

The Pileup

Newsletter of the CDXA

Presidential Ponderings

The Shelby Hamfest is rapidly approaching on the Labor Day weekend. At the CDXA Dinner during the Charlotte Hamfest back in March, Claude Oakes, NC4NC, suggested that the DXers might like to meet during the Shelby Hamfest. He has arranged for a room at the Days Inn in Shelby for 6 P.M. on Sat. Sept. 1st. We hope to see lots of DXers at the dinner. Please notify John Letford, W4JL, if you plan to attend. His e-mail address is w4jl@shelby.net.

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

Another one of our members, Paul Ponak, AD4IE, is organizing a 20th anniversary activity at Discovery Place in Charlotte for the weekend of Oct. 13 and 14. Information on this event will be put up on the CDXA website. Paul is particularly looking for phone operators for 2 hour shifts during the two day event. He has arranged for some nice certificates for anyone who contacts W4BFB from Discovery Place during the event. As we share lots of mem-

bers with the Mecklenburg Amateur Radio Society, this will be a joint venture of CDXA and MARS. Hope to see you or work you during this anniversary event.

As you can see we have lots of energetic members in the this club. We'd like to encourage you to consider running for office in CDXA for next year. Talk it up and let's get some great candidates for CDXA offices for the '02 term.

See you at Shelby

73, Bill

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)	

Logbook of the World

The information below was released in the first week of August by the ARRL. It provides convenience we'd all like to see, but at the same time may indicate the passage of the era where we get those lovely QSLs from the great DXpeditions. —The Editor

Fast on the heels of approval of the "Logbook of the World" by the ARRL Board of Directors, software design to support the electronic contact-verification program is continuing apace. ARRL Membership Services Manager and LOTW Project Manager, Wayne Mills, N7NG, said the ARRL hopes soon to make LOTW software modules available to vendors for incorporation into their logging programs. These modules are being developed as part of the Trusted QSL open-source project headed by Darryl Wagoner, WA1GON. (More information about the Trusted QSL project can be found at:

"sourceforge.net/projects/trustedqsl"

"We have been in touch with 15 or so developers of popular logging software," Mills said. "We're also looking at providing a basic, do-it-yourself program to get contact data to ARRL."

At the heart of the Logbook of the World concept is a huge repository of log data provided by operators—from individual DXers and contesters to major DXpeditions—and maintained by ARRL. Mills says the system will benefit big and little guns alike by providing quick QSO credit for awards offered by ARRL, and, it's hoped, for awards offered by other organizations as well.

Once it becomes available—which could be as early as the middle of next year—Logbook of the World will accept authenticated data directly from computerized logs via the Internet. "This is an e-mail based system that uses easy-to-obtain digital signatures for authentication," Mills said. "Once you get your digital certificate, a few keystrokes will do the trick."

Mills said the program envisions user access to the LOTW "confirmed database" so an operator can see what "matches" turn up—such as confirmation of new DXCC entities, states or grid squares. "We'll also publish a list of logs that have been submitted," he said, adding that operators may access the LOTW database once they've uploaded their own log data.

Heading up software development is ARRL Electronic Publications Manager Jon Bloom, KE3Z, along with Web Applications Developer, Mark Simcik, WA1VVB. Software specifications already have been established. Advising the project are Darryl Wagoner, WA1GON, Dick Green, WC1M, and Ted Demopoulos, KR1G. ARRL staffer and well-known contesteer and DXer Dave Patton, NT1N, who conducted the original electronic QSL project study, is also assisting.

Mills said that he hopes to be able to announce a specific inauguration date for Logbook of the World within a few months, as the software design progresses.

For Further Information Contact: Wayne Mills, N7NG

Dixon Puts out Call for Card Checks

Gary Dixon, K4MQG, has put out a call that all wishing to have their DXCC QSL cards checked by him for the 2000-01 fiscal year prepare them soon. Gary is an authorized field checker for the DXCC. It will be impossible for Gary to check all cards if presented for checking only in the last weeks before September 30, which signals the end of the DXCC fiscal year.

One of the easier ways to catch up with Gary is at the CDXA luncheons. Other times are by arrangement with Gary. It is still a good idea to contact Gary to ensure he'll be present at the luncheons on the day you'd like to bring in your cards. Gary can be reached via email at: gdixon@fmtc.net.

