#2846

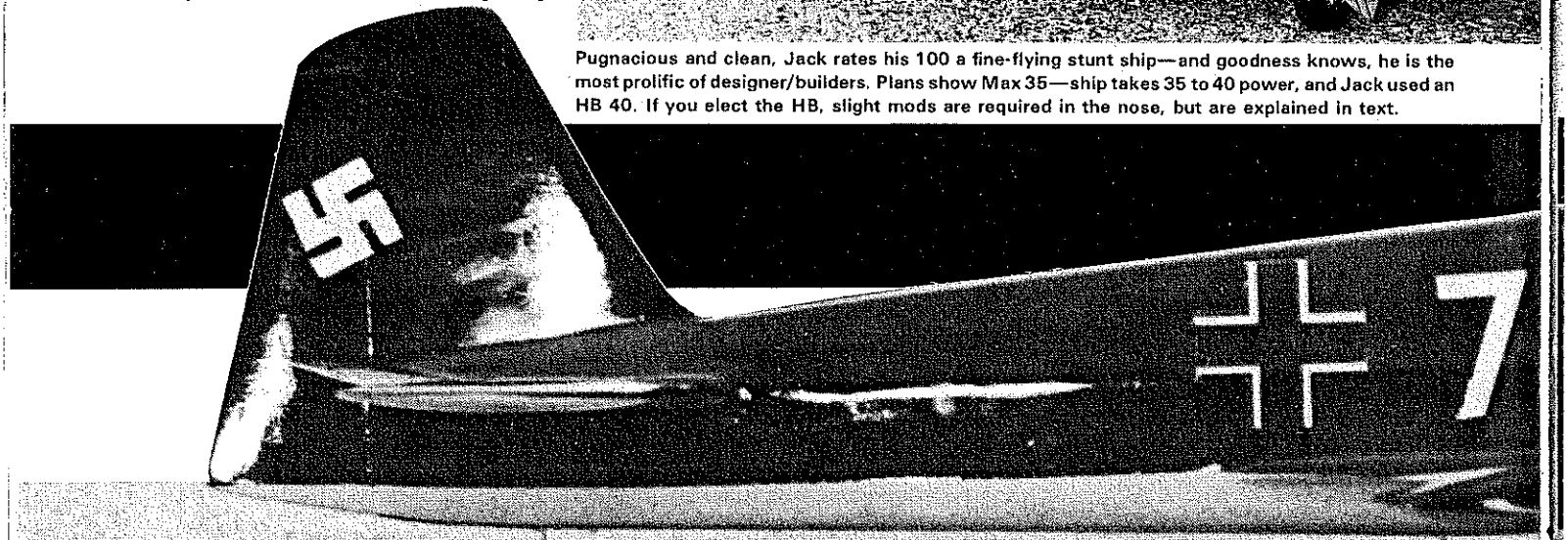
the Heinkel 100

One of the most dramatic and formidable fighters ever created—it held the absolute world speed record for a generation before broken by a special Bearcat—the bent- wing Heinkel 100, like our Corsair—has proved excellent for rubber and RC scale and, as modified here for 35-40 power, makes an exciting, high-grade CL stunter. Jack has a way with these things, you know. ■ Jack Sheeks

THE HE 100 came into this world when it was evident that Ernst Heinkel's HE 112 fighter was not to be accepted by the Luftwaffe even though it had certain advantages over the ME 109. Willie Messerschmitt had very good connections with the Nazi Party since 1933, and Heinkel had no one except Ernst Udet who had championed the Heinkel fighter to no avail. I think Heinkel got a little ticked off when he was informed that the Luftwaffe had decided he was to build only bombers and Messerschmitt was to build the fighters. So he sat down with Siegfried Gunther and designed a ship that not only would capture the world speed record but would out-do the ME 109 on all counts. The design was to be simple and easy to mass-produce, so when it was ready to be built it had only 969 parts, opposed to the previous 2,885 parts the 112 had.

The prototype was first flown on January 22, 1938 by Gerhard Nitschke. From the beginning

Pugnacious and clean, Jack rates his 100 a fine-flying stunt ship—and goodness knows, he is the most prolific of designer/builders. Plans show Max 35—ship takes 35 to 40 power, and Jack used an HB 40. If you elect the HB, slight mods are required in the nose, but are explained in text.



