The Pileup

Newsletter of the CDXA

Carolina DX Association

W4WNT	Bill Turner	President
W4JG	Jack Guion	Vice-Pres.
W4NZC	Ken Cannaday	Sec.-Treas.
K4MD	Joe Simpkins	Cluster Mgr.
-	Lloyd Burt	Webmaster
K8YC	John Scott	Editor

Presidential Ponderings

Sitting here with K1B ringing in my ears, I've been thinking how unique our DXing hobby really is. Roger Burt, N4ZC, and Don Daso, K4ZA, gave a program at one of the local radio clubs last night on DXing. Here are two guys that have worked everything and are still getting out there, making an effort to instill that DX spirit in others. I continue to be amazed at the energy and creativity of our CDXA members. While DX can be a lonely pursuit, when you get to a local meeting of CDXA, you will notice that you need a bullhorn to be heard!! It is a real group of communicators. The sound level at Shoney's in Charlotte during the Wednesday lunches has to be heard to be believed. If you haven't been there, why don't you join us?

Our QRP guru continues to be successful in his efforts. Tim O'Rourke, KG4CHX, came in fifth in the QRP class (outside the UK) in the RSGB 21/28MHz fall contest. There are lots of contests going on besides the ARRL and CQ sponsored events. While most of us have operated and given contestants points, I wonder how many others have worked one of these contests and submitted logs?

Tim brought in one of the QRP kits with the surface mount technology to lunch this week. A very small device, a monoband CW transceiver, but you could lose it in your shirt pocket! Just as I need new glasses, the devices continue to shrink.

This month brings the Dayton Hamvention, and I'm sure some of our folks will be making the trek up to Ohio. There should be some new goodies on display and lots of DX friends to meet.

We are publishing the CDXA roster this month, and the list should contain all our paid-up members. If you find any of the data pertaining to you is incorrect, please notify Ken Cannaday so he can bring the roster up to date.

73, Bill Turner, 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)	

Packets, Protocols, and What-Nots (Con'd)

By John Scott, K8YC

(This is one of a continuing series discussing packets, protocols and other miscellany regarding internetworking.)

What are packets and how did they come into being? Here, as in last month's article, it is useful to understand the historical framework driving the technology. In the "cold war" era of the 1960's and 1970's, our government was concerned about surviving a nuclear holocaust. Voice and data communications used the same wires of "Ma Bell" in those days, but were really separate networks. The "Bell System" long distance voice network run by the Long Lines Division of those days was a hierarchical network. Telephone switching offices ranged in hierarchy as follows: End Office, Intermediate Point, Toll Center, Primary Center, Sectional Center, and Regional Center. Different regions of the country had a Regional Center at the apex of its hierarchy. High usage paths between any two regions had direct paths between, for example a toll center in one region connected to a sectional center in the foreign region, but the "final" route was always up the chain to the regional center, across to the foreign regional center and back down the hierarchy. One of the known disadvantages was that if a key part of the hierarchy was damaged in any region, communications to the region would cease. On the voice side, the government built, with the assistance of "Ma Bell", the AUTOVON network. (AUTOmated Voice Operated Network) This network created a self healing, non-hierarchical voice network that would survive destruction of portions of the network and ensure survivability by routing switching paths around the failed sections of the network.

Similar needs were simultaneously being identified for the survivability of data networks which were just then becoming popularized by the burgeoning growth of computers and the desire to interconnect them. Since most "long-haul" data circuits were merely hard wired paths through the same Bell System hierarchical offices, data communications could meet the same fate as voice if a point in the hierarchy were destroyed. Today we all know that DARPANET and ARPANET were the modern predecessors of today's Internet and were rooted in defense needs of the country. These government sponsored activities sought both survivability and interconnectivity between computers. (You'll recall that computers of that era often did not "talk" to one another very well—no common protocols had been developed.) Yet, predating the more modern concepts of "routing" used in the early Internet was the Packet Switched Data Network (PSDN). This was particularly true in Europe, where government run telephone companies had high circuit costs.

Packet technology broke a data stream into smaller units (packets) and put them on the wire with destination address information and error correction information. It also could interleave in time packets from other data streams arriving at the same packet assembly/disassembly (PAD) station. The advantages were many: several different streams could share the same, expensive leased data line between PADs; errors in transmission in the "noisy" lines of the day could be corrected at each hop by requesting retransmissions of the damaged packets; and, perhaps best of all, the network nodes could be made "smart" enough to reroute around failed links in the event of disaster.

