

The twin-boomed "Torino" traverses the sky.

The "TORINO" Stunter

A twin-boomed, swept-wing Stunt Controlline contest machine:

by Jack Sheeks

♦ No this is not the ultimate in stunt design and to be honest with you, I don't think you will ever see the ultimate anywhere. Mainly because there isn't such a monster in existence yet. At least that's my opinion anyway. However, this is a good stunter, and I think a cut above the average. At least Jim Vornholt thinks so anyway.

To get this short "bull" session under way, we have to turn time back to about two months before the '68 Nationals. Jim and I, after such skull-duggery, finally got our vacations lined up so we could attend the Nationals. After all this great brain work, it dawned on us that Jim didn't have anything to fly at the Nationals, except the old "Freedom 45", which was getting a little worse for wear. Did I say a little wear? Well let's say it still

flies good anyway. I never like to say bad things about the ancient or decrepit, especially since at one time they were young and full of fight. Oh well, we all have to get old sometime. (This includes the Author and possibly the Editor.)

Anyway, Jim had a choice of either starting a whole new design or building one he had built before. At this time I was testing a new twin boomer in clear-dope. Jim, being partial to twin boomers, liked it, so with little time left he began working to complete one for the Nationals. With only one week left we put the final coats of clear on it. Now we were both ready to go, I had my new "Scottsman," design and Jim with a boomer which I named after his new car, "Torino". Now to practice, practice, practice. Well on a very bright day, while putting in some practice flights, something happened, that would bring tears

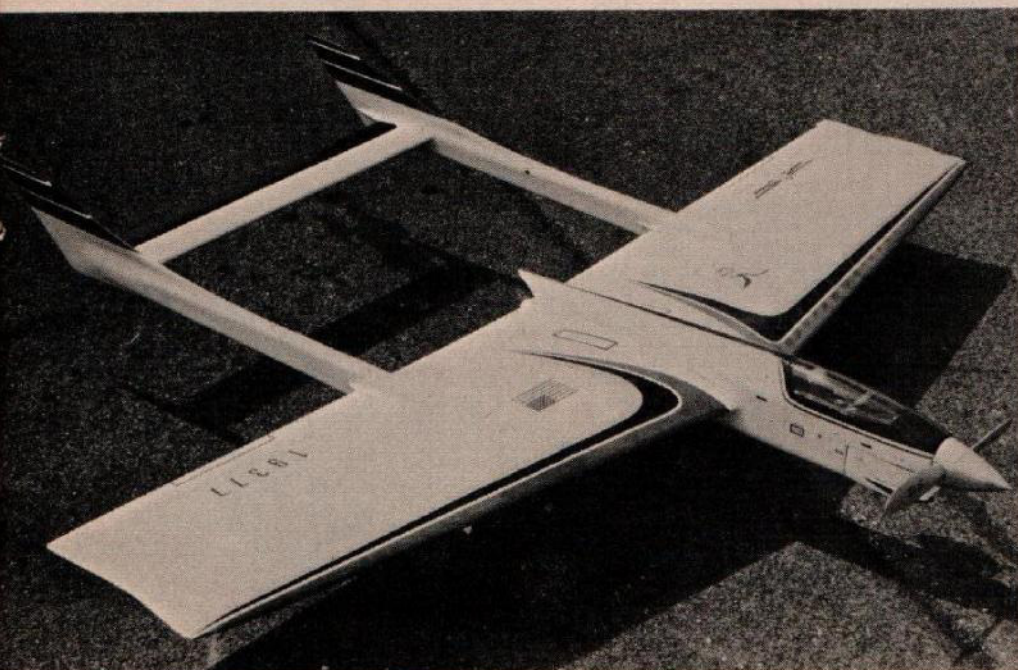
to the eyes of a Hobby Horse. A solder joint at the flap horn broke in the outside half of the Square Eight. Well when the "Scottsman" hit, the nose went one direction, and the rest of it went the other. There went by hopes of winning the Nationals, but I still had a week to get another ship ready. Outcame the old "Ryan." During its repair and new paint job, I injured my back to the point, I couldn't attend at all. Now it was up to Jim alone, to carry the Indianapolis Stunt Team colors. He didn't do badly either. He was on the board in 1st place most of the day, till someone decided to re-add the scores. That put him in 6th place on his circle, which can make a fellow feel kinda crummy as it did Jim. But with only a week's practice on a new ship, I feel he did quite well. At least he proved a point, that swept wing stunters are good enough to compete with the best of 'em. And at the Nationals, you compete against the best the country has to offer. So if you would like to try a ship that is not only controversial, but sharp in line, give the "Torino" a chance. I don't think you will be disappointed.