The Pileup

Official Newsletter of the Carolina DX Association
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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

Power-A-Plenty

At one of our recent CDXA luncheon meetings Gary Dixon, K4MQG walked in with a final amplifier tube that took us all aback. Frank Dowd, K4BVQ, had his camera with him that day and took the picture below.



Gary relates how he came to get the tube as follows: "Some time in the mid-sixties a friend of mine at Fort Gordon, Georgia, who knew I was a ham, asked me if I'd like to have an unusual vacuum tube. Fort Gordon was the home of the Army Signal Corps. My friend told me this particular tube was taken from a battleship sunk in the Philippines in World War II."

"The background is somewhat cloudy, but the story is that when the battleship was raised, the radio equipment was pulled from the ship and put into storage. Eventually this equipment was transferred to Fort Gordon after the war, where apparently it sat until the Army wanted to get rid of it. I don't know if the tube works, but there are no loose elements inside the glass envelope that would indicate it is broken. It is an Amperex tube designated 279A. I've had it all these years and it has been an interesting conversation piece."

Can anybody shed some light on this tube and its use? How about Bob Southworth, KI4YV, who can tell you some interesting tales about his time in the South Pacific in WW2. —*The Editor*

One Thousand Marbles

The older I get, the more I enjoy Saturday mornings. Perhaps it's the quiet solitude that comes with being the first to rise, or maybe it's the unbounded joy of not having to be at work. Either way, the first few hours of a Saturday morning are most enjoyable. A few weeks ago, I was shuffling toward the basement shack with a steaming cup of coffee in one hand and the morning paper in the other. What began as a typical Saturday morning, turned into one of those lessons that life seems to hand you from time to time. Let me tell you about it.

I turned the dial up into the phone portion of the band on my ham radio in order to listen to a Saturday morning swap net. Along the way, I came across an older sounding chap, with a tremendous signal and a golden voice. You know the kind; he sounded like he should be in the broadcasting business. He was telling whomever he was talking with something about "a thousand marbles." I was intrigued and stopped to listen to what he had to say.

"Well, Tom, it sure sounds like you're busy with your job. I'm sure they pay you well but it's a shame you have to be away from home and your family so much. Hard to believe a young fellow should have to work sixty or seventy hours a week to make ends meet. Too bad you missed your daughter's dance recital." He continued, "Let me tell you something Tom, something that has helped me keep a good perspective on my own priorities."

And that's when he began to explain his theory of a 'thousand marbles.' "You see, I sat down one day and did a little arithmetic. The average person lives about seventy-five years. I know, some live more and some live less, but on average, folks live about seventy-five years. Now then, I multiplied 75 times 52 and I came up with 3900, which is the number of Saturdays that the average person has in their entire lifetime."

"No, stick with me, Tom, I'm getting to the important part. It took me until I was fifty-five years old to think about all this in any detail", he went on, "and by that time I had lived through over twenty-eight hundred Saturdays. I got to thinking that if I lived to be seventy-five, I only had about a thousand of them left

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Comoros Cards Coming

The forecast that D68C cards would be coming by August was bettered by one day. Your editor received a QSL from the Comoros DXpedition on July 31. I submitted my card immediately after the first QSO, so it appears that QSL response is in the order received. I expect to see a few more QSLs from Comoros, but at least the first cards of their 168,000 QSOs are on their way.

Tower Safety

Tower fall claims the life of Texas amateur: A fall from an Amateur Radio tower July 8 claimed the life of ARRL member Bob Smart, W5TBV, of Georgetown, Texas. Smart reportedly fell from his 75-foot tower while adjusting his beam antenna. His wife, Ellice, N5RRO, who had been assisting him from inside the house, came outside to find him on the ground. His climbing belt reportedly was not attached to the tower

This information was forwarded to the editor by Jim Miller, K4SQR. It was extracted from The ARRL Letter published by the The American Radio Relay League. Jim reminds us all to use great care and safety equipment when working on towers.

Equipment Available

As many of you know, Reagan Rowe, W4FHI, long-time CDXA-member, now lives in Florida and South Carolina at various times of the year—to be near the water, ya know? I helped Reagan dismantle his station, and with the recent passing of his mother, Reagan asked me to help him dispose of certain items he cannot install at his new home.

- 1) 50-ft free-standing Universal (aluminum) tower
- 2) Hy-Gain Explorer 14 triband beam with 40M kit
- 3) Hy-Gain rotator
- 4) 2M vertical (StationMaster design--fiberglass-enclosed, 12db gain—two of these)

I also have a couple of 2M FM beams I'd love to dispose of—very reasonably.

