

# NCJ Station Profile

Conducted by Mark Beckwith, N5OT

It was spring of last year, and the Hardware Addict (H. A. for short) and I were sitting around with nothing to do. Then we remembered we still had to crank out a new Station Profile for *NCJ* in order to ensure receiving another "Golden Log" award in the Sprint.

We sat around for a while not thinking of anything creative, then we both remembered hearing about this great station in the Ozarks in Arkansas, about 4 hours away, and we simultaneously exploded: "Road Trip!"

## Father and Son

Certainly many of us have grown up to be contesters from early ages due to positive influences by male role models, but there is something special about a dad passing this disease, er, quality on to his own son. Stan Stockton, K5GO, whose dad was N5DX, has passed on this special attribute to his son Kevin, who now holds N5DX. I want to let these guys tell the story...

N5DX: The station is located in Northwest Arkansas on a mountain called Gaither Mountain approximately 2000 feet in elevation. Dad began operating from that location in the early '80s. At the time, I was struggling to pronounce my first words. I guess I was trying to speak in Morse code instead of using the English language.

We had a house fire that destroyed over half of the house and forced us to move off the mountain. Even after the fire, my mom and dad kept several acres. At that time, I had little interest in ham radio, but I did feel a special connection with the mountain and was very sad to leave.

I was first licensed in 1993 as KB5WWA. When vanity call signs came around, I obtained my grandfather's call sign. Ever since that day, I dreamed of having a super-station back on top of

The Mountain.

K5GO: Kevin had become a good operator and enjoyed contesting, which gave me a lot of additional incentive to want a better radio station. I kept telling my wife it was all for Kevin, but she said she knew better. There was not enough room at our house to put up much more than we already had.

I had accumulated a lot of tower, aluminum tubing, prop pitch motors and general "stuff" starting when I was about 16 years old. Some of what we are using today has followed me around in storage for over 30 years (sounds familiar—*Ed*). I was always very good at accumulating stuff, and perhaps the worst at ever putting it to good use. After conferring with K8CC about the pros and cons of attempting a multi-multi, I decided to go for it.

N5DX: When I was in junior high I used to dream of going off to contesting school. This school would be run by somebody like K3LR or K8CC and they would teach me how to build antennas and become a great operator. They would bestow their years of great wisdom and knowledge on me and I would carry on the radio tradition.

## The Next Best Thing

N5DX: In the late '90s we started going up to Lew Gordon's station to work his CQWW multi-multis (K4VX). Lew has an incredible station with a lot of history, and he mentored several of today's finest contesters. I really enjoyed our experiences up there and I felt honored to meet him and operate from his station. I believe that the years we operated at K4VX were the major factor pushing us over the edge to build our own super-station.

K5GO: Our big question was whether to have a small building and build a competitive single-operator station, or

whether some of my contest friends would be interested in helping with the many weekends of work to build a larger station where we could do some multi-operator stuff. Les, K5LG, introduced me to Carlin, N5OE, who lived just north of here, near Branson (Missouri). About the same time, I met Red, K5ALU, at the Springfield (Missouri) hamfest. K5LG, N5OE, K5ALU and Chuck, KM5G, all said they would be interested in putting in the effort required for a larger, multi-operator setup.

I found out quickly that Carlin was one of those rare people capable of doing a good job at anything. He also has high energy and enthusiasm, a love for CW, and is a great guy. He suggested that we build a relatively small, but fully equipped, house instead of a portable building of some type.

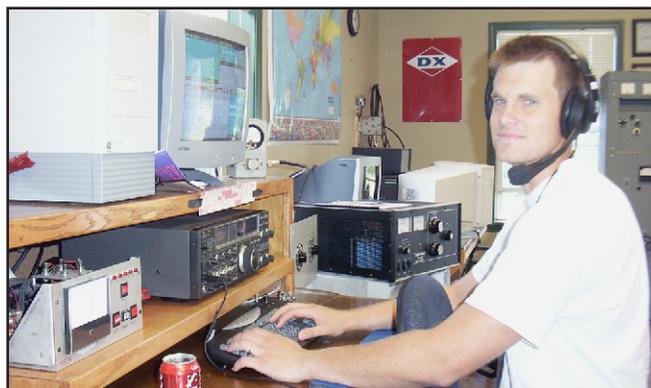
The plan was to build the house, put up four towers with one Yagi each on 40 through 10 meters, and somehow have a fully operational multi-multi station by CQWW CW in the year 2000. Carlin and I staked out the footprint for the house one cold Saturday in January; and the six of us had it built by about November 1.

N5DX: We built a 1330 square foot house dedicated solely to contesting! Then the same bunch of hams managed to build the multi-multi radio station almost from scratch in 6 months. The setup included 6 on 10 meters, 5 on 15 meters, 5 on 20 meters, a Cushcraft on 40 meters, a 120-foot dipole on 80 and we shunt-fed one of the towers on 160.

K5GO: In the final weeks before the contest with no computers set up, W0JOE came to the rescue. When he was finished, Joe had seven computers networked and running *NA*, and it all worked great. Bill, K0DEQ, made a huge contribution by volunteering to handle the QSL cards. Several others came to help along the way, but the project would



The K5GO-N5DX northwest Arkansas contest station.



Kevin, N5DX, at the controls.

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not have been done without KM5G, N5OE, K5LG and K5ALU, who all spent many weekend days at the site in 2000. Everyone learned a lot and we took pride in what we accomplished.

### Let the Operating Begin

N5DX: The 2000 CQWW CW was our first run at multi-multi, and for the most part everything went well. Other than a couple of amplifiers blowing up, we didn't have too many problems.

