The SPRENGBROOK "MINI-SPORT"—

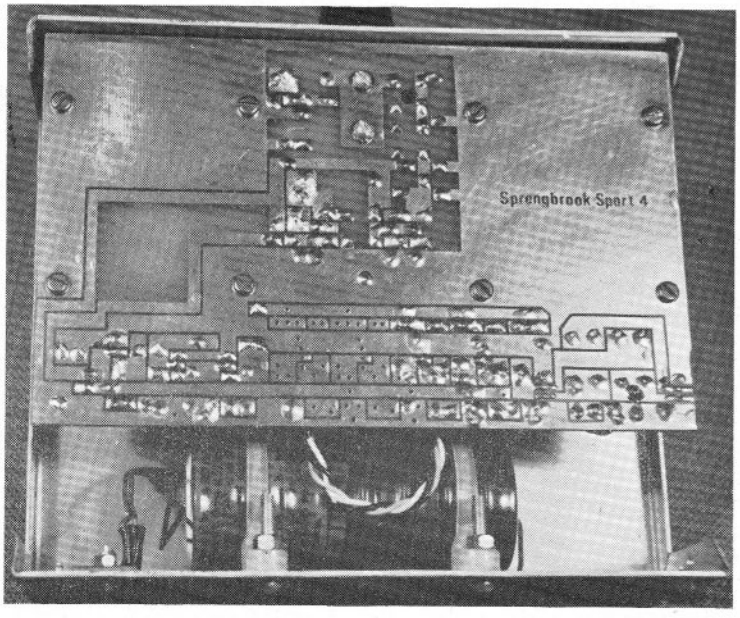
a digital proportional outfit that is "extensible" — from one to four functions

WHILE it is accepted that proportional control is the modern ideal, not every modeller wants, needs or can afford four functions. For boats, or gliders, for example, two functions may be all that is necessary, so why pay for extra channels ? Virtually all sets can now be bought with one or more servos as required but if you are going to stay with a two-function system for some time, then why pay for extra electronics that will not be used until you convert to three or four function system. The Sprengbrook Sport system provides for such people by offering the outfit as a two- or three-function device, which may be extended at extra cost only when needed.

The review outfit was intended for rudder and throttle operation, the left stick having a ratchet instead of a centring spring, such as would have been supplied for use in a glider, for the elevator function.

Resolution is good, and smooth-acting servos follow the sticks with precision.

The outfit can be supplied with Xtals on any of the twelve spot frequencies.



TRANSMITTER

Two dual-axis sticks are fitted, but each is "gated" to provide a single function, the sticks being factory converted to dual-axis if the "add-on" facility is incorporated. Both functions have electrical trim, which gives a servo movement of about 1/7th that of the total available.

A centrally placed meter indicates R.F. output and a sideways slide switch is used to turn the Tx. on. There is no clear indication of the "on" position, other than a small red dot which cannot be seen at certain angles.

The case is made from cedar red vinyl clad aluminium, and is in two parts, secured with four P.K. screws. The circuit board is mostly of the maximum copper layout to a rectangular design. It screws onto the backs of the stick units. The extra trim pots are side mounted, but accessible at an angle under the edge of the board. A 9.2v. Deac is mounted in nylon clamps on the bottom of the case, together with a polarised charging socket.

Size: 6½ × 5½ × 2in. Sticks project 1¼in. Screw-in chrome plated telescopic aerial 55in. long, retracts to 7in.

Weight (with Deac): 1lb. 15.8oz.

Current: 110mA.

RECEIVER

Double tuned (pre-selector) front end, special clipper circuit for noise rejection, and S.C.S. ring counter all in a single-deck configuration, and enclosed in a stout plastic case, which affords good crash protection. An unsealed version was examined and is very neatly assembled, as shown in our photographs.

Size: 2¼ × 1½ × 25/32in. Harness 3½in. long, with miniature block connectors.

Weight: 1.43oz.

Current (four function): 7mA.

SERVOS

The outfit supplied had the H.B. Micro-Lok servos. They are compact and neatly designed, with end mounting spigots, which also serve as pinch lugs for securing the halves of the case, and onto which a pair of nylon clamp rings fit for this purpose. The spigots fit spring steel mounting brackets, which offer shock protection in an endwise direction and enable the servos to be changed from model to model quickly.

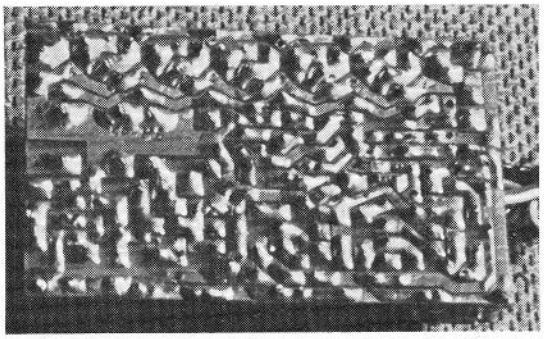
The servos have twin linear outputs operating in opposite directions, each having two take-off holes. There is an external adjustment for centring, this being the end of the pot shaft, driven via a slip clutch. With the equipment switched off, the slotted end of the shaft is turned a fraction with a screwdriver, which is then withdrawn and the effect noted when switched on. If any attempt is made to alter the centring with the equipment switched on, it will be found that the smallest adjustment will cause the servo to move to one end while the pot is held still.

