



## ww-1 combat

BUILDING, FLYING AND FIGHTING INSTRUCTION FOR THE SPAD-7 AND FOKKER D-7 COMBAT MODELS. PLUS ADVICE FROM THE BARON.

WW-1 COMBAT. It's an exciting sport flier's type of competition that even has the experts pulling on their goggles and flying scarfs. Models are cheap and quick to build. Engines are low cost 29s or 35s, stock and no pressure.

Two pilots fly in the circle at the same time. Object of the game is to chomp off your opponent's streamer one bite at a time. You get 100 points for cutting the crepe (paper streamer) in the end zone, 75 for the middle zone, and 50 for the first nearest the tail. If you cut the string first you get only 25 points. Two cuts in the same zone do not earn double points. Try to shoot up streamers not aircraft. You get one point per second of flight time, so it's important to get started fast and stay in the air.

Matches can be limited to three or four minutes from starting signal, or a kill is made. A kill occurs when streamer is cut loose from string. You can land, refuel and take off as many times as necessary, but remember that every second on the ground costs you a point. Control line length is 60 feet, with .014 minimum line diameter.

These profile combat models must be scale-like versions of WW-1 fighter aircraft actually used in "The Big War", with proper insignia and color schemes.

It's great fun to watch these dogfights, and even more fun to fly in one. Sig's combat ships are sturdy maneuverable aircraft that make fine sport fliers. Let's get started building so you'll be ready for that "dawn patrol flight".



Pilot and builder Art Middleton searches out the Hun

Baron von Flugmodel

FUSELAGE. Finish cutting slots for motor mounts and center wing struts. Check center strut detail on plan. Make them. Using white glue or epoxy, fasten left-side plywood doubler to fuselage. Glue motor mounts and center struts in place. Add right-side doubler. Clamp or weight down this assembly and let dry overnight.

Round off edges with sanding block. Drill holes for motor, landing gear and tail skid. You may have to drill larger hole to slip bent gear in place on Fokker. Fill hole with epoxy. Slip wheels on the gear and push her down to the next assembly station.

TAIL. Sand tail to cross section shown on plans. Glue Veco or Top Flite elevator horn to elevators with epoxy. Note plan shows bottom view of tail. Install hinges. Kit has sheet mylar strip-hinges. Make slits in edge of each surface. Slide  $\frac{1}{2} \times \frac{3}{4}$  inch strips in place. Punch holes for toothpick through wood and mylar with ice pick or nail. Fill with plenty of white glue. Now poke round toothpicks in place. Trim off flush (when dry). Fit elevator assembly in place and repeat operation.

Glue and pin stabilizer to fuselage. Add fin and rudder. Be sure to offset rudder ¼ inch to outside of circle. Push your aircraft carefully to the far side of the hangar and get ready to make the wings.



WINGS. Cut or sand scallops in trailing edges. Note jig pieces for wing ribs. They allow assembly flat on board. Pin every third rib in place. Fit notched L.E. and T.E. to ribs. Pin and glue in place. Add rest of ribs. Glue center blocks and tips in place. When dry, shape center blocks, add planking and sand entire structure with sanding block.

ASSEMBLY. Before gluing wings to fuselage: cover bottom of top wing, and top of lower wing. Glue lower wing in place. Cut all main (interplane) struts to exact size shown on plan side view. Glue top wing to center struts. Add main struts, making sure they are all flush with ribs, top or bottom. This assures correct incidence.

FINISH AND TRIM. Fill wood grain on fuselage and tail with Sig Sanding Sealer or Superfill. Use three coats Sig Supercoat clear on wings as base for color dope. You can find many authentic color schemes in Profile Publications books (50¢ each from Sig). The Spad is book 17, the Fokker book 25. All colors of dope are available in Sig Supercoat. A final coat of clear sprayed over the color will give you a glossy-fuel proof finish.

HARDWARE. Mount two ounce Perfect stunt tank with wire clips and rubber bands. Do not bend end hooks until the "U clip" has been pushed through fuselage. Mount engine and prop. Offset engine two degrees to right with washers. Check center of gravity of model by balancing it at wing tips. Add weight to nose or tail until it balances at C.G. shown on plans.

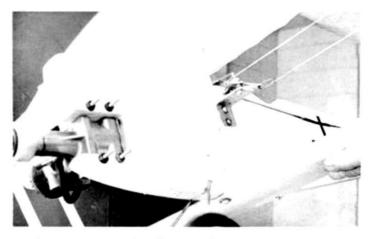
Now mark C.G. on fuselage, place bellcrank mount so that bellcrank pivot bolt is ½ inch behind C.G. One way to drill the mount holes is: file a chisel point on an 18 inch length of 1/8 music wire. Another is to burn it through with a red hot nail.

Pushrod on original ship was a heavy duty bicycle spoke. Use that or 1/16 music wire. Tubing joint shown on plans allows easy length adjustment. Make sure you use the cotter key pushrod brace. It prevents bending and loss of control movement under flight loads.

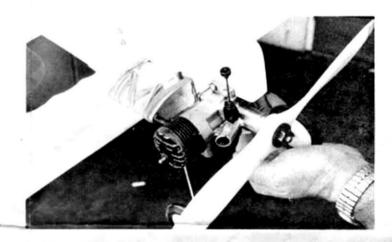
Mount bellcrank, and control leadouts. Original used 1/32 music wire.

FLYING. Test fly on a calm day. Take off downwind (if there is any). Do a lot of practice flying before engaging in combat with another flyer. Learn how to run your engine so well that it will start on the first or second flip. Be ready for any emergency during combat operations (tape, pins, Celastic, etc.).

Jawohl, undt don't forget to load mit der machiner guns yedt!



As you can see this flying machine is pretty well bolted together. Bellcrank is mounted  $\frac{1}{2}$  behind center of gravity after that last black cross is slipped on. (Charles Teed photos)



This all white Fokker D-7 is the original model by designer Kirk Kirkham. Note simple tank installation by hooks and rubber bands. Simple to build and maintain.



John Weaver built this fine model of the Fokker D-7. Note the Sig decals (furnished with kit). Ship is lemon yellow and forest green. McCoy 35 powerplant. Weight 28 ounces.

You can order spare decal sets from Sig Mfg. Co. for the Fokker (AW-15) 60 cents, and the Spad (AW-14) 85 cents. Sig model supplies and kits are available from most hobby dealers, but if not stocked in your area you can order from them direct. This booklet copyrighted November 1967 by Sig Mfg. Co. Inc., Route 1, Box 1, Montezuma, Iowa 50171.