That winter, I received a call from my father telling me to check my e-mail. I opened the attachment to find a picture of nearly all of our antennas hanging from the towers. Nearly all of the antennas broke due to heavy wind and ice. The antennas looked like something from an abstract Dali painting.

By this time, we had already realized (surprise, surprise) that we wanted bigger antennas, but the damage forced us into major repairs, so we figured we might as well upgrade them at the same time.

N5OT: By the time the Hardware Ad-dict and I visited Stan and Kevin's station in 2004, they had some really big and really stout antennas (see sidebar). All these antennas are homebrewed from scratch, and they have suffered few failures. Kevin had a funny story on the road from then to now...

N5DX: I spent the entire weekend of the 2004 CW sweepstakes building a 6-element 15-meter Yagi on a 48-foot boom. I built everything myself and stayed up until 3AM Saturday morning in order to finish the elements. My dad was a bit reluctant to even pursue the project because it was a little crazy, but I wanted to do it anyway.

The surprising part was he did not do any quality control before we put the antenna up. In the past, though, he has been very meticulous. At times, I felt he was overly critical. This time he seemed to trust my work, which surprised me.

After a couple of arduous hours, we finally got the beam on the tower and in its final position. We hooked up the coax and the SWR was off the chart, over 3:1. We ended up spending the next 3 hours finding the problem, and finally determined that half of the first director was 18 inches longer than it should have been! I felt really bad. My dad said, "I guess next time you won't be so defensive when I go back and check the dimensions."

My reply? "No, I won't." I definitely learned my lesson.

### What Next?

K5GO: We need to figure out what can be done, yet temper it with some degree of practicality.

N5DX: No change on 160, the shunt fed tower works really well. We are able to run Europe on it when the band is

### K5GO/N5DX Station Description:

#### Radios:

Omni 6+  
IC-761  
IC-765 (4 total)

#### Amps:

AL-1500 (2 total)  
BTI LK-2000  
L-4B  
L-7  
4-1000A (homebrew)

#### Antennas:

160 Meters:  
Shunt-fed tower against elevated radials

#### 80 Meters:

Four-Square

#### 40 Meters:

3 element Yagi at 150 feet, rotary  
3 element Yagi at 70 feet (fixed on Europe)  
Inverted Vee at 95 feet

#### 20 Meters:

5 element Yagi at 120 feet, rotary  
5 element Yagi at 60 feet (fixed on Europe)

#### 15 Meters:

7 element Yagi at 90 feet, rotary  
6 element Yagi at 40 feet (fixed on Japan)  
4 element Yagi at 35 feet (fixed on the Caribbean)

#### 10 Meters:

6 element Yagi at 80 feet, rotary

#### SO2R:

During single-operator contests, SO2R is accomplished with a Top Ten Devices box.

open. No change on 80, the four-square works as advertised.

K5GO: I will flip flop from being somewhat practical, which tells me to put up something that will stay up and be relatively easy to maintain without the use of a crane, to actually going for what all of us dream about—like 5/5 at 100 and 200 feet on 40 meters.

We thought 40 meters would be covered with 3/3 at 150 and 70 feet, but we only modeled them after they were up—those two antennas in phase do not work any better than the single one at 150 feet. The lower one is going to come down and now the question is whether to take both down and build a larger (5 element) Yagi. Did I use the word practicality before?

N5DX: We should take down the two existing Yagis and make a full sized 5-element 40-meter beam at 150 feet. At our location, this beats a stack of three-element beams at 190 and 110 feet all day long.

N5OT: Like father, like son, I see....

N5DX: On 20, we should add a fixed antenna toward South America. Computer modeling does not show a signifi-

cant difference between our current setup and adding a third antenna at 180 feet. On 15, we plan to put up a new tower at 90 feet on the bluff. It'll sport two 7-element beams, in phase, targeting Europe. On 10, we'd like to add two 6-element beams giving us 6/6/6.

K5GO: I hope we can arrange things to make it easier to go from multi-multi to single-operator and activate the station more often. I think, over time, as we make some improvements to the station and we get more experience, our scores will improve. I may work a 160-meter contest or two since I really like that band.

Perhaps we can offer the house/station to other amateurs at a good rate to generate a little aluminum tubing fund and help pay the utilities since it is located so conveniently to Branson, a prime vacation spot.

### Dad Gets the Last Word

Although I enjoy operating, my preference is still to build antennas and put them up. This fits well with the multi-multi category since there are always many antenna projects to do.

I feel lucky to have common interests with my son that should always keep us in close contact. My dad (the original N5DX) and I spent a lot of time together working on radio related stuff for over thirty years. He showed me how to spot the frequency with his Central Electronics 100V and turned me loose at age 12 during the ARRL SSB Contest. I was always glad we had that relationship. Kevin and I will always be able to talk about antennas and work together to have a better radio station.

Having a multi-operator station has an advantage in that we do not have to discuss who will be the one to operate in the major DX contests—I can operate as much or as little as I want when it's multi-multi. I don't have the desire to sit in the chair all day long any more, but do like to fix what breaks when I can and also sit down for short periods on the various bands to see how everything is working. Kevin can still work SSB contests as a single-operator, as we will probably only enter CW contests in the multi-multi category.

There is no question that without Kevin's interest and the help from several great friends, I would still be accumulating more "stuff" to build a station that probably would never be built.

Kevin and his wife Jennifer are going to have a baby girl in April. I have said I would only speak to the new grandbaby in Morse code. We will see how that goes.

N5DX: I've always wondered in the back of my head if one of my father's motivations for starting this project was to entice me to return home after college. **NCJ**

