## **County Hunter News**

October 1, 2011 Volume 7, Issue 10

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

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

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

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

CW County Hunter Nets run on 14.0565, 10.122.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, there is SSB activity now is on 'friendly net' 7188/7185 KHz. The cw folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB. (21.336 and 28.336)

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: <u>http://countyhunter.com/cq.htm</u>

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

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at: <u>http://countyhunter.com/marac\_information\_package.htm</u>

The CW net procedure is written up at:

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

There is a lot more information at <u>www.countyhunter.com</u>. Please check it out. Back issues of the County Hunter News are available at <u>www.CHNewsonline.com</u>

De N4CD, Editor (email: telegraphy@verizon.net)

### Notes from the Editor

1) The end of summer provided lots of opportunities for counties. While the kids are back in school, and the long vacation trips over for those working, we are back into state QSO Party season for the fall. Watch out for those school zones!

During late August and September, we had many great state QSO parties allowing folks to get the better part of 500 counties if they participated. While most of the activity was CW, more and more activity is seen on digital, and some of the QSO parties have a fair representation of SSB activity. We've included many of the reports on the state QSO party mobiles and stations participating. Where else would you learn about the Breckenridge Duck Race? The tales and tribulations of those trying to put out the counties makes interesting reading.

2) Propagation – it's been up and down. The sunspot number continues to rise, but many days have high A index values making things very flakey. Some days you just don't seem to hear mobiles and other days it's pretty good for snagging needed counties. 17M has mot had a lot of activity and in most of the state QSO parties, folks complain about lack of 15m contacts. The Salmon Run saw a lot of 10 and 15m contacts as the band 'popped open' for hours!

3 ) Weather - The summer high power usage is tapering off so maybe the power lines will be arcing a whole lot less as we go into fall weather. We'll save a few bucks on air conditioning. Dallas set the all time record for days above 100 degrees- 70 of them, and many daily high temp records. The same is true for much of the area under the persistent high in TX, which has also brought extreme drought and forest fires through TX, OK NM, AZ, and even CA. The hot weather didn't seem to affect county hunting too much though and one can't complain about lack of rain while out mobile, either. 25% of the entire county of Bastrop essentially went up in flames and over 1500 houses were lost in the blazes. Meanwhile up north, folks are cutting down trees, hauling it back, cutting it and splitting it in contemplation of winter heating season. If you go to New England, one of the most popular topics on the 2m repeaters is 'how much firewood have you stashed away now?' - hi hi.

If you are headed to Vermont for the fall foliage season, they are scrambling up there to re open all the roads closed in the aftermath of the hurricane. Most things should be back to normal but expect many side streets to still be closed. Most businesses are in a panic mode to repair damage and be open.

4) Hamfest Season – the summer hamfest season is over, but we still have a month of fall hamfest season – with mobiles headed to and from them. I've been to a dozen hamfests since spring and there are a few remaining ones to head to – so more counties to come. It's nice meeting county hunters at the various hamfests around the country. Every now and then you find some goodies to bring home, too!

There's a bunch of everything in this issue, so enjoy. Let the editor know what you like and what you don't. If you've taken any interesting trips, send in some pics and a paragraph or two about your adventures.

### Mobile Activity – End of August – mostly cw, some SSB

Bill, K2HVN, slowly worked his way from Washington state back east.

Joe, N5UZW, took a nice trip up to MO and ran lots of counties around the state. He's working on his Mobile Diamond transmit counties.

Jim, N9JF, left SC before the hurricane headed that way – and headed back to IL. Then he was off on other trips here and there.

W8FNW/W4FNW were up in MI putting out the counties. Al, W8GEJ, wasn't along on this trip. Later in the month, all three were on the road putting out northern counties in OH.

Greg, NM2L, headed up to New England running them on CW. A few weeks later, he headed into NY state, ran many there, then back to GA.

Lloyd, NX4W, was out and about in GA – putting them out on SSB and digital.

Dan, AA0TT, big rig, was out and about in KS and CO.

Karl, K4YT, headed up to NJ. Another day he was mobile over in WV.

Kirby, W8DCD, spotted out in KY

Tom, K8YJ, was over in KY putting them out.

Jon, W0ZQ, spotted out in IA. Then he ran in the KS QSO Party (coverage later).

Then we had the weekend of the HI, OH, and KS QSO Party. Many county hunters participated. Extensive coverage later.

Barry, N0KV, and Pat, N0DXE, made a trip through WY, to ID and over to UT. They were cleaning up some of Barry's needs and getting the next to LC WBOW for Pat for her Bingo.

Here's a quick report from them:

"Had a good trip to UT, ID and WY, Aug 27 – Aug 31. Got a few master gold's, transmitted from last 3 in southern ID (just Clearwater left in N. ID), and spent a day in Yellowstone, and gave out a number of last counties. (1813 qso's in 41 counties.) Pat drove most of the time so did a lot of CW. "

Larry, N2OCW, was out and about in WV and PA.

Bob, KA9JAC and Ann, KB9YVT spotted in counties in WI.

W7IN and N7COA seen giving out counties on SSB.

N4AAT, Scottie, headed out on a trip to WI, putting out Mobile Diamond counties. A few days later he returned via IL, IN, OH back to SC.

Silver, N9QS, ran a few in IL.

Lowell, KB0BA, and Sandra, N0XYL, ran a few in IA.

### **September Activity**

At the beginning of September, we had the CO QSO Party and the TN QSO Party. Reports later.

Joyce, N9STL headed out for a day trip over to MO to run counties there, then back via a loop in IL to home. She's good for the Mobile Diamond Award – and trying to make at least 3 contacts on each of 2 bands.

Jim, ND9M, was out in FL.

Jim, N4JT was out on a mutli-day trip in VA, NC, and down into the top half of GA.

The 'ride along club call' W1BQL was out giving out false 'stars' for any award. Since the operator cannot give out more stars than he/she is worth, using a club call that also has a star is a direct scam on the county hunters and Logger needs to be fixed to not give credit for club call stars. Seems to be promoted by the Clubs of One(4 people) – where the operator seems to need a mini-mee to feed their egos. Two of the 'ride along club calls' have stars – giving false stars for the five star and Star X award. Likely hundreds and hundreds of bogus contacts in Logger files now from the last trips. In addition, ride along calls used by an operator with a star also give out bogus 'no star' mobile contacts. It is the operator using the call who must have no stars. Why folks run with 'club calls' giving out mostly bogus contacts is beyond me.

Dan, KM9X, was out in Indiana for a day trip.

Larry, N2OCW, put out a few in PA over the holiday weekend as he headed to/from a family picnic.

Abe, W7GQK, spotted out in SC and NC.

Joe, N5UZW, headed over to Grant, AR. (LC in AR for N4CD for MD – Tnx). Later over in MS as well.

Joyce, N9STL, made a nice trip – over to MO – down to Ripley/Oregon – then over into KY to get a bunch of the rarer ones there including Breckenridge, Meade, and many more – then into IN across the bottom into IL and home.

Jack, N7ID, was over in WA and back through ID.

Jerry, W0GXQ, headed down to TX running them on all bands. He's now good for the Mobile Diamond award (and MG, MP, contacts as well). Later he headed back to MN via KS and NE.

Paul, WD9EJK, was out and about in IL, WI, and over into IA many days this month.

Bill, K2HVN, is winding his way slowly back east through SD.

Ron, KB6UF made a short trip in LA.

Dave, KE3VV, put some out in MD.

W8FNW/W4FNW were out and about in MI

Karl, K4YT, was up in NJ and later over in WV.

Dan, AA0TT, W8RCW, KD6HWD and W7IN were putting out counties on SSB .

Don, W0EAR, was out and about in MN.

Don, N5XG took a day trip south in TX. Later he was out in west TX putting them out.

N7LFX was spotted out in OR - propagation is challenging out that way!

KB0BA, Lowell, and Sandra, N0XYL, were spotted out in KY putting out many

K6PJ headed up to MT - running many on SSB

Jim, N8HAM, was up in NY state running counties.

Larry, W7FEN, was out and about in CO.

Ed, K8ZZ, seen spotted in MI counties. Then on long trip down through IL and IN.