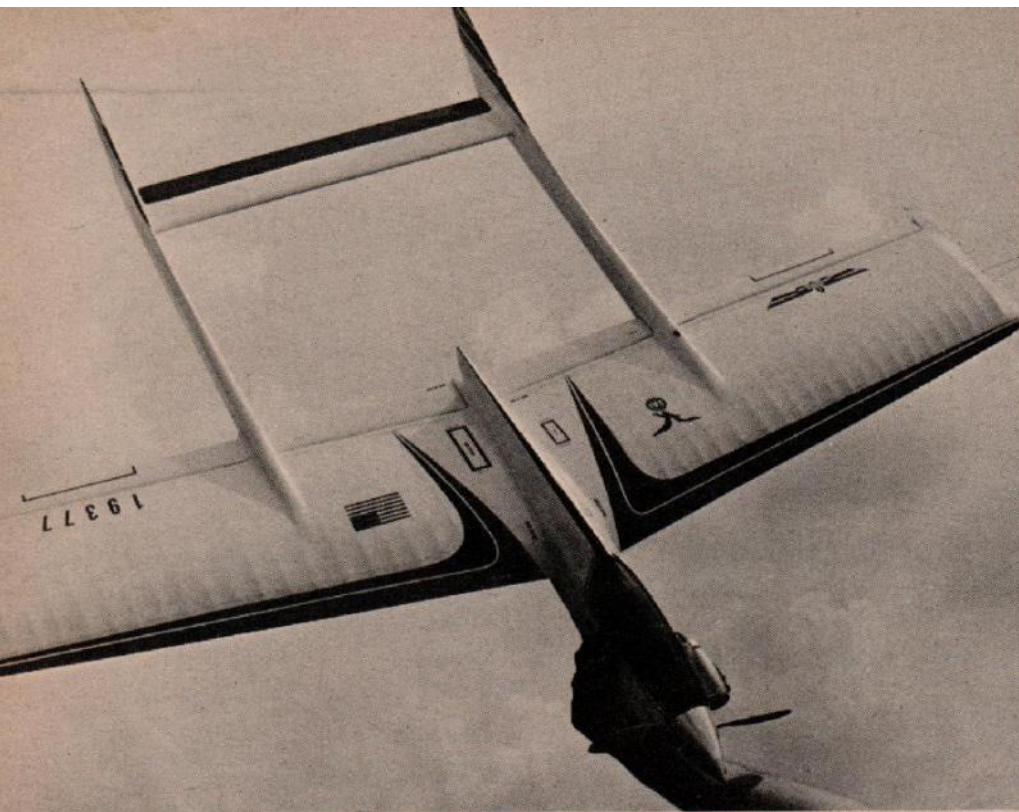
Construction:

Start by shopping for extra light and straight wood, especially since this is a large aircraft. The original "Torino" weighed in at 47 ounces and was powered by an Enya 35. The ship is sturdy enough to hold a .40 or .45 in case you go overweight.

Now get out your Boy Scout knives or whatever and cut the I-beam and the leading edges from $\frac{1}{4}$ " balsa. Be sure and centerline everything in order to insure straightness and alignment. Next cut out the two main body sides and the four boom sides from $\frac{1}{8}$ " balsa. Saw the $\frac{1}{16}$ " plywood doublers for the body and I-beam out and glue them into place. Also glue the motor mounts into place at this time.

While these are drying, cut the Stab-Elevator-Flaps and Rudders from $\frac{1}{4}$ "





Note fly on boom. He covered it with flypaper.

"TORINO"

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balsa. Sand them to shape hinging the stab and elevator and installing the two half control horns. Saw the main body formers of $\frac{1}{8}$ " and $\frac{1}{16}$ " plywood and install them using the tank for a guide. Allow it to dry well. Glue the $\frac{1}{8}$ "x $\frac{1}{2}$ " Capstrips onto the I-beam. Cut the two wing tip formers from $\frac{1}{8}$ " balsa. Now pull the main body sides together at the rear and glue them to a piece of $\frac{1}{4}$ " balsa scrap. After this has dried, turn the body upside down and install the leading and trailing edges plus the I-beam and the main

flap control horn. Now slide the boom sides into position and the two other flap control horns. Next block up the rear of the booms and slide the wing tip formers into place. Now double check everything for proper alignment, glue and pin all joints and set aside to dry. Next install the boom formers and the stab and elevator. Insert both pushrods in the booms, bushing them with $\frac{1}{16}$ " plywood. Make sure they are both even.

