County Hunter News

December 1, 2008
Volume 4, Issue 12

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 attempt to 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.

County Hunter Nets run on 14.0565, 10.122.5, and **7056.5**, with activity nights on 3556.5 on Tuesday evenings around 8-9pm Eastern Time. 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, 24.915.5, 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 ch.W6RK.com

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

The USACA award is sponsored by CQ Magazine. Rules and information are here: http://countyhunter.com/cq.htm

For general information FAQ on County Hunting, check out: http://countyhunter.com/whatis.htm

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at: http://countyhunter.com/marac_information_package.htm

The CW net procedure is written up at: http://www.wd3p.net/ch/netproc/netproc.htm

There is a lot more information at www.countyhunter.com . Back issues of the County Hunter News are available at www.CHNewsonline.com

De N4CD (email: telegraphy@verizon.net)

Notes from the Editor

1) Winter weather descends – the northern part of the country is now seeing the signs of winter. South Dakota had blizzards, dumping 40 inches of snow with 20 foot high snow drifts! Tough to go mobile in those conditions! The mountains out west are getting covered, and many secondary mountain passes are closed for the winter. The days are getting shorter.

However, there are many annual contests coming up for those looking for band counties, and folks are planning on traveling for the holidays and still off on trips. Not many have finished up lately compared to the gigantic surge at the end of the summer months, but there are still counties to be worked! Conditions are good on 40M and 80M, and there will be the annual 10M contest in December, and 160M contests in Jan/Feb.

Propagation isn't great, but there are signs of returning sunspots. The long lull between cycles is not unusual. Hams would rather be seeing high sunspot counts and high flux numbers, but we will just have to be patient.

2) Mobile Activity in November

Frank, AA9JJ, and Kay, N9QPQ, headed from the east coast back to AZ putting out many counties along the way. Both are good for Master Platinum contacts and a pile of 'stars', and of course, the team award together.

The KY QSO Party was held on 11/8/08 with many KY counties activated. K4Y, W9WI, KY4DXA, and AE8M were spotted mobile, and a dozen or more fixed stations got on for the QSO party.

Ed, KN4Y, made a trip up to GA for a bowling tournament, running counties up and back.

Jerry, W0GXQ, headed down to TX and back during November. He's now good for Master Platinum.

Here's his trip report from the K3IMC forum:

"My Texas trip was a lot of fun with good weather down and back. The trip odometer read 3,045 when I got back to Hubbard MN. I ran 93 counties and logged 2,815 contacts; the workhorse band being 40m with 1,337 (48%) of the Q's. Although I did not run late into the day, 80m was very good (313 Q's) or 11% of my total. Not much activity on 15 or 10m (24 Q's), but 17m produced 161 Q's.

It was nice to visit with WC5D, WA5OPO, W3DYA, and N4RS this trip. Was to have met with W0AV but George had to cancel.

The MRC's are pouring in so I am happy I was able to supply some needed counties. Now to get the mobile logs into Logger - not a task I look forward to.

The band rotation I used (40/80/30/20/17/15/10) really worked well; and I would like to see all the mobiles use it just to keep the rotation standard. The ops always seemed to be waiting for me on the next band regardless of the spots.

AA8R, Randy and W8TAX, Patti, finished up running all the HI counties and came back home to less pleasant winter weather. He had a successful trip. More pics of his operations and stats at www.aa8r.com

Jim, N9JF, was out and about putting out counties. On 40M SSB, N5UZW and others kept the band warm.

WC5D ran some on cw for the folks in TX.

Bob, N8KIE, did about 5000 miles getting from MI to CA via TX, OK, and lots of other states. He gave out lots of MP counties and is working on transmitting from all counties.

3) South Central Mini

The annual **South Central Mini** will be held in Weslaco, TX again this February. There is usually nice weather (shirt sleeve) for this event – maybe even swimming weather to use the pool. Put the second weekend in Feb on your calendar for a trip to warm south Texas for the mini.

4) World Radio Magazine Sold – from K3IMC

WorldRadio Publisher Armond Noble, age 74, decided it is time to retire. He has sold WorldRadio to CQ Communications, Inc.

"**WorldRadio to Cease Print Publication (Nov 13, 2008)** -- In a joint statement, WorldRadio Publisher Armond Noble, N6WR, and CQ Publisher Dick Ross, K2MGA, announced that WorldRadio magazine will no longer be published as a print magazine. According to the announcement, CQ Communications Inc has acquired WorldRadio and plans to continue it as an online publication on CQ's Web site. WorldRadio subscribers will have their subscriptions transferred to CQ magazine. Readers will be notified of details as plans are finalized."

Many details have to be worked out. There is talk of making WorldRadio an on-line publication, so WorldRadio will continue in some form, even if it is no longer a printed magazine. CQ Publications has asked me to stay on as editor, but that has not been finalized.

The Publisher of CQ, Dick Ross, wants to keep the "human interest" concept that makes WorldRadio unique, so we are hoping for a smooth transition, whatever form the new WorldRadio takes.

5) Getting Last Counties (from the K3IMC Forum)

Recently I have resorted to setting up contacts (AKA begging) for close-in counties. This link gives the cities and town in each county. I don't remember anyone posting this site on the Forum.
http://www.naco.org/Template.cfm?Section=Data_and_Demographics&Template=/cffiles/counties/city_srch.cfm

Mark, WB4UHI

Dennis, KK7X also noted:

There has been a link on CountyHunter Dot Com for this service for a number of years. About 2/3 of the way down on the menu on the left "City County Search"

6) County Lines for Garmin Nuvi (from K3IMC forum)

I found a free State County Line map overlay at

http://www.gpsfiledepot.com/maps/view/10/

It can be used within mapsource then downloaded to your GPS. In the GPS you see the County Lines over the existing map. I have not been able to figure out how to see the original map and the county line map in mapsource yet but switching back and forth will allow you to place waypoints at the borders.

De KW1DX

Mike, NF0N, Trip in NE

Bicycling and Hamming across Nebraska

One of my passions in life is bicycling which I have been doing now for about 50 years. Over the last twenty years I have usually done at least one or two week self-contained riding somewhere in the Midwest states. I had been thinking of doing a ride across Nebraska for some time and this year, 2008 seemed to be the year to do it.

Why not combine one of my other passions, Ham Radio, with bicycling. I planned with a cycling and Ham Radio friend to ride and operate across Highway 20 in northern Nebraska. Both of us actually have tadpole tricycles and Burley trailers. We planned to load the trailer with our riding gear including nice big tents that can accommodate the tricycle along with sleeping quarters. I fashioned my trailer with a rack and plate to mount two antennas with an umbilical cord from the trailer to the trike containing the power cord and antenna coax cable.