KC7YE noted on CW out in OR and CA.

N9STL made another trip around in MO toward the end of the month. Next it was a trip cleaning up needs in southern IL.

Ron, KB6UF, headed over to AL to get some, running through MS and putting them out.

K7TM was out and about in MT, running many of the rare ones there on cw.

Lowell, KB0BA and Sandra N0XYL were out in KY running lots for the folks.

### County Hunter News Exclusive Report

### Kalawao County, Molokai activation: A mini Dxpedition and more. August 25-29, 2011 by Bev, AH6NF

On August 25, 2011, our chartered plane, a 10-seat Piper Chieftain, took off from Honolulu International Airport for a short, 35 minute flight to Kalaupapa on the island of Molokai – a short flight, but a world away from the hustle and bustle of Honolulu where the 5 of us live. After many months of planning, we were finally on our way for a 5-day mini DXpedition to Kalawao County, Kalaupapa peninsula, to activate one of the rarest of the US counties, participate in the HI QSO Party and much, much more.



Our group at the Kalawao lookout on the east side of the

peninsula. From left to right: Bev Yuen, AH6NF; Kimo Chun, KH7U; Joe Speroni, AH0A; Ron Hashiro, AH6RH; and Jim Yuen, WH6GS.

#### Background and Location.

Kalaupapa is an isolated peninsula located on the north side of the island of Moloka'i in the Hawaiian Islands. The peninsula comprises Kalawao County, the smallest Hawaiian county and one of the smallest counties in the US. It is the site where Hawaiians, who were afflicted with leprosy (today called Hansen's disease), were sent to live, separated from society from 1866 to 1969. They now continue to live there by choice. Entry to the peninsula is difficult. There are physical barriers as well as entry restrictions. The peninsula has some of the highest sea cliffs in the world on its south side, and a coastline with high surf and hazardous ocean currents. A trail down the cliffs is suitable for mules and hardy, very fit hikers only. One airline provides passenger service to Kalaupapa. Airfare is a hefty \$500 round trip. But, entry is only by invitation of a resident or for business in the settlement or as part of one of the daytime tours.

In 1980 the Kalaupapa peninsula became a National Historical Park to preserve, protect and interpret the over 200 historic buildings and archeological sites, and to preserve the accounts of the life of the people who lived there. Currently, about 90 people live in the settlement of Kalaupapa, within the park, year round - former patients, Department of Health and National Park Service staff. Life there is at a slower pace, the tempo of a small town of many years ago. Everything is within walking distance.

While there are modern communication systems (i.e., telephone, high speed Internet), residents have been concerned that there is no backup communications during the frequent power failures and for potential disasters. This became evident during the recent tsunami following the earthquake in Japan on March 11, 2011. While little damage was done, residents had to be evacuated in the middle of the night to higher ground on the peninsula and had limited connection with the outside world. Having licensed ham radio operators would give residents backup communications and needed security that they could summon help easily.

Ham radio in the county.

There have no ham radio operators living in Kalaupapa for many years. Although in the 1940s and 50s and later there were several licensed operators, the last known was in the 1980s. Ham radio activation from Kalaupapa settlement has been rare since then. The most recent activation is thought to be in 2004 by 2 of us who were volunteers there for a few short days.

So, how to get ham radio back into Kalaupapa. The Civil Defense Amateur Radio Club (CDARC) from Oahu that does VE testing on Oahu requested and received FCC approval for a remote testing session in Kalaupapa (similar to what was done in Antarctica in 2010). Two sessions have been held. Joe, AH0A, was the one needed VE who traveled at his own expense to Kalaupapa. (More on the VE Test Session later)

http://www.arrl.org/news/kalaupapa-hawaii-is-site-of-second-arrl-remote-ve-testing Three residents are now licensed – one General Class and 2 Technician Class.

They are: Steve Prokop, WH6DTS, General Class Lionel Kaawaloa, WH6DTZ, Technician Class Rafael Torres, WH6DUP, Technician Class

#### Our mission.

Our undertaking while there was 2-fold: First, to help the 3 new licensees to become familiar with ham radio and comfortable using their new ham radio licenses, install UHF/VHF equipment for them and to help them determine the best frequencies/repeaters to use for emergency communications. Secondly, we wanted to set up 2 HF stations for the time we were there and operate during the HI QSO Party, August 27-28<sup>th</sup> to give as many hams as possible a chance to put Kalawao County in their logs.

### Our adventures.

Our group of 5 are all Ko'olau Amateur Radio Club (KARC) members from Oahu. Although sponsored by the Club, we paid all of our own expenses to get there, including chartering the plane and providing (or borrowing) all of our needed equipment. Members of the group were: Joe, AH0A, Kimo, KH7U, Ron, AH6RH, Jim, WH6GS and myself, Bev, AH6NF. Upon arriving, we were met by NPS, loaded our mountain of gear onto their truck and set off for town, about a mile away. We were given an orientation to the settlement and enjoyed a trip to the other side of the peninsula, narrated by NPS staff person, Lionel. We saw the 2 original churches and Father Damien's gravesite, among other sites. So, it was afternoon before we returned and started to set up our antennas.

Our station location was to be Paschoal Hall, the auditorium under renovation by the NPS. Best location there seemed to be on the wide, covered porch ("lanai" in Hawaiian), with breezes from the trade winds to keep us cool.



Our operating site is the front porch (not visible) on the left side of the building. One of our vertical antennas can be seen in the right foreground.

First came the antenna setup. The hot afternoon sun in the open field beside Paschoal Hall was draining, so we waited until the cool of the next morning to finish the antennas. Our antennas consisted of:

- SteppIR, BigIR vertical (10-40 meters)
- 20 meter vertical dipole (home brew)
- All band vertical (10-40 meters)(homebrew by NH7XL)
- Off-center-fed dipole at about 25 feet
- •

All were mounted on collapsible fiberglass poles.

Our rigs were:

- Kenwood, TS-480SAT transceiver with an Elecraft KPA500 amp.
- Icom IC-7200 transceiver, running barefoot.
- We also had another Kenwood TS-480 as backup, just in case, but was not needed.

With power considerations sorted out, we finally got both stations on the air Friday afternoon, in plenty of time for the beginning of the HI QSO Party at 04:00Z (6:00 PM Friday evening, our time), operating multi-multi as KH7Q.

20 meters was hot for contacts to the mainland. Then, later it opened up to Europe. Forty meters was only marginal. By about 11 PM our time (09:00 Z), the bands were slow, and we were all tired after a full day that had begun about 5:00 AM, so we shut down and headed to the Visitor's Quarters for some rest. But, we were back before dawn on Saturday morning and on 20 meters to catch the morning opening to Europe and the US mainland before breakfast. Fifteen meters opened later in the morning/afternoon, but 10 meters was elusive. We worked both SSB and CW during the day, mostly from our main station with the amp. The second station running barefoot was only marginally useful. Our location in the center of town, antennas and 100 watts combined to give us fewer contacts than the main station.

In the afternoon, and especially in the evening, residents dropped by to see what ham radio was all about. As well, the 3 newly licensed operators sat with us to become familiar with HF operations. Each station had 2 headphones as well as speakers so that all could have a chance to listen, while one of our operators was always standing by to describe what was happening and encourage the visitors to try for themselves. A couple of them did. Thanks to those who were calling us for being patient with these inexperienced operators. As well, one of the residents who had not been on the radio for more than 40 years took the mic. (He wasn't licensed then, but used to sit with one of the residents who was a licensed ham as control op, and talk on HF many years ago). He was delighted to again be on the air after so many years.

Again Saturday evening, the bands slowed about 11:00 PM our time, so we shut down for the night, returning from our quarters about 4 blocks away before dawn on Sunday morning. Some of us took a break to attend church services at one of the very small, old churches on the other side of the island – an experience not to be forgotten.

Sunday noon (22:00 Z) was the end of the contest. So, time for a few hours of fishing and walking around the town to take a few photos, then we got back on the air with our personal calls to make some more QSOs.



Kimo, KH7U



Night operating. Joe, AH0A on the left. Bev, AH6NF on the right.

