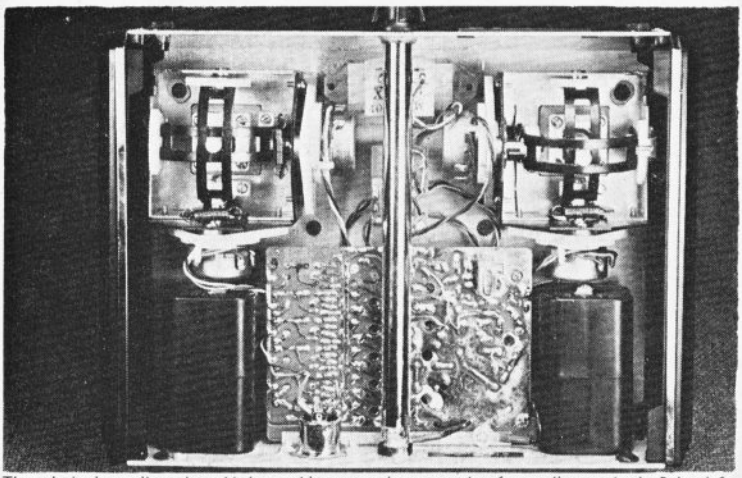
the outfit on the cover!

the latest 4-function OS offering

imported by KEILKRAFT

O.S. COUGAR *Mark II*

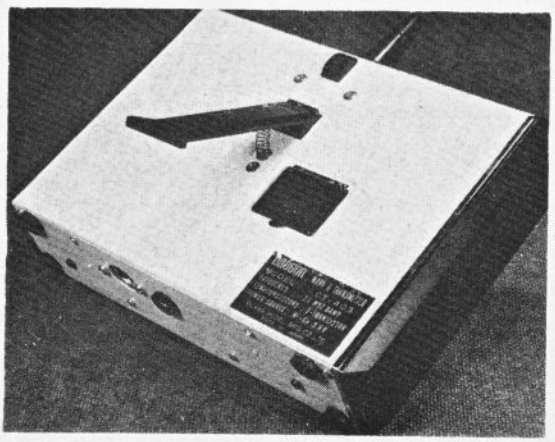


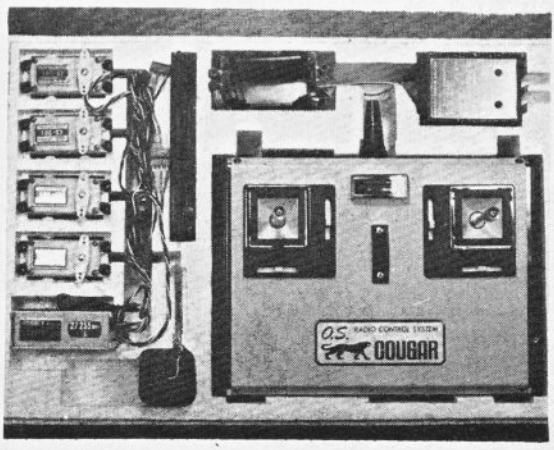
The relatively small p.c. board is located between the two packs of pencell type nicads. *Below left:* prop stand springs out when catch is released—note hinged access door to crystal (though only one pair supplied). *Right:* outfit as it comes, in foam box.

THE OS Cougar evidences much detail consideration in the finer points of practical radio control design and manufacture. The precision and 'fitness for purpose' of each part and assembly, shows that the first consideration had been trouble-free operation under exacting conditions. Here is a unit with excellent resolution and a smoothness of operation, and balance of all the transmitter controls, which inspires confidence as soon as it is handled. The general layout follows traditional practice, the transmitter is readily adaptable for Mode A or Mode B operation, servos have rotary output, the system has interchangeable crystal facility, and is extendable to five-function on return to the service department.

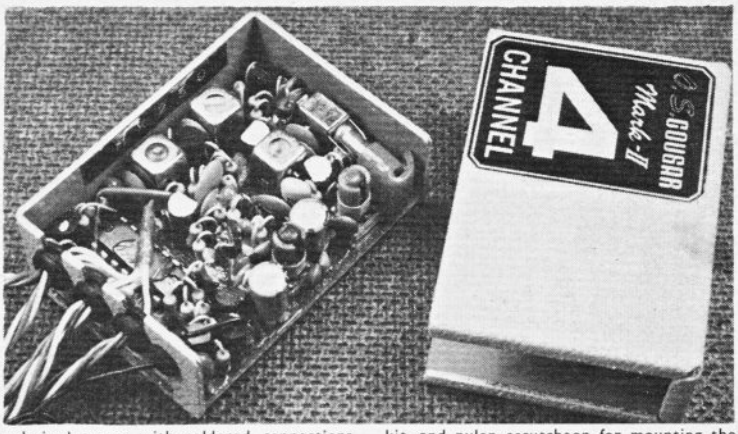
TRANSMITTER

The electronics are carried on a p.c. board of quite small dimensions, giving plenty of room for access to the stick unit mechanics. The latter have all metal frames, yokes, centring arms and ball-joint bearings, the latter being very highly finished. The trim mechanism employs nylon mouldings and is very smooth and positive in operation. The stick centring springs may be adjusted to control the amount of stick effort required; also the sticks themselves are adjustable in length. Plastic escutcheons incorporate the trim





