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Elecraft Turns 20!

NCJ is delighted to interview Eric Swartz, WA6HHQ, of Elecraft on the 20th anniversary of Elecraft. Eric and Wayne Burdick, N6KR, co-founded Elecraft 20 years ago. Elecraft has transformed radio contesting since its creation. The popular K3 series transceivers are likely the most popular contest radios, especially among top-tier contesters and WRTC participants. We appreciate Eric's taking a few minutes out of his busy schedule to share an update with *NCJ* readers.

Editor: Eric, tell us how Elecraft got started, and how did you meet Wayne Burdick, N6KR? How is it working with a fellow ham who lives 60 miles away from you and the factory?

Eric: Wayne and I met in 1994, after I purchased one of his early kit radio designs, the NorCal 40 4-W, 40-meter CW transceiver, from the NorCal QRP club booth at a local hamfest in Monterey, California. Wayne was working as a research engineer in Silicon Valley at the time, and I was running an engineering test equipment manufacturer. While definitely not a QRP operator then, I was looking for something to get me back to my hands-on engineering roots. It was a blast to build the NorCal 40, and I was impressed both with the simple, yet elegant, circuit design and its good performance. After working 108 countries with it in the next 12 months, I was hooked!

We actually met at a gathering of the NorCal QRP Club, which was as much an experimenting as a QRP operating club, later that year. We subsequently collaborated on a new club design of Wayne's, the Sierra multiband QRP radio. We also got together where I lived on the Monterey Bay with our wives, occasionally walking on the beach discussing big ideas for radios we'd like to design, but never thought we'd end up selling commercially.

The idea for the K2, an all band CW/SSB kit transceiver, evolved late at night a couple of years later during ARRL Field Day, when the bands were slow. Initially, it was targeted as an ideal Field Day rig, with both good performance and low receive current drain. We spent many late nights and weekends talking on the phone while we worked 60 miles apart at our home lab benches. This remote design and collaboration method worked well for us, especially with the ability to quickly correspond and send design documents via the internet. We've continued to use a dispersed engineering model as we've added engineering talent over time.

Elecraft's Eric Swartz, WA6HHQ.

As we refined the K2 design, we pushed its performance envelope, especially on receive, both with a low-noise band-switched PLL, and with a high dynamic range front end. Combined with a detailed kit manual and a microprocessor-controlled, easy-to-build-and-test design, we convinced ourselves we might even have a commercial winner. Heathkit had left a vacuum when it exited the ham market, and that created an opportunity for us to break into it. The first K2 kits shipped in January 1999.

The rest has gone exceedingly well, and we believe Wayne is productive and able to innovate more easily while stationed some distance from our factory. It is a pleasure to work with Wayne and all of the team at Elecraft.

Editor: Elecraft has built a number of radio models — the K1, K2, K3, K3s, and the KX-1, -2, -3 series. What have you learned about our hobby and contesting with the design of these models?

Eric: We've learned that both DXers and contesters are looking for an edge with our high-performance radios. It's a demanding crowd, but once we gained acceptance, they were also our biggest boosters. They also give us some of our best ideas. Our biggest challenge has been to keep one-upping our design performance as we've progressed from the K2 to K3 and now the K3S.

Editor: What are the secrets for success at Elecraft, especially for appealing so strongly to the contest community? How would you describe your commitment to performance, usability and appeal?

Eric: Listen to our customers. We have to keep pushing the performance envelope with unique and fun-to-use designs. Always keep looking to satisfy that next customer need and also to improve our existing products incrementally over time. Our secret weapon is to provide superior customer service with a great team that both understands and really cares about customers' questions and problems. We'll stick with each customer working to solve their problems until they are happy. Even our repair techs will call you if they have a question. Last, hire good people, work hard, and make sure we continue to enjoy our work.

Editor: What lessons have you learned about our hobby from being on the manufacturing end of things?

Eric: Hams are as demanding as any other customer segment. You have to treat this as a business and not a hobby pursuit, in order to succeed. We have to be serious about manufacturing process and quality. Our customers can be both demanding and also our biggest supporters. Plus our designs are as complicated and detailed as anything we both worked on in Silicon Valley.

Editor: How has the expansion into amplifiers gone for Elecraft?

Eric: Excellent! Our KPA500 has become a solid and popular amplifier in the mid-power range, with thousands on the air worldwide. And the KPA1500 surprised us with how quickly its sales took off. As its volume ramped up quickly last year we had to work extra hard to rapidly grow production to meet demand. We are also finding wide acceptance with customers using our amplifiers with most of our competitors' radios.

Editor: Many of our readers often wonder how long it takes from conception to point of sale for an innovative new idea with a radio or amplifier?

Eric: It's a wide range. Some ideas can percolate below the surface for some time before emerging to start the serious design phase. A year or less for simpler products. Anywhere from 2 to 5 years or more for more complex offerings. That includes

false starts, changing to new technologies midstream, and discarded designs as part of the process.

Editor: Where do you think contesting will be in 10 and 20 years? Are there trends that concern or excite you and Elecraft? Finally, how do you have the energy to display at so many ham radio events yet stay so focused on customer responsiveness and innovation?

Eric: I can't even guess where contesting will be in 10 or 20 years. It will certainly be interesting though! I'm sure a plethora of new operating modes and technologies will broaden the appeal and challenge of contesting. We see contesting as one of the more vibrant, active and growing ham radio groups. It is technical, competitive and has a strong sense of community, which likely means it will continue to expand even more over time. We are excited about the challenge to satisfy the contesting community with our designs as new technologies become available. It won't be easy!

We have a great team at Elecraft that shares the load of attending a wide range of ham events. Plus our customers are the greatest, even helping us at our booths and acting as our most enthusiastic supporters. That makes those long hours at each trade show worthwhile and enjoyable.

Editor: Congratulations again on your 20th anniversary and the success you enjoy at Elecraft. Thank you also for leading a company so focused on contest radio performance and your accessibility to the ham community.

Eric: Thanks! We're still having fun and hope to be serving the ham community for many more years.