Getting Set to Go

My daughter and son drove both of us to the Nebraska/Wyoming border using a trailer that my riding friend, KAØNCR had made for hauling the trikes and bike trailers. Our plan was to only ride 30 miles the first day to Ft. Robinson state park. My daughter and son camped there the first night with us and this gave us a chance to assess the first day ride and see if we wanted to continue as a team. Arnie, KAØNCR, decided not to continue as he was having some feet problems. Probably a good choice as the next day was a difficult one with some pretty good hills and heat. I continued the next morning by myself with Arnie's radio, an ICOM IC-703 and all the rest of my own gear. I had one 7-amp hour battery and charger which turned out to be sufficient. The trailer with all the gear was about 70 pounds.

My first radio stop was at the county line of Dawes and Sheridan. I setup the Buddistick on the trailer and connected the radio and turned it on and the County Hunter frequency of 14.336 was very active. Shortly a net control asked if anyone wanted to run a county and I checked in and had a nice run on SSB working 21 contacts including LY2ZZ as the farthest DX. I then

went to 20 CW and worked 12 on CW. After tearing down the antenna and repacking the trailer, down the road I went.

The trike with antenna

The ICOM IC-703 is sitting on the seat. When operating, I sat in the seat simply holding the radio on my lap.

My next stop was at Merriman and after I showered and watered down, I setup again in the park and ran Cherry County. On both SSB and CW on 20 I made 13 contacts. Several days later I ran the Brown and Rock county line and made 18 contacts.

Stopped at the County Line Brown/Rock NE

My final stopping point was at O'Neill as I had so many things to do in preparation for RAGBRAI, a family gathering and window painting that I needed to return home. My wife grudgingly picked me up. Total mileage was 320 miles at an average of 8.3 mph. I camped 2 nights and spent 3 nights in motels. Later I will go back and finish the last two days from O'Neill to South Sioux City, NE.

Peak Oil News

1) World will struggle to meet oil demand

http://www.ft.com/cms/s/0/e5e78778-a53f-11dd-b4f5-000077b07658.html?nclick_check=1

By Carola Hoyos and Javier Blas in London

Published: October 28 2008

Output from the world's oilfields is declining faster than previously thought, the first authoritative public study of the biggest fields shows.

Without extra investment to raise production, the natural annual rate of output decline is 9.1 per cent, the International Energy Agency says in its annual report, the World Energy Outlook, a draft of which has been obtained by the Financial Times.

The findings suggest the world will struggle to produce enough oil to make up for steep declines in existing fields, such as those in the North Sea, Russia and Alaska, and meet long-term demand. The effort will become even more acute as prices fall and investment decisions are delayed.

The IEA, the oil watchdog, forecasts that China, India and other developing countries' demand will require investments of $360bn each year until 2030.

The agency says even with investment, the annual rate of output decline is 6.4 per cent.

The decline will not necessarily be felt in the next few years because demand is slowing down, but with the expected slowdown in investment the eventual effect will be magnified, oil executives say.

"The future rate of decline in output from producing oilfields as they mature is the single most important determinant of the amount of new capacity that will need to be built globally to meet demand," the IEA says.

The watchdog warned that the world needed to make a “significant increase in future investments just to maintain the current level of production”.

The battle to replace mature oilfields’ output could even offset the decline in demand growth, which has given the industry – already struggling to find enough supply to meet needs, especially from China – a reprieve in the past few months.

The IEA predicted in its draft report, due to be published next month, that demand would be damped, “reflecting the impact of much higher oil prices and slightly slower economic growth”.

2) More IEA News

The International Energy Agency, an adviser to 28 nations, said it assumes oil import prices will rebound to average $100 a barrel between 2008 and 2015 and said the threat of a ``supply crunch'' remains.

The agency cut its global oil demand estimate for 2030 by 10 million barrels a day, to 106 million barrels, ``reflecting mainly the impact of much higher prices and slightly slower GDP growth,'' in an executive summary of its annual World Energy Outlook today. The full report will be published on Nov. 12.

``There remains a real risk that under-investment will cause an oil-supply crunch'' by 2015 as the decline in output from mature oilfields speeds up, the Paris-based adviser to 28 oil-consuming nations said. ``The current financial crisis is not expected to affect long-term investment, but could lead to delays in bringing current projects to completion.''

The agency raised its forecast for the world's energy investment needs from 2007 through to 2030 by more than $4 trillion to above $26 trillion. The world will require another 64 million barrels a day of oil capacity as declining production in existing fields accelerate to 8.6 percent from 6.7 percent currently, the IEA said.

Global energy demand, including oil, natural gas and coal, is set to grow 1.6 percent a year in that period, according to the summary. Global oil demand

growth will average 1 percent a year in the period, with all of the increase coming from developing economies.

OPEC's share of the world oil market, provided those nations invest in new supply, will rise to 51 percent in 2030, from 44 percent last year, the IEA said. Production ``has already peaked in most non-OPEC countries and will peak in most others before 2030," it said.

3) Saudi Cut Backs

“Saudi Aramco, the world's biggest state-owned oil company, said a further drop in crude oil prices may curtail investments needed to offset declining output in aging fields.

Investment is also needed to expand production capacity to meet long-term demand growth, Chief Executive Officer Abdallah Jum'ah said in a handout distributed today at an industry summit in Beijing.

Benchmark crude prices in New York have declined 58 percent since reaching a record $147.27 a barrel in July, because of concerns a slowing world economy will erode demand. The world will need to invest more than $26 trillion, almost twice the annual domestic product of the U.S., by 2030 to ensure energy supply, the International Energy Agency said on Nov. 6.

``It is clear that collapsing oil prices are not only detrimental to the economies of oil-producing states but also to future upstream investments to sustain future oil demand consumption," Vienna-based consultant JBC Energy said in its weekly market report issued today.

Saudi Arabia, which has the world's largest proved reserves of oil, is implementing large-scale energy projects to boost production and refining capacity. The country has pledged to spend some $250 billion on energy by 2012, including raising oil output to 12.5 million barrels a day by next year, and increasing refining capacity by 50 percent.

``There remains a real risk that underinvestment will cause an oil supply crunch" by 2015, the Paris-based adviser to 28 oil-consuming nations said.

``The current financial crisis is not expected to affect long-term investment, but could lead to delays in bringing current projects to completion."

Aramco and ConocoPhillips will halt the bidding process for a planned 400,000 barrel-a-day export refinery in Saudi Arabia because of market ``uncertainties," the companies said on Nov. 6.

4) Canadian Oil Sands

Canadian oil-sands developers are cutting investment plans by 20 percent after a slew of delayed projects, an official at the main trade group for Canada's oil producers said in an interview.

Companies converting the tar-like bitumen into heavy oil will spend C$16 billion ($13.6 billion) in 2009 on capital projects, down from a June projection of C$20 billion, Greg Stringham, vice president at the Canadian Association of Petroleum Producers, said.

Spending on projects such as pipelines, mines and upgrading plants will be about C$80 billion by 2012 instead of a forecasted C$126 billion, Stringham said.

The slower pace of work reflects plunging oil prices, difficulty securing credit and a crumbling economy, Stringham said.

"It's because of the economic uncertainty and turmoil that's out there right now, both the availability of capital and the lower pricing, people are waiting to see how long and how deep that is going to be," Stringham said.

