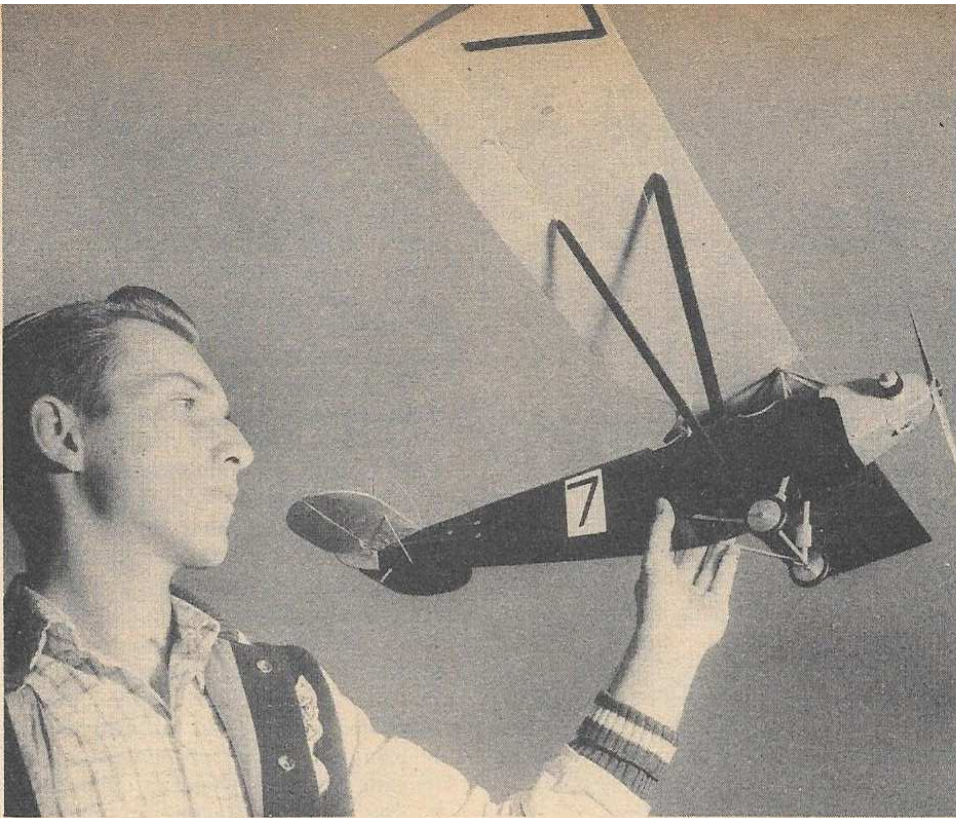


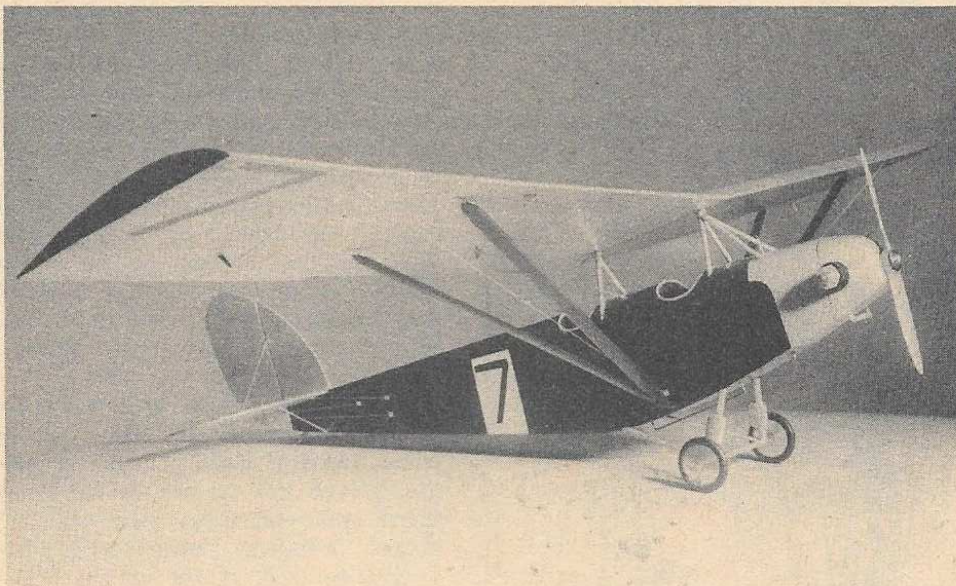
Supermarine SPARROW

By HAL COVER

This charming 1924 British lightplane, a natural flying scale for .049 engines. It's a consistent contest winner.

