# County Hunter News

January 1, 2011 Volume 7, Issue 1

Welcome to the On-Line County Hunter News, a monthly publication for those interested in county hunting, with an orientation toward CW operation.

Contributions of articles, stories, letters, and pictures to the editor are welcomed, and may be included in future issues at the editor's discretion.

The County Hunter News will provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

We hope you will enjoy the County Hunter News. Feel free to forward, or provide links. Permission is given for copying or quoting in part or all provided credit is given to the CHNews and to the author of article.

CW County Hunter Nets run on 14.0565, 10.122.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, with low sunspot activity, most of the SSB activity now is on 'friendly net' 7188/7185 KHz. The cw folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18135 or 18.132.5 for occasional 17M SSB runs.

You can see live spots of county hunter activity at <a href="mailto:ch.W6RK.com">ch.W6RK.com</a>

For information on county hunting, check out the following resources:

The USACA award is sponsored by CQ Magazine. Rules and information are here: <a href="http://countyhunter.com/cq.htm">http://countyhunter.com/cq.htm</a>

For general information FAQ on County Hunting, check out: <a href="http://countyhunter.com/whatis.htm">http://countyhunter.com/whatis.htm</a>

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at: <a href="http://countyhunter.com/marac information package.htm">http://countyhunter.com/marac information package.htm</a>

The CW net procedure is written up at:

#### http://www.wd3p.net/ch/netproc/netproc.htm

There is a lot more information at <a href="www.countyhunter.com">www.countyhunter.com</a>. Back issues of the County Hunter News are available at <a href="www.CHNewsonline.com">www.CHNewsonline.com</a>

De N4CD (email: telegraphy@verizon.net)

### Notes from the Editor

December was a good month for snagging some counties, but with winter weather moving in, the mobile trips and activities was down a bit from the feast during the summer months. There were opportunities for band counties with the CW DX Contest at the end of November (HI and AK counties to start), and the 160M and 10M ARRL contests.

#### 1) Logger and Mobile Diamond

Logger has been updated to track Mobile Diamond Counties for those who can work on it. You need to have earned your Master Platinum before you will be able to see that book in your Logger.

### 2) Bands/Sunspots

40 meters continues to be the prime band for contacts, with both CW and SSB doing well in December. In addition, 30M has been perking up, with dozens of contacts per run. The skip on 20M stays 'long' for much of the day, yet it will yield contacts with those further away (or those with big antennas). 17M has been good during the peak hours of the day with up to 8 or 10 occasionally, but usually 4 to 6 in the log per county when you are far enough away from the other stations – it's really long skip most of the time. Not much happening on 15 and 12 and 10M despite slightly better sunspot numbers.

During December, the flux got up to 90 a few times, then at the end of the month, all sunspots vanished and the flux was back in the 70s- meaning less propagation on the higher frequencies. There isn't a whole lot of joy for 10M ops, but they still are making good use of what there is. You don't see a whole lot of spots on 12M or 15M these days.

From ARRL Propagation Newsletter, courtesy of ARRL, Newington CT

"Sunspots disappeared this week. Five days with no spots is the

longest since May 9-19, 2010, when we saw 11 days in a row in which the Sun was spotless. Since then there has only been the occasional day or two that was spot-free. April 2010 saw 13 consecutive days with no spots, followed by one day in which the sunspot number was 12 (indicating the emergence of a sunspot group with two spots), only to be followed by another spotless day, April 29.

As this bulletin is being written early Thursday, December 23, there may be a spot emerging right in the center of our Sun, when viewed from Earth.

With no spots for five days, the average daily sunspot number for December 16-22 dropped nearly 23 points to 4.9. Average daily solar flux declined 8 points, or a little over 9%, to 80.1.

The noon reading at the Penticton observatory showed the solar flux rose today to 80.1, precisely the arithmetic average listed below for the prior seven days. Although still pretty weak, solar flux hasn't been this high since last weekend, on Sunday, December 19.

NOAA/USAF sees a low solar flux of 78 until December 26-27, when they predict a flux value of 80, then 82 for December 28-29, 84 on December 30, and 90 on December 31 and January 1."

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Higher flux means upper bands should be opening more!

#### 3) Ten Meter Contest

Ed, KN4Y, participated in the ARRL 10M contest. He noted the following contacts made in the following states. So you thought 10M was dead?

"This morning at daybreak it was 21 degrees F. So I decided to do inside activities, I would say work but Norm(W3DYA) would call me on that. Some county hunters like statistics of dubious value so I thought how many QSO's did I make with each State during the recent ARRL 10-meter contest would be a good presentation. Please be advised I used only whole numbers. AL-1, AK-0, AZ-5, AR-4, CA-20, CO-6, CT-8, DE-0, DC-2, FL-3, GA-4, HI-2, ID-4, IL-5, IN-6, IA-2, KS-5, KY-3, LA-7, ME-1, NH-1, MD-10. MA-9, MI-9, MN-8, MS-0, MO-9, MT-4, NE-5, NV-0, NH-5, NJ-7, NM-5, NY-16, NC-6, ND-2, OH-12, OK-6, OR-2, RI-0, SC-2, SD-0, TN-3, TX-42 (includes Norm), UT-2, VT-3, VA-20, WA-16, WV-4, WI-9, WY-2 "

#### 4) Miscellaneous

During December we also had the 160M contest with lots of opportunities for band counties there. I didn't see any activity reports, but we have a dedicated bunch of county chasers down there.

#### 5) Last Call for N4UJK Supplies

Ed, N4UJK, will be stopping production of his Magellan Coloring Book and the MRCs. What he has left is what there is, then no more.

### 6) 80 Meter Night - 3556.5

Tuesday nights is the unofficial night for 80M county chasing/going mobile. With winter conditions, you might be able to snag some new counties as mobiles venture out for a few hours Tuesday evenings.

#### 7) Mobile Activity in late Nov/December (after 11/20/2010)

At the end of November (Thanksgiving time) and into December -

Tom, **K8YJ**, ran quite a few in WV, and headed over to OH to get some of the rarer ones.

Dan, AA0TT was running counties on 20M SSB

Scottie, N4AAT, put out counties as he zips around in SC.

Jim, **N9JF** was over in NE, and wound in up several other states as well on cw. Headed west...headed east – got re routed here and there in OH and elsewhere.

Larry, **N2OCW**, headed out to PA, NJ, via MD and other states. He's good for MD, MP, MG, Bingo and the 'N" prefix plus a bunch of stars.

Jeff, **W9MSE**, headed over to OH from his QTH in WI, running them both ways on the cw bands.

**NX4C,** Wes, was out in TN putting out some of the rarer ones on SSB and CW on many days in Nov and Dec.

Bill, **KM1C** was spotted in the NYC borough area.

Doug, WA4UNS, ran in VA and NC.

**KB0BA**, Lowell, and **N0XYL**, Sandra, spotted in WI and IA.

Mark, **KO1U**, was out in NH hitting some of the rarer ones.

Karl, K4YT, was up in PA and NY getting some of the rarer ones on SSB and CW.

Jerry, **N4JR** spotted in VA.

NX4W, Lloyd, was busy in GA running them on SSB and PSK-31

**W8DCD**, Kirby, showed up in FL, and ran them on the way back home.

Dan, **KM9X** put out some in OH and IN on SSB.

**WD9EJK**, Paul, headed on down to FL and back, putting them out on SSB.

Dave, **KE3VV**, headed on down to Montgomery, VA and back again.

Gene, N4ANV, was putting them out in northern GA and SC.

Ed, **K8ZZ**, was mobile in MI.

Ed, **K8WQY** ran a few in northwest OH for the folks.

Ron, **KB6UF**, took several trips in LA and MS giving out Mobile Diamond Counties.

Joe, **N5UZW**, made a few trips in AR, then took a bigger trip over to MS putting out Mobile Diamond Counties.

Cliff, **K6JN** and Nelda, **W6XJN**, were out in GA putting out the counties on SSB then headed over to TX and west to CA.

Dave, **K4SSU** was out putting out the counties in GA.

Sandy, **WB4EVH**, put out a few in GA. Good to hear him back on. He was real active many years ago.

Ron, **KB6UF**, headed across the top of LA putting out the counties. Then more trips to run most of the counties in LA in the last few months.

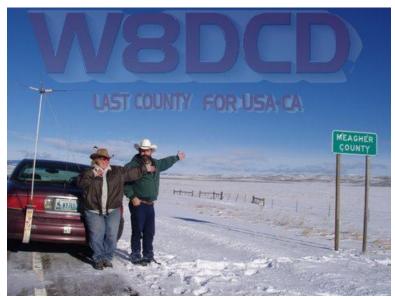
Jerry, N4JR was out and about.

Lightning Leo, **WY7LL** and Chris, **WY7ML** headed over to Meagher, MT in the winter conditions to get the LC WBOW for Kirby, W8DCD. Later in the month they were in WI running counties.

Bob, **N8KIE**, ran Honolulu HI on 20M and 17M. He noted 25 contacts on 17M with the good conditions.

Jim, N4JT, was on in VA and NC.

Jim, W4HSA ran in VA and NC on cw.



WY7ML and WY7LL in snowy MT

Jack, **N7ID**, headed over to Owyhee, ID to get the LC whole ball of wax for Dick, K5VYT. He gave out counties along the way for those working on Mobile Diamond Award.

Dick, K5VYT posted on the K3IMC Forum:

"Many thanks to all the mobiles and station that helped me in the last 4+ years to complete 6th time. Special thanks to N7ID for that last one, Owyhee ID. The following stations each gave me more than 50 counties this time: AA9JJ (256!), N8KIE (162), AB4YZ (157), N0KV, K0RCJ, KL1V, KM9X, WQ7A, N4CD, N2OCW, KB6UF, NX4W and WG6X. There were also contacts with over 230 other stations. My sincere thanks to all of you! 73, Dick K5VYT "

Dan, AA0TT was out and about on 20M SSB in the midwest.

Gene, **WB4KZW** was down in FL, and AL.

Ron, AF5Q spotted over in Greer/Harmon, OK area headed east.

Jack, **WD4OIN**, out and about in VA and NC and TN.

Tom, **K8YJ**, down in VA and NC after putting out lots in WV.

Jim, **K0ARS**, was out and about in KS.

Don, **K3IMC** headed out from GA and was running many counties in KY. He's headed off to Hawaii in January, so see his sked at the end of this newsletter if you need HI counties!

N5KGY, Jerry, was spotted mobile in AL and GA.

### On the Road with N4CD-1

It was time for the annual trek back east, but before I could leave, I went to the Antique Radio Convention (TX Vintage Radio and Phonograph Society) conveniently held about 40 minutes away. That starts on Friday and goes through Saturday, and then has a flea market starting 7am on Sunday until 10am or so. After writing all the articles about old radios, I was curious to see what they would have for sale. You never know what sort of goodies will show up, and occasionally some old ham goodies appear and there might not be too many bidders at the auctions for them. (dream on!)

Over 850 lots were auctioned off in 2 days – whew! If you like old tyme radios, they had them by the hundreds. More later on this. I did find a nice little Philmore 7001-CR 1950s regen set for sale at a good price and added it to my little collection of regen receivers.



Now I have to make it work. Everything about that old needs most of the capacitors replaced as they go bad after 20-30-40 years of not being used, or even just sitting around. The electrolytics go bad, and most of the paper capacitors are likely suspect as well. The controls get grotchy and the switches can have oxidized contacts. Even resistors can go bad after 60 years.

