### **Contesting 101**

By Kirk Pickering, K4RO

Hello, and welcome back to Contesting 101. Please send me your questions or comments, whether you are a newcomer or an old timer. I can be contacted via e-mail at **k4ro@k4ro.net**, or at my call book address. Spring is in full bloom in Tennessee as I write this column. Needed station repairs lists are growing in both quantity and urgency.

## Staying QRV

Many of us have heard the old adage about antennas, "if it stayed up through the winter season, then it wasn't big enough." The comment often brings a smile, and says a lot about the radio man's desire for more gain and better antenna patterns. However, unless we have unlimited time and resources, most of us can't afford to completely replace our antenna systems every year. The reality is that most of us have to make do with limited resources, and a broken component in our station means being *QRT*. Being off the air is bad for everyone. Our own skills fall out of practice, and our fellow contesters have one fewer station to work.

Sometimes, we just need a little break from contesting, and that can be healthy too. The key is to not let the respite become permanent. We might tell ourselves "I'll fix that next month when the weather improves." The next thing we know, other responsibilities have taken over our schedule, and weeks become months, and sometimes even years. If the repair is particularly expensive or difficult, and radio contesting is not the top priority in our life, delays can become even longer, to the point where we are literally off the air for years. Many times I have noticed a certain call sign missing from a particular contest. After an email inquiry, the answer is often "XXXX is broken, and I'm waiting for an opportunity to fix it." So what is a contester to do in order to stay QRV?

#### **Build to Last**

One thing that we can do to stay on the air is to select our components carefully, and pay special attention to areas of weakness or vulnerability. One common mistake I often make is putting up "temporary" antennas, which then become permanent. Before long, something in the antenna or the support structure fails, leaving me wishing that I had planned the installation better. In the past, I would get an idea, rush to the junk box, and string up whatever I could in the shortest time possible. Now when I get an idea for a new antenna (usually some sort of wire array) I'll spend some time making sure that I can put it up to stay up. If it means I have to make a trip to the store for better quality rope, or a few pulleys, I'll make the trip. If all I have is zinc-plated hardware, I'll make the effort to get quality stainless hardware before proceeding. If an antenna has a reputation for weakness in a certain area, and a "fix" has been designed and tested, by all means implement the fix. Don't wait to become the next casualty. If you think a boom or other component of an antenna needs trussing, then truss it. Don't wait for it to break, and then say "I knew I should have trussed it."

### **Weather Proofing**

Another area that we want to focus on carefully is weather proofing. Some of the most critical points in every contest station are the antenna feed points. The feed point is where our transmission line delivers power to the antenna driven element, on both transmit and receive. Any degradation of the feed point will result in reduced performance at best, and at worst will render the antenna completely ineffective. We need to take great care of our antenna feed points, particularly when they are subjected to physical stresses. Wire antennas can exhibit

particularly vulnerable feed points, especially when a heavy balun or choke is present at the antenna / transmission line juncture. (By the way, I strongly recommend a quality choke of some form on every antenna feed point.) Spend some time studying about weather proofing outdoor RF connections. Two of my favorite products are Liquid Electrical Tape and Scotch electrical tape (#33 or #88.) Experience has shown these products to be very effective in the Tennessee climate. Something to keep in mind is just how harsh the weather can actually be on materials. Just because a component can withstand a calm day does not mean that it will fare well in the next thunderstorm or hail event. I've never been sorry for a little over-kill when it comes to weatherproofing. I have been sorry for not doing enough.

# **Operator Maintenance**

Let's not forget the most important part of the contest station – the Operator! We've all probably heard more information than we wish about proper diet, exercise, and moderation in our bad habits. I encourage contesters to take care of themselves, both physically and mentally. One of the fiercest competitors in Tennessee is Don, N4ZZ. Don is in his mid seventies (in 2018) yet he continues to make an astounding number of QSOs every year, decade after decade. Don is usually at or near the top of the TCG's "Radio Active Report" every year. How does he do it? I suspect the main ingredient is *enthusiasm*. N4ZZ just *loves* to operate, as much as any contester I've ever met, but he also stays in good shape physically. Whether he is out walking his dog Duke, hunting in the forests of Tennessee, or playing competitive tennis matches, Don leads a very active life style. I suspect that his physical conditioning has a lot to do with his ability to sit at the radio, and stay sharp for long stretches of time.

# **The Synergistic Effect**

I feel that it is important for contesters to keep both our stations and our bodies well maintained. The end result is that our *mind* can stay focused on the game. I have found that there is a synergistic effect, and it works both ways. If my station is in disrepair and I am not actively planning or working on a repair, I will start to lose interest. Before long, my focus and enthusiasm can start to wane. On the other hand, when I've kept the station well-maintained, it makes me want to compete. That competitive urge encourages me to eat more healthily, to exercise regularly, and to get better quality sleep. After all, I have to be ready for the big contest!

That's all for this time. Please remember to send me your questions or comments. Most of all, don't forget to have FUN with contesting, because that's what's it's all about!

73

--Kirk K4RO