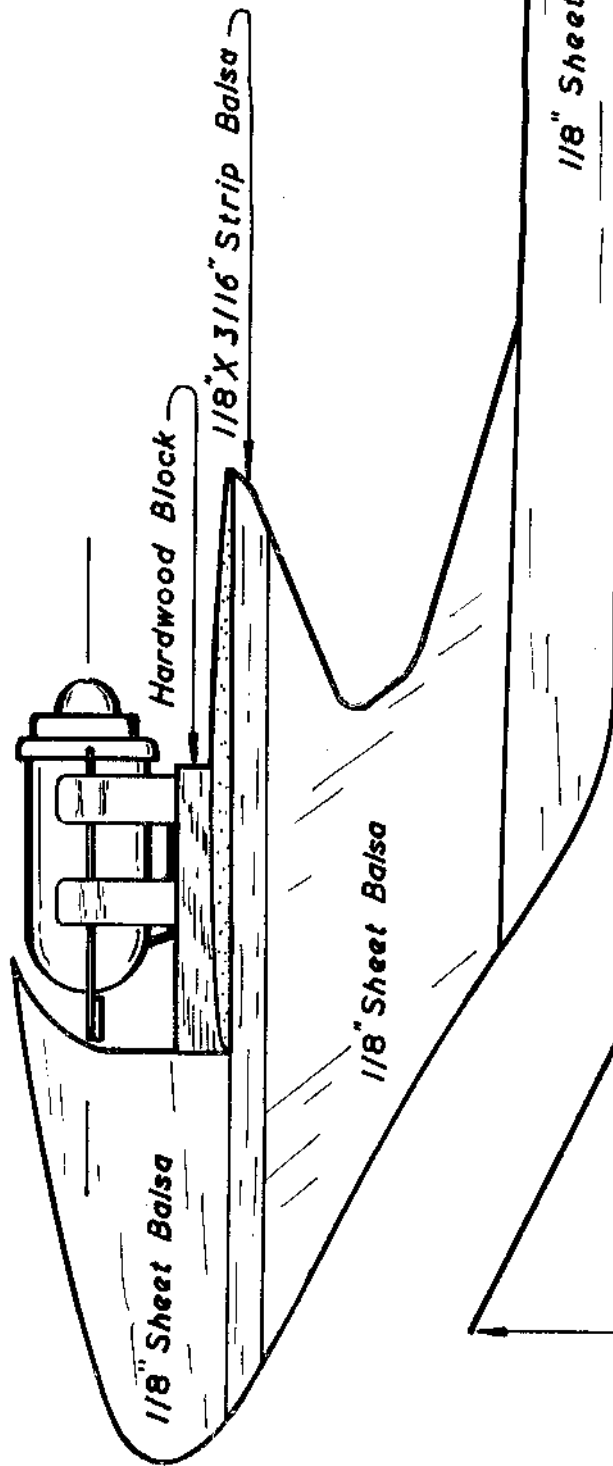
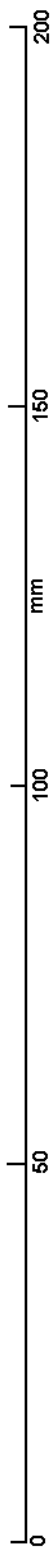