This was also the ARRL SSB Sweepstakes weekend which make a real mess out of the bands. I needed to either start on Sunday, or have a short direct trip to get up to Montgomery County MD for turkey day. So, as a county hunter, I loaded up the car early on Sunday morning (like 5:30am – dark), drove over to the site of the VRPS event, and was there before 7am for the flea market, which had already started. I didn't find anything else exciting to buy other than a few old magazines and one book, but if you need replacement knobs or gizmos for 1920s/30s/40s radio, this is the place to be. Likely 10,000 knobs were available to fix those old missing ones or broken ones or wrong ones, plus various replacement parts.

After about 2 hours I decided to leave and head east – it was right on the interstate so I got a good start on Sunday.

On this trip, I had several objectives.

1) Try to run 3 in VA for second time transmit to finish up that state: Henry,

Northumberland and Accomack.

- 2) Get a Master Diamond contact from every county if possible and give out 3 or more contacts on each of 2 bands
- 3) Get to some of the rarer counties for the folks.

Joe, N5UZW, was trying to hold down the County Hunter Frequency of 7188 through intense QRM with folks hollering "CQ Sweepstakes". The contest sort of takes over the band, and when the skip lengthens, you have the west coast pounding in, the east coast pounding in , and it's a real mess. With help from friends, we managed to work a bunch on 40M through the QRM with lots of repeats. The first day was up the Interstate 30 to middle of ARK, then on I-40 for a long way east.

With the QRM not making it fun to run on SSB, I stopped early afternoon at the Super 8 in Wheatley AR – a good value for the money (\$43 including nice hot breakfast). After checking it, I decided there was still time to run a few, so I headed up to Cross for a LC for Joyce, KD8HB. I got about 10 miles north and was looking to get on 49....but alas...there was a train blocking the road and it looked like it was just sitting there. After I sat there waiting for the train to move for five minutes – I decided it wasn't going to move any time soon, so I checked the map for plan B. Fortunately, by going northeast I could get there as well, which I did. I ran Cross on all bands, then headed back.

For the county to count as a Master Diamond transmit county, I have to work at least 3 people on two different bands, plus work a Master Platinum holder. On the way up to ARK, that worked fine. As the bands go dead as it gets dark, or early in the morning before they open, that really can be a challenge. After 90 minutes of having fun, it was time to get back to the motel, take out the radio, and head on over to the Pizza Hut for dinner (Sunday Night - pizza night!). The train was still blocking the other road as I passed by it! Good thing I didn't wait for it to move!

The next morning, it was trekking east on I40. As I get to TN, Kerry, W4SIG and I have an eyeball at the McDonalds off exit 24. We yakked for the better part of an hour...then I Had to get back on the road to make some miles. It was I-81 and more I-81. All day. I hit one county for 500 feet in TN....only made two contacts, and neither with a MP holder, so missed that one on Monday. I made it over to the east side of Knoxville (Knox County) and stopped at a nice Motel 6. It got dark early. There was a Cracker Barrel next door, so I enjoyed a country **ham** dinner.

The next morning it was up at daybreak, followed by a quick breakfast at the nearby McD. I had gotten to the east side of town, so no traffic jam to contend with, and I zipped up to Interstate 81 into VA. It was early and only 40m was open for the first two counties. No Mobile Diamond credit for those. Even worse, there is a net in the Caribbean on the air at

7am local time (1200Z) on 7188 that is good copy. You can't even show up there and run. I'd hear them every morning when I started early – and the net continued to 10:30Z most days.

Then it was 'off the beaten path' by heading down I-77 to the southeast. I missed the exit I intended to take.....and wound up on the next one driving along the Blue Ridge Parkway to get back to Highway 58 headed east. Wow...you get on some very twisty roads there in Carroll, Floyd and Patrick counties. As you head east on 58, it is both hands on the steering wheel and constant turns as it drops like a rock off the spine of the mountain ridges. Ray, AB4YZ, needed an "N" prefix in Patrick and Floyd – done – and he needs only 2 more to finish up the entire country now. I was running 40M SSB, and 20/17/30/40cw in nearly every county. 30M was working great. The weather was good. The forecast was ominous, but the rain held off. Only a few sprinkles fell. As I got further east, 17M worked better and better. You need to be far away from folks for the skip to work. K5GE was most consistently in the 17M log.

In the mornings, K1TKL was there early on 40M on cw (4am his time!). Later 30M would open. Alan, VK4AAR made it on 40M and 20M in some, and DL3IAC worked me on 40/30 and 20M along the way. When you get on Eastern Time, you can't start too early - not enough folks around and no propagation to give you 3 contacts on at least two bands! Joe, N5UZW was always there on 40M SSB, even from the 'east coast' once the Caribbean net ended.

Well, those back roads took a while, and I wound up making it across VA stopping at a Super 8 motel in Southampton County, VA on Tuesday night. Dinner at a nice China Buffet. The nest morning I found my way, after getting lost once, onto the Chesapeake Bay Bridge/Tunnel to get to the Eastern Shore and those two VA counties. That went well. The plan was to try to get over to Montgomery County by 4pm or sooner to avoid the rush hour in the Washington DC area.

My sister had told me to stop and buy some Hayman Potatoes. Well, I had no clue what a Hayman Potato was, but she said the farm stands sell them in the fall. OK – I made a note to buy Hayman Potatoes if I saw a sign. I was on a main road. There were dozens of speed traps, mostly for the folks heading south. At one, there were 3 cars pulled over as I headed north. About a mile north of that, there were SIX police cars side by side off the side of the road, and a speed trap set up to catch speeding southbounders. They must have had lots of business to justify six cars just waiting in turn to catch speeders in the 55 mph limit highway (4 lane divided and wide open).

I passed by a farm stand that was open. Oops, too late. Had to make a U-turn to get back to it on the divided highway with wide median a half mile later. Circled back and pulled in. All sorts of melons, and other stuff. I asked the old farmer about 'Haymans' and he pointed to small buckets of sort of grungy looking potatoes and said those are Haymans. Five bucks for a small bucket – and I bought the contents, which he put into a plastic bag, and put it in the back of the car.

#### From the web:

"For the longest time Hayman sweet potatoes were a treasured secret, shared by farmers and locals along the Virginia shore. Small in size and difficult to grow, the thin-skinned beige heirloom potato, with its whitish flesh that turns a pale sage green once cooked, is cultivated only on the a narrow peninsula off the coast of Virginia between the Atlantic Ocean and the Chesapeake Bay.

Though the Hayman may not have much going for it in the way of looks, it's unique sweet flavor and creamy, moist texture make it a much-anticipated treat among the locals every winter."

OK...so now you know about Hayman potatoes and they are GOOD! We had them for dinner on Wednesday night. My sister has enough for 4 or 5 more meals, too.

I wound up hitting a few counties in eastern MD, then over the bridge to get back to mainland MD and the traffic around DC. I pulled in before to the rush hour got too bad, but did get to see 10 miles of stopped "inner loop' on the 'beltway' in DC. Fortunately I was going the other way on the 'outer loop'. I parked the car for 4 days.

Friday night the family and nephew and his wife and her sister headed over to the Birchmere to hear the Seldom Scene and Dry Branch Fire Squad play some great Bluegrass music. It's probably the best place the country to listen to live music.

I would have headed back to TX that weekend, except it was the CQ WW DX Contest weekend, and that is likely the biggest contest in the world on CW. Talk about crowded bands and folks climbing all over each other! Not the time to be out mobile when you need contacts on multiple bands as a cw county hunter, so I waited until Monday.

On Sunday, the family headed over to the Wireless Radio Museum in Bowie MD.

### http://www.radiohistory.org/

They have hands on demos for the kids (from a small spark gap transmitter to Morse Code demos), and rooms set up with vintage TV sets – from scanning disks to small 3 inch CRTs with magnifier lenses, to vertical tube/mirror in lid sets, the 'wireless era', the early broadcast era with working crystal and battery tube sets (with earphones to listen to the local stations there in DC), plus other working radios. You can listen in to 'old' radio programs from the 1920s and 1930s at multiple points as well.

One of the most unique items they have is a Lee DeForest original audion. Not just any audion, but the one that was used in his battle with Fleming in a decade long court battle. This was the

one used in the court room. The family of the lawyer still owns it, but it is on loan to the museum.

Maybe there are 300 radios to see, including one owned and used by President Hoover. It took about 2 hours to see everything. The museum is open on weekends and one day during the week if you are in the area. You can listen to crystal sets, the one tubers of the early 1920s (RCA Radiolas), the TRF sets, the first superhets, etc. No admission, but a donation is requested to help keep things going.

I managed to get the special tour of the ham radio annex building. It's got a pile of 40s and 50s radios, plus a Collins commercial multi-KW transmitter than they occasionally use on 80/40/20M AM. It's a big thing – probably 1000 lbs of large cabinet and transformers, modulation transformers, chokes and other parts (full of 810s).

Worth a stop if you are nearby.

Ever see a Reado? From the website:

"We bet you have not. The Reado was developed by Crosley in the late 1930s as a then-cutting edge way to send a newspaper to individual homes.....using a very early form of facsimile. The Museum was lucky enough to find one of these now rare machines and it's on display along with signs showing you what the transmitted newspaper looked like. One could buy a complete machine—or a kit to make your own. But it was not yet a cost-effective way to transmit papers, and its graphic ability was very limited. Another breakthrough that wasn't . . . but also an indicator of changes to come after World War II. "

Here's a website for more info on the Crosley Reado <a href="http://crosleyautoclub.com/Reado/Reado.html">http://crosleyautoclub.com/Reado/Reado.html</a>

"Powel Crosley started producing what was one of the first low cost radio facsimile receiver for the home in the late 30s. Broadcasting news and weather over the WLW air waves when it went off the air around 12:30 at night. In January, 1939, Crosley announced it had manufactured 500 sets and had set up a factory to turn out 1,000 per day.

13 stations were equipped to transmit pictures under the Finch system under an experimental program early in the production of the Reado. Only 8 are known to have continued the service. The first 3 stations on the air were broadcasting in October, 1937, and Crosley's WLW and its Mutual Network partners, WOR and WGN, were experimenting with station-to-station radio FAX transmissions a few months later, and were on the air not long after. WLW continued radio FAX broadcasts during the early part of WWII, and Powel read his Reado strip for the latest news every morning."

See more pictures of the hardware at the website!

The range of transmission was not as great as the normal radio broadcasting because facsimile is more subject to static and other forms of interference. Under the Crosley Finch system of transmission and reception the receiving set synchronizes itself on the 60 cycle, 110 volt transmission and receiver current.

The broadcasting station must be equipped with a device for visualizing the picture just as a broadcasting station is equipped with a microphone for hearing a sound program. This visualizing device consists of an electric eye which moves back and forth rapidly across the paper, scanning a line at a time and translating the line by the electric eye into electrical dots which are then transmitted by the broadcasting station in exactly the same manner-as it broadcasts regular programs. Crosley uses the Finch system of facsimile, developed by V. G. H. Finch in his laboratory over a period of many years.

Transmission of pictures on the normal broadcasting band 530 kHz to 1570 kHz was limited to hours between 12 PM and 6 AM when the station wasn't normally on the air. Some transmitters were licensed to transmit facsimile from high frequency stations between 25 mHz and 47 mHz that were available for daylight operation. "

Now back to the story.....

That evening, my sister dragged me off to the movies to see Burlesque. Good movie. Then it was off to the local pizza place where she had some discount coupons. Sunday night -Pizza night, of course!

