The Pileup

Newsletter of the CDXA

The Carolina DX Association

W4VHF	Ted Goldthorpe	President
AD4IE	Paul Ponak	Vice-Pres.
W3ZL	Cliff Wagoner	Sec.-Treas.
K4MD	Joe Simpkins	Cluster Mgr.
W3OA	Dick Williams	Contest Mgr.
W3GQ	Paul Sturpe	Cluster Mgr.-North Area
WB4BXW	Wayne Setzer	Webmaster
K8YC	John Scott	Editor

It's HAMFEST Time Again!

This time of the year always generates some excitement. The Charlotte Hamfest is a time when we have an "eyeball" QSO with many members of CDXA who are spread over the Carolinas, welcome our friends from Tennessee (the "Tennessee 8" as they've now been named), get our QSL cards checked for various awards, find that elusive part needed for our projects at the flea market, view the latest offerings of ham radio technology as shown by the various vendors, take in a few forums at the Hamfest (especially those related to DXing!!), and enjoy a banquet where we repeat many of the same activities all over again.

What about this year? Well, we already know that Dan Henderson will be present from ARRL to check those 160m QSL cards alongside Gary Dixon. The Tennessee gang has already let us know they'll be here with numbers. Some of the vendors present will be: Yaesu/Vertex Standard, Icom, Ten-Tec, Vibroplex, MFJ Enterprises, Wireman, Mirage/Vectronics, Ameritron, Hy-Gain, Cushcraft, Ham Radio Outlet, CQ Communications, and others. Mary Hobart will be present representing the ARRL Development Team, and she is ready to talk to anyone who'd like to leave a bequest to ARRL or make a donation to the Spectrum Defense Fund or the Education Fund.

What about the forums? CDXA's own Joe Blackwell (AA4NN) will tell us all about the Midway Island (K4M) DXpedition. Dennis Bodson, Director of the Roanoke Division of ARRL, will conduct the Roanoke Division Convention. Dan Henderson will take leave from his card checking to give a talk on, "Keeping Amateur Radio Appropriate and Legal". Jimmy Holbrook, NC Army MARS State Director, will conduct a tri-service meeting. David Roy, NC Section Traffic Manager for NTS, will gather his team for a meeting. You can even upgrade your license class if you want! Something for everyone.

Oh, and did I mention the Hamfest BASH? This "capper" for Saturday evening now has over 100 souls signed up to enjoy an evening together and features some nice door prizes, too.

Not done yet? On Sunday morning, CDXA will draw for its raffle prize—a neat little generator perfect for that portable radio operation or campsite. No wonder we're excited.

CDXA PacketCluster & Other Communication Systems		
W4DXA (11 mi. NE of Mooresville)	144.93 MHz (1200 bits/second)	441.00 MHz (9600 bits/second)
K4MD Charlotte, NC	144.91 MHz (1200 bits/second)	Not Available on 9600 bits/second
K4MD (AR Cluster via Telnet)	k4md.no-ip.com	
NA4L (Near Hillsville, VA)	144.95 MHz (1200 bits/second) Connect to NA4L ("C NA4L")	
NA4L (AR Cluster via Telnet)	cdxa.no-ip.org	
CDXA Repeater 147.18 MHz (+600)	W4DXA, Near Fort Mill, SC	
World Wide Web Homepage	www.cdxa.org	
Wednesday Luncheon (11:30 AM)	Skyland Family Restaurant, 4544 South Boulevard, Charlotte, NC	

Welcome New Members!

With one new member in the first month of 2010, a logical progression followed with two new members in the second month of 2010.

In February, **Doug McCracken (KB1MBQ)** of Mooresville, NC was the first new member in the door for the month. Welcome, Doug.

Later in the month, **John Peay (W4PAY)** of Sherrills Ford, NC became the second new member for the month. With John and Doug's arrivals, representation on the north end of Lake Norman is on the rise. Welcome to you, too, John.

Now that we're in the third month of the year and with the Charlotte Hamfest just around the corner, maybe we can keep the string going and put three new members on the rolls in the third month??!!

