



18. A J.C. Yates Madman with K&M Orwick 64 built and flown by Floyd Carter.



19. Ed Wood is back in California again with an 80% scaled Electric Buzzard Bombshell.

B Glow

- | | |
|-----------------|------|
| 1. Bruce Norman | 2272 |
| 2. Don Hartman | 2054 |
| 3. Eut Tileston | 2037 |
| 4. Joe Percy | 1993 |
| 5. Jim Reynolds | 1260 |

Ignition A

- | | |
|-------------------|------|
| 1. Wayne Belcher | 1260 |
| 2. Jim Horner | 978 |
| 3. Jack Swaim | 928 |
| 4. Dick Bringgold | 867 |
| 5. Bob Angus | 707 |

Ignition B

- | | |
|-----------------|------|
| 1. Jim Reynolds | 1260 |
| 2. Jack Swaim | 1260 |
| 3. Bruce Norman | 1087 |
| 4. Art White | 1013 |
| 5. Bob Angus | 866 |

Texaco

- | | |
|-------------------|------|
| 1. Eut Tileston | 2741 |
| 2. Dick Bringgold | 1919 |
| 3. Joe Percy | 1653 |
| 4. Jim Lobb | 1467 |
| 5. Wayne Belcher | 1323 |

R/C Grand Champion:
Eut Tileston

SAM 27/MAC CRASH & BASH

This combination O/T R/C and O/T FF meet is one of the best San Francisco Bay Area contests held in Marin County. Staged jointly by SAM 27 (R/C) and Marin Aero Club (FF) on September 6 and 7 at the Olive Tennis & Racquet Club Field (the field is now officially the SAM 27 Flying Field), this two-day meet featured about every event you would want in radio old timers and no less than six events in the free flight area with a few specials thrown in for good measure.

Last year, SAM 27 was one of the first clubs to adopt the Ohlsson Sideport Event first flown at the SAM 30 meet. This proved so popular, the Ohlsson Event has been carried in nearly every Western O/T contest.

This year, inspired by the sponsorship of Ed Solenberger, an Ohlsson 23 Event was proposed featuring antique models with scaling allowed in this event. Front rotor Ohlssons were also permitted. Turned out to be a first-rate event.

However, you can talk about your flying and competition all you want, but nothing beats the operation of a "beer car" built by Tex Newman. Seen in Photo No. 12 is an ice cold one being delivered to the old maes-

tro. Eat your heart out, men!

Couldn't resist a shot of Jim Robinson recently relocated to Paso Robles from Cleveland, Ohio, as seen in Photo No. 13. Jim is still using the color scheme he adopted for his free flight models; i.e., red models with black and white stripes (chordwise) on the leading edge. No one uses that scheme!

In talks with Jim and Jinny (wife) about how they like California, I received the standard answer, "It is just one damn nice day after another." To say the least, Jim is delighted to be able to fly year-round. Wait until he starts running out of models, then he will miss that wintertime!

For the benefit of Jim's Eastern buddies, Jim can be reached at 1007 Vista Grande, Paso Robles, California 93446, and if you want to spend a couple of nickles, call him at (805)239-3875. Jim will welcome all calls and mail.

We must direct attention to Don Bekins and his SAM 27 club members for an excellent meet. The highlight was the Saturday

evening barbecue at Ron Kiel's home. This is something every gourmet looks forward to attending. No lack of food and beer!

We are also indebted to Ned Nevels for his excellent camera work. It is just a crying shame we are unable to use his photos in this particular issue, but we will feature them in subsequent columns. This month's report is simply jammed with contest reports and photos from everyone. We are not complaining! Keep them coming as it won't be long until the contest season is over.

About time we acknowledged some of the hard-working officials. Seen in Photo No. 14 is Walt Gunning, long time proprietor of Gunning's Hobby Shop and active modeler for at least 30 years in Marin County. Walt doesn't fly as much as he would like, but he has adopted old timers as the only way to relax in R/C flying.

