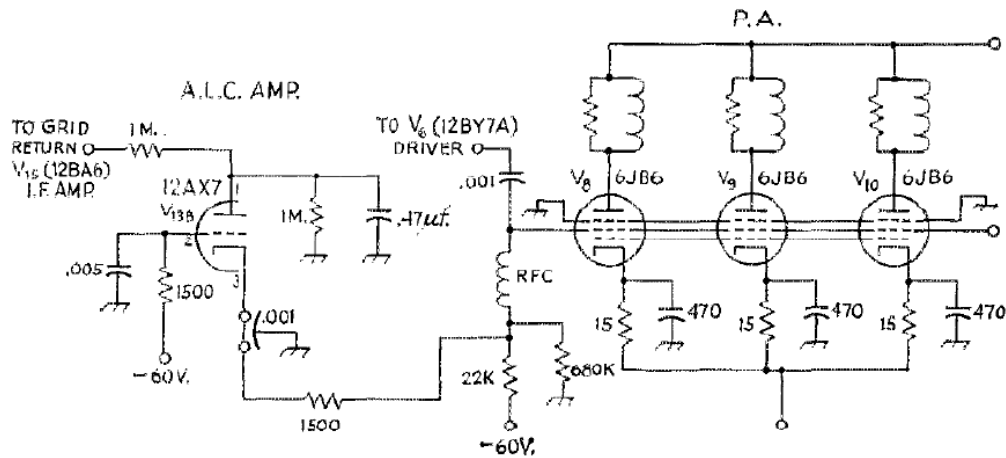
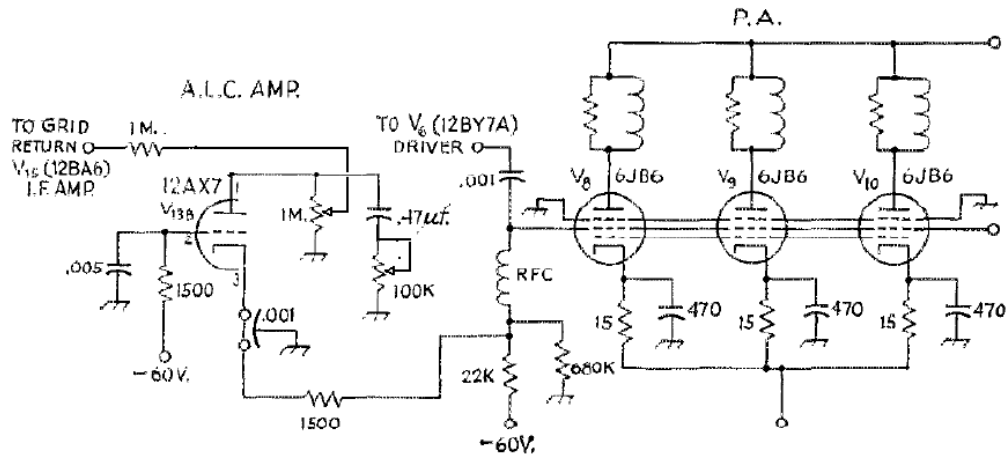


# TRANSMIT ALC LOOP GAIN CONTROL FOR YOUR DRAKE TR-4 TRANSCEIVER.

DRAKE TR-4 transceivers may exhibit anomalies in the modulation. The transmit ALC feedback control loop gain is very high because of the gain introduced by the 12AX7 triode. Remember that Heath transceiver SB-102 uses no additional loop gain in this part of the circuit. A high loop gain produces a great accuracy, but we may also have a possible impaired transient response. We need to optimize the loop gain without changing the time constant. Pole-zero compensation may be added like we have in the TR4-C.



Original TR-4 ALC circuit



New ALC circuit with loop gain control and pole-zero compensation.

Both 1 M resistors and the .47 uF cap are on the same board near the balanced modulator. Turn both 1M pot and 100K pot (R trimmers) for best modulation!

Best Regards. IN3IEX Giorgio...