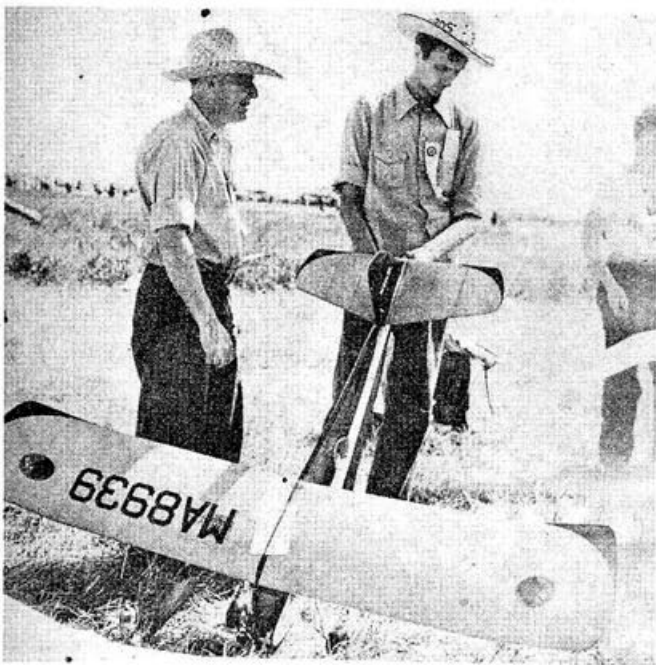


BUZZARD BOMBSHELL

BY JOE KONEFES

PLANS BY PAUL PLECAN

Our nomination for all-American gas job is this Nationals Class C Open record smasher. Single flight 49:40, total 58:00. Simplicity, ruggedness, consistency, make it a top-flight design. Contact!



Joe Konefes with the record model. Tiphead prevents looping. Bombshell has a hanging climb. It just won't stall.

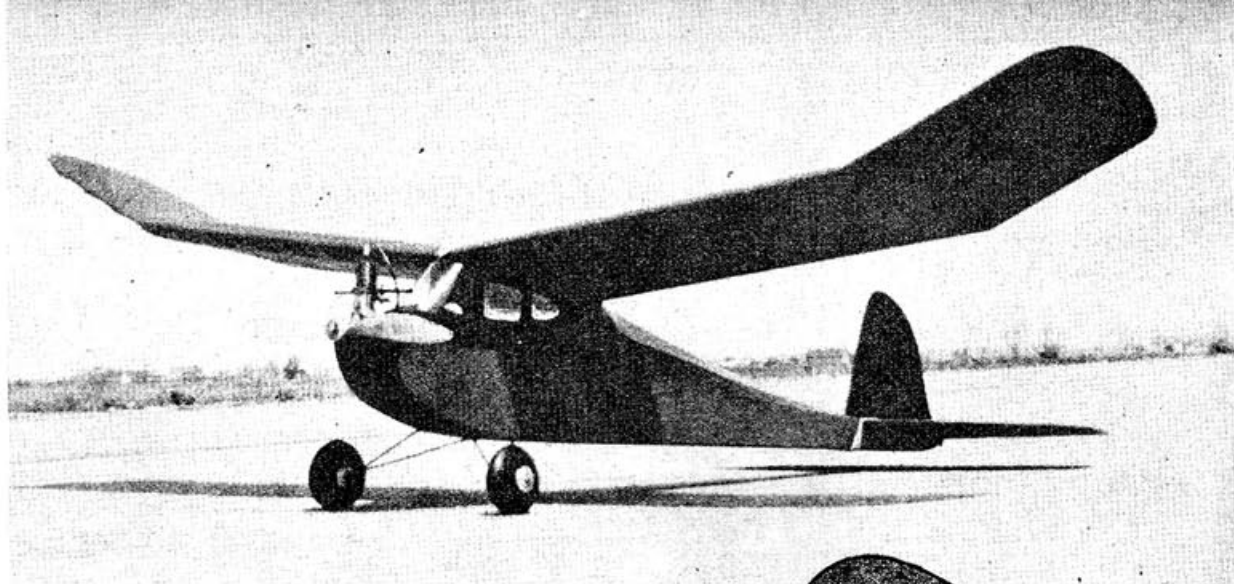
Right—The Chicago Buzzards, girls and men both, build them by the dozen. Placed 1st, 2nd, 3rd, C Open at Nationals.