The famous Heinkel 100 profile makes this project one of the most enticing scale-theme jobs ever to come down the pike. Maintaining that distinctive nose contour means an inverted engine, of course. First flown in 1938, the 100 was nearly 100 mph faster than contemporaries.

it was evident that it had a very marked advantage over Willie's 109.

One by one, the records on aircraft flight speed began to fall to this new aircraft, until it came to the absolute world speed record, which it broke on March 31, 1939. The pilot was Hans Dieterle and the speed attained was 463.92 mph. The aircraft was a modified version of the fighter but the production version was still faster and better than anything flying at that time.

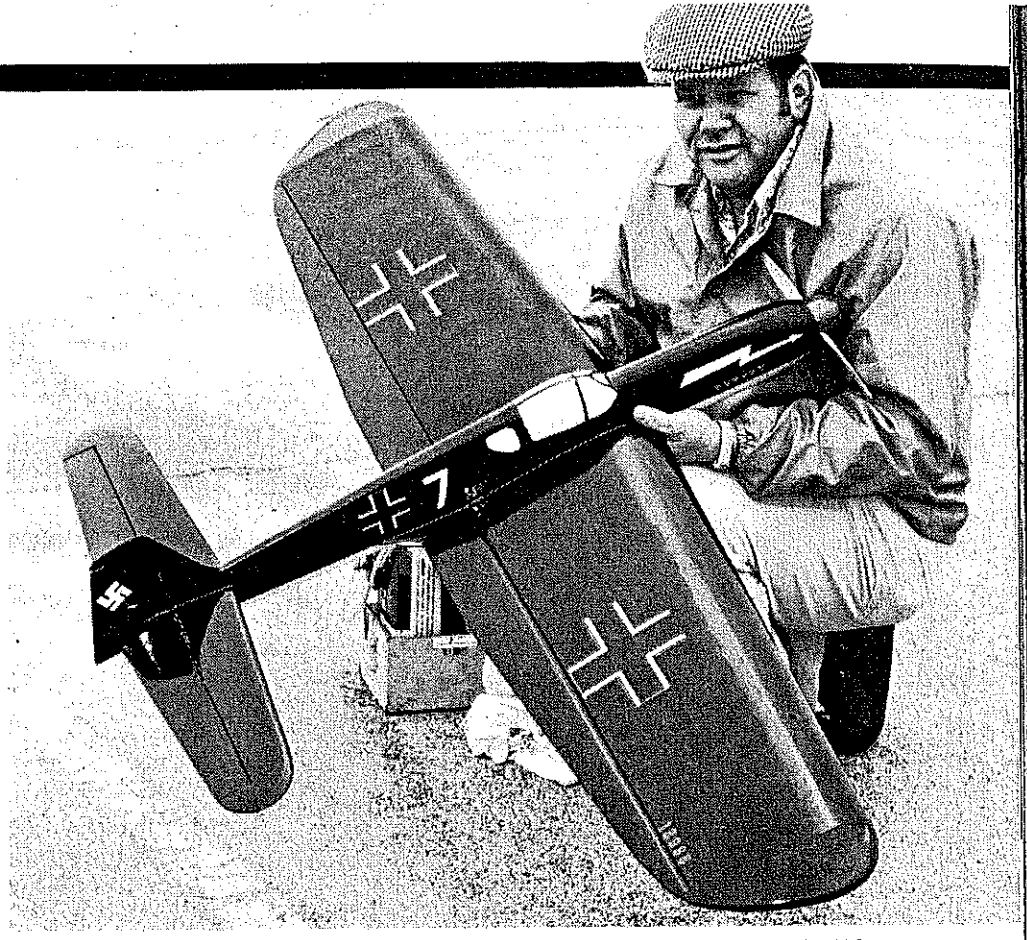
Even with all the propaganda this aircraft generated, the high command still would not accept it for Luftwaffe use.

But the Russians and Japanese weren't quite that dumb. They purchased a few each for study and design work, the Russians using it in studies which led to the YAK 3 and YAK 9, and the Japanese developed their Kawasaki Ki61 Tony.

