County Hunter News

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Volume 5, Issue 11

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) **Mobile Activity in December**

Wow – this has been a slow month. Record snow storms across the north part of the country, ice storms in the south, nasty weather in many areas – have all put a damper on mobile activity. The sunspot activity remains very, very low with low flux readings. Add in the uncertain financial times, and not many are venturing out mobile.

Jack, N7ID was out mobile in early December. KL7HBK(fixed) in the Second District AK was on 20 and 40M CW. Jim, N9JF made a few trips in December all over the east coast. Joe, N5UZW was down in MS putting 'em out. Jim, W4HSA ran a bunch in NC and VA, while KM9X/KB9MGI put out loads on 40M SSB on the quest to finish up Judy for USACA (successful).

Pete, N4AKP, made a run in VA, and Mike, NF0N was out in NE. K0PY was putting counties out in KS, while Lloyd, NX4W was in GA. Scottie, N4AAT, zipped around in GA, while Cliff/Nelda, K6JN and W6XJN trekked cross country. Jeffrey, AF3X, was out in IL and IA for a several day trip. Ed, K8ZZ ventured out in snowy conditions on a trip or two, and Bill,

K2HVN headed south to FL and back. Jim, K0ARS made a trip to TX, then to TN/PA.

Kirby, W8DCD ran quite a few on SSB for us, while N3MRA and N1SPX were spotted in various counties along their routes. Dave, KE3VV, made a run to NC from the home QTH in DC, and Gene, WB4KZW was down in AL and GA from his home in NC.

Matt and Sharon, W0NAC and N0LXJ, headed to TX panhandle for a short trip. They were followed by N0KV/N0DXE also spotted in the TX Panhandle, along with K0ERE. Was there a mini happening there?

K8YJ ran a bunch in WV and nearby.

Overall, lots of counties if they were the ones you needed. Vast areas of the country saw ZIP activity.

2) **Call Change – NU4C** (from K3IMC forum)

"Hi folks Please allow me to introduce myself. My name is Paul and my call is NU4C (effective 25nov08). Some of you may know me by my previous call, AB4PM. I have become addicted to CH'g. Currently sitting at nearly 1500 confirmed and 1900 worked. I will be working a lot of you over the next year or 3. 73 de Paul NU4C (ex-AB4PM)"

Paul is active on 40M SSB.

3) **N8KIE, Bob**, reports: "On our trip west we drove 5606 miles, ran 180 counties, used 265 gallons of gas and got 87 new Xmits. We made 3424 contacts on 20 and 40 SSB. That's 13.3 Q's/ gallon. Lol It was a fun trip, see you in Feb on the way home. 73 Bob"

4) **Defunct Car Makers** – over 500 car makers in the US have gone out of business or been taken over in the 100 year history of car making. See

http://en.wikipedia.org/wiki/Category:Defunct_motor_vehicle_manufacturers_of_the_United_States

for a listing of what used to be. The types of cars you see at a car museum! Will some of the current makers join the list? Or models? Join Plymouth, Nash, and Yugo?

5) **K0RC**J – Gave up 100 hour work weeks driving the 18 wheeler and now working in a factory, getting paid for all the hours – no more counties from Rich - he drove thousands of miles a month putting out the counties.

6) Awards

It started out a strange month…the first five awards were all USACA awards of folks finishing up the first time. Only one MARAC award issued this month. Unusual that nearly all receiving awards this month got USACA – guess there were lots of 'last counties' out there that folks helped clean up so others could finish up! Maybe it took a month or two for all the MRCs to arrive so things only got done in December even though the contacts happened earlier when weather was better for county putting out trips? Welcome to five new USACA holders who join the 'stars club'!

7) Oil Prices

Wow – the markets tank and oil follows everything down, down, down. But don't get lulled into buying a gigantasaurus SUV at this point because of $1.50 gas. Already, OPEC is attempting to raise prices back to $75 a barrel or so through cut backs in production, and will likely manage to raise prices. Any sign of a recovery will likely send things higher and higher quicker.

The real downside is that future expansion is all on hold - hard to get financing or justify to stock holders spending tens of billions on new capacity when oil prices are low. The oil sands expansions are dead. The deep sea high cost oil is all 'on hold' now. Those projects take 5-7 years to complete, and few are willing to raise or spend capital now. What that likely means is a boomerang – in a few years, as mature fields drop even more, there won't be new oil production to replace it. It's going to get interesting.

Meanwhile, Congress is 'mandating' green things, but consumers aren't willing to fork out the extra $5000 for a hybrid car that with $1.50/gas has 12 year payback for the premium. SUV and truck sales are recovering. It's going to get interesting if gas heads back to $2.50/gal in a year or two.

10 Meter Contest

The last few ARRL 10 Meter contests have been good times to catch up on errands, take long naps, and not hear much of anything. Zilch, or next to nothing for the whole contest. Bottom of the sunspot cycle. Not this year. At least for many county hunters who were watching the spots (to see activity) and had the E-skip propagation.

Starting Saturday night, the band popped open with E-skip type signals to FL from TX. Hope Gator didn't take the weekend off. That lasted a few hours –mainly to the same area. Mark, KO1U had early Saturday openings.

Sunday morning came, and I turned on the radio (with the R5 vertical) to see if anything was happening. Wow – for the next 8 hours, signals from around the country were heard. NM2L was reported loud in New England (never heard him). FL, AL, GA, NC, SC, DE, Wash DC, VA, OH, IN, IL, MN, ND, SD, WY, UT, CA, AZ TX and others in the log for some new band counties. Washington DC is a separate multiplier for this contest.

Active CH on included NM2L, KO1U, NM2L, WB2ABD, K7REL, KG5RJ, W0ETT, K5SF, AA4S (at N4ARR), W4OV, K4XI, W6RK, W7GVE, N8II, AA8R, N4NX, KN4Y, NF0N W3DYA, N5UZW, K1BV, plus likely another dozen or two….with the E-skip, you heard certain areas of the country (like AL) at one time, then waited for it to shift around. You never heard others, or heard signals spotted by others. Late Sunday, for me it was the Denver, CO area- all the counties around it: Denver, Boulder, Larimer, Jefferson, Douglas, Arapahoe!

The spots were a good indication that the band was alive and folks were there – so you looked for what you could hear! With my vertical, I could hear locals with beams and towers working lots of stations that just weren't there on the vertical. I suspect lots of CH were working stations but not spotting them.

This was not due to 'sunpots' and higher solar activity, but winter E-skip. I'd bet 6m might have been open as well – didn't check that. I'm sure a lot

missed out on the fun because of the current opinion that 'the band is dead'. You snooze, you lose. It was fun! Folks were occasionally complaining about QRM on SSB on 10M…..maybe for the first time in 4 or 5 years! Hi hi It was easier to snag things on CW with my setup but other big stations had good runs at times. There was a humongous cold front crossing the country, with blizzards in the Dakotas, snow in OR and WA, and a tremendous temperature drop across the front, and high winds (good for the wind shear that causes E-skip conditions).

Let's hope in a few years every weekend sounds even better than this one – DX from dawn till dusk – and thousands of band counties waiting to be snagged.

W0GXQ: "Ran 40 watts to a wire antenna and made 78 contacts. Spots are worthless unless you are in the same general area as the spotter. Sure glad I was able to find Gator before the contest ended!"

NF0N: "I didn't expect much on 10 either but decided to work a few today and ended up working over 100 contacts both CW and SSB today. Much better than what I was expecting, maybe this is an indication of many more band openings to come. Let's hope so."

AA8R: "Worked abt 75 on Sunday...mostly TX & Fl stations."

KR5C: "Worked about 10 mostly East. Coast but a few in CO and CA too weak to work on the attic loop. Running 10 watts from my IC-703."

KO1U:" Sat. a bit slow with some nice close in Qs. **Broke the 500 Q** level Sunday after finally going to SSB. Worked half dozen stations in GXQ county MN Sunday morning. Got every state East of the Mississippi and a few mid US west. 4Y-Gator and 2L-Greg were booming in Sunday. Station was without power most of the weekend as the ice storm saw fit. Battery/car and booster packs kept us on the air. As long as I ran below 50W there was no chirp. Got heat in the house 5PM Sunday afternoon. Best part of the contest: No power line noise/city lights, etc. Amazing quiet band. City station is attic dipole SSW with a bit of Vee in it. What is a "tower" thingy that some of you guys keep mentioning?" ""We had some great openings between 1AM and 5AM to VA,KY,NC,OH. Many were in bed by then. Too cold to sleep here"

WA7JHQ: “I thought that only the east coast was going to have fun with the 10m contest, but I ended up with 109 Q's, 82 of which came during the last two hours of the contest. AL, IA, IL, IN, KS, MI, MN, MT, NE, NJ, NM, PA, SD, TN, TX, UT, WA, WI, WI plus AB. Worked several county hunters. Look forward to a few sun spots for next year.”