We finished with more than 850 QSOs, contacting 47 US states and 42 countries as well as all continents except Antarctica. We were on 15, 20 and 40 meters, mostly SSB, but also CW. Although we tried 10 and 17 meters, there just was no action there.

Monday was reserved to install 2 new mobile UHF/VHF radios into vehicles, program them and the 2 new hand held radios, re-check access to other islands for emergency communications and to practice with the new licensees so they were more comfortable talking on the radio. By 4:00 PM we were packed up and ready to head back to the airport to meet our chartered flight to take us home.



Father Damien's (now Saint Damien) gravesite.

In Summary.

The 5 days passed too quickly. I was not at all ready to go back to the "big city" madness and could have stayed much longer in the peaceful, serene setting of Kalaupapa settlement and its wonderful, friendly people. Our total number of QSOs was lower than we would have liked, but together with all of our other accomplishments, we were pleased with the results. We left with plans to come back to assist the residents with more training and to activate Kalawao County again soon. Hopefully, it will not be long before we get back.

We are so grateful to the staff of the Kalaupapa National Historical Park and the State of Hawaii, Dept of Health for their assistance and hospitality. Without their support, this trip would not have been possible. Also, thanks to the residents of Kalaupapa for their warm welcome. We also thank numerous KARC members who provided equipment, advice and assistance to the group.

Listen for us again soon from Kalaupapa settlement, Kalawao County.

QSLs. - Via KH7Q or AH6NF (QSL manager for KH7Q). Address is in QRZ.com A photo QSL card is now in preparation. So, please be patient. We'll get it printed as quickly as possible.

# Ohio QSO Party

Wow..this was one of three QSO Parties going on at the same time. Most if not all OH counties were on the air. Much of the activity was on 40 and 80M as stations tried to work each other for multipliers, so finding stations on 20M was a challenge. However, there were quite a few counties to be had. I guess I need to finish up 'my next time around' since I didn't have any needs in OH, but I still worked dozens and dozens to put them in the log for prefixes and call combos and anything else that I might need someday. The only band with decent propagation was 20M from TX to OH. The east coast was real busy on 40M then later 80M.

**W9MSE (mobile)** - "Thanks to all the OHQP contacts, sorry for those looking for 20 meter contacts, but my rig went down on the way from WI on Wednesday, and I borrowed a rig here and had trouble on 20 meters. I was only able to make two 20 meter QSO's in the first county during the QP, and then stayed on 40 then 80 meters." (from K3IMC forum)

from the 3830 reflector:

#### **AE8M/m** 327 cw 90 SSB

This was a fun contest. Thanks to all who called. The weather was excellent and when I parked to operate, I could open the windows and keep cool from the mild breeze. Out-of-state participation was good, with TN stations seeming to be the most abundant. In-state, Delaware County appears most frequently in the log.

The mobile setup was a K3 with hamsticks for 20, 40 75 and 80. One of the allures of ham radio is working all around the country and into Europe while sitting in your car parked in some remote village using these short inefficient antennas.

Although I tried 75/80 in the afternoon, almost all 75/80 contacts were after dark. At times 40M CW seemed so crowded with OQP stations around 7045 that it

was difficult to find a frequency to CQ without moving 7 KHz or more away. I had one good SSB run on 40M, but it was difficult and time consuming to find a spot clear enough to call CQ on SSB. Nevertheless, working SSB in the last two hours became easier and a number of multipliers were picked up near the end.

#### KN4Y (FL) 75 cw QSO

I once thought all the Ohio CW operators had retired and moved to West Florida. I was wrong, there is lots of CW activity to keep the interest. I did however have a problem hearing the CW mobiles. The Three QSO party weekend messed up my scheduled naps. I started life in Conneaut Ohio and sure wanted to work Ashtabula county. No luck.

### W1NN mobile

This was my ninth mobile operation in the Ohio QSO Party. I continue to be completely intrigued and fascinated by the challenge of achieving the highest score that I can while operating a contest from an automobile and doing everything by myself including the driving. Since around 2004, I have been doing this in rental cars since my own vehicle has a manual transmission.

In 2010, my 80 meter antenna suddenly decided to stop loading and I lost a great deal of time and QSOs troubleshooting the cause. I finally got it to work but it really set me back, both in terms of contacts and in terms of my planned route. So this year my first priority was to make sure that this did not happen again. I figured that the problem was probably related to a bad ground so I redid all of the ground connections on my magnet mounts and coax cables and gave a lot of thought to how to get a good ground in the vehicle. In the past I could always obtain a good chassis ground by connecting to one of the bolts that hold the passenger seat to the frame or at a door hinge, but removable fasteners are becoming rarer and rarer and those that remain are painted so getting a good ground has become quite difficult. This year I decided to connect to the ground side of the battery where I was guaranteed a good chassis connection. This required a longer ground cable which can create its own problems, but fortunately this year everything worked perfectly.

One key to doing well as a solo op is to plan a route that requires minimal driving but that still allows you to change counties often enough to keep your

rate up. It is also important to have alternate plans in case something goes wrong or in case you want to stay longer in a county when you have found a good run frequency on SSB. It is never too difficult to run up a respectable mult total on CW, but it's a different story on phone. So another key to doing well in a contest like the OQP that adds up phone and CW mults is figuring out how to get those phone mults in the log. This involves two separate problems: out-of-state mults and in-state counties, meaning that you need to spend some considerable time on 20 meter phone and either 40 or 75 phone. Those who have tried it know how tough it can be for a mobile to establish and hold a run frequency. This is one place where experience really helps.

This year my plan called for operation in 10 different counties with multiple entries to a couple of them. Fortunately, I was able to make a couple of good SSB runs on 20 and 40, so I decided to stay longer in some of my afternoon counties. This put me about two hours behind my plan, so I had to rearrange my route on the fly and I had to give up operating from my last planned county.

When I tallied up my score, I thought that I might have set a new personal best score, but checking my past scores I see that this was not the case. I did manage a new personal best for multipliers (and possibly a new mobile record) of 135, but I see that in 2005 I had 738 QSOs and a final score of over 170,000 points, so I am some way from setting a new personal record (and a long way from topping K8MR's 2009 record of nearly 218,000 points - which he may have smashed this year anyhow).

In summary, it was a good year with very good conditions, good participation, good weather and overall a very fun experience. I'll be thinking about how I might do a little better next year.

73 & thanks for the contacts!

Hal W1NN

**K9ES** – **FL** – (73 cw 36 ssb) "Had fun. Put up a long wire, 25 feet long, and end fed with AH4, used IC756 Pro-2, and N1MM software with US Interface Navigator. Set up was in preparation for Hurricane Irene which remained 250 miles off coast, and never did anything to our area."

AD8J (NC) – 57 cw 56 SSB - "In past years I have operated from Ohio. Now that I live in

NC, I was on the other side of the pile and it's a lot more work. I live near the Blue Ridge Parkway and have a nice spot up there where I can put up wire antennas and operate as a portable while using the car as a shack. I operated the first five hours of the contest and had fun working all my buddies in Ohio. I suspect there was a shortage of NC stations this year due to the hurricane over on the coast. Where I was, it was sunny and only a bit windy."

**K8MM (MI)** 135 cw 100 ssb - "I had planned a mobile operation covering the west side of OH but I had to cancel a few days before the OHQP started. Propagation seemed good this year"

**K8O (K2KW op)** – Warren OH fixed – 353 CW 325 SSB - "Stellar Ohio participation! Wow. I just wish conditions compared to the OH activity - this was pretty much a 1-band contest until 80m came to life late in the day. 75/80 was a ghost town this year in the first 6 hours, where last year it was buzzin with activity. 40m had short skip all day long which made for

fun. I tried and tried and tried to get something going on 20 CW/SSB and spent way too much time there trying to eek out western mults that never showed.

I spent some time on 15 SSB as the band was loud to the west coast and EU, but the rate was about the same as 20m (i.e. snooze-ville). Thanks for all the fun, QSOs, QSYs and effort that everyone put in."

