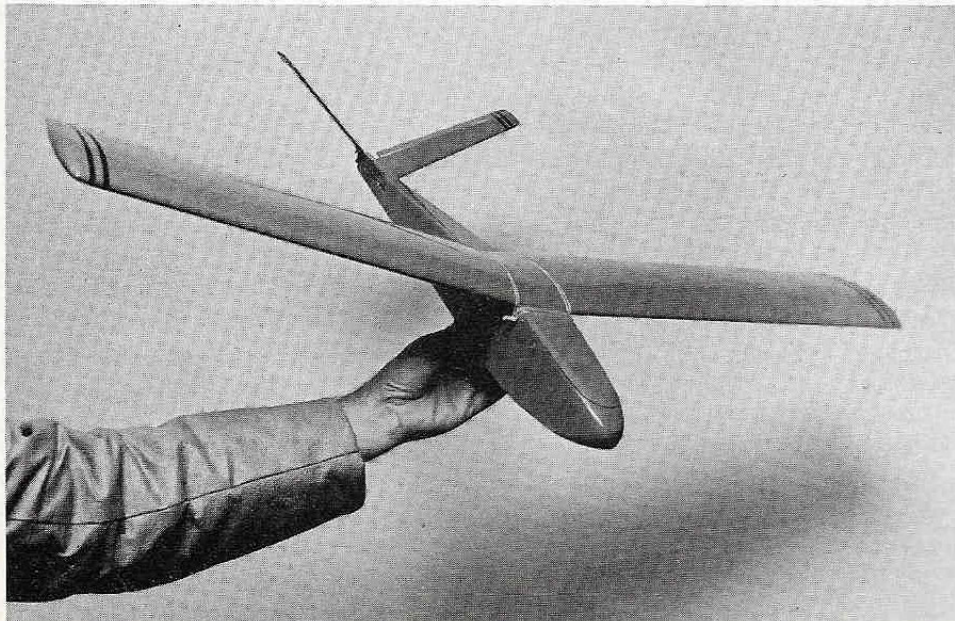


Overall view of the Little "V". All sheet balsa construction and an absolute minimum of construction time.

# LITTLE "V"

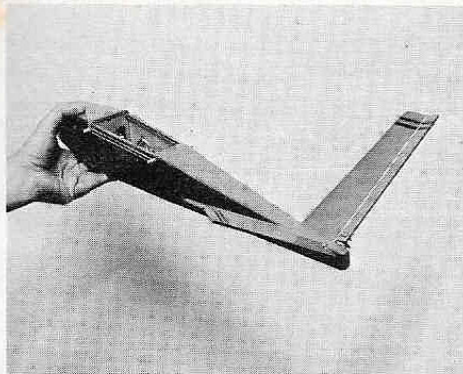
FULL SIZE PLANS FOR A 36½" SPAN, 15 OUNCE SLOPE SOARING GLIDER,  
WITH PERFORMANCE FEATURES THAT DWARF ITS SIZE. By LOU WEIHS



The Little "V" is an easy-to-build miniature slope soaring glider. It sports a 36½" wingspan, and weighs a scant 15 ounces with two Controlaire S-4 servos and a 225 MA battery pack.

How small can a slope soaring glider be? I really don't know, but the Little "V" was inspired by a model of similar configuration built by young Steve Woodard of the Cordova Model Masters, and it has a 26" wingspan. Steve's little bird flew with such great success, that I just had to try one.

These tiny gliders require moderate to strong conditions to keep them airborne, and flight tests have proven that a 15 MPH plus wind over a good slope will do the job. A 42" wingspan (add two extra wing ribs)



would be ideal for more moderate conditions. The model was first flown with a single channel pulse rudder only system and a Rand actuator, which worked very well. The Galloping Ghost rudder and elevator linkage as shown for the Delta "Lil Toad" in the February 1969 issue of RCM, should also prove quite practical. If the glider is to be flown on rudder only, the wing incidence will probably have to be adjusted to compensate for the wind condition. The first time the Little "V" was flown the T.E. of the wing had to be jacked up  $\frac{3}{16}$ " in order to penetrate the 25 to 30 MPH wind, with rain squalls yet!

When using the digital proportional servos, keep the elevator throw down to  $\frac{1}{8}$ " up and down, as I have had the glider snap roll in a landing pattern at high speed in a steep bank by applying full up elevator. (Poor pilot technique, or is that what you call a "thumb glitch?")

#### Construction

The construction is very simple and requires little explanation. The wing is skinned top and bottom, Ken Willard anti-warp style, and is quite light and rugged. Use  $\frac{1}{16}$ " medium balsa for the skins.

The fuselage sides are  $\frac{3}{32}$ " medium balsa with  $\frac{1}{16}$ " sheet top and bottom applied with the grain crosswise. The control system is simple and clearly shown in the photographs. The elevator servo is fixed and linked to the sliding rudder servo via  $.045$ " music wire. Pushrods are  $\frac{3}{16}$ " square hard balsa, with Kwik Links at the servo end, and wire keepers soldered to the control horn end. The control horns, themselves, are cut from the corners of a plastic box, and the holes made with a piece of heated music wire.

Super MonoKote was used to finish the model, because it is expensive, quick, easy to use, and doesn't stink up my apartment.

Build a Little "V", heave it off a cliff and try your hand at slope soaring!

