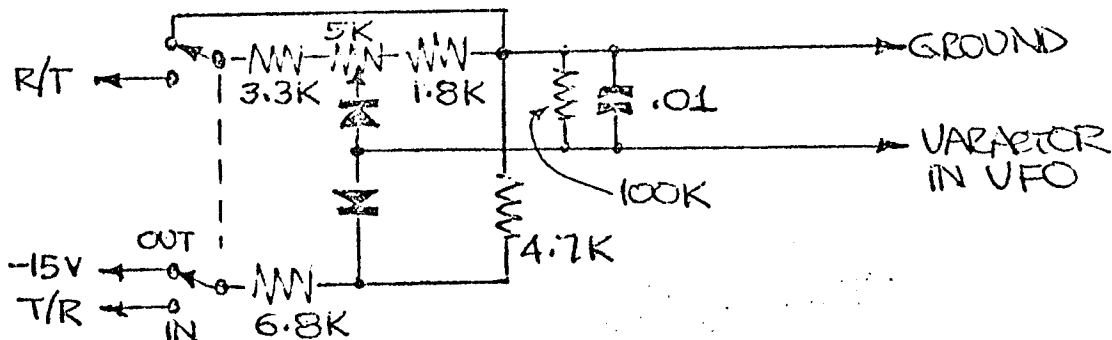


K6AQM reports that a defective socket for the 8072 caused loss of all output (no tension on socket pins 5 and 6). Moral: Don't overlook the obvious prior to extensive troubleshooting or purchasing replacement parts!

I have a couple of items this month concerning receiver incremental tuning (RIT). The first is from W7IV. In issue Volume II, Number 3, of S/1 NEWS a RIT modification by W7IV was described which utilized two transistors and a handful of resistors. Harry wrote me again and indicated that the transistors were not necessary. His revised circuit is shown below. Make the modification as follows:

Connect terminal 1 of VFO A, the FSK varactor, to a pin on J5, the accessories connector on the rear panel. Many of the present connections would never be used such as Front-end AGC. Disconnect one of these to free a pin (Make a note in your manual for future reference! ed.) All other necessary connections (T/R, R/T, and -15 volts) are already on J5. The RIT potentiometer and components now can be assembled in a small "minibox" and placed near the CX7. Harry did not indicate if the circuit was built up and tested.

