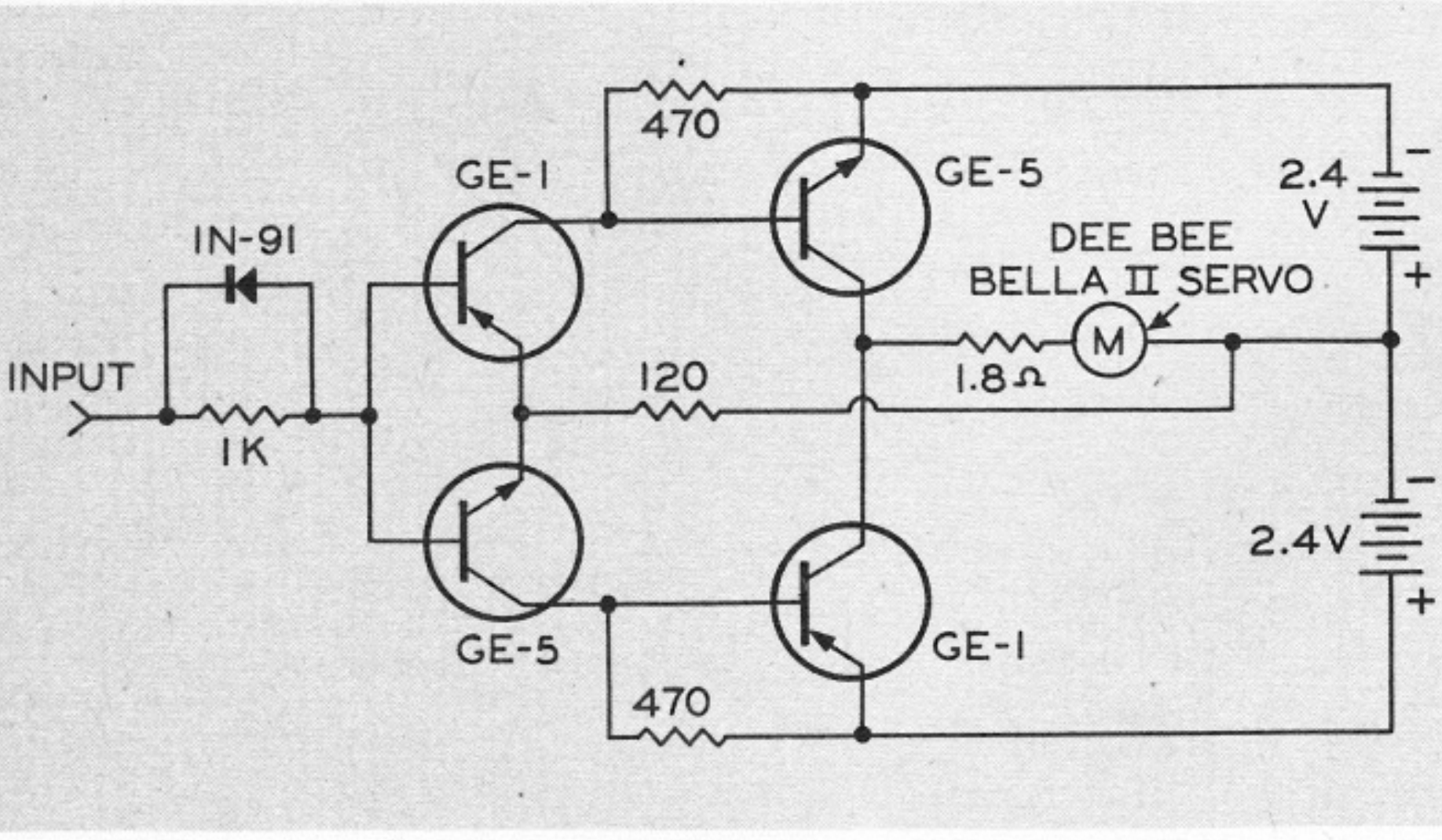
Servo Amplifier. Desirous of utilizing Bellamatic II servos with his Citizen-Ship AP transmitter and receiver, Paul Johnson (1500 Arthur Ave., Des Moines, Iowa 50316) schemed out the amplifier shown here. The transistors are G.E. replacement types, available in many radio service shops. At last reports the outfit had only been bench-tested, but Paul reports the servos operate beautifully, with no "wiggle" at all. Presumably he modified the Bella. II centering springs, via one of the methods we have illustrated in this space in past issues (or perhaps by utilizing the Dee Bee style of centering springs) but this matter wasn't mentioned. The 1.8-ohm resistor in series with the motor is the value specified for the Dee Bee "21" control system; this value allows plenty of servo power, but cuts current drain considerably. Without it the servo drive transistors would be pretty heavily loaded, and the servos would run hot. The circuit is very similar to that utilized in the "21" outfit, but the transistors shown here are very widely distributed.


470
GE-1
GE-5
2.4
V
IN-91
DEE BEE
BELLA II SERVO
M
INPUT
120
1.8Ω
1K
2.4V
GE-5
GE-1
470