Carolina DX Association

The Pileup

Newsletter of the CDXA

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EDITORIAL

Having the opportunity to design & layout a station is, indeed, a treat. I've dabbled a bit with N4ZC's place (I've built operating desks & done a little antenna/tower work), changed the lighting at W3LPL (Frank originally had overhead flourescents, creating shadows on the logs), & did some work for K3ZO (I'm one of Fred Laun's "basement people," the definition or distinction—depending on your point of view—of which you have to be around a hospitality suite, late on Saturday night, at Dayton, to understand) in laying out his operating desk to include two new amps (Titans) & a computer & good grounding. Plus, as an inveterate reader of ham magazines since boyhood, I've looked at lots of pictures & thought about this issue a lot.

So, it's with some foreboding that I undertake the task for myself. I want it to be right. The first time. Naturally, this causes me to re-consider everything several times. How much operating will I do, of what kind, & when, & so forth, are all considerations for me. I know, for instance, this QTH will not surpass the ZC station (I won't have six towers), so contesting will continue over there. But I will have opportunities to DX from here, & maybe casual contesting (whatever that means, it's surely a contradiction, right?). Which means I should follow the classic dictums described by Paul Rockwell, W3AFM, in his seminal series, "Station Design For DX," in *QST* for September, October, November, of 1966. So, my first order of business was to read & re-read this series. And consider ways & areas in which Paul's ideas might need up-dating. And consider ways & areas in which they were still valid. Amazingly, W3AFM made several conclusions which remain true.

Some differences, such as TX/RX combinations versus today's transceivers, the pre-ponderance of PacketCluster, & the ever-present computer, are all obvious. A bit more subtle are things such as: advances in vertical antenna design (the shift to using elevated radial systems, as opposed to the classic "120-buried radials," as defined by the broadcast industry in the 1930s, for instance) & the wide-spread use of computers to model antennas & do terrain analysis. The basic tenets of big antennas, high & in-the-clear, & having a good location (a place that's quiet), still hold true.

The terrain at this new QTH gently slopes away in all directions, except for a slight rise around 150 degrees. Hopefully, this terrain will allow me to lay out an effective station. Inside, I intend to try developing (using this station as a "test bed" of design) certain things which will end up in use at the ZC contest station. For instance: more effective stub filters; a fool-proof two radio switchbox system; maybe an amplifier or two; digital voice keyers; computer training (I want to be able to DO some modeling), & so on. DXing will, no doubt, regain some of my interest, as I have the ability to actually listen to the bands with something other than a "hunk of wire" strung around the room.

Radio's ability to fascinate me will, inevitably, return with all the romance I remember.

—K4ZA

AA4R's column will return in the next issue of *The Pileup*. And the next issue will be in August. June & July, I hope, will be tower & antenna raising-time at my new QTH. So far, I've received only one response to my request for input on this newsletter. KA8FSM, a new member, said he'd like to see some "beginner's tips," which we can consider operatingtips & techniques. Thanks, John, your request is duly noted!

MEMBER PROFILES

Bill Hall, KS4CD, is one of the CDXA's newer members. Bill's had a long-time interest in ham radio, fostered by growing up near Chicago on a block with three hams on it. "Seeing their shacks really inspired me," he says. But he waited until Eastern Airlines (where he and his wife were working) was closing, in 1991, to get licensed.

Today, Bill works for US Airlines Express. (He must be a busy guy—he says he has a "side job" in pest control, along with a "growing home inspection business" with N4JEV.)

"Listening to DX on the hf bands fascinates me," Bill told me. "I made DXCC on a dipole. Now I'm working toward 200 countries," he says. Bill has a 54-foot tower out back, with a tribander on it, and a literal hamshack behind his home—separate from the house. Inside, he runs a barefoot IC-751A.

Bill does have some unique resources available through his work, which he says he's used to get QSLs from some mid-Eastern countries. He can have letters and QSLs posted overseas, for instance, which has helped him get cards. But Bill believes he would benefit by hearing from some of the "big DX guns" within the club on QSL procedures. In fact, he mentioned that the club has been a good resource from him, with those members he's met being "super guys, really helpful...." KS4CD enjoys PacketCluster—he's one of the more-active calls you'll see putting out spots lately. His work prevents him from attending our luncheons, so say "hello" when you see him on the Cluster. Encourage this new CDXA member in his quest for countries....

Another new member is Jerry Moore, AE4PB, who also had an early interest in things electrical/electronic, but didn't follow up with his ham ticket until many years later. In 1986, while in Alaska with the Navy, Jerry began his first real attempt to getting licensed, but the code stopped him. Yet the idea of DX and QSLs and talking on the radio remained. Finally, in 1995, Jerry passed his no-code Technician exam, then upgraded to Extra within three months.