KN4Y: “This ten meter contest is my favorite….. Friday night to midnight only worked a few stations. Saturday morning started at sunrise and worked stations on and off like newlyweds. Saturday evening had a blast working stations as fast as I could write. Had a run of nothing but VE's, then MN's and the log if full of TX. Did not work WA, OR, UT, WY guys. NOT a California station worked, guess proposition 8 affected the panhandle. Sunday I had a bowling tournament and missed the great openings. But got 165 QSO's and 29 multipliers. “

On the Road with N4CD

My luck with avoiding winter weather on my annual November trip back east didn’t last. On the way home, I stopped at the Motel 6 just north of Knoxville after leaving the Wash DC area that morning. My route took me down the interstates with a short side trip to Carroll, VA, one that I had missed before. Now I’m down to 3 to transmit from in VA (Henry, Accomack, and Buchanan). Next year I’ll get some of them. I’m working on putting all the counties out a second time, following in W1TEE’s footsteps. He’s the only one who has done it twice.

It seems thousands must have been traveling Sunday night after Thanksgiving headed to the same way as I was going, as the interstate backed up 25 miles east of Knoxville, TN (Knox County) and then crept along at 10-20 mph for the next two hours. I went nowhere fast. The Motel 6 was more than half empty when I got there finally. It was Sunday, so it was Pizza night at the Godfather Pizza joint down the street. Conditions were ‘normal’ for this part of the sunspot cycle.

On Monday morning, I awoke to cold temperatures, and the forecast was for 'snow flurries' especially on "the plateau". That's nice if you know what the plateau is, but I had counties to run and didn't know where that was. There were four counties in TN that I had managed to avoid so far – so it was off to Union County. As you head north on the interstate from Knoxville, you go over a big, big hill. On the north side of the hill, the snow was coming down in prodigious amounts. Traffic was down to about 15 mph going down the hill which was just getting covered in snow and looking slippery. I ran out of it at the bottom of the hill, and figured it was just the elevation that caused the problem. With a short detour off the interstate I made it to Union County, which I ran all bands, then headed back east. I could either stay on highway 62 headed west, or get back on the interstate, and likely still fight some of rush hour traffic. I elected to stay on 62, which probably wasn't a good move. I needed to get to Fentress next.

At first, it was just snow on rooftops and on the grass. Then the snow was starting to stick on the roads, and within an hour, the snow was on the road and about 2 inches deep with slush. The decision to go across 62 wasn't a good one. There were cars in the ditch, and the speed was down to 25 mph on the twisty hilly road. My tires were not snow tires and had 70 thousand miles on them, so that didn't help either. I eventually made it to where I could get back on I 40, and decided the other two 'up north' (Clay and Jackson) could get run on another trip in nicer weather. Fortunately, there was no snow on the interstate so I zipped west quickly. So that leaves 2 more in TN to run for second time transmit.

Once I got to ARK, I took a short detour to get Woodruff, one I also had managed to either go around many times, or maybe I was there but can't find it in a log, and there was no spot. So I ran it, finishing off ARK finally, then headed for a motel as it got dark. I can send in now for the free MARAC award 'Ran All Arkansas" (and other states as I finish them).

That night was spent in a Super 8 Motel ($45 including tax). The breakfast included waffles. When I got there, I was the only one on the back side of the building around 5:30pm – in the morning when I woke up, there were 8 vehicles there – for about 30 rooms – not the least bit crowded. Things are slow in the motel business. I headed home the next day, where it was 62 degrees with 40 mph south breeze. No snow!

If I had stayed on the interstate, I probably would not have seen any snow, but it didn't take much to find it in TN. Dan, KM9X was up in OH, WV, VA, and TN, and seeing lots of snow. Larry, N2OCW came back on Sunday night/Monday with lots of snow in PA as he headed home to WV. Bill, K2HVN was on Tuesday headed toward FL running the counties as he mobiled on south.

I was a good trip, but I could have done without the few hours of slipping around in the snow in TN! That's all the snow I need to see for the rest of the winter. There are lots of counties to run where the snow doesn't fly!

Update: The ice storm hit Texas a week before xmas in December. It didn't look all that bad out – just a teeny bit fell around my QTH. I cautiously went out for my morning walk. About 1000 feet from home, I hit an invisible icy patch on the sidewalk, and, oops…..only this time, I wound up flat on my back and broke my left wrist. So, county hunting trips will probably slow down a bit. It's hard to drive, send cw, and log with one good hand. At least it wasn't the cw sending hand, so I can still have fun from home chasing counties. Oh, well, first broken bone in my life and things should get back to normal in 6 weeks hopefully.

You'd probably read a lot about ethanol, and flex fuel vehicles. I'd bet not many out there have actually seen an E85 fuel pump – that is 85% ethanol, 15% gasoline. Many states now give you E10 – 10% ethanol mixed in with your gas when you buy 'regular' fuel. You have to look hard or live in a farm state like IA to find E85 service stations.

E85 pump (Iowa?)

The label on the pump says “STOP – NOT Gasoline”. If your car is not flex fuel capable, nasty things might happen. It costs about $100 or more in new car cost to add the stainless steel fuel line sections and gaskets capable of withstanding high levels of alcohol, plus fuel sensors and a computer set up to run the engine on lower mileage ethanol. (less energy per gallon).

NanoTech Update

1) Nanotube Loudspeakers – More tekkie stuff

“Carbon nanotubes (CNT) are one of the new, emerging technologies for which more and more applications are being discovered and they seem to be one of the things we'll hear about even more in the future. Even though their existence has been discovered some 10 years ago, it is only recently that they have been more thoroughly known and their synthesis further developed. And speaking of the new uses for CNT, here's one with a very serious potential: loudspeakers.

Kaili Jiang is a physicist at the Tsinghua-Foxconn Nanotechnology Research Centre in Beijing and leader of a research team that managed to create loudspeaker-like structures from stretchable, flexible and transparent CNT sheets.

The result is a very special cloth-like texture that can bend and can be tailored in almost any size and shape – and when electric current alternating at an audio frequency is applied to this structure, it will resonate pretty much like your traditional loudspeakers. These CNT films can be easily attached to virtually anything and they can serve as sound sources in the most unbelievable places, being especially useful in locations where normal loudspeakers would be impracticable to mount.

A most interesting feature when it comes to CNT speakers is the way they produce sound: if a traditional loudspeaker generates sound by vibrating the cone back and forth, the nanotubes produce sound waves in the same manner the lightning produces thunder. As the current passes through them they heat up and expand the surround air, producing a sonic result; and unlike thunders, which are generated in an utterly uncontrolled way, the CNT physics is able to control this process quite closely."

http://news.softpedia.com/news/Carbon-Nanotubes-Loudspeakers-97169.shtml

"Transparent, flexible loudspeakers are tens of nanometers thick and just plain cool. Made by researchers at Tsinghua University in Beijing, the carbon nanotube speakers can play music just as loud and just as high quality as conventional loudspeakers do, even while being flexed and stretched.

Conventional loudspeakers use magnets and moving parts to produce sound-pressure waves. The nanospeakers work by the thermoacoustic effect. Alternating electrical current running through the thin films of nanotubes heats the surrounding air, causing it to expand and contract, creating sound waves.

These transparent thin-film speakers could be mounted on displays, eliminating the need for separate speakers. But one of the coolest things about the loudspeakers is that they're flexible and stretchable, allowing the researchers to imagine singing jackets."

Source: http://www.technologyreview.com/blog/editors/22184/

“In typical loudspeakers, a coil surrounds the apex of a flexible cone; when a varying current flows through the coil, the cone moves toward and away from a fixed permanent magnet and produces pressure waves we hear as sound. But researchers from Tsinghua University and Beijing Normal University showed that a thin film of nanotubes can reproduce sounds over a wide frequency range—including the full human audible range—with high sound pressure level, low total harmonic distortion, and no magnets.