The ZEN of Ambiguity!

For those who love the philosophy of ambiguity, as well as the idiosyncrasies of English.

If a deaf child signs swear words, does his mother wash his hands with soap?

Is there another word for synonym?

If a parsley farmer is sued, can they garnish his wages?

The Pileup
Official Newsletter of the Carolina DX Association

Published monthly 10 times per year, excluding the months of June and December.

The purpose of the association is to secure for the members the pleasures and benefits of the association of persons having a common interest in Amateur Radio.

Members of the CDXA shall adhere to "The Amateur's Code" as published from time to time in *The ARRL Handbook for Radio Amateurs*, and shall consist of those valid licensed amateur operators having an interest in promoting amateur radio. Long distance communications (DX) is of special interest to members of the association, but said interest is not a requirement of membership.

Dues are $35 per year for those using the PacketCluster maintained by the Association, $20 otherwise, payable each December. Dues are payable by check to the Secretary/Treasurer:

Cliff Wagoner, W3ZL
P. O. Box 577
Davidson, NC 28036

Address, telephone, and email address changes should be directed to the Secretary/Treasurer at the above address or via email at: jcw53@cornell.edu.

DX King News

Dick Williams, W3OA

Item 1: Full details of our DX King Contest and your chances to win a CDXA Jacket from Lands' End or an AES Gift Certificate are on page 10 of the January Pileup (http://cdxa.org/pileup/Archives/cdxa1001.pdf).

Item 2: Here are the first reports for the 2010 DX King competition. These are the scores I have as of February 28:

Call	Category	Countries	Zones	Total
K5EK	Unlimited	194	40	234
W3GQ	Unlimited	194	38	232
K4YR	Unlimited	179	40	219
W4HG	Unlimited	157	38	196
W3OA	Unlimited	155	35	190
N4PQX	Unlimited	138	38	176
N2TU	Unlimited	125	31	156
W3ZL	Formula	116	30	146
K8YC	Unlimited	105	32	137
K4ESE	Unlimited	55	23	78
K4DXA	Unlimited	18	14	32

Item 3: Don't forget to send me your DX Marathon scores (w3oa@roadrunner.com) as of the last day of each month after your score reaches 100.

A Few More "Groaners"

A rubber band pistol was confiscated in an algebra class, because it was a weapon of math disruption**.**

A hole has been found in the nudist camp wall. The police are looking into it.

Two hats were hanging on a hat rack in the hallway. One hat said to the other, "You stay here, I'll go on a head."

The 2010 North Carolina QSO Party

Dick Williams, W3OA

The North Carolina QSO Party (NCQP) ran on Sunday, February 28. The weather was very nice—in stark contrast to last year when Charlotte got lots of rain, high winds, and six inches of snow. CDXA's operation took place from near Stanley at N4ZC, Roger's house. W4GRW, Bill, and I were the lead off operators. W3ZL relieved me about 1:30PM and operated until he was replaced by K4CEB, Eric, at 3:30PM. K4CEB and W4GRW continued until 6:00PM when they were relieved by Thomas, N4HN, and me. The two of us continued until the 10:00PM ending time.

We operated as a club, in-state, all SSB entry. Our claimed score is 262 QSOs and 44,140 points. It's hard to compare these results to previous years because this is the first year for all SSB entry categories. Last year we had just 190 SSB QSOs so that's a significant improvement. One other entry in our category, W4APP, has posted a higher score on the 3830 email reflector so we didn't meet our goal of winning this new category.

We were happy that Eric Sossoman, the current holder of the K4CEB callsign, joined us. Eric is the son of Larry Sossoman, the former holder of K4CEB and now an SK. Larry was a founding CDXA member, premier DXer, and frequently operated at N4ZC in multi-multi contest operations. Eric is just starting to operate in contests and joined us to get some ideas, tips, and experience in contest operations. He still operates his father's station and said his goal is to operate that station remotely from his own home so he can operate the station at all hours for DXing without disturbing his mother. Hopefully he will be part of the "young blood" that will keep CDXA active into the future.