**N8BJQ (Champaign)** – 476 cw 413 ssb - "Great OH participation. 40M was super right from the start. 75M was not. 20M was pretty good. 15M appeared to be open but no one was there. Called on 10M a few times - heard a couple of SA stations but nobody else. Worked 78 OH counties. Thanks to all the mobiles"

W3DYA(TX) - 45 cw - "I would like to submit my log but decided to stop recording the number exchange because my log files are for county hunting and don't require it. Lots of activity and I did get three new counties! Either band conditions were pretty bad or my loop and dipole antennas aren't good enough. Good spots helped. CU next year!

**AA8IA (Jefferson OH)** 241 cw 219 SSB - "Here in Ohio, I think across the board the weather was great. No storms within the state that I knew of. Those along the East Coast were not so fortunate – I hope you all managed to keep safe!

Quick thought -- Near the end I heard a lot of high numbers. I have a feeling some county records will have been broken this year!

I replaced my 80m doublet a few weeks ago with an Alpha Delta DX-LB+ and was curious to see how it performed. It seemed to do equally well on 80m and much better on 40m. And, now I'm able to actually work any part of 80/40m. I did have problems with RFI taking out my CW interface and crashing N1MM. As a stopgap I relocated the interface and its wires and that seemed to help. When I finally got around to 80m SSB, the second station I worked, KW8N-bob, informed me that I had RF getting into my audio. A big thanks to him for kindly bringing that to my attention early on. I should have been monitoring my audio -- it was indeed horrendous. As another stopgap, I switched from the Heil headset and hand switch to the stock microphone So I was on my way finally being able to work 80m SSB. Ever since I've had this station, various difficulties had prohibited me from working 80m SSB. Although there was less activity on 80m, it was productive.

As usual, I really never know what band to start on, or when to switch from one band to another. After some good advice on the reflector from K8MR, I decided I'd try to be on 20/15 if i could to provide contacts for the folks on the left coast as well as DX. 15m was a bust for the most part, but I did manage to work a handful of stations. I did find some stations on 20m CW, but very few on SSB. I was surprised to hear a DX call in on multiple occasions, most frequently DL2HBX but quite a few others as well, and so I was glad I was there to be heard and grateful for the Qs.

For the first time in a contest, SSB was the bread and butter for me. 40m SSB was amazing. I had a blast, and there were many times when I just couldn't keep up with all of the stations calling in. It was great, except for the fact that I didn't have N1MM set up with my audio to queue up and I had to juggle the keyboard and microphone constantly. It really was a great time. Sure, CW will garner more points [if the stations are there to work], but SSB was yielding lots of Qs and I had the advantages of actually saying hi to some of the folks that I had worked many times only on CW.

Seemed to me 80m had a lot less activity this year. Could have just been me. Maybe I just wasn't hearing as much on the new wire, I really couldn't tell. I'm thinking everyone was just on 40m for longer periods of time.

I remember K5KG calling me on CW and then sending "SSB?". He had to repeat that so many times. I thought he was sending SS6 and I couldn't figure out why. Eventually the light bulb went on and I said yes. George gave a freq to QSY to and I met him there. He then explained to me that I'd probably be

hearing others ask for a QSY as well. I'd never had a station ask me to QSY before so it caught me off guard. I was asked to QSY a few times after that, most notably when OM2VL asked me to QSY from CW to SSB on 40m. That was fun, I was glad we were able to make the second contact.

I didn't chase the mobiles nearly as much this year, and my score certainly reflects that with quite a number of missing counties in my log. But, they were out there to be worked. As it turns out, I heard at least 7 counties on the air at times when they were S&Ping, but I never had an actual opportunity to work them. Had I realized then that the callsigns represented counties I needed, I'd have went after them. Oh well, I was having lotsa fun.

Thanks to many... Kenny, K2KW, for again spearheading the promotion of the OhQP; the Ohio stations, who really stepped up to the plate to put counties on the air; the abundance of out-of-state participation -- ya gotta have that!; the DX stations who joined us for the party, and the half dozen or so mobiles, aero-mobiles, and rovers for traveling far and wide [in some cases, from outside Ohio] to make counties available.

Oh yeah -- Thanks to the guys who were spotting us Ohio stations, especially K5KG -- a sudden influx of stations answering one's CQ is a great pick-me-up.

#### K8BL Lake OH Fixed

First, let me say that people who know me are quite aware that I am very opinionated and am not shy about sharing my opinions. However, I'll spare you all my COMPLETE opinion on this occasion. This is not the commentary that I had originally intended.

I thought I had a good time during this year's OhQP since my computer/software didn't crash and I think I did a personal best with my score. A new(er) computer and radio probably helped, plus the only connection to the radio from the computer was the CW keying line - very simple.

After reading over some of the submitted Soapboxes, I realized I didn't have so much fun after all. If I had any thoughts of having a chance to win in my category, I didn't have any idea I was doomed from the start. If so, I wouldn't have put in the total effort I did and would have taken the time out to have dinner with my XYL and watched a movie together. Or, maybe I have a mistaken idea of what is supposed to be the objective of this QSO Party. In my case, I used my own station that I put together myself and used my own antennas that I either built or assembled and installed myself. Also, I used my own Call which is not anything unique that stations would line up to work as an oddity. The only person around during the QSO Party was my XYL who would get me a coffee or sandwich as needed and was certainly not able to help with radio or computer or antenna or strategy issues. It was just me, myself alone at my modest station on a city lot and in no way super by any stretch. I have a 25 year old tribander at 55 feet and Inverted Vees for 80 & 40 with apexes at 50 feet.

However, this is all totally MY choice. This is the way I prefer to operate. If I had some other desire or objective in mind, I'm sure I could obtain a unique Call and find a buddy with a super station who would get everything set up for me and even install special antennas designed for the event. I could borrow a Corvette, too, and be the fastest guy on the Turnpike, but it wouldn't be me and it wouldn't be my car.

Next year, if I decide to participate, I'll have a good idea of what I'm really competing against/with. But, I know now it will just be me and my station and my antennas and my Call. Unfortunately, my effort and interest will much less.

Initially, I had thoughts of not even bothering to submit a Log, but I spent a fair amount of effort getting interest stirred up in our local club members to participate and several did. It would be pretty crappy to drop out on them due to my personal views which turned out to be quite naive."

## Reader Feedback

From Dan, AA0TT:

I got a kick out of the cost of mobiling article. I thought that I would share a little bit about this. For those that do not know me, I run a big rig for a company that works on electrical distribution equipment, such as transformers, substations, voltage regulators and the like for the power companies.

I would gladly trade just my fuel bill for any one of the folks that were mentioned. The truck gets about 6.2 miles to the gallon, depending on the load and where I am. Obviously, the

mountains are much lower for fuel mileage. I try to run between 500 and 750 miles a day, depending on the stops I have for the day. The fuel costs alone for me are between \$350 and \$600 per day. Like I said, that is just fuel. Then you can add all of the other costs on to that. The heat in Oklahoma caused me to have a tire to blow out. That was \$275 for a tire. Just the basic oil change cost about \$250 for the "quick lube" version. Permits, etcetera are also another thing. 16 cents a mile in Oregon just to drive on the roads there, for example. I could go on, but I do not want to turn this into a rant looking for pity. Please just remember why it cost so much to get things to you.

I will say that I am sorry not to see any more big rigs out there on the bands than I do. Many of the companies anymore do not allow you to have anything in the truck that is not standard equipment. They tell you if you need to get a hold of someone to use your cell phone, or they have what is known as a Qualcomm satellite link in the truck. So much for progress.

I will say that having found the county hunters net, has allowed me to "meet" many new friends, and really helps for the miles to go by. Last week (8/21-27) I ran 3,152 miles total for the week. I really wished the conditions were better, but was able to work quite a few people from Nebraska, South Dakota, North Dakota, Montana, Idaho, Wyoming, Colorado, and of course the home state of Kansas.

I usually find out on Thursdays where I am going to be headed the following week. If there is anyone to wants to know where I am headed get a hold of me and I will gladly let them know. My cell is 785.200.4074. Of course, the route is subject to change depending on a variety of things, such as construction, weight and height of what I am carrying, etc. Last week, I had to get permits for 98,500 lbs! There are a lot of bridges that do not like that sort of load. Need I say more?

