



The Pileup

Newsletter of the CDXA

Presidential Ponderings

The second weekend of March passed quietly weather-wise this year. There are a number of us who work the Charlotte Hamfest and Computer Fair who get nervous as that weekend approaches. Very good comments were heard about the new layout at the Merchandise Mart. It was great to see some of our members at the CDXA booth on Saturday. Shelley Pendleton was busy collecting dues while her husband, Ken Cannaday, W4NZC, was on Pratas Island with Joe Blackwell, AA4NN. Our editor, John Scott, K8YC, manned the booth on Sunday. Thanks to all the folks who helped out, including Carl Smith, N4AA, who donated copies of some of his publications to the booth. The Saturday night CDXA dinner was well attended, I counted over 50 people at the Open Kitchen. A larger venue is needed, we had a few "outlaws" again who ended up sitting in another room.

W4WNT	Bill Turner	President
W4JG	Jack Guion	Vice-Pres.
W4NZC	Ken Cannaday	Sec.-Treas.
K4MD	Joe Simpkins	Sysop
AE4PB	Jerry Moore	Webmaster
K8YC	John Scott	Editor

Ken and Joe are slowly recovering from the DX induced jet-lag after returning from Pratas. When you see Joe, ask him for lessons on how to change a battery in a digital camera. If you ever go to breakfast with either one of them, be sure to ask them how they want their eggs cooked!!

One of our members, Bill Parris and his wife Joey, has decided to move north to Michigan. So look for AA4R/8 on the bands. Gary Dixon, K4MQG and his wife Carole, hosted a nice party at their place, a combination welcome back for Joe and Ken and a send off for Bill and Joey.

Frank Dowd, K4BVQ, has again offered his front yard for a CDXA Barbecue in October, so keep Saturday Oct. 20 open on your calendar. Many thanks, Frank, the event is always a great get together.

73, Bill W4WNT

CDXA PacketCluster & Other Communication Systems		
W4DXA Young Mountain	144.93 MHz (1200 bits/second)	441.00 MHz (9600 bits/second)
K4MD Charlotte, NC	144.91 MHz (1200 bits/second)	441.075 MHz (9600 bits/second)
Digipeater near Wingate, NC	144.91 MHz (DXWIN)	
CDXA Repeater 147.18 MHz (+600)	W4DXA, Near Fort Mill, SC	
World Wide Web Homepage	www.cdxa.org	
Wednesday Luncheon (11:30 AM)	Shoney's, 355 Woodlawn Road, Charlotte, NC (704-525-4395)	

From the Editor's Pen

The last half of March presented a life event for your editor's XYL (Barb), Barb's sister, and the editor himself. Barb's sister was diagnosed 25 years ago as having a liver disease. This past November, Barb learned that her sister was on the liver transplant list. In discussions with her sister, Barb found out that a new technique permitted a live donor transplant if certain medical conditions could be met, and Barb met all of them. I didn't know before this that the human liver will regenerate itself. I learned that recipients awaiting a cadaveric transplant often get very ill and quite desperate as conditions worsen. So Barb's offering a gift of life to her own sister was especially profound.

On March 22, Barb gave half of her liver to her sister. Unfortunately, a small "kink" in the transplanted hepatic vein resulted in insufficient blood flow and resulted in damage to the transplanted segment. Barb's sister was put on the emergency transplant list. We prayed all day from Saturday evening until Sunday evening that a liver could be found. Without it, Barb's sister would be in a coma in 48 hours. At 6:00 PM on Sunday, a cadaveric donor was found, and a new, whole liver was implanted Monday morning—miraculously delivered through the snowstorm blasting Cleveland on March 25.

So why this in a ham radio newsletter? I became acutely aware that 1) people's lives are being saved all the time by organ donors, 2) that many people consciously offer their organs upon their death, and 3) there is an acute shortage of organs that can easily be remedied if we had more organ donors. I vowed on Sunday, March 25 that I would make more people aware of the wonderful gift they can leave behind as their soul gives up their earthly bodies. Please investigate and consider organ donation as a way of saving another's life.