N4ZC's QTH can be difficult to find for people that haven't been there before. As each operator arrived I asked if they had difficulty getting there. Eric mentioned that he had been there before. He had come with his dad when Roger's house was being built. That was over 31 years ago, and Eric would have just entered his teen years. How time flies!

K4CEB and N4ZC discuss "old times" in Roger's shack.

Bill, W4GRW, looks for QSOs on 20 meters while Cliff, W3ZL, runs on 40 meters.

Thomas, N4HN, working a run on 80 meters.

Balun/Balun

By Dick Genaille, W4UW

(This article first appeared in the February 1992 issue of CQ Magazine. It was written by CDXA Member Dick Genaille and is reprinted with the permission of CQ Magazine and Dick Genaille.—The Editor)

The most difficult thing that the writer of an article has to do, it seems, is come up with a "catchy" title. A title that catches the editor's fancy and one which stimulates the curiosity of the potential reader sometimes takes more thought than what was put into the subject of the article. I couldn't really combine in a title how to use two baluns in parallel, cut ferrite rod, and determine where your actual ground is. Therefore, "Balun/Balun"!

The purpose of this article is really to tell you how you can connect two baluns of different ratios, in parallel on the input sides (usually 50 ohms) while feeding two center-fed dipoles on different bands, each having different feedpoint impedances. This is desirable when one wishes to use a single transmission line to feed multiple dipoles.[1] As in the case of most experimental work, there is always some interesting fallout. Cutting ferrite rod so that it doesn't break into unusable pieces and determining our working ground level are two "freebies". I hope that this is the kind of article that is saved for future reference.

I recently experimented with a multiple dipole antenna which was designed to function on 40 meters and the WARC bands. A remotely controlled bridge[2] for reading the impedance at the feedpoint of the multiple dipole antennas was designed, constructed, and used in connection with that project and this one as well.

To prove out the technique of using two baluns in parallel I decided to resort to a multiple dipole antenna choosing frequencies which, when installed at a convenient height above ground, would provide feedpoint impedances sufficiently different so as to make it desirable to use parallel baluns for impedance transformation to 50 ohms. The radiation resistance chart shown in Figure 1 told me that a dipole installed about $^3/_8$ wavelength above ground should have a radiation resistance of almost 100 ohms, whereas a dipole at a little less than ¼ wavelength above ground should have a feedpoint resistance of about 60 ohms. Based on the chart, I chose 20 meters for one dipole and 12 meters for the other. At about 14 $^3/_4$ feet above ground the 12 meter dipole was about $^3/_8$ wavelength above ground and the 20 meter dipole was a little less than $^1/_4$ wavelength above ground with an expected feedpoint resistance of 100 ohms and 60 ohms, respectively.

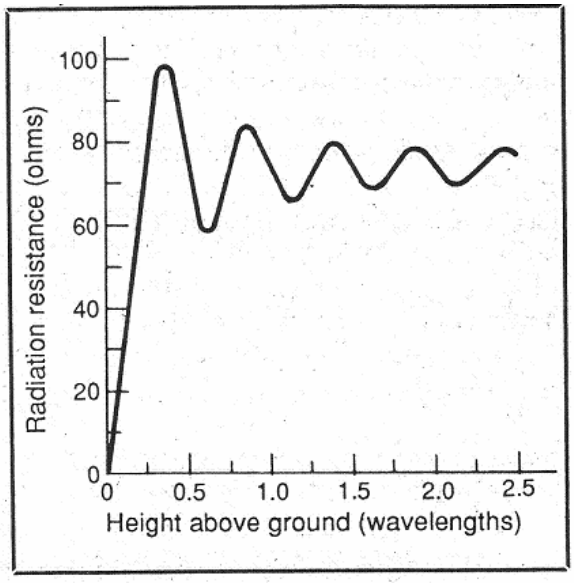

Figure 1—Radiation resistance of horizontal half-wave dipole at various heights above ground.

