

A quick-built profile with a scale flavor . . .
Pit it against a P-38 and have a brawl.



Can be flown with wide range of powerplants.

"COMBAT ZERO"

by Nick Zirolì

◆ Realism, I feel, should be maintained in all types of model airplanes. This does not mean that all models must be exact scale replicas. Instead they should have the general outline and more important, a paint job and trim to match a full size plane.

A realistic model adds to spectator interest because many of the people that do spectate have a little knowledge of full scale planes and recognize them. This, in the case of control line, takes them out of the rock on the end of a string class.

This is what I had in mind when I designed the Combat "P-38," which

appeared in the April-May '65 issue of Flying Models. With nothing but the same old unrealistic rocks to fly against, the realism still wasn't there.

To keep the onlooker happy it was decided that the "P-38" should have a foe. A logical choice was the Jap "Zero," for the two prototypes squared off at each other on frequent occasions in the wartime years. The taper in the wing is about the same as the "P-38" which meant I could use the same rib patterns. Possibly you could build two such wings, and fashion your own twin-boom "P-38" semi-scale profile if you lack this back issue. (Available—see ad.)

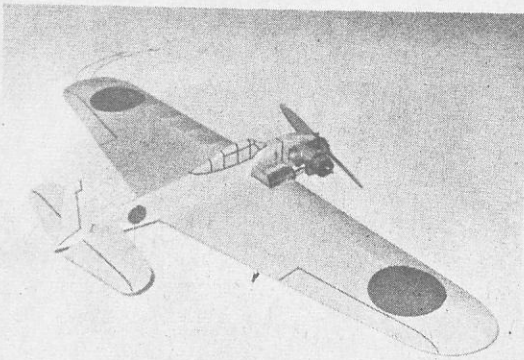
Construction is similar to the "P-38", except of course the stabilator is replaced with a more conventional stabilizer-elevator. The stabilizer section is however very small.

Performance of the "Zero" is enough to give the P-38 a run for its money. It has proven to be a lot more fun and excitement for the flier's with a good guy and bad guy to fight it out.

Construction: As everything is built around the wing this is the first and only major construction job. Cut out all the wing ribs from medium $\frac{3}{32}$ " sheet, except W-1 ribs which are $\frac{1}{8}$ " sheet.

(Continued on Page 34)

FULL SIZE "MODEL PLAN SERVICE" PLAN AVAILABLE AS ADVERTISED

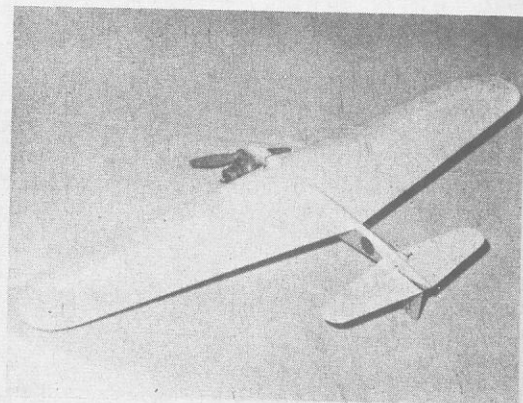
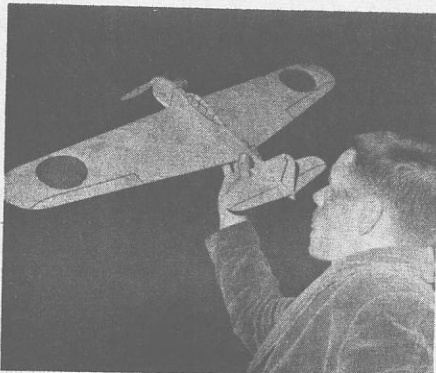


Suggestion of scale heightens Combat suspense. The trim adds only minutes to building time.