The Pileup

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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 \$30 per year for those using the PacketCluster maintained by the Association, \$15 otherwise, payable each January. Dues are payable by check to the Secretary/Treasurer:

Ken Cannaday, W4NZC
1929 Ewing Avenue
Charlotte, NC 28203

Address, telephone, and email address changes should be directed to the Secretary/Treasurer at the above address or via email at: w4nzc@att.net.

Comoros Recap

The following recap of the Comoros DXpedition appeared in Bulletin #6 of the Five Star DXers Association:

"After almost three, very arduous days of setting everything up, D68C hit the airwaves around midnight local on Thursday 8th February, working into Europe and the US on 8 bands simultaneously. We can only guess at what the PacketClusters looked like for the first few minutes as the spots started to appear! Suffice to say that we ended the first 24 hours of operation by beating the FO0AAA record for "most DXpedition QSOs in a day" with a new record of 16,412, and beat the FO0AAA record a second time on Day 2! The pile-ups were incessant, right to the end, despite some DX Clubs having said to us beforehand that D68 wasn't needed. Not by the hardened DX types, perhaps, but certainly by the wider audience. We were delighted to put D68 into the logs of novices, QRPers, those with indoor antennas, even a ham in W6 using a 10m handie-talkie!

And we really did make an effort to give everyone, even the "big guns" some new slots. Topband proved to be tough going, due to the constant tropical storms across the African continent, but we worked through to the mid-West of the US on several nights, and the other way into Japan as well as putting a couple of KH6 stations into the log. At the other end of the spectrum, 6m didn't offer the big openings into Europe that we had hoped for, but nevertheless we were able to work many stations in Southern Europe and North Africa, as well as across into Japan, Hong Kong and other parts of Asia. We held back with RTTY, as demand on the other modes was so high but, once started, put over 4,000 QSOs in the log (a good thousand or so higher than any previous DXpedition), along with over 1,000 QSOs on PSK. And many of you (over 3,000!) enjoyed the novelty of an FM QSO on 10m. Sadly, we were unable to undertake satellite operation. This was mainly because our plans had been centred around AO-40 which, in the event, was unavailable at the time of our DXpedition.

It is no secret that we had hoped to be the first DXpedition to exceed 100,000 QSOs, but to do so before the second weekend of our operation was way beyond our imaginings. Our final tally of 168,722 QSOs is 75% above the previous ZL9CI record, suggesting that the level of interest in DX chasing is perhaps greater than any of us had ever thought."

Lightning Protection and Grounding

At the Charlotte Hamfest, Tim Slay presented an informative session on Lightning Protection and Grounding. Much material of a technical nature was presented, but the essence of the presentation can be summarized as follows:

Because lightning is a pulsed phenomena, even though it appears as a DC discharge, if one analyzes the pulse into its Fourier frequency components, it is in reality a short term RF discharge with an average frequency of about one megahertz. Therefore, eliminating inductive reactance and producing a low resistance connection to ground is paramount to good grounding.

As a high frequency phenomenon, one must remember that conduction is via skin effects and is best accommodated through surface area rather than cross sectional area of the grounding conductors. Accordingly, flat ribbon conductors are preferred over round conductors of the same cross sectional area.

Bends in conductors with radii of curvature of less than 12 inches can produce one microhenry or more of inductance. With 18,000 amps in a typical strike, and one megahertz frequency, all grounding leads should have gentle curves with significant radii.

Grounding's role is to try to dissipate as much of the lightning's energy as possible before it gets close to your shack. Places you don't want the lightning to go should have high impedance (inductive reactance).

Ground rods should be no closer together than their length is long because the earth just cannot dissipate the energy if the rods are too close.

All service entrances for phone, power, cable TV and the like should have minimum inductance to their respective grounds and should be strapped together at as nearly the same point as possible to avoid developing potential differences between the various grounding points because of spatial separation. One way to help assure this is to have a perimeter ground around your house (shack) with a bulkhead panel where the coax enters your shack grounded to the same ground using a low inductance connection.

Be aware of connecting dissimilar metals in grounding systems that can corrode due to galvanic reactions and negate the grounding action by developing a high impedance at the point of corrosion. Periodic checks of ground connections should be made. Consider using

products like CADWeld to fuse ground conductors to ground rods to avoid loosened mechanical connections.