A package deal would be nice, but I suppose we can sell stuff individually. All items are located at K4ZA's Stanley QTH. vy 73 de Don K4ZA

Keeping In Touch

This note from Ted Huf to Joe Simpkins was forwarded to me to keep you in touch with W4ZE.

—The Editor

Just a quick note to let you know what's up with me. We have a contract to buy a house on 10 acres on a hill in Hickory, PA about 20 miles south of Pittsburgh. I will be able to put some antennas up this fall. I do have my rig set up in an apartment with a window antenna that does work, but not well. I did just work OH0/ W3UR on 20M tonight. Also I picked up a new rig at Dayton, a IC-756PRO. I love it! 73 Ted W4ZE

Sleepless in Seattle

Robert R. Brown, NM7M

Should that read "Sleepless" or "Awake"? Frankly, I haven't the foggiest idea or where the phrase came from but it seems to be popular around this area of the Northwest. I think I saw it as the title on a CD or cassette but that is as close as I can come. But it had meaning to me back in the days of solar maximum of Cycle 22. I used to burn the midnight oil on 20 CW, chasing "deep Russians" in my quest for all the oblasts.

But all that required the ionosphere be awake too, with at least enough in the way of electrons to propagate my signals across the dark ionosphere. I often wondered how that happened and have to admit I just found the real answer, a freak of ion chemistry, in recent weeks. Let me tell you about it.

As DXers, you know about E_s layers, those pesky things that show up on the higher bands and suddenly "short sheet" your hops and fill your ears with local signals when you were looking for DX. That ionization lasts a long time up there around 100 km as the positive ions seem to be metallic in nature, probably from tiny meteorites. They get together every so often as layers because of wind shears. Electrons tag along just to keep the E_s layers electrically neutral but they recombine slowly with those ions, making for the long duration of E_s layers.

As DXers and contesters, you're probably pretty oblivious to what goes on overhead, only noting major changes like with the solar cycle, magnetic storms and

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the seasons. Well let me tell you there is a big chemistry lab up there and it keeps the DX ionosphere awake, so we can have some long-haul contacts at night. By DX ionosphere, I am really alluding to the upper reaches, the F-region, where HF signals travel. For convenience, the paths that we pursue can be broken down into various simple categories—transcontinental, intercontinental, transequatorial and finally transpolar. If you get out your copy of MINIPROP and use its map, you can give meaning to those categories, for example, by paths from W7 to W1, W7 to G, W7 to VK and W7 to HZ, respectively.

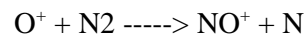
The sun, of course, controls matters; by its UV radiation and X-rays, it ionizes and dissociates the atoms and molecules of oxygen and nitrogen overhead. And there is a strong thermodynamic influence, heating of the upper reaches determining temperatures in the course of days and seasons. That makes the atmosphere rise and fall with the seasons and by dragging along the ionosphere, it affects MUFs, being high in winter months when least expected.

The geomagnetic field plays a role too, keeping electrons and ions close to where they were formed by solar photons. With the low density at high altitudes, collisions of electrons and ions are infrequent. And of the ions, the main one, O^+ , recombines at a very slow rate so that helps to keep the F-region intact after the sun sets.

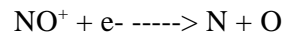
Some years ago I wrote a light piece for the Totem Tabloid in which I discussed what would happen if the Wicked Witch of the West (WOW, for short) snapped her fingers and made the earth's field suddenly go to zero. Aside from a loud BANG as all the energy stored in the field dissipated, the night-time ionosphere would disappear as electrons and ions went their various ways on ballistic trajectories; we'd then be reduced to something like another Maunder Minimum. Then the only means of DXing would be the day-time ionosphere, not a very pretty picture to contemplate. WOW would have an easy time of it with the geomagnetic field as its source is concentrated deep in the earth, not diffuse and spread out like the ionosphere. But if she saddled up, got on her broomstick and rode out into interplanetary space, she could grab a big gob of solar wind and hurl it at the earth. That could make a magnetic storm and a dandy aurora. Members of WWDXC know all about what that means to propagation. Or do they? By

throwing solar plasma at the earth, we've known that WOW would be perturbing the geomagnetic field; but do you know she would be creating electric fields, mainly in the polar regions? That happens because the charges in the plasma blob separate on moving across the geomagnetic field out in front of the earth. That creates an electric field and it is mapped down to the ionosphere because magnetic field lines are highly conducting.

