The Joy of Contesting

Rob Brownstein, K6RB

There's no better time than now to join in the fun of competitive ham radio.

am radio contesting is a unique sport. In what other sport do experts, amateurs and rank beginners get onto the same field of action at the same time and compete? And in what other sport do you and your competitors all benefit from making points by talking with each other? There simply is no other sport like it! The experts depend upon the beginners, and vice versa.

Then there's the variety. No two contests are alike. Your strategy in the ARRL November Sweepstakes (commonly just called "Sweepstakes" or even "SS") is different than your strategy in the CQ World Wide DX Contest (CQWW DX). In Sweepstakes you can work a station once, regardless of band. In CQWW DX you can try to work stations once on six bands! In Sweepstakes there are only 80 multipliers to be had, so scores increase linearly with the number of QSOs you make. In CQWW DX, there are 40 zones — per band — and hundreds of country multipliers. (We'll explain scoring a little later!)

Have a free upcoming weekend? Okay, how about a few hours? There are several contests scheduled virtually every weekend. Some are HF; some are VHF/UHF; some are CW only; some are mixed mode; some are digital mode and some are phone only. There is a contest to suit the interests and skill level of all hams.

Getting Started

Every contest has a sponsoring organization and a set of rules. The sponsoring organization takes responsibility for collecting entry logs, verifying scores and awarding certificates and plaques. For example, the ARRL is the sponsoring organization for several contests throughout the year, including the ARRL DX Contest in February/ March, VHF/UHF contests in January, June and September, and the premier contest for the US and Canada, the ARRL Sweepstakes, held over two weekends in November.

There are dozens of contests every year. Some are major worldwide events that last an entire weekend, while others are smaller, shorter events with a particular focus, such as low-power (QRP) operating. Some contests are focused on a specific geographic area, such as the Japan International DX Contest, or any number of state QSO Parties that emphasize contacting all counties in a specific state. Most US states have a QSO Party. These are great events to try your hand at contesting on a smaller stage.

With so many contests going on, it's important to know what the rules are. The ARRL publishes a contest calendar in every issue of *QST*. There are also numerous Web sites that have events listed for each weekend. One of the most popular is the WA7BNM Contest Calendar. This is a great resource for what events take place on any given weekend, often with links to a contest's official Web site. You can find the WA7BNM Contest Calendar online at **www.hornucopia.com/contestcal**.

Why contest? Aside for the competitive nature of the event, contesting is a tried-andtrue way to improve your on-air operating



It helps to start young. Mitch (front) and Liam share operating and logging duties at proud dad K6RB's station during a recent Kids Day event. Kids Day is a twice-a-year operating event that provides young people, licensed or not, with the chance to enjoy Amateur Radio.

skills. These skills can be applied to other areas of amateur radio you might enjoy. For example, if you are interested in emergency communications, contesting can teach you how to handle information quickly and efficiently.

Entering a Contest

To enter a contest, you could just simply keep track of calls, exchanges and times in your logbook. Alternatively, you can download and make multiple copies of a sample log page and use those for logging. Whether or not you ever turn in your log, your QSOs will boost the score for those you have worked. So you may decide to take a stab at a limited entry, get your feet wet and never submit your log. That's okay.

Nowadays, all expert contesters and many beginners use computer logging. There are several advantages to doing so. First of all, your computer will immediately alert you when you are trying to call someone you have already contacted (called a *duplicate* or *dupe*). Your logging program will also prepare the digital file you submit as your entry for most contests. Many good contest programs are available; search the internet for "ham radio contest programs."

During the contest a computer log will give you lots of statistics in real time so you can see how you are doing. Although you may find it challenging to concentrate on operating techniques while having to type in call signs and exchange information, it becomes much easier with some practice.

A Place for Everyone at the Table

Contest sponsors try to create level playing fields for all entrants — up to a point. Most contests have low power, high power, single operator and multi-operator categories. Low power is usually specified as up to 100 W. However, a station running 100 W with several towers and multiple Yagi antennas is clearly not on a level field with another station running 100 W and a simple G5RV wire antenna.

That said, many contesters with modest stations can and do enjoy participating in every contest. You can derive satisfaction by seeing how much your score improves each time you participate in a particular contest. Contesting is a great way to work toward awards such as Worked All States and DXCC. When you enter the fray, it's to the benefit of other competitors, since every point you make also adds points to their scores — a win-win for everybody.

It can be scary to jump into a contest for the first time — regardless of station capabilities. You hear loud stations working other stations one after another at a fast clip. On phone some operators talk so fast you can hardly understand them. On CW some

So When's the Next Contest?

