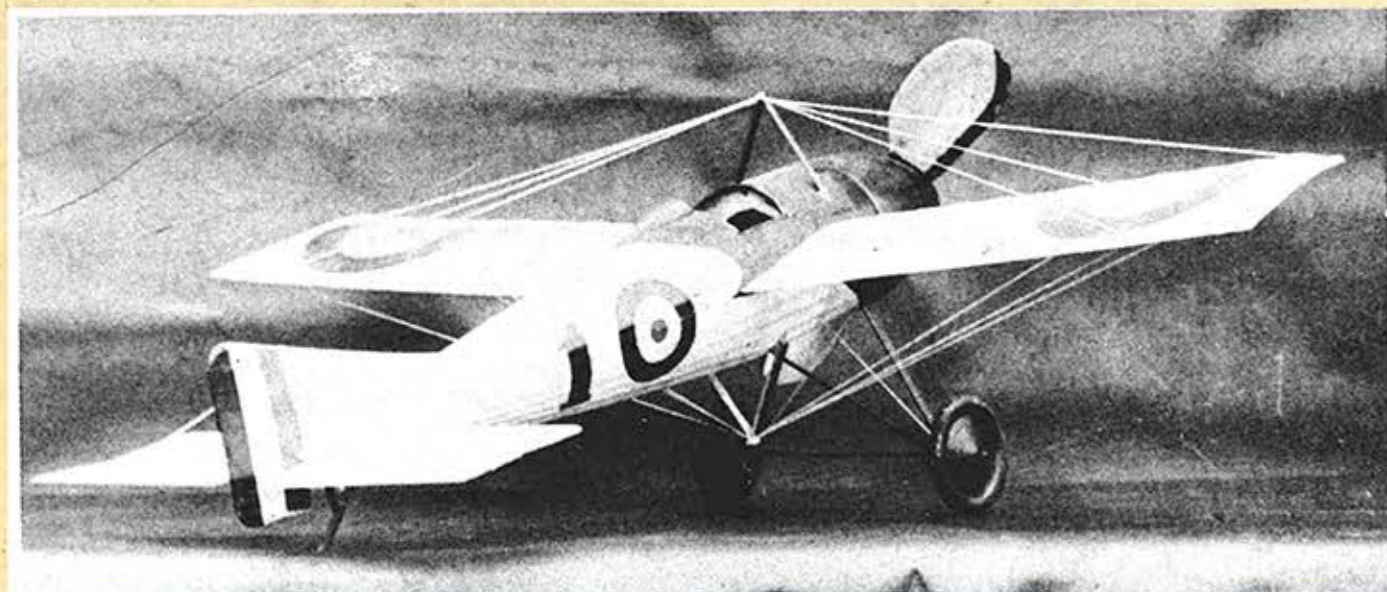


Easily converted to a control-line gas job, any 1/2A engine can be used on this plane. You should substitute sheet tail surfaces, and beef up the gear and fuselage as necessary. For a few cents, any local photostat house can enlarge the plans to the scale shown. This will eliminate all effort on your part, as well as chances of error or distortion.



● O.K. pal, come out of that musty old corner and admit that you would like to build a World War I ship, and capture some of the never dying glamor of the old spit-and-string crates of bygone days. Admit also that, if you have never built one of the ships of 1914-18 vintage, it has been simply because there are twice as many wings to build and that would be too much work. Stop right there, brother—here's your World War I ship, and it has a single wing!

We're lazy ourselves and hate to build more than one wing, but the bug for the W.W.I-type airplane captured us long ago. After a search through old pictures and articles, the Morane Scout Monoplane was found, and seemed to be the answer to the problem of our laziness.

The Morane appeared about 1915, and is reported to be the first airplane to mount a machine gun synchronized to fire through the propeller arc. The ship was of very clean design for that period, and its speed reflected the designer's foresight.

Scale proportions of the real plane were found to be sufficient for good flight characteristics in the model. The model, therefore, will make a snappy appearance as either a mantelpiece or flying-scale counterpart of the original. Remember to keep the structure as light as possible throughout the entire construction period.

Before beginning construction, it will be necessary for you to enlarge the plans, having a negative photostat made 16 1/2" wide to get full-size plans.

FUSELAGE: First trace the fuselage former

patterns from the photostat onto 1/16" medium sheet balsa (except as noted). Cut out all formers, including stringer notches, and number them to avoid confusion while building. Next pin the 1/16" x 1/8" keel strips to the plan, and add the formers in the position shown. Make sure that all formers are perpendicular to the vertical center line of the fuselage. Do not add stringers yet.