The team created the film by drawing nanotubes from a so-called superaligned array grown on a wafer, a technique the group introduced six years ago. The resulting film, only tens of nanometers thick but up to 10 cm wide, is transparent and has a nearly purely resistive impedance. When electrodes are placed along its ends and an alternating current is applied, the film produces clear tones that can be as loud as a conventional speaker. Moreover, since the film is flexible, the nanotube speaker can be configured into arbitrary shapes or mounted onto curved substrates. The film can even be stretched with essentially no degradation of the sound reproduction. The researchers attribute the sound generation not to vibration but to a thermoacoustic effect first proposed nearly a century ago: Thanks to the nanotube film's extremely low heat capacity per unit area, changes in the current flowing through the film are reflected in the film's temperature, and those temperature changes excite pressure waves in the surrounding air. The mechanism is independent of the sign of the current, which leads to a frequency doubling of the input signal, but that drawback can be overcome by applying a constant current bias”

Source: http://blogs.physicstoday.org/update/2008/11/nanotube_loudspeakers_1.html

Potential applications of flexible and stretchable carbon-nanotube loudspeakers include speakers on clothing, windows, flags, and video and laptop screens. It helps that nanotube films continue to produce sound if torn, unlike a torn diaphragm in a conventional loudspeaker. Earphones and hearing aids might also benefit from the new approach.

There is some way to go before the technology can be commercialised. The biggest task is devising a way to create the necessary films in industrial

quantities. But if that can be done, the next generation of loudspeakers may be almost invisible. The speaker-banks at rock concerts will never be the same again.

Recycling CFLs

Wait – ignenious hams don't just throw away old CFLs – they turn the parts into a QRP transmitter! See

http://forums.qrz.com/showthread.php?t=187142

"This electronic puzzle was a result of my changing a defective compact fluorescent lamp (CFL) in my kitchen. For some reason, I began to wonder if it would be possible to build a QRP CW transmitter using the electronic components salvaged from this derelict lamp.

Indeed, I'm pleased to report that a perfectly serviceable transmitter may be constructed! The only additional components required were the quartz crystal, and four of the five components needed for the output lowpass filter. The resulting transmitter produces up to 1.5 watts on 80m.

My defective CFL was labeled, "TriMax Electronic Fluorescent Lamp," Model #SKT320EAH, 20W, 120VAC, 60Hz. It was made in Korea by, or for, MaxLite. In order to gain access to the components I made a shallow, continuous, hacksaw kerf cut around the joint in the plastic base shown in the above photo of the lamp. One must be careful not to break the glass bulb; especially as these bulbs contain a small amount of toxic Mercury!

As soon as I had freed the circuit board, I checked for signs of component overheating. Finding no unusual discoloration, I set about unsoldering and cataloging the components. Here is a list of the components salvaged from my lamp.

Quantity Component Notes

2	BUL128	high voltage NPN transistor
6	1N4007	high voltage rectifier
5	1N4937	high voltage, fast recovery rectifier
1	1mH	radial leaded ferrite-core inductor
1	2mH	radial leaded ferrite-core inductor
1	1.23mH	inductor built on a "transformer" frame
1		inductor wound on a small ferrite toroid core
2	22 Ohm	1/4W resistor
2	470k Ohm	1/4W resistor
1	10uF	electrolytic capacitor, 350Vdc rating
1	0.22uF	mylar film
1	47nF	"
1	22nF	"
1	6800pF	"
1	3300pF	"
1	2200pF	"
1	DIAC	?
1	MOV	?

Of course, the exact type and value of the components you find will depend upon the make of your lamp. This web page shows some typical CFL schematics and part values.

Here's a page with typical schematics for CFLs

http://www.pavouk.org/hw/lamp/en_index.html

Wow…50 years ago, hams took apart defunct AM radios and television sets to scrounge for parts. Now, you can take apart old transistor sets or even CFL bulbs when they go kaput!

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ARRL Triple Play WAS

The ARRL has come up with a new award for 2009 – the "Triple Play Award" to spur activity on cw, SSB, and digital modes. Here are the rules – note that Logbook of the World must be used.

From ARRL:

1. The Triple Play WAS (Worked All States) Award is available to all amateurs worldwide who must use Logbook of the World (LoTW) to confirm QSOs with each of the 50 states on voice, CW, and digital modes. The Triple Play WAS Award is a serial-numbered award starting with # 1, as determined by the time stamp of the electronic application submitted via LoTW. Awards issued will be tracked and presented on the ARRL Website.
2. Two-way communications must be established on amateur bands with each state on each mode. There is no minimum signal report required.

Any or all bands (except 60 Meters) may be used for the Triple Play WAS. The District of Columbia *may* be counted for Maryland.

3. Contacts must be made from the same location, or from locations no two of which are more than 50 miles apart. Club station applicants, please include clearly the club name and callsign of the club station (or trustee).
4. Contacts **must be made after 0000Z on January 1, 2009** to be considered for this award. LoTW will be programmed to automatically use this criterion. Contacts must be confirmed via LoTW. Written confirmations will not be accepted.
5. There are no endorsements for the Triple Play WAS Award.
6. Contacts made through "repeater" devices or any other power relay method cannot be used for WAS confirmation. A separate WAS is available for Satellite contacts. All stations contacted must be "land stations." Contact with ships, anchored or otherwise, and aircraft, cannot be counted. EXCEPTION: Permanently docked exhibition ships, such as the Queen Mary and other historic ships will be considered land based.
7. A US applicant must be an ARRL member to participate in the WAS program. DX stations are exempt from this requirement.
8. Attempts to falsify data, logs, or other application operations may be grounds for disqualification. The decision of the ARRL Awards Committee in such cases is final.
9. Please follow the instructions presented on the LoTW website. The cost of the Triple Play WAS award is $12 for a certificate delivered to a U.S. address, or $13 delivered to an address outside U.S.A. Per-QSO fees associated with using LoTW credits as normal will be charged via the online application.

Garmin Nuvi Nav System Problem

From K3IMC Forum – by Ron, KA3DRO

Ron, KA3DRO experienced a problem with his nav system. He reported on the K3IMC forum:

“I just had a failure of my Garmin Nuvi 255W GPS unit.....It worked all day, I put it, still connected to power, under the front seat while we ate at a local Cracker Barrel, and when I reset it on the windshield, it was "off".....it tries to power back up when turned on, but clicks twice and goes black”

It turns out the problem was:

“the problem is solved..... I had some time this afternoon and looked the unit over again.....checked out everything including the 12 v car system and that circuit..... all OK..... I even removed the small ceramic type fuse in the head of the power cable....and it checked out..... BUT..... when I replaced it with another fuse.... (a gut feeling).... the unit came to life again. The fuse provided still shows continuity.....but will not operate when in place.....!!! Never had this happen before. Anyway... the problem is solved and my GPS is operational again! If your Garmin fails, check that little fuse carefully.”

Sunspots and Storms

“Scientists have found two large leaks in Earth's magnetosphere, the region around our planet that shields us from severe solar storms.

The leaks are defying many of scientists' previous ideas on how the interaction between Earth's magnetosphere and solar wind occurs: The leaks are in an unexpected location, let in solar particles in faster than expected and the whole interaction works in a manner that is completely the opposite of what scientists had thought.

The findings have implications for how solar storms affect our planet. Serious storms, which involved charged particles spewing from the sun, can disable satellites and even disrupt power grids on Earth.

The new observations "overturn the way that we understand how the sun's magnetic field interacts with the Earth's magnetic field," said David Sibeck of NASA's Goddard Space Flight Center in Greenbelt, Md., during a press conference today at the annual meeting of the American Geophysical Union in San Francisco.

The bottom line: When the next peak of solar activity comes, in about 4 years, electrical systems on Earth and satellites in space may be more vulnerable.

How it works

Earth's magnetic field carves out a cavity in the sun's onrushing field. The Earth's magnetosphere is thus "buffeted like a wind sock in gale force winds, fluttering back and forth in the" solar wind, Sibeck explained.

Both the sun's magnetic field and the Earth's magnetic field can be oriented northward or southward (Earth's magnetic field is often described as a giant bar magnet in space).

The sun's magnetic field shifts its orientation frequently, sometimes becoming aligned with the Earth, sometime becoming anti-aligned.

Scientists had thought that more solar particles entered Earth's magnetosphere when the sun's field was oriented southward (anti-aligned to the Earth's), but the opposite turned out to be the case, the new research shows.

Essentially, the Earth's magnetic shield is at its strongest when scientists had thought it would be at its weakest.

When the fields aren't aligned, "the shield is up and very few particles come in," said physicist Jimmy Raeder of the University of New Hampshire in Durham.

