

Everything Under Control?



Ring out, O bells! Unfurl the flag! Shout the glad tidings from the housetops! "EUC?" gets more space each month . . . because you asked for it!

■ A "universal" transmitter has been made up by Clark Proctor (545 S. 10th St., Saginaw, Mich.) from a regular Babcock BCT-4 transmitter. To the front panel he added a closed-circuit jack, a two-circuit pushbutton, and a SPDT toggle switch. As seen in circuit below, the jack may be used to check B current drain, or to plug in a Beep-Box or proportional pulser. SW1 is the normal on-off control of the BCT-4; with SW2 in the "On" position, the transmitter sends out a steady carrier for use with the regular control stick and A.F. modulation. When this switch is turned to "Off," the RF may be interrupted by operating the pushbutton, to control a straight CW receiver.

Clark has also snapped the B connection clips in the transmitter together, and plugged in a heavy-duty power supply, which could be either large batteries or of the dynamotor or vibrator style. Note that the pushbutton P.B. must be of the type that opens one circuit and closes another, when the knob is depressed. Certainly makes a highly versatile transmitter. (Don't forget, though, that any alterations of this sort made on a commercial R/C unit will void the manufacturer's guarantee.)

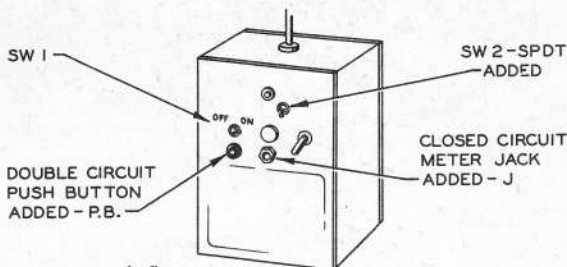
The Bonner rudder-engine system as shown on pg. 14 is now being used successfully by quite a few West Coast modelers. It is a better way to get rudder-engine control because to change engine speed the standard compound es-

capement requires the "pilot" to press, release, press, release, and press again, holding for approximately one second, and release. This is naturally more awkward than the quick blip used to change engine speed with the new system. Also the standard compound has rudder control positions 157 deg. apart which is less desirable than the 180 deg.

Webb Hill used this system to win a LARCS (Los Angeles Radio Controllers) contest at Miles Square. The quick engine speed changes made possible with this system allowed an easy touch-and-go landing despite the high wind. This control also permitted Webb to stop accurately at the required 50 feet for a prototype take-off. Darryl Bergstrom used this system to win a 1st at Los Angeles.

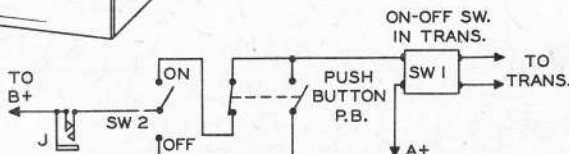
The 180 deg. compound escapements were formed by unsoldering the four-arm part from the standard Bonner Compound and substituting the joggled, two-arm part shown in the drawing. The neutral pawl is shortened slightly so that the joggled arm will clear it, thereby always providing right rudder as the next position after neutral. The cam on the speed governor wheel is so positioned that the contact points close momentarily just before right rudder.

In operation, a quick blip from the transmitter releases the crankpin arm from neutral. Then the receiver relay returns immediately to the normally closed contact position. This completes the circuit to the motor control unit be-



Here are several fine examples of the type of hints 'n' kinks contributions we welcome for this section. From \$15 to \$25 is paid for 'em in rough sketch form.

We need photos of interesting models for this section, as well as Model Boating, Model Car News and Hobby-Model World. We pay not less than \$10 for 1st picture used.





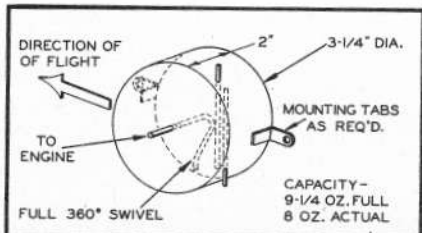
What channel you think they're on, Elsie?

cause the escapement contact points are closed momentarily by the speed wheel cam as the crank approaches right rudder. A pulsed signal (longer than a quick blip) does not operate the motor control because the receiver relay remains in the open position until after the escapement points have opened again. The signal must be a quick blip in order to permit the relay to spring back to its closed position while the escapement contact points are still closed. After a quick blip to change engine speed, the crank travels around to neutral again.

