



**PARTS CONSTRUCTION:** (1) The Fuselage. Place your wood strips on the side view of the fuselage. Use pins to hold the formers (stringers) in place. Cement the upright and diagonal braces to them. Build the second side on top of the first. Separate the two sides with a razor blade except at the tip of the tail. Turn back the nose to the tail and put the top and bottom pieces of former and stringer in the top. Cement any remaining stringers to the formers. Bend the tail hook and cement in place. It is very important that it be placed in the exact position shown in the side view of the drawing. Then carve the nose block and cement in place. Cover the fuselage with dark tissue. Leave the bay at the tip of the tail open so that the tail hook is accessible. (Special Instructions for Construction of Fuselage for F-21. Cut out the formers from the sheet halves. Cement the stringers in place. Do not try to put all the stringers in at once. Start with four, in square or oblong patterns. After you have fastened these to the formers go ahead with the rest of the stringers. Cement

**AIRPLANE ASSEMBLY:** Before assembling your model, study the plan carefully and note the exact position of the various parts in relation to each other. (1) Wing Assembly for F-13, F-14, F-15, F-16, F-17, F-18, F-20. Attach the wings to the body after carefully lining up the bottom of the wings is parallel to the line of thrust. You can find the line of thrust by drawing a line the side view of your drawing from the center of the propeller hook to the center of the tail hook. Check your assembly with the front view of the plan to see if you have the proper dihedral in the wings. Attach the wing struts. (Special instruction for F-19, F-21, F-22, F-23, F-24. Cement the lower wings on first. Make sure that the wings are parallel with the line of thrust. Locate the line of thrust on your plan by drawing a line from the center of the propeller hook to the center of the tail hook. Check also with the front view to see if the wings have the proper angle with the body. Then cement the interplane struts to the wings and let dry in the right position. Cement the top wing in place. Finally put in the cabane struts.) (Special instructions for F-10. Cement the top wings in place. Fasten wing strut to bottom of top wings. Cement lower wing to struts. Then put in cabane struts.) (2) Put on the stabilizers. Make sure that they are parallel with the line of

**FLIGHT TESTING:** This type of model flies best in light air or a calm. Be sure that you have plenty of room, free of trees and other objects. Remember that your airplane will not be likely to fly well unless it makes good glides. The first thing to do is to slide your model. If it noses down too sharply as you glide it, correct by raising the trailing edge of the stabilizers slightly. Make these adjustments by bringing the trailing edge of the wings up as you bend them. If it stalls correct by lowering the trailing edge of the stabilizers. If the plane turns to the left, correct by giving it opposite rudder; if it turns to the right, correct with a little left rudder. If the airplane makes a circular dive to left, correct by "washing-in" the tip of the left wing. Do this by gently warping the trailing edge of the wing tip downwards. A circular line to the right would be corrected by "washing-in" the tip of the right wing. Now for the first flight. Hold your model by the nose block, as you wind the propeller. Wind the propeller clockwise until you are a row and a half of notches on the rubber motor. (about 54 times). Launch it carefully from the hand by the trailing edge forward and let the propeller pull the model. The landing should be pointing down slightly and the wings parallel with the ground when you release it. As it goes forward note whether it tips up or down, or right, forward, etc. Make whatever adjustments are necessary before flying it again by warping the wings or tail surfaces or by correcting the balance. Fly again. Once the model is properly adjusted, wind the motor fully and fly again.