Now, of course, Jerry's on the PacketCluster, on 7.18 , at the Wednesday luncheons, at meetings, and on the air "all the time," asking questions and hoping "to learn as much as the other CDXA members can tolerate to get my skills up...." He says he joined because he felt this club "was the cream of the crop, as far as ham radio operators" goes—high expectations for all of us to live up to, indeed.

Jerry's current station includes a TS-440, SB-220, and a 56-foot tower with an A4, complimented with 75M slopers and a 40M vee. He listed the following as hobbies: computers, electronics, Star Trek, Scuba Diving, Hunting, Fishing, and ham radio. Naturally, one of us will have to correct him before too much longer—ham radio is a way of life, right? Maybe those "other things" could be called hobbies, but ham radio, never....

Jerry, 32, resides in Fort Mill, is married with two children, and works as a computer consultant.

PACKETCLUSTER NEWS

Apparently, some CDXA members don't know, or have simply forgotten, how to read much of the DX information available on our system. Each week we get the following DX bulletins:

ARRL DX bulletin - example DX25.97
ARRL propagation forecast - example PFB25.97
ARRL Keplerian date - example KEPS25.97 (computer data for satellite DXers)
OH/PA DX bulletin - example OPDX.305
Once a month, we get the monthly propagation forecast - example PROP.JUN

You will also find other bulletins of interest, such as:

COUNT.DX - listing of all countries added/deleted (including dates) since 1980.
RUSS.PFX - listing of old/new prefixes for ex-Soviet Union.
SYSTEM.115 - map of SE packetcluster system, node calls/freqs/baud rates.
Other bulletins of interest are added from time to time.

As each new bulletin comes in to your node, an Announce message is sent showing the name of that bulletin just received. The command <SH/ANN> will give you the last five Announce messages. You can look at the full list of bulletins with the command <SH/BUL> You may read these bulletins with the command <TY bulletin#> For instance, <TY PFB25.97>

Another great source of DX information is the "NEWS FILE" These news file additions are also sent as an announce message. You view the news file available with the command <SH/NEWS GUIDE> This gives a listing of the latest DX information by country prefix. The number in parentheses is the date the information was placed in the file. This is a good way to find the latest information on a rare DX-pedition. You must use the prefix as listed in the NEWS GUIDE. You read the NEWS with the command SH/NEWS PFX>, for instance, <SH/NEWS 4J1>

QSL manager information can be found with the command < SH/QSL call> For instance, <SH/QSL VK0IR> *(See last month's* Pileup *for full details)*

Here's the point to remember: please, make sure you check bulletins, news and SH/QSL *BEFORE* you send an ANN or mail message asking for QSL manager information.

More great information can be found with the following <SH> commands:

SH/BUC - callbook listings - includes over 100 countries.
SH/CONTEST - listing of contest information.
SH/DEALER - ham dealers: address, telephone #, e-mail or www site & product reviews.
SH/DXNODES - listing by state/country of PacketCluster nodes, calls, freqs, baud rates. Great info if you want to watch PacketCluster while on vacation or to pass information to a DXer buddy about where he can find a local node.
SH/FLUX - historical solar flux data along with a glossary.
IOTA - Islands on the air reference guide.
SH/MIC - TNC-to-radio wiring info.
SH/RULES - FCC rules & regulations.

PacketCluster News, *continued*

SH/ROSTER - CDXA member information. Check your data with the command <SH/ROSTER call> For instance, < SH/ROSTER N4ZC> If your information is not correct, or missing, use the command <UPD/ROSTER> to update it.

SH/TODAY - provides you with facts from history on this date. Also includes a perpetual calendar so you can find the date for any day of the week in history.

SH/INFO - This command gives far too many things to list here. Try it & see what I mean, but keep the next point in mind!

It would be best, whenever possible, if you'd look at these large data base files outside prime DX hours of 7 to 10 in the evening. A number of users looking at these sources of information at once will really slow things down for everyone. Think of your fellow CDXA PacketCluster users, & don't try to look up everything at one time. And, as always, let your SYSOP know of any problems. Send a packet or call: K4MD (704) 365-8492; K4PC (704) 264-7557; K4QO (803) 479-0334; N4ZC (704) 263-1133

--N4ZC

WEB WANDERINGS

Having moved, I was curious as to where I was—meaning I really wanted to have a "great circle" map of my new QTH. I've always wanted a big 40M beam, turned with a prop pitch, with a selsyn indicator system using a great circle map, too. But right now, I'd settle for the map. So, a quick Internet search turned up the following leads. (In case you don't know why this is useful, most maps are, of course, NOT centered on your QTH, & directions, distances, beam headings, & so on to far-distant lands must all be corrected to be accurate. A great circle map centered on your QTH will be useful.)

