

The Elmer Project Part IV

Sponsored By The Oklahoma DX Association
My Dog's Bigger Than Your Dog!

Edited by Nelson Derks, AC5UP

Blame it on testosterone poisoning, but with the preponderance of Hams being of the male persuasion it's inevitable that we have Contests. These manly competitions serve many purposes... I can't think of a better way to rack up Q's, check out a new antenna, or test your skills against yourself and every Big Gun on the bands. Amateur Radio is the only competitive activity I can think of without class distinctions. Yes, we have band segments allocated by license class, but the newest of Technicians can go head-to-head with the most seasoned OM on any legal band segment. If you think you need a Mega-Station to be competitive you really should read this article... There are contests at every interest level and I've yet to hear of a Ham who didn't improve their abilities by participating in a contest.

Let's start with a few thoughts from Bert, **K2BA** on why contesting is so popular:

Contesting is to Ham Radio what auto racing is to cars. It pushes the technology and skill envelopes at many interest levels. It encourages the operator to improve all aspects of their station and operating practices while rewarding those who've learned how to score Q's at just the right time and place. The reasons why Hams get into Contesting are as many as the contests and Hams who participate. Some like the competition just to see if they can produce a top score, but most just contest for the fun of it, or to improve their score from a previous year. It's all about the challenge, and it takes a flexible attitude to succeed.

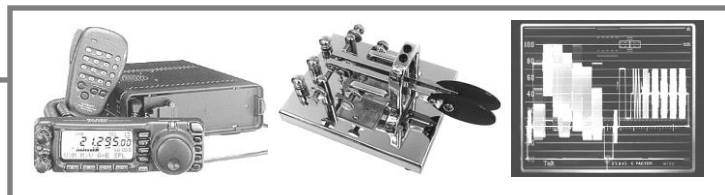
There are often many different categories you can enter: Single operator all band or single band unassisted, single operator all band assisted (by spotting nets), multi-operator single transmitter, and multi-multi (the unlimited class). DX'ers often use contests to improve their country totals as some rare calls are only heard during a contest. The two techniques for contesting are "run station" and "hunt and pounce". If your station puts out a good strong signal, then the "run station" technique will yield

the most QSO's per hour. Just park your rig on a clear frequency and try to work 'em as fast as you hear 'em.

Producing a truly big signal requires good technical skills and can run into some serious money, but the average Ham with a Tri-Bander at 50 feet will see times when band conditions allow them to run stations, especially on 10 and 15 Meters. During marginal conditions the "hunt and pounce" technique can yield more Q's. But, once you get a rhythm going, 60 or more QSO's per hour are possible from either method.

Using spotting nets like the **OH2AQ** site or **K1TTT** site will alert you to the DX. It is amazing how a very modest station can get through. I have spent hours working low power (5-10 watt) JA's using dipoles. Use a contest logging program like CT. An older version of the program (version 6) is a free download from www.qrz.com. Like any other piece of gear, get familiar with the program before the contest. It will do your logging, check for dupes, keep your score, send the routine CW exchanges and become a valuable asset once you get handy with it. You should also look at a good propagation program like "Miniprop" or "ICEPAC", both of which are free. They can predict when the best times are for a band to be open to various parts of the world, and Europe and JA are where most of the DX stations are located.

If you plan to contest seriously, try to get some sleep beforehand. Don't eat big or heavy meals. Eat lightly and drink plenty of fluids. Set goals before the contest and try to achieve them. Your success is like a stool that relies on three strong legs: The equipment, operator, and preparation. If any of the three is weak, it's a balancing act to compensate with the other two. CT lets you write notes in the log at any time, and you should put down your thoughts as situations occur. Evaluate what you did right or wrong both during, and especially after, the contest. You'll learn from the



experience what works best for you. Next time will be better, and you will have fun!