Here's a list of some upcoming contests of interest to all hams, regardless of previous contest experience.

- January 5-6 is the ARRL RTTY Roundup a perfect opportunity to try your hand at PSK31 or one of the other digital modes. KCØUCX jumped in this past year and had this to say: "First time in a contest. I have been in Amateur Radio for about two years. I look forward to some of the other contests coming up. My daughter really was into it watching and waiting for the next call to come in. She sat with me for over eight hours watching. I told her it's like fishing: You have to wait and they come in groups of three."
- January 19-20 is the VHF Sweepstakes. Whether you're at a fixed location (preferably with some altitude) or roving in your mobile, you can hunt for grids on 6 meters (and, of course, 2 meters and the UHF bands) with small antennas. The photo shows a hardy soul, KØNR, atop Mount Herman in Colorado during the 2007 Sweepstakes.



The International DX Contest (CW) is February 16-17. There's no better way to add to your entity total. If you prefer Phone, put it on your calendar for March 1-2.

A complete calendar of ARRL-sponsored contests is at **www.arrl.org/contests/ calendar.html**. For a comprehensive list of what's ahead for the coming month, see "Contest Corral" in each issue of *QST*, and online at **www.arrl.org/contests**.

stations are cranked up to 30-plus words per minute and sound like a blur of noise.

Don't be intimidated! All of these stations will be looking for you before the contest is over. Just take your time, find stations without big pileups and then call and work them. You will be surprised at how quickly your paper or computer log gets filled.

Listen First and Get the Hang of It

As you begin exploring contesting it pays to listen to a few expert stations to see how they operate. In a phone contest you'll notice that experts don't say extraneous words, such as "Please copy." They don't repeat the elements of the exchange. They give it once, clearly, and then pause. The other station will say, "Thanks" meaning he has gotten it all. Or he may come back with, "Your number?" The first station will simply repeat his number and pause. There are no wasted words. Politeness in contesting isn't about saying, "Please copy." Politeness is about making the exchange as efficient for both of you as possible.

A CW contest can be the epitome of efficiency. An expert operator gives the information once and pauses. The other station will send TU, which means, "Thank you, I got it." Or if he missed your call sign he might send CL?

One of the biggest stumbling blocks in Sweepstakes is the length and diversity of the exchange. Most people can figure out NR? means repeat your number, but a lot of folks scratch their heads when someone sends PR? The other operator is looking for A, B, U, S, M or Q. He is saying, "Please repeat your precedence."

You may find similar situations in other contests where you are sending an abbrevia-

| Phonetics | | | |
|-----------|---------|---|----------|
| A | Alfa | N | November |
| В | Bravo | 0 | Oscar |
| С | Charlie | P | Papa |
| D | Delta | Q | Quebec |
| E | Echo | R | Romeo |
| F | Foxtrot | S | Sierra |
| G | Golf | T | Tango |
| H | Hotel | U | Uniform |
| I | India | V | Victor |
| J | Juliet | W | Whiskey |
| K | Kilo | X | Xray |
| L | Lima | Y | Yankee |
| M | Mike | L | Zulu |

tion for your state as part of the exchange. The other operator sends ST? meaning please repeat your state. Sometimes he might have to send QTH? to get the other operator to understand what information he wants. (It would, of course, be better if all participants became familiar with the names for all parts of the exchange, particularly complicated exchanges for contests like Sweepstakes.)

How to Speak Contest

In the Sweepstakes phone contest the goal is, again, efficient exchanges. Anything that causes a repeat request wastes time. For example, if your serial number is 55 and you say "Fifty five" it might be mistaken as "Sixty five." So just say "Five five." The same holds true, as numbers become three digit figures. A serial number of "255" should be spoken as "Two five five."

Some sections are also problematic. My section, Santa Clara Valley, could be misconstrued as "Sacramento Valley," or even "San Joaquin Valley" when there's lots of interference (QRM) or noise (QRN). So I always use the standard phonetics "Sierra Charlie Victor." A good rule of thumb: It is better to spend an extra second to ensure a first time copy than to have to spend three or four seconds going through a repeat cycle.

One thing you will notice right away is that in contests that require a RST signal report in the exchange, virtually everyone sends 599 or 5NN on CW and says "Five nine" on phone. So RST is 99.9 percent of the time predictable and the challenge is to get the correct serial number or state/province/country information (often indicated in the rules as "S/P/C").

Say What? An Abbreviation Contest Glossary

Barefoot — station not using an amplifier.