There was much more than this in Tim's presentation, but this is a start. Tim is a registered Professional Engineer. I sensed from his presentation that he is engaged in some of these activities for Duke Energy. If any feel that this might be a worthy subject for a presentation from Tim, contact your officers to see if we can persuade him to address the CDXA.

Inside the Kenwood TM-D700 Data Radio

Hams love to tinker and take things apart. The following note appeared in issue #80 of the TAPR Packet Status Register:

"If you have ever wondered how Kenwood crams all that functionality into the TM-D700, here's your chance to see what's inside the box. I took mine apart, shot some closeup pictures, and put them up on my website.

<http://members.aol.com/wa8lmf/ham/index.htm#TMD700pics>

I was astounded to see that the entire radio is built on a single PCB combining the analog RF, audio, digital and synthesizer blocks. There is no segregation of analog and digital into separate modules or shield cans like any other radio I have seen"

Stephen H. Smith, WA8LMF@aol.com



Yes indeed, after you switched on your linear amplifier, your signal became much stronger...

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Scenes From the Charlotte Hamfest



Bill Turner (W4WNT), Shelley Pendleton (AE4HD), and Larry Sossoman (K4CEB) at the CDXA Booth. Larry brought along pictures of his recent trip to China for all to see. The trip fulfilled a lifelong dream of Larry to stand on the Great Wall of China. We had many CDXAers stop by the booth.



Who wouldn't entrust their precious QSL cards to these bastions of the ham radio community? Gary Dixon, K4MQG, and Roger Burt, N4ZC, met visitors as members of the DXCC Advisory Committee and "Fourland" QSL Bureau Manager (single letter prefixes only, please), respectively.



Bob Southworth, KI4YV, and Jack Guion, W4JG, check with "Hamfest Central", being manned by Ted Goldthorp, W4VHF and his also-ham XYL, Itice.



CDXA Past President Bob Burton, N4PQX requests Wayne Mills and Gary Dixon to check his QSL cards. Bob is getting within a whisker of that pinnacle of DX-ing achievement—The Honor Roll.

Scenes From the Charlotte Hamfest Fellowship Dinner at Open Kitchen



The Goldthorpes, Trotters, and the Thomas McAllisters visit with Nick Palomba at the Open Kitchen. Nick came in from Connecticut to see the hamfest and his CDXA friends. Because this group had to sit at an overflow table in the next room, they are now known as the “outlaws”.



You won't be able to recognize everyone in this photo, but it does show that the Fellowship Dinner has become quite popular. The picture to the left is the “overflow” table for those who couldn't fit in the regular banquet room. Looks like we'll have to find a bigger place next year.



Gary Dixon stops to say hello to Wilson Caselli, K1MIJ, and his XYL. This table was one way to “shoehorn” at least two more people into the banquet room.



Bob Burton (N4PQX), Claude Oakes (NC4NC), and Ted Huf (W4ZE) review the day's purchases.

Greetings Topbanders

de Joe, aa4nn

Congratulations to those in the log for BQ9P, it was a rough trip! My apologies to the callers whom I just couldn't hear. Aligator? Hardly, maybe. Four hundred watts from the AL572B, and I could hear the 5.5kw generator groan. Pratas Island power was typically 90vac, so that was no good. We had several generator failures.

XMT was the 87' Titanex vertical, kevlar guy lines except for the last, longest guy, upwind, which was of unproven material, strong, light, cellophane type material. Within an hour of erection, the winds began to rip this unproven guy line to shreds until eventually the guy became useless, and the antenna bent over into the famous Battle Creek Special configuration. I have pictures. Yet, VSWR was 1 to 1 on 40, 80 and 160. Perfect. After three days the antenna broke and fell. We patched the break and used some number 14 wire with occasional insulators to raise it up once again.

The second Titanex vertical was missing a section or two, plus there was no kevlar for guy lines. Ken, W4NZC, and I put together six sections for a 12 meter vertical which Ken tuned for 40 meters. The last couple of days Ken tuned this vertical for 30 meters.