I hope to BCNU on the net.

73 de Dan AA0TT

## Greenie Fuels – OOPS!

#### 'Serious' Error Found in Carbon Savings for Biofuels

The European Union is overestimating the reductions in greenhouse gas emissions achieved through reliance on biofuels as a result of a "serious accounting error," according to a draft opinion by an influential committee of 19 scientists and academics.

The European Environment Agency Scientific Committee writes that the role of energy from crops like biofuels in curbing warming gases should be measured by how much additional carbon dioxide such crops absorb beyond what would have been absorbed anyway by existing fields, forests and grasslands.

Instead, the European Union has been "double counting" some of the savings, according to the draft opinion, which was prepared by the committee in May and viewed this week by The International Herald Tribune and The New York Times.

The committee said that the error had crept into European Union regulations because of a "misapplication of the original guidance" under the United Nations Framework Convention on Climate Change.

"The potential consequences of this bioenergy accounting error are immense since it assumes that all burning of biomass does not add carbon to the air," the committee wrote.

European Union laws "need to be reviewed to encourage bioenergy use only from additional biomass that reduces greenhouse gas emissions," the committee wrote. Estimates of emissions saved by using crops for energy should instead focus on biomass that would "maintain or build carbon stocks in plants and soils," it adds.

Farmers and fuel companies may no longer be able to use as wide a variety of crops to meet targets that were agreed upon three years ago to generate 10 percent of transportation fuel from renewable sources by 2020.

The committee suggested that bodies like the International Energy Agency and the United Nations could be forced to lower their forecasts for the amount of energy from plants and crops that could be generated in the future.

The opinion comes at an awkward time for the European Commission, the European Union's executive body.

The commission already is agonizing over how much to tighten the rules on biofuels to curb a phenomenon called indirect land use change, in which areas containing high stores of carbon dioxide, like grasslands, peat lands or forests, are stripped to produce food crops.

The committee attributed some of its findings to work by Tim Searchinger, a research scholar and lecturer at Princeton who has written extensively about accounting for emissions from biofuels.

In one example attributed to research by Mr. Searchinger, the committee wrote:

"Clearing or cutting forests for bioenergy crops releases large stores of carbon into the atmosphere and may reduce ongoing carbon sequestration if the forest was otherwise still growing. Bioenergy crops will absorb carbon that offsets the emissions from their combustion, but it may take decades for this carbon absorption (which offsets emissions) to catch up to the lost carbon storage and forgone carbon sequestration of the forest."

The committee's opinion backs up earlier criticism by environmental groups including Birdlife International and the European Environmental Bureau, which likened the carbon accounting error by European Union officials to a "subprime carbon mortgage that it may never be able to pay back."

Source: http://green.blogs.nytimes.com/2011/09/14/serious-error-found-in-carbon-savings-for-biofuels/

# HI QSO Party

**N8KIE:** "Anyone needing Hawaii should have been on at 0330z worked all 5 counties in 20 min "

KH6LC – Hawaii - (AH6RE, KH6LC, KH7Y, NH6V) 1634 CW 3314 SSB

With the big push for activity in this year's HQP, we tried to do our part, making almost 5000 QSOs. Lots more activity than we ever expected, especially the nearly 1000 European stations. Thanks to all, especially the folks listed below who worked us on 6 or more band/modes.

**K4ZGB(AL)** 128 cw 96 ssb qso

## On the Road with N9STL

From Joyce, N9STL:

It has been a long, long hot summer and finally we started having some cooler weather in IL.

I decided to take the opportunity to do a little county hunting and start working on my 500 transmits for the Mobile Diamond Award.

So I left on a Friday and went to Missouri to get some counties that I missed from Joe, N5UZW.

After running a few counties in MO I ducked back into Illinois to run Pulaski and Alexander. Well, after I crossed the bridge I realized that Union was only a few miles down the road so I turned north and ran the county line. After heading south once again I saw a sign that the bridge going to KY was out so I had to change my plans and go back to Missouri and get back on my schedule. I ran out to Shannon to get a last county for someone and then headed back to the eastern edge of MO.

I ended up spending the night in TN. I did manage to get into the motel before dark.

The next morning I headed out and ran 4 counties in TN and then headed into KY to get Ballard, KY (the county that I missed yesterday) or Joe, N5UZW would never have forgiven me.. Then I started going around in circles, getting this county for one and that one for another.

I felt that I was on a rare dxpedition in some of the KY counties. Seems like they don't get run as often as they use to since KQ0B and WG6X are not running. They use to keep KY needs down to a minimum. I had decided to go to KY to get N9QS some of his cw needs, and I did manage to work him in the four that he needed.

I spent the night at Elizabethtown . The next morning I woke up early (5 A.M.) EST and had told everybody that I would not be on until 1300 so I had a nice breakfast at the motel-one of the nicest breakfast buffets that I have ever seen. And then went out to my car to work W0GXQ before I took off. I was sitting in the car working Jerry and a lady came up and asked if I knew that I had a flat tire.

25 Minutes on hold to AAA and they finally dispatch a truck. Thankfully he showed up within 5 minutes of the dispatch and soon had my tire fixed (I had picked up a nail) and ready to get back on the road.

So off I go and discover that I took the wrong road-or was it the right one? - it gave me two more transmits. I was on the northern edge of KY following the border and headed for the bridge into IN. Guess what, the bridge I was going to use was CLOSED so I had to back track about 20 miles.

I was planning to meet N9QS and Bonnie in IL so I had a little time to run some IN counties.

Finally Roy, Bonnie and I met up and ran around to 4 different counties-Silver wanted to make sure that he was going to hear me.

He is down to 4 after our runaround in IL.

If you see him ask him why he still needs Pike county, MO.

So we went to Olney, IL to grab a bite to eat and then we headed home.

I feel extremely fortunate in that I received the necessary contacts in every county that I ran - 62 in all. There were a few counties that I had to call and call . I even broke into some guys from DE talking and they gave me the three contacts that I needed on 20.

I averaged 452 miles each day. Way too many QSOs to count and had a great time but it is always nice to get back home. Thanks Ted for holding down the fort at home and taking care of the animals and having supper on the table after a long three days."

### Sunspots

"Hathaway: Sunspot Cycle Will Be Smallest in 100 Years

NASA solar physicist David Hathaway told

hams at the Huntsville Hamfest in August that solar Cycle 24 will likely be the smallest in at least 100 years, in terms of maximum sunspot numbers. But he says it is too early to know if this cycle is a precursor to what some scientists are predicting to be "the death of sunspots" or a "little ice age."

In a talk titled "The Sky is NOT Falling," Hathaway explained why predictions of "killer flares" capable of causing massive disruptions are *not* likely to occur -- mostly because of too few sunspots. At the same time, he said, predictions of future cycles with *no* sunspots -- based on observations to date -- are premature because the "missing" activity is associated with the peak of the sunspot cycle, which is not yet here.

Hathaway's current prediction is that Cycle 24 will peak at a maximum of around 75 in mid-

2013, the lowest peak in the past century. And while he says it is too early to write off Cycle 25 completely, he feels it could be even weaker than the current cycle. He admits, though, that "every time you come up with a model, you find a problem and you have to go back to the drawing board."

# Oil News

Our Oil-Constrained Future by Kevin Drum

The basic story is simple: As long as there's spare oil-production capacity, increasing demand caused by economic growth produces only a steady, manageable increase in oil prices. But oil production is now close to its maximum and can't be easily or quickly expanded. When the global economy grows enough that demand starts to bump up against this ceiling, oil prices don't rise slowly and steadily; rather, they spike suddenly, causing a recession, which in turn reduces oil demand and drives down prices. When the economy recovers, the cycle starts all over. Because of this dynamic, the production ceiling for oil produces a corresponding ceiling for world economic growth.

Stuart Staniford puts some numbers to this for our most recent recession. What would it have taken for growth to continue at its 2000-08 rate over the past few years?

In the counterfactual world, 2009 gross world product would have been 6.4 percent larger than in the actual world. We can estimate the implications for oil supply because we know that the global income elasticity of oil demand is about 2/3. Thus the counterfactual world would have required an additional 4.5 percent more oil than the real world.