I have a 36 foot square concrete parking pad at the back of my house which has been reinforced with 6-6-6 steel reinforcing mesh—i.e., 6 gauge steel wire on 6 inch centers. Two large oak trees are conveniently located at diagonal corners, giving me a more than adequate span over the pad for the 20 meter dipole. The thought crossed my mind that if I checked the feedpoint resistances of both antennas at resonance and found them to be what I expected, then I had a reasonably good ground plane over which I was working. My actual measurements using my remotely controlled bridge indicated 65 ohms for the 20 meter dipole and slightly over 100 ohms for the 12 meter dipole. That brought to mind one of the "freebies".

Assuming that I erected an antenna at a given height above my backyard so as to be approximately $^3/_8$ wavelength high over the surface, I would expect to see a feedoint resistance, at resonance, of almost 100 ohms if the actual ground was at the surface (which would be unusual unless one had a backyard covered with copper plate!). If the feedpoint resistance was measured to be 95, 90, or 85 ohms, it could be assumed that the actual ground is somewhat below the surface. Just how much would have to be interpolated, and further discussion of how one would proceed from this point is not the sub-

(Continued on page 5)

(Continued from page 4)

ject of this article. While the values mentioned can be found on either side of the curve, it should be obvious that the estimated height would not be more than $^3/_8$ wavelength unless one had a plasma level several feet above the ground surface, causing the actual ground to be above the surface! Knowing where your actual ground is may be of interest or value to some of the more curious among us.

Back to the Parallel Connected Baluns!

After checking the feedpoint impedances of the 20 and 12 meter dipoles, I proceeded to wind a couple of baluns that would provide me with the necessary transformation for 50 ohms to 65 ohms and 50 ohms to 100 ohms. Details for the construction of each balun are shown in Figure 2. There is a lot of excellent information in Sevick's book (See Reference 1) which takes the fear out of winding your own baluns. I used ferrite rods of μ125, $^1/_2$ inch in diameter and about 3 inches long for the balun cores.

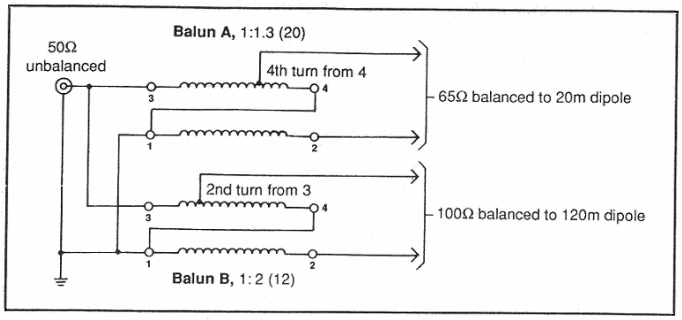

Figure 2—Parallel connected baluns 1:1.3 and 1:2 ratios. Balun A: 30 bifilar turns, 14 AWG, enameled wire, spread out 2 inches, wound on 1/2 inch diameter ferrite rod, μ125, 3 or 4 inches long. Balun B: 24 bifilar turns 13 AWG, enameled wire, spread out 2 inches, wound on 1/2 inch diameter ferrite rod, μ125, 3 or 4 inches long. Note: Balun A and Balun B were made primarily to cover the 20 and 12 meter bands, respectively. Both could have been made to cover 80m through 10m with some additional effort, but that was unnecessary for the purpose of this article. Ferrite toroids could have been used, but rods are generally easier to handle. Thirteen AWG wire was used on Balun B accidentally. Fourteen AWG could be used with similar results.

At this point let me interject another "freebie." I had an Amidon R61-050-750 ferrite rod 7-$^1/_2$ long lying around which I thought I would use if I could cut it in half. I had bad luck previously when I tried to cut a ferrite rod and wound up massacring the rod. I tried using a hacksaw, but I found that ferrite is extremely hard to cut. I happened to mention this problem to Sevick in one of our telephone conversations, and he suggested scoring the ferrite rods with a file around the circumference of the rod and snapping the rod in two. My small files left a lot to be desired. Then I hit upon the idea of scoring the rod with a tubing cutter. I wrapped a layer of masking tape around the rod and proceeded to carefully run the cutter around the rod. Tightening the cutter very slightly after each turn, I managed to score the rod sufficiently so that it broke in two very neatly at the point where I had scored it with the tubing cutter. Photo 1 shows the "complicated" arrangement for cutting the ferrite rod!

