

Construction

by DAN SANTICH

Super Hots



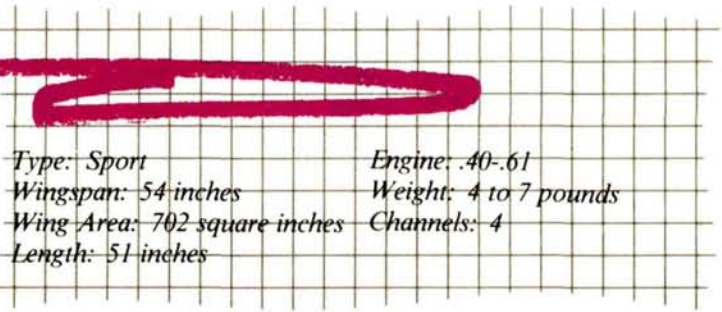
Kick some tails with the new king in the fun-fly arena!

THERE IS no doubt about it, the Hots is *hot*! Midwest Products* has already sold out on their second run of kits and *M.A.N.* has sold more plans (#4841 for \$6.00) for it than for any other model. Why is that? Well, the design speaks for itself. It is simple, attractive, inexpensive to build, and it flies like mad. Put all of these ingredients together and you have a winner.

The Super Hots is a direct offspring of the original Hots, which appeared in the April 1984 issue of *M.A.N.* This Super version is a larger model that will handle any engine in the .40 to .61 size range. With a .40 on it, it behaves like a real gentleman. Go to a .61 with a pipe and you have a guided missile, yet still capable of near hovering at slow speeds. This is due to the extremely thick airfoil

and lightweight of the airframe. There are gobs of lift and a prop turning over at less than 1,000 rpm will keep it in the air.

For those of you who are into show-stoppers, the Super Hots will outdance anyone on the floor. You can loop it on takeoff and still do a touch-and-go on the bottom side. It will knife-edge better than most pattern ships. It will flat-spin like a falling leaf and recover instantly when you want it to. Rolls are as fast or as slow as you want. On full-throw ailerons it will do three rolls a second. Now that's quick! Throttling back is like putting on the brakes, yet it won't stall or fall off on you. The ailerons are responsive right down to zero airspeed. Snaps are very predictable and it will do them equally as well in either direction. The airplane is so responsive and predictable



Type: Sport Engine: .40-.61
 Wingspan: 54 inches Weight: 4 to 7 pounds
 Wing Area: 702 square inches Channels: 4
 Length: 51 inches

it would even make a great pattern ship.

For the quiet bunch I feel a four-cycle would be a wonderful addition, although I haven't tried it yet. The main consideration would be the balance point, and you might have to shorten the nose in order to get it. Don't add weight to the tail unless you absolutely have to. The lighter it is, the better. Toward that end, when you pick out your material, get the lightest wood you can find. You'll notice I used 1/8-inch thick lite-ply for the fuselage sides. If you want a lighter model, you can substitute 1/8-inch thick balsa. The lite-ply adds a great amount of strength to the frame, however.

You'll also notice I used a backplate mount for the engine. I really like this method because of a number of factors. First, it is light. Second, it gives a direct force upon the fuselage. Third, it cuts down on vibration.

Another thing you'll notice is the use

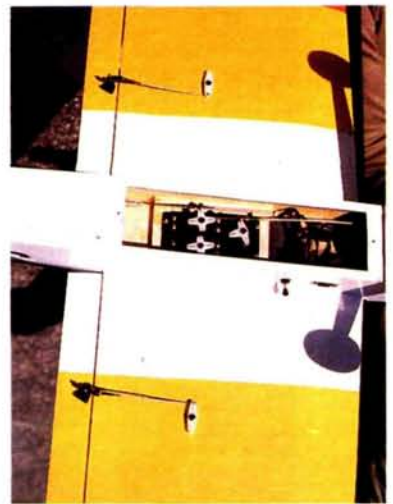


of two servos for the ailerons. There is room in the fuselage if you wish to use conventional strip aileron linkages; however, I've found that this setup gives zero slop and that makes it fly all the better. Slop can also induce flutter, and you know what that does. It kills nice little airplanes!

Aside from building it light, build it straight. It's no fun flying a corkscrew.

The Super Hots does not require a massive building area; anything the size of a kitchen table will do. Although it is a one-piece airplane, it isn't cumbersome or hard to transport in a small car. And when you get to the field, all eyes are going to be on you and your Super Hots.