...2009 oil production was around 85 [million barrels per day] (depending on what source you like) so **in the counterfactual world we would have needed it to be around 88-89mbd.** Now, in 2008, oil production got up to around 86mbd (on an average basis) but doing so triggered (or required) an oil shock in which prices briefly reached \$135/barrel on a monthly basis and almost \$150 on a daily basis. What would the likely price path have been had the world then needed an additional 2-3mbd the following year?



To give an indication of the scale of 2-3mbd, **note that the loss of 1.6mbd of oil this year (Libya) triggered something like a \$30 increase in the price of oil** (before it became clear that the global economy was slowing again causing prices to fall). That, along with other commodity price increases, was enough to cause a little bump in inflation that significantly reduced the Federal Reserve's latitude for action.

OPEC countries routinely claim that they can increase pumping capacity to meet world demand. "Our customers aren't asking for more supplies," is the usual phrasing. But that's not true. The world plainly *wants* more oil that OPEC can't provide. After all, if OPEC had plentiful supplies, we wouldn't see huge price spikes whenever demand gets near the neighborhood of 90 mbd. But we do.

The effect this has on the economy is probably greater than even most pessimists realize. James Hamilton, a University of California-San Diego economics professor who's studied the economics of oil demand deeply, points out that 10 of the 11 recessions in the United States since World War II have been preceded by an increase in oil prices—and even small increases in oil prices can have a surprisingly big impact on economic growth. In a recent update of a model he originally published in 2003, he estimates that an oil price spike of 10 percent over its previous high produces a GDP decline of 1.4 percentage points one year later. To put this into real-world terms, his model suggests that the huge run-up in oil prices between 2007 and 2008, when prices nearly doubled, explains most of the Great Recession that followed. And he forecasts that the Libyan price spike early this year, which came on top of a 9 percent increase the previous quarter, will reduce GDP by an estimated 2.4 percentage points by the end of 2011. And the Libyan price spike was pretty modest.

The precise effect of oil prices on the economy depends on which model you prefer, and Hamilton says that a different model that uses a three-year window might be more accurate.

That would be good news for the economy in 2011 (and 2012), but it doesn't matter much for the long run. Basically, we're stuck with two stubborn observations. First, world demand for oil is very near its production ceiling, which means that even small increases in demand (or small disruptions in supply) now result in large oil price spikes. And increases in demand are inevitable every time the economy starts growing even modestly. Second, even small increases in the price of oil cause large GDP losses. Price spikes of 20 to 30 percent are likely to be common in the future as we periodically bump up against production ceilings, and if Hamilton's model is correct, this will produce subsequent declines in GDP of 3 to 5 percentage points. That's huge. The effect on world GDP may be less pronounced, but it will still be significant.

If this model is accurate—and if the ceiling on global oil production really is around 90 mbd and can be expanded only slowly—it means that every time the global economy starts to reach even moderate growth rates, demand for oil will quickly bump up against supply constraints, prices will spike, and we'll be thrown back into recession. Rinse and repeat.

## Interesting QRP Regen Kit

By now, you should know that N4CD likes 'regen' receivers. Here's an interesting 40M QRP 40M Transceiver kit you can buy for \$30. It's a two transistor job with a 'regen' receiver and a two transistor (same ones) transmitter than puts out 1/2 to 1 watt or so. Runs off 9V battery. No SMT (surface mount parts) and only about 30 parts in the whole kit.



The HAM CAN transceiver is the latest offering in minimalist amateur radio from the Four State QRP Group! The HAM CAN is a crystal-controlled CW transceiver, delivering 1/2 to 1W transmit power, with enough sensitivity and selectivity to receive plenty of signals. It does all this with only TWO transistors!

The "Ham Can" is a minimalist transceiver designed to be very simple and inexpensive, yet provide good performance. The low cost kit sacrifices nothing in the way of quality. It features a high quality printed circuit board, low parts count and fast and easy building. It is an excellent kit for first time builders, and was chosen as the Build Session kit for OzarkCon 2011.

This NMØS design features an innovative power switch. Your straight key plug also serves as the on and off switch, i.e. Just plugging in the key powers up the rig automatically. Designed to be as small as possible and still use through hole parts, it will fit on top of a 3 oz ham snack can, while a 9 volt battery resides inside the can, thus making self contained portable rig. Brand names with cans this size are Armour, Bryan, Fancy Feast and probably many others. The builder can enjoy a snack while obtaining the enclosure :o)

First time builders please note: This kit is not difficult to build. All parts are thru hole parts, there are NO SMT parts, and all connectors are board mounted which eliminates point to point wiring. After all the parts are installed it's ready to try out.

Here's the schematic



The receiver is a mix of regenerative and reflex at Q1. The diode doubler D3, D4, coupled to the collector to Q1 detects the received signal, which is then sent to the base of Q1 through the 1k resistor R1 to further boost the rx gain.

It's crystal controlled (7122 KHz QRP frequency). If you are looking for a winter project when the snow keeps you homebound, maybe you'd like to try your hand at this kit?

If you are a CQ reader, they described this kit in August 2011 issue.

Here's the Ham Can web site – you can read the manual there and there is more info on it.

Want some other kits to build? Check out the following links otherwise skip this section

http://www.electronickits.com/kit/complete/complete.htm

Want to build a hand held 2 watt xtal controlled on 7290 - 40M AM transceiver (I don't know why)? ....\$150

http://www.dzkit.com/HT-7.htm

Here 40M nifty decent QRP transceiver.....or kits for 40/75m AM!.....

http://smallwonderlabs.com/

# Kansas QSO Party

This was a great QSO Party – tons of special 1x1 calls and likely all counties on the air at some point – not necessarily on the mode/band you needed, but there were thousands and thousands of contacts made with a dozen mobiles running everywhere and a few dozen fixed stations. I caught a few I needed and missed a few others which I never heard or saw spotted. There was a severe lack of spotting on 20M - you'd hear pileups but not one county hunter spotted the mobiles a good part of the time. Same on SSB – the mobiles were out but few spots resulting in many county hunters missing out on the action. (stuck on 336 syndrome waiting for a spot to get them off the sofa).

from the 3830 Contest reflector:

### WY0I mobile

I had a great time this year for my 1st effort to participate in the KS QSO Party. I ran in the mobile SSB category with my 1989 Ford f150, Yaseu 857 radio into a Hustler mobile mostly on 20 meters. I logged on my laptop with N1MM.

I began my trip Saturday morning in Rawlins County with a plan of working an hour in each county. Rawlins, Decatur and Sheridan were pretty much on time as

they were all close in this corner and the roads were good. I had about a 30 minute trip to my next setup which was Gove & Logan counties. By this time it was after noon and getting hot. The temp in my pick up was over 100 deg and the A/C had decided to go on the fritz. My next stop was to be Fort Wallace in Wallace County. But being 30 minutes from my QTH in Colby I decided to run home and attempt to recharge my A/C system. After a wasted couple of hours I headed to the corner of Wallace County then to Sherman County and finished Sat night in Bird City Park, Cheyenne County. A lot of the locals were interested in what a stranger was doing in their park and would pretend to not notice me as they walked by to check me out. I would guess that hearing me speak into a microphone with a lot of CQ and the phonic alphabet they figured I was with the Government UFO program or just plane crazy, any way they figured I was semi-harmless and left me alone.

Sunday morning I got up early restocked RC Cola and water into the cooler tweaked the mounts on my antennas. The rough dirt roads tended to loosen my mounts and I had to stop a couple of times Sat to tighten them. No problems on Sunday though. I headed back up Rawlins County to retrace the 1st 3 counties from Sat then ended up back home under a shade tree in my front yard to finish the contest.

I worked mostly 20 meters except the last hour or so I swapped resonators and tried 40 meters. 99 % of my contacts were east and west US.

I had 35 mults, 280 Q's, 1 100 bonus, for a total of 19,700 points

73, WY0I, Bob

### K0K (N0UTK, WY0A) mobile

"We had a great time running counties and had planned on putting out 38 total counties. To do this, we traveled on lots of dirt roads and tried to stay as close to county lines as possible when heading west. Once we got to the last counties next to Colorado, we went up a few counties and then started back east.