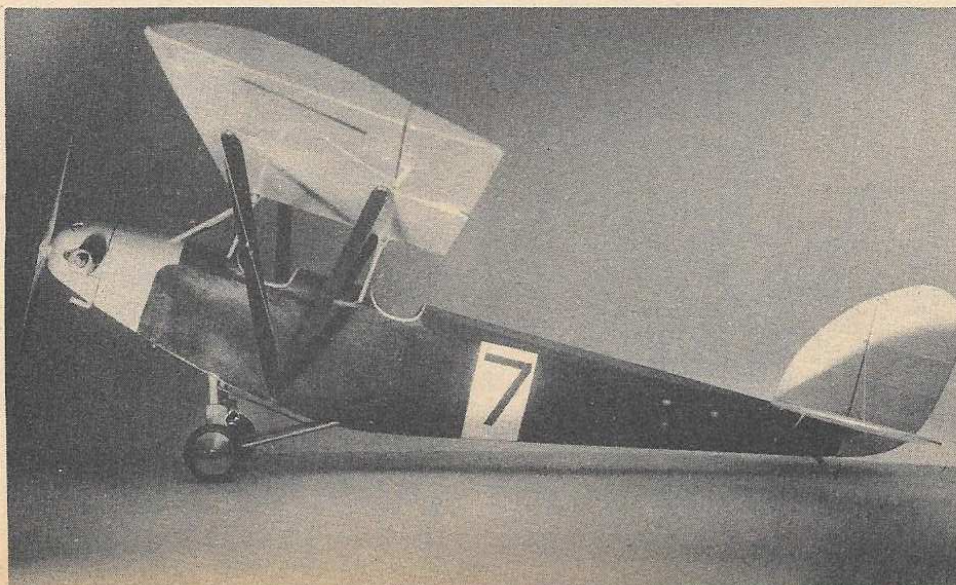


Posed by the author, Number 7 shows off its good detail. Beauty of a simple ship is that details can be duplicated without blowing stack.



Finish must be good for scale points. Silver wings and tail, a dark blue fuselage, black numbers. Some special points, so do follow text.

Parasols always seem to fly well. Metal struts under wing and for the gear will stand up and look scale. Old Cub cylinder duplicates twin.