- Big-gun station optimized for contesting success: high power and sophisticated antennas.
- Cabrillo standardized format for electronic contest entries.
- Dupe a station already worked during the contest
- Grid square an area of 1° latitude by 2° longitude indicated by two letters and two numbers; used mostly in VHF contests.
- *Little pistol* modest ham station.
- Log list of stations contacted; most logs are electronic and are compiled via the use of specialized contest software.
- *Pileup* many stations attempting to contact a single station.
- *QSO rate* Number of QSOs during a specified time frame; usually calculated over the previous 10 minutes, and previous hour.
- Reflector subscribing to a reflector provides a means of sending and receiving e-mail messages on specific subjects; one example can be found at lists.contesting.com/mailman/listinfo/sccc.
- *Rover* a station that moves around during a VHF/UHF contest to offer hams the chance to make contacts from different grid squares.

Run - to work many stations, one after the other.

Search and Pounce — The act of tuning around and finding new stations to work. SO2R — a single operator who utilizes two transceivers — "single op two radios." Spotting — using specialized software to find lists of desirable active stations worldwide. State QSO Parties — statewide contests held at various times during the year. COURTESY N3ZL



Greg Davis, N3ZL, of Florence, South Carolina, jumped into his first IARU World Championship Contest recently and came away with more than 700 CW contacts.

Practice Makes Expert

The word *expert* is derived from the word *experience*. A contest expert is someone with experience in that contest. Every time you operate the same contest you increase your expertise. There is no shame in being casual about contesting — just getting on for a couple of hours, taking your time and working some stations. It is these casual operators who make it possible for experts to set new records. Every expert will tell you that they are thrilled when hams join the contesting ranks.

If you want to see marked improvements in your year-to-year scores you will have to put in some effort. If your preference is phone contesting, learn to keep your words to a minimum and make no unnecessary repetitions. If you have a modest station with modest antennas, don't spend a lot of time trying to work one station. Wait for three or four rounds and then move on. He'll be begging for QSOs before the contest is over, so don't waste your time. Write down his frequency so you can come back later when the pileup has diminished.

In some contests, stations will run (that is, call CQ on one frequency) the whole time. They are betting that other stations will call them, and a lot of times they are right. Other stations will *search and pounce* (S&P) for the whole contest. They simply go down the dial calling everyone they have not already worked who is calling CQ.

Full time S&P is not a good strategy — even for a modest station with modest antennas. You will miss working all the other stations that are also searching and pouncing because they will never find you if you don't sit still at least part of the time. At some point in a contest everybody must do some CQing.

In Sweepstakes, for example, almost everyone runs out of stations to work well before the end of the contest. Even the *big*- gun stations will be searching for new calls. If you are searching and pouncing the whole time, that big-gun will never hear you or call you. A modest station should look for a clear frequency before trying to run. Your signal will not be loud for most others so you need to stack the deck in your favor. A good clear frequency — even if it is above the most active portion of the contest — will allow you to establish a run. Many contesters with modest stations achieve great success just by "thinking big." Act as if you have a big station and you will do well.

Try CW for More Points

There is a myth that anyone can operate a phone contest but that only high speed CW types can get by in a CW event. That's baloney. You will hear a ton of poor contest techniques in most phone contests. And it's not just the newbies. Some of the S9+20 crowd will be telling you to "Please copy..." too. If you learn good techniques, even with your 100 W and a dipole, you can give that big-gun word-waster a run for his money!

CW is a skill, no question about it. To be sure, a CW operator who can copy 20 WPM will probably have more QSOs in a contest than one who can only handle 10 WPM. But even 20 WPM is well below average in most CW contests. For many, the starting point is 30 WPM. That said, if you can master 20 WPM you will have a lot of fun. And if you can get up to 30 WPM your fun will increase geometrically. You can still make plenty of QSOs if your CW is slower by sending PSE QRS — "slow down." Lots of lower-speed operators can be found in the upper portion of the CW sub-band, in the neighborhood of .060.

There are some cool freeware programs

How Can I Learn More?

- Getting Started with Ham Radio, a guide to setting up your first station, includes a chapter on contests and awards. See www.arrl.org/shop; order no. 9728.
- The ARRL Operating Manual (the updated new 9th edition is now available) has a comprehensive contesting chapter.
- The National Contest Journal (www.ncjweb.com/welcome. php), published six times a year, is packed with news and information for the active contester.
- The ARRL Contester's Rate Sheet (www.arrl.org/contests/ratesheet/) is an e-newsletter available free of charge to ARRL members.



