

QRP Quarterly, January, 2002

By Mike, Boatright, KO4WX
1013 Latham Road
Decatur, GA 30033
ko4wx@mindspring.com

QRV? Dah-di-dah-dit Dah-dah-di-dah

It was April 1991. After studying for my Novice exam and listening to code tapes for about two months, I decided it was time to try and become a ham radio operator. Bright and early Saturday morning, I drove over to Southern Tech and found the VE session. Nervous, and very unsure, I sat down to take the code test. The 20 WPM test sounded like machine gun fire. I could pick out an occasional letter of the 13 WPM session. Then came five words per minute.

For the first minute or so, I was totally confused and couldn't make head nor tail of anything. Then I heard something that made sense and letters started to appear on paper. When the test was finished, my heart was pounding. The guy giving the test said that we could pass if we had exactly 25 characters straight—one minute of solid copy—or could answer seven questions out of ten correctly. Looking over what I had written down, I knew there was no way I could answer the seven questions.

He told me to check over my work and make sure it was correct and then he'd check it over to see if I had gotten enough solid copy. Looking it over, I noticed that I had written down that the QTH was "Wackson, GA." I'd never heard of "Wackson, GA," but I had been fishing down near "Jackson, GA" before, so I erased the "W" and put a "J" in its place and turned in my work. Would you believe that I got *exactly* 25 characters of solid copy, including that "J"? And then I went on to not only pass my Novice exam, but the Technician exam as well! It was definitely a happy dance day!

Just before my ticket arrived in June, I bought myself a Radio Shack HTX-100 10-Meter radio. At the peak of an incredible solar cycle, KD4BDE worked the world on 25 Watts, SSB, into a dipole at 20 feet. My most memorable contact was with Australia, one night about 11PM (Eastern time, US)—I think I received a 45 signal report, but I was ecstatic

That fall, one of my elmers told me to "put down the microphone" and "pick up the key." At the Lawrenceville, GA, ham fest that November, I bought an old Heathkit SB-102 in the bone yard. The guy I bought it from gave me his address and phone number in case I had trouble.

Well, I learned more about radio that next month or so trying to get and keep that radio on the air, let me tell you! He offered to buy it back from me, but in the end, after putting it up on his bench, we got it going. It never put out more than about 20 or 30 Watts, but I was able to use it on the Novice HF bands, so I was happy.

In January, I worked 90 stations in two weeks during the ARRL Novice Roundup (one of the last Novice Roundups—frankly, I am sad to see it go). Three days after the end of the contest, on a business trip to Raleigh, NC, I took my General exam, and passed the 13 WPM, first try! My elmer's advice and the Novice Roundup paid off!

Later that Spring, I passed my Advanced Test (one of the *hardest* exams I've ever taken—and that with a degree from Georgia Tech) and received the call, KO4WX that I still have today.

It took me two tries to pass the 20 WPM code test. At the Atlanta ham fest in June, I failed the code miserably on Saturday morning, but passed the Extra written. They told me I could come back the next day and try again. They must have slowed the tape down a little on Sunday morning, because I was actually copying some code. No way I had a minute of solid copy, but I thought I might have a go at the questions.

When I handed in my work, I told the examiner that I swore I heard the guy was operating with a “Carolina Window” antenna (think I had a problem with that code group, huh?). He swore that that was what he heard as well and he passed me!

I used to go to Field Day and watch the guys work CW all night long. They’d sit there chatting with each other, and still log the contacts into the computer and send the exchange back. I was in awe and dreamed that someday I could do the same thing. But I struggled with making CW contacts and am embarrassed to think about how many QSO’s that were lost to “QRM” that were really because I was too embarrassed to send QRS.

Then about three or four years ago, I got hooked up with the North Georgia QRP club, joined QRP ARCI, and even went to my first FDIM this past spring. I’ve always loved building stuff, ever since my grandparents gave me a Radio Shack shortwave radio kit when I was 8. Construction has always been my favorite part of the hobby.

Problem with a lot of this QRP gear that I have been building, though, is that it is mostly CW equipment. So somewhere along the way, I found that I really *had* to improve my code speed—while the FCC said I knew 20 WPM, but there was simply no way I could hold a QSO at anywhere near that speed.

So for the past few months, I’ve really been trying to get on the air and operate. Some of you have suffered through my QSO’s, and I’m grateful for each and everyone. But last week, I copied down “NICE FIST”—you cannot imagine how good that felt!

As part of our effort to get folks on the air, the North Georgia QRP Club has sponsored a friendly “Worked All States in 2001” competition. Four guys have already earned it, and as I write this, I am one state away from mine (Nevada). How did I get all the states? Well quite a few came during contests, particularly, the Spartan Sprints, the ARS Bumblebee and the QRP ARCI QSO party. And then, at the beginning of November, I decide to have a go at the ARRL CW Sweepstakes.

Wow! Those guys really scream! Early in the contest, the code speeds are lighting fast. On Saturday, I only made about 20 or 30 contacts in about 5 hours, because I would have to sit and listen over and over to a station send it’s exchange, until I was sure that I had it right, and could follow the serial number sequence. But you know what? I did log the contacts, and did end up in their logs as well (I even have QSL cards to prove it!).

By Sunday afternoon, however, either they had slowed down considerably, or I my code speed had increased. I had my keyer set for 25 WPM, and found my self hearing a station call CQ (or QRZ?) and would call him right back, and get the exchange, first time! Whew!