So what happens next? The O^+ ions in the ionosphere gain energy between collisions in the E-field and a weak, almost dormant, chemical process goes into action:



as O^+ ions are now moving faster, at a much higher temperature and making chemical reactions go faster. And the NO^+ ions are quickly dissociated by electron recombination



with the result that electron densities are reduced! So there goes the ionosphere? Well, not quite. WOW does not have that much of a pitching arm and her E-fields as well as those from bursts of solar wind, while capable of lowering electron densities in the manner given above, are not strong enough to really wipe out the ionosphere. It is more like a significant perturbation but helpful in some quarters, the 160 meter operators who need all the help they can get, witness the havoc that ionospheric absorption creates on that band. But it is still not enough help for them to think about taking the auroral zone head-on. That is much tougher and best left alone!

But going back to the original theme, the ionosphere is awake at night because that reaction involving O^+ proceeds at a very slow pace at normal ion temperatures. But it could leap into action at very high ion temperatures and have a devastating effect on the electron density, taking away the night-time DXing we count on and spoiling the beautiful life we have as DXers. So be nice to WOW the next time you see her and look for times when the solar wind is weak and puny for your DXing. You never can tell about her but the solar wind is at least predictable from magnetometer records at auroral latitudes.

This piece was provided by N4UH. It was sent to him for our use by his old friend Bob Brown, NM7M—longtime propagation editor for World Radio. —The Editor

(Continued from page 3)

One Thousand Marbles (Con'd)

to enjoy. So I went to a toy store and bought every single marble they had. I ended up having to visit three toy stores to round up 1000 marbles. I took them home and put them inside of a large, clear plastic container right here in the shack next to my gear. Every Saturday since then, I have taken one marble out and thrown it away. I found that by watching the marbles diminish, I focus more on the really important things in life."

"There is nothing like watching your time here on this earth run out to help get your priorities straight. Now let me tell you one last thing before I sign-off with you and take my lovely wife out for breakfast. This morning I took the very last marble out of the container. I figure that if I make it until next Saturday then I have been given a little extra time. And the one thing we can all use is a little more time."

"It was nice to meet you Tom, I hope you spend more time with your family, and I hope to meet you again here on the band. The 75 Year Old Man, this is K9NZQ, clear and going QRT, good morning!"

You could have heard a pin drop on the band when this fellow signed off. I guess he gave us all a lot to think about. I had planned to work on the antenna that morning, and then I was going to meet up with a few hams to work on the next club newsletter. Instead, I went upstairs and woke my wife up with a kiss. "C'mon honey, I'm taking you and the kids to breakfast."

"What brought this on?" she asked with a smile.

"Oh, nothing special, it's just been a long time since we spent a Saturday together with the kids. Hey, can we stop at a toy store while we're out? I need to buy some marbles...."

If you live to be a hundred, I want to live to be a hundred minus one day, so I never have to live without you."

-Winnie the Pooh

A friend sent this to me, so I pass it along to you. I checked the given callsign and was actually disappointed to find it hasn't been in the callbook since 1996. I believe this exchange took place, and hope the author chose the callsign to provide anonymity to the "75 Year Old Man". -The Editor

Frustrations of QSLing

I was talking to Jim Miller, K4SQR, recently about the changing landscape of QSLing. (See the article elsewhere in this issue about ARRL's efforts in providing an electronic medium for QSLs.) When Jim was stationed in the Panama Canal Zone he earned 5BWAS but not without some QSL problems. There were many who wanted to get confirmation of working the Panama Canal Zone, but a few who just would not provide a return reply to Jim.

Then there is the DX contact who says, "100% QSL" on the air in a contact but three or four submissions including IRC's or green stamps nets nothing. One country that was on my all time worst list was El Salvador. They have since moved off my list and Moldova is now firmly on top with Bulgaria hovering nearby. Why is this?

Some will tell you that there is less integrity in the postal services in some countries, and the appearance of a letter to a known ham is sure to result in the prized "Green Stamp" to the postal worker who loses the card in his pocket. Your QSL card never arrives to its intended recipient. I prefer to believe that version, but have my suspicions that some less scrupulous operators may just enjoy receiving "green stamps" with no intention of replying to your QSL.