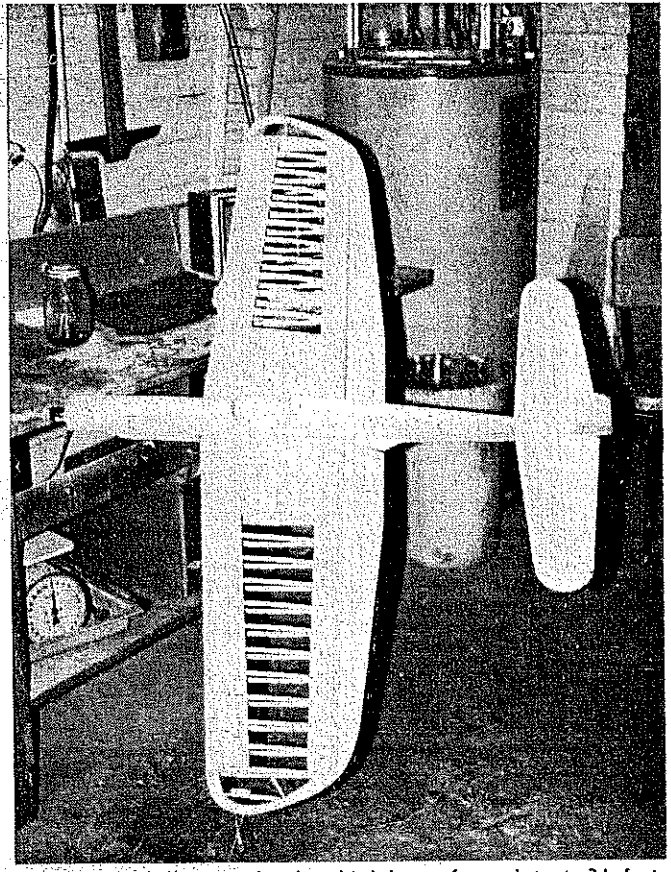
The final version had a speed of 416 mph at 13,120 feet, cruised at 345 mph with a climb rate of 3,288 ft. per min. With stats like these, the Allies were pleased that politics killed this aircraft, since they had nothing that would keep up with it at the time.

The model is a fine-flying stunt ship.

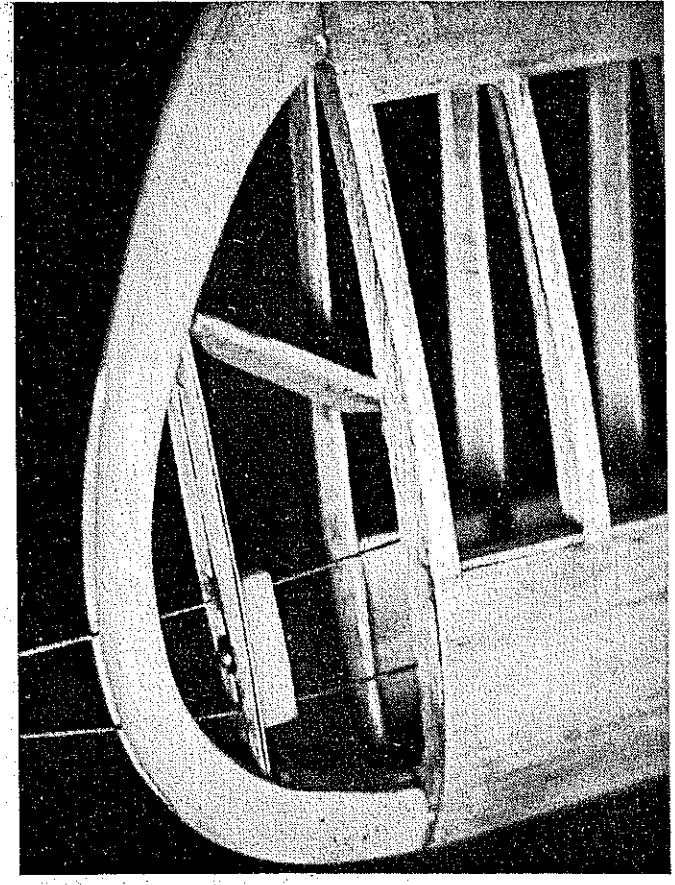
I usually try to explain how and why I built a model of a certain aircraft, but this one has been in the wings, so to speak, for so long I've almost forgotten why. You see, the wing on this model is a custom-built wing by Fran Abt, of Cincinnati, Ohio. I had been trying to get one of these dudes for over a year, but before one could be obtained Fran quit building them. Through the efforts of a good friend of mine, Paul Fewell, who swapped an engine for one, I could finally do the Heinkel. Of course, there was a plot behind this that thickened when Dennis Duvall and myself were invited to Cincinnati to try the new HP 40 which Paul had reworked. (I think he is trying to compete with mother (Rene Mechin) of New York.) He knew that once we got our fat fingers on a powerhouse like his HP, we would have to have one. He used the wing as bait. Get the picture? Of course, the HPs are not cheap, but the way Paul reworks them, they run fantastic



Sporting a spic-and-span checkered cap as his concession to the miserable day when the 100 was photographed at the flying field, Jack shows off his realistically painted stunter. The wing may be decidedly un-Heinkel-like, but who cares. It is, after all, a stunt ship not a scale model.



