheet and cap strips have been installed.

Oil or grease plan and turn over to build left half of wing.

Install 3/8" alum. tube, but do not install sheet screws to lock it into place until wing is fit to center section.

Build center section over plan, and install 1/2" alum. tube in same. Use 3/8" screws to lock tubing into place as shown. Do not plank center section until you trial fit wing panels. At this time, plank bottom of center section only. (The use of plywood pieces on bottom of center section as shown on plan has been discontinued.)

With both halves or outer wing panels plugged into center section, center the wing on the body. Drill 3/32" pilot holes down through both tubes and hardwood wing mounting blocks in four places, as shown in top view.

Enlarge the holes slightly and install blind nuts as shown.

Build wing struts from parts WS, 1/4" x 3/8" sticks, 1/8" rod and 3/32 wire which is bent to

shape as shown. Retain with 3/32 keepers. Aileron installation is optional.

After finishing and equipment installation, balance as shown on the plan.

On prototype models, radio was installed in the forward cabin area. Aileron servo was installed from the bottom in the center wing section. Clevis connections to servo must be undone when wing is taken apart. In most cases to transport wing, leave center section attached to one section.

FLYING

In all cases a .60 engine in this model has proven to be more than enough power and not the least bit marginal. Due to the large size of this model, AILERON control has been quite slow, and until you feel the model out, fly on rudder and forget about the ailerons.

After a few flights, try using both aileron and rudder for turns. You will find the model handles much the same as a real aircraft in this respect.

The model will not stall easily, but make sure you have decent ground speed before you attempt to lift off. **MAKE SURE YOU FLY IT OUT ON RUDDER ONLY FOR THE FIRST FEW FLIGHTS.**

The model outline as drawn is exact scale. Three views are available from Bud Nosen Models or Historical Aviation Album, P. O. Box 33, Temple City, Calif. 91780.

The four foot leading edges have ~ tendency to warp. This can be easily corrected by pinning the leading edge down straight on flat surface. Glue leading edge spar into leading edge. Allow to dry thoroughly and remove.,

MATERIALS AND USE LIST

2	1/16" x 3" x 48" sheet	Use for wing web
2	1/2" x 1-1/8" x 48"	Use for leading edge
8	3/32" x 2" x 48"	Use leading and trailing edge wing sheet
1	1/8" x 4" x 36"	Use for bottom center of fuselage, lengthwise
3	3/32" x 3" x 36"	Center section wing planking, also between W-2 & 3
3	1/8" x 3" x 36"	Use on body as shown
4	1/4" x 3" x 16-1/2"	Marked side -- use for sides of fuselage as shown
3	3/8" x 3/8" x 48"	Use for tail surfaces -- figure for no waste.
8	1/4" x 1/4" x 48"	Spruce or very hard balsa -- main wing spars
2	1/4" x 1/4" x 48"	Balsa -- used in leading edge.
16	3/32" x 3/8" x 36"	Use for cap strips on wing
4	1/4" x 3/8" x 36"	Use for tail surfaces
2	1/4" x 3/8" x 24"	Use for capping part WS; wing struts
21	1/4" x 1/4" x 36"	Use, for stick sides of body as shown and sand down for 3/8" shim stock....
4	1/8" x 12" dowel	Use for tail section support as shown. These dowels provide most of the tail support and strength. A R/C magazine in a recent review complained of tail section weakness. A careful study of the photo of their model shows a careless builder left these essential parts off!

Do not attempt construction until you are familiar with the basics of our plan. We hope you enjoy building our kit.

Bud Nosen