— **K2BA**

I think Bert shares the same spirit of the Amateur Arts as I do... The hobby has so many ways to satisfy the itch to tinker and experiment that a good Contest can be considered an extension of your test gear. There's always room for improvement and the satisfaction of achieving a new goal... If not on the technical side, surely on the operating side. For another perspective, let's see what Jerry, **K5YAA** has to say:

Knowledge, practice and conditioning make for perfection in any sport and the sport of radio contesting is no different. To get in 'shape' you gain tools, methods and knowledge from every challenge. Start by dabbling in several Contests that offer a good match to your interests and station capabilities, then 'workout' often enough to gain conditioning from each experience.

If you're a casual contester, you've been doing a bit of 'working out' already... I hope some of the ideas that follow will add to your inventory of tools and operating techniques that have made Contesting so enjoyable for so many. I've included sources of operating information and a web site with contest stories to encourage further research into the sport.

Start with short workouts and build toward the marathons. One common mistake is to start with the BIG Contests, then burn out too quickly from the relentless QRM and competition. Being overwhelmed by the pileup at every Q can make a bad first impression, but the smaller, less crowded contests offer shorter workouts that can build your confidence and abilities. There are scores of European contests, state QSO parties and regional contests that offer plenty of activity and performance rewards to test your equipment and skills. If you

haven't been watching the contest listings in the OKDXA Newsletter, take a little time to see what's available this month. You'll also find that many DX'peditions are timed for contest events and your best chance to work them is during a contest. Many contests span twenty-four hours or less, but will include bursts of activity high enough to push your limits and help you discover where improvements can be made. Not only do the 24-hour contests demonstrate how propagation can shift during the day, but HF Contests can be considered a variety of contests rolled in to one... Like the Three Musketeers, it's wise to Adopt, Adapt and Improve as the changing band conditions present new opportunities. The contest will feel much different as you transition from daylight to night band conditions, and they are a great way to test your wits, personal endurance, and exchange speed while improving all three. You may surprise yourself; it's not unusual for a modest commitment to yield a certificate for your efforts. You'll never know until you try...

A serious contest effort requires your full understanding of the rules. Nothing short of a Solar Flare or tower collapse can drop your score through the floorboards like a small misunderstanding of the rules. After studying the rules, many operators develop a band plan for use during the contest. Yes, you need to think in the moment during a contest, but a well-reasoned band plan made when you were fully coherent can be an asset when Mr. Sleepy is playing games between your ears. Band plans can be as simple as an estimate of which band will yield maximum results based on listening sessions during the week before a contest or as elaborate as computer-based predictions available from the Web. Your judgment can be enhanced by your results from prior years, and that works both ways: If you did well overnight last year, stick with what worked for you. If not, a bit of experimentation could be profitable.

Band patterns and QSO yields on different bands will definitely develop from a single location over the years, and that's the mental part of the game. Predictions made by a Propagation Guru from West Armpit, Louisiana may need interpretation for your QTH. Keeping records from past years' effort not only helps in developing current strategies, but can also set the high-water mark to beat. Much of the contesting fun is when you set a new scoring goal, and

that's where a flexible attitude comes in handy... You may not out-score the Mega-Stations every time, but whenever you out-score yourself it deserves a 'Thumbs Up'. Keep good personal records and visit sites like <http://www.contesting.com> to find preparation and operating tips from some of the most active contesters in the world. You'll find techniques ranging from how much rest is needed before beginning a full 48 hours of operating and what kind of food and drink are preferred. Yes, there are operators who go the full 48 hours in a major contest like the CQ World Wide DX contests. These are the marathon runs of Ham Radio where a month of preparation is not unusual. One advantage to a longer contest is that you're less dependent on short-term band conditions than you'd be in a four-hour Sprint.

No article on contesting is complete until something is said about the effect of your geographic location. It's no secret the East Coast OM's have an advantage into EU and the West Coast guys are stout into JA and Oceania. Good for them. Five-Landers can work both within an S-Unit or two of the coastal guys on HF, and we're tough to beat in the domestic and North American contests. Large numbers of stations in Europe have gotten into the contest game. Fix a set of antennas into Europe and on days when Ol' Sol gives us a chance against the East Coast, the well seems to never go dry. The low bands like 40 and 80 Meters are very productive in domestic contests and low-slung antennas without much of a DX punch are preferred in the Midwest. Include VHF contests, and the Big-Gun Ops on both coasts often envy us.