KEN KRAFT

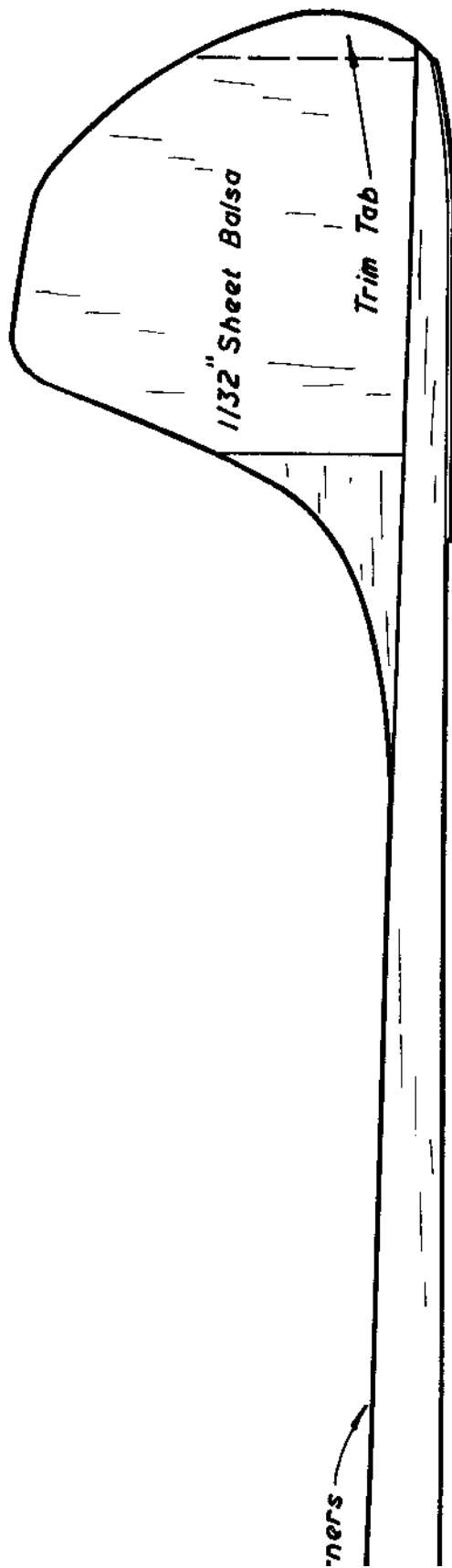
SPACE-

BY IAN DOWSET



Space-JET

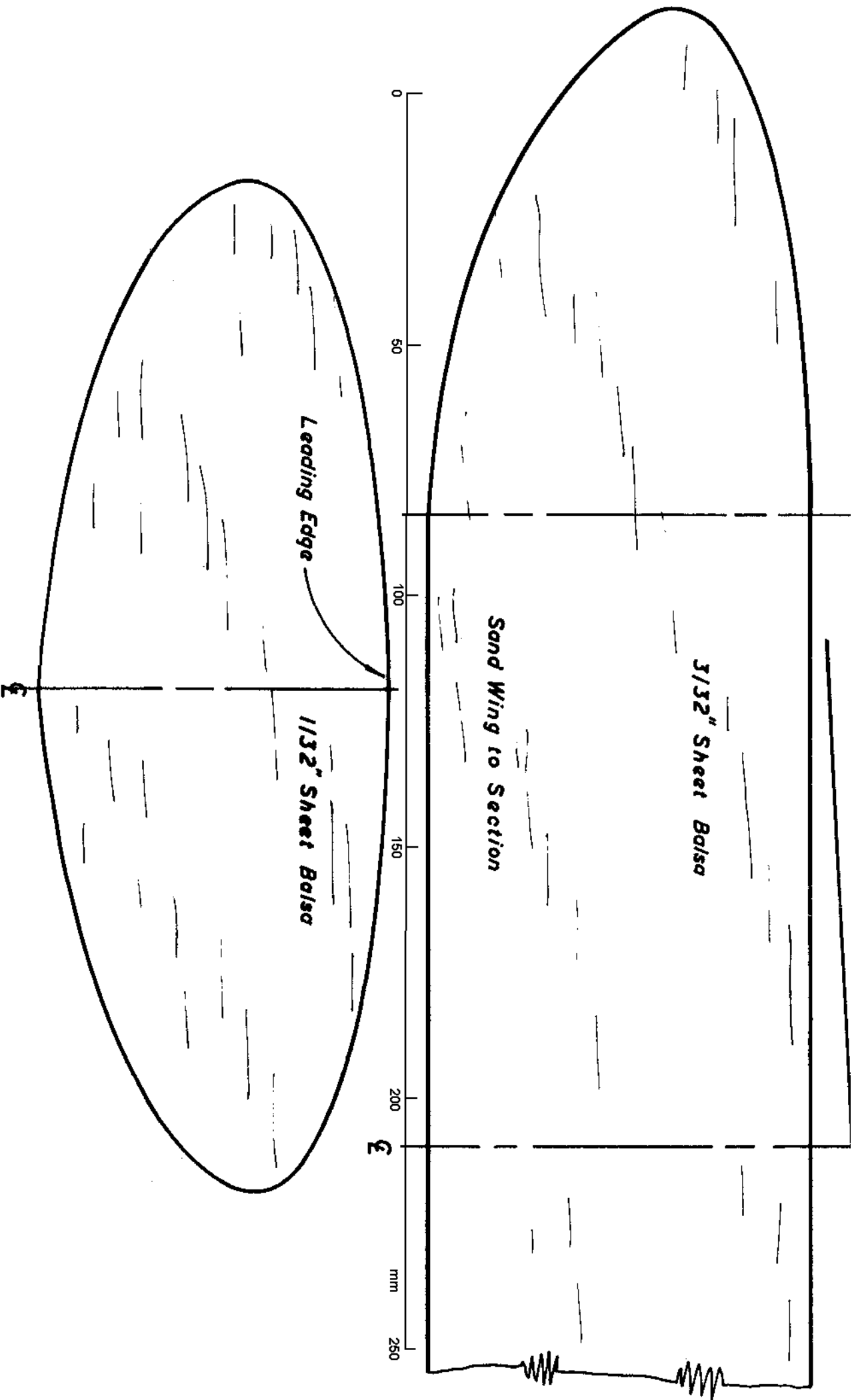
OWSETT



View of Tailplane
(and from front)

