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; www.farcircuits.net.

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'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 $6-1/2 \times 4-1/16$ 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 haven¹t 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 don¹t 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 dmetzger@monroe.lib.mi.us

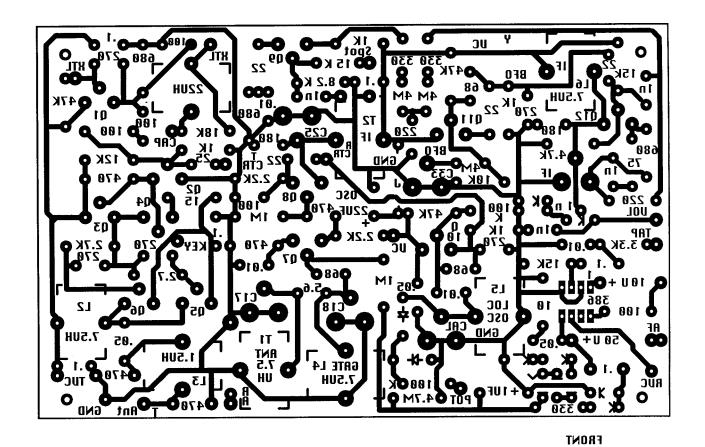


Figure 9—An etching pattern for the 'No Excuses' QRP transceiver. This is a positive (black represents unetched copper) as seen from the trace side.

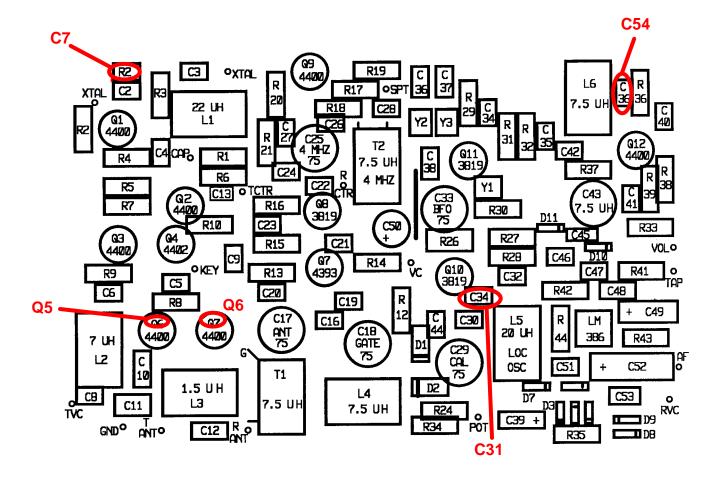


Figure 10—This is the original parts-placement diagram for the 'No Excuses' QRP transceiver with errors. See author's notes above for corrections.