Monday came, and it was time to head back to TX via the county hunter way. The objective was to not run any of the same counties on the way home as I did on the way up. Now, since the fast way is straight down the interstate – I-66 to I-81 to I-40 to I-30 to home...that meant going on lots of back roads for a while. OK....well, this Mobile Diamond thing would get me heading to lots of 'new' counties. I had not been on I-66 or I-81 down to Roanoke so I did some quick miles on those roads. Whoop – too early as I left at 6:30am to beat the Washington DC beltway traffic – no contacts on 2 bands for first three counties, but did work an MP holder to get at least that credit. I zipped on down the Interstates.

Then it was off 'the beaten path at Montgomery, to hit Giles and Craig (good for NB there), into WV to get Mercer, back into VA for Bland, Tazewell, Buchanan, and Dickenson. Whew, that road into Dickenson and back out again is a two hander keep turning the wheel back and forth at 30 mph max speed road. You won't be doing too much CW or talking on that road – besides it runs down through valleys where you don't hear much either. You can say that about a lot of the roads in that part of the country including the 'main roads'.

I finally hit the County Line and ran Dickenson in a small parking area. Then a few miles later took the road to the northeast up into Pike KY. That proved slow going, and as I got to Pikeville in the drizzle, there was a horrendous backup – a traffic accident stopped traffic for an hour. I looked for motel in database in the GPS, and found the Daniel Boone motel. Sounded OK – called them and reserved a room while I sat in the traffic jam. \$34 plus tax.

I got there an hour later after the traffic jam cleared. It was dark and I took me 15 minutes to find the motel despite the big sign on the road. It was pitch black, drizzling, and I kept winding up in a parking lot for a shopping center. I finally got out of the car took around and up on a hillside was a small sign and arrow. OK....I headed up a narrow driveway and at the top of the hill was the motel. I guess you just either have to know it is there, or get there while it is light out. 100 cars and trucks there knew the way.

The nice lady at the desk said I would be on the 'second floor'. Well, that turned out to be 150 feet behind the office down the hallway, across a multi-purpose room – and on the other side were six rooms. I guess if I could see out the window, other than the city lights below, I'd be up on the air as the motel was perched on the hillside. It was a good value for the money. Lots of contractors and apparently the guide truckdrivers for 'wide loads' stay there. Looks like over 100 rooms. Lots of other motels in Pikeville too. Not much elsewhere in that neck of the woods, though. It got very dark early with all the hills around and the drizzle, plus it's December with shorter days to start with.

I ate next door at the Windmill restaurant. Ham dinner costs \$5.50 and included salad, two veggies, and a roll. I like the prices in Pikeville – cheap. Hi hi. Ate breakfast there too as I got up too early and it was still dark.

The next morning it was up to Floyd, then west on Highway 80 over to the interstate – that's a good road across that part of KY. The rain started. It rained. More rain. Even more rain. A few inches of rain fell, and there were flash flood warnings all around. Other than not so great driving conditions, the day went well other than rain and more rain, and even more rain. I got down through Knoxville and headed down I-25 to Chattanooga, and then started back up toward Nashville. By getting off in GA at the exit, I could run Dade GA on multiple bands.

It had been a long day of driving in not so great weather, so I started looking for a motel and found a Super 8 in Kimball, TN. Probably should have kept going a few more miles but I was tired. The Super 8 was good but the price was high. Things are less expensive 25 miles further northwest with motels advertised for a lot less along the interstate. Of course, didn't see that until the next day – hi hi. Dinner at a nearby China Buffet. Waffle and some eggs for breakfast, OJ and coffee, included at Super 8.

So far I had only hit two counties in both directions – Knox and Loudon TN – no way around crossing paths. Now it was down along the south border of TN running straight west. As I got over near Fayette County, I needed to not go there – been there already, so I ducked down into

MS. I headed west.....took a detour north to get Desoto, then back south on highway 3 for Tunica. It was getting late and very dark, and there wasn't much in the way of towns around. My GPS only showed motels the way I had come and I wasn't going to backtrack. Art, N4PJ checked the net and said there were motels in Clarksville – 25 or 30 miles ahead. I headed that way and it was way dark when I got there. Found several motels (as I got closer to it, the GPS started to show the motels), and picked a cheapie looking 1950s style one – Budget Inn. \$45 including tax. It was cold – the heat ran half the time keeping the place warm. I slept fine that night.

I headed across the street to a restaurant for a lasagna dinner (nice – salad included). The motel owner said I should visit the 'blues club' in town but I was tired and I'm not a blues fan. Apparently there is one world famous blues club there – Ground Zero Blues Club.

#### http://www.groundzerobluesclub.com/home.php

I grabbed an early quick breakfast at the nearby McD, then figured I needed to make some tracks as I wanted to get home that day. I took one short detour to get to Sunflower - ¼ mile east detour at Shaw – for LY5A. Then it was steady driving all day. I'd stop to run on 40M SSB. Don't have enough hands to log, drive, and hold the mic so it goes so much faster if I stop to run SSB. Maybe the brain doesn't work as fast on SSB either. The ears don't work as well as they used to, either. My doc says I need hearing aids....well, one of these years.

CW is easy while driving. It took about five minutes for the average SSB run, then it was CW on the run across the county till the next one all across ARK. I hit Miller ARK and the TexArkana line – and put the pedal to the metal on the way across TX back home. I had run those on the way up. I kept it at 77-78 mph and it went well till I hit Greenville (Hunt County).

I was planning on hitting Rockwall, always needed by someone, but the interstate came to complete halt at 4pm. Plan B - I got off, took some detours and found my way to 380 west – the back way in to my QTH. I made it near home by 5pm after long day. Hit the Golden Corral for a nice dinner then the final 13 miles home. Now have all sorts of logging to do for the Diamond transmit counties.

It was a fun trip – lots of counties NOT on the interstate coming home, but it will be a challenge to go a different way each time!

Miles – 3000 plus. Gas – ran \$2.75 to \$2.90/gal. 8 days on the road. As of 12/4/2010 have run 200 Mobile Diamond Counties, but missed getting 3 contacts per band, or working a MP holder in 8 of them. So about 40% done on transmitted counties requirement, so lots more mobiling to come.

# Caught Red Handed by Wiki-Leaks

#### WikiLeaks cables reveal how US manipulated climate accord

Hidden behind the save-the-world rhetoric of the global climate change negotiations lies the mucky realpolitik: money and threats buy political support; spying and cyberwarfare are used to seek out leverage.

The US diplomatic cables reveal how the US seeks dirt on nations opposed to its approach to tackling global warming; how financial and other aid is used by countries to gain political backing; how distrust, broken promises and creative accounting dog negotiations; and how the US mounted a secret global diplomatic offensive to overwhelm opposition to the controversial "Copenhagen accord", the unofficial document that emerged from the ruins of the Copenhagen climate change summit in 2009.

Negotiating a climate treaty is a high-stakes game, not just because of the danger warming poses to civilization but also because re-engineering the global economy to a low-carbon model will see the flow of billions of dollars redirected.

Seeking negotiating chips, the US state department sent a secret cable on 31 July 2009 seeking human intelligence from UN diplomats across a range of issues, including climate change. The request originated with the CIA. As well as countries' negotiating positions for Copenhagen, diplomats were asked to provide evidence of UN environmental "treaty circumvention" and deals between nations.

But intelligence gathering was not just one way. On 19 June 2009, the state department sent a cable detailing a "spear phishing" attack on the office of the US climate change envoy, Todd Stern, while talks with China on emissions took place in Beijing. Five people received emails, personalized to look as though they came from the National Journal. An attached file contained malicious code that would give complete control of the recipient's computer to a hacker. While the attack was unsuccessful, the department's cyber threat analysis division noted: "It is probable intrusion attempts such as this will persist."

The Beijing talks failed to lead to a global deal at Copenhagen. But the US, the world's biggest historical polluter and long isolated as a climate pariah, had something to cling to. The Copenhagen accord, hammered out in the dying hours but not adopted into the UN process, offered to solve many of the US's problems.

The accord turns the UN's top-down, unanimous approach upside down, with each nation

choosing palatable targets for greenhouse gas cuts. It presents a far easier way to bind in China and other rapidly growing countries than the UN process. But the accord cannot guarantee the global greenhouse gas cuts needed to avoid dangerous warming. Furthermore, it threatens to circumvent the UN's negotiations on extending the Kyoto protocol, in which rich nations have binding obligations. Those objections have led many countries – particularly the poorest and most vulnerable – to vehemently oppose the accord.

Getting as many countries as possible to associate themselves with the accord strongly served US interests, by boosting the likelihood it would be officially adopted. A diplomatic offensive was launched. Diplomatic cables flew thick and fast between the end of Copenhagen in December 2009 and late February 2010, when the leaked cables end.

Some countries needed little persuading. The accord promised \$30bn (£19bn) in aid for the poorest nations hit by global warming they had not caused. Within two weeks of Copenhagen, the Maldives foreign minister, Ahmed Shaheed, wrote to the US secretary of state, Hillary Clinton, expressing eagerness to back it.

By 23 February 2010, the Maldives' ambassador-designate to the US, Abdul Ghafoor Mohamed, told the US deputy climate change envoy, Jonathan Pershing, his country wanted "tangible assistance", saying other nations would then realise "the advantages to be gained by compliance" with the accord.

A diplomatic dance ensued. "Ghafoor referred to several projects costing approximately \$50m (£30m). Pershing encouraged him to provide concrete examples and costs in order to increase the likelihood of bilateral assistance."

The Maldives were unusual among developing countries in embracing the accord so wholeheartedly, but other small island nations were secretly seen as vulnerable to financial pressure. Any linking of the billions of dollars of aid to political support is extremely controversial – nations most threatened by climate change see the aid as a right, not a reward, and such a link as heretical. But on 11 February, Pershing met the EU climate action commissioner, Connie Hedegaard, in Brussels, where she told him, according to a cable, "the Aosis [Alliance of Small Island States] countries 'could be our best allies' given their need for financing".

The pair were concerned at how the \$30bn was to be raised and Hedegaard raised another toxic subject – whether the US aid would be all cash. She asked if the US would need to do any "creative accounting", noting some countries such as Japan and the UK wanted loan guarantees, not grants alone, included, a tactic she opposed. Pershing said "donors have to balance the political need to provide real financing with the practical constraints of tight budgets", reported the cable.

Along with finance, another treacherous issue in the global climate negotiations, currently continuing in Cancún, Mexico, is trust that countries will keep their word. Hedegaard asks why the US did not agree with China and India on what she saw as acceptable measures to police future emissions cuts. "The question is whether they will honour that language," the cable quotes Pershing as saying.

Trust is in short supply on both sides of the developed-developing nation divide. On 2 February 2009, a cable from Addis Ababa reports a meeting between the US undersecretary of state Maria Otero and the Ethiopian prime minister, Meles Zenawi, who leads the African Union's climate change negotiations.

The confidential cable records a blunt US threat to Zenawi: sign the accord or discussion ends now. Zenawi responds that Ethiopia will support the accord, but has a concern of his own: that a personal assurance from Barack Obama on delivering the promised aid finance is not being honored.

US determination to seek allies against its most powerful adversaries – the rising economic giants of Brazil, South Africa, India, China (Basic) – is set out in another cable from Brussels on 17 February reporting a meeting between the deputy national security adviser, Michael Froman, Hedegaard and other EU officials.

From an said the EU needed to learn from Basic's skill at impeding US and EU initiatives and playing them off against each in order "to better handle third country obstructionism and avoid future train wrecks on climate".