levers, and are set in a vinyl clad aluminium case with plastic end caps. An output meter is positioned between the sticks and the top of the case. There are two plugged holes, for the insertion of the control for the optional fifth function, at either side as required. The rear panel of the case is removable by withdrawing two PK screws, while access to the crystal is via a click-in hinged nylon hatch. On the back is a spring loaded prop stand, released by a slide catch and self-locking in the closed position. The aerial is supported in the bottom of the case and at the top with a nylon moulding, which fairs into a nylon aerial tip when retracted. The on-off switch is shrouded, and there is a charging connection in the bottom of the case for a Din plug.
Size: 8 x 5⅜ x 2in. (Sticks project 1 7/16 or 1⅝in. adjustable.
Aerial: 47in. retracting to 1⅜in.
Stick effort: typically 5oz. as set by manufacturer—adjustable.
Weight: 2lb. 1oz.
Power: 9v. from two separate 4-cell packs of pencell type nicads.



RECEIVER

The electronics are assembled on a 1/16in. glass fibre laminate p.c. board, enclosed in a really stout 16g. vinyl clad aluminium case. The input and output cables emerge from rubber grommets at one end, and the case has a wrap-around lid, which slides off to give access to the crystal socket. The components are bonded together with adhesive.
Size: 2⅜ x 1⅜ x ⅞in.
Cables: 6in.
Weight: 2·8oz.

SERVOS

These are rotary with double arm or disc outputs, giving an option of three different throws. The motor is fitted with a brass pinion driving a four-stage nylon gearbox, with stops on the final quadrant gear. The amplifier is discrete and has 4-wire supply requirements. The case is moulded in a resilient plastic with reinforcing webs at the lugs.
Size: 1¾ (+ ¼in. lug each end) x 1⅜ (+ ¼in. over disc) x ⅝in.
Cable: 6½in.
Weight: 1·8oz.
Throws: Disc—inner ¼in.; outer 5/16in. Arm: inner 13/16in.; outer 7/16in. Trims: approximately 1/16-⅛in. respectively.
Transit: 0·8sec. typically limit to limit loaded at 8oz.
Power: Outer hole of arm 2lb. 4oz. (approaching stall).
Resolution: better than 0·5%.

BATTERY & HARNESS

The four pencell shaped nicads are housed in a nylon box, with the cable exiting at one end. All plugs and sockets are miniature round pin polarised types, with soldered connections and sleeving shrunk over plugs and leads for support and grip when separating. The receiver output wires are colour coded to the stick functions. The switch is a multi pole double throw slide type, and there is a charging socket on one cable.
Battery Size: 2⅜ x 1½in. sq. cable 3½in.
Weight: 4oz.

ACCESSORIES

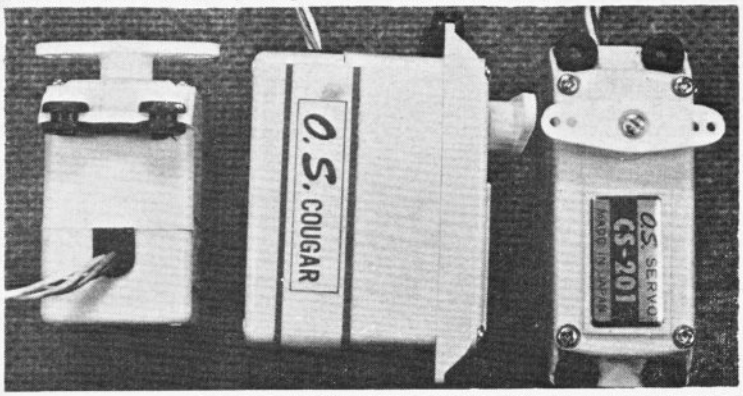
Each outfit is provided with a separate dual output charger, having L.E.D. indicators and integral (American) 2-pin plug. A servo tray moulded in nylon carries three servos and the switch—it can be cut down to suit only two servos. There is a remote operating switch kit, and nylon escutcheon for mounting the switch alternatively on the model. The aileron servo has a box type bracket mount. All servo mounts have spigots and washers ready for PK attachment screws (supplied). Each outfit comes with one pair of crystals and appropriate frequency pennant. The crystals are number coded and have coloured sleeves for Tx and Rx identification.

PAYLOAD

Typical airborne weight with 4 servos and tray: 13·2oz.

DISTRIBUTION AND SERVICE

E. Keil & Co. Ltd., Keil Kraft Works, Wick Lane, Wickford, Essex.



Top: receiver with cover removed—crystal at far end. *Above:* our "3-view photo" of servos. *Below:* top removed to show nylon gear train with stops on final quadrant gear. *Right:* the underside, showing discrete components in amplifier.