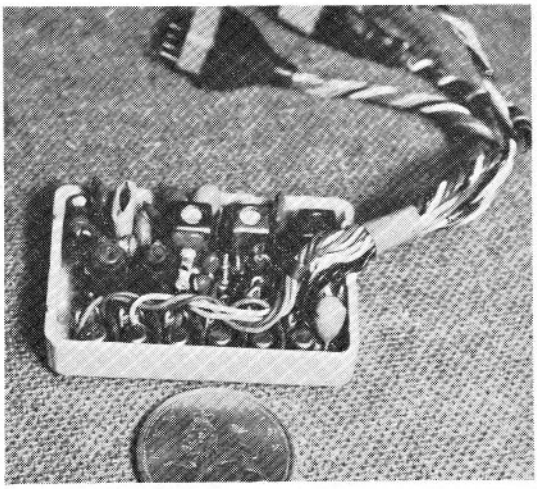
Size: 2 1/16 (plus 3/32in. spigot each end) × 1 5/16 × ⅞in. Output lugs project ¼in. Cable 6in. long, terminated in miniature polarised plug.

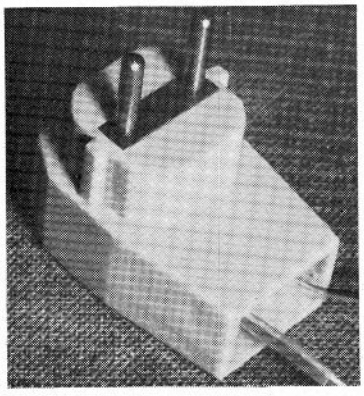
Weight: 1.9oz.

Transit: ¼in. plus 5/64in. trim. Time: .5sec. unloaded.

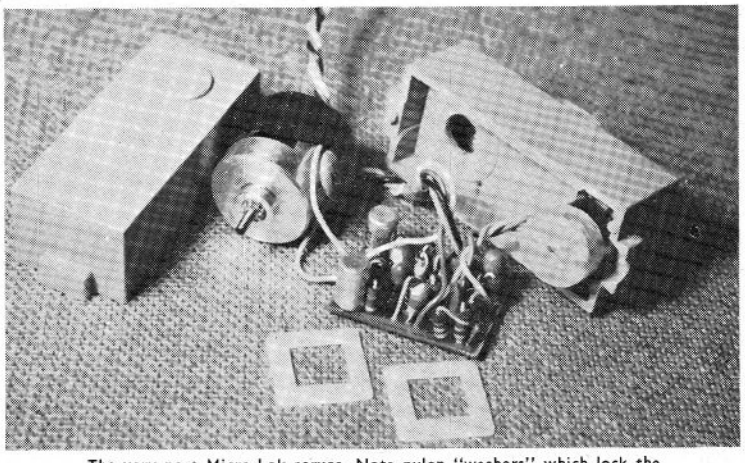
Power: up to 5lbs. static.



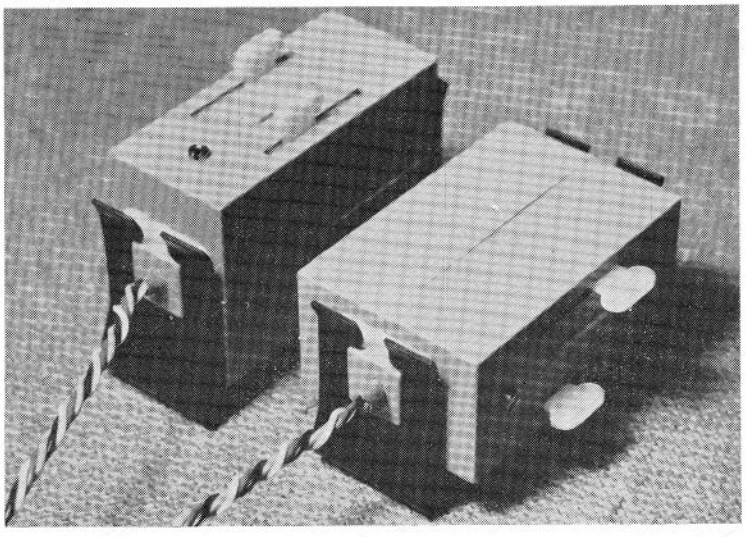




The neat receiver arrangement and workmanship is shown above. Left: the compact charger unit.



The very neat Micro-Lok servos. Note nylon "washers" which lock the two halves of the case together, also the screw for adjusting the centring.



SERVO MOUNTS
Twin mounting bracket holds two servos upright, four hole fixing via grommets (or tape).

Size: 2½ × 1 13/16 × 1¼in.

Weight: 0.42oz.
Single mounting brackets, three hole fixing, short for side mounting saves ⅛in. height.

Size: 2⅜ × ⅞ × 13/16in.

Weight: 0.2oz.
Single upright bracket—

Size: 2½ × ⅞ × 15/16in.

Weight: 0.21oz.

DEAC PACK
The slim-line pack contains two stacks of type 500 Deac cells side by side, and carries the switch harness.

Size: 2⅞ × 1½ × 15/16in., harness 8in. and 6in.

Weight: 4.9oz. inc. switch harness

FLYING WEIGHT
Checked weight with two servos and 500 Deac pack 10.5oz. inc. double bracket.

FLIGHT ENDURANCE
With 500 Deac: 3½-4 hours per charge (four function), slightly more for two function.

CHARGER
The charger is a self-contained dual output device which plugs into the 240v. mains via an available voltage dropping adaptor. As supplied, the polarised plug for the Tx. socket was on a separate cable, which must be connected to the appropriate wires from the charger.

MANUFACTURER AND SERVICE CENTRE
Sprengbrook Precision (Brighton) Ltd., 15A Victoria Road, Portslade, Sussex.