Space-Jet

This model is a high performance duration design utilising modern design techniques to obtain the ultimate power/weight ratio required for contest performance. It must be said that with this combination, whilst it is not essentially a beginners model, with accurate assembly and careful trimming it is not too difficult to build and will give a very high performance indeed.



Note: this page prints out slightly smaller than full size
to fit all the instructions on one sheet of A4 paper

Space-jet

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BEFORE YOU BEGIN

Read these instructions fully, study the plans and be sure that you understand the method of construction.

CONSTRUCTION

Mount plan on a suitable flat building board. Commence the construction by sanding the $\frac{1}{8}$ " sheet fuselage to conform to the shape on plan, pay particular attention to the radius on the underside at rear where trailing edge of tailplane is curved upwards.

Carefully remove upper forward fuselage parts from die-cut sheet. Cut to length $3/16$ " x $\frac{1}{8}$ " strip balsa wing seat and cement to top edge of pylon. Pin fuselage in position on plan and cement $\frac{1}{8}$ " sheet pylon in place, making certain that assembly is flat on plan. Cement upper forward piece of pylon in place and allow to dry thoroughly.

Remove fuselage from plan. Gently sand around outline and carefully radius all edges except at wing, tailplane and fin locations.

Remove wing panels from die-cut sheets. Sand wing panels to cross section shown on plan, ensuring that you are sanding left and right panels.

Sand wing roots to correct angle, pin one panel flat on board and join the two halves of wing together, blocking up tip to a height of $\frac{1}{8}$ ".

When dry score underside of wing at outer dihedral break, cement and block up each wing tip in turn to give 2" dihedral at each side while opposite centre panel is pinned flat on plan.

When the wing dihedral joints are dry it can be assembled to the fuselage, making sure that dihedral is equal on either side with fuselage held vertically. Make a good cement fillet along the underside of wing at junction with fuselage.

The tailplane and fin are die-cut from $1/32$ " sheet and only require careful removal, lightly sanding and cementing in place. Note that the tailplane is cemented onto the underside of the fuselage, with the trailing edge curved up to conform to the fuselage shape. Position so that the tailplane is tilted parallel to the left hand centre-section of the wing when viewed from the rear.

Sand underside of the hardwood motor mount to a shallow vee and cement in place on centre joint of the wing. Screw

clip onto motor mount with screws provided, in position shown on plan, placing small piece of asbestos between clip and block as heat insulation.

Finally remove backing from pressure sensitive foil and apply to centre section of wing behind motor mount. This is to prevent wood from scorching through heat from the jet.

FLYING

It has been found with the prototype models that the optimum point of balance is 30% of the chord back from the leading edge of the wing. This should be checked with a loaded motor in position. It may be necessary to add plasticine to achieve this.

First test glides must be made with motor fitted and pellets loaded.

Gently launch the model into wind with the nose pointing slightly downwards. A smooth glide should result but you will notice that the forward speed is quite low. Best results will be obtained with the c.g. in the previously mentioned position but possibly the trailing edge of the tailplane will have to be curved up a little more or reduced slightly to achieve perfect trim. At this stage rudder offset should be introduced by bending the trailing edge of the fin to the right, do this a little at a time until the hand glide has a definite tendency to turn to the right.

You are now ready to commence powered flights. Use only one fuel pellet for the first flights to reduce the duration of the motor run, light the wick and when thrust has developed launch gently. The wind direction in relation to the launch is important. Launch model slightly crosswind to the right, and with the right hand wing a little lower than the left so that the model is already in a gentle bank to the right on launch.

If the model tends to stall under power, increase the turn by bending the rear edge of the fin a little more to the right to reduce the diameter of the climbing circle.

Once the model is trimmed correctly for both flying under power and gliding, it may be flown with two fuel pellets in the motor for maximum performance.

In conclusion one word of advice, put your name and address on this model, as when trimmed correctly it has a very high performance indeed and may well fly out of sight.

Drawn by Cliff Goater.