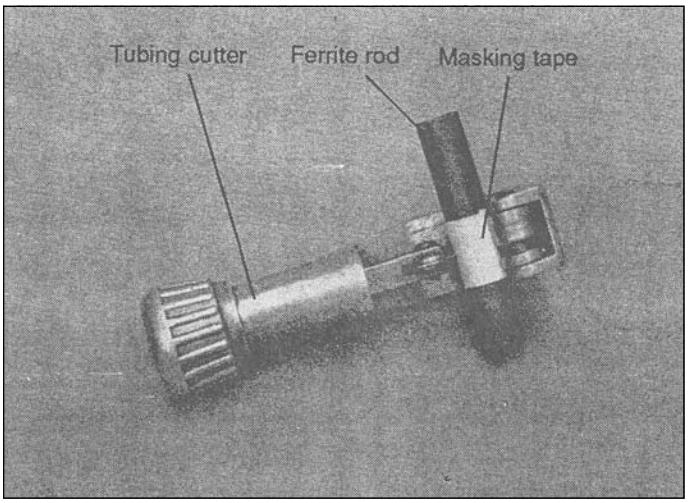

Photo 1—Using a tubing cutter to score the ferrite rod.

Back to Balun/Balun!

After fabricating each balun, I connected it to a low-level SWR bridge and terminated the balun with a non-inductive resistor of the correct value since each balun needed to serve only one band. I adjusted the length of the windings to optimize the balun for the particular band, ensuring that I had a zero SWR. I then connected the baluns in parallel on the input (50 ohm) side. I checked the SWR again with the bridge, and lo-and-behold, I had a 2:1 SWR. How could that be?

It quickly dawned on me that the noninductive terminations were a proper load for each balun, and with either 20 meter or 12 meter input to the bridge I would have two 50 ohm inputs, at either frequency, paralleled to

(Continued on page 6)

(Continued from page 5)

give me 25 ohms. Actually, this shows that the baluns are working correctly, since the noninductive resistors are not frequency sensitive—at least at HF. As Sevick points out in his book, "the transformer that sees its proper match takes the load while the other one is essentially transparent." What this means is that when you feed 20 meter power up your transmission line, the balun connected to the 20 meter dipole is active, providing a match to your 50 ohm transmission line. The other balun, connected to the 12 meter dipole, is inactive and vice-versa. Regardless of which band you are operating, the input to the paralleled baluns is always 50 ohms at resonance. It works slick as a whistle. Two bands with one transmission line, perfect SWR, and no antenna tuner required!

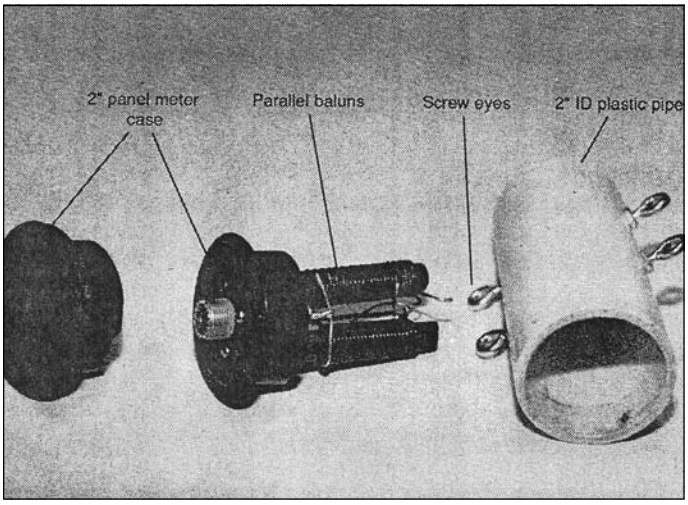

Photo 2—Parallel balun components ready for assembly.