Hedegaard is keen to reassure Froman of EU support, revealing a difference between public and private statements. "She hoped the US noted the EU was muting its criticism of the US, to be constructive," the cable said. Hedegaard and Froman discuss the need to "neutralise, co-opt or marginalise unhelpful countries including Venezuela and Bolivia", before Hedegaard again links financial aid to support for the accord, noting "the irony that the EU is a big donor to these countries". Later, in April, the US cut aid to Bolivia and Ecuador, citing opposition to the accord.

Any irony is clearly lost on the Bolivian president, Evo Morales, according to a 9 February cable from La Paz. The Danish ambassador to Bolivia, Morten Elkjaer, tells a US diplomat that, at the Copenhagen summit, "Danish prime minister Rasmussen spent an unpleasant 30 minutes with Morales, during which Morales thanked him for [\$30m a year in] bilateral aid, but refused to engage on climate change issues."

After the Copenhagen summit, further linking of finance and aid with political support appears. Dutch officials, initially rejecting US overtures to back the accord, make a startling statement on 25 January. According to a cable, the Dutch climate negotiator Sanne Kaasjager "has drafted messages for embassies in capitals receiving Dutch development assistance to solicit support [for the accord]. This is an unprecedented move for the Dutch government, which traditionally recoils at any suggestion to use aid money as political leverage." Later, however, Kaasjager rows back a little, saying: "The Netherlands would find it difficult to make association with the accord a condition to receive climate financing."

Perhaps the most audacious appeal for funds revealed in the cables is from Saudi Arabia, the world's second biggest oil producer and one of the 25 richest countries in the world. A secret cable sent on 12 February records a meeting between US embassy officials and lead climate change negotiator Mohammad al-Sabban. "The kingdom will need time to diversify its economy away from petroleum, [Sabban] said, noting a US commitment to help Saudi Arabia

with its economic diversification efforts would 'take the pressure off climate change negotiations'."

The Saudis did not like the accord, but were worried they had missed a trick. The assistant petroleum minister Prince Abdulaziz bin Salman told US officials that he had told his minister Ali al-Naimi that Saudi Arabia had "missed a real opportunity to submit 'something clever', like India or China, that was not legally binding but indicated some goodwill towards the process without compromising key economic interests".

The cables obtained by WikiLeaks finish at the end of February 2010. Today, 116 countries have associated themselves with the accord. Another 26 say they intend to associate. That total, of 140, is at the upper end of a 100-150 country target revealed by Pershing in his meeting with Hedegaard on 11 February.

The 140 nations represent almost 75% of the 193 countries that are parties to the UN climate change convention and, accord supporters like to point out, are responsible for well over 80% of current global greenhouse gas emissions.

At the mid-point of the major UN climate change negotiations in Cancún, Mexico, there have already been flare-ups over how funding for climate adaptation is delivered. The biggest shock has been Japan's announcement that it will not support an extension of the existing Kyoto climate treaty. That gives a huge boost to the accord. US diplomatic wheeling and dealing may, it seems, be bearing fruit.

## Medium Wave Allocation Moves Forward

A secondary allocation to the Amateur Radio Service at 461-469 and 471-478 kHz gained inter-American support in meetings held earlier this month in Bogota, Colombia, with the Permanent Consultative Committee II (PCC.II) of the Inter-American Telecommunication Commission (CITEL) adopting the US position for the MF allocation. World Radiocommunication Conference 2012 (WRC-12) Agenda Item 1.23 calls on participants "to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the Amateur Service on a secondary basis, taking into account the need to protect existing services."

Canada -- which had previously supported a secondary allocation at 472-487 kHz -- withdrew that support and aligned itself with the US at the meeting in Bogota. Over the course of the meeting, Argentina, Brazil, Colombia, the Dominican Republic, Uruguay and Venezuela signed on to have CITEL present the agenda item at WRC-12 as an Inter-American Proposal (IAP). The support of six countries is required for a proposal to gain IAP status. The US agreed to support the allocation earlier this year, despite initial opposition by maritime interests.

As a member of the US delegation, ARRL Technical Relations Specialist Jon Siverling, WB3ERA, attended the meeting, serving as Rapporteur for the agenda item. IARU Region 2

President Reinaldo Leandro, YV5AMH, was also in attendance on behalf of the IARU. The adoption of an affirmative IAP on Agenda Item 1.23 represents an important milestone in the ARRL's and the IARU's international advocacy efforts.

ARRL Chief Executive Officer David Sumner, K1ZZ, explained that while the milestone is important, there is still work to be done on the agenda item to maximize success at WRC-12: "While we still face an uphill battle internationally, gaining the support of one of the major regional telecommunications organizations this early in the process improves our chances for achieving an allocation at WRC-12."

CITEL is one of six regional telecommunications organizations whose formal positions carry significant weight during deliberations at a WRC. The WRC-12 is scheduled for January 23-February 17, 2012 in Geneva..

Source: ARRL Letter, ARRL, Newington, CT 06111

# Greenies Wrong Once Again

"After 30 months, countless TV appearances, and \$80 million spent on an extravagant PR campaign, T. Boone Pickens has finally admitted the obvious: The wind energy business isn't a very good one. The Dallas-based entrepreneur, who has relentlessly promoted his "Pickens Plan" since July 4, 2008, announced earlier this month that he's abandoning the wind business to focus on natural gas.

Voters and politicians embraced the folksy billionaire's plan. Last year, Senate Majority Leader Harry Reid said he had joined "the Pickens church," and Al Gore said he wished that more business leaders would emulate Mr. Pickens and be willing to "throw themselves into the fight for the future of our country."

Alas, market forces ruined the Pickens Plan. Mr. Pickens should have shorted wind. Instead, he went long and now he's stuck holding a slew of turbines he can't use because low natural gas prices have made wind energy uneconomic in the U.S., despite federal subsidies that amount to \$6.44 for every 1 million British thermal units (BTUs) produced by wind turbines. As the former corporate raider explained a few days ago, growth in the wind energy industry "just isn't gonna happen" if natural gas prices remain depressed.

In 2008, shortly after he launched his plan, Mr. Pickens said that for wind energy to be competitive, natural gas prices must be at least \$9 per million BTUs. In March of this year, he was still hawking wind energy, but he'd lowered his price threshold, saying "The place where it

works best is with natural gas at \$7."

That may be true. But on the spot market natural gas now sells for about \$4 per million BTUs. In other words, the free-market price for natural gas is about two-thirds of the subsidy given to wind. Yet wind energy still isn't competitive in the open market.

Despite wind's lousy economics, the lame duck Congress recently passed a one-year extension of the investment tax credit for renewable energy projects. That might save a few "green" jobs.

But at the same time that Congress was voting to continue the wind subsidies, Texas Comptroller Susan Combs reported that property tax breaks for wind projects in the Lone Star State cost nearly \$1.6 million per job. That green job ripoff is happening in Texas, America's biggest natural gas producer.

Today's low natural gas prices are a direct result of the drilling industry's newfound ability to unlock methane from shale beds. These lower prices are great for consumers but terrible for the wind business. Through the first three quarters of 2010, only 1,600 megawatts of new wind capacity were installed in the U.S., a decline of 72% when compared to the same period in 2009, and the smallest number since 2006. Some wind industry analysts are predicting that new wind generation installations will fall again, by as much as 50%, in 2011.

There's more bad news on the horizon for Mr. Pickens and others who have placed big bets on wind: Low natural gas prices may persist for years. Last month, the International Energy Agency's chief economist, Fatih Birol, said that the world is oversupplied with gas and that "the gas glut will be with us 10 more years." The market for natural-gas futures is predicting that gas prices will stay below \$6 until 2017.

So what is Mr. Pickens planning to do with all the wind turbines he ordered? He's hoping to foist them on ratepayers in Canada, because that country has mandates that require consumers to buy more expensive renewable electricity.

How do you say boonedoggle in French? "

Source: http://online.wsj.com/article/SB10001424052748704368004576027310664695834.html?mod=googlenews\_wsj

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Isn't it amazing how government trying to force technology never seems to work? Boondoggles on ethanol, that pollutes more per gallon than gasoline, costs taxpayers an additional \$1/gallon in subsidies, raises the price of food by 50%, and gives you 10% less fuel mileage? And the liberal democrat 'greenies' tell you how good it is for you? You gotta be nutso to support this.

## Some Rare Ebay Things

These days it can be a while between mobile runs. Some days are mighty slow, so I occasionally browse the internet for interesting goodies. One of the best things is you can look, examine, and investigate, but not 'collect' a pile of boat anchors. At hamfests, you can browse the flea market and see some interesting relics from the 30s, 40s, and lots from the 50s, 60s, and 70s. They are 'collectible' things for some. Newer hams might not recognize any of them, and older hams may never have seen that model or manufacturer before.

This month there was a good bit of older tube mobile stuff showing up. Things like Gonset receivers and transmitters like the G-66, G-67, the Multi-Elmacs AF67 and 68 and so on that many county hunters used 'way back when'. The CHNews has covered those and put pictures in of those units in previous issues (See the Master Index for which radios are in which issue). Of course, dozens of Heathkit and other commercial units show up each month to bid on. Here's some of the seldom seen things I've run across in the past month or two.

Here's a mobile receiver from way back when that I hadn't seen complete with vibrator power supply! Covered 160M through 10M, too!



Pierson Mobile KE 93 Receiver (1950s)

Going back even further, here's a very early superhet receiver for ham use in the 1930s. Aviation services and others also used these radios for long distance communications.



Breiting Model 12 Receiver – mid 30s

Paul Breting started selling communications receivers in 1935. Ray Gudie, famous for the Patterson PR-10, was Breting's chief engineer. The Breting 12 was Gudie's first major design for Breting and it was introduced in 1935 for just under \$100. The circuit was a 12 tube superhet that featured a second RF Pre-amp above 7.0Mc, band-in-use dial scaling, xtal filter, two meters (R-meter & Volume meter) and P/P 42s - all on a chrome chassis. The ham owner could also use the receiver's audio section as a transmitter modulator pre-amp. The BFO adjustment is a knob located under the cabinet. The dial had "oak leaves & acorns" decor on the early models while later dials had "rays." Breting didn't have the necessary RCA Superhet license so his receivers were assembled at the Gilfillan plant in Los Angeles, California.

Going back even further, here's a UK special item that was auctioned by the RSGB – the Radio Society of Great Britain. It's a 1920-30s vintage regen kit



Globe King One Tube Regen Kit (sold for \$55)

Well, that last one would have cost \$65 to ship from the UK to the states, so I didn't even think about bidding on it..well, I did until I learned the shipping costs – hi hi

The insanity of Ebay continues. An unbuilt Knight Kit Ocean Hopper sold for \$535.00! (back in the 1950s, they sold for \$11.95 – so if you bought a few, stored them away, and never built them, you'd have one of the best investments ever!). An unbuilt Conar Transmitter sold for \$265. If you find an unbuilt Heathkit, they sell for big bucks, too!

Here's an "Archer" (Radio Shack was selling a unit similar to the Lafayette Explor-Air. This is the only one I have seen! It's a, what else, 3 tube radio kit with one of the tubes a rectifier.



Archer Globe Patrol – Tube version

Radio Shack would later sell a solid state 3 transistor version under the same name – Globe Patrol.

Here is a super, super rare transmitter. There are only four others of this model known!



McElroy MT -35 All Wave Transmitter

No tubes, and who knows what condition the internal parts – starting bid at \$500. Likely not used in over 60 years.

Way back in the 1930s and 1940s, there was a radio manufacturer out in CA – Sargent Radio. Here is a rare shipboard radio from 1938 – it has a regenerative detector for the long wave bands – 15-550 Khz, and a superhet receiver for the higher frequencies.