Conversely, when the fields are aligned, it creates "a huge breach, and there's lots and lots of particles coming in," Raeder added, at the news conference.

As it orbited Earth, THEMIS's five spacecraft were able to estimate the thickness of the band of solar particles coming when the fields were aligned — it turned out to be about 20 times the number that got in when the fields were anti-aligned.

THEMIS was able to make these measurements as it moved through the band, with two spacecraft on different borders of the band; the band turned out to be one Earth radius thick, or about 4,000 miles (6,437 kilometers).

Measurements of the thickness taken later showed that the band was also rapidly growing.

"So this really changes our understanding of solar wind-magnetosphere coupling," said physicist Marit Oieroset of the University of California, Berkeley, also at the press conference.

And while the interaction of anti-aligned particles occurs at Earth's equator, those of aligned particles occur at higher latitudes both north and south of the equator.

The interaction is "appending blobs of plasma onto the Earth's magnetic field," which is an easy way to get the solar particles in, said Sibeck, a THEMIS project scientist.

Next solar cycle

This finding not only has implications for scientists' understanding of the interaction between the sun and Earth's magnetosphere, but for predicting the effects to Earth during the next peak in the solar cycle.

The Sun operates on an 11-year cycle, alternating between active and quiet periods. We are currently in a quiet period, with few sunspots on the sun's surface and fewer solar flares, though the next cycle of activity has begun.

It is expected to peak around 2012, bringing lots of sunspots, flares and coronal mass ejections (CMEs). CMEs can interact with the Earth's magnetosphere, causing problems for satellites, communications, and power grids.

This upcoming active period now looks like it will be more intense than the previous one, which peaked around 2006, some scientists think. The reason is the changes in the sun's alignment.

During the last peak, solar fields hitting the Earth were first anti-aligned then aligned. Anti-aligned fields can energize particles, but in this case, the energy came before the particles themselves, which doesn't create much of a fuss in terms of geomagnetic storms and disruptions.

But the next cycle will see aligned, then anti-aligned fields, in theory amplifying the effects of the storms as they hit.

Raeder likens the difference to igniting a gas stove one of two ways: In the first way, the gas is turned on and the stove is lit and you get a flame.

In the other way, you let the gas run for awhile, so that when you add the gas you get a much bigger boom.

"It should be that we're in for a tough time in the next 11 years," Sibeck said."

http://www.foxnews.com/story/0,2933,468268,00.html

CHU Time Signal

As noted in previous CHNews time station CHU, which was just above the ham bands (and useful for calibrating those old receivers), moves to 7850 KHz on January 1, 2009. Old timers will remember calibrating the bandspread dials on the tube type receivers on 40M. That, plus they gave the time every minute, so you could set your GMT clock easily.

Prius Hybrid Mobile

I did some websearching and found that Phil, K9HI, had installed HF radio in his Prius. Here is his response to my question about how well it worked:

"Hi Bob,

Nice to meet you.

Sadly, I must confess that mobiling in the Prius on HF with the Screwdriver and the IC706MGII never really succeeded. I used to have cw contacts all the time in the 80s using my Yaesu 757 in a Volvo using an Outbacker, so when I bought the Prius I had high hopes of sprinkling some chokes here and there. I spoke at length with a W9 in Illinois (I forget his call now) who had been down that road before. He spent countless hours and $$ trying to RFI-proof his Prius with only mixed success.

Given this, and the fact that my average commute is typically 3 miles, culminating in parking garages both at home and work, I opted to take off the antenna and use the 706 feeding a small 1/4 wave whip on 2m/440 only.

Yes--the RFI IS as bad as everyone says. 30m and 17m operation was especially impossible. All in all, it was very disappointing.

73,
Phil, K9HI"

K9HI

Global Warming Hype

Global Warming? Bring it On!
By Gregory Young

The argument propounded by the dubious United Nations' Intergovernmental Panel on Climate Change (IPCC) report on Anthropogenic (human-induced) Global Warming (AGW) is willfully fraudulent. The report has been vigorously and critically undermined, scientifically denounced and found wanting from both notable scientists here and abroad.

In spite of this fact, it is likely that the new U.S. Democratic Congress and Administration will once again proclaim that they know better than we do about such things. Get ready for them to move surreptitiously under the guise of Global Climate Control in an effort to enhance their own legacies and pocketbooks. To be sure, the Left hears nothing but their own incestuous voices, despite the voices of clarity and reason that abound around them. And there are many, many distinguished dissenters against the charade of AGW.

Take for instance the Founder of the Weather Channel and eminent Meteorologist John Coleman who has stated:

There is no significant man made global warming. There has not been any in the past, there is none now and there is no reason to fear any in the future.

The climate of Earth is changing. It has always changed. But mankind's activities have not overwhelmed or significantly modified the natural forces.

Through all history, Earth has shifted between two basic climate regimes: ice ages and what paleoclimatologists call "Interglacial periods". For the past 10 thousand years the Earth has been in an interglacial period.... [where] the Earth warms up, the glaciers melt and life flourishes. Clearly from our point of view, an interglacial period is greatly preferred to the deadly rigors of an ice age. Mr. Gore and his crowd would have us believe that the activities of man have overwhelmed nature during this interglacial period and are producing an unprecedented, out of control warming.

Well, it is simply not happening. Worldwide there was a significant natural warming trend in the 1980's and 1990's as a Solar cycle peaked with lots of sunspots and solar flares. That ended in 1998 and now the Sun has gone quiet with fewer and fewer Sun spots, and the global temperatures have gone into decline. Earth has cooled for almost ten straight years. So, I ask Al Gore, where's the global warming?

There is an abundance of solid data to back these conclusions up. For example, new measurements from the NASA/ESA spacecraft Ulysses show that the sun's current period of low activity goes beyond an extended dearth of sunspots. Solar activity has dropped to the lowest levels since recording began some 50 years ago. Current experts, such as Veizer, Shaviv, and most recently Svensmark et al., and Patterson, suggest that changes in the output of the sun caused the most recent climate change. They convincingly argue that increased cosmic radiation acts as a catalyst for cloud formation in earth's atmosphere. This, in turn, leads to a general cooling of the world's climate if the pattern persists.

Ironically, during the 1970s while some (including NASA's James Hansen) were hysterically promoting the schizoid fears of a new ice age hitting the world in a few decades, a new frenzy over Global Warming and Climate Change was just beginning at Scripps Oceanographic Institute in San Diego, CA. It was started by one of their most esteemed scientists Roger Revelle, the father of Oceanography. His work correlated the increases in carbon dioxide, CO2 (a laboratory defined greenhouse gas) to atmospheric warming. Revelle later moved to Harvard and encouraged his students, including Al Gore, to rehash the data.

Since then the research methods have clearly gotten out of hand. Many avenues of research have proven repeatedly useless. Even Roger Revelle understood that there were greater variables at play than the trace gas of CO2.

Before he died, Revelle gave interviews and wrote letters stating that CO2 and its greenhouse effect did not warrant extreme countermeasures. He told Omni Magazine, in March 1984, that "CO2 increase is predicted to temper weather extremes" -- not cause them. One cannot argue that CO2 was a causative factor -- especially since CO2 was apparently following temperature trend -- not moderating it. It seems none of his followers, Gore in particular, heeded his words.

There is a huge problem with the idea that Carbon Dioxide, or CO2, is a globally polluting gas, much less one that causes climate change and global warming. Even though some data seemed to initially substantiate the AGW thesis, these ideas were later proven to be wrong. (Those derived from ice core data were especially damning.) Australian Climatologist Dr. David Evans has done yeoman's work on this issue.

Often forgotten in the argument is the fact that CO2 is only a trace component of the atmosphere. For every million molecules of other gases in the atmosphere (such as nitrogen, oxygen, and hydrogen), there are only 385 molecules of CO2.

It is a fact that atmospheric concentrations of CO2 have varied widely over geological time. The peak was estimated to be some 20-fold higher than at present (+6,000 ppm) -- and the low about 200 ppm below today's. (Everyday office air concentrations often exceed 1,000 ppm CO2.)

Meteorologist John Coleman perspicaciously asks:

How can this tiny trace upset the entire balance of the climate of Earth? How can a trace element possibly be the cause of systemic Global Warming? It can't. That's all there is to it; it can't.... Carbon dioxide does not cause significant global warming.

Increased levels of CO2 has more likely benefited all life forms on the

planet, summarizes Coleman. Many other scientists have come to the same conclusion.