The slashed projections follow delays in oil sands plans announced by Royal Dutch Shell Plc, Suncor Energy Inc. and Calgary-based Encana Corp. The companies have said recently they are cutting spending plans on extraction and upgrading work.

Stringham said the group has not yet revised projections for production. The industry produced 1.2 million barrels per day in 2007 and had planned to produce 2 million barrels per day in 2012. That projection will be cut next month, he said. The group collects data from virtually all of the oil sands developers in making its forecasts.

Inconvenient Weather

1. London was hit by its first October snow since 1922

2. The Swiss lowlands last month received the most snow for any October since records began. Zurich got 20 centimeters, breaking the record of 14 centimeters set in 1939.

3. Ocala, Fla., experienced its second-lowest October temperature since 1850.

4. October temperatures fell to record lows in Oregon as well. On Oct. 10, Boise, Idaho, got the earliest snow in its history — 1.7 inches. That beat the old record by seven-tenths of an inch and one day on the calendar.

5. In the Southern Hemisphere, where winter was winding down, Durban, South Africa, had its coldest September night in history in the middle of the month. Some regions of the country had unusual late-winter snows. A month earlier, New Zealand officials reported that Mount Ruapehu had its largest snow base ever.

6. At the top of the world, the International Arctic Research Center reported last month, there was 29% more Arctic sea ice this year than last.

Oh, where is Al Gore when you need him for Global Cooling!

7) Upon examination of all tropical cyclone activity in the basins throughout the Northern Hemisphere for the past 2 years, a remarkable downward trend in cyclone energy has continued and reached historic levels of inactivity. Even though North Atlantic hurricane activity was expectedly above normal, the Western and Eastern Pacific basins have produced considerably fewer than normal typhoons and hurricanes, respectively in 2008. Using a 24-month running sum, we see that Northern Hemisphere ACE remains at historical lows. Moreover, there has only been 1 Category 5

typhoon (Jangmi) during the past year. This cyclone activity is consistent with continued colder conditions in the Pacific Ocean and the previous strong La Nina last spring.

FCC News

The U.S. Federal Communications Commission on Tuesday approved a plan sought by tech companies like Google Inc and Microsoft Inc to open soon-to-be-vacant television airwaves to new wireless devices.

The five-member FCC voted to open unlicensed pockets of the spectrum known as white space that will become available when U.S. broadcasters are required to move to digital television next year.

Companies like Google and Microsoft, as well as consumer groups, said access to the white space airwaves would encourage innovation in cellular telephones and wireless devices, much as WiFi did.

"Let's hope it's not just Wi-Fi on steroids but Wi-Fi on amphetamines," FCC Commissioner Jonathan Adelstein said.

FCC commissioner Deborah Taylor Tate dissented in part, saying she preferred a more formal process to deal with interference issues.

Traditional broadcasters such as Walt Disney Inc's ABC, General Electric's NBC, CBS Corp and even country singer Dolly Parton opposed the plan. They said signals sent over that part of the spectrum could cause interference with broadcasts or wireless microphones at live productions.

A broadcasters' group, Maximum Service Television, said the decision "imperils American's television reception in order to satisfy the "free" spectrum demands of Google and Microsoft."

The FCC sided with the tech companies and consumer groups after two rounds of testing the devices. An agency engineering report released several weeks ago said the spectrum could be used without causing harmful interference.

Harold Feld, senior vice president at the consumer group Media Access Project, said the vote will lead to expanded investment in broadband and other technologies.

"Motorola, Google and Microsoft have invested five years and millions of dollars to get this approved," Feld said. "The people that made those decisions are going to show they made good decisions."

The bi-partisan vote by three Republican and two Democratic FCC voting members signals that greater access to white space will move forward regardless of whether Republican John McCain or Democrat Barack Obama wins the presidency, said Ben Scott, policy director of the advocacy group Free Press.

Republicans back white space access as a free-market approach, while Democrats like that it improves affordability and is pro-consumer, Scott said. "No matter who is president, this white space policy will be expanded upon," he said.

The decision "will allow the marketplace to produce new devices and new applications that we can't even imagine today," Republican Commissioner Robert McDowell said.

The order requires both fixed and portable devices to be capable of sensing television stations and wireless microphones and that those devices be registered in an FCC database."

Geolocation will be required, along with a database lookup, in order to provide a "belt-and-suspenders" approach to avoiding interference (spectrum sensing is the belt, in case you were wondering). The FCC will also provide toll-free phone numbers for reporting interference and plans to require the use of software patches to remotely lower power levels in white space devices that are generating interference—one answer to the question of how the agency can possibly police millions of devices once they are already in the field.

Everyone took care to stress their commitment to an interference-free rollout, and the FCC will pay special attention to interference concerns relating to broadcast TV and wireless microphones as the devices are

introduced. It will also be certifying devices before they can be sold and drawing up the necessary operational standards for them over the next several months.

LED Bulbs in Your Future?

Within the next several months, several of the world's biggest lighting companies, including Osram Sylvania and Philips, will introduce LED replacement bulbs to various world markets, including the United States.

While the bulbs will be praised for their energy-saving characteristics and long lives, most consumers will immediately think, "These things look weird."

And they do. Really weird. Here's an example of one LED substitute for a standard reflector bulb used in many home ceilings. Those funny fins are a "heat sink." Because LED light sources generate all their heat through the rear, manufacturers are adding heat sinks to dramatically increase the surface area and let the heat dissipate rapidly. Without them, the LED fixture would lose its color accuracy and have a dramatically shortened life.

That's especially important for these reflector bulb substitutes. The "cans" in which recessed reflector bulbs typically sit in today's ceilings were designed for standard incandescent light bulbs, which direct most of their heat forward. How they will fare with prolonged use of the new generation of bulbs that send heat back up into the ceiling is anyone's guess.

Aesthetically, the bulbs' odd shape will not be a problem if they are mostly hidden from view, either in the ceiling or under a lampshade. But what happens with other bulbs that are out in the open, like track lighting?

LED Reflector Bulb

A company in Westlake Village, Calif., is embracing the design drawbacks and turning them into a feature. Journée Lighting has just started selling track lighting that emphasizes the heat sink..

Journée is marketing seven different colors of its LED-based Lotus Luminaires, from golden yellow to Bordeaux red. The fixtures look a bit like knockoffs of Ming the Merciless's spaceship in the 1930s Flash Gordon serials. While you might find them a bit over the top, they've already been installed in the Chicago Center for Green Technology and Universal Studios.

Designed for the commercial market, the Luminaires are a bit pricey: each fixture costs around $400. But prices for LED technology are coming down dramatically. In February, the company will sell its newest generation, the Pentas, that ups the light output more than 60 percent per watt.

And home versions are coming. The company has been approached by Costco to design a track lighting kit. The company's goal is to use less expensive manufacturing techniques and sell three fixtures and the track for around $200.

