



RM TEST REPORT

Sterling LANGER

built and flown by
PETE MORGAN

THE STERLING *Lancer* is described as being a 62in. span 700sq.in. contest/sport model for .60 engines, with an all-up weight of 6½lb. The kit includes everything except tank, wheels, glue and covering material, and this is a real "modeller's model"—the box is crammed with top quality balsa and plywood—masses of it, die-cut for ribs, formers etc. And, believe it or not, no foam or plastic in sight!

The die-cutting I found to be superb, with all parts requiring only a push to separate them from their sheets. Even the ¼in. ply formers needed only slight knife assistance. Shaped leading edges, strip ailerons, and cast aluminium motor mount brackets were also included, together with control horns and quick links.

Getting it together . . .

Whilst definitely not one of those "squirt-the-glue-in-the-box-and-shake-to-assemble" instant kits, it nevertheless goes together surprisingly quickly, construction being simplified by the use of a numbered component system of assembly, tied in with exploded views on the plans. Commencing with the fuselage, I

ran a trial assembly of all parts before reaching for the PVA, and found that only a slight sanding of the formers was required for everything to fall into place. Care was needed to avoid a "banana" planform, however, as one side was harder than the other. Fitting the top blocks was straightforward, but lots of pins and Sellotape were needed to hold the spindle-moulded decking in position.

The wings are built in two panels and then joined (although there is no dihedral), and are of traditional built-up structure, with upper and lower mainspars, leading and trailing edges and capping strips. The ribs have jiggling tabs cut integrally which, for building purposes, convert the section to a flat-bottomed one, until removed on completion. The system works well and results in a very true wing, easily built.

I did have a little trouble with the leading edge sheeting, which was bowed, resulting in curved edges. Fortunately these sheets were just wide enough to allow the necessary trimming up to be done.

The fin is sheet balsa and the tailplane is built-up as a flat plate

structure with sheet covering. In joining the fin and tailplane to the fuselage I found it necessary to cut away the part of the fin which should go down into the fuselage. Double checking with the plan brought to light no other way of doing it. Anyway, it seems strong enough in spite of this.

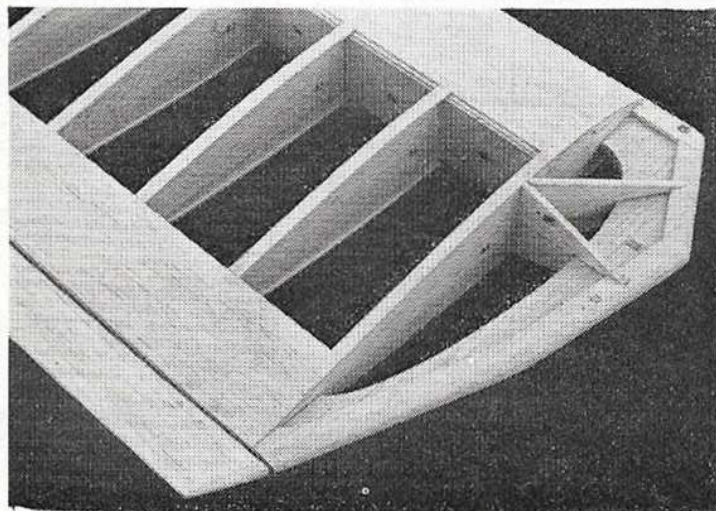
Finishing and installation

I covered the wings with nylon, applied wet, and the fuselage and tail with heavyweight Modelspan tissue, doped on. One coat of sanding sealer on the fuselage and fin was followed by two coats of blue dope, brushed on, then finally a coat of TufKote fuel-proofer. For the wings and tail I used white U-Spray cellulose aerosol, several coats being necessary for thorough coverage.

I placed my servos across the fuselage, rather than fore-and-aft and, since the battery would not go under the tank, I used a ¼in. ply bulkhead to create a battery compartment at the front of the wing seat. With the radio installed and my Merco 61 Black Streak up front, a balance check showed the c.g. to be too far back. Eventually 7oz. of ballast were needed at the front bulkhead to get things according to the plan. The finished model, including ballast, came out at 7½lb., and I feel I was maybe rather too liberal with the colour finish!

