



November 1994

Carolina DX Association

The Pileup

Newsletter of the CDXA

WD4R	Joe Simpkins	President
K2SD	Scott Douglass	Vice-President
W4UNP	Bill Jennings	Secretary-Treasurer
WZ3Q	Don Daso	Editor
AG4L	Bruce Gragg	Net Manager

The President's Column

Welcome to our November issue.

Hope this crisp fall weather has made your antenna & tower work easier. I started installation of a replacement wire for 80M. That turned into a forest clearing project, which I may not finish this year.

For those who missed our 'BVQ BBQ...too bad! It was, in a word, fantastic! Sincere thanks go out to Frank, K4BVQ, who has already indicated he will host this event next year. Thanks also to K2SD, who worked hard to make the event a success. Details on our next social event--the annual Christmas dinner--are detailed below. Our yearly election will take place at this event. If you'd like to serve as a CDXA officer in 1995, or want to recommend someone, please contact WA4UNZ. Ken is heading up our nominating committee this year.

PACKETCLUSTER TIP OF THE MONTH

Make sure your TXDelay is set to 35 (350 ms) or higher for your radio.

Avoid using VIA in your connect path. It really clutters up the frequency. Use a higher antenna or a NETROM station. We will have a NETROM station at Wingate shortly. Details as we make progress.

Do NOT use BBS software on the PacketCluster. If you do, I cannot reconnect you. And our system is NOT to be used for direct keyboarding--other than through TALK through the nodes.

If you want to turn your computer off overnight, please type in BYE & leave the Cluster. Any other method clogs the node & slows the system. And it's discourteous, besides.

Make sure your CHECK is turned off. Most TNCs accept CHECK = 0 (zero).

CDXA Cluster was very active during the CQWW contest. Thanks for reading mail early, & for just monitoring if you're in a fringe area. We're working to bring everyone under a solid coverage umbrella, but members need to do their part, too. Vertical antennas are preferred unless you are in an extreme fringe area, for instance. Otherwise, you'll experience lots of disconnects due to your TNC not hearing others connected to the node. Roger & I are working to get his node running on a faster backbone. Watch the Cluster for news on that front. *The Callbook* CD-ROM is running. Thanks again for all your support.

73 de Joe WD4R

7:00 PM Friday 16 DECEMBER 1994

CDXA CHRISTMAS SOCIAL

Ole Smokehouse Dining Room 1513 Montford Drive Charlotte NC

Nice big private room. Plan on arriving at 7:00. We plan to begin the meal at 7:30. Montford Drive is near Park Road Shopping Center. You can enter Montford Drive from either Park or Woodlawn Roads. A map will be provided in the December *Pileup*. Please RSVP to K2SD--use PacketCluster or 704-847-7734

Buffet menu @ \$8.62 per person including tax & tip: ribs, BBQ chicken, roast beef, turkey, ham, tea, coffee, salad, rolls, hush puppies, potato salad, green beans. Additional items: pie @ \$1.50, beer & wine @ \$1.75, coke @ .80

CDXA DX Information NET (will return when .36 is fixed)
Wednesday evening 8:30 PM 147.36 repeater

EDITORIAL

Stations having truly modern equipment in line with the best practice will have the advantage...and can outperform just ordinary installations...

--W1BDI QST December 1929

This quote, referring to the beginning of ARRL's Sweepstakes contest, still rings true today, nearly 70 years later. With the contest season in full bloom, I consider SS from N4ZC. After all, why else have I spent countless hours climbing up & down those towers--fixing & figuring how to make modern equipment out of the limited budgets both Roger & I have to work with? To measure performance--mainly my own. To have fun. To succeed. Once a favorite from my Ohio home, the SS has lost favor to more exotic DX events--Roger's influence. Some highlights...

