

Contesting with Computers

By Mike Dinelli, N9BOR

As a devout CW enthusiast, contesting has become an essential part of my operating routine. I have heard passionate arguments both for and against contests. However, I have found that contesting is just one more way for me to enjoy ham radio.

I enjoy chasing awards, so DX contests help add to the number of countries I work. Domestic contests keep pushing me toward my goal of 5-band, Worked All States, CW. It is not difficult to work 50 or more countries or all 50-states in a single contest weekend, even with a modest station. I do it all the time with 100-watts and a ground-mounted vertical antenna.

Operating a contest used to be a tedious endeavor. Prior to computerized contest logging, much time was spent doing paperwork. During the test you logged and duped on paper. After the contest you had to submit more paperwork to the contest organizer, using the proper forms. As we move closer to a paperless society, contesting is leading the way for ham radio.

After a lengthy search for the *perfect* contest software, I decided to purchase **TR**¹ (named after N6TR, the program's author). **CT**² and **WriteLog for Windows**³ are two other popular contest applications. My selection was based on recommendations by serious contesters, the number of contests it supports and the hardware and operating system requirements.

TR and CT are both DOS programs, so you can get by with an old (i.e. inexpensive computer). The first computer I dedicated to logging was a 486SX that I purchased for \$10 (with monitor) at a rummage sale. It worked great.

WriteLog requires a faster computer with more memory than its DOS counterparts. However since it is Windows based, it has some neat additional features. Utilizing your computer's sound card, WriteLog supports RTTY and PSK31 without the need to purchase anything else. It can also use your sound card as a *voice-keyer*. Instead of speaking the repetitive contest phrases into your rig's microphone, your computer can say them for you in your own voice.

Besides eliminating the paperwork, computer contest loggers send CW via the keyboard using a simple interface via the parallel or serial port. Solid state rigs can use a single transistor interface to key the rig. Older grid block keyed rigs, like mine, require two transistors. There are other interfaces that utilize an optoisolator in their circuit.

A drawback to using a Windows based program for CW contesting is that there is no direct control of the serial or parallel port by the computer hardware. Windows says if

¹ <http://www.qth.com/tr/>

² <http://www.k1ea.com/>

³ <http://www.writelog.com/>

you want to use that port to send CW, you are going to have to go through me first. This can create timing errors, which make your CW sending erratic.

A typical contest exchange might be a signal report and QTH. In TR, you call CQ by pressing the enter key. You can also set it to auto-CQ, or repeat the CQ call after any time interval you select. When a station answers, you type their callsign and press enter again. TR will send that station's call and "599 IL." The other station will send their exchange and you type it into the computer. Then you press enter and TR will send "73 de N9BOR TEST." That contact is now logged, the multiplier checked off (if any) and the points added to your running tally. If a station that answers your CQ is a dupe, TR will automatically send "SRI WRKD B4 73 DE N9BOR QRZ."

Contest software can increase your score by giving you instant feedback. The screen tells you which multipliers you still need. If you are operating in an *assisted* class, you can use a DX packet cluster to help you find those missing mults. The software will also calculate your rate or estimated number of contacts in one hour. When your rate starts to decline, you might consider changing bands, modes or even going into search and pounce mode instead of calling CQ.

At the end of the contest, TR can generate the standard Cabrillo file for submission to the contest's sponsor. You simply attach that file to an e-mail and your contest *paperwork* is over. If you are really interested in evaluating your performance, TR can generate reports on band changes, rates, locations worked or even analyze the callsign prefixes you worked.

Contest software does not take the place of an everyday logging program (e.g. Win-EQF, DX4Win, etc.). It serves a specialized purpose and allows the operator to do on the fly adjustments to his/her operating to improve their score. It also allows you to operate longer because you are less fatigued. It eliminates the paperwork and is a lot of fun. For less than \$100, you can add a dedicated contest logging computer, software and interface to your station. That's a lot of bang for the buck. ■

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