Sargent Model 51-TR

The 51-TR is a seven band, eight tube communications set designed for ship board use. It is battery powered [6v A supply and 90-135 v B supply]. Tube lineup 6F7, 6L7, 6K7, 6F7, 6Q7, 6F6, 6C5 and 6E5. IF frequency is 535 KC. Covers the range from 80 KC to 31 MC in 7 bands with an elaborate large dial and separate band spread. Regenerative detector on the lower bands. (on Ebay – started at \$10). You need a sturdy desk – 51 lbs.

This particular one comes with manual and documented service history on ship from 1938-1940. The 51 series was the biggest and most elaborate of the rarely seen Sargent receivers. California was home to a number of manufacturers of early communications receivers in the 1930's. Names such as Gillfillan Brothers, Patterson, Sargent and the Breting were some of the better known companies. Sargent, an old shipboard radio operator, started E.M. Sargent Co. in his home in 1924. In 1934 the company moved to its definitive address, at 212 Ninth St., where they operated until the production of their last receiver, in 1940.

Hallicrafters didn't offer many transceivers, and here is their first attempt at a mostly solid state one. It had a driver tube and two finals.



Hallicrafters FPM 300 Transceiver

This was sold in 1972-74. It had a 12BY7 driver and 6DK6 final, with bi-polar, FETs and 3 ICs. It covered 10-80M (no WARC).

Not only did Hallicrafters make ham radios, it produced television sets and consumer broadcast radios up till the late 40s and early 50s. Never seen a Hallicrafters TV set?

In the early 1940s, just before WW2, Hallicrafters came out with the Echophone EC-1 receiver. It was the predecessor of the S-38 series. You see them for sale quite often. They were advertised (but usually not available) all through WW2 as production had stopped on commercial gear.



Hallicrafters Echophone EC-1 Shortwave Receiver

It had six tubes and covered .54 to 30 MHz (megacycles per second back then).

Now, for Collins collectors to drool over – a KWS-1 Kilowatt Transmitter



Started at \$1000 bid and you must pick up in Oregon.

Well, that's a few tidbits from Ebay this month. Given lots of money, you could easily stock a museum with many of the radios produced from the ham market with at least 200 different makes/models in just 2 or 3 months. The 'rare' stuff that folks want go high – like Collins and top end Hallicrafters, National, etc. Other things sell for \$10 to \$500 depending upon condition, age, and how many really want that one up for bid.

# SpectraWatt goes Bust

A solar technology company spun off by Intel Corp. will close a plant in New York that will affect more than 100 workers less than a year after the plant opened.

In a short news release, SpectraWatt blamed the shutdown on a steep decline in demand for solar cells due to a harsher-than-usual European winter.

SpectraWatt, created in June 2008, makes photovoltaic cells in a plant opened at IBM's Hudson Valley Research Park earlier this year. It also has research and development facilities in Hillsboro.

A formal filing with the state labor department Tuesday said the company will start layoffs in March

SpectraWatt was offered about \$8 million in government subsidies to help get it started, along with at least \$91.4 million in private investment.

Intel <u>launched SpectraWatt in Hillsboro in 2008</u>, but <u>stopped construction</u> of a planned 65,000-square-foot-plant last year when it couldn't find funding. In April 2009, it announced plans to start up in New York.

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Your tax money thrown down 'greenie rat holes'.

### Letter from Down Under

Alan, VK4AAR writes:

Thanks for the monthly newsletter. I am typing this at 1430z ... half hour after midnight here. So far only 2 mobiles have been spotted and both on SSB (14336 and 7188). Which brings me to the point of this missive.

Can I get you to make a mention of my situation here Down Under? Over the years I have "enjoyed" working mobiles on the nets ... mostly 20m SSB and have landed USA-CA, and 2nd Time, and Bingo. Band conditions, as you are aware, went downhill a few years ago and I made no contacts at net times but a few fixed stations after 0400z mostly. Earlier this year the bands have cooperated a little bit for me and I started to work a mobile now and again on the nets ... mostly 7056.5 as I am working CW almost exclusively this time. I am therefore aiming for the CW award + Bingo2 and 3rd Time.

My county hunting finishes about 1430z (tops) when the bands deteriorate for the day and it's bed time anyway. But guess what ... the mobiles don't seem to be getting on the road as early as they used to and spots don't start until the band is gone and very few are on CW. I have worked you a few times and I thank you for restoring my faith. But I will NEVER finish at this rate. I am making only a few CW contacts a week ... perhaps only 4 or 5. (Alan has worked other mobiles like AF3X, W4SIG, K8ZZ, W0GXQ, W9MSE, W7FEN, KL1V)

I get depressed when I read of the heaps of contacts being made by stateside guys ... and notice that they are also complaining of poor conditions. They ought to try doing it from this location, hi! Hi! If you can say a few words on my behalf, Bob, I would appreciate it.

If the CW mobiles can hit the road just a little earlier and keep an ear open for my pip squeak signal it might help my cause. If they can't do this due to circumstances then I understand. But it will mean that I'm wasting my time and I'll have to do something else. Trouble is, I only want to chase counties ... anything else is boring. I'm 77 y.o. and time is running out for me.

Thanks for your contacts and I hope for more. If any of your readers would be interested in making a CW sked with me they can email me at : <a href="mailto:ttwatr@aapt.net.au">ttwatr@aapt.net.au</a> (or <a href="mailto:ttwatr@gmail.com">ttwatr@gmail.com</a>) and we might work something out.

73 and thanks in advance

Alan Roocroft ... VK4AAR 376 Old Toowoomba Road Placid Hills (Gatton) QLD 4343 Australia"

### OK1APV Finishes USCA

Tonda, OK1APV, became the first "OK" station to qualify for the CQ Magazine USCA Award. Well done! He received number USCA Nr 1210 on December 17, 2010.

## Global Eruption Rocks the Sun

**Dec. 13, 2010:** On August 1, 2010, an entire hemisphere of the sun erupted. Filaments of magnetism snapped and exploded, shock waves raced across the stellar surface, billion-ton clouds of hot gas billowed into space. Astronomers knew they had witnessed something big. It was so big, it may have shattered old ideas about solar activity.

"The August 1st event really opened our eyes," says Karel Schrijver of Lockheed Martin's Solar and Astrophysics Lab in Palo Alto, CA. "We see that solar storms can be global events, playing out on scales we scarcely imagined before."

For the past three months, Schrijver has been working with fellow Lockheed-Martin solar physicist Alan Title to understand what happened during the "Great Eruption." They had plenty of data: The event was recorded in unprecedented detail by NASA's Solar Dynamics Observatory and twin STEREO spacecraft. With several colleagues present to offer commentary, they outlined their findings at a press conference today at the American Geophysical Union meeting in San Francisco.

Explosions on the sun are not localized or isolated events, they announced. Instead, solar activity is interconnected by magnetism over breathtaking distances. Solar flares, tsunamis, coronal mass ejections--they can go off all at once, hundreds of thousands of miles apart, in a dizzyingly-complex concert of mayhem.

Video at:

 $\underline{http://science.nasa.gov/media/medialibrary/2010/12/13/global disruption.mov}$ 

"To predict eruptions we can no longer focus on the magnetic fields of isolated active regions,"

says Title, "we have to know the surface magnetic field of practically the entire sun."

This revelation increases the work load for space weather forecasters, but it also increases the potential accuracy of their forecasts.

"The whole-sun approach could lead to breakthroughs in predicting solar activity," commented Rodney Viereck of NOAA's Space Weather Prediction Center in Boulder, CO. "This in turn would provide improved forecasts to our customers such as electric power grid operators and commercial airlines, who could take action to protect their systems and ensure the safety of passengers and crew."

In a paper they prepared for the Journal of Geophysical Research (JGR), Schrijver and Title broke down the Great Eruption into more than a dozen significant shock waves, flares, filament eruptions, and CMEs spanning 180 degrees of solar longitude and 28 hours of time. At first it seemed to be a cacophony of disorder until they plotted the events on a map of the sun's magnetic field.

Title describes the *Eureka!* moment: "We saw that all the events of substantial coronal activity were connected by a wide-ranging system of separatrices, separators, and quasi-separatrix layers." A "separatrix" is a magnetic fault zone where small changes in surrounding plasma currents can set off big electromagnetic storms.

Researchers have long suspected this kind of magnetic connection was possible. "The notion of 'sympathetic' flares goes back at least three quarters of a century," they wrote in their JGR paper. Sometimes observers would see flares going off one after another--like popcorn--but it was impossible to prove a link between them. Arguments in favor of cause and effect were statistical and often full of doubt.

"For this kind of work, SDO and STEREO are game-changers," says Lika Guhathakurta, NASA's Living with a Star Program Scientist. "Together, the three spacecraft monitor 97% of the sun, allowing researchers to see connections that they could only guess at in the past."

To wit, barely two-thirds of the August event was visible from Earth, yet all of it could be seen by the SDO-STEREO fleet. Moreover, SDO's measurements of the sun's magnetic field revealed direct connections between the various components of the Great Eruption—no statistics required.

Much remains to be done. "We're still sorting out cause and effect," says Schrijver. "Was the event one big chain reaction, in which one eruption triggered another--bang, bang, bang,-in sequence? Or did everything go off together as a consequence of some greater change in the sun's global magnetic field?"

Further analysis may yet reveal the underlying trigger; for now, the team is still wrapping their minds around the global character of solar activity. One commentator recalled the old adage of three blind men describing an elephant--one by feeling the trunk, one by holding the tail, and another by sniffing a toenail. Studying the sun one sunspot at a time may be just as limiting.

"Not all eruptions are going to be global," notes Guhathakurta. "But the global character of

solar activity can no longer be ignored."
As if the sun wasn't big enough already....

Source: <a href="http://science.nasa.gov/science-news/science-at-nasa/2010/13dec globaleruption/">http://science.nasa.gov/science-news/science-at-nasa/2010/13dec globaleruption/</a>

### On the Road with N4CD II

I got the urge to go put out some counties. I also needed to whack off some of the 500 transmits for Mobile Diamond. The net also needed mobiles putting out counties – it's been pretty quiet many days with not much going on. Now that winter is approaching, after checking the weather, I opted for a panhandle type trip up to the northwest from my QTH. No bad weather was expected there. Bad weather was all up north with feet of snow in MN, blizzards in IA, temps down to 40 below, etc. Rain on the east coast. Various folks needed counties up there to the NW, although many were cleaned up by the recent Texas QSO P:arty two months ago. I really had no plan other than go run as many as I could fit in in two days.

Winter had descended upon the country. International Falls got down to 45 below zero. Jerry, W0GXQ reported over a foot of snow and 16 below on Sunday morning. There were blizzards in IA according to Ralph, WB4FFV, and the network news was reporting interstates shut down in MN, IA, WI and other places. Not many mobiles would be out there!

The alarm went off at 5:45 am Saturday morning. Naturally it was very dark, but I loaded up the car for the two day trip and headed out. It's 35 miles up to the point I head west off I-35 and about 45 minutes to get there. At that intersection is a McDonalds, so I stopped and had a quick breakfast, scanned the newspaper, topped off the gas tank, and then headed out to the first county line a bit after 7am. No sense getting there too early as no one would be around, and I wouldn't get contacts on 2 bands. (Denton/Wise). It worked and I got my Mobile Diamond contacts. It was then to the northwest running a bunch of county lines – Montague/Clay, Wichita/Archer, through Wilbarger and Hardeman to Collingsworth/Hall, and the panhandle ones where I've been 15 or 20 times or more. Things went well, but the wind was howling from the north portending plummeting temps.