ABOUT four years ago when gas models were in their infancy, a number of dreamy-eyed individuals had a mania for building as many gas jobs as possible and a desire to fly them as often as they found time.

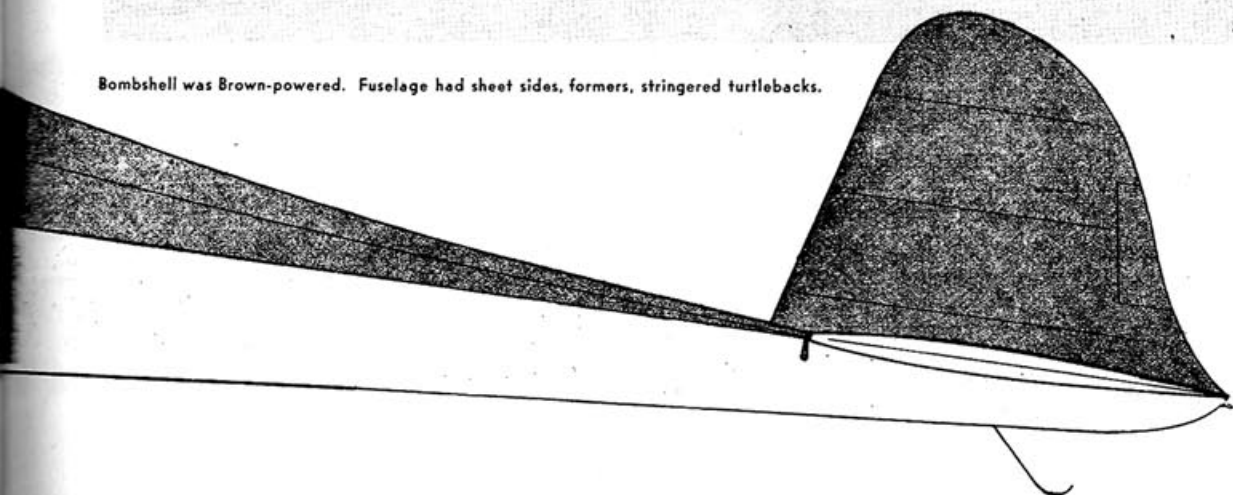
Gradually these fellows drifted away from their respective clubs, banded together, and called themselves the "Buzzards." A strange name, perhaps, because our namesake doesn't look like a flier—until he sights his prey. Well, we pray a lot ourselves, but do a great deal more flying than he does.

The Buzzards fly every Sunday regardless of weather and they all agree that some of their best flights have been had in two feet of snow! It is this constant practice that has enabled them to be consistent winners in local contests as well as the National meets—the winner of the Senior event in the 1938 Detroit Nationals also came from this club, as does the winner of Class B Open this year.





Bombshell was Brown-powered. Fuselage had sheet sides, formers, stringered turtlebacks.



The constant flying brought with it a desire for a rugged, easy-to-construct plane that would add a distinctive appearance to the mass flights and banner towing we have been running at the various contests. Having decided on a design, we all started our planes—and when the first of them took the air, it climbed like a frightened mallard and just didn't want to come down. It was then that we secretly began hoping that our new planes would throw a bombshell into the coming contests and so began a frantic race to finish them for the fast-approaching Nationals.

Eight members managed to finish them in time for the Wisconsin State Contest in Milwaukee. Out of these eight, one captured the State Championship and the first-place award in Class C Open, and another placed third and another won a fifth.

The following week in a meet in Madison, Wisconsin, the Milwaukee winner was lost on its first flight after six minutes, and on this single flight won tenth place, another of its flock taking fifth. Before the month was over, other Buzzard models had won another second in Chicago and placed twice at Beloit, Wisconsin.