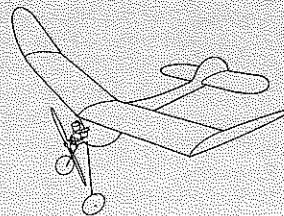
One official in the background is Jodie Staben, who we are going to miss sorely. Al and his wife have decided to go back to

Continued on page 101

OLD TIMER of the MONTH

WESTERNER

Designed by: Don Foote
Text by: Bill Northrop



• It is said over and over that you can't argue with success, and Don Foote's "Westerner" certainly had lots of it. Probably one of the last "big" designs of pre-World War II days, it capped off a whole series of first place wins during the 1941 season by setting the AMA record for Class C R.O.G. Open at a fall contest in Sacramento, California, with a three-flight average of 24 minutes, 37.8 seconds. And it seems that Bud Romak didn't always fly indoor, as he held the Class B R.O.W. record with a smaller size Westerner.

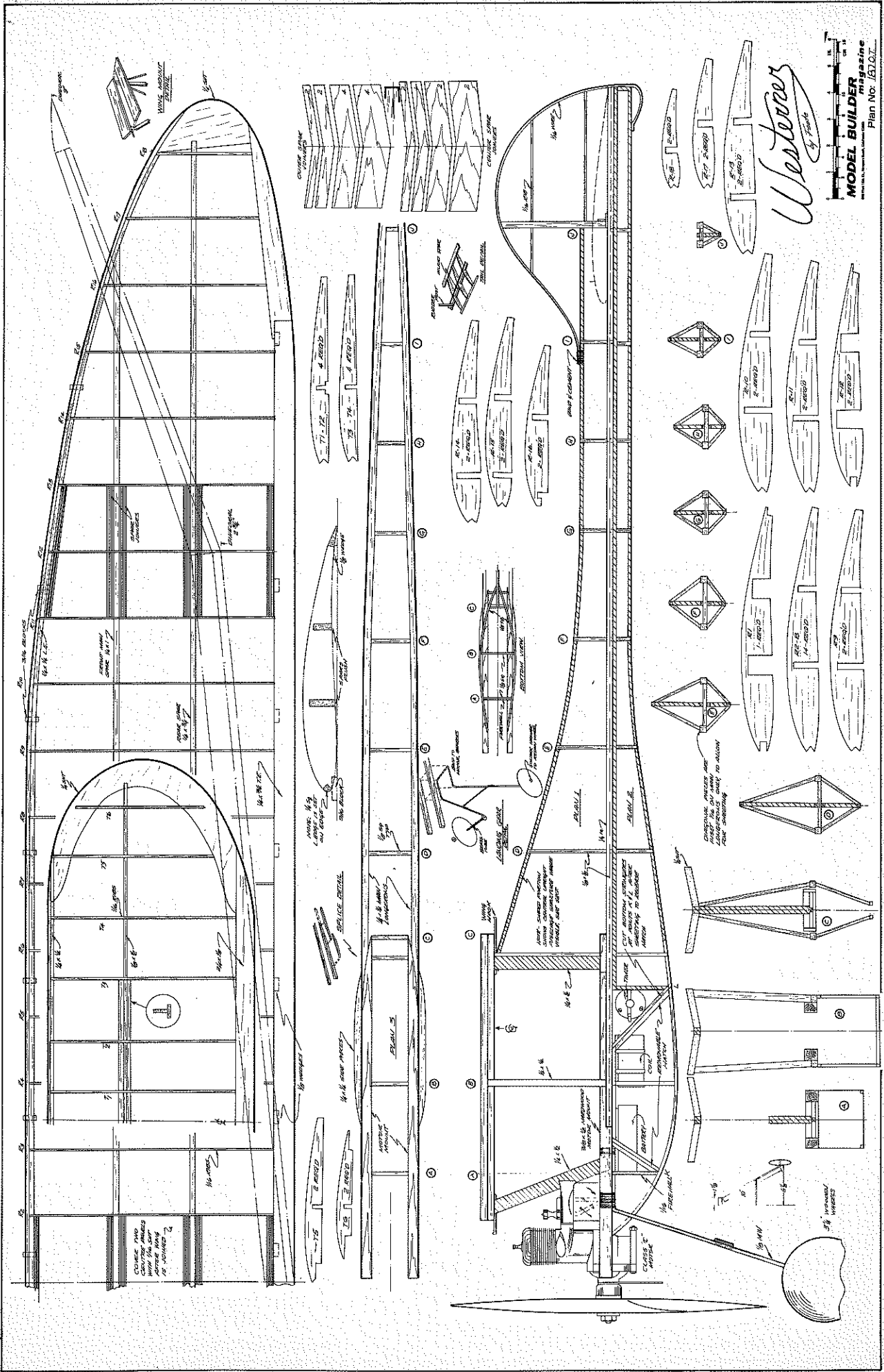
For a long time, this writer had heard stories about the Westerner, of its soaring capabilities, of its awkward construction, of its tendency (probably if not

