The Unicounter author doesn't supply the Unicounter (used in some of the "No Excuses" transceivers) any more, but FAR Circuits does. The PC board is offered at \$12.00 and a Unicounter mini-kit is \$20.00. The Unicounter kit has the PC board, programmed PIC, LED, and the crystal. This is available from FAR Circuits; 847-836-9148; <u>www.farcircuits.net</u>.

NoExcusesXcvr1202.pdf

This file pertains to "Build the 'No Excuses' QRP Transceiver," by Dan Metzger, K8JWR (QST, Dec 2002, pp 28-34). At the time this was posted, the author's e-mail was **dmetzger@monroe.lib.mi.us**. This file contains an etching pattern and parts-placement diagram for the project with subsequent updates from the author.

73, Bob, KU7G

12/10/2002 10:26:57 AM

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NO-EXCUSES TRANSCEIVER - NOTES FOR HOME BREWERS - 7 Dec 02 1. R13 in the receiver should be 470 ohms, not 2.2 K. The published schematic was in error, although I don<sup>1</sup>t think the 2.2 K would seriously harm the receiver performance.

2. R26 was 47 K in the original version, with Q10 having a gate cutoff of -1 V. Later tests showed better frequency stability with R26 of 1Meg and Q10 with gate cutoff of -3 or -4 V. This is a home-brew project; experiment.

3. The finished PC board should be  $6-1/2 \ge 4-1/16$  inches. The copy downloaded from the ARRL web site may have to be resized using your printer options.

4. The original parts placement diagram on the web contained several errors, hopefully corrected by 10 Dec 02.

- A. Top left: component above C2 is C7 (not R2)
- B. Top right: component to left of R36 is C54 (not C36)
- C. Bottom left: components above L3 are Q5 and Q6 (originally mismarked Q6 and Q7).
- D. Middle right: below Q10 is C31 (not C34).

5. A 1-uF capacitor from the wiper of R22 to ground will make the varicap tuning smoother. One ham reports better results using LEDs as varicaps. I haven't tried it, but it sounds interesting.

6. If you choose to eliminate R22, R23, R24, R25, D1, and D2, and tune with an air variable, I found that about 20 pF across C29 tuned the 40-meter version from 7000 to 7150 kHz (vernier drive almost essential here.) About 35 pF across C32 tuned the 39-meter version from 10,110 to 10,125 kHz.

7. The Unicounter (Dec 2000 QST) is apparently no longer available from Ron KA3J, who wrote the article. My 30-meter unit has no internal counter, and I don<sup>1</sup>t miss it much. I use an external counter to monitor the transmit frequency, and zero-beat the receiver to the transmitter with the SPOT switch.

8. If you're into simplifying, omit C39, C53, R54, R35, and D3 through D9, and ground the bottom of R12. This eliminates the AGC action, but I find that with some FETs the AGC causes the receive frequency to shift with signal strength, so eliminating the AGC restores stability.

Good luck es 73 de Dan K8JWR <u>dmetzger@monroe.lib.mi.us</u>



FRONT

Figure 9—An etching pattern for the 'No Excuses' QRP transceiver. This is a positive (black represents unetched copper) as seen from the trace side.



Figure 10—This is the original parts-placement diagram for the 'No Excuses' QRP transceiver with errors. See author's notes above for corrections.