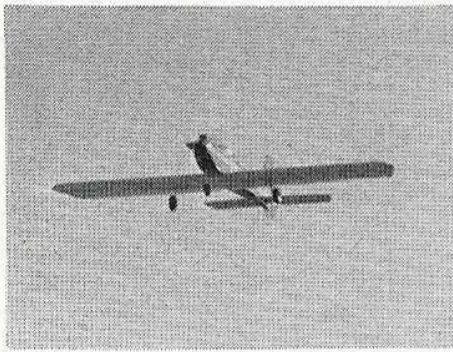
Flying

With the motor running sweetly, I taxied the *Lancer* out to the take-off point and checked the controls one final time before opening up the throttle. The model quickly gathered speed . . . I corrected a slight swing to the left . . . fed in a little up—and it left the ground smoothly in a shallow climb. After gaining height, a touch of right

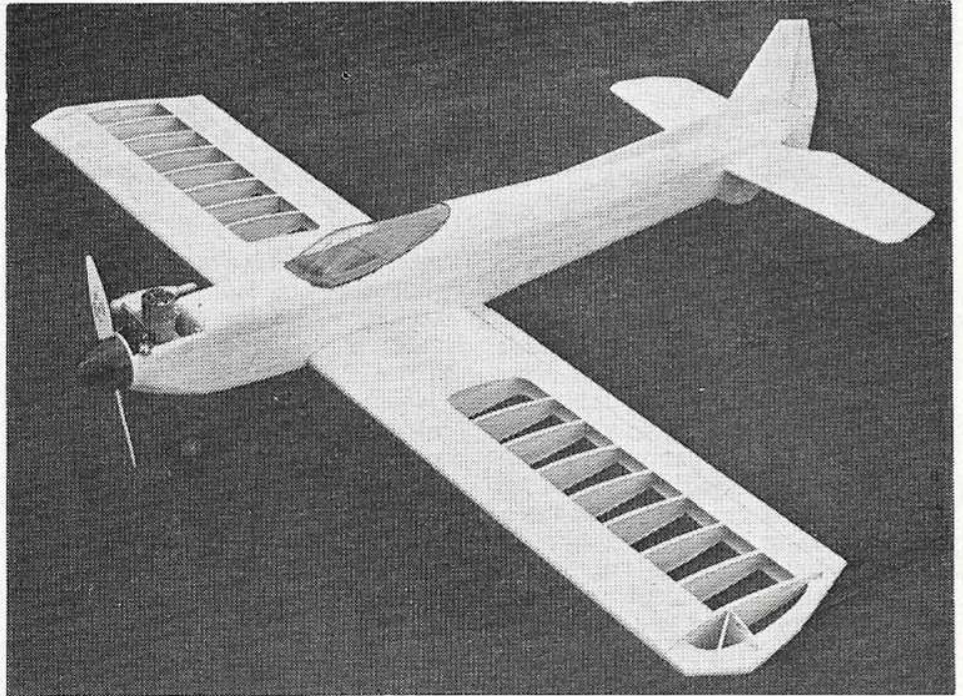
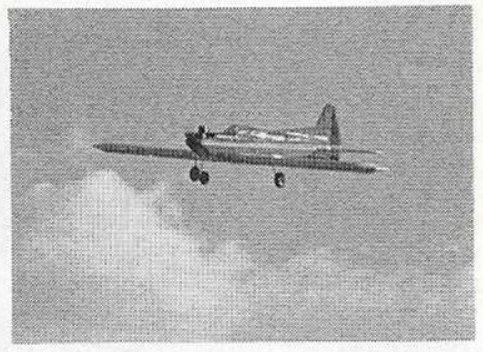
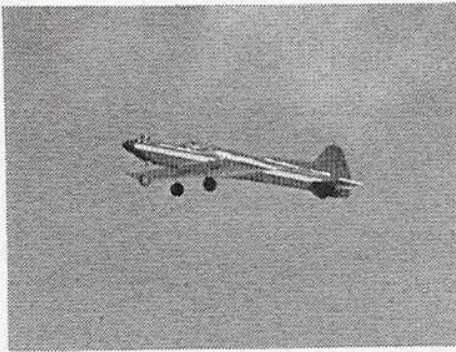


Above: with everything checked, our reviewer, Pete Morgan, is all ready go go. We even got some good weather!