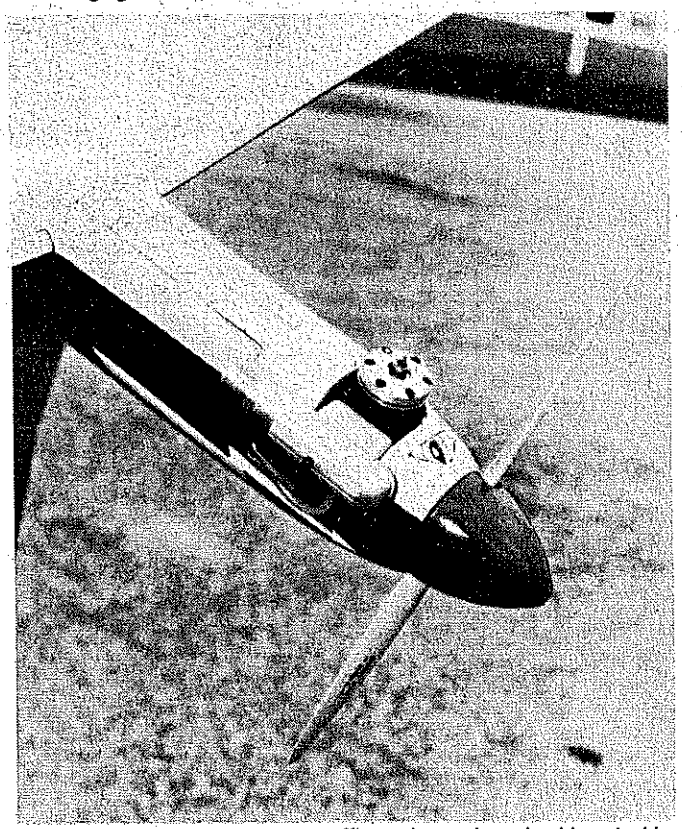
Are we going too far to say that the wing is heart of a good stunter? In fact, the wing on the original was custom-built by Frank Apt. The stunt-wise reader will note things like flap size and configuration, the neat root fillet, and relationship of control surface areas.



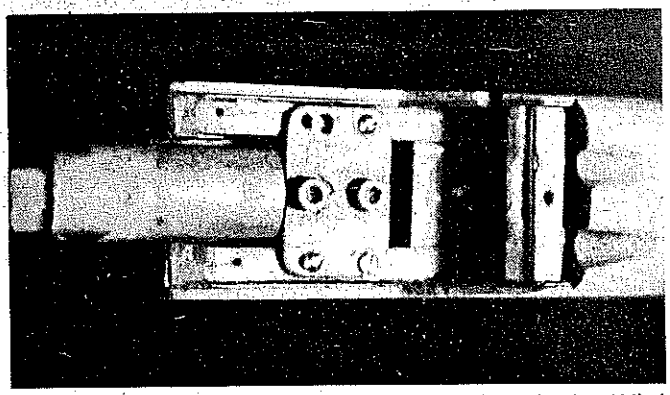
This closeup of the tip highlights the internal adjustable leadout guide, 4-40 bolt-blind nut-washer-nylon stock-ply mount. Light-weight construction is self evident—only 1/16 sheet ribs and 1/16 cap strips.

and are worth every dime. They have been called a chain-horse engine, but Paul de-tunes them to run smooth.