Weather protection for the paralleled baluns is provided by a piece of plastic pipe as shown in Photos 2 and 3. The pipe is 5 inches long and a little over 2 inches in inside diameter. Most plumbers have scrap pieces around for free. The end caps for the balun case were made from old 2 inch panel meter cases—the metal variety that has about a 2 inch outside diameter. The 2 inch plastic pipe has in inside diameter of just over 2 inches so the meter cases slip into the pipe snugly. I used a circle cutter to cut a couple of circular end-discs to fit inside or outside of the meter cases to provide further protection and to provide for the coax fitting on the bottom side. Four small screw eyes were added for fastening the wires of each dipole center end. The meter case/parallel-balun assembly is inserted into the plastic pipe and fastened with several small metal screws.

With a little dexterity and longnose pliers one can make the connections between the upper end of the balun and the screw eyes. I used solder lugs on the inside under the screw eye nuts and soldered a short length of wire to each lug, passing the wires through small holes in the pipe cover in order to make a good electrical connection to the dipole wires.

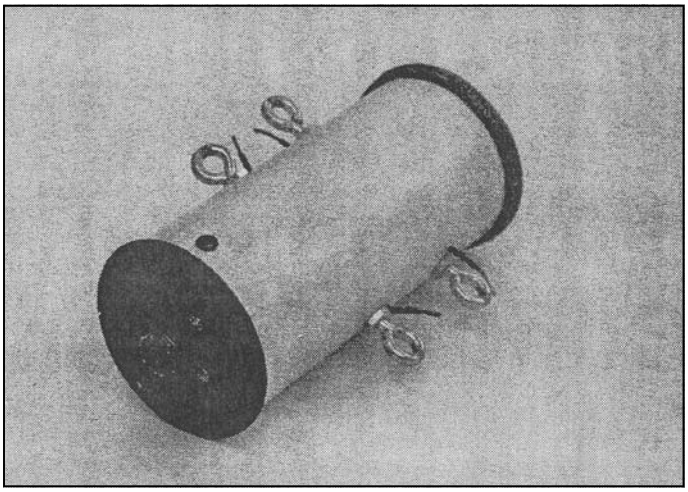

Photo 3—Finished product. Parallel balun assembly for use as center insulator/transformer for 20/12 meter multiple dipole system, 65 ohms balanced for 20 meters, 100 ohms balanced for 12 meters.

I wasn't really expecting spectacular results from a 20/12 meter multiple dipole 14 feet or so above the ground, but I was surprised when I managed to work into Europe with S9 signal reports on both bands—and running barefoot at that! Attribute it to propagation or whatever, but it proved that dipoles operated close to ground level work, and certainly work even better when properly matched to the transmission line.

Paralleling baluns does work, and the technique may come in handy someday in laying out your antenna system.

I would like to express my appreciation to Jerry Sevick, W2FMI, (now SK) for the encouragement and suggestions provided by him during my experiments with parallel baluns.

REFERENCES:

1. Sevick, Jerry, W2FMI, *Transmission Line Transformers,* 2nd Edition, ARRL, 1990.

2. Genaille, Richard A., "A Remotely Controlled Bridge for Impedance Matching", CQ, August 1991.

A Great Half-Time Score in the ARRL DX Contest

Dick Williams, W3OA

When you read this the ARRL Contest will be finished, but I'm writing this before the SSB portion in order to meet the publication deadline. Thus, I can only report on the CW portion. There we made a great improvement over last year. As of this writing, our Club score is 13.9 million points. Last year at this time we were at 7 million points. I attribute this almost doubling of our score to three things. 1) Propagation was much better this year with both 20 and 15 meters staying open almost all day Saturday and Sunday. And 10 meters was better than we've seen in recent years. 2) We had an expanded Skimmer network this year with three stations (K4DXA, N2TU, and W3GQ) feeding Skimmer spots to our members. 3) Four new stations contributed big scores this year, K4LY, K5EK, N2TU, and W7DO. You can see all our scores on our Web site.

