

S. R. 71. "BLACKBIRD".

Some construction and flying notes.

Select only good quality straight grained medium grade balsa for the fuselage sides, splice join where shown on plan. Make sure a good joint is achieved.

For the wing core ensure that only light grade good quality balsa is used. It must be straight grained, all the lengths used must be of similar quality with regard to weight and cut of grain. Make sure it is of uniform thickness as stock size balsa does vary. Mark out the pieces with a biro pen or similar starting with the longest length, tape (with adhesive tape) to the next piece on one side only, tape the full length of the joint, then hinge back to reveal both sides of joint. Apply adhesive, hinge back to close joint removing surplus adhesive. Then apply tape to other side so that both sides are now taped, repeat this procedure until all the wing core is glued together.

White polystyrene foam was used on the prototype for the top of engines and bottom of fuselage. This can be cut to rough shape with "hot" wire cutter or fine hacksaw blade, final shaping can be achieved using good quality glasspaper on a large sanding block (starting with rough grade) use long "planing" strokes taking care not to "dig in". A satisfactory finish can soon be achieved with very little practice. Use copydex or unibond to bond to balsa, Any small holes can be filled with fine surface polyfilla, after the first coat of emulsion paint has dried. Use sparingly to save weight. It may be easier to cut bottom of fuselage from two separate pieces of polystyrene, join just in front of F.7.

The card used on chines was 230 micron vanguard (or similar) available from drawing office/ artists materials shops. Cut to shapes shown or slightly oversize test fit curving to shape before final fixing, unibond was used on prototype.

FLYING - Make sure that the model balances at point shown, also that model balances laterally i.e. that one wing tip is not heavy. For first flights at least, choose a good smooth slope with no obstructions etc. to ensure good smooth lift, and either soft ground or long grass to cushion any heavy landings, with a wind speed of at least 15 m.p.h. Launch slightly nose down of course (because of shape of model you will ideally need someone to launch for you). Fly model out from slope into lift. Do not try to "float" S.R.71 as it will almost certainly stall. The front fuselage and chines seem to generate a substantial amount of lift at even slight angles of attack, so keep airspeed up and model slightly nose down. S.R.71 is very responsive to only slight movement of controls so take it steady, however, the model is light (or should be) and fairly robust. The main risk to serious damage is diving into ground soon after launch due to over control.

Although S.R.71 was designed as a slope soarer it might be possible to bungee launch, the towhook would have to be placed in front of C.G. it might need to be adjustable to determine best position.

WARNING - Don't leave your S.R. 71. in bright sunlight for long periods, the black finish absorbing heat can cause warps etc. upsetting trim of model.