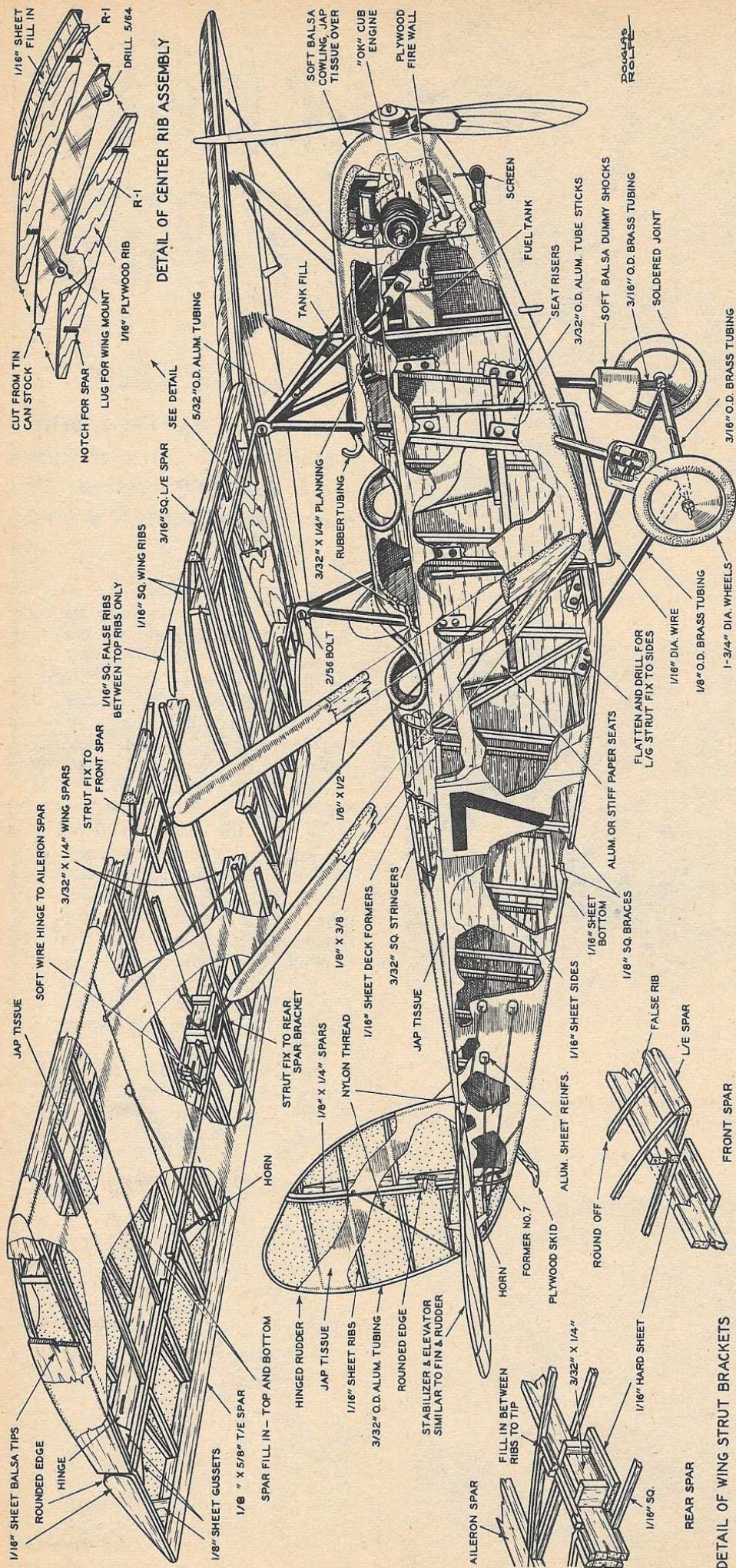


► In 1924, Supermarine Aviation Works, Ltd., deviated from its usual sea-going craft to build the Sparrow: Mark I. It was built to compete in the British Air Ministry's 1924 competition for dual two-seat lightplanes. The Mark I was a biplane and a stroke of bad luck forced it out of competition.

Two years later saw the *Daily Mail* contest for lightplanes. The Mark II was entered in this contest but, not being built for speed, could not hold the minimum permissible speed of 50 mph and was disqualified. After this contest, the plane was fitted with three other interchangeable wings with different airfoils. Specifications and performance were: *Span*: 34 ft.; *Length*: 23 ft. 10 in.; *Height*: 7 ft. 5 in.; *Area*: 188 sq. ft.; *Top Speed*: 63 mph; *Low Speed*: 31 mph; *Rate of Climb*: 5,000 ft. in 33 minutes.

The Sparrow makes an excellent model. This is its record: *Inglewood Flightmasters' Scale Meet, 1954*: Sr., first place; *Scale Finish Testor's Award*; *San Diego Scale Meet, 1955*: High scale points; Sr., third place; *Nationals, 1955*: Sr., second place; *Flightmasters' Scale Meet, 1955*: Scale Fidelity Award; *Scale Finish Testor's Award*; Sr., second place.

This should whet your keeness to go places and do things with this model, so let's start construction with the stabilizer. Aluminum tubing, 3/32, is wrapped around a bottle, 4 in. dia., the same diameter as the tip of the stab. The tubing is then cut into three sections: the first section is the tail plane; the second and third, the two elevators. Add 1/8 x 1/4 spars to both tail plane and elevators; then add ribs. The LE of the elevators is shaped to half-round sections. Sand the ribs to streamlined shape and join stab and elevators



by pieces of soft copper or aluminum wire, one piece at each end of the two elevators.

The fin is made in two parts—the fin and rudder—shaped similarly to the stab. The bottom rib and $\frac{1}{8} \times \frac{1}{4}$ spar are cemented together, then tubing and ribs are put in place and sanded to a streamlined shape. Add the two hinges.

