

went on the upper surfaces and Fluorescent Orange on the lower surfaces. The rudder is Bright Red.

The body and fin were covered in Bright Yellow Ultracote for high visibility.

Horizontal stab changes

Using the plan, I moved the $\frac{3}{8} \times \frac{1}{2}$ stab trailing edge piece forward $\frac{1}{2}$ inch to the original location of the reinforcing strip and then added the reinforcing strip per the plan length. The rest of the stab parts were modified to fit as required. Then with a very fine saw, I cut off each extended end of the stab tips. I sheeted the bottom of the stab with $\frac{1}{8}$ -inch balsa sheet stock to make it stiffer.

Elevator changes

A piece of $\frac{1}{2} \times \frac{3}{8}$ -inch balsa was added to the front of each elevator. I took the extended end parts I cut from the stab and glued them to the outboard end of each elevator. I sanded the new elevators to a bit of a taper with a square trailing edge. These changes keep the stab/elevator chord and area to the original size to fit to the body.

Vertical fin changes

This was a *major* redesign: instead of the swept back trailing edge of the stock fin, I have changed it to a straight vertical hinge line.

The original fin/rudder height was $11\frac{1}{2}$ inches and this dimension was retained but the shape was radically changed. The new fin is $6\frac{1}{4}$ inches high, the bottom is 8 inches wide, and the top is 3 inches wide. The $\frac{3}{8} \times \frac{1}{2}$ -inch trailing edge piece is 10 inches long to extend down through the body to form part of a sub fin for mounting the DuBro tail wheel bracket and to give lots of room for extra hinges. (You *will* try knife edge flight!)

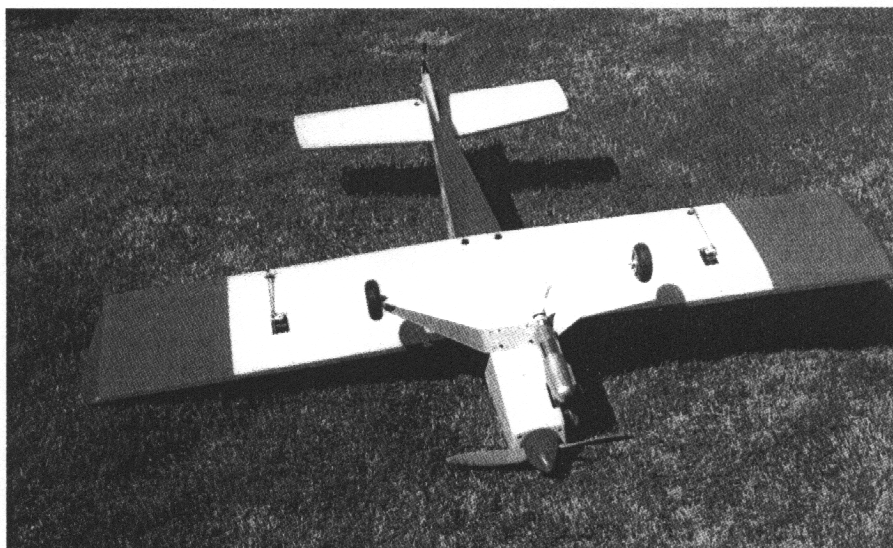
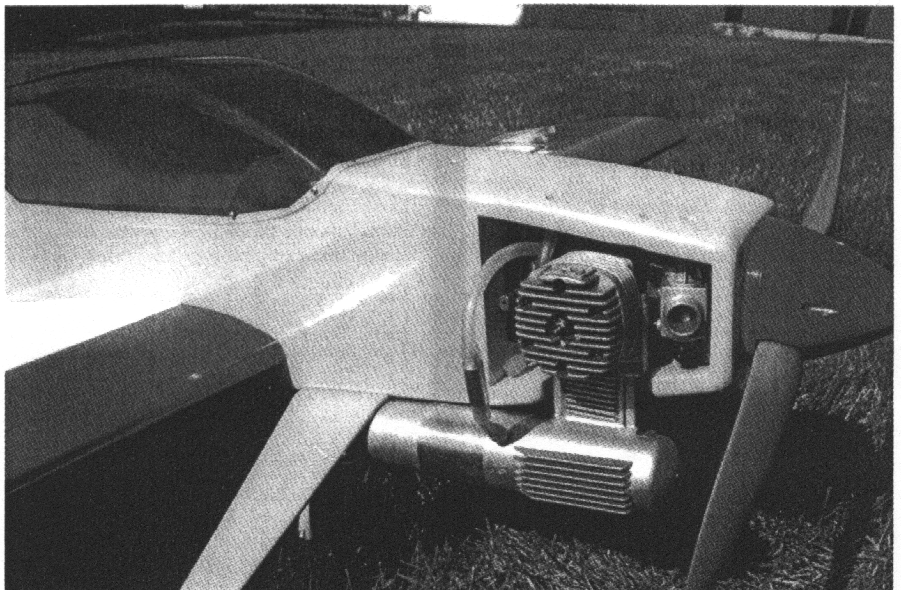
The fin was sheeted with $\frac{1}{8}$ -inch balsa on both sides with the grain running vertical.

Rudder changes

This was also a *major* redesign: The new rudder is still $11\frac{1}{2}$ inches high. The bottom is $5\frac{1}{2}$ inches wide and the leading edge $\frac{3}{8} \times \frac{1}{2}$ -inch balsa piece extends down to the same length as the trailing edge of the fin.



Finished airplane showing clipped wing, modified tail surfaces (above). Lots of easily seen color changes—bright red and white wings, bright yellow body. Side mounted engine (below) for proper fuel flow during maneuvers and lots of cooling air past the engine head.



Totally different colors on the bottom surfaces (above) so you can count your rolls, and maintain good orientation. Hitec HS-77 low profile servos (at right) are buried deep in the wing to minimize drag. Use a 4-40 pushrod, heavy duty DuBro hardware, and clevis keepers to keep everything good and stiff.

