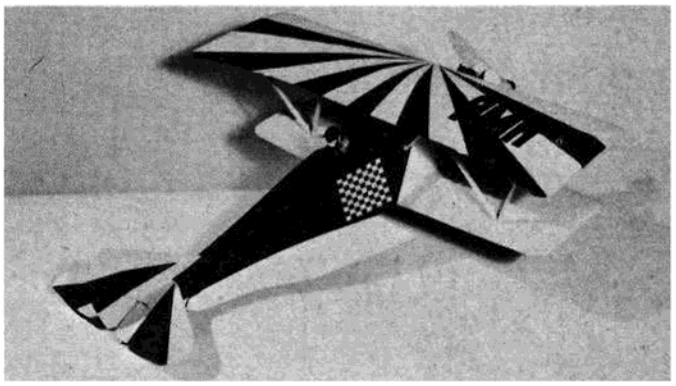
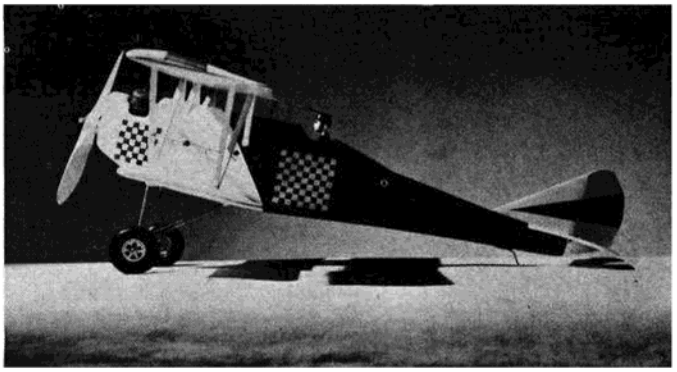
Left: Here is the tricky little World War I Italian fighter plane decked out in circus markings. The author has used red, white and lemon yellow to create a sparkling color scheme which will be appreciated on any model field. Controline fans should enjoy building this scale bipe since the construction is very simple while it embodies all of the rakish lines.

Below: The plan includes drawings of full-size wing ribs for both sport and stunt flying. Rugged fuselage construction is assured through the use of sheet balsa for the fabrication of the entire box-type structure.



Below: Almost any Class A or B engine may be used to power this model. The "M" type bracing of the interplane struts adds sufficient strength to overcome the failing that many biplanes have with poor wing mounting



ANSALDO S.V.A.

by Paul Palanek

● The Ansaldo made its appearance in the latter part of the first World War carrying Italian markings. However, side stepping the run of the mill trim we decided to deck our little bipe in aerial circus paint and trim. The result was a colorful aerobatic circus clown.

To pull our bipe we used a Cameron .19 spinning a 8-6 prop. Gay colors of red, white and lemon yellow in proper harmony decorate the Ansaldo. The low center line permits a vertical engine mounting, with most of the engine concealed. This arrangement is best by test for ease of operation. It avoids bulky and flooded engines.

WINGS: Construction begins with the wings since they constitute the greatest part of the building. Both upper and lower leading edges are ¾" x 1" medium hard strip balsa. The ribs are ⅛" and ¼" sheet stock with solid balsa for wing tips. Wing trailing edges are ¼" x ¾" stock. Since the upper surface has no dihedral we will let this unit be our starting point. The plans appear ½ size, with details such as ribs, formers, and landing gear wire shown full-size. For quick and accurate scaling up, the drawing should be photostatted. The price will be considerably less if each page is enlarged separately and joined on the work table.

Secure the leading and trailing edges in place. Cement the rough cut ribs in proper position, placing the ¼" ribs as shown. The 1" x 2" soft balsa tips are then added. The scalloped trailing edge tips are accomplished by using a scrap piece of ¼" x ¾" strip. Secure it to the wing and trim it to the proper outline. When the above assembly has dried sufficiently, remove it from the plans and set aside until thoroughly dried. Work can then be started on the lower panel. Since this lower section has a ½" dihedral at each tip, it is built in three operations. Start with the center section, working out to both panels. The center ribs, leading and trailing edges are reinforced with ¼" sheet balsa gussets as shown.