We got off the beaten path a few times, most notably in Stevens county when we ended up on a lot of roads with fences that had openings in them with a sign that read (open range). We ended up way down by Ashland and decided to fill up with gas. Talk about a slow running gas pump, it took almost 15 minutes to fill up our tank...more wasted time....;) Another time we were in Wichita county on a back road that showed going through on our DeLorme map; however, this road ended up in a some kind of field and we had to back track a few miles. While

attempting to turn around, we must have poked something in one of our back tires because we didn't get far before we realized we blew out a tire. It took us a while to get the spare out from under the truck bed since the lowering mechanism kept jamming up.. With a little persistence a few choice words we were finally on the road again...more wasted time.... Note to anyone in that part of Kansas..take lots of insect repellant, the flies were terrible...;) With all that said, we had to cut one of the counties we had planned to run (Hodgeman) off our list do to time constraints...

**KN4Y (FL)** "Great mobile and Fixed station CW activity, Managed to work Kansas and Sunflower, but only 1 bonus station. Enjoyed the party."

### W0O (W0ZQ) mobile

It was an honor to help the great state of Kansas celebrate 150 years of statehood by operating as W0O. On the Friday afternoon before the contest I grabbed my trusty FT897, my netbook, and my collection of hamstiks and headed for Kansas from my home in Bloomington, MN. I had spent a few hours pouring over the KS map planning a route.

Operating a state QSO party is part contest, part road rally, part strategy and tactics, and part luck. Also, I operate solo doing all the driving, navigating, and operating myself. I decided to drive to Atchison, KS, so that I could be near the Atchison/Doniphan/Brown county line for the 9:00 am start on Saturday. On the drive down, Hwy 59 in MO that runs SW out of St. Joseph was closed due to the Mighty Mo still being at flood stage, so I had to double back up to Hwy 36, then down into Atchison. Although it made for a longer drive, driving through the green and lush Flint Hills was a treat .... I had forgotten how beautiful this part of KS is. Once in Atchison I was able to find a hotel on Hwy "73" ... a good omen.

Saturday was sunny and warm. By about 3:00 pm the temperature was the highest that I saw on my car thermometer of 101 ... I was reflecting on one of the MNQP contests when it warmed up to -10. It was hot and I fried a bit. That night I stayed over night in Topeka and had thought of running 80m from the hotel parking lot at around 8:00 pm, but when I got set up the noise was S9 and I think I was having noise issues with their sodium vapor outdoor lights. That, plus I saw a Golden Corral across the street, I had not eaten much all day, I was a bit fried, so that was when my "fun index" bottomed out and I QRTed for the day to go eat and to cool down. Sorry for those that I may have missed on 80m, but the chicken fried steak and air conditioning were wonderful.

Sunday morning I started from the south side of SHA and then ran five new

counties after that. The weather was about 5 to 10 degrees cooler than Saturday, so about 90 for a high, and there was a bit more of a breeze. On one of my last stops I found a nice quiet county road with a beautiful cotton wood tree that I parked under and ran the county from .... nice. At 3:00 pm when the contest ended I was wheels up. I had a nice drive back home watching a beautiful sunset crossing the IA/MN boarder pulling into my home driveway around 10:30 pm. So yes, I burned up some gas, put some more miles on my 2004 Subaru (147K now), but it sure was fun.

Regarding conditions, I had thought that 40m might be noise with Irene going up the east coast, but 40m on Saturday morning and Saturday evening was pretty good. The noise level was definitely noticeable on Sunday morning however. 20m was the money band with good signals all day long except for a dip mid-day. 20m was so good that 91 of my 581 20m contacts were with "DX" ... that's 16%. I did CQ a few times on 15m from mid day until about 3:00 pm, but I only heard one weak KS station that was doing the same thing. I do wish I had been able to spend a little more time on 80m Saturday night, but it just did not pan out that way.

Many thanks to the KSQP sponsors and for allowing me to help represent the "O" in SUNFLOWER. My last stop on Sunday was at a spot on Sunflower Road, how fitting was that? Thanks for all the Q's.

73, Jon W0ZQ/W0O

**W0S** – (**K0BJ op**) – 312 CW 663 SSB - 20 was weird and short Saturday; lots of loudish KC-area stations. Fun to work ARRL board buddies K0CA and W9GIG, and DJ7RD who I visited in January. Plus lots of area friends, 2 stations on USS Hornet, etc.

Last 45 minutes had QRN from a storm to the east -- it collapsed, produced 70 mph outflow and knocked off power 30 min. after the contest.

RTTY contest made Saturday Baudot problematic, and I never got a run generated Sunday. Otherwise things were sweet -- I even earned both certificates after being only halfway to KANSAS and 2/3 to SUNFLOWER, at intermission. Tnx to W0BH and the other organizers/promoters, all the out of state guys, and KX9X for getting this whole all-state QP thing ripping. **KO7X (WY)** -45 cs 31 ssb Worked both bonus stations - K0A and KS0KS. Also worked most of the 1X1 calls and was able to spell out KANSAS SUNFLOWER for the special certificate. As usual, the Kansas stations were skipping over me on 20 and 15 but at times the eastern Kansas stations were workable on 20 meters.

**KO0U (MO)** "Worked both bonus stations - K0A and KS0KS. Also worked most of the 1X1 calls and was able to spell out KANSAS SUNFLOWER for the special certificate. As usual, the Kansas stations were skipping over me on 20 and 15 but at times the eastern Kansas stations were workable on 20 meters"

**W3DYA (TX)** - 15 cw - "Just to show I was listening. Conditions just weren't very good. " N4PN(GA) – 175 cw 179 SSB "As always, the mobiles kept it interesting...led by Bob, W0BH (K0S)and his XYL, Lorna, K0WHY...K0S - 56 Q's and K0WHY - 25 Q's..I missed seven counties...know they were on, as at least one station worked them all -- John, N6MU...

### N0A (K0RU, N1HWCL, N0MTC) 271 cw 257 ssb 70 digital

We started out doing great, operated 1 transmitter and 2 ops taking turns on Saturday, we had a ball. Bill would do the PSK31 stuff and then with a little push and shove from me I got him going on SSB to bag and tag many contacts.

I ran all the CW contacts and most of the SSB contacts. I had a ball, loved my new Heil Boom Headset/Mic configuration. (never been a phone contester) but doing the hands free was amazing and really made my life simpler for logging.

Logging program was N1MM, we bumped and thumped our way through using that as I've been a WinTest user for the big contest. I must say, the N1MM digital interface was absolute JUNK, I didn't care for the decoding capabilities of that MMVAR goofy thing and the interfacing with my MMTTY was nuts getting it to do RTTY using FSK although we did finally get that figured out late Friday before the contest, turns out that during the KSQP on Saturday RTTY was worthless gave up on that mode quickly. I think we worked 2 - RTTY stations if even that don't recall now but it was hard work getting even those.

20M DX was just nuts on Saturday and Sunday we were working stations left and right in a pileup for hours on both Saturday and Sunday that was a lot of fun. Remember this was the KSQP not a CQWW or WPX contest we didn't expect to see that number of stations calling us especially the DX stations.

We loved running the 1x1 call N0A, and having the QRZ.COM Bio setup to explaining the special event station made is so much more exciting. I'm looking forward to

running another 1x1 call again next year, that was a lot of fun.

We didn't have any troubles, other than the RTTY issue, although we did have a lot of PSK31 and just for fun we ran a QSO on the JT65 mode and to our surprise we worked 2 stations on 40M using JT65, the exchange was very smooth considering you have a standardize exchange used in that mode, we were able to run it very smoothly and it was fun, we will definitely try to do that along with some 2 meter and 6 meter FSK441 stuff next year as I'm in the process of setting up a 6 meter eme here so it will be fun trying those modes next year.

We worked a lot of friends and some of the local KS Stations were very hard to copy, we had many difficulties dealing with the QRN on both 40 & 80 meters even with my beverages we had a struggle coping many folks the constant static was just crazy for us especially on Saturday, on Sunday it got a little better.