FLYING MODELS

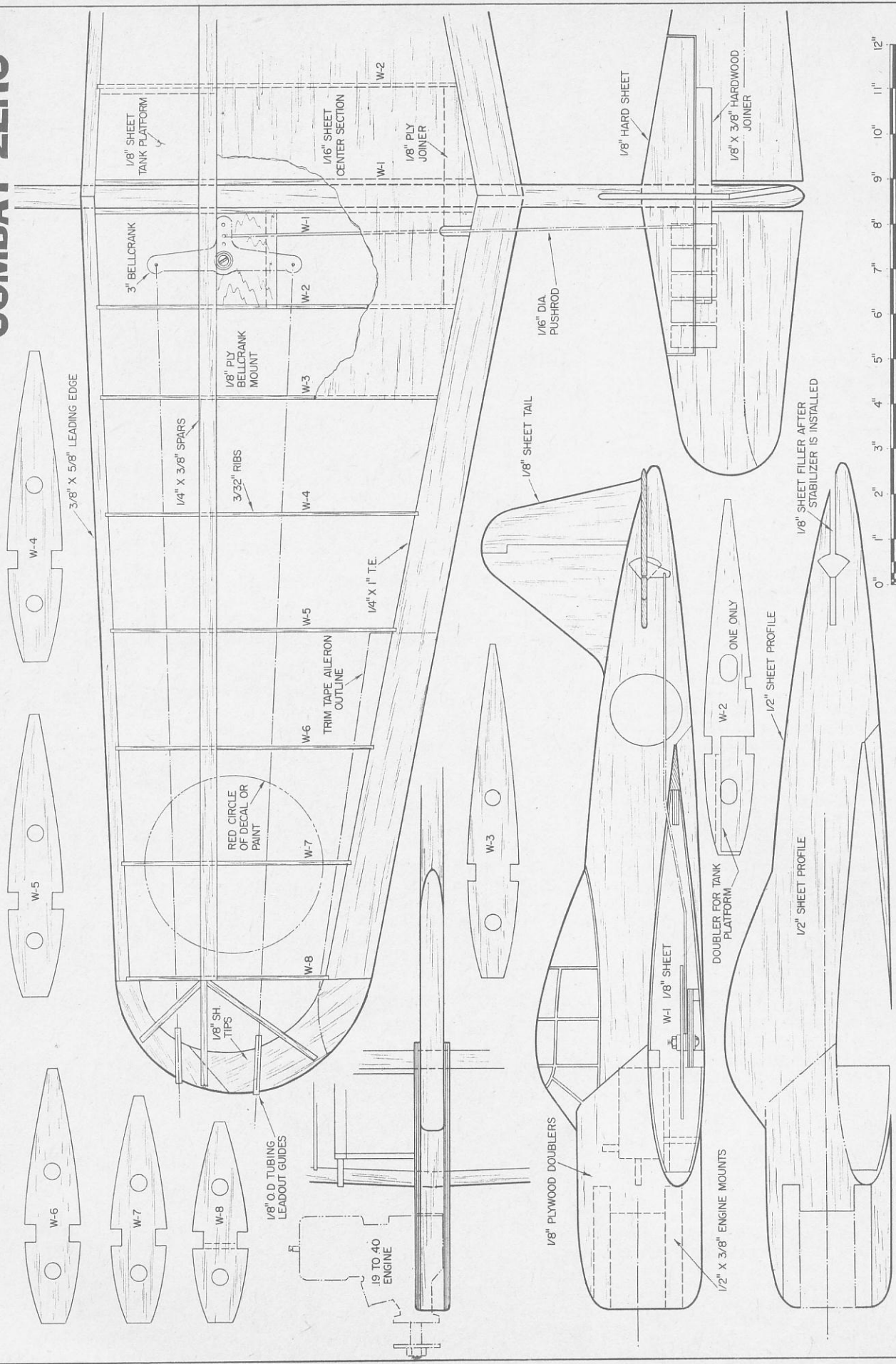
A Fox .29 engine, typical doublers, structure.

Frame builds up fast, in the Combat tradition.



Short moments for tight turning radius, stab is small, large movable elevator. Zero flies fine.

"COMBAT ZERO"



D.J.M.

"COMBAT ZERO"

(Continued from Page 25)

Cut holes for leadout lines in one set of ribs.