While the lower assembly is drying, shape the upper wing panel to proper contour. Two types of ribs are shown on the plans—a Clark Y for sport flying, a symmetrical rib for stunt work. With both panels complete and sanded, brush a coat of clear dope on all of the surfaces which are to be covered. The wings are then covered with medium grade Silk-Span, and wet down with water. When the covering has dried thoroughly, brush on two coats of clear dope and set aside to dry.

FUSELAGE: The fuselage, whose major portions are *(Please turn to Page 34)*

ANSALDO

(*Continued from Page* 19)

⅛" sheet balsa, is box shape forward of the cockpit and triangular aft of it. Sheet stock ⅛" thick is used for the sides, a portion of the top and the entire bottom.

Formers "A" and "B" are ⅛" plywood and ⅛" sheet balsa is used for the balance of the formers, "C", "D", and "E". Shape both sides of the fuselage allowing a small amount for a little trim operation aft of the cockpit on the bottom side.

Mark former and engine mount positions on both inside faces of the fuselage. Install formers "D" and "E" starting with the rear of the fuselage and working forward. Prior to installing former "A", ⅜" sq. hardwood mounts are installed. Be liberal with cement and use care to make tight joints, since a good joint assures greater strength. Soaking the balsa sides in boiling water will help to relieve the strain. This will make bending much easier.

Cover the upper and lower fuselage openings with balsa. While this is drying, install the 2" bellcrank as shown and solder both the lead-ins and pushrod. A slit on the right side of the fuselage permits free movement of the pushrod. Cement a balsa fairing boot to cover the slit.

The turtle deck is shaped and hollowed from laminated sections of ⅜" sheet balsa. After the cockpit and engine cut-outs are made, cement the unit securely in place. The balance of the ⅜" sheet stock is used for the nose block.

Next, sand the completed fuselage and add two coats of clear dope. When dried, brush on a few coats of a good grade balsa sanding sealer. A portion of the fuselage is cut out, and the lower wing cemented in place. Be liberal with cement and allow it to dry. Work is then started on the tail surfaces.

TAIL SURFACES: All surfaces are made using ⅛" sheet balsa stock. A ⅛" sq. hinge spar is cemented to the elevator halves, thin cloth is used for hinges. The elevator horn is mounted on the right half of the elevator. Sand the surfaces thoroughly, then brush on two coats of clear dope. After installation, add a few coats of sanding sealer. Cement the rudder to the fin as shown with proper offset.

FINISHING: Having chosen the trim details, brush on the color scheme. Two coats of each color should cover nicely. Install the Cameron .19 using bolts for fastening. Mount the fuel tank while mounting the engine. With the above completed, the upper wing is fastened in place. Use ⅛" x ¼" hard strip balsa for both cabane and interplane struts. Be liberal with cement since these members assume great loads during hard landings. Paint the struts as required, then add sewing thread rigging.

During the drying period, shape the landing gear wire from 1/16" wire stock and fasten it in place. Solder the wire at the axle end first, binding with copper wire. The gear is secured to the fuselage using ⅛" x ¼" very hard balsa. Slip on 2" dia. wheels and keep in place with solder. Cement the tailskid to the rear of the fuselage.

Having completed the above, select a good grade of fuel proofer, and brush two coats on all surfaces. For an added touch of realism, a properly painted dummy pilot is cemented in the cockpit.

If you have built the stunt version don't attempt any maneuvers until you are familiar with the model's behavior. Check the balance point. Our model flew well, using an 8-6 prop, on 50 foot lines.

BILL OF MATERIALS
(Balsa unless otherwise specified)

1—¾" x 1" x 36" (med.)	Wing leading edges
2—⅛" x 3" x 36" (med.)	Fuselage and wing ribs, tail surfaces
1—¼" x ¾" x 36" (med.)	Wing trailing edges
1—½" x 3" x 36" (med.)	Fuselage turtle deck, nose block
1—⅛" sq. x 10" (hard)	Elevator spar
2—⅛" x ¼" x 36" (med. hard)	Wing struts and landing gear struts
1—1" x 2" x 20" (soft)	Wing tips
1—¼" x 2" x 12" (med.)	Wing ribs

Wheels; clear dope; colored dopes; Silk-Span; 2" bellcrank; horn; 1/16" wire; masking tape; hardwood motor bearers; ⅛" plywood; nuts; bolts; 8-6 prop; .19 engine; tank; plastic fuel lines; Trim-Film; crinoline for hinges; sanding sealer; fuel proofer; sewing thread for rigging.