On the Road with N4CD

It was time for the annual trek back to Maryland to visit for Thanksgiving with my sister, brother in law, and their kids and 'significant others'. After a few years of bad weather around the end of December, I moved up the trip to November, and haven't had too many major snow storms to report on. Heading a bit south seems to help that out instead of the frozen north seems to help out, as snow has been flying in MI and OH and PA in large quantities already The bands hadn't gotten much better yet. It did snow again in WV, but I missed all that by going south!

I looked at my book of places I haven't been a second time, and there was one county in MS, 6 in AL, about 6 in GA, and 20 something in NC. I could get most of them on this trip by only adding another 700 miles or so….going the county hunter way. I headed out after rush hour in the Dallas area, zipping along I-20. Nothing exciting. Bob, N8KIE was headed west to CA, but via many counties he needed for MP and needed to run. Jerry, W0GXQ, was headed from TX back to MN. Otherwise, not much activity. Gene, WB4KZW was on a day or two headed to central NC.

Hollis, KC3X, is chasing band counties, and Scottie, N4AAT is hunting CW contacts. Kirby, W8DCD, Doug, WA4UNS, Joe, N5UZW, with help from others were keeping the 40M SSB net humming. 17M isn't doing too good yet, with the only contacts with AA8R(1) and AB7RW for a few for the first few days. Clarence, KH6G, was in for one county, but otherwise, no DX even the first few days.

The first night I reached Jackson, MS (Rankin County) and decided to stop for the night. There didn't seem to be any Motel 6 or Super 8 motels for the next 100 miles, so it was a good place to stop. Motel 6 - $45 senior rate. Dinner at Shoneys – has the salad bar included in most meals for a reasonable price. The weather was good, but chilly – temps in the 40s, and going down into the 20s at night. Heck, MS is 'south'. It's supposed to be warm here, but they are having January weather in November. Gas is down under $2/gal, so county hunting is less expensive once again. At least for a while.

Mobile activity appears down quite a bit. Not many have finished up lately. I wonder if the financial crisis is keeping some closer to home, with the uncertainty about the stock market, employment, pension plans, insurance companies and annuities, etc. Or maybe folks are just not out because conditions still haven't improved much? There are counties being run, and of course, with contest season upon us, there are ample opportunities for band counties.

Wednesday started out cold. I had to scrape the frost off the windshield before heading out. Motel 6 has no breakfast, but the MacDonalds was 1 mile down the road, so a stop was made there. Then it was east on I20 over toward Newton, MS, then south to Jasper. That was one county I managed to avoid on all previous trips, so I ran it for the last transmitted county second time. 40M CW was good, and 40SSB worked well after the morning broadcast faded out.

The good news is that the broadcast should leave the 7.1 to 7.2 MHz band within 4 months! We'll see how many really move out, but broadcasting is supposed to cease. Imagine how nice it would be if the broadcasters leave 7185 and 7188! Let's hope they really honor the international commitment to leave that segment. It's been 40 years, since the mid 60s, when broadcasting invaded the 40M ham band. That's back to when the first county hunters were using 40M with K9EAB and others running the nets. It won't leave 7.2 to 7.3, so we'll see how crowded the rest of the phone band gets. Moving down below 7200 and keeping our frequency there might really be a wise choice if the broadcast leaves! Imagine county hunting without that mess!

The other bands opened slowly, with 30M, then 20M, and later 17M. On Wednesday, PA3ARM was in on 20M, and AB7RW, WA7JHQ and K7REL were worked on 17M. Doug, WA4UNS and Joe, N5UZW, were heading up the 40M SSB net. There were one or two mobiles on 20M SSB but not a whole lot of activity compared to 40. Jerry, W0GXQ, was headed from IA to MN. After he received his MG, he's looking for MP contacts from the 500 separate required counties to be run to get his MP. That's a tough requirement, then again, Master Platinum is the 'top award' of MARAC. Quite a few have already transmitted their 500 counties, and others are working on it. Bob, N8KIE, was headed west running counties that he needed for MP, and filling in transmitted counties as well. He's headed to HI via California.

On this trip, there were no more needs for Platinum – that was done. Maybe the MARAC awards committee is working on "Unobtainium" or Titanium or Plutonium? Within a year, another 3 or 4 should finish up Platinum with N8KIE, N4AAT, N9STL, W6TMD and others closing in. So I hit second time transmits and others needed by the folks, just wandering more or less from A to B and back. I need about 10 for 3rd time cw, but unless I drag a county hunting buddy along, those can't be worked by one person in a car and there are few cw mobiles in TX, so that's for another trip and most are in TX. Maybe in Feb on the way to the mini?

Wednesday night is at the Motel 6. If you want 'wi-fi' internet access, they charge about $3 for a 24 hour access card. The motel is $31, including tax, so you can't complain too much, but their internet did not work. I ran all but one county for second time transmitted in AL, so someday I'll have to come back and run one up in the middle to finish it up. So many counties, so little time. Tomorrow it is off the GA, to run all but one there – there will be Treutlen left to run, so someday I'll have to snag that one, too! Since I make annual treks back and forth to MD, I guess that will be next year's route to finish off AL and GA. Dinner at the Chinese buffet place nearby for $8.62 including tax. With the low price of gas, under $2/gal, the daily cost for county hunting in this part of the country is $70/day! You sure can't complain about that. You don't find too many $30 motels these days. A few months ago, out in the west, the daily budget was over $125 with $4 gas and the more expensive motels out west. Of course, with county hunting, to get them all, you get to enjoy all the areas of the country.

Thursday I headed across AL, winding up in Houston County in a Motel 6. The price was up a bit, $41, but that included free internet, so I can't complain too much, and it worked. It's getting colder outside. Dinner was at a Ryans – I like the salad bar and the assortment of veggies and fruit, and the price is reasonable and there is no wait for the food!

Friday I headed north to GA. It went well till I got near Atlanta – then all the secondary roads turned into horrendous pileups with hundreds of traffic lights, lots of traffic. The map showed nice roads – in reality there was continuous 4 lane strip mall type roads for 30 miles across Clayton, Fayette and into Henry. Yuk! I probably lost 2-3 hours sitting in traffic. If you are going to run there, stick to the interstates, get off in the county and run it,

then get back on to get to the next county, even if it looks 'the long way'. The other roads are a gigantic slow mess! I eventually got out of that mess, and headed up the interstate. I missed Catawba, and of course, getting off the interstate meant you had 2-3 miles of traffic lights, then finally some better road to get to Catawba. I ran it by a marina/restaurant, then headed back through the traffic. Then up to Forsyth and Stokes, and down to Rowan for the night.

Oh, I forgot to mention when I got to the NC border, I had an eyeball with Mark, WB4UHI at exit 5. We yakked for a while at the truck stop there. He's a big, and I mean big, civil war buff. He's written several books on Civil War cemeteries, and is finishing up a book on Civil War generals. He teaches electronics as well. He's got about 2000 counties confirmed and is so busy he isn't on the radio all that much these days.