Robinson, Robinson & Soon, in their cogent 2007 published research paper found here, provided empirical evidence that invalidates AGW alarmists hypotheses. They also found overwhelming support for the general benefits that are derived from natural global warming.

Here is the summary of their findings:

1- A review of the research literature concerning the environmental consequences of increased levels of atmospheric carbon dioxide leads to the conclusion that increases during the 20th and early 21st centuries have produced no deleterious effects upon Earth's weather and climate. There are no experimental data to support the hypothesis that increases in human hydrocarbon use or in atmospheric carbon dioxide and other green house gases are causing or can be expected to cause unfavorable changes in global temperatures, weather, or landscape. There is no reason to limit human production of CO2, CH4, and other minor green house gases as has been proposed.

2- Predictions of catastrophic global warming are based on computer climate modeling, a branch of science still in its infancy. The empirical evidence - actual measurements of Earth's temperature and climate - shows no man-made warming trend. Indeed, during four of the seven decades since 1940 when average CO2 levels steadily increased, U.S. average temperatures were actually decreasing.

3- Increased carbon dioxide has, however, markedly increased plant growth. Predictions of harmful climatic effects due to future increases in hydrocarbon use and minor greenhouse gases like CO2 do not conform to current experimental knowledge.

4- While major green house gas H2O substantially warms the Earth, minor green house gases such as CO2 have little effect.... The 6-fold increase in hydrocarbon use since 1940 has had no noticeable effect on atmospheric temperature or on the trend in glacier length.

5- Solar activity and U.S. surface temperature are closely correlated...., but U.S. surface temperature and world hydrocarbon use are not correlated.

6- We also need not worry about environmental calamities even if the current natural warming trend continues. The Earth has been much warmer during the past 3,000 years without catastrophic effects. Warmer weather extends growing seasons and generally improves the habitability of colder regions.

7- Human use of coal, oil, and natural gas has not harmfully warmed the Earth, and the extrapolation of current trends shows that it will not do so in the foreseeable future. The CO2 produced does, however, accelerate the growth rates of plants and also permits plants to grow in drier regions. Animal life, which depends upon plants, also flourishes, and the diversity of plant and animal life is increased.

Dr. Michael Griffin, the new NASA Administrator, looks at climate change in a refreshingly contrarian fashion. He has stated:

To assume that [climate change] is a problem is to assume that the state of earth's climate today is the optimal climate, the best climate that we could have or ever have had and that we need to take steps to make sure that it doesn't change.

There are other fundamental objections to the AGW theory:

(1) The infamous "Hockey Stick" statistical debacle, nicely summarized here, effectively cherry-picked data from tree rings to estimate temperature change over the past 1000 years. The report erroneously declared that the largest increases in world temperature occurred in the 20th century. These results could not be reproduced by anyone. The U.S. National Academy of Sciences (NAS) later found the statistical methods first employed inappropriate and the findings bogus.

(2) The reported NASA temperature data glitch discovered by Canadian Computer Analyst Steve McIntyre that wrongly kicked all temperature records up several tenths of a degree was a severe setback for AGW modelers. This software "failure" was overseen by one of AGW's fiercest proponents, the notorious Dr. James Hanson. NASA's GISS and Hanson have recently come under fire again for poor data collection methods and

questionable accuracy.

(3) As recently presented in American Thinker, Lord Monckton competently summarizes for us that many of the highly publicized AGW "facts" are simple documented anomalies of natural climate cycling -- designedly misrepresented for the cause of AGW.

To wit: The Oceans are not catastrophically rising nor are they warming. In fact, the oceans have been cooling since 2003. The Snows of Kilimanjaro are not melting but ablating because of friction due to a cooling atmosphere and natural cooling trends. The world's 160,000 glaciers are not suddenly receding, but appear to be re-advancing, including those ice shelves in Antarctic and the polar ice sheets, all of which cycle regularly in ice mass. Lord Monckton, a science-journalist, provides even more evidence here.

(4) Finally let us not forget the astute investigation of automated weather stations by US Meteorologist Anthony Watts. Watts painstakingly discovered that a large fraction of the nation's 1,200 stations have been wrongly sited in man-made heat-absorbing centers. (Examples include locations on rooftops, on slabs of heat absorbing concrete, next to air conditioners, diesel generators and asphalt parking lots, even at sewage treatment plants. Some are located in areas experiencing excessive nighttime humidity, and at non-standard observing heights, including one actually sinking into a swamp.) Watts' discovery profoundly undermined the veracity of historical temperature data documented in the United States -- data that had been used by AGW proponents.

There are three indisputable and fundamental facts that were wantonly ignored in the UN's IPCC sham of a report. The UN breathlessly but insidiously "forgot" to include the specifics that:

(1) The Earth has largely benefited by past warming cycle's and that these previous "warmings" had nothing to do with man's activities. These earlier natural cycles were not catastrophic events; they were, in fact, beneficial to all life forms. They provided warmer and longer growing seasons, more areas available for crops, etc. We know, for instance, that Greenland was once green, that Eric the Red planted and grew grapes in what is now Nova Scotia, Canada, that the Romans planted grapes in England, etc.

(2) Solar/Sun Spot activity is the originator of most climatic change and

most weather patterns on Earth. It is king. There is no larger factor of influence. CO2 influence is negligible and pales in comparison. CO2 follows the trend of temperature; it does not cause it.

(3) Subordinate to solar activity alone, atmospheric water vapor/cloud formation and movement is the largest known variable that influences temperature changes in the atmosphere of the earth, and the earth's oceans. Water vapor in the atmosphere is around 1000-10,000 times as important as atmospheric CO2.

These three quintessential and pivotal factors are not even discussed in the UN's IPCC report. This exclusion should raise a red flag in any intelligent mind. That's why so many of us are yelling from the rooftops about the absurdity of the report itself!

Instead of a true and open discourse, we see the daily dribble from the MSM and various liberally usurped science journals, dishonestly and falsely alleging a "consensus" when there is none.

Indeed, arrayed against the arcane burlesque of the United Nations IPCC with its politically selected 2500 Scientists, of which a core group of 600 exists, and a relatively small number of mediocre "scientists" here and there across the American landscape who have suddenly found notoriety or grant money in the global warming cause, are 31,072+ legitimate and viable scientists (of which I am one) who signed the American Petition Project declaring the Global Warming Hypothesis bogus found here, here and here. We openly refute the UN's conclusions.

Here's the Petition Statement we dissenters signed in opposition:

"We urge the United States government to reject the global warming agreement that was written in Kyoto, Japan in December, 1997, and any other similar proposals. The proposed limits on greenhouse gases would harm the environment, hinder the advance of science and technology, and damage the health and welfare of mankind.

"There is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gasses is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate. Moreover, there is substantial scientific

evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plant and animal environments of the Earth."

Let me assure you that we're not in good humor, nor take it kindly to be slurred and ridiculed by taking the other side in this debate. And our numbers are still growing. Indeed, we're angry that the vast majority of American Scientists will not be heard by the media. We're dismayed over the fact that the Global Warming fiasco has become politically popular and expedient to those left-wing politicians and power-brokers whose sole aim is to literally tax everything with a carbon footprint and give them control over all life, hidden within their PC guileful pretence to save the planet. They wish to save no one but themselves.

And the tide turns further. Of the 2500 originally aligned scientists and putative authors of the UN's IPCC report some 500 are no longer faithful to Big Al's errand. Many of these scientists discovered that their individual findings and comments were willfully misrepresented. All participant conclusions were unilaterally changed to adhere strictly to the United Nations objective of building support for world taxation and rationing of industrially useful energy. Since the original IPCC report (and there have been some 4 others now formally issued), the defecting 500 scientists have issued public statements challenging global warming. Approximately 100 of these scientists are now open defectors. Others are currently suing the UN for the misuse of their good names and research. It is difficult to see why a thinking person would even consider the IPCC report as legitimate.

The entire IPCC process is but obfuscation by the secular and atheist Left. It has allowed the Left to conflate the vanity of secular opinion with scientific and/or moral truth. There is an easy and immediate remedy for their debacle. Will Rogers stated it simply: "When you are in a hole ... stop digging.... Please!"

Y'all Come – Texas Mini

The Texas Mini in Weslaco is coming up in March. Put the dates on your calendar and make your reservations. Escape from winter weather for a few days if you live 'up north'.

Here's some things to consider if you come to TX.

