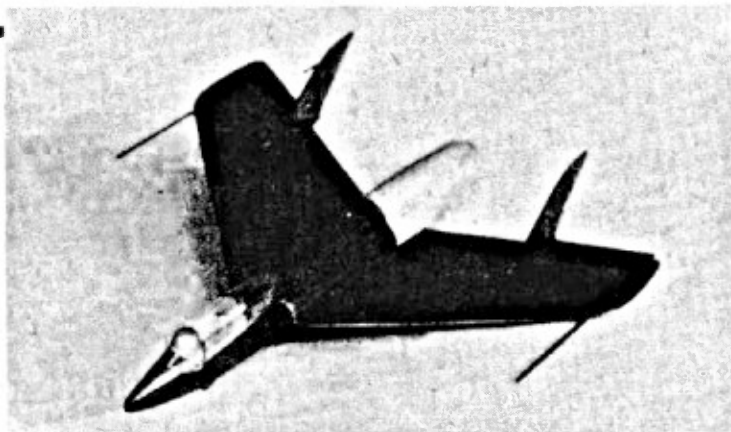


THE NAVY'S FAMOUS VOUGHT CUTLASS FIGHTER AND A JETEX 50 UNIT TEAM UP FOR AN UNUSUAL HIGH-PERFORMANCE FLYING SCALE MODEL. FULL-SIZE PLANS!

by Bob Buragas



CUTLASS XF7U-1

● This twin-jet Vought fighter presents a formidable looking sight when streaking through the air. Featuring afterburners for extra speed, it does better than 700 m.p.h. at high altitudes. At lower altitudes, the versatility of the Cutlass is evidenced by the low landing speeds available for carrier-based operations. Even with the limited amount of information supplied to the public, one still ponders over Navy claims that this plane can down the famed B-36 bomber.

The general arrangement of this plane immediately made it a candidate for scale-model jet flight, using a Jetex 50 for a power plant. Few models lend themselves as readily as the Cutlass did for this purpose. Difficulties in balancing and supplying sufficient cooling air for the jet unit are overcome by the unique structure of the plane. The plan is full-size and can be used by solid modelers to construct an exact replica for pedestal mounting.

As for the flying version, all balsa should be very soft and light, since the model should not exceed 1½ ounces, total weight, for best performance.

WINGS: Cut, trim and sand the wing panels from 1/8" x 3" sheet balsa, but do not put in the airfoil at this time. The intake blocks are cut from 5/16" sheet, using the dimensions listed in Fig. 1. After slotting the blocks, carve them into a half-

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round cross-section, and cement the wing panels into the intake block slots. When these units have dried, the correct dihedral bevel can be put in by mounting the panels on a board as indicated in Fig. 1 and sanding off the surplus wood. Take care that two identical sides are not made!

The engine tracks are cut from hardwood and a hacksaw blade is used to cut the slots. These tracks are added to the rear of the intake blocks by cutting small grooves so that they may be inset. When finished, these tracks are flush with the intake block.

Using a medium fine sandpaper mounted on a small block, the wing airfoils are now carefully sanded in. By wrapping a small piece of sandpaper around a pencil, the bevels in the intake blocks can be sanded easily. Cut out the flap sections at the wing tips and hinge them with soft wire — the wire found on milk-bottle caps is ideal.

FUSELAGE: The sides and formers used in the construction of the main fuselage are cut from 1/16" balsa sheet. The square cut-outs in the sides line up with the bevels in the intake blocks. Top and bottom blocks are cut from 5/16" sheet and are rounded into shape **before** they are cemented in place. Dimensions for these blocks will be found above and below the side view drawing. Take the dimension from the rear of the (Turn to Page 40)

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the top view drawing to get the proper taper for the rear of the top and bottom blocks, then shape and cement them in place.

The intake block assemblies are added next, taking care to line them up with the cut-outs in the fuselage sides. Former 4 is cut out in the center to allow intake air to pass into the engine compartment.

RUDDERS: In making the rudder assembly, it is best to start with the lower rudder blocks. These are made from $\frac{1}{4}$ " square balsa. The reverse tear-drop shape is carved and sanded in. The points of location for these blocks are 2" outboard of the intake blocks. The rudders are added, after cutting and sanding, to complete the assembly.

NOSE BLOCK: Use $\frac{5}{16}$ " sheet to fabricate the nose block. Two pieces, 1" x $1\frac{1}{2}$ ", are laminated together for this purpose. Cement this block to the nose section and carve it into its proper shape, following with a general sanding.

DETAILS: Gun ports, static tubes and a radar antenna may be added for realism, but they are not advised for the flying version of this model. Cockpit details are a matter of personal preference. In any case, all accessory parts and details are added before painting, with the exception of the cockpit covering. The cockpit covering consisting of three pieces of thin celluloid, is added after painting has been completed.

FINISHING: For a slick finish, apply two coats of wood filler to the model and sand it down to a smooth surface. Then,

add at least two coats of clear dope before painting with pigmented dope.

The rear portion of the fuselage, from the flap line back, is painted with silver dope. This is the afterburner section. The rest of the model is painted Navy Blue—a dark shade of blue. Static tube tips and the radar antenna are painted red. For the correct insignia, use a white star and bar with a center red bar. By drawing in the flap and rudder lines with India ink, you can add the final realistic touch.

FLYING: For flying, the model should balance 6" back from the tip of the nose. Bend the hinged flap sections upwards about $\frac{1}{8}$ " and test for a smooth, steady, straight glide using an empty jet unit. If a stall or dive is noticed, correct for a stall by lowering the flaps slightly—correct for a dive by raising them higher.

The original model was flown in right-hand circles, but the model will turn and fly well in either

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direction, due to lack of torque. Flights should be made in very large, wide circles. It is better to start with too little rudder and work up, as the turn under power will be much tighter than the turn in the glide.

BILL OF MATERIALS

(Balsa unless otherwise specified)

- 1— $1\frac{1}{8}$ " x 3" x 18" (Medium-soft).....Wing panels
- 1— $1\frac{1}{16}$ " x 2" x 18" (soft).....Rudders, fuselage sides, formers
- 1— $5\frac{1}{16}$ " x 2" x 18" (soft).....Fuselage nose, top, bottom

$3\frac{3}{32}$ " dowels for pivot tubes, antenna; $1\frac{1}{4}$ " square scrap for sub-rudders; $3\frac{1}{16}$ " square scrap for engine track; Celluloid for cabin; Assorted sandpaper; Decals; Wood filler; Clear dope, silver dope, red dope; India ink; Jetex "50" engine and fuel.

INTAKE BLOCK ASSEMBLY

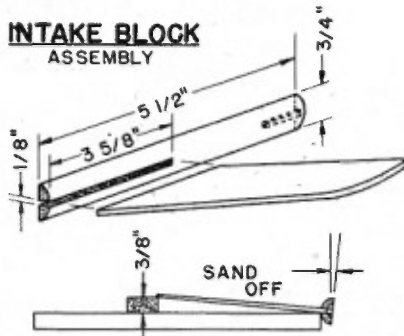


FIG. 1