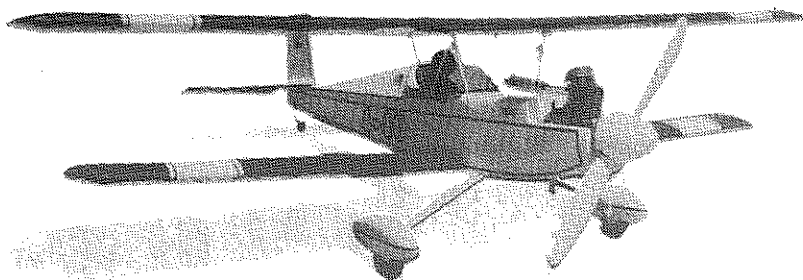
built exactly right) toward wing flutter, and of the teeny-tiny vertical fin... but had not had a chance to study the plans.

Until a short time ago, we didn't even realize that the plans were right under our nose. When looking up designs for O.T. of the Month in our old magazine collection, we never searched much beyond the 1942 issues, as the S.A.M. cut-off date is December 1942. But lo and behold, a casual flip through the 1943 issues of *Air Trails*, and there it was, in August!

Going back to our opening statement that you can't argue with success, just look at that fin area. Whatever hap-

Continued on page 82





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1. Hang gliders operate at very low speeds and therefore are susceptible to winds. The possible dangers in turning upwind or downwind at low groundspeeds can be readily observed.

2. The angle at which an airliner moves through air determines its stall point; the weight carried by the airliner does not. By increasing the speed, the airliner will carry more weight but as soon as its airfoil reaches the critical angle of attack, the aircraft stalls, regardless of speed.

This is pretty basic stuff but surprisingly enough many active pattern fliers do not realize that stall speeds and minimum flying speed are not always the same. This must be understood if you choose to learn

aerobatics!

A while back, we talked about I.M.A.C. and invited readers to try this style of aerobatic flying. I just watched on TV the latest Hilton-sponsored Masters event which was flown in Illinois. The competitors all flew Christen S-2A (Pitts) Bipes and the competition included known and unknown maneuvers.

The vertical power demonstrated was fascinating! I hope my new CAP 21 with its SuperTigre 3000 will give me the sustained climbing power to duplicate this flying cycle.

My last CAP had just over 2 hp swinging a 15 x 10 at 8000 rpm. I used two Wankels geared two-to-one. Excellent power but noisy and busy.

The Tigre delivers 3 hp at 7900 rpm and tests show this figure is easily exceeded.

Also, two of my "flying friends" just got S.T. 6000 twins and we will hopefully get a chance to handle these engines and share the results with you.

The more we experiment with scale-like models for I.M.A.C., the more we find that the model's capabilities are more influenced by horsepower and wing loading than any other factor.

The single factor that grows more apparent, however, is the influence the propeller has as we increase the relative size and pitch. It seems like we have a helicopter with wings which requires the control coordinates of both types of craft.

For instance, a model which flies well

with a 14 x 8 propeller turning 11,000 rpm becomes very different at low airspeeds when we use a 16 x 12 propeller turning 8,500 rpm. The sudden acceleration with the big prop (much more efficient) creates the need for tremendous control inputs to keep the model on line until the flying speed is increased.

All-in-all, the big prop setup is just plain old more fun to fly because you don't have to wait around for the airspeed to build up.

The best prop combos for me have proven to be those where the pitch is almost the same as the diameter—12-1/2 x 12, 13 x 12, etc.

The same size relationship appears to work best on my O.S. 90 four-stroke. This time being 11-1/2 x 10, 11 x 11, etc.