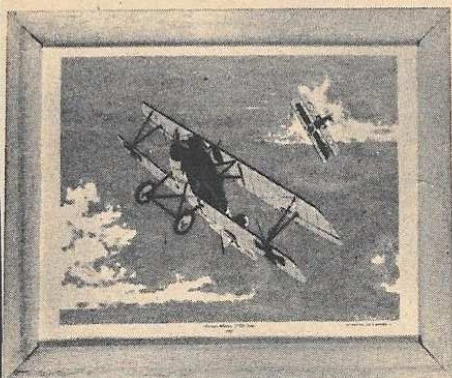
This brings us to the wing. Make a template of wing rib out of metal or plywood and cut 28 ribs out of hard $\frac{1}{16}$ sheet. As each one is cut, sand the top of next one. Lay LE and TE in place, then pin them down. Add the $\frac{1}{16}$ sq. ribs and position the $\frac{3}{32} \times \frac{1}{4}$ spars. One piece of $\frac{3}{32} \times \frac{1}{4}$ is added against the back of the rear spar the length of the aileron, then the ribs are added to top. The false ribs are made in the same manner as the ribs, but these are put only on top and the back is rounded off to prevent sharp protrusion when the wing is covered.

The wing is taken up and 1 in. dihedral is added to each tip. The spars are braced as shown with $\frac{1}{16}$ plywood on both sides. Locate fitting for the struts between Ribs 3 and 4; then add sheet on the bottom. Note the center rib is laminated out of two pieces of plywood and one of metal. Cut out the metal rib and drill holes in the two lugs $\frac{5}{64}$ dia. for the 2-56 bolt to go through, then cut out the two plywood ribs in the same manner, excepting only the lugs, and laminate them together. When the rib is dry, cut two notches for the spar and add it to the center of the wing and to both sides of bottom add $\frac{1}{16} \times \frac{1}{2}$. Between Ribs 3 and 5 the top and bottom of the spar and aileron spar $\frac{3}{32}$ sq. is put on. After these are dry, cut apart between the two pairs of ailerons, sand the LE of the aileron to half-round shape and replace on wing with two hinges, as shown. There is a tip rib of $\frac{1}{16}$ sheet that is put on after tip is sanded flat.

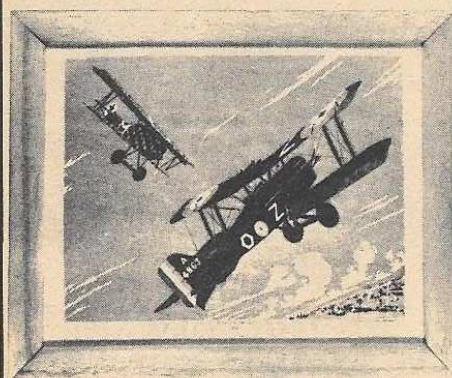
For the fuselage, sides are cut out of medium $\frac{1}{16}$ sheet, the uprights are added, $\frac{1}{8}$ plywood firewall is cemented on and $\frac{1}{8}$ sq. cross-braces are added. Put Former 7 in place, add the Formers from 1 to 6, then four $\frac{3}{32}$ sq. stringers. The landing gear is made of $\frac{3}{16}$ dia. brass or aluminum tubing. The upper ends are flattened and holes drilled in them, then cemented to the fuselage. Be sure to use plenty of cement. Note the wing mounts are made in the same order, but are of $\frac{5}{32}$ dia. aluminum. Drill a $\frac{5}{64}$ dia. hole in tip for bolt to go through. The tank is mounted in fuselage as shown on plans and it should run engine for about one minute. The planking on top is $\frac{1}{8} \times \frac{3}{32}$ strips. Shape cockpits, put hooks on sides of fuselage for struts, then place (Continued on page 40)

PAINTINGS

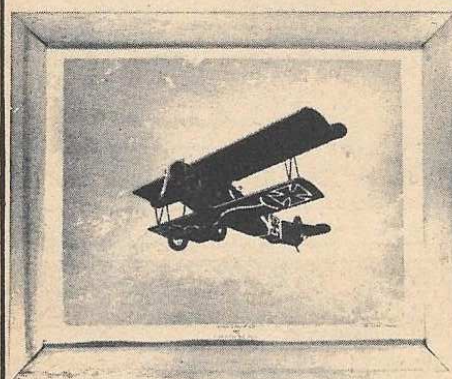
World War 1 Aircraft
In Full Color



Painting No. 1—Shows **GERMAN ALBATROS** being attacked by British Sopwith Pup. All in full battle color, grey, red, brown, etc. against blue, white fleeced sky. All strut and rigging wires shown in full detail. Beautiful for your Living Room or Den. **LARGE** size 17" x 14" with white border \$3.98