1800Z...I arrive at ZC's. We spend entirely too much time walking around the property talking about one of our favorite topics--antennas. Post-WW, we know what we need to do to improve our multiplier stations on 10 & 15. Plus, we now have more land available for beverages. In five minutes together, Roger & I can generate an intensity or focus on ham radio I find tremendously appealing. It's easy to lose track of the domestic contest coming up...1930Z...We begin to assemble the station, necessary since we were M-M in the WW. I decide to use Roger's call, avoiding the "misplaced-3 in 4-land" scenario if possible. The hardest job we have is routing all antennas to one position...2000Z...By now, it's apparent the switchbox I've built (allowing me to try my hand at two-radio contesting) isn't working right. (Living in an apartment, sans radio or workbench, is NOT the way to contest success.) It becomes apparent I won't be on the bands early, checking gear, getting a frequency, etcetera...2045...Nervous, I realize I will not even make the start. I remember reading W2GD was standing in a grocery store check-out line last year at this time. Small comfort. John won anyway, in QRP. CT-8 won't load right. We decide to use our as-yet-untried CT-9. (We're still waiting on documentation promised at Dayton.) 2100Z...The contest begins with a roar on 20M. I am, alas, behind. I finally get going. WX3U answers my CQ & I discover my computer isn't...well...quite right...Dave is amazingly patient as I flub three attempts to send something coherent his way. In the confusion, I simply forget to reach out & send anything with the paddle. He goes away, probably convinced N4ZC is an idiot. I get going 10 minutes later with the paddle, logging by hand, then typing stuff into CT with my left hand, trying to figure it out. By 20 minutes in, I have the keyer, computer, software, rig & amplifier playing right. Now...to get myself on track...2232Z...With 150 Qs...I love 40M in SS, but this isn't Ohio; I move to 80M. We're loud here & I plan to hold a frequency throughout the night. I settle at 3538. The three log periodics work. I stand up at 081Z with 486 QSOs & 70 sections in the log...1213Z...I open back up on 40M, thinking I must have 50-60 hourly rates to stay with some of the big guns. It's hard from this part of the country. I do 42, 63, 60, 51, 59, 31, & 33, moving from 40 to 15 to 20, then alternating 15/20. In the process, I get everything but WY, AK, & the proverbial toughie--VE8. As a DXer, I always want a sweep. I stay on 20, beam pointed to AK/YUK, knowing I can make them call me. The rate suffers, although skip is short enough for me to work as close as MDC, NY/NJ, as well as W6-7. I make the sweep at 2351Z when VY1JA calls....I immediately shift to flipping between 80/40 until the contest ends for me at 2410. Final tally is 1127 QSOs with that coveted sweep.

I stand again & wander upstairs. Rog & family are watching something called Earth 2 on TV. I feel like the characters look--lost in space. Once again, I realize I like the race, the competition. I like the strategy, the ability to lose myself for hours at a time trying to perform at such high level.

I'm just a contester, waiting now for the CQ World-Wide CW....

--WZ3Q

THOUGHTS ON SHUNT FEEDING

In keeping with W4FHI's suggestion vis-a-vis short articles on antennas, here are some ideas for shunt feeding towers. It takes about two seconds to realize the support for your tribander (okay, monobander) really is going to waste--just holding an antenna up in the air. You really should be able to do something else with it. Shunt feeding it as a vertical is one answer. (Other answers may generate other articles.)

And while there are a myriad of ways to attack the shunt feed question, and while many of them have valid points, this way will work. (I know; I used it while living on a tiny lot in New York in the early 80s...)

Your first order of business is to insulate the guys. Phillystran is the best way to go. If you cannot use it, make sure you've broken the guys up into non-resonant lengths between insulators. (see the Handbook; I used 13-foot lengths successfully) At the same time, make sure the tower is well-grounded. A hose clamp with some house-wire grounding cable isn't good enough. Invest in a good rod & cad-weld your strap. Static discharge is important. And you can use this connection point for your radials, too.

It's time consuming, but route control cables & coax inside the tower. This cuts down on RF returning to the shack. Bring the cables out below the feed point. Ideally, follow the broadcast tower rule & bond the shields of the coax cables to a tower leg. In a non-hardline world this is often difficult.

The ground system installation is also labor intensive. But attention to detail here will provide dividends later. Do this work when you cannot climb. You have two choices: either lay (or bury) lots of wire on the ground, or install an elevated ground screen. It's the "missing half" of your antenna system; it's worth your attention.

Clean up the tower face on the side where you plan to install the shunt feed system. Think about how you climb the tower normally. Install the system on a face opposite that side, or plan to climb it differently from now on. I wanted to make the tower a folded monopole; you benefit from not having the ground resistance a big part of the feedpoint impedance with a monopole. A monopole is basically two identical structures--one's the tower, one's the shunt system. (Great, now I gotta build another tower right next to my first tower; this is really great, Don. There are, however, more benefits....) You can get away with using only two wires. I used 3/4-inch CATV hardline. It's big, it's light; it was free. Spaced the width of Rohn 25 (or whatever tower you use) & mounted parallel two feet out from the tower, the shunt feed system attaches to the top of the tower if you want to use the system on 160, as I did. The attachment points must be cleaned well. Use No-A-Lox (or other anti-oxidant)--so you can make solid connection, electrically as well as mechanically. (At these joints, I DID use stainless steel hose clamps.) PVC water pipe pieces were used as spacers & insulators, up the tower & at the bottom, respectively.