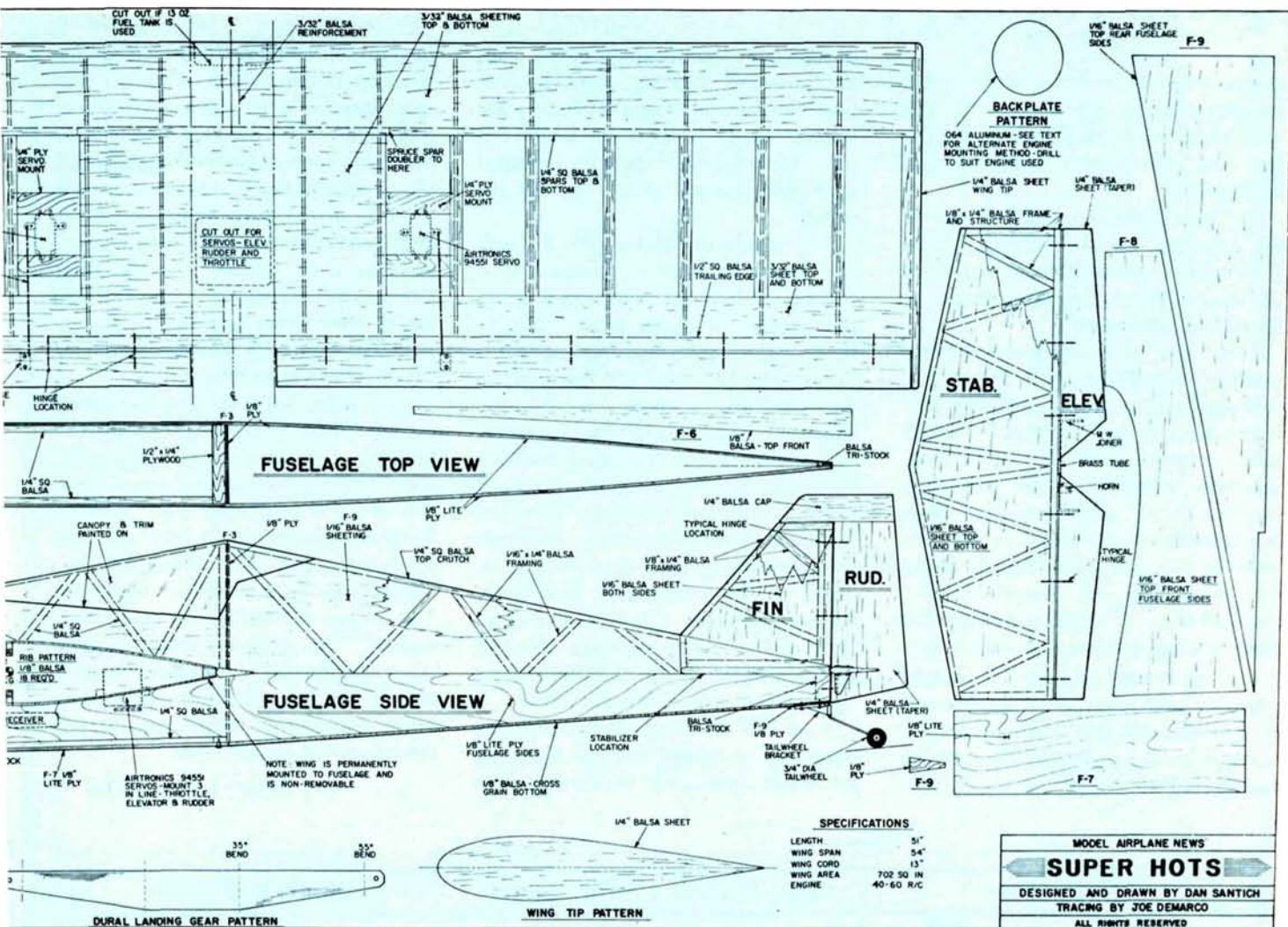
CONSTRUCTION. As I have in the past, I strongly suggest you obtain two sheets of See-Temp* pattern material. It's a translucent plastic that you simply



Shot of the radio installation from removable lower hatch shows use of dual aileron servos.



Although a one-piece airplane, the Super Hots is not ungainly.



FULL-SIZE PLANS AVAILABLE...PAGES 116, 117

Sand the daylight out of it and cover the model with your favorite skin. Do your thing on the color scheme and blow everyone's mind when you take it to the flying field for the first time. The Super Hots is an attention getter.

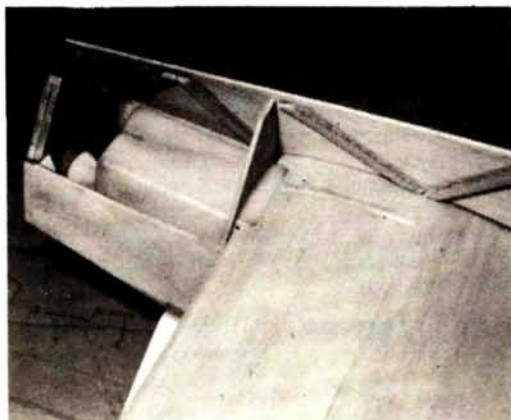
FLYING. Make sure your controls move in the right direction and check

your radio for good range. Run your engine and check it for idle. When your knees stop knocking, put it in the air. You'll soon find that the Super Hots is a dream to fly. It goes where you point it and it has no bad habits. So build the Super Hots and have some fun. That's what it's all about.

**The following are the addresses of the companies mentioned in this article:*

Midwest Products, 400 S. Indiana St., Hobart, IN 46342.

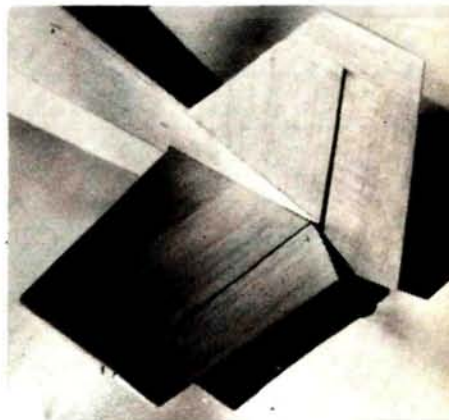
See-Temp, P.O. Box 105, Sussex, WI 53089.



Be sure tank is installed prior to completion of top forward fuselage section.



Individual aileron servos for slop-free setup, necessary in high-performance airplanes.



Horizontal and vertical stabs are built-up for strength, rigidity, and light weight.