REC was a single beverage, initially on the ground. Any beverage on Pratas Island is an exercise in futility. The bushy undergrowth growth is dense and filled with razor wire. The roads weren't straight, yet I managed a BOG favoring 22 degrees by zigzagging along and across the roads. Five hundred feet—not good—never worked. Terminate or not to terminate—there was no experimentation after dark. We were advised to not leave the compound after dark as there were sentries and dogs everywhere and a real potential to get shot at “out there”. I'm serious. I had material for two beverages, but the second one proved impossible to put into the SSE direction. Additionally, I counted up to 18 beacons from 1.800 to 1.830, not too loud, but enough to catch my attention as perhaps a weak stateside station. Eighty meters was full of local choppy CW stations apparently in a local network of some kind. SSB on 80m and 40m just about covered us up in the CW band. 9M0M killed me on 3.503 which was my published 80m frequency. Best for me was 3.511mhz and 3.513mhz.

I put together some sections of the unusable Titanex so that

Ken and I could push the beverage up, over and into the bush to achieve an elevated beverage favoring 22 degrees. Unterminated one night proved somewhat effective, next night with a termination was much better. Crossed three roads at a height of 14 feet because of the huge army trucks that continuously patrolled the area. No way a ground rod could be effective, so I used a 1/4 wave counterpoise and 470 ohm terminating resistor. ICE beverage box at the coax end. At 1030Z every day I would begin CQing on 1.826.5 listening for USA. East coast was just not in there. Typically I could work into Texas, then a few 8s and 9s. Then the 0s, 7s and 6s would prevail. On occasion I went to 80m at 1100-1130z calling specifically for K4ESE and N4JJ with no results. Believe me, 160m was my concern. I was listening and I tried, but I just couldn't hear. Around 1500z I would relinquish the radio to Alex, RK3DT, who wanted to run 160m and 80m toward his Russian friends. I never knew if he did any USA during east coast sunset. BTW, the station I carried to Pratas was my Ten-Tec Corsair II and AL572B amplifier.

Big signal from Bill, K6GNX, worked him using CW and SSB on 1.826.5. Also big 80/160 signal from KH6DX/M!! Don, you are just incredible!! Gary, K4MQG, was our unofficial pilot station, with daily contacts on 20m. Big signal from Gary. All paper logging, no computer network. Total Qs were just short of 30,000. (Yep, lots of JAs in there).

Speaking with Paul Pai, BV4FH, a most efficient DXpedition organizer and one very well connected to pull off a DXpedition to the Military base on Pratas Island, I learn that he is looking for someone to take the helm for future DXpeditions. There may not be a BQ9P in 2002—2003, maybe.

The problem with Pratas Island is the sensitive Military operation there. Mountains of paperwork must be approved. The operation must be kept secret until the final go ahead is issued. Hence, the last minute call for operators who can quickly join the team on short notice. The operation cannot be publicized to acquire support from manufacturers or to get world class operators, so the operators themselves put money up front for all expenses.

All Ops do their best. We had five positions set up and just eight ops. It makes me sad to see on DX Summit a few spots that complained about the poor ops or bad ops at BQ9P. However it went for you, that's how it went for you.

--73, de Joe Blackwell, aa4nn

Do you Get QSL's Direct?

Does it bother you to merely discard all those interesting postage stamps you get on QSL cards sent directly to you? Have you ever saved them for that reason? I do, even though I'm not a philatelist.

Shelley Pendleton, AE4HD, spouse of Ken Cannaday, W4NZC, advises that there is an outstanding alternative to merely discarding them. The Lions International Stamp Club puts those old stamps to use in a program called Stamps for the Wounded. The stamps are used in over 130 V.A. hospitals to give bedridden or long-term treatment patients an opportunity to fight the enforced idleness that often comes with their lives. The stamps allow them to fight boredom, loneliness, frustration, futility and despair. All that is needed is philatelic material of any kind in good condition.

If you are interested, I will forward you a copy of the materials Shelley gave me for the asking, or you may write directly to:

John M. Hotchner
Vice President, Stamps for the Wounded
P.O. Box 1125
Falls Church, VA 22041

Windows-based Contesting Software!!!

