

NCJ Profiles: David Smith, ND4Y

Like many ham radio operators, David, ND4Y, got his start as a short-wave listener (SWL) but soon embraced the exciting world of radiosport. Following the classic motto, "You can't work 'em if you can't hear 'em," David put together a first-class home station employing high-performance antennas. A specialist in low-power SSB contests, David is also a founding member of the Kentucky Contest Group. Here is his ham radio story, in his own words.

Early Years

I was introduced to ham radio during grade school in the mid-1960s, when I visited a schoolmate who had built a Heathkit shortwave receiver. I was at his house for an overnight, and we spent the evening listening to faraway short-wave stations such as Radio Moscow, Radio South Africa, and many others. It was exciting to be able to listen stations in foreign countries and their music and political point of views. My friend showed me his collection of QSL cards from all of the countries he had heard. We then tuned to the ham bands and listened to Amateur Radio operators chat with each other. I was hooked. I knew this was the hobby for me, but where to start? I decided I wanted to collect QSL cards and work toward SWL country awards. In 1970, I was assigned my SWL call sign of WDX4KSO by Hank Bennett, W2PNA/WDX2FT, the long-time short-wave editor of *Popular Electronics*. You could send in your SWL QSL cards and earn awards for hearing a certain number of countries.

While I began studying for my Novice ticket, I entered high school and then went on to college (and discovered girls), so I put my Amateur Radio aspirations on hold for a while. Several years later, after I'd graduated from the University of Kentucky (1976) with a BS in accounting, I came back to my hometown, Harlan, Kentucky, bought an existing accounting practice, and got married. At that point, I also found the time to study for my Novice, set up my first ham station, and start what would be a life-long adventure of making many new friends via ham radio.

I took my Novice exam from my Elmer John, KC4CG, in 1978. John also handed me a brochure for a Drake TR-7 — a radio he thought I should purchase. With a trip to the bank to get a loan, I had my first radio.

Building My Station

My introduction to contesting was during my first Field Day in 1978. Our local club then was very active in Field Day and took it seriously. As a newbie, I was assigned to the Novice station and told to make as many contacts as I could. With my Ham Key straight key, I stayed at the rig pretty much the entire time, and the contest bug bit. The next contest I was able to enter was the Novice Roundup in 1979, which I did from my apartment. My antennas at that time consisted of a Butternut vertical and a three-element CB beam readjusted for 10 meters and turned with a TV rotator. In 1979, 10 meters was very active. I started out with the Drake TR-7 in my apartment in 1978.

I soon fell in love with such domestic contests as ARRL November Sweepstakes and the state QSO parties, where you didn't need a large antenna farm, and we could compete against one another within the club. Soon after, I started meeting other contesters in Kentucky at local hamfests and developed many friendships. I attended my first Hamvention in 1978. At the contest hospitality suites at the

Crowne Plaza, I met many national and international contesters. I was definitely impressed and inspired to do better as a contester. Soon after, I was invited to the N4AR antenna farm and started getting my real education on antennas from Bill on how antennas operate. It was then I developed my interest in antenna design.

Two years later, I purchased 10 acres of land, built a house, and dedicated a room where my ham shack is today. My HF radios progressed from the Drake TR-7 to an Icom IC-765 and a TEN-TEC OMNI VI+. In the 1990s, I discovered SO2R to search for multipliers while running the open bands, so I purchased a second TEN-TEC OMNI VI+. A good friend, N4TY, built SO2R boxes for both of us. It was a novel idea in the 1990s. Around 2003, I took a break from the hobby for several years but stayed in close touch with the many friends I had made through ham radio. Seven years ago, I sold part of my accounting practice and semi-retired and have gotten back into the hobby full force. I currently am operating two Elecraft K3s and have a KX2, which I take with me when operating mobile or on weekend vacations.



Figure 1 — The ND4Y station with twin Elecraft K3s.

When I moved to new my home location, I put up two towers at 100 feet and 120 feet. On the 100-foot tower, I mounted a KLM three-element 40-meter monobander at 100 feet and installed LTA monobanders as well as a 5 × 5 × 5 10-meter stack with a BIP/BOP switch. On the 120-foot tower, I installed a KLM five-element 20-meter monobander at 120 feet and a 5 × 5 15-meter monobander stack at 120 feet and 60 feet. For SO2R, I also mounted a rotatable KLM KT34XA at 35 feet. My only 160-meter antenna is an inverted V at 120 feet. After visiting the N4AR antenna farm, I was able to play with his four-square array on 80 meters and 160 meters. Seeing the great performance of this type of antenna, I installed an 80 meter four-square and spent all summer long laying 20,000 feet of radials, each approximately 65 feet long.

In 2012, I installed a 40 meter four-square with 8,000 feet of radials. I am currently in the process of erecting a new 120-foot tower that will have a JK403 40-meter monobander at the top, and a side-mounted rotatable M² 4 element 10-meter monobander at 90 feet. I also have a new KLM five-element 20-meter monobander, which I will side mount at 60 feet fixed toward Europe.