Everyone who operates in either contest should submit their log to ARRL to contribute to our Club score. ARRL will send you an email confirming receipt. If you didn't get the email, you need to resubmit. Full details on how to do this are in the contest rules at http://www.arrl.org/contests/rules/2010/intldx.html. Remember to show "Carolina DX Association" as your Club.

The deadline for submitting logs to ARRL is March 22 for CW and April 5th for SSB.

Here are **soapbox comments** (edited) from some of our participants:

K2SX: Nice to have better conditions than in recent years but we are not all the way home. I heard very little on 10m, including no EU, but that may be due to my poor antenna (Butternut HF9-V vertical). I used the Skimmer/telnet connection and it seemed to work very well with very little downtime. The marking of Skimmer spots in N1MM helped. I was surprised to see the number of Skimmer spots that I could not hear down here (Pawleys Island). Some of that is the weaker antenna here I am sure but some may be just due to different conditions 150 miles away from here. Skimmer does make a difference to not keep running into packet pileups.

KH6/AA4V: One K3, Tokyo High Power HL-1.1Kfx (500W) and a Butternut HF9V 15 feet from the Pacific Ocean.....priceless fun. Thanks to all who pulled me out, especially K2SX and W7DO for SC multipliers from home.

KI4TZ: Conditions were pretty good this year. Not a huge effort but fun to hone the ole CW skills.

N4PQX: OK, Cardinal Sin, loaded N1MM, which I've never used, about 5 minutes before the contest, so to say the least it's been a learning experience. Conditions seemed good, mostly operated during the day, not much work on the low bands at all, Saturday evening 5-6pm was a huge JA flurry on 15m, best opening on 15m to JA in quite some time. Not much on 10m still for me, antenna likely too high as mostly LU and lower SA. Heard all of the usual contest gang on the bands (except KZ2I).

N4ZC: Even with 10m open a bit, like the last few years, I had more countries on 160 than 10. If my amp worked on 10 I think I would have come near the 160 countries. Just two European countries on 10, CU and TK. 160m conditions were great and it was nice to see 15 almost back to its old self. I think this may be the first time I've broken 2 million as a single op from the U.S. For sure since I started using N4ZC.

W3OA: One of the highlights for me was working four ZLs on 10 meters. They were workable here for at least an hour Sunday afternoon.

W4ZV: (Operating Single Band-160m) Great fun! Poor prop and no QRN the first night...great prop and bad QRN the second. I'm not sure which of these was the most exciting; working five UA9 stations the second day or working five European QRP stations. This year I used my Beverages for one side of diversity in the K3 and a new RX 4SQ in the other side. I also used the Sub RX a lot more for tuning the band when things were slow on my run frequency. After a year of experience with N1MM I can now do this without making lots of mistakes like I did last year. I have a gut feeling I may be back on 10 meters at this time next year. The past

Ten and Twenty Years Ago. . . .

Ten Years Ago

The "Roving Reporter" visited a tired Bill Tippett (W4ZV) just after he finished working the ARRL International DX contest. His relatively new 6 over 6 over 6 ten meter antenna system had netted him first place as SOOB in the recently completed CQWW SSB contest setting a new 10 meter record, and Bill thought he earned a second or third place in the then just completed ARRL contest. . . . Gary Dixon (K4MQG) had recently given a presentation to the Sugar Creek ARC in Fort Mill recounting his trip 20 years earlier to visit a world famous ham with the callsign of JY1—King Hussein of Jordan. . . . Don Crane (W4OC) and Gary Breed (K9AY) were scheduled to make presentations at the imminent Charlotte Hamfest. Bill Miller (KT4YE) was lined up to give a presentation on a "newer" mode—PSK31. . . . The "new millennium" callsign, WY2OOO, was still creating quite a stir and CDXA members were still turning a lot of QSOs using it. . . . The *Pileup* was being placed on the CDXA website in an archive for future reference. (Since then, all issues of the Pileup dating back to 1982 have been scanned and placed in the archive.)