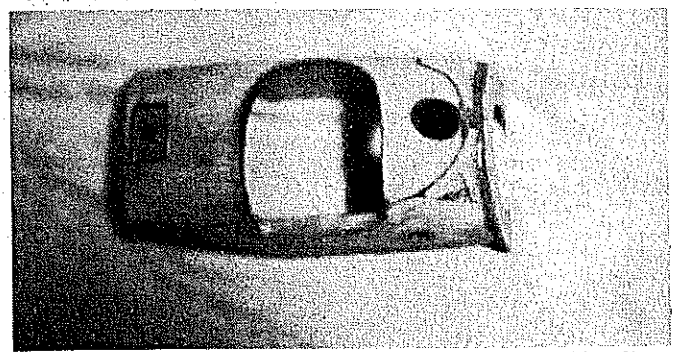
Anyhow, when weighed, the wing turned out to be from the petrified forest of balsa. Heavy. We found out later that because of the difficulty of obtaining light wood, Fran had decided to close shop. Sorry about that, but the construction of the wing was as close to perfect as you could ask for. Sorry he quit, as I'd like another. Anyhow, as it usually happens, I finished the ship in Indiana's nasty time—winter. As the pictures show, we, Steve Ashby, and our vice president in charge of airplane bottoms, Beth (his daughter), braved the icy winds to deliver. We just couldn't wait any longer for the weather to clear. Steve made me promise not to tell you that he chattered so bad he screwed up the in-flight shots, so I won't tell you. But after the session was over and we stopped at Steve's house and drank iced tea, of all things, relaxed and discussed the per-



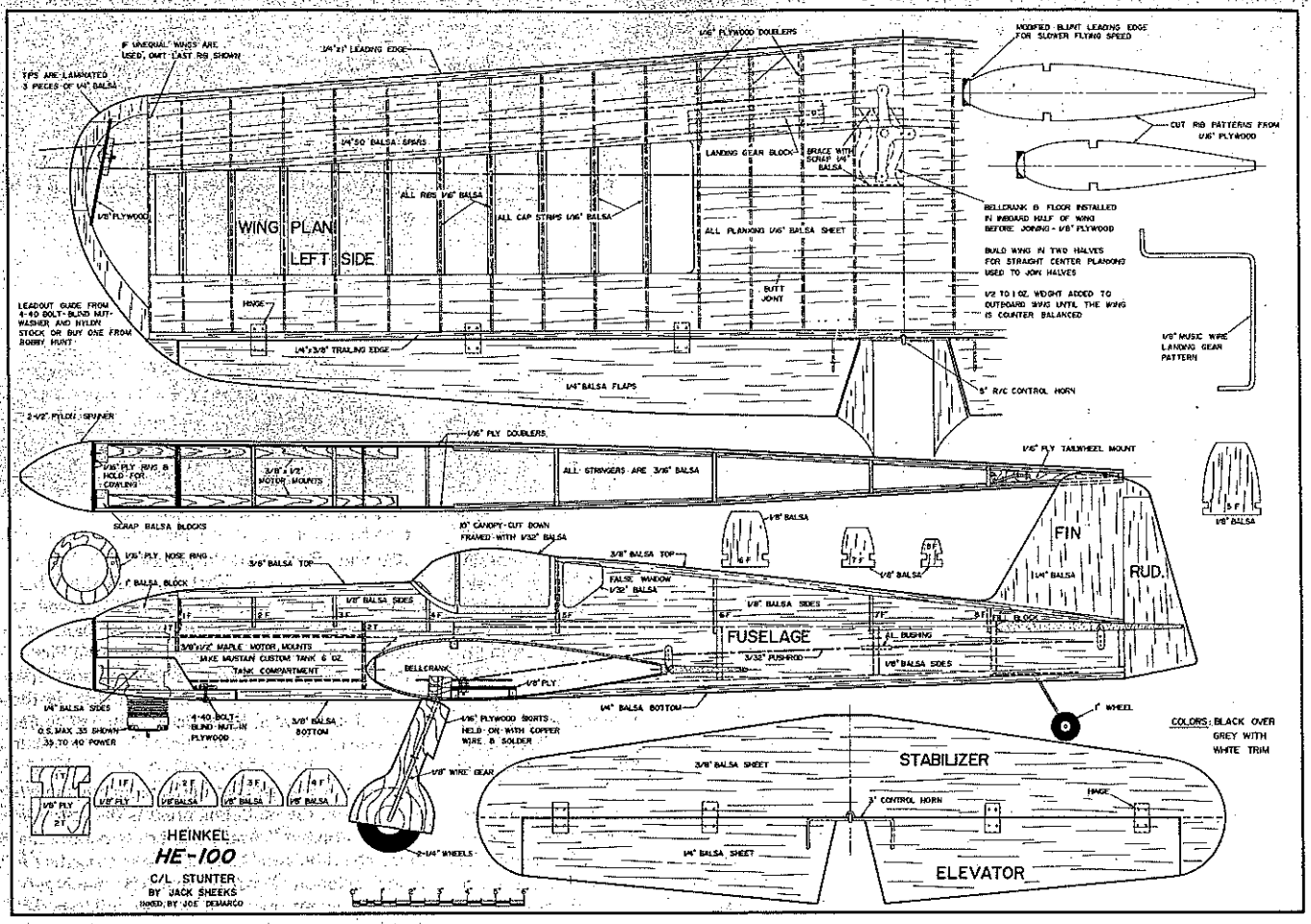
In spite of the always necessary muffler and attendant plumbing, Jack's engine installation is as snug as can be. Spinner is 2½-in. by Pylon.