Favorite Events

My favorite events are the domestic contests, and my favorite mode of choice is SSB, with CW a close second. My primary must-work contest each year is the ARRL November Sweepstakes, SSB. My antenna designs are set up primarily for domestic contesting. I also participate in the NAQPs, the ARRL 160 and 10 meter contests, and the IARU HF Championship. The holidays with family keep me from operating every weekend in November and December, but as a semi-retired tax accountant, I have been able to enjoy the ARRL DX contests, both CW and SSB, as well as the CQ 160 Meter contests and various CQ RTTY contests. It's a great way to spend some cold winter days.

On the technical side, I have always enjoyed building antennas and understanding their performance. Over the years, I have learned from others, and through contesting, that you will make the most contacts geographically if you know your competition and build your antennas accordingly. Also, I have found that a killer antenna that may have worked in a past contest, may not perform the same next year, so it is best to have alternate antennas for that band. For domestic contests, I have an NVIS horizontal loop antenna built for 80 meters that I also use for 40 meters. It sometimes is, by far, the best receiving antenna from my location, especially for New England, Great Lakes, and Delta Division stations.



Figure 2 — ND4Y at his station.

Software Integration

I currently use *N1MM Logger+*. It amazes me that in the early days of contesting, we used paper-and-pencil and old-style dupe sheets. The stamina, memory, and eyesight needed was a much larger part of contesting. Then *CT* by K1EA came along, and I thought I had died and gone to heaven. No more dupe sheets! Just type in the call sign, and it would tell you if you had worked that station. No more searching over the dupe sheet anymore, especially when the 2 × 1 call signs came out. When *N1MM* first released, it was overwhelming, but I just took a deep breath, put it on my laptop and would just practice with it (trial and error) while watching television and not participating in any contest. When I got it interfaced to my HF radio, it wasn't so intimidating. There is so much this software can do that each year I try to add another feature in the next upcoming contest. I find I don't need some of the features in some contests, so I use the "keep it simple, stupid" philosophy. The call history file is fantastic. It really has kept my log checking error rate down, especially on CW.

My biggest learning curve is the configuration for each contest. For each type of contest, I keep a folder with notes and pictures I have taken with the particular settings for that contest. I have configuration notes for setting up SSB contests, SO2R, and how I want the function keys to be set. I also do this for CW contests, where I do not operate SO2R and therefore have to change configuration settings again. RTTY contests are often the hardest to

configure. On RTTY, I have *MMTTY* set up to run SO2R, which means two *MMTTY* programs in separate folders, two sound cards, and the correct configuration of two HF rigs, various USB ports, and digital settings in *N1MM+*. I operate AFSK and had a situation once that for some reason, after I would change to another band during a contest, the K3 would reset back to FSK. It took me an hour or so to find out how to fix this.

In general, I would suggest setting up your contest software a full day prior to the contest, to make sure all is well. One time I had a sound card, which, for some reason, couldn't find its driver. I had to uninstall and reinstall the driver and then was good to go. Also, it's a good chance to get familiar with your function keys and select/modify the messages you want to use in the contest the next day.

My current ham radio interests also include various data modes. With the operating ease of modern radios, setting up and operating digital is much easier compared to 20 years ago. My first-ever RTTY contest was about 3 years ago, and now I enjoy the NAQP RTTY, CQ RTTY, CQ RTTY WPX, and I've recently been operating FT8. I enjoy the challenge of configuring the rig and the software.

Clubs: a Great Resource

I am active in my local club, the Harlan County Amateur Radio Club, and I'm also a founding member in the Kentucky Contest Group (KCG). At the 1991 Dayton Hamvention, many of the Kentucky

(and Tennessee) contesters already were acquainted, and after some discussion, we decided to form a contest club. After several meetings, we officially became an ARRL-affiliated. By 1996, we had 81 members from Kentucky, Tennessee, and Indiana as well as a Facebook site and a website with an email reflector. I have made many friends through the club experience and would suggest you consider joining a club in your area.

Ham radio contesting is still my #1 passion. For me, it's most important to just have fun. It's not about what size of station you have or about winning. My memories are always made with my fellow contesters before and after the contest, comparing notes on what bands were open (or not), equipment problems, each other's families, other hobbies, occupations. This is how lifelong friendships are developed.

I can't begin to express the great satisfaction that the hobby of ham radio has brought to me. Throughout the years, all of the people I have met, friends I have made, and memories I have experienced are a part of my life, and without this hobby, I wouldn't have had this pleasure. There are too many call signs of close friends I have made over the years, but I will mention one: Hank Zimmerman, K4FU (SK), who became a special friend and mentor over the years. He is missed by all that knew him. We always have a story or two to tell about him at Dayton each year. If you see me at a hamfest, come over and say hello. I'm looking forward to many more years of ham radio, keeping up with old friends, and making new friendships. See you in a future contest!

Thanks, David, for sharing your Amateur Radio story. Yours is a reminder that Amateur Radio is as much about fellowship as it is about operating achievements.