Photo No. 13. South Africa's Jack Abbott with R/C Sailplane. Covering caused fuselage to twist, flies well anyway.

Photo No. 14. Charlie Critch cranks up the O.S. .60 4-cycle in the 9-foot Clipper built by Bill Bowen (standing). A real floater!

different breed of cat. As the Playboys descend in size, the tail moment gets longer and the elevator area gets larger. This particular 66-inch wingspan model has the same tail area as the 80-inch Playboy Sr.! As one can see, if he appreciates the effect of lifting tails on the glide, here is a new way to go with the excellent Playboy designs. Right now, Kernoff is developing a Class C version of the Playboy Jr. If the demand warrants it, he may produce kits!

Before wrapping up this Texaco report, it might be well to report the black cloud that has been striking Ted Kafer, ex-SAM 21 Prexy, for the past three contests.

Picture No. 8 shows an excellently built advanced Challenger for the 1/2A Texaco Event which Ted produced. Preliminary test flights indicated he had a winner. However, fate stepped in and dealt him a cruel blow as his model got in the way of John Drobshoff's big nine-foot Champion and was promptly chewed up, spit out, and the Champion continued on to an excellent flight completely undamaged. The ironical part of it all was that the Challenger was a design by John Drobshoff.

Picture No. 9 shows what the "Mad Russian" (John Drobshoff) looked like when he was young. It was taken in 1938 at the San Francisco Phelan St. Water Reservoir site, which was later built. This was one of the few sites left in the city where models could be flown.

John Drobshoff, who resides at 1675 46th Ave., San Francisco, is still quite active in modeling after all these years. He was one of the nine charter members of the S.F. Vultures which was founded in John Pond's basement room in 1935.

Well, we have procrastinated enough,

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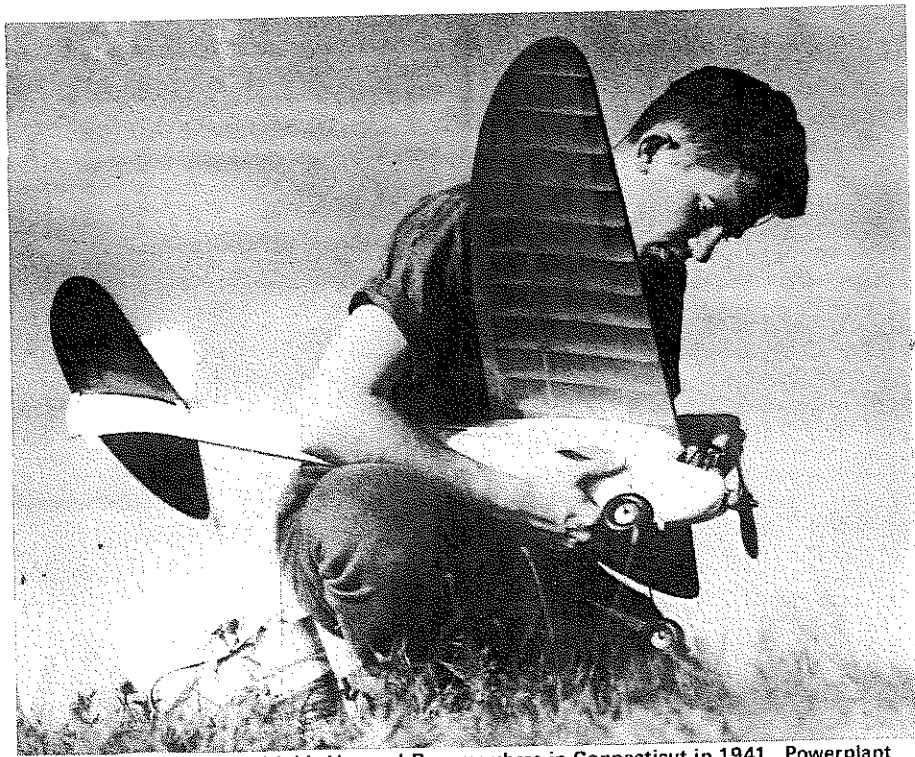
HAYSEED

OLD TIMER Model of the Month

Designed by: Carl Hermes

Drawn by: Al Patterson

Text by: Phil Bernhardt



A youthful Carl Hermes with his Hayseed B, somewhere in Connecticut in 1941. Powerplant was an Ohlsson .23. Original color scheme was red, white, and blue; details on plan.