Sand the trailing edges of the wing to it's proper shape, and install the flaps. Next install the bellcrank and the $\frac{1}{8}$ " bellcrank platform. While this is drying glue the $\frac{1}{4}$ " top and bottom blocks on the booms. Drill the motor mount holes and install the hidden

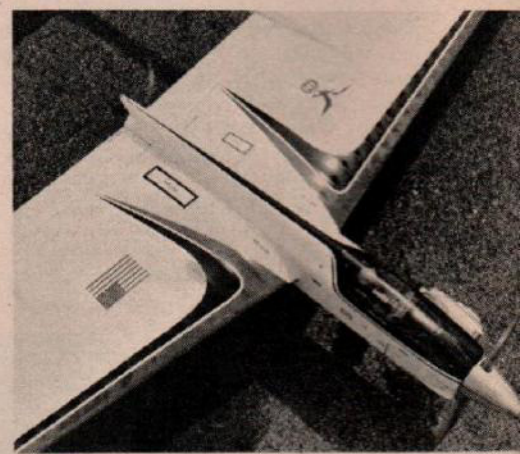
mounts. Bend and install the $\frac{1}{8}$ " dia. wire landing gears with J-bolts. Bend and install the main pushrod, plus the leadouts.

Carve and install the bottom and top body blocks and sand them to shape. Using the wing rib pattern cut out 12 ribs that are $\frac{3}{8}$ " wide and install them next to the body and booms, top and bottom.

Build the cowling at this time, being careful to have a good fit. Install the cowl hold-down now. Get your jig saw out again and laminate a bunch of $\frac{1}{8}$ " balsa and cut as many ribs that you need. Plus a few extra for fat fingered mistakes. Glue them into place cutting them at the rear to insure a good fit and uniform airfoil. Sand them till they are uniform. Cut the wing tips from $\frac{1}{4}$ " balsa and install. Now glue all the fillets and little braces into place. Be sure to glue the rudders into position, making sure there is no offset. After the ship has completely dried, final sand it all over. Now cover the entire model with SGM Silkspan. This will strengthen the entire ship, particularly the booms and the center-section of the ship.

Finish the ship to your desires. The original was finished with Aero Gloss white, trimmed in red-corsair blue-black and silver. The decals were Finishing Touch.

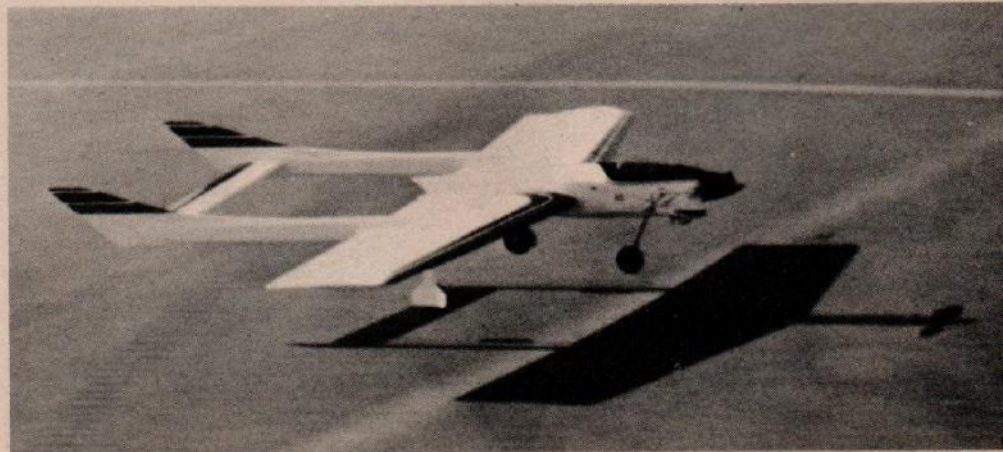
Good Luck With the "Torino." We hope you like it. ●



Focus on the fuselage, short as it may be.



Jim Vornholt, Jack Sheeks' Torino design. Enya .35 10/6 Power Prop. 520 sq., 48 ounces.



"Torino" sliding in for the touchdown.

FLYING MODELS