Remove the completed fuselage half-shell from the plan. Then make a reverse tracing of the fuselage by holding the photostat against a window pane and build the opposite half shell on this. Remove this shell and join the two halves by cementing firmly.

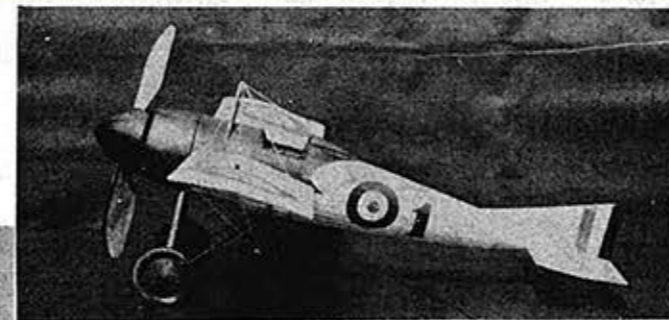
Add stringers by starting at the centerlines of the fuselage and working up or down. Check for perfect alignment of the entire structure at all times.

When addition of the stringers is complete, fill in between stringers from former 1 back to 3 and down to the horizontal centerline with 1/16" sheet scraps as noted on the plan. Install the rear rubber hook and its retaining block and cement well. Sand completed fuselage with fine sandpaper.

LANDING GEAR: Bend the landing gear from 1/16" diameter wire, referring to the plan as a guide. Attach the landing gear assembly to the fuselage as shown. Don't spare the cement on this installation, since a sturdy landing gear will pay off in many ways. Next add the 1/16" x 1/8" fairings and sand to a streamline shape.

WING: Start the wing by cutting twenty-four

1914-18 MORANE SCOUT MONOPLANE



wing ribs from 1/32" medium sheet balsa, using the rib pattern shown on the fuselage side view. Next pin the leading and trailing edges of the wing to the photostat plan. Again use medium grade balsa. Note that the trailing edge must be raised about 3/32" at the forward or inside edge.

Cement the ribs in place and add the small leading edge tip gusset which is cut from 1/16" sheet balsa.

The tip of the wing is formed by soaking a 1/16" x 1/8" medium balsa strip in water and bending it to conform to the contour of the undercamber of the wing ribs. Add the trailing edge gusset of 1/16" sheet scrap balsa.

Remove the completed structure from the plan and add the 1/16" x 1/8" medium balsa spars. Check all cemented joints thoroughly and recement where necessary. Use a razor blade to carve the leading and trailing edges to the shapes shown on the fuselage side view. Taper wing spars at the wing tip and taper the tip itself to a sharp edge.

Sand the entire wing structure well. Build the opposite half of the wing by making a reverse tracing from the photostat and following the instructions above.

VERTICAL FIN AND RUDDER: Cut pieces "T-1" and "T-2" from 1/16" medium balsa sheet, and pin to the plan. Next add the 1/16" x 1/4" ribs and cement firmly. Cement the 1/16" square and 1/16" x 1/8" fin and rudder outlines in place and add gussets of 1/16" sheet scrap balsa. Let the structure dry thoroughly before removing from

the plan. After removing from the plan, carve and sand the ribs and outlines to shape, using "T-1" and "T-2" and the fuselage top view as guides. Take care in this step and strive for a symmetrical appearance.

STABILIZER AND ELEVATOR: The entire stabilizer and elevator structure is of medium balsa. Pin the 1/16" x 1/8" spars to the photostat plan and cement the 1/16" x 1/8" ribs to the spars. Add the 1/16" x 1/8" outlines and 1/16" sheet scrap gussets. Remove the completed structure from the plan and sand to shape, as shown on the fuselage side view. Build the opposite half over the same plan following the instructions above.

It is best at this point to join the fin to the rudder and the stabilizer to the elevator by using soft iron wire hinges. Be sure to anchor the hinge wire securely to the structure, using plenty of cement. Refer to the plan for the hinge attachment points.

ENGINE COWLING, SPINNER AND PROP: Trace the side and top views of the engine cowling on a soft balsa block of the correct size and cut to shape. Next locate horizontal and vertical centerlines on the block with the aid of a compass. Measure the radius directly from the photostat plan. Carve the entire cowling to rough shape and sand till the finished shape is obtained. Next, cut the cowling in half and (Turn to Page 32)

PLANS ON PAGE 28