Finally, you're ready to match this system & work DX. Huh? Now we gotta match this thing? What did we just install all that aluminum/wire for? This is a folded monopole. The shunt feed system is part of the antenna itself. Don't try moving the attachment point or changing the distance from the tower face. You need to determine the feedpoint impedance, instead. A noise bridge works fine. Since I was only interested in 160, I used an L-network, with parts right out of the junkbox.

This system was installed on 50-feet of Rohn 25 with a Hy-Gain 204 on it. The tower had a house bracket at 20 feet & non-conductive guys at the 50-foot point. Radials (varying in length from 20 to 100-feet) ran 180-degrees out from the base, as space permitted. The tower base was right next to the foundation. A singular wire was looped around the entire outside perimeter of the basement--in hopes of gaining something to the west, to no avail. The system showed about 160 ohms inductive reactance & 40 ohms resistance. It allowed me to finally work Europeans barefoot on this band--something I'd never been able to do with the wires I'd used before. Cheap & simple. The hard part was installing radials under the grass. (I rented a chainsaw & cut dozens of slits in the lawn, then pushed the wires in on my hands & knees. The neighbors really wondered about that one...& I'm embarrassed to say the guy in the rental house probably did, too! It worked amazingly well, though.)

--WZ3Q

MEMBER PROFILE

Jerry Hagen AD4MQ

Like many, Jerry started out SWLing. Using his kid brother's S-38, he had 50 countries confirmed before receiving WV6GLD in 1959. By the time WA6GLD had graduated from Claremont Men's College in 1961, the "real" DXCC was almost in hand. After Army Signal School, Jerry ended up at Fort MacArthur--40 miles from home in San Pedro. Membership in SCDXC followed, along with the usual trials & tribulations of home ownership, bigger tribanders, the first monobanders, SSB, editing the club newsletter, & chasing a guy named Gus around the bands. Jerry became CQ's WPX & DX Awards manager in 1971. He mentions the sunspot highs experienced during 1968-72 as real thrilling. He made 5B-DXCC, edged onto the Honor Roll, got a new SB-220, and became CQ's DX Editor. During this period, Jerry also discovered the joys of contesting. He spent several interesting weekends at the W6ANN/W6BA station. He received N6AV in 1979. Flash forward to 1981.... Jerry (along with WB6RXW--Gary, now KD4RH) gets transferred to Charlotte. He immediately finds (& enjoys) CDXA hospitality. A full sized 1/4-wave 80M vertical adds to the fun. Then, in 1986, Jerry's plant closes, & he returns to 6-land. Finally, in 1993, Jerry & XYL returned to Charlotte (both their children were living in the area) & have settled in Davidson. He received AD4MQ & started over on 5B-DXCC from the 4th call area--an admirable quest. Currently, Jerry's out in the yard most weekends, working on phasing some verticals once again. Inside the shack, he's got a new TS-950, along with the old 220 workhorse. And...Jerry still seems to enjoy contests. He contributed his 220 & fine spirit to the recent N4ZC M-M phone effort. CDXA is glad to have him back in the area.

THE ZERO HEADS TO THE PROMISED LAND

We've all probably heard or read something about "the East Coast advantage. Some of us may have experienced it firsthand, visiting or living in W1-land & trying DXing or contesting. Here's what KRØY had to say about the process in the NTCC News....