What's the solution? The expensive one consists of sending your QSL via registered mail. At about \$7.00 for a registered letter, it is guaranteed to go under lock and key. That is how I finally got my QSL card from Libya. I realize that with our numbers, we Americans are hardly considered "rare DX", and the "rare one" cannot afford the postal expense to respond directly to the thousands of hams who desire their QSL card.

I did find an alternative for consideration if email is not an alternative. After sending about four cards with IRCs to Vlad, UA0FF on Sakhalin Island (Zone 19, a tougher one to find), I finally went to the USPS, bought several aerogrammes at 45 cents, and sent one to Vlad asking him if he'd received the several cards I had sent or whether they'd been lost. Shortly thereafter Vlad's card confirming the three contacts we'd had over the past two years came back. Oh, almost forgot, no enclosures are allowed in aerogrammes to tempt a postal worker. If it works for you, let me know. -The Editor

January 2001 VHF Sweepstakes Results

Last month, we teased you a bit with the results of the AA4ZZ contest crew's performance in the January VHF Sweepstakes. The official results are in and are published in the August 2001 issue of QST, although it was not without a few false starts. I understand from Paul Trotter, owner of the AA4ZZ callsign, that the contest division of ARRL discovered some missing entries through their own oversight that resulted in a last minute recasting of the whole contest results. In the final analysis, AA4ZZ finished in a neck and neck race for top honors nationally alongside W2ODH/6 in the Limited Multioperator category. Needless to say, that finish made them tops in the Southeast Region. The first four finishers in the Top Ten Limited Multioperator category and their points are:

W2ODH/6	129,260
AA4ZZ	101,320
K8EB	87,345
N2BJ	85,272

The W2ODH/6 crew was operating in the high density area around mountainous Los Angeles giving them somewhat an advantage over the less populous Southeast. Members of this crew were: Ken Boyd, Gary Dixon, Bill Fisher, Roger Webb, Paul Trotter, and Ted Goldthorpe. You'll remember from an earlier issue of the Pileup that this was the event which showed the operators how c-c-c-o-o-o-l-l-d it can get on the top of the Blue Ridge in January!

CDXAers Still Collecting Kudos

Your editor received word from long-time CDXA member, Dr. Sam Hawes (K4DGJ), that he was awarded All BAND WAZ #231 for ALL CW in February, 2001. Folks, that's 231 people since the award began in 1947, and that places yet another CDXA member in the elite class. Sam writes, "I am very proud of this accomplishment, since all contacts were 100w or less. Been a ham since 1955 and am now 60 years old." Now that Sam has his award, he's stepped up his power a bit with an Ameritron AL-811 to go along with his TS-570D.

Dr. Hawes is a prominent Urologist in the Charlotte area, and in his professional capacity reminds all us "oldtimers" (my words) to have an annual prostate checkup.

Did you know we have some pretty heavy hitters in CDXA on the Top Band? If not, point your browser to "Who's Who on the Top Band". Its URL is: <http://www.qsl.net/160/>

In the top 200 Worldwide, you'll find the following CDXA members:

Rank	Callsign	Name
1.	W4ZV	Bill Tippet
8.	N4SU	Dave Kennedy
21.	N4JJ	Jack Jackson
107.	AA4V	Steve Reichlyn

If we restrict ourselves to the Eastern United States, the following CDXAers jump onto the list as well:

N4MM	John Kanode
N4UH	Henry Elwell
N4ZC	Roger Burt

Congratulations to all of you on your successes in one of the avocations you obviously enjoy.



Something to check out if you've got a "birdie" in your receiver on 20 meters.

The Back Page

Upcoming Contest Activity:

<u>Dates</u>	<u>Contest</u>	<u>Notes</u>
August 11-12	WAE CW Contest	August 2001 QST, Page 111
August 18-20	North American QSO Party, Phone	August 2001 QST, Page 111
August 25-26	W/VE Island Contest	August 2001 QST, Page 111
Sept. 1-2	All Asian SSB DX Contest	August 2001 CQ, Page 88 (no details)
Sept. 8-9	WAE SSB Contest	August 2001 QST, Page 111
Sept. 8-10	ARRL September VHF QSO Party	August 2001 QST, Page 112
Sept. 9	North American SSB Sprint	August 2001 CQ, Page 88 (no details)

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First Class Mail

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