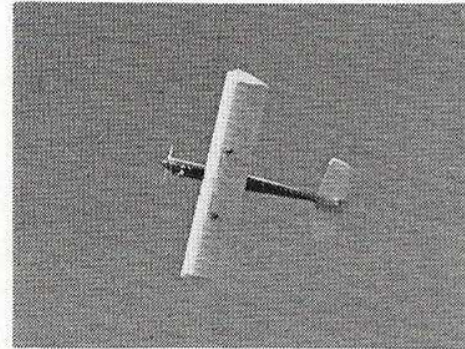
Left: close-up of the wing-tip, taken during construction, shows the very 'traditional' design of this part. It's nice building jobs like this, says Pete.



The *Lancer* looks quite distinctive in the air, as these fly-by shots clearly show. Dig that highly distinctive fin!!



Ready for covering, the "all-built-up" structure of the *Lancer* is shown up well in this view.



aileron and down trim were necessary for hands-off flight, and then a few circuits under full power convinced me that the *Lancer* was a very smooth yet responsive flier.

After throwing the machine around for a while, I slowed it down and found that the low speed response was very good. I then sent it climbing almost vertically at full bore, to gain height, after which I slowed the motor and slowly fed in up-elevator to try the stall. The model seemed to be moving very slowly indeed when the stall broke. Then the left wing dropped and, after a shallow dive, on opening the throttle the *Lancer* recovered with very little loss of height.

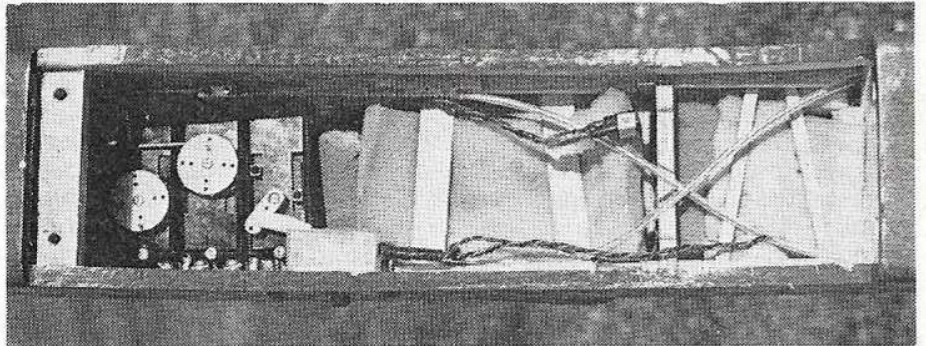
After a few low, slow passes—just to appreciate how she looked in the air at close quarters—I took her out and started a landing pattern. Half throttle . . . then, shutting the motor right down on the final approach, I flared out and made a very presentable first landing—or so the on-lookers told me.

Summary

The *Lancer* is a traditional balsa model, with which Sterling have successfully employed a numbered assembly system to ensure straight forward, rapid building. The completed model flies very smoothly and, in the right hands, should do all the stunts in the book. I am certainly looking forward to using my next few gallons of fuel in this one.

Manufacturer: Sterling Models Inc., Philadelphia, U.S.A.

Distributor: Ripmax Models, Ripmax Corner, Green Street, Enfield, EN3 7SJ.



Pete fitted his servos athwartships—and buried the receiver and battery in plenty of foam. He made a slick job of the blue and white colour scheme, as shown below.