However, our Milwaukee winner which we were counting on for the Nationals was still lost somewhere north of Madison. Then a few days before the Big Event in Chicago, a farmer's cow shied at something in a tree and the lost plane was soon back with the rest of the Buzzard flock—which by this time was rapidly being completed in the last few days before the Fourth of July. On this day, the bunch was out en masse and after a number of test hops on the new planes and a short prayer of thanks to that Wisconsin cow, the first Bombshell burst down the runway—and didn't return to earth until the National record had been boosted to over forty-nine minutes by a beautiful flight that remained under a fleecy cumulus cloud. When the cloud

finally broke up, the Buzzard model descended to land within the bounds of the field. On the remaining two official flights for this particular model, the motor was throttled down to prevent loss of the model—yet the total time was over fifty-eight minutes. The other club models performed just as satisfactorily and the final results showed a Bombshell holding down first, third, and fifth in the Class C Open.

CONSTRUCTION

The sides and front gussets are cut from $\frac{1}{8}$ " balsa. Medium balsa is used for the sides, but hard balsa should be used for the "G" gussets. Due to the 4" depth of the sides, two 2" sheets will have to be butt-cemented together. A splice is necessary in the upper portion, as the sides are 48" long. The motor skids should be cut from birch or some similar hardwood. Stringers are $\frac{1}{8} \times \frac{3}{8}$ " hard balsa strips.

The front gussets and $\frac{1}{8}$ " square and $\frac{1}{4}$ " square strips are cemented to the sides in the proper locations to serve as former guides. A $\frac{1}{8}$ " square strip is run along the bottom edge to provide a cementing surface for the bottom planking. The sides are joined together with the formers and the motor skids are slipped in place.

Stringers and top planking are now applied. Small sheet metal strips should be bent around the landing gear struts to a U shape to retain the landing gear. These strips should be bolted into place on Formers #2 and #3 and should be well coated with cement. Wire the landing gear struts together at the lower extremities and solder together.

Bind coil to a piece of wood with cellulose tape as illustrated and cement the works to the rear of the firewall. The wiring should now be installed, using a hot soldering

Buzzard Bombshell

iron to produce neat and small connections. If desired, fahnestock clips can be soldered to the battery box leads instead of twisting the wires together for a connection. The $\frac{3}{32}$ " planking can now be applied to the bottom of the fuselage. This is best done when the strips are applied across the fuselage, as the small pieces can be slapped into place without having the cement partially dry, as is the case when longitudinal planking is attempted.

Bolt motor in place and use several coats of cement over the nuts, so that they will not loosen later due to motor vibration. After the cement is thoroughly dry, remove the motor and carve a cowling out of moderately soft balsa. Cut out windows and cover with heavy celluloid. Cover entire fuselage with heavy bamboo paper.

The wing is of standard construction. Main spar is built first over a

full-sized plan. Use hard balsa for center gusset and cement in place carefully. Ribs are now cemented to the spar. Add the notched trailing edge, rear spar, wing tips, and $\frac{1}{16}$ " sheet leading edge covering. Sand all over and cover the under portion of the center section of the wing with heavy celluloid. Use bamboo paper for covering the wing.

The tail is light and simple. The outline is constructed first, followed with the application of spars and then ribs. Note the "notched" leading edge which allows a strong cement joint with the $\frac{1}{16} \times \frac{1}{4}$ " cap ribs. Finish the entire rudder before trimming the lower part to fit the stabilizer.

FLYING

The first model was test flown carefully to obtain the correct adjustments which were applied to the subsequent planes with practically

identical results. First of all, be sure there isn't any warp in any of the surfaces. The plane was balanced at one third of the wing chord from the leading edge and glided several times. On some of the planes a little positive or negative incidence was required in the elevator to obtain a smooth glide. Downthrust to the extent of three washers under the rear of the motor lugs was required to prevent mushing in the climb under power. About three degrees left thrust was put in the motor so that the rudder could be turned for a right circle in the glide.

First flights should be made cautiously, revving the motor up only a little at a time until you are sure the plane can take full power. In the winning model, a model B Brown Motor was used swinging a 14" propeller. It was found, however, that quite a variety of motors could be used satisfactorily.