To find your exact latitude & longitude, start here with your zip code: CLT = 35.45 N
http://www.census.gov/cgi-bin/gazetteer 80.9 W
(I believe this will be the zip code of your post office, & NOT your own QTH)

A program to plot great circle maps centered on your QTH can be found:
http://www/alaska.net/~bucholz (on page two)

An on-line map creator from the Xerox Corporation:
http://pubweb.parc.xerox.com/map

A shareware propagation program can be found:
http://www/berkshire.net/~robbins/k1ttt.html

Another great circle source:
http://www.xray.duke.edu:1080/az_html/azproj.shtml#
(just follow directions & fill out the form; the map will be sent in a few minutes)

Another great circle source:
ftp://n6nd.nosc.mil/hamradio/gcmwin21.zip

And, finally, other interesting, & useful DX/contest sites:
http://pw2.netcom.com/~ac6v/index.html
http://www.dxer.org/index.html
http://www.qth.com/ka9fox/
http://members.tripod.com/%7EJoBear/n4zrl

The Back Page

A Review of the Kenwood TS-570D

After using both TS-450S & TS-950S radios for the past five years, I decided to try one of the newer DSP transceivers. Having decided a TS-870S was probably overkill for my station, I opted for a TS-570D.

The 570 is the same size as the TS-450, & looks similar. It uses the same multi-channel knob to accomplish menu settings. There are 46 menu items, most of which can be left at their default setting. Menu items are set by pushing the menu button & selecting the item with the multi-channel knob, & then using the + & - buttons. Selections are read out on the illuminated dial. The procedure is easy to use, once you figure it out. I found the most-used items to be: antenna tuning during receive; speech compression; CW sidetone pitch & volume; linear amplifier relay & IF bandwidth settings. Separate from the 46 menu items are settings for mic gain, power (from 5-100 watts), keyer speed & VOX delay. (The VOX delay includes separate settings for SSB & CW—a good idea.) The keyer has auto weight, which can be disabled, three memory message capability of 50 characters each, & can also be used in semi-automatic "bug" style, which disables the memory functions. A serious flaw, for me, is having to stop transmitting to change speeds by menu option. As a result, I continue using my old keyer, with its handy "pot" to change speeds anytime!

Received audio quality of both SSB & CW is very clean, typical of Kenwood rigs. On CW, the audio filter can be set from 50 cycles to 2.0 kilocycles bandwidth; I found it fairly effective. The DSP slope (low & high) seems to work fine, although I haven't used it much. CW operation does require the optional IF filter (500 or 250 Hz), as I discovered while trying to operate without it. The front end overloads easily—so much so I thought there was something wrong with the radio!

Band changing is easy. The + & - buttons, as well as the clear function for RIT/XIT (left off the 450 & 850 radios, but used on the old 930, for some reason), make for smooth operation. Split frequency use is similar to the 450/850 rigs, & easy to use. The "fine" tuning option works well, as does the digital dial. However, I found the large, extra digit distracting, being able to select a one or two digit display on the old 450S. I'm sure I'll adapt.

The Noise Blanker is effective, but can cause IMD, as is typical. There is a noise reduction feature, useful for "random noise." The Beat Cancel function works on SSB, & I found it helpful in reducing the AM carriers on 40-meters during the ARRL DX Contest. There are five "quick memory" registers, allowing you to stack up frequency, mode, & other functions—very handy while working around contest pileups, for instance. Conventional memory channels are set using the M:IN button, & recalled using the M:V button, with the multi-channel knob, as with the 450/850 rigs.

The automatic antenna tuner works well. I also found the PS-40 switching power supply to be a delight. It provides 20.5 amps, yet weights only 4.5 lbs. I wish I had it in 1992, while lugging an 18-lb supply to VP9. The only drawback noted so far is a slight whine from the fan, which might distract anyone not wearing headphones while operating. My overall impression of the rig is very favorable. The usual high quality audio, both received & transmitted, along with a logical front-panel layout, makes for a winning combination. And, the operating manual seems to be well-written.

—W4IX

1800-2100 UTC June 28-29 Saturday & Sunday

Field Day is coming up—the perennial ARRL summer-time operating event which manages to draw interest from hams everywhere. Is it a contest? Is it a social event? Is it both, or something else, yet again? Whatever your feelings or thoughts, FD remains something neat to do on that final weekend in June. And this year, once again, some enterprising CDXA types will be making an assault (they sound like contest types, don't they?) on the "home station, emergency power" category. Using the AA4S station, some of our CDXA gang will be doing their level-best to win the class—something they did a few years back.

If you'd like to help, in any way, please contact Ron Bailey, AA4S, or N4ZC or K4ZA.

Ron's station is completely powered by his generator system, and we already know we can be competitive. Plan now to come out, join the fun, & help the CDXA!