• Don't be surprised if you've never heard of the "Hayseed" before. Even though it was never published in a magazine or kitted, the SAM committee in charge of authenticating old designs has just recently put its stamp of approval on the Hayseed as an authentic, bona fide Old Timer, making it completely legal for SAM O.T. events. The model is a very clean design that sports, of all things, an auto-rudder operated by the Austin ignition timer . . . a very advanced feature for its time. The version of the Hayseed presented here was aimed at the Ohlsson .23, but those lucky enough to own both an O&R .19 and .23 today could fly classes A and B with the same ship, just by switching engines at the field.

We were fortunate to have the designer, Carl Hermes, on hand to give us a few words about his model. Here's what he has to say:

"Hayseed" was the name given to a series of gas jobs that were designed while I was growing up in Fairfield, Connecticut. They were all of the same basic design and came in various sizes. The biggest Hayseed used the Ohlsson .60 Custom or the Super Cyclone, since

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get in the same amount of flying on 1/2 gallon of gasoline. I'm sure you know the cost of glow fuel vs. gasoline these days.

Now, what about this business of ignition interference with radio? Well, it happens to be true. Every time the ignition points open, a spark occurs at the spark plug. Simultaneously, an electrical arc takes place between the breaker points. This also causes radio frequency signals to travel throughout the entire ignition system, and it is these signals that affect the R/C receiver, which in turn sends erratic commands to the servos, causing them to jitter and dance. We have seen some brands of R/C receivers that seem to be immune to ignition noises and work perfectly even when mounted right next to the ignition system. However, the vast majority of present-day R/C gear is greatly affected by ignition interference even when the two systems are mounted as far apart as possible in the model. To the best of my knowledge, there are only two practical solutions to this problem:

Solution No. 1: Completely enclose, in a metal cover, all components that make up the ignition system and ground it to the engine. This would include the ignition points, batteries, coil, condenser, spark plug, switch, and all wiring. When properly constructed, this system works flawlessly. I have had a system of this type operating with an old Heathkit R/C unit for over eight years without a single case of interference.

Solution No. 2: Install a transistorized ignition system. Here's how it works. In a standard ignition system the points act as a switch to open and close a circuit of the batteries and the primary winding of the ignition coil. When the points close, approx. four amps of current are consumed by the coil's primary windings. When the points open, an arc develops between the points, causing them to pit and burn. This arc also is one of the major causes of electrical noises that play hob with your receiver. With a transistorized ignition package, current is made to flow through the primary windings of the ignition coil by the use of a switching power transistor. This switching transistor is turned on and off by a smaller signal transistor, which in turn is turned on and off by the ignition points. Instead of the normal four amperes going through the points, the little signal transistor requires only 1/10 ampere. This amount of current is so small that no arcing occurs between the points, and therefore no radio interference. This allows the breaker points to operate completely exposed and without shielding. It also eliminates pitting and burning of the points, giving them an almost unlimited life. Of course, all of the remaining electrical components of the ignition system must be enclosed in a metal cover (even aluminum foil will suffice) to prevent stray signals from escaping and getting to your radio, but this should present no problem.

A word of caution. It has come to my attention that there are a few "operators" who are advertising in certain model magazines who claim they can provide you with an ignition system that is compatible with any R/C system. My advice to you is to make them prove it. Insist on a full description and written guarantee. Finally, ask for a list of satisfied customers. After all, it's your money, and you have the right to know if the ignition system you are paying to have installed on your engine was made from the top cover of a metal fence post or a piece of certified aluminum bar stock! •

Hayseed . . . . *Continued from page 40*

they were the hottest engines of that size at the time.

