



Robert W. Elliott, 25, Atlanta, Ga., shown with the Arthur Godfrey Perpetual Trophy which he won for top performance in scale and stunt competition in 1950 . . . in '51 organized and captained the Veco Stunt Flyers which flew at the Nationals . . . Bob's original stunt designs preceding Black Tiger include the "Cobra" and the "Snapdragon," both widely duplicated in South . . . Pres., East Point 8-Ball Flyers.

**This stunt model has been taking Dixie by storm! Bob's many wins with black beauty can be duplicated by you**

■ The *Black Tiger* is the result of ideas and inspiration from my trip to the '51 Nationals in Dallas, Texas.

For two seasons I had done very well in competition throughout the Southeast with a smaller ship powered with a Veco .29, but placed third in Dallas. I realized that any stunt man who is out to do his best must have an airplane to match his competition, and took note of the trend of stunt ships flown by the winners. George Aldrich and Don Still were most helpful. I found them not only fine stunters but fine fellows personally. George advised me to use a larger ship with smoother flying characteristics.

His suggestion started my search for just such a ship. It would have to be one with clean lines, realistic proportions. It would have to have that "second look" appeal!

On my drawing board the Tiger took shape. Simple in design, simple in con-

struction, box-type fuselage that a novice as well as an expert would have little trouble building into a good-looking, smooth-flying airplane.

During the winter of '51-'52 construction started on this semi-scale stunt ship resembling the P-40 Warhawk. In May '52 it was completed. During the season that followed it was given full appearance points in all meets in the Southeast. A sister ship built and flown by Harris Grimes (1951 National Junior Champ) in the '52 Plymouth Internationals in Detroit also gained full appearance points.

The *Black Tiger* has an overall length of 30 inches, weighs approximately 32 ounces and has a wingspan of 45½ inches with approximately 448 square inches of wing area, including flaps.

Start the fuselage assembly by gluing the 1/16" plywood doublers to the ¼" sheet sides in their correct positions. Motor mounts are then glued in place on the ¼" sheet sides, *inside* the slot of the 1/16" plywood. The firewall and landing gear are glued into position with the gear attached. The sheet sides are then glued at the rear to a ¼"x3/16"x1½" tail piece and bulkhead assembled. Glue tailwheel into position and plank bottom with ¼" sheet up to the landing gear. Place tank in position and add 1/16" sheet baffle. The remainder of the bottom can now be planked with 1/16" sheet balsa.

Wing construction is fairly simple. The inside wing is 1¼" longer than the outer panel with 2½" rib spacing. (1/16" ribs are used with 3/16" cap strips.) Note that the rib nearest the bellcrank on the inside panel is made from ¼" sheet and note also that the wing spars are *not* spliced in the center. Splicing is alternated to distribute equally the weak spots. The leading and trailing edges are made from ¼" square. The remaining spars are of 3/16" square. Splice all spars and leading edges and mark for rib spacing. Build wing flat on work table.

Glue ribs into position on one of the 3/16" spars. Add the other spar and check alignment of ribs. Glue leading and trailing edges into position, also checking alignment. The trailing edge is then beveled and the 1"x1/16" sheet balsa is glued into position. Glue bellcrank floor into position and add bellcrank and lead-out wires. Plank leading edge and center section. Glue wing tips into position and sand wing until smooth. (Note: The flap horn must be placed into the fuselage *before* wing is inserted.) The flaps are of solid ¼" sheet, tapered and sanded. These are attached *after* the installation of the wing.

The rudder, stabilizer and elevators are made from ⅜" sheet balsa. The rud-

# the Black Tiger

By ROBERT W. ELLIOTT



An important part of any stunt model today is neat workmanship and sleek appearance. Read how Elliott achieves his fine finish.



# Black Tiger.

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The original ship is painted light blue on the bottom and black on top. Three or four coats of the color dope are sprayed on for glossy finish. To get the "mirror" finish, rub the entire model with Martin-Senour Speedy Rubbing Compound. (IMPORTANT! All rubbing strokes must be forward and backward strokes to avoid bad scratches on the finish.) Now hand-rub the entire model with a DuPont #7 polish and finally, a thick coat of a good grade of auto wax.

The decals are made from Trim-Film. The Tiger's mouth is not hard to freehand. A little practice, however, is recommended! The lips are red, teeth white, and inside the mouth is orange. Finally, check the ship for balance. This is very important!

Any good .29 or .35 engine will give the Tiger plenty of power. If you use a .35 I recommend 65 ft. lines, otherwise 60 ft. lines will do the job. With a .35 up front you'll have power to burn!

## Bob Elliott's Bill of Materials—Black Tiger

(Balsa unless otherwise specified)

10 pcs. 1/16"x3"x36", ribs, wings, fuselage, planking, caps, strips. 4 pcs. 1/8"x3"x36", fuselage, formers, wing tips, fuselage bottom. 1 pc. 1/4"x3"x36", flaps, tail raiser block, spinner block. 1 pc. 1/32"x2"x36", wing fillets. 2 pcs. 3/8"x3"x36", stabilizer, elevator, rudder, window walls. 2 pcs. 1/4"x1/4"x36", wing L.E. and T.E. 2 pcs. 3/16"x3/16"x36", wing spars, bellcrank floor mount, fuselage backbone. 2 pcs. 1/2"x3/8"x7 1/8" hardwood, motor mounts. 1 sheet 1/8"x6"x12" plywood, firewall, l.g. former, bellcrank floor, cockpit former. 1 sheet 1/16"x6"x12" plywood, fuselage doublers, cowl front. 1 pc. 1/32"x2 1/2"x3" plywood, cowl rear. 1 pc. 1/2"x2 1/2"x10", fuselage top deck. 1 pc. 2 1/4"x2 1/2"x2 3/4", cowl.

Scrap blocks for fuselage bottom, cowl, stabilizer, fillets, aerial, and cockpit details.

9" 1/16" dia. piano wire, tail wheel gear, canopy frame. 48" 3/32" dia. piano wire, pushrods, landing gear. 1 pc. .020"x2 1/2"x4 1/2" sheet aluminum, canopy. 1 Veco or similar L.G. clamp, 2 "J" bolts, landing gear attachments. 1 sheet .020 celluloid, cockpit front, canopy, rear windows. 1 wedge or square tank. 1 1 3/4" "From" needle nose spinner. 1 pr. 2 1/2" banner plastic wheels. 1 3/8" Veco tail wheel. 1 roll electrician's tape, L.G. detail. 12" black neoprene tubing, landing gear detail. 1 large Veco or similar bellcrank. 2 large Veco or similar control horns.

Aircraft tape for hinge material; flexible lead-out wire; 3/32" brass tubing for lead-out guides. Johnson's Baby Powder for sanding sealer. Black, light-blue (Cessna gray), silver, clear, fuel-proofed dope. Dark blue, white, medium yellow, Trim-Film decals.