When you are driving along at 70 mph with a 30-45 mph headwind, it kills the gas mileage. Only got 27 mpg on the second tank of gas on Saturday. No problems driving, but it is strange to see all the flags straight out with the north wind howling. Temps were in the 40s and cloudy. There isn't much traffic up in the panhandle. You can drive for 10 or 20 miles before seeing another car. It's all pretty flat cotton farming land and some oil operations.

I ran out of daylight after Hansford/Hutchinson. In the summer months, I can make it over to Dallam another 100 miles west, but in December, the trip was cut short and I headed to a motel in Borger, TX. You can see the lights of town from five miles away as you head in. In some places, you can see city lights 10-15 miles away, with no other lights around – strange – and it takes you 15 minutes to actually get into the city or town!

No Motel 6 there in Borger as it got real dark, but one expensive Best Western and a half dozen older others. I passed by 3 of the cheapies and settled on the Heritage Inn (\$55) which probably had about 150 rooms. The room was a non-smoking room but still reeked of old tobacco smell. With the temps in the low 20s, the heat ran about 90% of the time keeping the place warm. Maybe there were 8 cars in the entire motel area.

I swapped dinner nights around and had pizza at the Pizza Hut – it was convenient and it was really dark out so I didn't feel like venturing too far.

Morning temperature was 24 degrees in the morning in town. I walked next door to the McDonalds. Wow...they open at 5am every day of the week including Sundays. The temp gauge dropped to 16 as I headed further south to the first county line of Carson/Armstrong. Whoa – had to watch the speed. A 40mph tailwind lets you do 80 or 85 before you know it.

That early county line worked out OK in the morning. Then it was a bit west to Potter/Randall. I would have to hustle to make it back home by dark. Pete, N4AKP needed Hale. He needs about seven in TX and they are all scattered. Turns out NF0N needed it for LC. Hope Pete doesn't expect me to get all of them! The trip included a bunch of secondary roads which worked out fine. I ran Hale/Floyd(good line on county 788), then put the pedal to the metal and only ran one or two county lines on the way home. Sometimes only on one band, with everything else on the run. Everything was pretty much 'on the move'. If I get to the county line without running one of the 4 bands, I'll usually stop and finish, then move again for the other bands.

Folks always need things like Briscoe, Motley, Dickens and others not on 'the beaten path, so I zigged a bit to get them as I headed generally southeast. Often, you have to make a choice of one or the other as you can't whack too many corners in many of those – one road north to south and one road east to west, and that is it!

The plan was going to go to Haskell...but at the fork in the road...well, the fork to Haskell was closed due to construction, and that changed that plan. It would have been a big detour to get there – that's for another trip. So many counties – so little time. Golly, about 2750 more counties need to be run for Mobile Diamond. I did take a short side trip to Throckmorton/Young. You can run that off 210 just south of Meragel, TX. Take Spring Creek road (gravel) to the west and go ¼ mile to the county line. That's one of those you find by running things time and time again.

Then it was more pedal to the metal to get home. I really don't like driving on strange roads at dark and in lots of TX, you have to worry about wildlife ruining your trip, too. So I try to plan to be at the motel or home by dark which is now 5:30-6 pm or so here. Plus the bands die, so there goes the mobile diamond credits if you can't get your contacts on two bands. (Ron, KB6UF, is using 3901 when he runs late).

17M was hot on Sunday with 8 to 10 QSOs per county, and many at 599 reports! K1TKL, WQ7A, N4AAT, N3HOO, W4GNS, NM2L, K8MW K4XI, N2OCW, NT2A, K7TM pounding in, and W0GXQ, K7REL and others filling up the log pages. 40M really got sick mid day with poor signals for 3 hours, but then picked up. 30M was good much of the time.

There were many runs on 20M that weren't spotted. Seems a few stations are always there, but work you (or tell you to "go ahead" but never spot.) You can tell the difference when a spot hits. After 20, I go to 17 when the band is open, and if folks don't see the 20M spot, they aren't waiting on 17M. Oh well.

I hit Denton County at 5pm or so, and the car made a stop at the Cracker Barrel there for a country **ham** dinner at 5:30. Then on home just as the sun was way down and it was getting real dark.

Some stats – 1040 miles in 2 days. 37 counties plus 3 more transmitted twice. Ran 4 bands in most counties – but some had no 20/17m as it was 'too early'. Many of the Master Platinum holders were around – WQ7A, N9STL, N4AAT, N2OCW, K5GE, N5UZW, KB6UF chasing MD counties and giving me credit for the county. Worked well – got 'em all. Averaged about 29.9 mpg with the 75-77 mph speeds and high wind and cold temps. (speed limit 70 on about 75% of the roads I traveled – lots of nothing out in west TX!.

# Museums to Visit

If you are traveling, here are a few museums on communications to check out. Maybe next summer when traveling weather is better? The National is in MN next year, too!

## A - The Museum of Broadcasting, St Louis Park, MN

http://www.pavekmuseum.org/

## B - American Radio Museum, Bellingham WA

http://www.americanradiomuseum.org/home.htm

#### C – International Spy Museum, Wash DC

Has spy radios, microminature ones, etc

http://www.spymuseum.org/

## D- Antique Wireless Association Museum (great), Western NY

http://www.antiquewireless.org/museum/museum.htm

## E- Museum of Radio Technology, Huntington WV

http://oak.cats.ohiou.edu/~postr/MRT/

Right off the interstate

#### F- National Electronics Museum, near BWI Airport, MD

http://www.hem-usa.org/

Focused mainly on defense electronics

# NASA on Global Warming

A group of top NASA boffins says that current climate models predicting global warming are far too gloomy, and have failed to properly account for an important cooling factor which will come into play as CO2 levels rise.

According to Lahouari Bounoua of NASA's Goddard Space Flight Center, and other scientists from NASA and the US National Oceanic and Atmospheric Administration (NOAA), existing models fail to accurately include the effects of rising CO2 levels on green plants. As green

plants breathe in CO2 in the process of photosynthesis – they also release oxygen, the only reason that there is any in the air for us to breathe – more carbon dioxide has important effects on them.

The NASA and NOAA boffins used their more accurate science to model a world where CO2 levels have doubled to 780 parts per million (ppm) compared to today's 390-odd. They say that world would actually warm up by just 1.64°C overall, and the vegetation-cooling effect would be stronger over land to boot – thus temperatures on land would would be a further 0.3°C cooler compared to the present sims.

Source: <a href="http://www.theregister.co.uk/2010/12/08/new\_model\_doubled\_co...">http://www.theregister.co.uk/2010/12/08/new\_model\_doubled\_co...</a>

# Most Wanted List (as of Dec 1) compiled by K7REL

Below is a list of the 100 most needed counties, sorted by state:

State	County	Needs
AL	Clay	8
AL	Bullock	7
AL	Coosa	7
AL	Escambia	7
AR	Howard	9
AR	Randolph	7
CA	Modoc	9
CA	San Benito	8
CA	San Francisco	8
CA	San Mateo	8
CA	Del Norte	7
CA	Mariposa	7
CO	Jackson	9
CO	San Juan	8
CT	Litchfield	7
GA	Johnson	12
GA	Talbot	12
GA	Calhoun	11
GA	Jasper	11

GA	Montgomery	11
GA	Pike	11
GA	Banks	9
GA	Chattooga	9
GA	Lumpkin	9
GA	Bleckley	8
GA	Jones	8
HI	Kalawao	29
HI	Maui	9
IA	Hardin	10
IA	Cherokee	8
IA	Audubon	7
IA	Buena Vista	7
IA	Humboldt	7
IA	Pocahontas	7
ID	Blaine	8
ID	Minidoka	7
ID	Power	7
IL	Mercer	7
IN	Union	11
IN	Greene	9
IN	Brown	8
IN	Carroll	8
IN	Monroe	8
IN	Ohio	8
IN	Owen	8
IN	Rush	8
IN	Parke	7
KS	Wallace	9
KS	Grant	8
KS	Sheridan	7
KY	Cumberland	10
KY	McCreary	10
KY	McLean	9
KY	Wayne	9
KY	Estill	8
KY	Bracken	7
KY	Jessamine	7
KY	Spencer	7

KY	Webster	7
LA	Red River	12
LA	Caldwell	9
LA	Claiborne	7
LA	Grant	7
LA	Jackson	7
LA	Plaquemines	7
LA	Union	7
LA	Vernon	7
LA	Winn	7
MA	Hampden	9
MD	Caroline	9
MD	Dorchester	9
ME	Franklin	7
MO	Knox	11
MO	Dent	10
MO	Audrain	8
MO	Worth	8
MS	Claiborne	8
MT	Fallon	8
NE	Stanton	8
NV	Esmeralda	10
NV	Mineral	8
NV	Pershing	8
NV	Storey	8
NV	White Pine	8
NY	Sullivan	11
NY	Washington	9
NY	Essex	8
NY	Hamilton	8
OK	McCurtain	9
OR	Curry	9
PA	Sullivan	8
SD	Miner	8
TN	Johnson	11
TN	Marshall	10
TN	Rhea	9
VA	Buchanan	9
VT	Franklin	8

WI	Ozaukee	8
WV	Lincoln	10
WV	Taylor	9

Naturally, do a check of the needs and a check with the people needing counties before heading out on a special trip. Some of the needs are for CW, or for YL, or MG or MP.

#### Here's the cw needs list

## W3DYA CW COUNTY NEEDS 11/28/2010 (FROM K3IMC)

GA Johnson 11

MO Knox 9

LA Red River 8

CO Jackson 7

GA Banks 7

GA Bleckley 7

GA Jasper 7

GA Jones 7

IN Greene 7

IN Ohio 7 I

N Rush 7

KY Bracken 7

MO Dent 7

MO Douglas 7

PA Mifflin 7

VA Buchanan 7

WV Lincoln 7

GA Calhoun 6

GA Lumpkin 6

GA Montgomery 6

GA Talbot 6

HI Kalawao 6

ID Blaine 6

IN Carroll 6

IN Martin 6

IN Orange 6

IN Owen 6

KS Barber 6

KY Carlisle 6

KY Cumberland 6

KY Estill 6

KY McLean 6

LA Cameron 6

LA Claiborne 6

LA Grant 6

LA Jackson 6

MO Gentry 6

NY Hamilton 6

NY Sullivan 6

OR Curry 6

TN Bledsoe 6

TN Fentress 6

VA Henry 6

WV Mingo 6

AL Clay 5

AL Coosa 5

AR Howard 5

CA Alpine 5

FL Hardee 5

GA Appling 5

GA Colquitt 5

GA Heard 5

GA Pike 5

GA Taylor 5

IA Audubon 5

IN Brown 5

IN Lawrence 5

IN Monroe 5

IN Parke 5

KY Clay 5

KY Larue 5

KY Leslie 5

KY McCreary 5

LA De Soto 5

MO Perry 5

MT McCone 5

NV Esmeralda 5

NY Essex 5

OH Gallia 5

TN Chester 5

TN Hawkins 5

TN Jackson 5

TN Lauderdale 5

TN Morgan 5

TN Scott 5

VA Grayson 5

VA Russell 5

WA Douglas 5

WA Ferry 5

WI Ozaukee 5

WV Gilmer 5

WV Hancock 5

WV Taylor 5

Article on 20s radio technology?

Neutrodyne Coils.

# Cellulosic Ethanol

#### from the Oil Drum discussion board:

It is hard to believe that just a few short years ago, Congress mandated a massive increase in usage of cellulosic ethanol. This was remarkable, because no commercial cellulosic ethanol facilities even existed at the time. But people like Vinod Khosla were busy testifying before Congress that the only thing holding the industry back was more funding, and if they would provide the funding we could replace all of our gasoline consumption with cellulosic ethanol.