Chester Kowalkowski of Bridgeport won the Connecticut State Championships at New Haven in 1940 with one of the big ships. Carl Cappozi, Bill Wargo, and I also flew the model at contests all over the East Coast just before the war. Frank Bushey (the ex-AMA President) and Jim Grant from Hartford picked up the design around 1947 and proceeded

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to do fairly well with it. Jim made the longest official flight with the design to date by clocking over 57 minutes at Hicksville, Long Island, in 1947. A slightly smaller "C" version, developed for the .49 engines after the war, is shown in Zaic's 1951-52 Yearbook.

With the low aspect ratio, this ship was not a fantastic glider in dead air. However, it seemed to have an ability to utilize to its best advantage any thermal activity. It had what Frank Zaic used to call "thermal bounce," which I attribute partially to the smallish stab.

There were two Hayseeds designed for the Ohlsson .23 and of the two, the one shown turned out to be the best. It was flown throughout the summer of 1941, placing fairly well in several of the smaller contests that were on the East Coast at that time. The auto-rudder idea shown on the plane was picked up from the Norwalk, Connecticut group, who were using it on Comet Clippers at that time.

In a Christmas card from Bill Wargo came the following news. "I finally lost my big 'C' job (Hayseed) last July 1979. It caught the only thermal of the day at the contest. When it was last seen it was at about 2,000 feet heading toward Windsor Locks from Rocky Hill Meadows. I suppose they can't last more than forty years." Bill had been flying this ship steadily at Old Timer contests for most of that time.

The Hayseed B spans 47-1/2 inches and has 350 square inches, so a .15 is the biggest glow engine you could use for O.T. R/C events. The O.T. F/F rules were recently amended to include projected area (as if the rules weren't complicated enough already!), so after laying it out on the drawing board we get a projected span of 46-1/4 inches and area of 340 square inches. Minimum required weight at this area is 18.9 ounces. •

Electric . . . . . *Continued from page 52*

loaded switch, normally on, so I could hold it off, then when I threw the model the motor would start. But I dropped the idea because of the nearly 1/2 ounce the switch would have added. If I were to fly the event tomorrow I would get rid of the switch and charge jack, and I would cut maybe an ounce off the plane by replacing some sheet balsa with tissue. If I were to start from scratch, I would keep close to the design and airfoil and area, but would try to get the ready-to-fly weight down to eight ounces. I wonder how it would be to use cells of less capacity, but use more of them? (I think this is the way to go. MP) *At the Nats, I would run the battery down after each flight so I could fully charge without risking overcharge. I was using only 25 seconds of an (estimated) two-minute capacity. If I were to work on this event with any seriousness, I would look for some cells lighter than the Astro 020 pack, and maybe add some voltage. Maybe six 100 mah? The problem might be that cells of this size might not deliver the current.* (The GE 100 mah cells will. MP)

Thank you, Bill, for all the good information. Bill taught me all I know about soaring and picking air, he knows more about reading the air than anyone I know, and his advice has a lot of experience behind it.

Howard Evanson sent a photo of his M.E.N. Buzzard Bombshell charging up during a winter flying session. Since this is a summer column, I can't resist running it now! He said it was so cold and windy that no fly-bys for inflight photos were possible, but he did fly until the hot coffee ran out! The Buzzard uses an Astro 15 geared to a Y&D 13x10 prop. The weight is about 4-1/2 pounds, with a Benson SC-2H motor control with auto-shutoff and an EK three-channel radio. Howard says that the fancy "Spirit of St. Louis" cowling took less than an hour to make. He used thin aluminum sheet, drew half-inch squares on it, and made the metal swirl effect with a drill press and a small round steel brush. Howard built a Bombshell in 1948, and remembering the problems he had in covering the undercamber, he decided to build it with a flat-bottom airfoil, an 11% Clark Y. He says this flies great and is much easier to build. I have had several columns on the virtues of Old Timers as electrics, they are superb.

Howard got started in electrics the hard way: he broke his leg! It was a