A few more thoughts on record keeping and the latest techniques... Years ago, paper logging was all that was available. A QSO is an exchange of information, albeit brief in many contests, and computers are adept at information storage and retrieval. PC based logging programs have become a must-have tool for the serious contesteer. There are many on the market and reviews of several contest logging programs can be found at www.qsl.net/g3cwi/contest.html. Most programs have more features than a single op will ever need because many of them contain support for multi-transmitter and multi-op entries. Don't be intimidated by this, as it's often better to master a program that's ready for your growing interests than to choose an 'easy' offering that leads you to learn another program all

too soon. Nevertheless, features like single key exchanges, immediate dupe checking, band spotting and proper log generation make a logging program invaluable.

There are many other software tools like antenna selectors, rotor controllers, dual radio consoles and more. Station control is an integral part of many contest logging programs and can increase your enjoyment of the Contesting Arts, but great scores and personal satisfaction can still be made with pencil and paper. However, more often than not, the winning crowds in the major contests employ SO2R (Single Op, Two Radio) vs. SO1R (Single Op, One Radio). There is a point where all of us reach our too-many-knobs-and-things-to-watch limit, but if the contest bug really bites, take a look at dual radio operation. Rules in most of the major contests allow a single operator to move freely among bands. The second radio is employed to execute 'search and pounce' Q's while maintaining a run frequency on the primary radio. Sound too complicated for you? Wondering where you'd put the second antenna? Don't forget there was a time when you thought it was a major hurdle to get your license and put a signal on the air... Then you did it. Remember?

This leads us to the science of ergonomics and operator comfort. Contests are a great opportunity to find out what bugs you about your station setup and make those overdue changes. A Ham station you don't use very often (thanks of the layout) is a waste of money and effort. The equipment arrangement is an important factor in reducing fatigue and increasing your enjoyment of the contest. Frequently used controls should be within easy reach and less-frequently used items like antenna switches should be well labeled. Record the 'normal' setting for amplifier tuning and beam headings into popular areas as speed and accuracy in band changes can improve your score. This may seem trivial when you're fully rested, but after hours of exercising the gray matter it's best to keep the simple tasks as easy as possible.

Search and Pounce is the term for tuning up and down the band looking for stations and (hopefully) multipliers that can boost your score. Your run frequency is where you park the VFO and call CQ for any and all comers. In the popular contests a run frequency can be hard to come by, so part of the game is holding on to it. Imagine the

skills required to hold your run frequency while scoring Q's on the second radio. Successful testers always look for new ways to pack more contacts and points into the same time frame. Gathering multipliers with a second radio has raised the bar a bit higher, but if you enjoy a challenge...

Multipliers will always be a big part of your contest score. They are valuable and scored as the name implies. Contact points times the number of multipliers make up the final score, so the more multipliers the merrier. What a multiplier can add to your score depends on the contest, and the rules should always spell out the value and what it takes to make a multiplier count. Visit <http://www.remote.arrl.org/contests/announcements> for more info. This is the ARRL Contest Rules and Announcements web page. Choose any contest description like the Sweepstakes or the ARRL DX Contest and see how multipliers are applied to the scoring. In some cases, the multipliers can seem to favor a location or mode, but don't forget that you'll need something to multiply before they add value. In other words, you can't rely on multipliers alone.