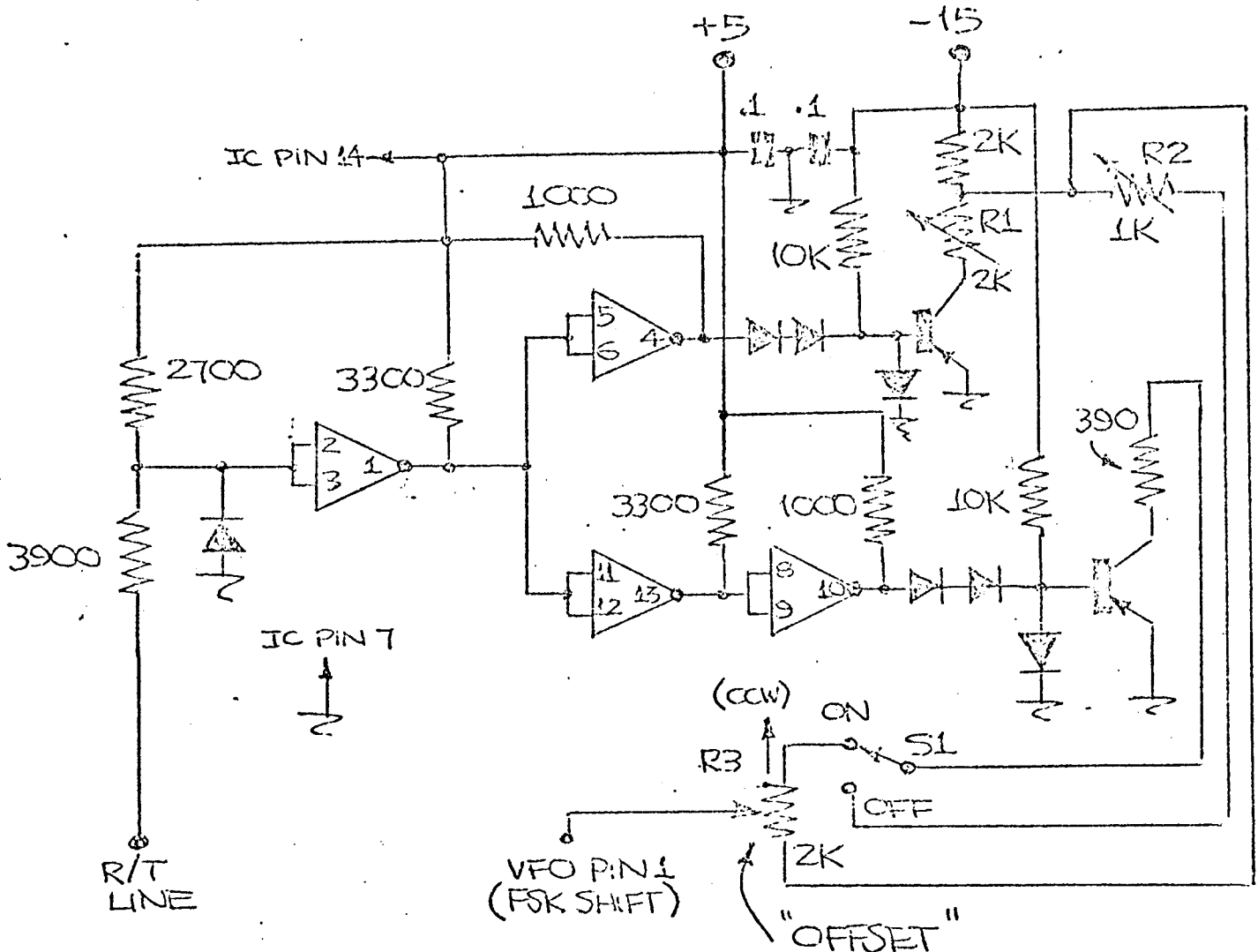


Jerry, W4MLA, also send a schematic of his RIT modification which is installed in his CX7 and working well. His circuit is a bit more involved but can be easily built up on a small piece of vectorboard. The existing FSK potentiometer is removed and replaced with a new RIT potentiometer and switch assembly. (See schematic on next page). The small vectorboard with all necessary components can be attached to the new RIT potentiometer. Make the modification as follows:

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1. Remove existing FSK potentiometer and replace with the new RIT potentiometer and switch (R3 and S1 on schematic below)
2. To use with VFO B, connect white wire #10 on the arm of the FSK potentiometer to the arm of R3.
3. The blue wire #52 is - 15 volts. Connect to vectorboard as required.
4. Route new wires for +5 volts, ground, and R/T and connect as required to the vectorboard assembly.
5. Turn RIT on and adjust R3 for the center of the frequency range and install the knob so that the pointer is at 12 o'clock.
6. Turn RIT off and adjust R2 for the same frequency as read in step number 5. above.
7. Key transmitter and adjust R1 for the same frequency read in step number 5. above.

The RIT range with this modification is approximately  $\pm 4$  KHz. On schematic below, the IC is a SN7401, transistors are 2N2907, and all potentiometers are linear taper.

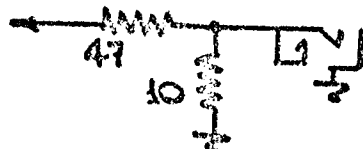


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Bill, K2SIL, writes with a list of some interesting hints and modifications which will be of interest to all of us:

1. Add a switch, potentiometer, and phone jack next to the side-tone level control to allow injection an external sidetone.
2. Add a one transistor amplifier after the CW filters to level gain when changing selectivity.
3. From W6DGH to K2SIL: A \$7.95 audio frequency denture cleaner is a neat tool for cleaning old lubricant off the PTO lead screw.
4. For A70 and A77 owners: Add a 12-volt zener in series with the existing zener to increase efficiency (46% to 57% at 28 Mhz!) Short this zener with a small relay, coil in parallel with the high voltage relay, to get back to AB<sub>2</sub> bias for SSB operation.
5. Replace the headset jack with a stereo jack and add a pad as shown below to reduce hum and noise for low-Z phones:



6. Add 2700-ohm resistor across the offset oscillator potentiometer, R8, to reduce its range.

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Does anybody have and/or know how to eliminate the transmitted spur in A/T0 near 28.0275? (K2SIL)

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