Up 'till now my two-cycle engines have required extra revs to produce the thrust needed so we have stayed with the 11-1/2 x 8 or 11-1/2 x 9 sizes. My new O.S. long stroke will better these conditions. It likes 11-1/2 x 10.2 and 11-1/4 x 12!

Raising and flattening and torque curve is no small problem, but it can be done. I expect to see even smaller piston diameters, long con rods, bigger crank shafts and bearings as the engine people try to make the .60 produce more torque.

For what it's worth, Honda has developed an automobile engine which has only 5% variance in torque from 2500 rpm to 6500 rpm. It's a four-banger, and it is in the new Integra automobile.

By using a small bore, long stroke, and four valves per cylinder, they apparently have designed what we need—an engine that pulls evenly throughout its operating range.

Too bad it's over 1.2 cubic inches. Maybe someone will put one in a full-size airframe! Or, maybe the giant scale guys will try for the ultimate assault on the FAA's patience; a bigger B-25 with two Hondas for power!

Old Timer... Continued from page 44

opened to the old saw about keeping the center of lateral area somewhere near or slightly behind the C.G.? This thing has to be like a dart with the feathers mounted on the point! Of course, the stab is big, and the tail moment is pretty long, but...

About that fuselage. To say that it gets all its strength from the 1/16 sheet covering had to be the modeling understatement of 1941! Even experienced modelers would probably appreciate a hint or two on the building procedure. Start by building the crutch of 1/4-square hard balsa longerons and 1/8-square cross-pieces per Plan 3. Note that the crutch width is determined by the motor mount spacing to suit the engine you're going to use. Talk about early, total commitment!

Next you built the top and bottom center structures, using (oh mercy!) 1/8-square hard balsa, as shown in Plan 1 and Plan 2, being sure to center the 1/8 square on the 1/4 x 1/2 wing pylon pieces. With the crutch pinned down,

center, align, and glue the top center structure to the crutch. Butt-glue the 1/4-inch sheet wing platform halves (with proper dihedral angle) to each side of the pylon beam (which should already have the wing hold-down wires bound and glued to it). Now glue the 1/4-square side pieces to the outside of the longerons, and then fit and glue the 1/4-square saddle supports in place. . . is this different or is this different!

Next come the slanted uprights that form the top half of the diamond-shaped fuselage. Get this. . . they are to be flush with the top 1/8-square longeron, but are set in 1/16-inch at the longerons, so the 1/16 sheet covering will come out flush with said longerons.

Now, and if you read this before beginning construction, you can complete and attach the 1/16-soft wire fin outline, having allowed the aft end of the crutch to extend beyond the edge of your building board (*sure* you did). As to how you build the stab and then mount it to the fuselage with the inverted 'T' spar section neatly wedged *under* the fin post, according to the plans, rottsa ruck!

Although not called out on the original magazine drawing, the wing dihedral braces all appear to be cut from 1/4-inch sheet balsa. Rather than cut the center braces off sharp at the first rib out from the center, where the center section sheeting also stops, we'd suggest tapering off the stresses at this critical point by extending the braces out to the third rib from the center, tapering the brace material from full depth to zero through the outer two bays.

With those sturdy 3/4- and 1-inch depth spars, it doesn't seem likely that flutter could develop, but if you'd feel better, add 1/16 x 1/8 diagonal braces between spars and rib bays in a Warren truss design. Maybe flutter only occurred in recent reproductions using heat-shrink film, which does not always develop the skin strength of tightly shrunk and doped tissue, silkspan, or silk.

Power climb is normally without a turn, and balance is 66 percent back from the wing leading edge at the center.

Guess we'll have to do the late Joe Weather's "Westerner" very soon; just to give it equal time. . .

Inputs. *Continued from page 25*

standard on even entry-level and bargain radio systems. Even before reversing switches were available, most modelers managed at one time or another in their career to take off with reversed ailerons. The message here is "be careful," whether you are using accessory radio functions or not.

Misconception #3: "You have to be a genius to figure one of those things out."

Programmable systems do require some extra time spent studying the instruction manual but are certainly not too complex for most modelers to understand if they are willing to put forth the effort. In some cases,



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