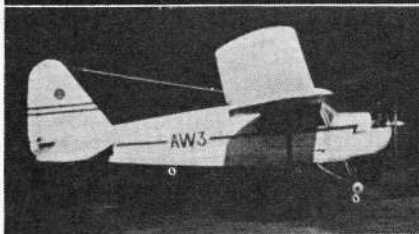
A modeler who has doubts about his soldering and mechanical technique is better off by not altering his escapements, but the system will provide the careful craftsman with the advantages described, for rudder-engine control.

"Triggering" is quite easy when flying with this system. However, when the "pilot" is used to keying a compound escapement, the tendency at first is to change the engine speed by mistake when left rudder is desired. Proper keying soon becomes second nature, but the modeler should practice keying on the ground before launching. On the first few flights, engine speed may be changed accidentally, until the new keying system becomes a habit. (Submitted by Frank Dazey, Redondo Beach, Calif.)

For those big stunt planes, we show a cylindrical fuel tank used by Ernie Kratzet (482 St. Clair Ave., Grosse Pointe, Mich.) and other members of the Radio Control Club of Detroit. Outlet to the engine is taken through a 360 deg. swivel tube, and note that the tank is mounted edgewise to the direction of flight. Ernie uses this tank in his big biplane stunter; tank has a capacity of about 8 oz. of fuel and was made from a tuna-fish can. Pressed-in rings on can ends add to rigidity, and the can Ernie used was 3 1/4" dia., 2" wide. Mounting tabs may be soldered on wherever convenient. The biplane has had its first flights incidentally, and seems to have real promise; has 1400 sq. in. of area, is pro-



EVERYTHING UNDER CONTROL?



Berkeley Buccaneer won 2nd in 1st international R/C event at Brussels, Belgium for French flyer. Uses split elevator tabs.



Ancient-looking German design, like most of its kin, fitted with two-speed engine, rudder and elevator controls.

pelled by a Fox .59, and weighs 12½ lbs. ready for action. RME.

Contests and Clubs. Organizational meeting was held at Walpole, Mass., and was attended by 27 modelers, with "proxies" from another 20 who couldn't make it. It was decided to go ahead with formation of a Radio Control Association for New England Area (official name not settled as yet) and temporary officers were selected, with John K. Ross—who had set up the meeting—as Chairman. Meetings will follow monthly flying sessions, and will rotate among various localities. Dues are to be decided upon, but initiation fee is \$2. Group decided to affiliate with AMA. New members are being solicited, and those interested may contact Mr. Ross at 23 Lantern Lane, Wellesley Hills, Mass. Club members will be insured 100%. Mr. Ross tells us that the New England R/C Championships are scheduled for Aug. 14 at Beverly, Mass., but exact location not yet selected. Keep in touch with him for full details.

Some news of doings in L. A. area comes from Bill Butler (8856 Earhart Ave., Los Angeles 45, Calif.). Bill is publicity man of this large and active group. He says a contingent took in the Turlock meet and brought home a fair amount of "bacon"—three out of the six trophies offered. Dean Kenney was first in Multi-Control, Harry Sprague 3rd in this class, and Vic Nelson was 3rd in Single Channel. There was a very high wind, but Howard Bonner put on a fine demonstration with his new shoulder-winger fitted with 2-channel equipment. LARKs meetings are third Thursday of each month at Parkview Playground, near MacArthur Park in L. A.

Monthly club contests are popular in the group, and at latest report, Dean

Kenney is top Multi-man, while Webb Hill has two "legs" on the Single Channel trophy. Dean has been using slightly modified Tuned-Relay receiver similar to that in May ATH. LARKs have been selected to run the R/C Event at 1955 Nats (to be held at Los Alamitos Naval Air Station) and Howard Bonner will be R/C Event Director.

This club has also been experimenting with R/C pylon racing in cooperation with Keith Storey of the F.A.S.T. group; they have tried to hold one pylon race each month, but wind has ruined this schedule. At the one race they were able to stage, Webb Hill was winner, and as might be expected, the big trouble was climbing against the wind on the upwind leg of the 2-pylon course. Keith has told us that the boys are all convinced this event will take a special plane; he says the feeling is that .19 is plenty of power, and in fact—you can get in plenty of trouble with an .09 racing plane! First running of the Pylon Race was made with regular sport R/C planes and there were six entries who flew, with 14 more ready to go, when the wind took over. Planes were flown singly against time, and while there was a bit of trouble with depth perception and anticipating the pylons, it is felt this will come with more practice. This event seems to be a lot of fun, and we hope to have more data on it, as soon as the LARKs and F.A.S.T. pioneers can run a few more races.

R/C League of North Carolina had 110 members at last reports, and meetings are being held 1st Sunday of every second month, with an all-day flying session first, then supper, and evening meeting. Group held its first Invitational R/C Meet over Memorial Day week end at Chapel Hill, N. C. (notes on this in

