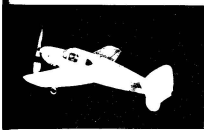


# the CRUISAIR

—::: WEISS

The simple model, though  
it is a smooth and realistic  
performer



OUR Minute Model this month is a commercial ship, the graceful Bellanca Cruisair. The answer to the dreams of many a private pilot, the Cruisair carries four persons at a cruising speed of 145 mph over a 800 mile flight range. Although the jets may go streaking by, the Cruisair owner, flying in comfort with his friends in a heated cabin with 160 lbs. of vacation baggage stowed away can reflect with satisfaction that should some unforeseen mishap occur he can set his \$5000 investment neatly down, with the aid of flaps, into many a tiny field that would be fatal to a high speed aircraft.

Our model is of simple but sturdy structure. The sheet balsa fuselage sides and tail surfaces allow rapid construction for those who want to get their models into the air in the shortest possible time.

**FUSELAGE**—We found it convenient to start construction with the fuselage. Cut two fuselage sides from 1/32" sheet balsa, starting from Former 4 and proceeding back to the tail. Sand the sides smooth and cut out the windows with a razor. Cut out the bulkhead halves from 1/16" sheet balsa and cement the halves together, adding a thin strip of scrap balsa about 1/16" square across the joints to strengthen them.

When bulkheads are dry, cement the two fuselage sides to Bulkhead 5. Cement the tailpost, a strip of 1/16" square balsa between the two sides at the tail. Then insert intermediate bulkheads (6, 7 and 8) one by one, and cement them in place. Finally add Bulkhead 4 and the three 1/16" square stringers on the top of the fuselage.

The nose can be made in two ways. On our Cruisair we carved the nose roughly to shape from soft balsa, hollowed it out for lightness, cemented it to Bulkhead 4, then sanded it carefully to conform to the fuselage outline. An alternate scheme is to cut out Bulkheads 1, 2 and 3 from 1/8" sheet balsa as shown, connect 3 to 4 by 1/16" square strips as indicated and then cover with 1/32" sheet balsa.

**WING**—To make the wing, pin a piece of waxed paper over the plan, then build the wing on it in one piece, transferring dimensions from the right half of the wing shown on the plan to the left half by a ruler. Pin the spar, leading and trailing edges in place, then cut out the ribs and cement them in place. For a light flying model every other rib is omitted. Add the wing tips from 1/16" sheet balsa. When the cement has set, remove the frame and sand all rough spots from spars and ribs. Crack the spars at the middle and recement to give the proper amount of dihedral.

**TAIL**—Cut out the tail surfaces from 1/32" sheet balsa, sand them smooth and cement them in place on the fuselage. The stabilizer is made in one piece, and the fuselage is slotted to receive it.

**ASSEMBLY**—Cut slots in the fuselage sides to receive the wing spars and cement the wing to the fuselage. Bend the landing gear from wire and cement it to the wing leading edge and the wing spar where shown. Make this a good solidly

cemented joint to withstand rough landings. Cement cellophane or thin celluloid over the windows and windshield. Add the tail wheel and air scoops.

**COVERING**—The Cruisair is an easy model to cover. To get a smooth job it is best to work a few ribs at a time in covering the wing, or a few inches at a time on the fuselage. Spray the tissue lightly with water to tighten it. A thin coat of dope may be applied if desired.

**PROPELLER**—The prop is carved from a block of hard balsa, the harder the better. Don't carve it too thin, and give it a couple of coats of dope, sanding between coats. It will then be better able to survive collisions with trees, walls and fences. Power the prop with two strands of 1/8" flat rubber.

**FLYING**—First glide the model. If it dives, warp up the elevators slightly. If it still dives, add weight to the tail. If it stalls (a more likely occurrence with flying scales), add weight to the nose. Modeling clay is O.K. Correct right or left spirals by warping down the trailing edge of the inside wing and applying opposite rudder. Then give the prop a few turns of power and continue the adjustment process until the model flies nicely under full power.