

SPECIAL INSTRUCTIONS FOR BUILDING THE CADET

Study the plans and familiarize yourself with the general construction. Several features will depend on which direction you intend to fly. These points are: Rudder and motor offset, and the wing guide-plate.

FUSELAGE - Take the two side pieces and mark the exact location of all bulkheads. Start assembling by gluing F-1 and F-2 in place. Pin this part upside-down on flat board or table, checking alignment, until dry. Meantime, assemble the bulkheads, C, D, E and F on the plan as shown. Cut out the plywood blkhds, A and B, and cut holes for motor mounts to fit your motor.

Insert bulkheads between sides, starting with C. Then A & B. Bind or clamp together until cement has set. Make sure that sides bow equally and fuselage is straight. After all blkhds and the Rudder post are in place, add Stabilizer and Elevators. Put on top stringers aft of C, and build fin and rudder. Attach the landing gear firmly to A. Bind with fine wire or bolt on.

STABILIZER & ELEVATORS -- Assemble the Elevators as shown with 1/8" sq hardwood spar and short sub-spar. Small sketch with Control Accessories explains method of attaching horn. Cloth hinges (gauze or crinoline) are shown - altho other types may be used. The cloth strips go under and over, thus forming an X between stab and elevator spar for each pair.

RUDDER - The solid Rudder is cut out to clear control horn as shown. Patches of 1/16 scrap are glued to sides of rudder, indicated by feathered lines on side view. The solid patch is placed on the side bent away from the controls. Sand the Rudder to a tapered edge at the rear. Reveal the front edge to give approx 3/8" turn-out, and cement to Rudder Post.

WING - Pin lower main spar and 1/16 X 7/8 trailing edge in place on plan. Pin the spar securely to table at Tip rib then block up tip end of spar 1/8" as shown in sketch. Set ribs in place. Slant top edge of base rib approx 1/16 outward, toward tip, to allow for dihedral.

Add leading edge, top main spar and Tip pieces W1, W2 & W3. Pin tip of spars together as shown. Remove wing from plan before adding top of trailing edge. Glue well and hold together with clothespins or clamps until dry.

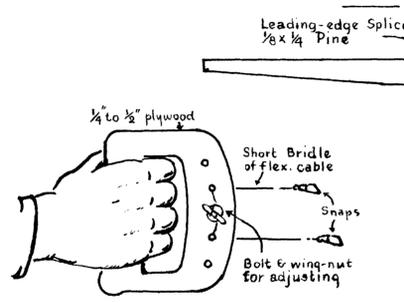
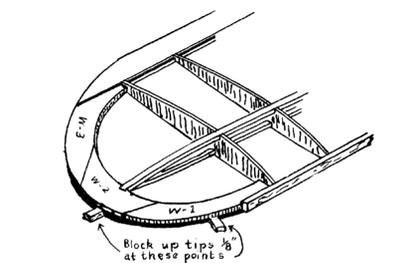
Plank fore part of wing with 1/16 X 2 sheet. Fill in between planking and trailing-edge with capstrips on all ribs, and add the tip pieces W4 and W5. Shape leading edge & tip with sandpaper. Sand trailing edge to knife edge.

ATTACHING WING - Lay out the locations of spars and leading-edge splice, and cut the holes with sharp-pointed knife. Put wings in place, with bottom of Base Rib flush with lower edge of fuselage side. Raise tips 1/4" to 1" above center to form dihedral angle. Insert the Wing center splice between main spars - bind with strong thread and glue. Cement ends of rear spars to blkhd B.

If one of the larger size motors is used, we suggest that the fuselage sides be re-inforced around wing-root by gluing pieces of scrap balsa inside fuselage, with grain running up and down. Kit may also be adapted to motors up to .45 cubic-inch, by using slightly heavier motor mounts.

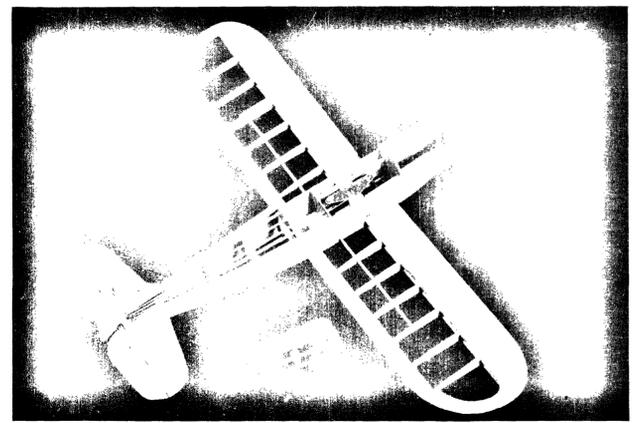
BALANCE & FLYING - Completed model should balance slightly nose-heavy on the main spar. If not, move weight forward or add weight to nose.

For average sport flying, thread control lines thru front and rear holes in the wing guide-plate. When flying in wind stunting or on long lines, thread front line thru center hole. This gives the effect of added Rudder. Beginners should try out in calm weather, with low power at first.



SUGGESTED CONTROL HANDLE
An improved type control handle - for easy adjusting and finer control.....

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FALCON CADET

SPORT & STUNT PLANE

• For Motors .19 to .35 Displ. •

SPAN 33" LENGTH 24"

DESIGNED BY FRANK GREENE

MFD. BY

FALCON MODEL AIRPLANE CO., LONG BEACH, CALIF