Cut the $\frac{1}{4}$ " x 1" trailing edge and the $\frac{3}{8}$ " x $\frac{5}{8}$ " leading edge to length. Notch leading and trailing edge $\frac{1}{8}$ " deep at rib locations as shown on the plan. Join the trailing edges with the $\frac{1}{8}$ " plywood joiner, making sure they are straight.

Cement both W-2 and W-8 ribs in place on the $\frac{1}{4}$ " x $\frac{3}{8}$ " top spar. Locate the W-2 rib with the bellcrank platform notch on the correct side. When dry, cement the trailing edge assembly to the four ribs, aligning it with the spar. Pin it in place until the cement sets. Cement the remaining ribs in place. Use a $\frac{1}{2}$ " thick block between the two W-1's in front of the spar as a spacer, to make sure the $\frac{1}{2}$ " fuselage profile will fit properly. Add the remaining spar and leading edge again, maintaining alignment until dry. Cut the wing tips from $\frac{1}{8}$ " sheet and cement in place along with the tip braces.

Install the $\frac{1}{8}$ " plywood bellcrank platform and brace, cementing securely in place. Attach leadout wires and pushrod to the bellcrank and bolt it to the platform. Sheet the top and bottom center section with medium $\frac{1}{16}$ " sheet. Leave space between the two W-1's between the spar and the leading edge

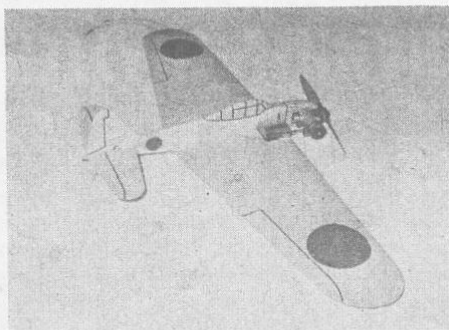
as well as the fuel tank area. Cement the $\frac{1}{8}$ " sheet tank platform in place.

Cut out the $\frac{1}{2}$ " sheet fuselage profile and cement securely in place into the wing. The method used to join the fuselage to the wing offers a joint that is much stronger than the more conventional wing in a slot. Here we have the wing and fuselage locked together in one vibration proof assembly. Add the engine mounts and $\frac{1}{8}$ " plywood doublers. Clamp securely until dry.

Cut the tail surfaces from $\frac{1}{8}$ " hard sheet. Join the elevators with a strip of $\frac{1}{8}$ " x $\frac{3}{8}$ " hardwood. Install a control horn and hinge the elevator. Cement in place and fill in slot with strip $\frac{1}{8}$ " x $\frac{3}{8}$ " hardwood. Install a control horn and hinge the elevator. Cement in place and fill in slot with scrap $\frac{1}{8}$ " sheet. Attach pushrod to control horn.

Round off all the edges of the fuselage. Cement rudder in place, off-setting as shown on plans. Locate and drill the motor mount holes.

Round all edges and sand smooth from top to toe to prepare for covering. Remove any lumps of cement and high spots. Clear dope a coat over the entire plane. When dry, sand with fine sandpaper to remove fuzz. Cover wing including sheeted center-section with silk or heavy Silkspan, the later being used on the original with satisfactory results. Give the entire plane two or three coats of clear dope sanding between coats with fine paper.



One coat of sanding sealer over all the wood parts, sanded well, followed by one more coat of clear over the entire model prepares it for colored dope. The original was painted with a white bottom and yellow on top. The cockpit area is painted light blue or silver. A red decal sheet is used for the rising sun insignia's. Control and cockpit outlines are applied using black $\frac{3}{32}$ " trim tape.

Bolt your engine in place. Offset the thrustline to outside of the circle by placing a washer between fuselage and front engine lug. Epoxy fuel tank in place.

Performance is similar to any high performance combat model and the usual first flight precautions should be taken. Hand launching is best done with an under-hand heave, holding neutral or slight up on the control surface. Using this method you will get a smooth launch every time, without a wild climb or dive. Hope you enjoy a touch of semi-scale realism with your combat flying. ●