Editorial

The Secret Ingredients

K9LA asserts in this issue's "Propagation" column that "lots of aluminum and legal limit power don't guarantee a win. I personally believe ability and desire aren't discussed enough." I have to agree with Carl. As the contesting hardware arms race escalates, more and more attention is focused on bigger antennas, more powerful amplifiers and taller towers. The simple fact is that louder stations in good locations are a key component of contest success. Over time the gap between the average contest station and the super station grows ever wider. However, with rare exceptions, it's always the operator who really makes the difference in the end. A killer station in a killer location still needs killer operators to pilot it to its ultimate potential.

The effect of the arms race is probably more evident in DX contests, where, for example, entirely new layers of stations become available with increased antenna firepower. The domestic contests are still dominated by the greatest ops at the best stations, of course, but the effect of the arms race is a bit less prevalent. This may be due partially to the fact that the available pool of people actually operating in domestic contests is smaller, as is the number of overall competitors. In any contest the number of multipliers is finite and sometimes limited by a lack of participation. Domestic multipliers are generally reachable without massive antenna systems. There is a greater chance for the smaller station to place well, if the operator's mind is really into the contest. That's one of the reasons for the NCJ-sponsored contests - to provide a competitive environment for all operators in North America to exercise their on-the-air skills.

Whether domestic or DX, the contest winners usually share some traits. These include: a dedication to operate the entire contest, detailed planning - including studying past results and strategies, meticulous work in assembling and testing all hardware and software, and a strong belief in the ability to win. I've heard champions like K5ZD state that one key ingredient in operating a DX contest is that the operator must really want to go the distance. That desire to push forward through the tough times must be strong enough to overpower any inclination to stop and rest. While not everybody can operate 48 hours nonstop, that's the kind of mental determination that most winners share.

The other key ingredient Carl mentions is ability. The plain truth is that developing

superior ability typically requires years of practice. Contesting skills are not developed overnight, and some of the more subtle nuances may take decades of operating to reveal themselves. The majority of contest champions have typically operated hundreds, if not thousands, of contests over a long period. Their skills were developed through countless losing efforts from lessthan-optimal stations. The top operators learn from their mistakes and gain valuable experience through thousands of hours spent on the air. Most top operators still learn something new in every contest.

> Ability and desire make the most difference.

One final ingredient I've seen among the best operators is that they seem to find real joy in contesting, year after year. The top ops have figured out how to keep radiosport really fun, and their enthusiasm for contesting remains strong for decades. It's not surprising that these same operators share their enthusiasm with others and give back to the sport they find so rewarding. Their call signs can often be found in the lists of volunteers who work behind the scenes to keep the contests we love running smoothly.

Thanks to the Contest Software Gurus

In several discussions with N4ZZ over the last few years, Don has called the current computer era the "golden age" of contesting. Don has been contesting for more than 50 years. He's seen a few changes come and go, and he feels that computer logging really brought us into this golden age. It got me thinking about how we take these programs and other developments for granted. In my opinion there have been some negative consequences as well. Tools that locate and identify stations for the operator have had a negative effect on skills development. The ubiquitous use of computer-generated keying has probably affected overall CW sending skills among contesters. Just as many tools have been created to enhance the contesting experience, however. One example is the advent of computerized log checking, which has gone a long way toward helping to establish a correct finishing order among competitors. Another tool that most contesters are familiar with is the real-time logging program.

I started contesting well into the computer age and only operated a few contests with paper and pencil. I first saw computer logging at ARRL Field Day, when I watched K4AMC run stations on a computer. After that, I threw away the paper and started operating contests exclusively with the computer. In fact, it was the software that drew me into operating contests almost as much as the radio operating. I discovered that learning how to use the software and have it monitor and control station components was something I really enjoyed. While I've never been a video game enthusiast, the integration of the computer and the radio equipment resonated for me. I've spent countless hours using TR-Log and N1MM Logger over the years, and I'm grateful to the software authors and development teams who create and maintain these great tools. The next time you're enjoying your favorite logging program, be grateful to the developers who created the tools now at the heart of most modern contest stations.

In This Issue

ACØC shows us how he built a sophisticated 10 band indoor antenna system for his SO2R contest station, K2AV introduces us to the folded counterpoise or FCP. NO3M describes his flexible and expandable microcontroller-based receive antenna switching system. N2QT relates his experience operating single op with three radios in RTTY contests. KØMD reviews some W2IHY audio processing gear. We also have some tips for keeping up your rate from K3TN and the PVRC. K9JM offers some ideas on managing multiple devices on the common CI-V serial communication bus. N4ZR presents an ingenious way to send remote control signals via receive antenna coax feed lines.

Our regular columnists share their knowledge about restoring old antennas, choosing from among the wide array of available RTTY interfaces, and deciding which band to pick depending on propagation. K6MM profiles Bud Trench, AA3B. K9ZO emphasizes the value of sharing our stations and our attention with newcomers to contesting. NØJK reviews conditions during the 2012 ARRL January VHF Sweepstakes. We also have the results of the March RTTY Sprint from WØYK, we remember John, W1BIH, who died in March, and W4DC provides us with a list of ARRL Field Day records to shoot for in June. We hope you'll enjoy this issue!