As the early work in the ARPANET progressed into what has become the Internet, the concepts of packets became much more sophisticated as did the communication protocols developed to promote the capabilities needed for internetworking disparate computing platforms. Leaps in silicon technology arising from expenditures on Project Apollo and its logical successions have given us "smart" electronics to execute the routing algorithms now prevalent in all of modern internetworking. Thus, the nuclear age had a lot to do with the development of much of the technology which has led us to today's Internet. More in July.

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 $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

The Pinnacle is in Sight!

by Bob Burton, N4PQX

I had a "good mail day" the other day. I got my DXCC submission back which was in time for the March 31 deadline, thanks to Gary, and below are my new totals. I also got my return receipt from a registered mail letter to UA9YAB (zone 18) for our 80m contact in January. I had tried twice to get a card to him before going registered mail, but that looks like it did the trick (he put "73's UA9YAB" on the return card, so I know he got it this time). Hopefully, his card will be showing up shortly. Also, I didn't get credit for 7Z1AC contacts that were

	Current	All Time
Mixed	325	327
Phone	325	327
80 Meters	204	204
40 Meters	192	192
30 Meters	1	1
20 Meters	254	254
17 Meters	114	114
15 Meters	257	257
12 Meters	82	83
10 Meters	265	266
DX Challenge	1368	1370

submitted. It came back as awaiting documentation. I always wondered if I'd be able to get Honor Roll or 5BWAZ first. It looks like Honor Roll is the winner thanks to several recent DXpeditions. Turned out to be a good low band season as well to get zone 18 and 23 on 80 meters. Now, I need zones 24 and 26 on 80 meters next season.

(There's always the next carrot, *isn't there? Bob reported to the Editor in a separate communication one of the idiosyncrasies of DXCC awards. Since Ducie Island was not made official until November 16, 2001, it did not count in the 2001 totals list for the "AWARD YEAR" which ended March 31, 2002. Therefore, the official entity count for the past* award year *was 334 entities, making 325 entities within 10 of the "top". Now with Ducie under his belt, Bob will also have 326 or more for next year, ensuring he's on the honor roll for 2002 as well. The lesson—if you're close to the top, read the rules closely or check with the DXCC desk. It may mean the difference of a year in reaching the Honor Roll! —The Editor)*

Address Changes

Attached with this newsletter is a copy of the 2002 roster of the Carolina DX Association. All efforts are made to ensure the data therein accurately reflects your name, address and email address. If you don't tell us that something has changed, well, we're stuck.

All relevant roster data changes should be directed to the Secretary/ Treasurer of the Association, Mr. Ken Cannaday. That will ensure the data gets distributed to the webmaster and those who prepare the mailings of the Pileup. The way to reach Ken is provided each month both on the back page of the ***Pileup*** and in the masthead of the newsletter on the lower left hand corner of Page 2.

Please check your data in the roster and let Ken know if any corrections are needed. With all the changes in area codes of late, please check your telephone area code specifically. Anyone whose dues were not paid as of April 30 has been assumed to have chosen to not join us this year *–The Editor*

Shirt Order on its Way

By the time you read this, the Spring 2002 order for CDXA shirts will be on its way to Lands' End. If true to form, delivery should be the week of about May 27.

Publication Notice

The Pileup will not be published next month. This publication is published 10 times per year and excludes the months of June and December to allow the Editor to "charge his batteries". See you in July!

June is VHF Contest Month

While the Pileup will not appear next month, the CDXA mountaintop gang will be at it again atop the Blue Ridge for some summer VHF contesting. They'll be looking for the usual QSO count from the members from down in the bottomlands of North and South Carolina and Virginia. Look for an email in June asking for your help.

The Back Page

Ever been to Dayton? At least 6 from CDXA are on their way in a few weeks. The DX session and Antenna session are supposed to be superb. If not this year, put it on your calendar for next year.

Contesting activity wanes somewhat in the summer months, but there are still some events on the horizon:

Dates	Contest	Comments
May 18-19	Baltic DX Contest	
May 25-26	CQ WW WPX CW Contest	March, 2002 QST, P.102
June 8-10	ARRL June VHF QSO Party	May, 2002 QST, P. 110
June 15-16	All Asian CW DX Contest	
June 22-23	ARRL Field Day 2002	May, 2000 QST, P. 108

There's still some interesting DX coming up as reported by the various DX newsletters. See you in the pileups.

Dates:	Operation/Activity
May 10-15	8Q-Maldives
May 11-16	Tuvalu
May 16-19	Marianas
May 16-27	TN - Congo
May 21-?	Mongolia
June 4-13	BQ9P - Pratas
June 5 - Jul 5	Tromelin

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First Class Mail

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