



TIGER SHARK

By HAROLD LANSER . . .

• Well, for you "young timers", this is a 50% enlargement of a 1938 Victor Stanzel design. We old timers have all probably built one of Vic's little speedsters . . . the Super 'G' Shark, the Super 'V' Shark, or maybe a Baby Shark . . . all classics of their day.

The Tiger Shark was the original Stanzel model that led to all of the historic Shark series. It was flown with one line, plus a six-foot bamboo fishing pole to help control climb and descent.

Thanks to John Pond, I got a copy of the Tiger and 'V' Shark plans to build control line models, but I got into R/C before I finished. One photo shows the difference in size between the original and the enlarged R/C version.

Construction of the R/C version is very much like the original. The fuselage could be built of sheet sides, but it just wouldn't be a Tiger. Incidentally, the Tiger was selected from all the Shark designs because it seemed to enlarge better into an R/C configuration. I used the Falcon 56 wing as a base because it cut down on construction time and also was better proportioned for R/C. Thanks, Carl Goldberg!

CONSTRUCTION

I suggest you build the horizontal stabilizer and elevator first, as the aft end of the fuselage builds around it. Use all hard balsa on the stab and elevator spars, also the leading and trailing edges.

BE SURE to install the 1/4-inch hardwood dowel in the stab spar and the 1/8 dowel in the leading edge. These dowels are vital! I found out the hard way. On the eleventh flight, I did one of my world-famous vertical rolls with a Split 'S' over the top. I forgot to close the throttle over the top, and she was really smoking on the way down. I heard a buzz, slammed the throttle closed, and very gently pulled back on the stick. Was I glad I had gone high doing the vertical rolls, because the Tiger leveled out about five feet off the deck! When I got it down on the ground, I found the stabilizer spar cracked next to the fuselage. Use epoxy to set those dowels. . .

The cover aft of the cockpit is 1/16 balsa soaked in hot water and molded over the formers, taping in place until

dry. Lift off when dry and then glue in place.

The decking in front of the cockpit is done in strips about 3/16 wide, then the under side is painted with Elmers yellow glue, thinned 50% with water. This makes it very strong, as the glue soaks in well. Any small gaps on the outside surface can be filled with micro-balloons and sanded smooth.

The hatch over the engine is carved from a solid balsa block, and the nose is planked with 1/8-inch balsa strips of various widths. The fuel tank compartment is lined with 1/16 balsa, then painted with thinned Elmers, as is the engine compartment. I paint with glue until the surfaces are smooth, without sanding. When dry, this will stand up against most any fuel.

The part under the stab is 1/4-inch medium balsa. The vertical fin is squared to the fuselage, then the stab is squared to all of this. Do it right . . . you can't change it later! The leading edge of the fin is three laminations. The medium hard balsa center piece is installed first, followed by the 1/4-inch sheets over the stab. Now the softer outside fin leading edge pieces are added. Ribs are 1/16 sheet rectangles. Sand to airfoil shape after installation. Stab is built in the same manner.

The landing gear mount is two pieces of 1/16 plywood. The front piece is larger so it lays on the face of the 3/16 square upright fuselage structure; the second piece fitting between the uprights.

The wing fairing cannot be made until the wing is built. The latter is built totally flat and then the trailing edge from the eighth rib from the tip is sanded to form the washout of the wing. After the wing is completely finished and sanded, carefully cut out the ailerons. Trim the ribs of the wing and add the aileron spars. Trim the ribs on the ailerons and add the aileron leading edge. After the planking is on the center section and the wing has been trial fitted to the fuselage, place a sheet of waxed paper between the wing and fuselage and bolt them together. Now fit the 1/16 balsa fairing bases over the wing root, gluing them to the fuselage only.

Remove the wing now, and install the fairing between the fuselage and fairing base. Use two layers of 1/32-sheet, as it is easier to fit and form one at a time. Bond the second layer to the first with Jet, soaking it through the second layer to make a very solid fairing.

The front of the cockpit is formed with .030 music wire, which supports the clear plastic. Use Wilhold R/C-56 glue to hold the two canopy pieces in place. It dries to a transparent clear.

I use Du-Bro large hinges on all of my airplanes, and pin them with round toothpicks and Elmers or Jet glue. Use two hinges at the bottom of the rudder to carry the load of the tail wheel strut. It is important to use the plywood rib at the bottom of the rudder to hold the tail wheel wire. Epoxy and wrap with fiberglass cloth.

I made up the special exhaust/muffler to make the Tiger look like it has an inline engine. It was assembled from 5/8 and 1/4-inch brass tube, using silver solder. It has a real unusual sound, works well, and muffles the engine as well as a production model unit. It also provides fuel tank pressure.

One of the photos shows my radio installation. Everyone has their favorite method, but this worked well for me. This photo also shows the firmly installed landing gear wire, using plenty of nylon holers.

I never weighed my Tiger, but it is light . . . or was. I added ballast, because being so light and so clean, it just floated like a balloon.

The tail-dragger configuration is not bad to handle on takeoff. I feed the throttle in slow, and at the same time, ease in some right rudder. I use half throttle until she's up on her mains, then come in with the rest of the throttle.

The rudder is big and effective, but if you have to fly off a narrow runway like I have to, and have to take off crosswind much of the time, be extra careful as she will tend to weather vane into the wind.

To you modelers out there who do build this beautiful flying machine, I hope you enjoy her as much as I do. . . Happy flying.

P.S. I've got a 100% enlargement on the board now, using a Senior Falcon wing, with retracts and flaps!