If you are mobiling, try the following scenic routes!

a) FM 170 between Lajitas and Presidio – Texas Parks and Wildlife Web site calls this 45 mile stretch through rugged desert terrain along the Rio Grande 'among the most spectacular [scenic drives] in the nation.

b) Devil's Backbone – The Devil's Backbone is a winding razorback ridge with wonderful vistas of Hill Country landscape. It runs along 24 miles of Ranch to Market Road 32 between SU Highway 281 and RM12 south of Wimberley.

http://www.texasescapes.com/TRIPS/Texas-Scenic-Drive-RR12-Devils-Backbone.htm

c) Willow City Loop – The narrow 13 mile road goes up hills, over cattle guards and along side meadows studded with rock outcroppings and cut by shallow streams. Take Ranch to Market Road 1322 east from Texas Highway 16, about 14 miles north of Fredericksburg, and follow the Willow City Loop signs.

http://www.lone-star.net/wildflowers/willowcityloop.htm

d) River Country – Roads along the Frio, Guadalupe, Nueces and Sabinal rivers west of San Antonio provide one beautiful view after another. Some of the best include State highway 16 from Kerrville to Medina, Ranch to Market 337 from Medina to Leakey or Camp Wood, Highway 55 to Barksdale and RM 335 to State Highway 41, RM 187 from Sabinal through

Utopia and Vanderpool, and US83 and RM 336 north from Leakey to Highway 41.

e) Big Thicket – Virtually undisturbed parts of the Big Thicket survive in Sam Houston National Forest. Take Highway 150 west from Coldspring, then FM 2025 and Forest Service road following the signs to Double Lake Recreation Area.

http://www.bigthicketdirectory.com/

f) Skyline Drive – Skyline Drive through the Davis Mountains State park – plus a 74 mile loop following Highway 17 south out of FT Davis to Highway 166, looping west to highway 118 and back to Ft. Davis. Drop by the McDonald Observatory if you wish.

g) Silverton to Claude along Highway 207 – This may be the most impressive 53 miles of road in the state. Along the way, you experience miles of flat high-plains agricultural land, then plunge successively into Tule Canyon, with magnificent knife-edge buttes, and Palo Duro Canyon, a riot of color that unfolds as you drive.

http://www.palodurocanyon.com/

Some other things to consider – The Texas Ranger Museum in Waco TX – right off the interstate open 364 days a year - excellent collection of Colt pistols and firearms. Or if you are/were Southfork fan (the TV series Dallas), you can visit the Southfork Ranch in Parker TX. Or the Alamo in San Antonio or RiverWalk in Austin. Caverns of Sonora. The TX Windpower Museum in Lubbock.

http://www.texasranger.org/

http://southfork.com/

http://www.thealamo.org/main.html

http://www.moon.com/planner/austin/mustsees/riverwalk.html

http://www.cavernsofsonora.com/

http://www.windmill.com/

If you head down I35 about 1 hour from Dallas, you'll probably see Bruco, the Catepillar, on the east side of the road at the exit for Italy. Take the exit and head into the gas station on the east side of the road. At the interstate side of the parking lot is a road that heads down to the monolithic dome institute – about 1 mile down. They have a visitor center there with a short (15 minute) video about monolithic dome construction, and about 50 dome homes you can look at the outside and one or two you can view the insides.

Bruco the Monolithic Dome Catepillar (about 300 feet long)

http://static.monolithic.com/

If you are looking for something different, how about visiting the King Tut Exhibition at the Dallas Museum of Art? Featuring some of the rarest artifacts, the exhibition is expected to draw 1 million visitors on its six month run.

http://dallasmuseumofart.org/Dallas_Museum_of_Art/View/Tut/index.htm

There is a hefty admission fee, but you don't get to see something this rare too often.

"*Tutankhamun and the Golden Age of the Pharaohs*, the exhibition that drew nearly four million visitors during its two-year, four-city tour, will return to the United States for a three-city encore tour. Following the success of the first tour, which broke records at each of the four museums it visited in the United States from June 2005 through September 2007, the exhibition will return from its current London engagement to open at the Dallas Museum of Art in October 2008..

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Since opening in June 2005, *Tutankhamun and the Golden Age of the Pharaohs* has drawn nearly four million visitors, setting records in each city it has visited, including Los Angeles, Fort Lauderdale, Chicago, and Philadelphia. With nearly 1.3 million visitors at The Franklin Institute in Philadelphia, the exhibition became the most popular museum exhibition in the state's history.

Tutankhamun was one of the last kings of Egypt's 18th Dynasty and ruled during a crucial, turmoil-filled period of Egyptian history.The boy king died under mysterious circumstances around age 18 or 19, in the ninth year of his reign (1323 B.C.).

Tutankhamun and the Golden Age of the Pharaohs offers glimpses of that evolving period. On display are fifty of Tutankhamun's burial objects, including his royal diadem — the gold crown discovered encircling the head of his mummified body that he likely wore as king — and one of the gold and precious stone inlaid canopic coffinettes that contained his mummified internal organs.

More than seventy additional objects from tombs of 18th Dynasty royals, as well as several non-royal individuals, are also exhibited. These stone, faience, and wood pieces from burial sites before Tut's reign give visitors a sense of what the lost burials of other royalty and commoners may have been like. "

Obama's Prediction

It's amazing what a few months will do to political statements!

"Retail Sales Plummet," read the Christmas headline in the Wall Street Journal. "Sales plunged across most categories on shrinking consumer spending."

Hey, that's great news, isn't it? After all, everyone knows Americans consume too much. **What was it that then Senator Obama said on the subject? "We can't just keep driving our SUVs, eating whatever we want, keeping our homes at 72 degrees at all times regardless of whether we live in the tundra or the desert and keep consuming 25 percent of the world's resources with just 4 percent of the world's population, and expect the rest of the world to say you just go ahead, we'll be fine."**

And boy, we took the great man's words to heart. SUV sales have nosedived, and 72 is no longer your home's thermostat setting but its current value expressed as a percentage of what you paid for it. If I understand then Senator Obama's logic, in a just world Americans would be 4 percent of the population and consume a fair and reasonable 4 percent of the world's resources. And in these last few months we've made an excellent start toward that blessed utopia: Americans are driving smaller cars, buying smaller homes, giving smaller Christmas presents.

And yet, strangely, President-Elect Obama doesn't seem terribly happy about the Obamafication of the American economy. He's proposing some 5.7 bazillion dollar "stimulus" package or whatever it is now to "stimulate" it back into its bad old ways.

And how does the rest of the world, of whose tender sensibilities then Senator Obama was so mindful, feel about the collapse of American consumer excess? They're aghast, they're terrified, they're on a one-way express elevator down to Sub-Basement Level 37 of the abyss with no hope of putting on the brakes unless the global economy can restore aggregate demand. What does all that mumbo-jumbo about "aggregate demand"

mean? Well, that's a fancy term for you — yes, you, Joe Lardbutt, the bloated disgusting embodiment of American excess, driving around in your Chevy Behemoth, getting two blocks to the gallon as you shear the roof off the drive-thru lane to pick up your $7.93 decaf gingersnap-mocha-pepperoni-zebra mussel frappuccino, which makes for a wonderful cool refreshing thirst-quencher after you've been working up a sweat watching the plasma TV in your rec room all morning with the thermostat set to 87.

The message from the European political class couldn't be more straightforward: If you crass, vulgar Americans don't ramp up the demand, we're kaput. Unless you get back to previous levels of planet-devastating consumption, the planet is screwed."

Source: http://article.nationalreview.com/?q=YmFlNDI3OWIwM2JmOTRlMzc...

Green Jobs

http://article.nationalreview.com/?q=Yjc1ZjNjZDQ4NTIwOTBmYzN...

The "green" jobs enthusiasts are making a classic error illustrated by the 19th-century French economist Frédéric Bastiat. When a railroad was under construction from France to Spain, someone in Bordeaux suggested that there be a break in the tracks to boost the town's economy with all the extra work for porters to cart luggage between trains. Bastiat pointed out that if breaks in the tracks were such an economic benefit, every town should have one and France should build a "negative railroad" consisting entirely of interruptions.

Of course, the French economy benefited much more from a real railroad delivering the efficient and cheap transport of goods. The push for "green" jobs is about creating a "negative" energy sector — hampering the energy sector we already have to create one that requires more labor.

To make people buy biofuels or wind power, either these energy sources have to be subsidized (draining resources away from more productive uses) or traditional sources of energy have to be taxed or regulated, which is what Obama proposes with his cap-and-trade plan on carbon emissions. The latter policy will cost jobs in the traditional energy sector and leave consumers with less to save and spend elsewhere. As Iain Murray of the Competitive Enterprise Institute points out, advocates of "green" jobs always emphasize the gross rather than the net job figures because a more complete picture shows they are ultimately subtracting, not adding

County Hunter News Quiz

It's been a few months since the last CHNews Challenge.