Mark, WB4UHI

My Uncle lives in Rowan, so I'm stopped at the Super 8 in Salisbury, NC where he has lived for about 60 something years. He's 90, and just moved into a retirement home since keeping up the house by himself is a bit of a chore. He's also a ham, WD4LMK, but never got interested in county hunting. It's always good to have one relative that lives to a long life – the rest of my family tree has shorter branches, so one can be optimistic – hi hi. The temps in NC are tying all time record lows – where's Al Gore when you need him? There's been 6 inches of snow up on the western mountains of NC, with the interstate closed at times, and lots of ski areas east of the Mississippi are getting set for early opening this year with lots of snow!

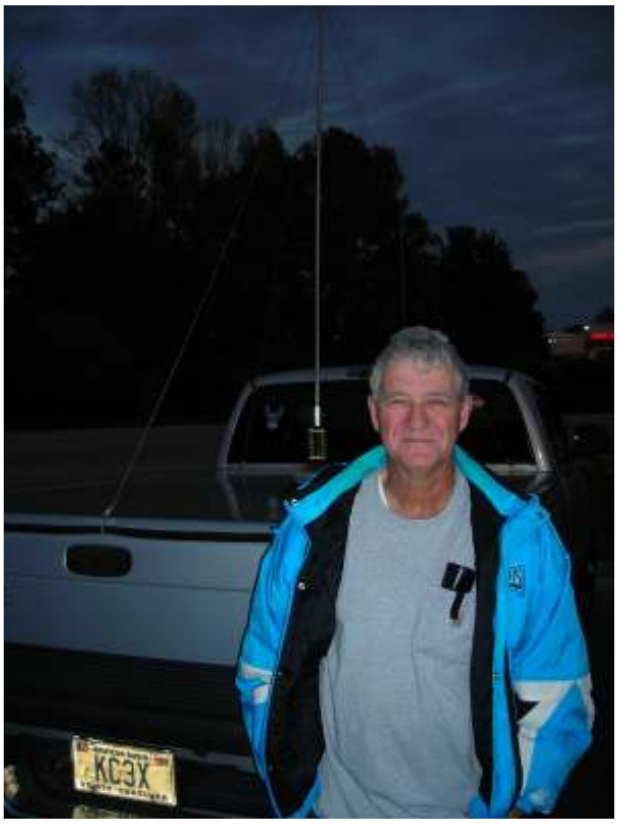
Watching the news is getting depressing – stocks down, and down some more, and then down more. I'm sure a lot of county hunters who are retired are not enjoying the financial meltdown, even if gas is under $2. The talk of layoffs and slow business is not helping either. Maybe it's the sunspots making everything go whacky? Well, I've got enough change to get out for a trip here and there, so the county hunting will continue. Maybe the old Buick will just have to go another year before getting replaced? I'm sure others are thinking along the same lines.

Seems the 'credit card' propensity of too many to spend too much money they really didn't have is slamming the country hard. The economy was kept moving ahead by borrowed money/credit. Folks took out every penny of equity in their houses. They used credit cards and ran up gigantic bills before they knew it, along with car loans, home equity lines of credit. Then, all of a sudden, the house didn't appreciate, there was no more money to 'borrow out', they had a gigantic mortgage, many with variable rates that started to kick up, and no assets. Many (a majority it seems) were living on borrowed time and borrowed money, and someone called for the hand to be shown. It's not pretty, with the AVERAGE balance on credit cards over $8000! Yikes! Some have $50,000 and $100,000 balances! I can't imagine that, but some think the 'money fairy' is going to magically rescue them.

It used to be, a long time ago, that people actually saved up to buy a house and put 20% down, saved to buy larger items, and never took out the home equity – the goal was to pay it down, not make the mortgage bigger and bigger by borrowing the increased equity and spending it now! No longer it seems. Many borrow every penny they can, then more, and wonder why their paycheck goes to repaying all the debt! Business is hurting because

people don't have the money to spend – they can't borrow more, the credit card limits are dropping, and there is no home equity to tap to pay off the credit cards so they can be used even more! Hmmmm….Houston we have a problem, and I doubt Obama is going to fix that. Folks just have to learn to 'live within their means', and if they have debt – live below their means to have money to pay off the cards. Somehow I don't think too many will be too happy doing that.

On Friday, I head east from Rowan County – running things I needed to run for second time transmit. Over by the Lenoir/Greene county line, Hollis, KC3X is loud. He invites me to stop on by for a visit, so we have an overnight eyeball after dinner at the local steak restaurant. He's got a nice place with lots of acres for antennas, got his new tower/beam up after the tornado took it down a while back, and is chasing counties left and right.



Hollis, KC3X

He's also working on all 'mobile to mobile, so sometimes he'll see the spot, and run outside to work the needed county from his mobile set up.

He's one of the ones working seriously on getting that MP and getting those 500 counties run. He's planning on making it to National Convention in MI, so that should help by running all those counties along the way.

It was a great visit. In the morning I headed out to run some more of NC. Most of the day, I stopped to run the counties – lots of noisy power lines in NC – and to hear the weak ones, it sure helps to stop. Signals on the bands are good, but still at a distance on 40M they are weak, and most sigs on 20 and 17 aren't all that strong. I probably stopped in most of the counties to run, except for the last day where I kept moving on the interstates.

Mike, WU3H, was busy chasing me with his QRP type signal. Sometimes he'd get me on 40, sometimes 30M. It had to be fairly quiet to hear him.

40M was the best band most of the time. 30M was so-so. At times it was good – at other times only a handful showed up. K1TKL worked me dozens of times on 30M. Naturally, 20M opened late – and had fairly long skip unless you have really really big antennas like N8II or K8CW who can work stations closer in. F5FJ has worked me a few times on 30M cw. Maybe 30M will get back in good shape again. It's sad to see so many get really enthused a few years ago on 30M, then almost forget about it over the past year or two. Quite a few likely have 2500 counties and headed for working them all on 30M. Meanwhile, folks are filling in band counties on 40M SSB and 40M CW, with a few really working hard at 75/80M as well.

Way back when, in the 70-80s, much of the activity was on 75 meters with mobiles running most of the night! Folks would stay up till 3 am working 'em, then catch a few hours of sleep and go to work. Now, when the sun goes down, most activity stops. Only a few venture out at night – KB6UF and N9JF come to mind. 17M has been good with up to 10-12 contacts per county in the middle of the day. Skip is always long – 1000 miles plus, so being on the east coast mobile helps.

After the visit with Hollis, I headed east to run counties over that way – winding around the state. I got turned around in Durham, and really missed the nav system. I was an hour and a half from home when I realized I had left it in the other car! Oh well, it was back to 'old technology' and reading

maps once again. Of course, I always plot the route on state maps, and also in at Atlas in case I lose the map, if it flies out the window, disappears after a stop, or other calamity. That's a back up. So it was now using the maps for all the navigation. In Durham, I didn't check carefully enough on how to get from A to B, and spent an extra 20 miles going in a big circle. Oh well – that will teach me not to forget the nav system ever again"! I stopped in a Econolodge ($40) near Oxford, NC. The person at the front desk didn't seem to busy (the motel was 80% empty) so I asked "How was business?" He commented that they were seeing 35-40% less business this month from normal. Folks aren't traveling as much. It was Sunday, so it was pizza night.