Through somewhat universal acclaim, CT by K1EA has for many years been the defacto standard contesting software package. One of its drawbacks is that it must run in a pure MS/DOS environment. This makes it fast and avoids "The Blue Screen of Death" sometimes encountered when Windows gets "confused". Yet, with the latest releases of Windows, the DOS underpinnings have been replaced with an operating system kernel that is exclusively a Windows product. Thus, continuing to run CT requires that one maintain a PC with an older version of Windows (Windows ME, Windows 98 or earlier) or a purely DOS machine to gain access to a pure DOS environment. Then there is the perennial problem with finding enough interrupt requests (IRQs) to operate all the add-on serial ports to drive rotors, radios, TNCs and the like.

Don Daso advises me that Tom Wagner has a Windows based contesting program now developed to the beta-testing phase. Details of the program and some informative "screen shots" can be found at his website at:

<http://tomwagner.home.mindspring.com/n1mm.htm>

Downloading is free. From a quick purview of his site,

it appears Tom has made extensive use of the Windows graphical user interface, especially in displaying spots in an ordered fashion along a frequency dial. Using the sound card found on most of today's PCs, the program allows digital voice keying. Sound snippets are recorded as WAVE files. At present, the scope of contests supported does not appear to be as complete as CT's array, but the program is a work in progress, and more are sure to follow. Kenwood and Yaesu radios are presently supported with ICOMs in the works. The underlying database is Microsoft Access which should make exporting or custom manipulation of the log file at contest end easier for those with facility with that database management system.

Don't expect this program to work on your old "clunker" of a PC. Tom recommends a 233mhz Pentium II as a minimum platform. Check this one out.

A52A Video Begins a New Millennium

Bob Allphin, K4UEE, presented two very informative forums at the Charlotte Hamfest on recent DXpeditions to Bhutan and Kingman Reef. As part of his presentation, Bob had available professionally edited video tapes on the whole operation. These were the first tapes I had ever seen documenting a DXpedition. I had read about Bhutan on the DXpedition's website while the operation was in progress. The \$20 price for the tape was a worthwhile way to support the expedition as well as to encourage future tape productions as being economically viable.

I am sure some of my non-ham friends will not find interest in the segments showing an operator calling "CQ this is A52A" contact after contact, but for one who has never been on the receiving end of a pileup, I found this fascinating. Radio operations were only a portion of the tape, however. The hour long tape is half "hamming" and half travelogue. The tape begins with a cockpit view of the approach to the airport from a plane winding down a valley towards landing. The scenery is outstanding. An explanation of the Bhutanese use of flags for religious purposes is also very fascinating.

I now have the tape for my personal tape library and am willing to share it. If you have a VHS VCR into which your children have not tried to load a peanut butter sandwich, I would be happy to loan the tape out for viewing. If interested, please contact John Scott.

—John Scott, K8YC

The Back Page

The **Catawba Valley Hamfest and Computer Fair** will be held in Morganton, NC on April 21. Morganton is accessed from exits 100 through 105 off of I-40. Tom Taylor, KC4QPR writes that the following dealers will be in attendance: Signman of Baton Rouge, Alabama Radio, Virginia Ham, Iri Electronics, Rad-Com of Texas, Rosewood of South Carolina and other regularly attending vendors. Of course, bingo and the usual flea market will be part of the hamfest. Parking and children under the age of 18 are free. Testing will be done by WCARS, and a forum schedule includes talks on skywarn, Linux, APRS, PSK31, and other digital modes. You can reach Tom at kc4qpr@vistatech.net.

Mecklenburg Amateur Radio Society will be having a **VE Test Session** on Saturday, May 12, 2001 at 9:00 AM in the East Baptist Church on Monroe Road. If you have a friend or acquaintance looking for an exam session, please advise them about this session.

The **2001 Upstate SC Hamfest** will occur on Saturday, May 5 from 8:00 AM to 3:00 PM. Admission will be \$5.00 at the gate. For more information visit the Blue Ridge ARS website at: <http://www.brars.org>.

Upcoming Contests:

April 13-16	Japan International DX Contest,CW	See January QST
April 21-22	Michigan QSO Party	See April QST
April 21-22	Ontario QSO Party	See April QST
Various April Dates	VHF/UHF Spring Sprints	See April QST
April 28-29	Florida QSO Party, Nebraska QSO Party	See April QST
April 28-29	Six Meter Sprint	See April QST

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First Class Mail

See something wrong with your address label? Notify W4NZC at once, please.