You can drive to Austin, TX, on the Interstate Highways. You can drive to Albany, NY on the Interstate Highways. It's hard to miss Little Rock, AR as you drive on any interstate in ARK. Lots of county hunters have been all over the country – and most county hunters likely can name most of the counties in the differing states by name and where they are in the state. Many county hunters have been in, through, or passed by, the State Capitols of dozens of states. Some National Conventions have been in state capitols.

So the quiz for the county hunters this month is:

There are 5 states that you cannot drive to the State Capitol on an interstate highway. Name those five states.

LEDs – More Info

“ScienceDaily (Dec. 20, 2008) — A "revolution" in the way we illuminate our world is imminent, according to a paper published this week by two professors at Rensselaer Polytechnic Institute.

Innovations in photonics and solid state lighting will lead to trillions of dollars in cost savings, along with a massive reduction in the amount of energy required to light homes and businesses around the globe, the researchers forecast.

A new generation of lighting devices based on light-emitting diodes (LEDs) will supplant the common light bulb in coming years, the paper suggests. In addition to the environmental and cost benefits of LEDs, the technology is expected to enable a wide range of advances in areas as diverse as healthcare, transportation systems, digital displays, and computer networking.

"What the transistor meant to the development of electronics, the LED means to the field of photonics. This core device has the potential to revolutionize how we use light," wrote co-authors E. Fred Schubert and Jong Kyu Kim.

Researchers are able to control every aspect of light generated by LEDs, allowing the light sources to be tweaked and optimized for nearly any situation, Schubert and Kim said. In general LEDs will require 20 times less power than today's conventional light bulbs, and five times less power than "green" compact fluorescent bulbs.

If all of the world's light bulbs were replaced with LEDs for a period of 10 years, Schubert and Kim estimate the following benefits would be realized:

- Energy savings of 1.9×10^{20} joules
- Electrical energy consumption would be reduced by terawatt hours
- Financial savings of $1.83 trillion
- Carbon dioxide emissions would be reduced by 10.68 gigatons
- Crude oil consumption would be reduced by 962 million barrels
- The number of required global power plants would be reduced by 280

With all of the promise and potential of LEDs, Schubert and Kim said it is important not to pigeonhole or dismiss smart lighting technology as a mere replacement for conventional light bulbs. The paper is a call to arms for scientists and engineers, and stresses that advances in photonics will position solid state lighting as a catalyst for unexpected, currently unimaginable technological advances.

"Deployed on a large scale, LEDs have the potential to tremendously reduce pollution, save energy, save financial resources, and add new and unprecedented functionalities to photonic devices. These factors make photonics what could be termed a benevolent tsunami, an irresistible wave, a solution to many global challenges currently faced by humanity and will be facing even more in the years to come," the researchers wrote. "Transcending the replacement paradigm will open up a new chapter in photonics: Smart lighting sources that are controllable, tunable, intelligent, and communicative."

Possible smart lighting applications include rapid biological cell identification, interactive roadways, boosting plant growth, and better supporting human circadian rhythms to reduce an individual's dependency on sleep-inducing drugs or reduce the risk of certain types of cancer.

http://www.sciencedaily.com/releases/2008/12/081217074908.htm

Note de N4CD – you're likely already seeing LEDs in many traffic lights and tail lights in cars these days. Soon, possibly home light bulb replacements. In the future, homes designed to use LED lighting.

The Hybrid Models Coming

"The Ford Fusion hybrid will be the most fuel-efficient midsize sedan on the market when it arrives this spring, clocking in at 41 miles per gallon, according to data given to Ford Motor by the Environmental Protection Agency.

That will make it the second-most fuel-efficient vehicle on the road, according to a ranking published on the EPA's website, behind the smaller

Toyota Prius and ahead of the smaller Honda Civic hybrid.

It's a huge marketing gain for Ford as it attempts to green up its image and improve fuel efficiency across the board. The Fusion hybrid will cost about $27,000 vs. roughly $24,000 for the conventional Fusion model.

"Our overall strategy is to ensure that with every new vehicle we introduce, we're either the best or among the best in fuel economy," says Derrick Kuzak, vice president of global product development for Ford. "Clearly fuel economy … is at the top of the list of customer wants."

Source: USA Today

Michigan Mini

For the 'northerners', put the MI Mini on your calendar.

April 23, 24, & 25 2009

West Bay Holiday Inn
615 East Front St
Traverse City, MI 49684

SAME FORMAT AS LAST YEAR

Registration $15, Guest $5.
Saturday Banquet $24 per person, (Everything Included).

Motel Rates $75 per night, plus taxes
Check out the Holiday Inn website at www.tcwestbay.com

More information later

Peak Oil News

Dec. 22 -- Petroleos Mexicanos, the state-owned oil company, said crude oil output fell 6.5 percent in November from the year-earlier period as production at its Cantarell field declined at a faster-than-expected rate.

Production dropped to 2.711 million barrels a day, from 2.901 million barrels a day a year earlier, the company known as Pemex said today on its Web site. Pemex cited Cantarell, its largest field, as the reason for the drop.

The Mexico City-based company in October lowered its 2008 output forecast by 3.6 percent to as low as 2.7 million barrels a day after interruptions from hurricanes. It was the third time Pemex reduced its forecast this year, after a faster-than- expected decline at Cantarell, the world's third-largest field.

Declining pressure at Cantarell has made it more expensive and harder to continue pumping oil from the offshore deposit. **Cantarell's output fell 32 percent last month from a year earlier, more than twice as fast as government estimates.**

Cantarell has shrunk to account for about half of the 65 percent of Mexico's oil output it once represented.

Oil exports fell 20 percent to 1.511 million barrels a day, according to a chart on Pemex's Web site.

Mexico is the third-largest supplier of crude to the U.S. Canada and Saudi Arabia are the first- and second-largest suppliers. "

Source:
http://investorvillage.com/smbd.asp?mb=2234&mn=167044&pt=msg&mid=6345690

At this rate, Mexico won't have any oil to export within 3 years. Not a problem – Obama will invent magic energy bullets. Meanwhile, we import more from the Middle East – the folks who don't especially like us, but love our money.

Top Ten Oil Stories of 2008

From R-squared at the Oil is not Well board

“1. Unprecedented volatility in the energy markets

Oil prices raced to nearly $150 a barrel, and then fell to the $30's by year end. This marks the highest ever prices for oil, followed by the lowest prices in four years. Gasoline, diesel, and natural gas prices demonstrated the same kind of volatility. There are multiple factors behind the volatility. The role of speculation was hotly debated, and the economic collapse - fueled by cash-strapped consumers who had overextended themselves - resulted in a sharp drop in demand. Some even argued that the real reason behind the plunge in prices was closure of the so-called "Enron loophole."

2. Oil price volatility fallout

A consequence of the incredibly volatility was the economic damage done at both ends of the price spectrum. At the upper end, airlines were going bankrupt and car companies were in deep financial trouble as consumers stopped buying the higher profit margin SUVs. After oil prices plunged, some non-integrated oil companies found themselves in financial trouble, including Flying J who declared bankruptcy.

3. Barack Obama elected

In a normal year, this would have been my #1 story, especially considering that the new administration is likely to attempt a major shift away from

fossil fuels. My prediction is that reality is going to collide with enthusiasm, and while gains are likely to be made along several fronts, aggressive renewable energy targets will not be met.

4. Ethanol producers struggle

Despite production mandates and generous federal subsidies, ethanol producers struggled to make a profit. A combination of high corn prices followed by falling fuel prices pushed even some of the largest ethanol producers to bankruptcy. Corn growers fared much better, as higher prices and mandated demand from the ethanol industry provided them with the same sort of windfall seen recently by the oil industry (prompting some to ask whether a windfall profits tax on corn would be good for consumers). Xethanol finally ceased operations, as I had predicted in early 2007.

5. Somali pirates hijack supertanker

Somali pirates, emboldened by recent multi-million dollar ransom payments, hijacked a Saudi supertanker carrying $100 million worth of oil. At the time of this writing, the situation remains unresolved, although the value of the oil at current market prices is now considerably less than $100 million.