As I was walking over the Pizza Hut, conveniently located next door to the motel, two cars decided to collide on the road about 50 feet from me. One was turning from a turn lane and decided he could beat the oncoming driver. He said there was a another turning car 100 feet down the road that 'blocked his view'. He didn't make it. Let's see..it gets complicated….one driver had a suspended license, and was driving a borrowed car. She was the one going straight.

The other driver was worried about getting a ticket because he already 'too many 'and was worried about losing his license. He was the one who caused the accident. No one was hurt, but the turning car likely had $3000 of damage to the front end of the car – all plastic/fiberglass, headlights whacked off, etc. The other car, a van, was barely dented. Since I witnessed it, I stayed around until the police got there and took all the reports. That's one of the reasons I usually head for a motel about the time it gets dark – it gets more dangerous (plus the bands usually start getting flakey).

On Monday, I headed up toward MD. Mark, W8MP, gave me a call on the cell phone as asked if there was a way to get to Nottoway, VA, his last county. He's down to about 100 to finish up. After some figuring, I found that I could get there with about a 30 mile detour, so that was added to the posted route. Lots of folks showed up, so I guess a few could use it. The one consideration was to be through the Washington DC area before rush hour started! I spent 7 years living in Arlington, and knew exactly what 'rush hour' was. It turned out that was a smart move, as some rain showers turned the beltway andI270 a gigantic parking lot with several accidents.

After that, it was up along I95 up to the Washington DC area. Lots and lots of traffic on I95- no shortage of traffic jams, accidents and construction. I made it to my sister's house in Montgomery, MD, where I'll help finish off a lot of turkey, and then head on back to Texas over the weekend.

The trip was good with hundreds and hundreds of contacts. 17M improved, with AB7RW, W7GVE, W7KQZ, W0QE, W0GXQ, N0KV, K7REL, K8CW and others getting in the log multiple times. Darrel, W6TMD worked me in many on 40M CW on the trip. On 20M, DL3DXX caught me in a few, but not many Europeans on this trip – conditions were just not great. Gas was under $2 the entire trip, so that helped, and there were no problems with 'sold out motels' as most appear to be really struggling for business.

Conditions were good enough to rack up lots of contacts by using 40, 30 and 20cw, and 40M SSB. 20M SSB didn't sound too great, with mobiles there getting a half dozen QSOs in many counties. For the eastern half of the country, 40M SSB was decent, with some runs of 20-25 Qs. Usually on cw, between the 3 bands you would log 20-30 contacts, sometimes 30-40. ON 17M, it went from 'none' to 14. So many counties, so little time.

The next major trip might be around the end of December, and then likely down to the mini in Feb in Weslaco, TX.

Erie Canal

An interesting piece of history, or?

“Completed in 1825, rerouted in parts and rebuilt twice since then, the Erie Canal flows 338 miles across New York State, between Waterford in the east and Tonawanda in the west. It carved out a trail for immigrants who settled the Midwest, and it cemented the position of New York City, which connects with the canal via the Hudson River, as the nation’s richest port. In 1855, at the canal’s height as a thoroughfare for goods and people, 33,241 shipments passed through the lock at Frankfort, 54 miles east of Syracuse, according to Craig Williams, history curator at the New York State Museum in Albany.

Though diminished in the late 1800s by competition from railroads, commercial shipping along the canal grew until the early 1950s, when interstate highways and the new St. Lawrence Seaway lured away most of the cargo and relegated the canal to a scenic backwater piloted by pleasure boats.

The canal still remains the most fuel-efficient way to ship goods between the East Coast and the upper Midwest. One gallon of diesel pulls one ton of cargo 59 miles by truck, 202 miles by train and 514 miles by canal barge, Ms. Mantello said. A single barge can carry 3,000 tons, enough to replace 100 trucks.”

“Sixty percent of the people I meet have no idea the Erie Canal is even still functioning,” Mr. Dufel said. He is assistant engineer on the tugboat Margot and an owner of the New York State Marine Highway Transportation Company, one of the largest shippers on the canal.

After decades of decline, commercial shipping has returned to the Erie Canal, though it is a far cry from the canal’s heyday. The number of shipments rose to 42 so far this year during the season the canal is open, from 15 during last year’s season, which lasts from May 1 to Nov. 15.

Once nearly forgotten, the relic of history has shown signs of life as higher fuel prices have made barges an attractive alternative to trucks.

“We anticipated we might have an increase in commercial traffic, but nowhere near what we’re seeing today,” said Carmella R. Mantello, director of the New York State Canal Corporation, a subsidiary of the New York State Thruway Authority that operates the Erie and three other canals.

“There aren’t too many wagon trails left, but we still have the canal,” said John Callaghan, a mate on the Margot. “Sure it’s history, but it’s still relevant. We’re making money here.”

Mini Nukes

Warning - This is 95% hype, but entertaining none the less -

Nuclear power plants smaller than a garden shed and able to power 20,000 homes will be on sale within five years, say scientists at Los Alamos, the US government laboratory which developed the first atomic bomb.

The miniature reactors will be factory-sealed, contain no weapons-grade material, have no moving parts and will be nearly impossible to steal because they will be encased in concrete and buried underground.

The US government has licensed the technology to Hyperion, a New Mexico-based company which said last week that it has taken its first firm orders and plans to start mass production within five years. 'Our goal is to generate electricity for 10 cents a watt anywhere in the world,' said John Deal, chief executive of Hyperion. They will cost approximately $25m each.

Deal claims to have more than 100 firm orders, largely from the oil and electricity industries, but says the company is also targeting developing countries and isolated communities. 'It's leapfrog technology,' he said.

The company plans to set up three factories to produce 4,000 plants between 2013 and 2023. 'We already have a pipeline for 100 reactors, and we are taking our time to tool up to mass-produce this reactor.'

The first confirmed order came from TES, a Czech infrastructure company specializing in water plants and power plants. 'They ordered six units and optioned a further 12. We are very sure of their capability to purchase,' said Deal. The first one, he said, would be installed in Romania. 'We now have a six-year waiting list. We are in talks with developers in the Cayman Islands, Panama and the Bahamas.'

The reactors, only a few meters in diameter, will be delivered on the back of a truck to be buried underground. They must be refuelled every 7 to 10 years. Because the reactor is based on a 50-year-old design that has proved safe for students to use, few countries are expected to object to plants on their territory. An application to build the plants will be submitted to the Nuclear Regulatory Commission next year.

'You could never have a Chernobyl-type event - there are no moving parts,' said Deal. 'You would need nation-state resources in order to enrich our uranium. Temperature-wise it's too hot to handle. It would be like stealing a barbecue with your bare hands.'

Other companies are known to be designing micro-reactors. Toshiba has been testing 200KW reactors measuring roughly six meters by two meters. Designed to fuel smaller numbers of homes for longer, they could power a single building for up to 40 years."

http://www.guardian.co.uk/environment/2008/nov/09/miniature-nuclear-reactors-los-alamos

More at: http://www.hyperionpowergeneration.com/

"Perfect for moderately-sized projects, Hyperion produces only 25 MWe — enough to provide electricity for about 20,000 average American sized homes or its industrial equivalent. Ganged or teamed together, the modules can produce even more consistent energy for larger projects."

