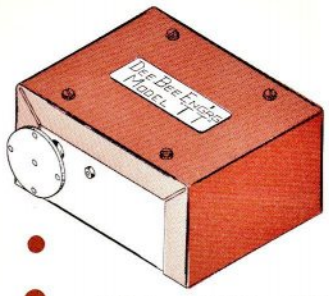
EXTRA

POWER
PRECISION
RELIABILITY



2¾ L x 2⅛ W x 1⅜ H

THE ALL NEW

DEE BEE

PROPORTIONAL SERVO

NOW for the *ULTIMATE* in R/C flying pleasure—
a fine *proportional* servo is available—
$14.95 each postpaid,
(Check or Money Order Only)

The Dee Bee "TT" servo has been developed especially for use in proportional control applications. Its design was prompted by the need of a better servo for use in the Dee Bee IV aircraft. More power at extreme positions was required than could be obtained with the standard home made servos used successfully in our slower, less agile airplanes, (namely the Dee Bee I, II, and III which were never released to the general public via magazines, plans etc.). A special centering system was designed, featuring a planned non-linear response; firm near center where precise control is required, and tapering off near the extremes, to allow rapid full excursion with plenty of torque where needed. This problem has been solved by use of a "twin tension" centering spring. This spring provides the output response versus stick movement that is necessary for smooth proportional control action. This servo was developed especially for TTPW use, but also is well suited to "Rudder Only" proportional use.

The mechanical design is simple and rugged. All shafts are bushed and gear centers are held to a close tolerance. A special stop has been devised on the low torque shaft, which takes the strain off the high torque output shaft. Electrical noise transfer is eliminated by use of a nylon gear in the first reduction stage. A spark suppression capacitor is built into the servo. Captivated, self locking, mounting nuts (4) are built into the servo base for easy installation in the aircraft, using #4-40 (preferably brass) machine screws.

The model "TT" servo is versatile --- we use it for rudder, elevator, and aileron control in its stock form. It follows pulse rates high enough to eliminate all wobble in flight, due to "flapping" of the control surfaces, heretofore experienced with other servos. Three of these servos are used in the Dee Bee IV, with VO 800 Nicad batteries, supplying 2.4 VDC on each side. Current drain is low enough to permit a full days flying on one charge and still have a substantial safety factor in battery capacity left. Temperature has no effect whatever on servo operation. Output is via a rotary coupling easily adaptable to either push or torque rod drive to the surfaces. Actual installation is shown on the full size Dee Bee IV plans.

This type servo has been flown consistently by Don Brown over a two year development period. Three "off our shelf" production models were flown by Don in his Dee Bee IV to the second place position in "Multi" at the 1961 NATS, which places him on the International Team for 1962.

Each unit is individually tested under actual pulsing conditions and is fully guaranteed to perform properly, if installed according to the instructions found packed with each servo.

DEE BEE ENGINEERING CO.
1102 SO. BROADWAY, PITMAN, N.J.

"EQUIPMENT FOR PROPORTIONAL RC"