Painting No. 2—Shows **BRITISH S.E. 5** of No. 85 Royal Air Force Squadron being attacked by German Fokker D-7. The S.E. 5 in olive and all Squadron markings, etc. the D-7 in full camouflage pattern colors. This is simply full of color, very outstanding. **LARGE** size 17" x 14" with white border \$3.98



Painting No. 3—Shows **GERMAN FOKKER D-7** in a brilliant scarlet against a light blue and white sky. All markings, rigging, etc. as it shown flying, looking for prey. One of the most famous of WW 1 Aircraft and was featured in old photoplay "Hells Angels" **LARGE** size 17" x 14" with white border \$3.98

SPECIAL All 3 Paintings
a \$11.94 value
for only \$9.98 postpaid

Check off paintings above, send payment with order. **PRINT** name and address in column of this ad. Send 20c postage per painting on orders under 3 paintings.

GULL MODEL AIRPLANE CO. Dept. M
10 E. OVERLEA AVE., BALTIMORE 6, MD.

Supermarine Sparrow

(Continued from page 20)

holes in fuselage for the wires. These wires are nylon thread attached inside to Former 3 with rubber bands for allowance of movement of elevators and rudder. The dummy motor is made of scrap wood and paper; the engine cowling, of 1/2 in. sheet.

Only the finishing touches remain now. The color scheme of the original model was silver wings and tail; dark blue fuselage with black number of wing and black number with white background on fuselage; where brass is used on landing gear, paint silver.

Cover wing and tail with tissue and five coats of dope, all dope being thinned 50 per cent. Three coats of Sanding Sealer then go on fuselage which is covered with white tissue. Wings and tail had Testor's silver nitrate dope, while the body carried dark blue nitrate dope. One coat of clear Butyrate was sprayed over the entire plane. Finally, the entire airplane was covered with white Japanese tissue with six coats of clear nitrate dope.

Before flying, check to see if the CG is about 50 per cent; glide the plane left and power it with right and downthrust.

FOR SMOOTH ENGINE RUNS USE THE

Positive Flow

FUEL TANKS

ASSURES CONTINUOUS FUEL FLOW AT ALL TIMES. EXTREMELY SIMPLE TO INSTALL AND USE. 2 SIZES TO FIT ALL ENGINES.

MODEL A20Z \$1.59
09 TO 19 ENGINES
MODEL B40Z \$1.69
19 TO 35 ENGINES

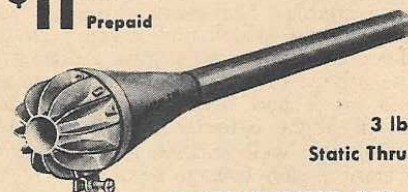
FOR RADIO CONTROL AND CONTROL LINE FLYING!

THE TANK WITH THE "INTERNAL SWIVEL"

DE BOLT MODEL ENGINEERING CO. WILLIAMSVILLE, N.Y.

M.E.W. 307 JET ENGINE

\$11.45
Prepaid

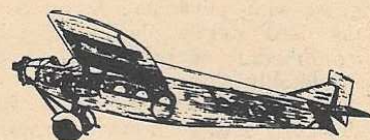


3 lbs.
Static Thrust

MOST THRUST PER DOLLAR

MINNESOTA ENGINE WORKS, INC.
5600 N. HAMLINE AVE.
ST. PAUL 12, MINN.

LARGE SIZE PLANS FORD TRI-MOTOR



SCALE: 1/4" = 1'-0"

WYLAM MASTERPLAN

The famed "Tin Goose" was Henry Ford's bid for air transport supremacy. Some Fords are still flying. More may be built! Now for the first time large-size plans are available! Every detail; the corrugations, every fitting, are all there. The most authentic set of Ford drawings ever put together.

Drawn by **MODEL AIRPLANE NEWS'** William Wylam. These drawings consist of four 1/4 inch to the foot plans—double the size of the Ford drawings in the May and June issues. Two plates show side view and cabin details, two more the dimensional layout and front view details. Complete set \$1, postpaid.

AIR AGE INC., 551 FIFTH AVE., NEW YORK 17, N. Y.