



FULL SIZE PLAN

Noel Shennan's **CRICKET** A tough 32 ins. span free-flight sportster for .8 c.c. engines

PERHAPS I can blame the design of this little machine on Leroy Grumman, for it was certainly a liking for fat bellied Grumman fighters of the pre-war period that guided my drawing instruments when *Baby Dumpling* was produced. This was a biplane and apparently the combination of two wings and bulging fuselage was too much for some people as witness the many rude comments I received!

Stung by these unkind words, I took the plan of the *Dumpling* and thinned down the lines. Somewhere about here the lower wing got lost and after walking three times around the drawing board, I realised that the nose was too short for the motor I intended to install. So, Cyrano. All serene so far. Showed it to a couple of mates, expecting at the very least a small word of appreciation. Huh! "Looks O.K. I suppose, but the fuselage is a bit fat." You can't win; my next design will be a thinned-down *Cricket*! There should, incidentally, be no problem involved in converting the *Cricket* for lightweight R/C!

Construction of this little bird is pretty easy, there are no tricks. The only part where any sequence is necessary is around the nose. Here you have to first cut out bulkheads F1 and F2, birthing the landing gear wire to F2. Cotton will do for this job, but I prefer to use thin copper wire and have never yet had a gear pull out. Fit the bearers and glue up F1, F2 and bearers as a unit. Glue the fuselage sides to this assembly fitting the other bulkheads in place later.

If you are using a radial mount motor place the firewall bulkhead in a position to suit your motor and behind it glue $\frac{1}{4}$ in. balsa doublers on the fuselage sides, extending back to F2. These doublers should be full fuselage depth. Use plenty of glue. When you have the fuselage bottom in place go over all visible joints with more glue. After that the fuselage top sheeting can be positioned. Sand off all sharp edges.

A point here regarding finish. If you go to a little trouble and sand the sheet parts first you will get a far better finish. This is largely because when you sand on the completed model the balsa is only supported in local areas and you tend to sand more off these spots than the flexible places. The remedy is simply to lay the un-assembled balsa parts on the board and sand lightly using a fairly fine sandpaper and a sanding block the improved results will prove worthwhile.

The wing construction is just a bit unusual in that a T-spar is

used. The spar is $\frac{1}{4}$ in. sheet balsa, and fits into the rib cut-out with no trouble. Again glue well. Remember, the vertical component of the spar goes into place first!

Lightweight Modelspan is used to cover the entire aircraft and this *does* include the fuselage. Personally I prefer to use starch paste or a commercial paste as an adhesive rather than dope. Before you tissue cover, however, clear dope all exposed framework and lightly sand when the dope is dry. This cuts off the balsa whiskers that spoil many a finish.

The type of wheels you use are optional, but keep in mind that these can be used to get the centre of gravity into the right place. This depends on whether the motor is light or heavy, so balance finally with a heavy or light pair of wheels. Don't forget to put the prop on when you are carrying out that final balancing . . . it does have some weight! Paint the model to suit your tastes, the original is yellow with red trim.

Spats are shown on the plan, but the photo shows a modified version without them. The explanation is that the undercart was moved at one stage and the spats were never replaced. The spat fixing shown on the plan will be quite strong enough, so long as plenty of glue is used.

Set up the motor with two washers under the rear of the lugs for downthrust and a small amount of right sidethrust. Hand glides will give you some idea of the trim for the stabiliser, but don't forget, when trim is finalised after power flights, to cement in any packing pieces used. The model should fly in left-hand circles under power.

Finally, *don't* put too much fuel in the tank and *do* put your name on the model!

MATERIALS REQUIRED

All woods balsa unless otherwise stated.	1 sq. ft. 1/8 in. ply
2 sheets 3/32 x 3 x 36 in. medium	10 in. 14 G. wire
2 sheets 1/16 x 3 x 36 in. "	12 in. 1/8 in. dowel
1 sheet 1/8 x 3 x 36 in. "	10 in. 3/8 x 3/8 in. beech or ash
1 sheet 3/16 x 3 x 36 in. "	2 in. wheels, 1 pair
2 strips 1/4 in. sq.	1/16 in. ply 12 x 1 in.
1 length 3/4 x 1/4 in. trailing edge	Scrap block for wing and stab tips
	Celluloid for cabin windows
	Two sheets lightweight tissue.