Cowl and nose section are built after the engine has been fitted and blind nuts installed. Gauge plate is used here to position holes and for drawing up the blind nuts—note plug to simulate engine front.



Bottom of cowl, shaped from balsa pieces, ply nose ring in position. Note ply insert for attach bolt, extreme left, and the venturi hole.



formance of the Heinkel, we found we both were very pleased. The HE 100 does it all and does it well. So, don't be afraid to try it. Build one and we feel you too will be pleased with the performance.

The construction is rather simple, especially if you have a complete wing to use as we did, but if you don't, don't worry, as it is easy to build. Or, if you like, have a foam wing cut for it.

First, shop around or order direct from Sig, 4-to 6-lb. Contest Balsa. Make sure it is straight, then laminate the ribs to be cut between the two rib patterns shown on the plan—1/16" balsa was used for these and all planking. The leading edges are blunted, as we feel the wing will fly a little slower and groove better. It's built like other wings from the lower spar. The ribs are glued to it, along with the lower rear planking, blocking the wing up in the rear so the center-lined ribs are equal front and back. The top rear planking is added, pinned and glued along with the leading edge and trailing edge. The wing should be built in two halves if you don't have a jig, and glued together with the center planking after the bellcrank, floor, leadouts and landing gear blocks are added. Glue bottom planking on first. This will give you strength while installing all this junk. When the wing is completed, add the flaps and wing tips and set it aside so it won't get busted. Now that's not hard, is it?

I usually build the stab and elevator next, as I dislike building them the most. Well, maybe, I dislike cutting and shaping flaps worse. Anyway, now you have these complete, so cut the fuse sides out along with 1/16 plywood doublers. Glue 'em together, along with the motor mounts and body stringers. Weight the mounts and pin the stringers. While this is drying, bend your landing gears, cut and install the wheel skirts and wheels. This will keep you busy long enough, so you don't screw up the motor mounts while they're drying.

I usually have a tank vented by now so it can be fitted between the body sides. This way, you can

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Checking the needle setting with nose high, Steve Ashby gives us a good look at the bottom with its dress-up markings. By the time he had it on the ground for takeoff, he'd pulled up the hood for warmth—bet his right hand was blue. That two-color scheme? The Germans used a dark olive drab on top—darker than U.S. O-D—and a light, light blue on the undersurfaces. You'll need to do a bit of mixing for that.

all had pit trouble, they were all trying chicken-hopper tanks. . . . I managed the first with my K&B .35 Super Slow plane in 7:20. . . We also ran third with Chad's plane in 8:17. We also won Mouse Class I on a windy afternoon with a woefully long time. No one showed up for Fast Rat so we ran the Juniors in it with their profiles. Chad won in 7:49. Jimmy Faith, Norm's boy, was third. . . .

"I'm sort of leading a one-man crusade to get the guys here into racing. From just Chad and I we have six men (three father-son teams) and maybe two others. Not too bad."

Not too bad, indeed! Damn fine effort if you ask me!

Another couple of father-son teams that we are beginning to see this year are Jim and Timmy Ong, from Alexandria, Louisiana, and George and Mitchell Cleveland, from Kenner, Louisiana. When you get to a contest and see a half dozen or so Junior fliers with Daddy helping out in the pit, you get kinda excited about what the future can bring. And it's this kind of display that leads your own progeny on with the "if he can do it, so can I" type of resolve that is just now being displayed by my own son, Kris. Well, we have a new ½A Flite Streak and a Cox Black Widow, and we did go out yesterday and flew it. O.K. The first few flights weren't blazing successes. I had forgotten how dizzy you can get out there. But the desire is there, now, and I'm sure not going to try and stop it.