What's a run frequency? Find a clear spot in a popular band segment and hold it with a stream of "CQ" calls for any station. We've all heard it. Holding a frequency in the popular contests can be a challenge, as others are looking for a place to do the same. It takes a quick response to fend off would be frequency takers, so don't take this as rudeness... It's just double-quick Contest Diplomacy. A real test of 'staying power' comes when a weak station wants to say more than the required exchange. It will seem like hours, all the while leaving the frequency in a seemingly unused state. Be ready to respond to any di di dah dah dit dit that pops up. Responsible testers try to make sure a frequency is available before pounding out a CQ and will usually pause before transmitting. Nonetheless, be aware that spectrum can be at a premium and that no one is going to leave a 'clear' frequency alone for very long. There will also be times when a 'larger than thou' signal appears and simply pounds their way into control of your frequency. It may be accidental, and it could be intentional. Propagation and directional antennas can fool the best of us into thinking we're OK. There is little to be gained by trying to run them off, especially when they hear quick replies to their CQ's right on top of you. Don't waste your time trying to get even,

get back into the contest instead. It's one of the few hazards of contesting and an incentive to improve your signal strength & frequency holding techniques. Move up the band. You may find fewer huge signals and be surprised by the good results. I've listened to W6's stagnate on a frequency that was being run by a G3 they couldn't hear. With the W2's beaming Europe, the W6 didn't exist on the East Coast and the net result was a slow contest moment for someone in California. With a reasonably clear frequency even modest signals can get a good run going. If you can't, cut your losses and QSY to greener pastures.

So, let's say you'd like to work DXCC, WAS, WAC, WAZ or WAE this weekend or fill in a few countries, states or zones needed. Contesting is one way to reach those objectives. Racking up contacts toward those awards, plus the skill and station improvements, are all driven by the desire to compete. However... None of it counts towards DXCC or other Awards until you have the pasteboard to prove it. QSL'ing, especially for the rare counties and states is the next step and your logging program can help you do this. A computer and the Internet can cut down on the effort needed to track your QSL's and figure out who's the QSL Manager for the mega-multiplier DX'pedition you just worked. A fact of life for the tester is that QSL's will be received only from a percentage of contacts made in any contest. Be prepared to send and answer QSL's, as many of the stations you work are in the contest for two reasons: They want to give you a few points (Thank You!), but they also want a QSL from your state, county or country. Return the favor, and you will see cards coming in... Possibly, in great quantities!

For those of us limited by antenna space and budget, the thought of being the Top Dog in every contest is unlikely. But, for those who understand that the Termite is the mightiest animal in the jungle, there is an alternative in Club Score Participation. Whether casual or dedicated to winning, many clubs appreciate receiving collective credits for your score. Several contest sponsors post aggregate club scores in a separate section of the contest results. To know that you added to a club effort can be satisfying, and it's no embarrassment to belong to a club that does well in a contest. While very few members of a club may be hard-core testers, there is no reason why a few Q's here and a few more there

can't add up to a competitive total. If your club is looking for a new group activity, there are plenty of club-friendly contests beyond Field Day.

In closing, there really is a contest for almost every operator interest and station configuration. It's easy to get started. If you hope to do well, you will need to build your station and skills by regular practice. Hams who work only one or two contests a year on a Saturday afternoon are a great source of points, but those who hang tough through the wee hours of Sunday morning usually make it near the top of the scoring columns. The great equalizer in the contest game is perseverance. You may not have the real estate for a serious antenna farm; you may not have the ear for CW, and you may run near QRP to keep the neighbors happy. But, that doesn't mean you can't contest. If you can type like a demon, have a knack for computers, and are prone to insomnia, you could be competition for the RTYY guys. Take advantage of everything you have going for you, no matter how limited, and always remember that you get the same number of hours in a contest as everyone else. If you can make better use of your time than others, it will put points in *your* log... And that's the ultimate goal.

— K5YAA

If that doesn't give you something to think about, I don't know what will. If your Ham activity has become routine and you miss the excitement of your first year or two on the air, there's no better way to shake out the cobwebs than by learning a new skill. Contesting may be a good way to bring the excitement back, and can you think of any better way to spend a long winter night or hot summer day when it's no fun being outdoors than by working a few new ones on the radio? Neither can I.

In future editions of this series we hope to cover topics dealing with bands and modes and need your help. If you're a sharp CW or Digital Mode Op, why not take a few minutes and tell us how you learned the art? All it takes is e-mail to ac5up@vei.net and you could be *famous*. Have an idea for an Elmer topic? Tell us. All comments will be credited, and appreciated!

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— 73 and Good DX!