Wojciech Drwal, SP9W, is an accomplished contester from Tarnów, Poland.

that can really help you raise your code proficiency. One is called *RufzXP* (www.rufzxp. net/). Another is called *Morse Runner* (www. dxatlas.com/MorseRunner/).

RufzXP is a CW call-copy trainer. There's no QRM, QRN, no multiple signals, just clean call signs being sent, one after another. The program monitors how quickly you type each call in and how accurately you copy them. Starting at a slow speed (you get to choose), it will speed up as your copying and typing accuracy improve. And it will keep doing so until you "hit your wall." Then it slows down until you are copying correctly again. It keeps track of how you did each time and it's a great way to improve your CW copying ability.

Morse Runner simulates a real contest environment, including QRN, QSB, QRM, LIDs (poor operators) and pileups. This is great practice for the real thing. I find a couple of rounds of *RufzXP* followed by a couple of rounds of *Morse Runner* is a great way to loosen up before the start of a CW contest. And if you continue to practice every few days, your baseline speed can only improve. If you are only interested in CW contesting, there is no better way to exercise your CW muscles.

I would also recommend ARRL's W1AW code practice sessions. These occur every day, at various times per day. Check out the schedule in each issue of *QST* or at **www. arrl.org/w1aw.html**. This is a good way to learn to copy plain text CW at up to 35 words per minute.

DXing Versus Contesting

Many people are drawn to DXing once they get their feet wet in HF ham radio. And many expert contesters are also expert DXers. DXing and contesting have several things in common and several diverse aspects. In both cases, you are rewarded by working differ-



ent stations in different places. However, in DXing there's no time limit. It takes as long as it takes. In contesting you do have a time limit, usually no more than 48 hours.

As an Honor Roll DXer, you may pass on a JA or DL calling CQ to look for a 5A in Libya. After all, you have hundreds of JA and DL QSLs already. But in the CQWW DX Contest you can't afford to be jaded about any country — you need as many countries as you can get and you have only two days to do it.

Many DXers take advantage of contesting as a way to work new countries. Even modest stations will often achieve WAS (Worked All States) in each year's ARRL Sweepstakes contest. Big-gun stations will often work DXCC on several different bands in the popular DX contests. So there's a contest benefit for awards chasers.

Activity Counts

Ham radio is a privilege, not a right. Our allocated bands and modes are the result of years of negotiation and international conferencing. Some may think that a warning of "use it or lose it" is just hysterics. And maybe they're right. After all, in the last 50 years ham radio has benefited from increasing rather than decreasing spectrum allocations. But there's no question that the lack of CW activity on 80 meters was a driver in the FCC's reallocating that band's sub-bands for more phone spectrum.

The only time that major portions of the bands become alive with activity is during contests. Sometimes they become too active, such as 20 meters during Sweepstakes phone in 2006, when it was the only band open for much of the country. Nevertheless, contesting provides a benefit for all ham radio operators.

For a good portion of the year, the HF bands come alive with activity when contests come on, usually on weekends. Were it not for contests, the HF sub-bands could become a vast unused collection of frequencies. It would be great if there were more spillover of activity from contests into the weekdays before and after them.

After almost 50 years of active ham radio operation, I still get an adrenaline rush when I hear the bands filled with stations calling CQ TEST. Everyone benefits by everyone else's activity. For me, that is the joy of contesting!

Rob Brownstein, K6RB, was first licensed as KN2UMU in 1958. He passed his General 10 months later, and got his Extra in 1970. He spends all his operating time on HF either rag chewing or contesting, and is a member of the Northern California Contest Club (www. nccc.cc) and First Class CW Operators Club (www.firstclasscw.org.uk/). When Rob is not on the air, he writes books about technology and business, and four have been published by McGraw-Hill. He lives with his wife, two boys and one dog in Santa Cruz. He can be contacted at k6rb@baymoon.com.



Strays

CALL FOR PAPERS FOR THE 2008 CENTRAL STATES VHF SOCIETY CONFERENCE

♦ The Central States VHF Society is soliciting papers, presentations, and Poster/table-top displays for the 42nd Annual CSVHFS Conference to be held in Wichita, Kansas July 24-26. Papers, presentations and posters on all aspects of weak-signal VHF and above Amateur Radio are requested.

Deadlinesforsubmissions:Forthe*Proceedings* — May 15; for notifying us you will have a poster to be displayed at the conference — July 1. (Bring your poster with you on July 24!)

Please see the Web site at **www.csvhfs.org** for more information. – *Dave Powers, KAØKCI*