## HFO / LMO Voltage Regulation For the Heathkit SB-300 / 301 Receiver

This modification will provide regulated B+ voltages for both The Heterodyne Oscillator (HFO) and the receiver LMO. This will completely solve the frequency shift between TX and RX solve the frequency shift problem when transceiving with the SB-400/401 transmitter on the 15 and 10 meter bands. Looking at the schematic of the SB-301 locate and replace resistor R18 with a 1K ohm 1 watt resistor. Then locate and replace resistor R219 with a 1K ohm 1 watt resistor. The attached .JPG scans will show the location of the zeners and where they are connected on the circuit boards. Two 60 volt 5 watt zeners were used for the HFO regulator, two 68 volt 5 watt zeners were used for the LMO regulator. The 60 volt devices are NTE-5149A and the 68 volt devices are NTE-5151A. These provide 120 volts regulated for the HFO and 136 volts regulated for the LMO.

Mark Graalman WB8JKR



