

Contesting Retrograde

Tom Taormina, K5RC, is one of the station builders of the Comstock Memorial Station W7RN — usually an easy Nevada multiplier in ARRL November Sweepstakes. W7RN is a club station dedicated to the memory of David, N5JJ; Chuck, K5LZO; Paolo, I2UIY, Sam, W1FZJ, and Father Moran, 9N1MM. Taormina, his wife Midge, K7AFO, and Grady Ferguson, W5FU, manage and maintain the station, which is an IRS 501(c)(3) nonprofit charitable foundation.

When I won the ARRL November Sweepstakes CW in 1975, I was using a Heathkit HW-101 transceiver, a Collins 75A-4 receiver, and a Heathkit SB-220 linear. I did have one of the first memory keyers, but that was the most state-of-the-art equipment in my station.

I surmounted a long and challenging learning curve to finally reach #1 after 15 years of SS participation. In the ensuing 40 years, I have continually updated station equipment, peripherals, and antennas, attempting once again to gain a competitive edge in SS CW. The station did not win SS CW again until Bob Wilson, N6TV, did it from W7RN in 2013.

In the 1980s, Randy Thompson, K5ZD, bestowed on me the title of SO (Station Owner). My focus had changed from being competitive in single-op contests to building stations for up-and-coming super operators. Randy, along with David McCarty, K5GN; Eric Silverthorn, NM5M, and David Busick, N5JJ (SK — this call sign has been reissued) became emerging super ops at the early K5RC stations. I found it much more gratifying to host them and to host multioperator DX contests. In a multiop, I could continue to operate competitively, but focus on my skills as a DXer (373 confirmed). I started specializing in running the multiplier station and busting pileups for rare mults. We managed to win a few CQ World Wide DX contests in multiop configurations.

Subsequently, my focus changed to SB (Station Builder), as we attempted to build the stations of Grady, NA5R (now W5FU), and Sid Leach, K5XI, into massive contest superstations. During those years, the cost of building a competitive station escalated nearly exponentially. It was no longer possible to be competitive without high-end transceivers, heavy-duty amps,



Figure 1 — The W7RN antenna farm near Virginia City, Nevada.

computers, and mono-band antennas. For a quality control engineer with two young sons, the challenge became to design and build stations with other people's money. It became a very pragmatic solution to establishing Top 10 stations for guest operators. Many famous "hired guns" worked on and matriculated from K5RC, NA5R, and K5XI.

Malaria

Competitive contesting is a bit like malaria — it may go into remission, but it eventually erupts again. When we moved to Nevada in 1997, my wife Midge, K7AFO, suggested that we just put up two towers and create a competitive station for domes-

tic contests. After all, winning DX contests from the West Coast was always considered to be folly. That was the plan, until I re-established contact with Grady. We were both older and "wiser," but he suggested we attempt another superstation. Creating new paradigms for winning stateside and DX contests from the West Coast became the vision and mission for W7RN.

As I laid out a competitive station and antenna system, the costs were now as much as 20 times what they were in the 1970s. Not only did making the Top 10 require state of the art transceivers and amplifiers, SO2R was virtually mandatory, and it was dependent on sophisticated



Figure 2 — An aerial view of W7RN.

logging programs, radio/amplifier/antenna switching, and features available with pre-fills, packet spots, and the Reverse Beacon Network (RBN).

Then there are the choices of antennas, switching, and rotators. These are under continual evolution. We have always shared our experiences and suggestions on station antenna configurations. We also mine as much data as possible from other successful contesters. The evolution of hardware and software continually prompts operator meetings to brainstorm where we might harvest the “next 3 dB” of station improvement. Unfortunately, we are now down to cost/benefit tradeoffs for 1 dB and improving station efficiency at the microsecond level.

The Evolution

In the 1960s, Chuck, K5LZO, and I devised an “octopus” lockout system, so that we could do multiop SS with two stations, but ARRL changed the rules to prohibit the use of such devices as an unfair advantage. Today, N6TV has incorporated a three-radio, positive lockout system at W7RN that, through software and hardware, guarantees only one signal on the air at a time. Contesting ethics also have

evolved over the years. We are adding such features as fail-safe operating systems and sophisticated log checking that detects compliance with the entry category. Running more than the legal power limit (aka QROO) has become very rare.

The Retrograde Thing

Now in my 73rd year and my 59th on the air, I find that creating and maintaining a competitive contest station has become a continual improvement process that parallels my consulting work with companies that want to be best in class. That process is always very expensive initially, very outcome based, and absolutely requires maintaining the drive and the talent to skillfully keep the edge.