During my 14 year contest career, I've had the pleasure of operating from MO, TX, with an occasional side trip to V3, VP5, P4 & PA. But I have NEVER before experienced the absolute feeling of domination in a contest like I did this weekend...I was at the KIAR (K1EA QTH) Multi-Two...K1EA has a FB station with excellent antennas. If you could somehow rank stations by size of antenna systems, I'm sure K1EA would be in the top 50-100. Ken is no slouch as an operator, either; he has won the WW--in between writing CT & stuff. KIAR needs no accolades from me or anyone else....we all know John is THE operator...I said TOTAL DOMINATION before, didn't I? What have I left out? Oh yes, location! I don't mean the hill Ken's QTH is on, either...conditions were down this year, but EQUALLY across geographic areas? No...I've never seen it so easy to find & hold a frequency. Not even challenged by wanna-be types who don't care if anyone calls--they just wanna nudge the big boy on the band edge & play. Big rates all the time, you ask? Not really...our best hour was 135. But you sure do hear EU well for A LOT OF HOURS.. And where do all those QRP guys in Europe come from? I've never heard them before! Weird EU run on 15 & HS during Sunday morning EU 15 run...disappointed 80 was so poor. I mean, only 300 QSOs? What a bummer. How could we miss JA on 15, too? Losing one station for 45 minutes Friday night right at EU sunrise...Does it sound like I'm bitching? It's not my intent. I simply had no idea what it was like--operating a DX contest from W1. I won't get caught up in the argument about what makes an "East Coast" QTH...I'm sure guys in W2-3 think it's W1. I CAN safely say one thing: DO YOU GUYS KNOW HOW GOOD YOU HAVE IT?

--KRØY

The Back Page

Zero-Beating For The 90s

Have you ever wondered why so many of the same DX spots on the PacketCluster all have different frequencies?

As a long-time CW operator, I've watched the art of zero-beating disappear with the predominance of transceivers. I hear very few zero-beat CW contacts anymore. The reason is simple. Very few operators know how close their transmit frequency is to the station they're calling--unless they can "set up" their transmit frequency with a second receiver. Not too many have that luxury. New operators are unable to place their transmit signal where they should or want to in pile-ups. Not knowing any differently, they conclude more power is needed...you see the confusion and needless QRM which results--both in today's pileups and in tomorrow's operating practices.

Having editorialized a bit, what's the solution? What can you do? Listen to WWV when there is no tone modulation on the signal. Set your receiver in your favorite CW listening mode. (I prefer 400 Hz peaked with very narrow IF and external audio filters.) On the 10 MHz WWV signal, my receiver readout shows 10.000.4. I know I'm listening to the 10MHz rf carrier. Then if I am listening on 30 meters and my digital readout shows 10.104.4, I know the station is transmitting on 10104.0. I will spot him accordingly on the Cluster. Before putting the spot out, I will subtract .4 KHz from the receiver's readout. If my radio receives CW on the opposite sideband, I would add .4 KHz before sending the spot to the Cluster. This means I would read out WWV at 9.999.6, & so forth.

Calibrate your rig this way. I'm sure it will help narrow the range of frequencies spotted for the same station on the Cluster. And thanks.

--N4SU

A Report On The CQ World-Wide Phone Contest From N4ZC

We were plagued by multiple problems. You know Murphy...! Plans were to have six KW stations up & running. The way things worked out, even with a total of 10 operators sometimes present, we often had only 3 people operating. We seldom had more than 5 operating. At the start, only 75M was up & running. 15M began the contest 20 minutes late & had no amp the first night. 20M started over 40 minutes late & had no amp for several hours. (At the start, Rich & Don were occupied with a non-functioning AL-1200 which Rich had borrowed & brought. We were heart-broken.) 40M started 45 minutes late; I was too depressed to run hard, plus 40 interfered with 75M. Propagation didn't help. Nor did it improve on Saturday. Stand out efforts from WØZV on 75M (at least the log periodics played well) & from WA4UNZ, who ran around trying to make the computer network work right. All the summer & fall efforts from WZ3Q & myself seemed to have paid off--my antennas worked fine. It's just that everything inside the shack went west more-or-less at once. Contributing to our effort were: AA4SQ, AD4MQ, KB2LH, KU4V, N4ROL, N4ZC, WØZV, WA4UNZ, WB5M, & WZ3Q.

In spite of all the negatives, we learned lots of things. I even think some of the newer ops might have learned some things. I certainly hope they at least had some fun. And might consider coming back & doing it again. We managed 3.72M in spite of Murphy, the propagation & everything else.

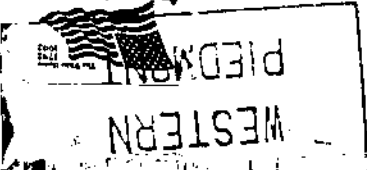
--N4ZC

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The Newsletter of the Carolina DX Association

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FIRST CLASS MAIL



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HEY GANG....

Let's all send in our 1995
CDXA dues a little bit early.
Send your dues to W4UNP...

Bill Jennings
630 Whitepine Drive
Catawba SC 29704

**We've had some serious expenses
which early payment could help!**