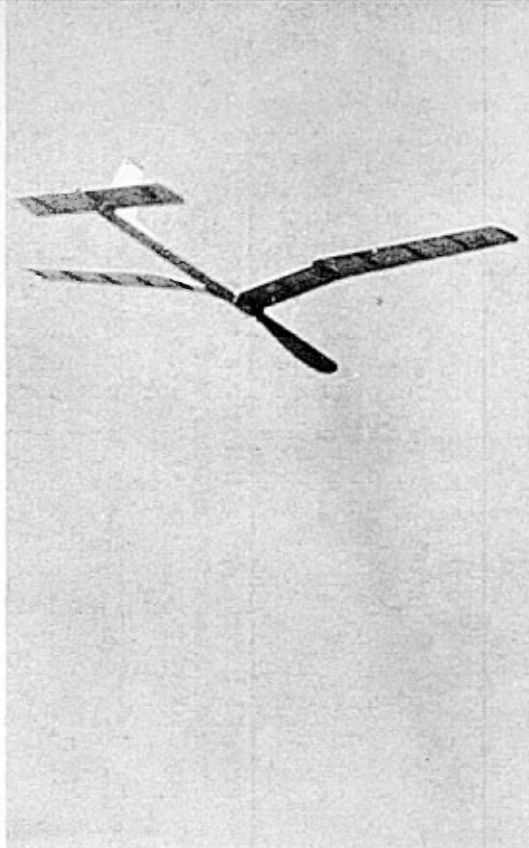


Right: Lil Nordnick's gull wing and droop snoot fuselage give it rakish sailplane lines which will please anyone interested in building towline gliders. What's more, this 'un soars like a contest ship.



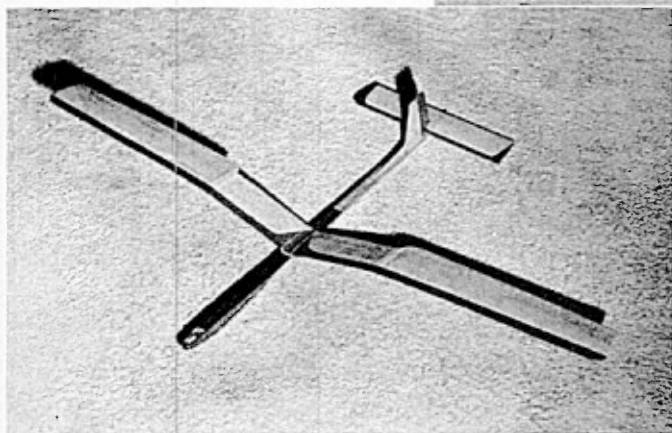
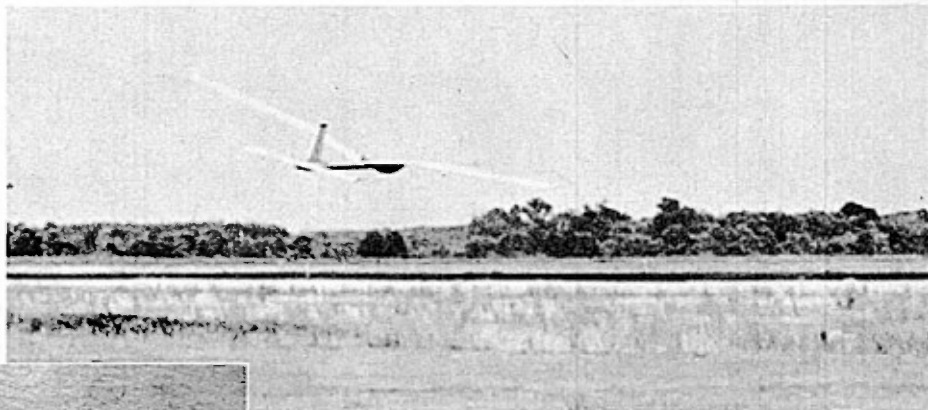
LIL

by Lynn East

NORDNICK

This article tells how to build a simple glider from a few sheets of balsa wood and cement

Right: Wheeling in a wide-open banked turn. Glide adjustment is made so that the glider hovers on the edge of a stall.



Above: Few gliders lend themselves to this simple and sturdy construction. Novice modellers can find this ship a worthwhile trainer which will fly well at little expense. Repairs due to faulty adjustment are also easy.

● Contrary to first impressions our model's name was not a play on the word "sputnik" for it was flying a year and a half before "sputnik" became a household word. It was, rather, a play on the Nordic glider class having been designed along similar lines.

Any similarity in performance was largely accidental because Li'l Nordnick was designed and built solely for a change of pace. We had hoped it would fly but weren't bent upon breaking any worlds records.

Use of sheet balsa throughout for ruggedness and speed of construction had a beneficial effect upon flight for the severe undercamber of the wing resulted in a very slow yet extremely high lift wing. The addition of the tabs to the outer wing trailing edges increase lift by acting as flaps.

A local modeller decided to build one after seeing ours perform and asked what material was required. We in-

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LIL NORDNICK

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WINGS AND STABILIZER

wings are built in four pieces joined when all ribs are in place.

Build the wing by cementing the trailing edge to the trailing edge of the other wing. Only one

FLY

time being. When dry, turn the panels over and cement the ribs the rest of their length. Pin the panels down to dry.

Set the panels up in their dihedral attitude and sand the root ribs so they'll make good joints. When the dihedral joints have been made, reinforce them with gauze or silk strips. Now, cement the outer panel trailing edge tabs in place in such a manner that they follow the curvature of the wing section and are not flat with the bottom.

Cement a piece of $\frac{1}{16}$ " sheet the width of the fuselage to the bottom center of the wing for support and then add a scrap piece of $\frac{1}{16}$ " for incidence. This completes the construction.

FINISH: Our model was covered with two coats of thin plasticized clear dope, lightly sanded with very fine sandpaper. Two more thin plasticized coats are then added. Trim was four normal coats of red dope on the nose which helps as part of the ballast.

A tow hook of $\frac{1}{32}$ " wire was bent and cemented in the spot indicated.

FLYING: Check to see that there are no warps in the flying surfaces. Add BB's, lead shot or solder to the nose cavity for ballast and, with the wing in the location shown, balance the model at the spot as noted.

Pick a calm day for test glides. Very gently launch the model with an easy sweeping motion. If you're near the balance spot, the model should very gently glide for from 75' to over 100' from an overhand launch.

A gentle stall can be corrected by moving the wing back $\frac{1}{16}$ " at a time. A dive can be corrected by moving the wing forward $\frac{1}{16}$ " at a time.

On calm days adjust the model to where it is almost ready to begin a slight stall. On windy days the opposite is necessary.

When taking the model up on a towline be gentle and go slow. Pulling or running too fast will tend to cause the wings to flutter and you'll lose about half your altitude before this stops. Once you've mastered getting a ship as light as Li'l Nordnich up we feel certain you'll be pleased with the performance.

BILL OF MATERIALS (Balsa used throughout)

3— $\frac{1}{8}$ " x 3" x 36" All surfaces, ribs
Balsa block; cement; $\frac{1}{16}$ " dowel; dope; $\frac{1}{32}$ " wire;
rubber bands; ballast.