6. 2nd generation ethanol is delayed

The story this year was supposed to be "2nd generation ethanol production begins", but alas the over-promise, under-deliver meme that I have been critical of continues. Range Fuels had initially intended to start producing in 2008, but that was delayed to 2009 and now production isn't forecast to begin until 2010. Meanwhile, other 2nd generation ethanol companies

continue to promise the world, including Coskata who claims they can make ethanol for "under US $1.00 a gallon anywhere in the world) Finally, according to this source (another here), of the six cellulosic ethanol projects selected to receive $385 million in federal funding in February 2007, almost two years later only one plant is actually under construction (Range Fuels).

7. Peak oil becomes fashionable, then unfashionable again

High oil prices demanded an explanation, and peak oil was ready to provide that explanation. 2008 was probably the year that the mainstream began to seriously discuss and debate peak oil. However, when prices began to plunge, the peak oil skeptics began to say "I told you so." Others suggested that this was just a continuation of the normal cycles.

8. Gas stations in the southeast run out of gasoline in the wake of Hurricanes Gustav and Ike

Some major oil refineries that shut down in the face of Hurricane Gustav had to remain shut down with Hurricane Ike following closely behind. Gasoline inventories heading into the hurricanes were low, so it wasn't long before spot outages began to show up across the southeast. As I predicted during a panel session at this year's ASPO conference, the outages were likely to be short-lived, and inventories would recover as refineries came back online. This was in response to wide-spread concern, partially fueled by Matt Simmons' presentation, that the outages were the beginning of something much more widespread. (I think my answer was literally "This situation is temporary. I expect inventories a month from now to be substantially higher.")

9. "Drill here, drill now"

Momentum for more exploration and production in U.S. waters increased along with oil prices. This became a campaign theme for Republicans, who adopted the slogan "Drill here, drill now." President Bush lifted a moratorium on offshore drilling. Democrats initially responded with calls for oil companies to be forced to drill on current leases before opening up new ones. However, Congress - facing constituents unhappy with high gas prices - ultimately followed suit and allowed the 25-year moratorium to expire. The response from then candidate Obama was that he wasn't happy to see the moratorium expire, and that he favored "responsible" drilling as part of a broader energy package. My own proposal was to allow drilling and funnel the lease proceeds to alternative energy, mass transit, and other initiatives designed to reduce oil consumption. This proposal later received quite a lot of attention when Paris Hilton proposed the same thing.

10. Record profits by US energy companies

On the back of high oil prices, the integrated oil companies (those who produce both oil and refined products like gasoline and diesel) once again saw record profits. There was an interesting dichotomy, however, as downstream profits in the refining sector vanished as gasoline consumption fell. Pure refiners like Valero saw their profits crash.

That's more or less what I think were the Top 10 stories of 2008. There were quite a few in the honorable mention category, such as T. Boone Pickens energy plan, the decision by OPEC to reverse direction and propose big production cuts, falling oil production in Russia and Mexico, and postponed investments in the wake of lower prices."

Other news items lately

 Delays in energy investments could curb future global fuel supplies by the equivalent of 4 million b/d within the next five years, according to Peter Jackson, Cambridge Energy Research Associates. As scores of small wells

are shut down, analysts have calculated that oil production in North America could decline by 1.3 million barrels a day through 2010, or 17 percent, to 6.14 million barrels a day.

 Oppenheimer & Co. senior oil analyst Fadel Gheit estimates **world oil supply** is likely to drop by three million to five million barrels a day in 2009, due to OPEC cuts and smaller companies slashing production, compared with a decline of just one million to two million barrels a day in global oil demand. This scenario of over tightening supply relative to demand would reduce global oil inventories a record 10% to 30%, pushing crude prices significantly higher later in 2009, Mr. Gheit said

 Oil companies have begun cutting spending nearly across the board. A survey by Barclays Capital found 2009 capital budgets were 12% lower than 2008 spending plans, and some believe they might head lower. Budgets in the U.S. and Canada are being cut the most, as projects in the high-cost oil-sands and unconventional natural-gas fields now make less economic sense.

 Russia would come under crippling financial pressure and may need to raise money abroad if oil stays at an average of $30 a barrel over the next two years, the World Bank predicted Friday. The bleak scenario would mark a rapid unraveling of Russia's oil-fueled economic gains over the past eight years.

 Because **Russia's oil output** is falling due to underinvestment, Russia already is, in effect, helping OPEC without actually turning off any taps. Any reduction from Russia, depending on the size, could simply be repackaging naturally declining output as a "cut."

 A survey of 200 oil and gas companies shows the **oil price** required to allow new oil projects to break even has climbed from about $18 US per barrel in 1999 to $60 in 2007 and an estimated $62 now…In addition to jeopardizing future conventional oil projects, oil at $45/barrel makes new tar sands production uneconomic, has the same effect on biofuels, and discourages development of more fuel efficient vehicles.

 Iran's oil minister said he considered the "real price" for a barrel of crude should be more than $100. Saudi Arabia has said $75 a barrel was a fair price, comments echoed by an Iranian official this month. Other OPEC officials have said OPEC states needed $70 to $80 a barrel.

 Last week **Iran's President Ahmadinejad** acknowledged for the first time that due to low oil prices the Government will have to cut spending and subsidies for food and fuel, as well as raise taxes.

 John Holdren, currently a Harvard University physicist, has been selected as President-elect's Science Advisor. Holdren has said recently that the world is not running out of energy and that even "peak oil" is debatable.

 A coalition of 14 companies announced the creation of a new business alliance aimed at promoting domestic production of **lithium ion batteries**. Automakers hope to use the batteries in next-generation hybrids as well as plug-in electric cars.

 Recent analysis by the **EIA** projects virtually no growth in US petroleum use through the year 2030 because of wider use of ethanol and biodiesel and a push toward greater automobile fuel efficiency. The reversal began this year with US petroleum use declining by a million barrels a day compared with 2007.

 Nepal's government declared a national power emergency and said consumers will face electricity cuts of as much as 16 hours a day.

 Facing poor returns for producing gasoline, **Valero Energy Corp.** reduced gasoline production at 10 U.S. refineries.

 Gazprom said it would cut Ukraine off from gas supplies starting in January as Kiev could only pay $800 million in gas arrears before the end of the year.

 The United States will not be able to meet the mandate to use 36 billion gallons of **biofuels** by 2022, reported the U.S. Energy Information Administration Wednesday.

 International oil companies operating in **Nigeria** said that if cases of insecurity should continue in the oil and gas producing zones, they may be forced to stop the production and supply of gas.

 Expanding its output of lower-emission fuel, **Exxon Mobil Corp.** said it would spend more than $1 billion to increase diesel production at two US refineries and a third in Belgium. Exxon sees a growing market for diesel,

which provides better fuel economy than gasoline and therefore emits less carbon dioxide for each mile driven.

 Venezuela's PdVSA, which has served as the sole engine of growth for Venezuela's economy, now faces one of its biggest challenges since President Hugo Chavez took office: keeping up production with less money and funding the spending of a bloated government.

 Proved reserve reductions: Many companies will likely be forced to declare that big chunks of their oil and gas reserves are uneconomic at today's low oil prices. Smaller companies that rely on their reserves as collateral on their credit lines from banks could find their available credit shrinking along with the value of their booked reserves. “

Source: From the Oil is not Well board.

CW TOTALS

Time to send in your year end totals to Elwood for the annual CW compilation of county hunter’s progress toward their awards. Please send your cw totals (for first time USACW or Nth time CW) to Elwood at:

ka3mmm@pa.net

Results will appear in the Feb Issue of the CHNews. Even if you only have 300 toward first time, send in your results on be on the list of CW county hunters!

Awards

USACA #1174 , Ed, N3HOO, November 28, 2008
USACA #1175, Phil, AA9ZZ, December 6, 2008
USACA #1176, Chuck, W4QNW, December 12, 2008
USACA #1177, Greg, NM2L, December 16, 2008
USACA #1178, Judy, KB9MGI, December 16, 2008
Third Time #318, Jim, N1BY, December 17, 2008

Events for County Hunters

Nothing specifically for county hunters in January. There are two RTTY contests, the North American QSO Party for some band-counties, but no state QSO Parties. There are 160M contests, DX contests, Straight Key Night and a VHF contest (band counties there, too).

Source: www.arrl.org/**contest**s/months/jan.pdf

Answer to the Quiz

Juneau, Alaska
Jefferson City, MO
Dover, DE
Pierre, SD
Carson City, NV

See y'all next month! If you have some interesting county hunting experiences or tales, share them with the folks. Contributions and pictures welcomed!