So Congress mandated in the 2007 Energy Independence and Security Act that we would use 100 million gallons of cellulosic ethanol in 2010, 250 million gallons in 2011, and then rapidly expand to 16 billion gallons per year by 2022. At the time, I saw a very appropriate analogy that summed up the situation: "It's like trying to solve a traffic problem by mandating hovercraft. Except we don't have hovercraft."

I tried to bring a dose of reality to the debate in this blog. I have worked on cellulosic ethanol myself. I know first hand the challenges. Biomass has low energy density relative to fossil fuels, and thus a conversion facility must have easy logistical access. In most cases, this means that biomass must be sourced close to the facility. This puts some limits on the size of biomass facilities, so they suffer from the lack of economies of scale. I have harped on this logistical issue for years, and a newly released study from Purdue reiterates the points I have made: "Without solving the logistical issues, commercial production of second-generation biofuels will not take place."

Further, cellulose generally makes up less than 50% of the composition of biomass, limiting the biomass fraction that can be converted into ethanol. The fraction that is converted ends up as a dilute beer of generally around 4% ethanol and 96% water. This makes the energy requirements of purifying cellulosic ethanol very high. Of course if you listen to Bob Dinneen and the guys at the Renewable Fuels Association (RFA), they say the issue is that not enough money is being thrown at the problem. But that's their answer to anything ethanol-related: We need more money.

Commercialization attempts for cellulosic ethanol date back over 100 years. Germany was the first to commercialize cellulosic ethanol in 1898. Commercialization came to the U.S. in 1910, when Standard Alcohol Company built a cellulosic ethanol plant in Georgetown, South Carolina to process waste wood from a lumber mill. Standard Alcohol later built a second plant in Fullteron, Louisiana. Each plant was designed for 5,000 gallons of ethanol per day from wood waste, and both were in production for several years. Both plants were eventually closed due to lack of economic viability.

## Snap Back to Reality

In early 2010, 100 years after the first cellulosic ethanol plant was built in the U.S., the EPA recognized that the cellulosic ethanol mandates could not be met. They subsequently reduced the 100 million gallon mandate for 2010 to 6.5 million gallons. (Actual qualifying production of cellulosic ethanol through October 2010 is zero gallons). MIT Technology Review posed the question What's Holding Biofuels Back? I responded with the answer in What's Really Holding Cellulosic Biofuels Back. I have maintained that future mandates would also have to be cut, and the EIA recently indicated that they agree, at least for 2011:

#### EIA cuts cellulosic producers from 2011 list

The U.S. DOE's Energy Information Administration has completed its predictions for next year's cellulosic biofuels production and estimates that actual production levels will be much lower than anticipated. Earlier this year, the U.S. EPA proposed a reduction in the cellulosic biofuels portion of the 2011 renewable fuel standard (RFS) to between 5 and 17.1 million gallons, down drastically from the 250 million gallons initially called for in the 2007 RFS. But

according to an Oct. 20 letter sent from EIA Administrator Richard Newell to EPA Administrator Lisa Jackson, the EPA's reduced target is still too high. The EIA suggests that a more likely 2011 production total for cellulosic biofuels is approximately 3.94 million gallons. Additionally, the EIA said half of the facilities on the EPA's list won't produce biofuels next year.

So the EIA projects that 2011 cellulosic ethanol production will be 3.94 million gallons, less than 2% of the originally mandated amount. They suggest that the EPA, having cut the 2011 estimate from 250 million to the range of 5 to 17.1 million gallons, is still much too optimistic, and that half of the facilities that the EPA expects to produce cellulosic fuel will not. Following the EIA story, the EPA has come back and revised their 2011 numbers down to 6.6 million gallons of cellulosic ethanol.

#### Better Late Than Never

Back to the EIA report, they were quite frank in their assessment of Range Fuels. If you recall, I was the first to point fingers at the vast disconnect between Range Fuels' early, hyped up promises and the constantly diminishing expectations of what they would actually deliver:

#### Broken Promises from Range Fuels

I contrasted the more than \$320 million that they have taken in and the promises of a 100 million gallon cellulosic ethanol plant (which they had said would cost \$150 million) with this year's admission that they would only have 4 million gallons of methanol capacity. But you wait, they insisted. They were going to get that plant up on methanol, and then switch over to ethanol and all would be right in the world. But they just needed more money.

Oh, I had my critics. Defenders of Range — including Range themselves — began to come out and insist that I didn't know what I was talking about. Well, the EIA had something to say about that:

Range Fuels Inc., which was excluded from the EPA's proposal, is expected by the EIA to provide 1 million gallons of methanol next year. The plant's Soperton, Ga., capacity is 4 million gallons, however, "we assumed a 25 percent utilization rate due to its repeated inability to meet stated production goals," Newell wrote.

Repeated inability to meet production goals. Range Fuels is starting to look like the Pets.com of the cellulosic ethanol world. They won't be alone, but they are the highest profile example of cellulosic hype colliding with cellulosic reality.

Conclusion – Technological Breakthroughs Can Not Be Mandated

Personally, I don't believe large-scale commercialization of cellulosic ethanol will ever be

viable due to the aforementioned fundamental issues with biomass conversion and efficiency, and will ultimately be relegated to the role of a niche fuel provider (as discussed in Biofuel Niches). The heart of the problem here was the idea that technology can be mandated. Imagine that in 2005 Congress put forward a mandate that lung cancer would be cured by 2010, breast cancer by 2012, and by 2020 all cancers would be cured. People would think they were absolutely daft, because more people understand the difficulties involved in coping with cancer. On the other hand the general public doesn't have a clue of the difficulties in economically turning cellulose into fuel, but they did hear a lot of hypesters in the news saying that it would be easy — as long as you get that Silicon Valley "know how" working on the problem. But the Silicon Valley players learned that Moore's Law doesn't apply to the energy business.

It is great to have lofty goals, but when you start to base your energy policy on fairy dust, you are setting yourself up for massive problems down the road. Technology breakthroughs can't simply be mandated. Sometimes critical breakthroughs happen, and sometimes they don't. In the case of cellulosic ethanol, commercial viability remains out of sight. "

# On the Road with N4CD III

My friend in Killeen TX (Bell County) was set to move to Van Buren, AR (Crawford County), and she was going to be driving a big Pensky 24 foot U-haul type truck with trailer behind it for her little Ford Ranger truck. She wondered if I would drive along with her in case she had any problems, and get her through the traffic mess in Dallas with the least amount of hassle. Why not? Even though she had lived in the Dallas area for a long time before moving down there it had been a few years and she hadn't been through all the new construction going on constantly here

So it was down to Bell County on Thursday via some new counties for the Mobile Diamond Award including Kaufman, which a few needed for various awards, Van Zandt, Henderson, Anderson, Houston, Milam, and across through Limestone, Leon, Falls to Bell for the night. In the morning after a late start it was up I-35 through Dallas to McIntosh, then east to Crawford, AR, at 60 mph.

The economy in Killeen had gone south. After Obama took office, he punished Texas (which didn't vote for him) by moving 30,000 of the troops and trainers from Fort Hood in Killeen to Colorado. A large insurance company moved 500 jobs out of town, and things had really gone downhill, plus the Obama Depression of 2009 didn't help the job situation. So it was time for her to bug on out and move to where much of her family lived in AR.

We headed up I-35 (green stamp counties) fortunately avoiding all the traffic jams and backups

in Dallas by careful route planning. When you are hauling a trailer behind a big truck, you really don"t want to get caught in situations where you have to be changing lanes quickly, making difficult transitions, etc. Going the other way we saw 15 miles of backed up traffic with a single accident. After about 30 miles of heavy Dallas traffic, we got north of the 'metroplex' and it was clearer sailing. Well, it was fine until Pittsburg County, OK, when it started to sleet. Tiffany freaked ot a bit, but the temps were 38 degrees and it had been warmer, so road conditions were not too bad. We hit I-40 going east and about 25 miles of construction zones with narrow lanes. That truck/trailer combo got 6.5 miles to the gallon of diesel. Ouch! It's running about \$3.25/gal here, too. She had it loaded to the top so it was heavy plus she was pulling the little truck on a trailer.

By 7pm, we pulled into Van Buren, AR(Crawford Cty), and that was that. It was time to get some ZZZs – it had been a long day. I headed to a Motel 6 in Ft. Smith (Sebastian County) since she was staying with sister until she got her own place.

Next day she had a bunch of relatives help unload the truck, so I took off and did some county hunting in NW Arkansas, starting with Sebastian. I figured it was smart to just stay out of the way. I've got to run them all again, well, at least 500 for Mobile Diamond, and this was a great opportunity. Several folks needed those counties desperately. It was up early in the morning heading up the 'Walmart Interstate' (I-540) up to Boone County, then across 412 through Madison to Carroll, then circling around, down to the interstate and back to Crawford County. The 40M net was going great, and the cw frequencies provided lots of contacts. The roads are fairly good, but there just isn't much reason for folks to be in a lot of these counties other than county hunting! (or on the way to Branson, MO).

Next day I had the morning to go county hunting, so a short trip to NE OKLA was planned and done. Up highway 59 to Cherokee, OK....lots of rural nothing up that highway. Then up 59 all the way to Delaware County, across on 'Scenic' 412 to Rt 10 down into Adair, then backtrack to 412 then west again to Mayes, then south through Wagoner to the Interstate and back to Crawford, AR by 2 pm. I also got to run Sequoyah when it wasn't dark, and got in contacts on a second band as well. Back in Crawford, AR by 2pm on schedule.

Monday morning came and it was time to head back to TX, but I needed to run more counties, so it was west on I-40 early in the morning. Alan, VK4AAR was the only one around at 6:30am local time on 40M (10:30Z), followed by K4CFA, and I caught Alan in the next five or six before the band faded out to down under. I hit some new ones including Okmulgee, Okfuskee, Seminole and Hughes before zipping down through others I had run a few weeks before like Johnston and Coal. The weather was great on Monday with temps up at 70 degrees as I got close to TX. I had the a/c on! I'm sure that wasn't the case up north in MN. (Dallas hit a record 79 degrees Monday afternoon).

17M was 'hot' for most of the trip with 5-12 contacts in many after the band opened about 1300Z until late afternoon. WQ7A, NT2A, N4AAT, K7TM, WB2ABD, K0DEQ, K5GE in the

log more often than others, but K1TKL, K7REL, NG9L, AB7RW, N2OCW, K2HVN, K8MW, and many others in there.

JO7WXN worked me a few times on 20M CW, as well as on 17M once. Nice to have DX work you – hi hi. Worked LY5A once.

DX on 20M was limited to DL3IAC and G3WPF most of the time, but there were big pile ups on 20M, too – good signals and conditions. 40M very good in mornings and afternoons but sagged in middle of the day.

Wow....I don't know what K0DEQ runs on 17M, but you sometimes hear 3 or 4 sets of echoes on his signal at 339- Must be running some power and antennas – he can work me most of the time on 17M it seems if the band is open to anywhere.

So that was the trip that started south, went north and then east, had two loops off of Crawford, and a return back to home. I added a few more MD transmits with KB6UF, N4AAT, K5GE, N2OCW, WQ7A, W6TMD, on for MD credits. Yes, W6TMD in there a few times on the trip. Nice to hear Darrel again.

Bob, N8KIE was on 20M and 17M on Saturday Heard him nicely on 17M working a pile of stations, and he had a good run on 20M. Jack, WD4OIN, was out in NC, Jim, W4HSA ran a few, NX4C was out in TN on SSB and CW, Jim, N9JF was off on a trip east, K0ARS was in KS. Monday was the busiest day for mobiles.