Twenty Years Ago

CDXA had "amassed" 2.1 Million points in the 1989 ARRL International DX (SSB) contest, and the defacto "contest manager" of that era was beating the bushes to get more to participate (sound familiar?) in the upcoming 1990 edition of the contest. . . . Victor (LY2ZZ) was due to arrive from Lithuania for a tour of the United States. Roger Burt (N4ZC) wrote a wonderful bio sketch on Victor for the *Pileup,* and Victor was to make N4ZC's home his base of operations as he used US Air's equivalent of a Eurail Pass to fly to as many locations in the USA as he could during his stay. If you've not heard Roger relate his story about Victor's visit, you simply must get Roger to tell it to you—in detail.

Weights and Measures Conversion Factors

Here is a handy table of conversion factors. Keep it close-by in your shack.

1. Ratio of an igloo's circumference to its diameter = Eskimo Pi
2. 2000 pounds of Chinese soup = Won ton
3. 1 millionth of a mouthwash = 1 microscope
4. Time between slipping on a peel and smacking the pavement = 1 bananosecond
5. Weight an evangelist carries with God = 1 billigram
6. Time it takes to sail 220 yards at 1 nautical mile per hour = Knotfurlong
7. 16.5 feet in the Twilight Zone = 1 Rod Serling
8. Half of a large intestine = 1 semicolon
9. 1,000,000 aches = 1 megahurtz
10. Basic unit of laryngitis = 1 hoarsepower
11. Shortest distance between two jokes = A straight line
12. 453.6 graham crackers = 1 pound cake
13. 1 million-million microphones = 1 megaphone
14. 1 million bicycles = 2 megacycles
15. 365.25 days = 1 unicycle
16. 2000 mockingbirds = 2 kilomockingbirds
17. 52 cards = 1 decacards
18. 1 kilogram of falling figs = 1 Fig Newton
19. 1000 milliliters of wet socks = 1 literhosen
20. 1 millionth of a fish = 1 microfiche
21. 1 trillion pins = 1 terrapin
22. 10 rations = 1 decoration
23. 100 rations = 1 C-ration
24. 2 monograms = 1 diagram
25. 4 nickels = 2 paradigms
26. 2.976 statute miles of intravenous surgical tubing at Cornell University Hospital = 1 IV League

CDXA Hamfest BASH

Don't forget the Hamfest BASH on Saturday, March 13, 2010 at the conclusion of the first day of the Charlotte Hamfest. We have over 120 people signed up, so the event will surely be a BASH!

Where: Carolina Prime Steakhouse
225 East Woodlawn Road
Charlotte, NC

When: 6:30 PM for social hour
7:20 PM for sit-down dinner

Fare: Special CDXA menu items for the evening

Cost: $22.95 including entrée, coffee/tea, tax, tip. Dessert, if chosen, is extra.

Libation: Alcoholic beverages are at your expense.

Reservations required with Paul Ponak if space available. (pponak@carolina.rr.com)

The Back Page

Lots happening at the **Charlotte Hamfest**, as usual. See Page 1.

The **DX King** competition for 2010 is underway again. Several are off to a fast start, probably aided by the improving solar activity. See Page 2.

North Carolina QSO Party is now behind us. A familiar callsign was operating in the event this year. See Page 3.

Dick Genaille (W4UW) returns this month with a technical article on building **parallel baluns** to drive two antennas using a single feedline. See Page 4.

The **ARRL International DX Contest** (CW edition) is behind us and results were good. The SSB edition is happening as this month's edition of the *Pileup* is being completed. Be sure to get your scores to W3OA by March 10 if you'd like to be recognized at the Hamfest Banquet. More on Page 7.

A convenient **weights and measures conversion chart** is awaiting you on Page 8. Don't miss it!

Cliff Wagoner, W3ZL
P. O. Box 577
Davidson, NC 28036

jcw53@cornell.edu

First Class Mail

See something wrong with your address label? Notify W3ZL at once, please.