Ethanol in Trouble

This was a brutal week for the ethanol industry.

Once upon a time, ethanol was seen as the future of clean energy and as leading the U.S. to energy independence.

That was 2004, but Wall Street wised up fast that ethanol was ready for a bust. So, in 2006 and 2007, when Wall Street firms started investing their

own money in renewable energy companies, they left ethanol far behind.

The largest producer, VeraSun, is said to be near a bankruptcy filing, owing to some bad hedges on corn and what is being described as an "ill-timed" acquisition. The stock is trading at less than $1 per share. (P.S. -- VeraSun filed for bankruptcy late Friday).

Aventine released its earnings Friday, and while it made money, it was only a few cents per share, and was about half of what analysts predicted. In a conference call, Aventine officials said margins were "break-even." And in the market, the worst of both worlds is taking hold. The crush spread -- the value of taking corn and turning it into ethanol -- continues to be "terrible," as my colleague Robert Sharp described it. But what's even worse is that the price of ethanol now has moved solidly above gasoline.

While that may sound positive, it isn't. There are two markets for ethanol in the US. The first is largely set in stone: as an octane enhancer for reformulated gasoline. The second is optional blending of ethanol into conventional gasoline, and that's dependent upon the relationship of ethanol prices to gasoline. (Blending simply to meet the nation's Renewable Fuels Standard is not an issue as of now; what's being consumed is more than adequate for the 2008 standard of 9 billion gallons).

When ethanol is blended into conventional gasoline, it's being done so primarily because it's cheaper to buy the BTUs contained in ethanol than it is to produce gasoline. So the cheaper ethanol-based BTUs back out 10% (usually) of the gasoline content. As ethanol fell significantly below gasoline earlier this year, the trend toward ethanol blending into conventional gasoline picked up steam, with Florida in particular seen as a growing market.

Today's Platts assessment for Gulf Coast ethanol was $1.84-$1.85/gal. CBOB, the unfinished gasoline product that ethanol is blended into to make finished conventional gasoline, was assessed at $1.4284-$1.4309. At those numbers, with the 51 cts/gal blending tax break for ethanol, the decision about whether to blend ethanol into conventional gasoline is roughly a toss-up...if you're in Houston. But if there are higher transportation costs to blend it in areas further away from a key market center like Houston, the economics for blending ethanol get a lot worse.

The entire ethanol complex is looking long-term disastrous. The RFS requires increased blending of renewable fuels -- which are mostly ethanol -- every year through 2022, when 36 billion gallons of renewables must be consumed. (The standard for next year is 11.1 billion gallons). So more supply is being asked for while the industry is going through a double whammy on prices: corn prices relative to ethanol makes producing ethanol barely profitable, if at all; and ethanol prices relative to gasoline discourages optional blending.

Markets always tend to work to fix that, but markets don't work quite that smoothly when layered with government regulations. So you've got a renewable fuels mandate and what amounts to an ethanol consumption mandate, and the prices of the three legs of that supply equation -- corn, gasoline, ethanol -- just aren't working too well with each other. Plans for new plants are being delayed or put on the shelf, and while that may be good for the industry today, it won't help provide enough supply to get to the 36 billion gallons target for 2022.

It's not clear how this will work out, but for policy makers who have embraced ethanol, it is a very troubling sign.

When Wall Street banks started placing their own bets on renewable energy companies, they invested in such companies as Heliovolt, BPL Global and Vulcan Power. The chosen technologies were solar power, geothermal energy, wind power, power-grid support and emissions trading. Few, if any, were ethanol companies.

Ever Disappearing VOA Locations

Shortwave Broadcasting has been in steep decline (other than the stations in the 40M band it seems) for more than two decades. Most of the Europeans and the US have cut back or stopped transmissions in English, and many cutbacks in budgets have occurred worldwide. Here's a good 10 minute video about the history of US shortwave broadcasting.

http://uk.youtube.com/watch?v=qlLhWlDbKbI&fmt=18

Nice video about the Delano CA VOA site decommissioning and the history of the site. If you've made the trek to Dayton, maybe you stopped by there a few years ago to visit the VOA site just south of Dayton? Now, it is pretty much just a small museum without any antennas.

Solar Cell Development

A new anti-reflective coating developed by researchers at Rensselaer Polytechnic Institute could help to overcome two major hurdles blocking the progress and wider use of solar power. The nanoengineered coating boosts the amount of sunlight captured by solar panels and allows those panels to absorb the entire spectrum of sunlight from any angle, regardless of the sun's position in the sky.

Researchers at Rensselaer Polytechnic Institute have discovered and demonstrated a new method for overcoming two major hurdles facing solar energy. By developing a new antireflective coating that boosts the amount of sunlight captured by solar panels and allows those panels to absorb the entire solar spectrum from nearly any angle, the research team has moved academia and industry closer to realizing high-efficiency, cost-effective solar power.

"To get maximum efficiency when converting solar power into electricity, you want a solar panel that can absorb nearly every single photon of light, regardless of the sun's position in the sky," said Shawn-Yu Lin, professor of physics at Rensselaer and a member of the university's Future Chips Constellation, who led the research project. "Our new antireflective coating makes this possible."

An untreated silicon solar cell only absorbs 67.4 percent of sunlight shone upon it — meaning that nearly one-third of that sunlight is reflected away and thus unharvestable. From an economic and efficiency perspective, this unharvested light is wasted potential and a major barrier hampering the proliferation and widespread adoption of solar power.

After a silicon surface was treated with Lin's new nanoengineered reflective

coating, however, the material absorbed 96.21 percent of sunlight shone upon it — meaning that only 3.79 percent of the sunlight was reflected and unharvested. This huge gain in absorption was consistent across the entire spectrum of sunlight, from UV to visible light and infrared, and moves solar power a significant step forward toward economic viability.

Lin's new coating also successfully tackles the tricky challenge of angles.

The seven layers, each with a height of 50 nanometers to 100 nanometers, are made up of silicon dioxide and titanium dioxide nanorods positioned at an oblique angle — each layer looks and functions similar to a dense forest where sunlight is "captured" between the trees. The nanorods were attached to a silicon substrate via chemical vapor disposition, and Lin said the new coating can be affixed to nearly any photovoltaic materials for use in solar cells, including III-V multi-junction and cadmium telluride.

Source: RPI News Release

Note de N4CD: While this helps with retaining light within the solar cell structure, the efficiency of conversion of sunlight to electricity is still in the 5-20% range for most types of solar cells. This is an incremental improvement in design, but does not put solar cell performance ahead by leaps and bounds. It will take dozens of incremental improvements to bring solar cells down to the affordable level for everyone.

Sunspot Minimum Reached!

Nov. 7, 2008: After two-plus years of few sunspots, even fewer solar flares, and a generally eerie calm, the sun is finally showing signs of life.