Checking the log and the spreadsheet where I keep track of MD transmitted counties, it's up to 260 transmitted counties with credit, and another 9 where I need more contacts to get credit (been there but didn't get credit). Half way there and it's only been a few months since the award started. Maybe I'll knock this 500 out by June 1? Time will tell. All the close in ones are getting filled in! I'd guesstimate about 500 counties have now been run for the mobile Diamond award. Joe, N5UZW has put out a bunch, as well as Ron, KB6UF. Joyce, N9STL made two trips, and Bob, N8KIE made a nice trip before enjoying warm 'winters' in HI till spring. Terry WQ7Q put out a few up northwest, and Larry N2OCW has run in PA, WV, and NJ. Gene, K5GE has put out a bunch so far, and so has Scottie, N4AAT.

Hopefully I hit some that you needed. Now we have to finish off a few more for Platinum so they can join the fun working on Diamond. (and finish off new comers for USA CA, and those working on Bingo and MG and on and on!). It never ends.

## Code Practice Oscillators/Machines

It's another month, so N4CD is off on another look into ham radio technology, history and trivia. For 150 years, telegraph operators and hams had to learn the Morse Code. Initially, you had better have a friend at the telegraph office or a relative who could teach you. That was about the only way you were going to learn as there weren't any other devices around to learn from. If you had a friend, you could use a buzzer to send each other code.

Starting in the late 1800s, you could, if you had some extra money, buy a mechanical clockwork driven mechanism to send you practice code letters.



NRI Code Wheel

The letters were around the edge of the wheel. Some units had stacked disks with a cam that rode up and down randomly selecting dozens of different transitions and code that did not repeat.

When it got to the 1920s and 1930s, there were several manufacturers who made machines that read paper tapes. Here is an image of just one of those made



Peerless Paper Tape Wind Up Machine

Instructograph – type machine video of machine in operation.

## http://www.youtube.com/watch?v=-7J44bDItE4

Instructograph was one of the largest manufacturers around. You could get tapes in both the American Morse (Telegraph System) and Continential or International Morse (what hams use).

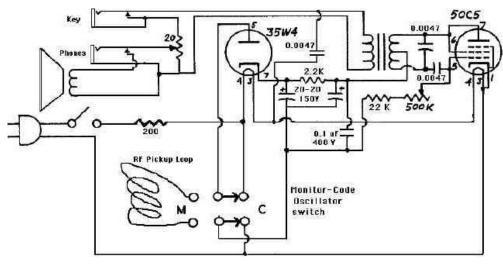
For telegraph, you would simply hook a sounder in series with the contacts on the machine – and a battery. For audible more code, you could use a buzzer, and later models had a built in tube oscillator that provided an audio tone keyed by the paper tape.

Many of the early machines were wind up machines – using the motors from a Victrola. That was followed later by machines running off 115 VAC. There was a regulator mechanism for speed – the faster the tape went through the machine, the faster the code produced.

The invention of the phonograph let code practice move to records- you could buy them on 78 RPM records. Then 33 ½ and even 45 RPM records. Dozens of manufacturers produced them.

During WW2, there was a need for an audio system to be used in a classroom full of new recruits to teach them Morse Code. That created the Code Practice Oscillator – which could fill a room with code. They usually were one tube audio oscillators with another tube as a rectifier.

The McElroy unit (late 30s) was one of the first. In the 50s, a dozen folks made these – and the Bud and Ameco brands probably made more than anyone else.



BUD CPO-1288 code practice escillator

This is a Bud Oscillator – it actually serves two purposes. When you wanted to practice code, you put the switch in one position. When you wanted to listen to your code as you sent it (transmitters did not have sidetones like today!), you could use it to pick up RF from your transmitter and operate the tone oscillator – giving you a sidetone!



#### Codemaster Tube Type CPO

Of course, when transistors came along, the major catalog houses and ham radio suppliers jumped on the bandwagon. You had Knight Kits, Heath Kits and everyone else making units.



Ameco Solid State CPO – 50s/60s

In addition, many hams would make their own CPOs – one or two transistors and a handful of parts would make a very simple, very easy to build unit. Later, just one 555 Timer IC would do it.

You could also later buy modules – small boards already made up, where you connected a pot for the volume and one for the tone frequency, a power supply of some kind, and key leads for a few bucks.

Now, of course, there are all sorts of programs on the computer to interactively teach you Morse, in addition to some electronic stand alone tutors you can carry with you (MFJ). I wouldn't be surprised if there is an 'app' on the iPhone or iPad to let you practice code in your spare time (or even copy it for you!).

If you want to see all the types of Code Practice Oscillators, Records, Modules and associated things, take a visit to this site below! You'll be amazed at his "Code Practice Oscillator" Museum On Line!

I can remember using a CK722 to build a CPO back in the late 1950s (used headphones), and have had a few of the models of units shown in the museum in and out of the hamshack over the years.

Now that hams no longer are required to learn Morse Code, these may become even more of 'antiques' in the future. Well worth a few minutes to browse the museum and collections he has amassed.

The Code Practice Oscillator Museum – well worth a on-line visit!

http://www.n4mw.com/cpo.htm

# Getting folks Finished

One of the traditions of County Hunting is going out on special trips to get folks finished up for various awards. Here's a few folks who are closing in that you can help finish up. From the K3IMC web page – and certainly not inclusive. Many others down to a handful for various other awards, too!

## AA0LV has been working for 42 years to get it done. Can you help with?

AR:Benton, Boone, Madison, Marion, Searcy

GA:Talbot

IA:Boone, Bremer, Madison

IL:Brown, Coles

IN:Parke, Randolph

KY:Campbell, Pendleton, Perry

LA:St. Helena

MS:Clarke

ND:Griggs, McHenry, Steele, Traill, Walsh

NE:Cuming, Howard, Madison, Merrick, Nance, Platte, Stanton

SD:Brown, Deuel, Lincoln

WI:Dunn, Eau Claire

**Jerry, W0GXQ only needs 4 to finish up all mobile to mobile.** He's put out thousands of counties for the folks. Can you help with?

CA:Sonoma, Trinity TN:Jackson, Maury

#### Milt, KY0E, is down to a handful for 'all cw'

CO:Rio Blanco

KS:Wallace

**KY**:McCreary

NY:New York

OH:Monroe

PA:Indiana

VA:Frederick, King William

WV:Berkeley, Wetzel

## K0DEQ down to not all that many to finish USCA

AL:Clarke, Escambia

AR:Hempstead, Woodruff

CO:Crowley

GA: Appling, Bleckley, Early, Heard, Montgomery, Talbot, Taylor, Upson

ID:Benewah, Boundary

KY:Breckinridge, Cumberland, Lewis

LA:Lasalle, Pointe Coupee, Union, Washington

MO:Lewis, Perry, Reynolds

MS: Carroll, Clarke, Franklin, Holmes, Simpson, Tippah

MT: Carter, Petroleum, Richland, Teton

NC:Chowan

ND: Adams, Grant, Sargent, Sheridan, Sioux

NE:Blaine, Boone, Clay, Nance, Richardson, Sioux, Thurston, Wheeler

OK: Alfalfa, Ellis, Jefferson, Nowata

SD:Jerauld

TN:Clay, Fayette, Hardeman, Lake, Lauderdale, Macon, Marshall, Smith

UT:Kane

WI:Menominee

## Terry, W9UX, is down to a handful for Second Time - CW

CA:Lassen

MI:Manistee

**UT:Beaver** 

#### He also only needs a few for Bingo

CA:Inyo, Lassen, Mariposa, Modoc

KY:Trimble NE:Frontier

### Jim, K9JF needs just a handful now

GA:Butts, Montgomery

NE:Sherman

SD:Jerauld, Miner, Sanborn

VA:Giles, Highland

## Randy, AA8R, closing in on MG

CA:Mono, Tulare

**IL**:Crawford

KS:Gray, Kiowa, Morris

ME:Waldo

NV:Lincoln

**OH**:Clinton

UT:Piute, Summit

## K8AO for Bingo – just a few

AR:Madison

DE:Sussex

MI:Dickinson

OK: Alfalfa, Grady

WI:Vernon

## Larry, W7FEN needs for Bingo

CT:New London

GA:Bacon, Glascock, Hancock, Jenkins, Lumpkin, Talbot

IL:Jersey

KS: Atchinson, Lincoln

KY:Breathitt, Fleming, Geenup, Larue, Lewis, Nicholas, Spencer

MT:Deer Lodge, Granite, McCone

OH:Darke, Holmes, Scioto

PA:Armstrong, Elk, Forest

TX:Jones

VA: Grayson, Rappahannock

WA:Walla Walla

WI:Wood

#### Just a few for W6TPC for Masters Gold

GA:Calhoun

KY:Robertson MN:Clearwater

NC:Clay ND:Adams

VA:Bath, Middlesex

## Jim NW6S needs 4 to go to finish Second Time

GA:Effingham, Johnson, Wilkinson

TN:Fentress

## W6OUL needs just a handful to finish! On CW

AR:Clay

GA: Jones, Montgomery

**IN**:Benton

KY:Bell, Casey, Menifee

NC:Columbus

## Billy, KD5YUK needs just TWO for Bingo - on SSB

CT:Litchfield OH:Butler

## Dick, K5VYT needs just ONE in MS for five star (already worked N5UZW and WG6X)

MS:Holmes(2)

## Paul, N5PR needs just 3 to finish Bingo!

KS:Clay, Mitchell

NM:Taos

## VA3XOV, Jim, needs just a few for Bingo

IN:Carroll ME:Lincoln

NV:Esmeralda OH:Brown TN:Overton UT:Duchesne WV:Tucker

There are lots of other needed counties you can help whittle down. Some are closing in on Nth time and Bingo N, prefixes, etc, and maybe you can make a day trip and knock off some needs?

See the needs page at:

http://www.cquest.com/cgi-bin/flynn/needs.pl

## **Awards**

## CQ Magazine, K1BV Custodian, has announced the following awards:

USACA #1209	Don, WA8OWR	December 3, 2010
USACA #1210	Tonda, OK1APV	December 17, 2010
USACA #1211	Kirby, W8DCD	December 21, 2010

## MARAC has issued the following awards

Mobile to Mobile #12	Gene, K5GE	November 10, 2010
Mobile to Mobile #13	Dennis, KK7X	December 1, 2010
Masters Gold #47	Dick, NG9L	November 20, 2010
Second Time #399	Mark, KO1U	December, 13, 2010
USA CW II #24	Mark, KO1U	December 13, 2010
Third Time #227	Jim, AC4XL	November 29, 2010

Fifth Time #99 Jim, N4JT November 26, 2010

Sixth time #38 Dick, K4VYT December 14, 2010

Bingo #324 Jacki, N9RLJ November 1, 2010

Bingo II #77 Ken, K4XI November 29, 2010

# **Events for County Hunters**

There are no state QSO parties in January. There are some smaller events you might wish to check out. The fun begins later in the spring.

Don, K3IMC headed to Hawaii to run all the counties. He's good for two stars and has Bingo so can give you a contact for your Master's Gold Award (if you have Bingo).

#### Here's his sked

Oahu - Jan. 12 to 14 Kauai - Jan. 16 to 17 Kalawao + Maui - Jan. 19 Maui - Jan. 20 to 21 Hawaii - Jan. 23 to 24

## Long Range Planning

Michigan Mini April 28-29, 2011

Dayton Hamvention May 20-22, 2011

That's it for this month. See you next year in 2011! 73

12/24/2010