This leads me back to the original words on this topic. I wonder if programs aimed at kids who really aren't interested to start with will ever succeed. I wonder if the future of model aviation isn't in the hands of the fathers who are now themselves active. Is there any way that we can

comb, Mike Pilla, Jim Harner, Mike Hom, Dick Robbins, Lew Boyce, Bruce Horvath and Lance Schneider.

A special thanks to chief cook Linda Goedkoop, and her assistants Susan Hagen and Dot Roane for running a very efficient food concession.

Dave Chesney, Rt. 9, Box 621A, Greensboro, NC 27409.

Heinkel 100/Sheeks

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glue the formers around the tank so it will slide in and out and be smug while doing it. When dry, pull the rear of the fuse together, glue and install the wing with 5-minute epoxy. Next, bend the 3/32 pushrod, making sure the ¼-in. aluminum bushing tubing is on it before. Solder it in place on the elevator control form. Now slide it in place and solder it in the wing flap horn. Slide the stab back and forth until both are aligned and epoxy it.

Now that all this good stuff is completed, install the formers as shown on the plans, and begin the planking and blocking of the aircraft to its final shape. Build the cowl and the nose section of the ship after the engine has been fitted and the blind mounting nuts are installed. Thought I had forgotten them, didn't you? While the engine is in place, shape the nose around the 2½-in. spinner. Remember, the engine will have to set on a ⅛ plate if you use an HP, or the motor mounts will have to be cut ⅛ inch, in order for the tank to sit above the motor when the ship is on its wheels.

Why? Paul said it makes them run smoother without changing speeds inverted. And you know, it worked. I went with a metal plate so other engines also could be used. Install the canopy, rudder and fillets. Now sand the ship and do all the little things you forgot, sit back and drink a Diet Pepsi (I'm getting fatter by the day).

When you are through enjoying your balsa wonder, paint the jewel and get it ready to fly. Remember, this has not been a job, but an adventure, so enjoy it to the fullest, and good luck.

CL Racing/Lee

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contests around the country. Most of the time my family has gone, too. The District VIII contests are particular treats for the family, as we've made quite a lot of good friends from as far away as New Orleans and Dallas/Fort Worth. And the one thing that has really marked this year of competition has been the number of junior fliers that have emerged. Typically, these have been sons of fliers working with Daddy, using some of his old equipment, but also building new stuff, too. And some of these teams are really starting to do quite well.

One pair that comes to mind is Mike and Randy Wheeler from Mesquite, Texas, up near Dallas. Randy is eight this year and has been flying for only a little over a year, but is really getting good! He and Mike went to Winston-Salem this summer and walked away with a lot of gold. And they repeated that at several other contests later in the summer.

Another team is Ed Moorman and his stepson, Chad Stewart, from Elgin AFB, Florida. Here's some words from Ed that will give you some feeling for his and Chad's work.

"Just returned from the District V meet in Jacksonville and the guys from the panhandle did very well. Chad and I took 1-2 in Florida Slow Rat. . . . One of our other members, Norm Faith, took third. . . . In AMA, the O.S.s and 5.8s

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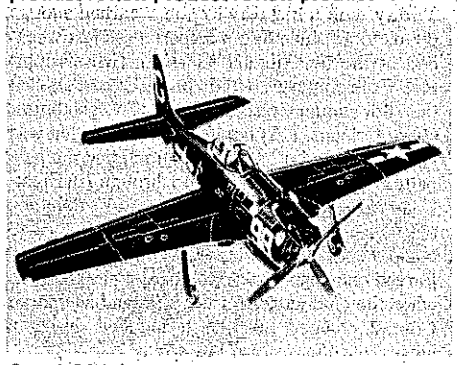

Stand-Off R/C F8F-2 Bearcat, Top Flite Models, Inc., 1901 N. Narragansett Ave., Chicago, IL 60639.

Top Flite has introduced an interesting model of the legendary carrier fighter, the F8F-2 Bearcat. The Bearcat has a wing span of 60 in., a length of 43 in., and is designed to be powered by a .60 engine. Top Flite features all balsa "Superform" construction of the fuselage, formed landing gear, a two-piece extra strong injection-molded cowl, and a clear plastic canopy. All parts are die cut and marked for easy identification. Machine cut strips are used as an alignment jig to assure that everything goes together correctly. The kit also includes a fully illustrated check-off construction booklet. Other informative material contained in the kit includes the 24-page booklet, "Grumman F8F Bearcat" by Aero Publishers. This book contains historical commentary and selected photographic material covering all aspects of the aircraft. Four pages of color drawings should help the serious modeler.

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