"I think solar minimum is behind us," says sunspot forecaster David Hathaway of the NASA Marshall Space Flight Center.

His statement is prompted by an October flurry of sunspots. "Last month we counted five sunspot groups," he says. That may not sound like much, but in a year with record-low numbers of sunspots and long stretches of utter spotlessness, five is significant. "This represents a real increase in solar activity."

Even more significant is the fact that four of the five sunspot groups belonged to Solar Cycle 24, the long-awaited next installment of the sun's 11-year solar cycle. "October was the first time we've seen sunspots from new Solar Cycle 24 outnumbering spots from old Solar Cycle 23. It's a good sign that the new cycle is taking off."

Old Solar Cycle 23 peaked in 2000 and has since decayed to low levels. Meanwhile, new Solar Cycle 24 has struggled to get started. 2008 is a year of overlap with both cycles weakly active at the same time. From January to September, the sun produced a total of 22 sunspot groups; 82% of them belonged to old Cycle 23. October added five more; but this time 80% belonged to Cycle 24. The tables have turned.

At first glance, old- and new-cycle sunspots look the same, but they are not. To tell the difference, solar physicists check two things: a sunspot's heliographic latitude and its magnetic polarity. (1) New-cycle sunspots always appear at high latitude, while old-cycle spots cluster around the sun's equator. (2) The magnetic polarity of new-cycle spots is reversed compared to old-cycle spots. Four of October's five sunspot groups satisfied these two criteria for membership in Solar Cycle 24.

The biggest of the new-cycle spots emerged at the end of the month on Halloween. Numbered 1007, or "double-oh seven" for short, the sunspot had two dark cores each wider than Earth connected by active magnetic filaments thousands of kilometers long.

On Nov. 3rd and again on Nov. 4th, double-oh seven unleashed a series of B-class solar flares. Although B-flares are considered minor, the explosions made themselves felt on Earth. X-rays bathed the dayside of our planet and sent waves of ionization rippling through the atmosphere over Europe. Hams monitoring VLF radio beacons noticed strange "fades" and "surges" caused by the sudden ionospheric disturbances.

Hathaway tamps down the excitement: "We're still years away from solar maximum and, in the meantime, the sun is going to have some more quiet stretches." Even with its flurry of sunspots, the October

sun was mostly blank, with zero sunspots on 20 of the month's 31 days.

But it's a start. Stay tuned for solar activity.

Source:
http://science.nasa.gov/headlines/y2008/07nov_signsoflife.htm?list991146

Stirling Engine Hybrid Car

“The same day that Ford and General Motors announced catastrophic third-quarter losses, Dean Kamen was showing off his new electric car.

The prototype vehicle, a zippy two-seat hatchback designed with more than a passing resemblance to the Volkswagen Beetle, can go about 60 miles on a single charge of its lithium battery and with practically zero emissions.

The secret?

"It's the world's first Stirling hybrid electric car," its inventor said with a flourish.

Installed in the car's trunk compartment is a Stirling engine invented at DEKA, Kamen's technology company in the Manchester Millyard. It powers the features that would normally drain huge power from the battery, notably the defroster and heater.

That leaves the battery primarily for propulsion. "You're running a pure electric, which is enormously cheaper to operate and enormously more environmentally friendly," Kamen explained.

And if the battery does run low, the Stirling can recharge it, so you'll never get stranded, he said. That's why Kamen calls his Stirling engine "an insurance policy" for the electric car.

He ticks off the advantages of the Stirling engine as a backup system: It can use any fuel, from biodiesel to natural gas; it burns clean; it can even be

programmed to turn on so the battery and car are all warmed up by the time you get in."

http://www.unionleader.com/article.aspx?headline=Revolutionary+auto+already+on+the+road&articleId=1b081989-f67b-458e-8e42-913c8568fb36

Of course, it comes down to can you manufacture the car to be reliable and low enough cost to be cost effective. That's always the bottom line.

BPL – Still not dead!

On Wednesday, November 12, IBM announced that it has signed a $9.6 million deal with International Broadband Electric Communications (IBEC) to install equipment and provide BPL service to almost 350,000 homes in Alabama, Indiana, Maryland, Pennsylvania, Texas, Virginia, and Wisconsin. According to the Associated Press, IBEC Chief Executive Scott Lee said the network, which will be funded by $70 million in low-interest federal loans from the Department of Agriculture, should be in place in about two years. IBEC currently provides broadband to only about 1400 customers, most of them beginning to receive service in the past 18 months.

"IBEC's equipment doesn't use the ham bands," said BPL expert and ARRL Laboratory Manager Ed Hare, W1RFI, "making it less likely that they will have any interference complaints from amateurs. Their equipment, however, does interfere with shortwave broadcast and other spectrum, but in the US, not many users have complained. IBM has been in the BPL business for a few years now, so this venture is nothing new for them." IBEC staff member Brent Zitting, KB4SL, serves as a member of ARRL's EMC Committee.

IBM is the first major systems integrator to enter the market. According to an IBEC press release announcing the joint venture, IBM "will provide overall project management, oversight, and training of the line crews who will be installing the BPL equipment." IBEC "will provide the BPL technology and equipment and serve as the Internet Service Provider (ISP) to these rural residents."

A 2006 FCC study reported that fewer than 5000 homes receive their Internet connections via power lines. IBM and IBEC's joint plan, Lee said, will serve residents, of whom about 86 percent have no cable or DSL access, in the seven states.

According to reports, IBEC's strategy is to sign up electric cooperatives that provide power to sparsely populated areas across the eastern United States. Rather than compete toe-to-toe with large, entrenched cable or DSL providers, IBEC is looking for customers that have been largely left out of the move to high-speed Internet.

"Although the BPL industry is making progress on the EMC issues," Hare explained, "this process will not be complete until it supports regulations and industry standards that reflect its successful models. At recent meetings of the IEEE P1775 BPL EMC standards committee -- although utility and radiocommunications stakeholders wanted to include an informative annex on the ways to address BPL interference, as well as a procedure to address complaints -- some in the BPL industry, including the representative from IBEC, blocked moving the EMC standard to IEEE ballot with the annex included."

Source: http://www.arrl.org/news/stories/2008/11/12/10449/

Awards

USACA 1173 , KF2O, Hank, 3 November 2008
USA-CW #97 N3AHA, Ace, November 28, 2008
Fourth Time #139, WA5OPO, Ray, October 21, 2008
Bingo #303, W8CE, Aaron, November 16, 2008
Five Star #38, KQ0B, Mike, November 1, 2008

Operating Events for County Hunters

There are no state QSO Parties in December, but opportunities for band counties exist in the following contests: (courtesy ARRL Contest Corral)

160M ARRL Contest - Dec 5 2200Z to Dec 7 1600Z, RST ARRL Section

ARRL 10 Meter Contest Dec 13 0000Z to Dec 14 2400Z

There are DX contests and RTTY contests and lighthouse activiations, so check out all the action at:

Source: http://www.arrl.org/contests/months/dec.pdf