So with some trepidation, I volunteered to be a “Cub Fox” this season. The Cub Fox Hunt is basically the same as the regular fox hunt—the designated “fox” for the evening calls CQ FOX and works as many hounds as he can in a 2 hour period. It goes on for weeks, with the ultimate goal of whoever gets the most “pelts” wins the contest.

The difference between the Cub Fox Hunt and the regular hunt is that it is intended for the folks who can’t scream along at 20 or 30 WPM. We usually go at about 10-12, but will slow down if necessary. Now you might think that 12 WPM is slow, but in 2 hours, I worked 43 stations—a personal record!

Where am I heading to with all of this and why is it the subject of this issue’s column? Well, I used to think that a ham license gave me permission to test out my equipment—but that’s often as far as I got. To be QRV means you are ready to operate—and that includes being ready to send and receive Morse code (if that’s the mode your equipment is designed to operate, as most simple QRP gear is).

I need to remember sometimes that I need to “put down the iron and pick up the key!” If you’ve got that NOGAnaut working, get it on the air! Call CQ. If you are new to QRP, borrow a rig—most guys that build a lot of stuff, like me, have a few to spare and would gladly loan you a rig—and not only that, they’ll

come help you put up your antenna as well (thanks Mike and Sam!). If you are looking for somebody to practice with, send me an e-mail (ko4wx@arrl.net). I'd love to make a schedule with you!

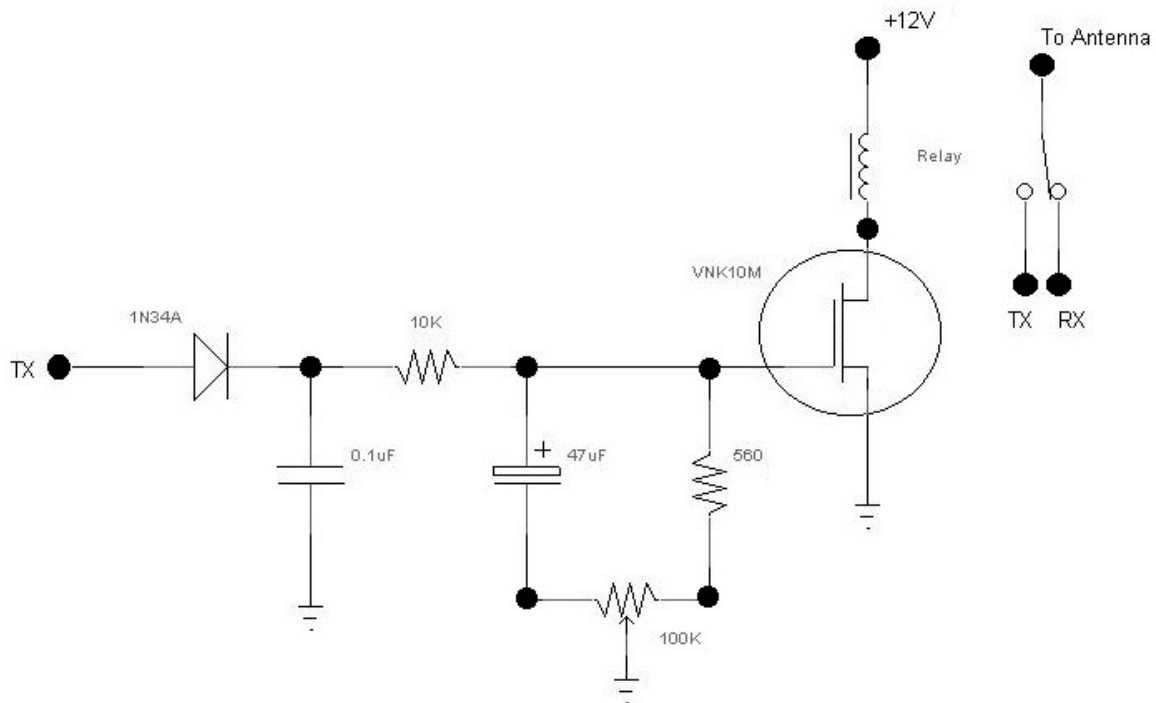
If you love to build stuff, keep building, but get that equipment on the air! At the beginning of this year, was still pretty nervous about holding a long QSO in CW. Now I am finding CW to be a whole lot of fun!

Hey, I Gotta Build Something!

OK, just to keep our irons hot until next time, here is a little circuit I have used to sense RF and automatically switch from receive to transmit. Try building this yourself Manhattan style (hint, draw the schematic on a piece of PC board and glue "pads" where the black "dots" in the schematic are—you're on your own to figure out how to hook up the relay, but try putting it upside down on the PC board).

I've seen circuits very similar to this in *QRP Quarterly* before, but I arrived at these values experimentally. You can use just about any FET (JFET, etc.) that can take the current needed to drive the relay. The VNK10M is pretty robust and seems to do the trick for me.

The variable resistor sets the turnaround delay. If it is too slow for your tastes, try reducing the size of the electrolytic capacitor (or increase, if it is too fast). This won't give you QSK, but it's better than forgetting to switch to transmit before keying, like I often do...



RF Sensing Transmit/Receive Switch

Until next time, let's get QRV!

72 de Mike, KO4WX