Competitive single-op efforts have grown beyond my skill sets, and computer-run stations beyond my comprehension; I find it much more rewarding to share my skills and experiences with others to help them find their niche of excellence, both in radio and in life.

To paraphrase a well-known vow, my current philosophy is to excel at what I *can* do, not to attempt tasks I cannot do, and to have the wisdom to know the difference. I have not lost the drive for excellence, but

now I satisfy it by collaborating with others who are younger and more tech savvy.

A Will and a Way

N6TV and WX5S have been responsible for helping to hone the W7RN station efficiently in stateside contests. They both are regularly in the Top 10 of SS. WK6I joined the team and helped turn RTTY into the fastest-growing contesting mode. WK6I has enabled us to achieve the founding vision of winning international (RTTY) DX contests from Nevada a reality.

Together, we have created the SO6V RTTY station. It employs three Elecraft K3s — each with sub-receivers, three computers, three mice, three keyboards and 12 decoders running on the computers. Three ultra-reliable Acom 2000A amps make instantaneous keyboard band switching truly seamless. Adding a HamPlus 6 × 8 switch allows any radio to access any bank of antennas. The Green Heron hardware and software make the selection of any antenna a matter of pushing a button on the touch screen of the antenna computer; there is also touch-screen access to any of the seven rotators.

We made W7RN an IRS 501(c)(3) club station. While W5FU endowed the bulk of



Figure 3 — Our benefactors, K5AAD and W5FU.



Figure 4 — N6TV operating the main station in the 2017 ARRL November Sweepstakes CW.

the resources, we now operate on donations, endowments, and income from membership in our remote station. W1YL is on the remote from a big contest station nearly every day from her retirement community. K6DGW, K5XI, and others operate the remote from their restricted communities. We have collectively devised a system to give remote operators access to all equipment and antennas. K5XI is pushing the envelope in JT65 and FT8. He has endowed us to build a 7-element, 6-meter LFA Yagi on a 58-foot boom to enable him to do horizon EME. N6TV continually encourages us to adopt subtle new technologies that are often expensive (for him!) but add another decibel of competitive advantage for operators.

Limitations

Having successfully maintained a competitive station for others to realize their potential, and continuing to evolve with technology, I have finally achieved one of my 50+ year dreams of having a Collins KWS-1 and 75A-4 on the air. The Collins Gold Dust Twins were donated by K5AAD, along with many more vintage radios that we sell to keep the maintenance fund above water.

With one of the most sophisticated contest stations on one side of the room, this old man now has his vintage station for

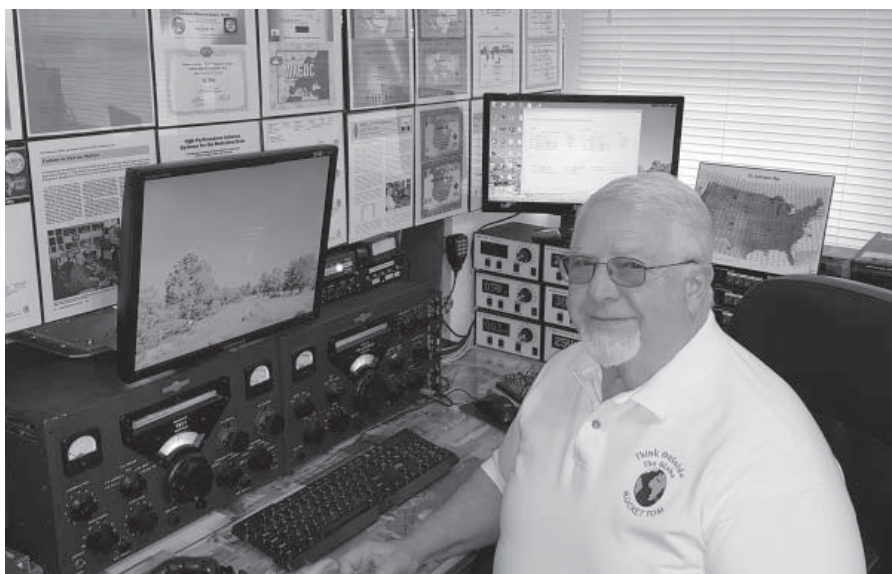


Figure 5 — K5RC, “The Old Man,” chasing DX.

rag-chewing and chasing DX on the other side of the room. My senior aches and pains are now comforted by the warmth of vacuum tubes. Along with working full time and maintaining W7RN, I now have an opportunity to indulge in nostalgia, using vintage equipment, state-of-the-art anten-

nas, packet spots and computer logging.

Being an old timer while attempting to keep up with state-of-the-art technology inspires me to paraphrase “Dirty Harry,” who famously said, “A man’s got to know his limitations.” I have supplemented that with “...and learn how to overcome them.”