One station mentioned some of his trials and tribulations when working KSQP on PSK31, what I found out that worked was modifying my exchange to this.

CALL de N0A 599 JOH = (Johnson County, KS) I need your RST and STATE pls CALL de N0A

Then for the TU I ran this

CALL TU de N0A special event station for KSQP 150 Anniversary of Statehood we need your RST and STATE de N0A KSQP QRZ

etc, the stations just kept coming and coming till finally we got bored with that but we tried to let people know we were running the digital psk31 as well but it was a lot of fun in any case. Looking forward to running the digital modes again next year.

Thanks for all the contact and we look forward to running the KSQP again next year...

**N0F KR0L operator - (Marion KS)** 285 ssb 87 digital "This is the second time I've worked KSQP. Last year, I had just had my ticket about a month and was KD0MJT. This year, I (KR0L) worked with 1x1 call N0F.

Had a lot of fun with it this year. I used N1MM for SSB logging and scoring, and fldigi on Linux for digital logging. This simple shell script converts a
fldigi ADIF file to one that N1MM will import:

sed -e 's/SRX\_STRING:/APP\_N1MM\_EXCHANGE1:/g' \ | unix2dos

and then, after having N1MM rescore the file, it tabulates my score for me. Handy.

I had a lot of trouble hearing calling stations with my dipoles -- apparently they heard me a lot better than I heard them. That must have been frustrating for people trying to find an elusive F for their certificate. I tried hard and pulled many of them out, but no manner of adjustments could get some of them.

I tried 15m a couple of times but it was mostly dead from my location. For a little while, I was concerned I might not match last year's score of 14,574 but it worked out OK in the end.

PSK31 contesting was interesting like always. A mix of people that obviously are into contesting and those that see a CQ and just hop in there all friendly, using their 2-minute macros to send me information about them and their station. I was sending my usual contest exchange (CALL de NOF 599 599 MRN CALL) and usual contest CQ (CQ CQ KSQP NOF NOF CQ) and was having limited success. I decided, hey, if 80% of people answering my CQ want to chat, how about just chatting a bit? So I sent a 1.5-line CQ that mentioned 150 years of statehood, and made an initial response with a "Good morning from Marion Co., Kansas" or something (not hard for me, since I type way faster than PSK31 transmits, so I just edited my exchange on the fly after it started transmitting). I made far more QSOs that way than operating as a normal contester.

I also had to remember that some PSK31 ops like to type their entire message before hitting the transmit button, and they may also type slowly, so what looks like lack of copy of them might just be the 45 seconds they needed to be ready to transmit. It was often ambiguous whether I lost them or they were just taking their time transmitting.

I'm learning Morse code, and tried calling CQ. I am only good enough to recognize code at about 10WPM, and also I'm not good enough with the Iambic keyer to run it faster than that. so I called CQ KSQP N0F for a little while. No response. Either I wasn't getting out, or contestors heard 10WPM, figured it couldn't possibly be a contest station, and left before waiting to hear the KSQP or N0F bits.

Anyhow, a fun and educational experience like always.

#### K0E (AD0DX) mobile

It was great to have the chance to be K0E/M. This was my first contest as a rover. Thanks to everyone for all the help getting started. Special thanks to Bob W0BH.

We had an ft-857 with a little tarheel 2 antenna. It seems like this is a great transmitting antenna. But it sure seemed like there were a lot of stations that we could not hear, so I'm not sure how good of a receiving antenna it is. This was my first mobile contest... is the tarheel 2 typical of all mobile antennas for receiving on 20 and 40m? I'd be glad to hear others thoughts on this. I understand it's a compromise because it is a shortened antenna.

Originally I had not planned on working any county lines. I'm using n1mm and it isn't really set up for a rover to sit a county line. But when I got to the end of Jefferson county and saw the Atchison county line it was just too tempting. At that moment I realized all I had to was to keep track on a piece of paper ( on the clipboard on my lap next to the laptop) was the first and last station that I worked on the county line. Then after I generated the cabrillo file I could go in with a text editor and add in the additional county for each station worked. This worked very well.

I had also planned to use a cable to key my rig from the ft-857 using n1mm. I decided to first build a cable for my ft-950 at home and it took a while to get this working. Unfortunately I didn't check the ft-897 until it was Fri evening, and then realized that 950 has a 1/4 inch jack and the 857 has a 1/8 inch jack. So I did all the cw with a keyer.

We missed the turn for Jackson county and decided to just keep driving through Atchison county because our goal was the far western counties of Kansas and the eastern counties have lots of coverage.

We tried to work cw and phone on both 40m and 20m. For some reason we just couldn't make hardly any contacts in Jewell county. But when we got to Norton and Decatur we were quite busy. Sitting on the Decatur / Rawlins county line was a real highlight. It was fun to hand out contacts to people and be the first one to give them those counties. Living in MO, I don't get to work a pileup very often.

We really had a hard time making contacts in Cheyenne county on Sat evening, so we decided to go back on Sun am to give more people a chance to log CHY. My friend/driver Bob had downloaded all the county maps for Kansas, so we located the corner of Cheyenne, Sherman and Rawlins and decided to start there at 9am on Sunday. This went well, and it was fun to give out 3 counties to each person.

I was sitting on 3540 calling cq Sat evening from 8:40 to 9pm and only made a few contacts. In hindsight I should have put this on my qrz web page to let everyone know we would be trying 80m cw at this time.

We were sitting there on Sun am between these two corn fields and a farmer in his pickup came along, he slowed down to see what we were up to, out there in the corn fields of Kansas. We rolled the window down and said hi and explained about being ham radio operators and that this weekend there was a contest for people all over the USA, Canada and the world to talk to ham radio operators in Kansas. We explained roughly that they get points for talking to someone in each county in Kansas and that's why we were out here at this particular spot, because it was the intersection of Cheyenne, Rawlins and Sherman counties. Anyway he was kinda excited hearing what we were doing, wished us luck and continued on his way.

About 10 min later a doe and her fawn came out of the corn about 20 yards away from us... but we weren't hunting deer on this trip.

One great memory for me on the trip was after we left the 3 corners chy / raw / smn, we were driving south in Thomas county to get back to the I-70. We are driving through cornfields, and I'm trying to find a spot on 20m phone without much success. N4PN gave me a call, I worked him and then he helped me move down the band about 8khz to find an open spot. He was hearing a lot more signals on the band than I was. I really appreciated him taking the time to help me find a clear frequency to call cq on.

We also spent extra time in Graham county. And we were still working stations when we came the Rooks county line. We stopped for 20 min(?) at the Rooks / Graham county line and made more contacts.

The extra stops in chy / raw / smn on Sun am and also sitting at the Rooks/Graham county line put us way way behind our original schedule, and so we ended up the contest in Mitchell county.

I can see that time discipline while mobile contesting is a challenge, at least it was for me because when you have a good run going sitting at a county line to you want to keep it going and are reluctant to leave to keep on schedule.

The other thing we learned the hard way is that 20m sstv is 14230 to 14235, which really cut down on our freq's when the Ohio and Hawaii qso parties were centered on 14250.

The other interesting thing that happened was that late in the day on Sat, and again on Sun, we could not bring the swr down on the tarheel. We kept notes of the settings for each band and mode, and could not find the 'sweet' spot where the swr was 1:1. We had to stop the truck and shut everything off for about 10 minutes, and after that we were able to get the swr back to normal. I have no idea what caused this.

We also had a problem with the small inverter we used to power the laptop. Around Sun at noon, the electrical noise was really bad. We looked outside to find the problem. Again we stopped and shut the truck off, and then we heard that the small fan in the inverter had kicked in and was causing all the electrical noise. So we started up again and ran the laptop off the battery, and plugged it back in to charge when we were off the air.

I did hear K0S on Sun afternoon on 20m phone but could not break through the pileup.

It was also fun to work Hawaii on cw while mobile.

We had a great time. Special thanks to Bob / K1BBR for driving his truck and providing the radios and the antenna.

**N6MU (CA)** 144 cw 193 ssb - Wow, what a challenge. Needed 18 counties after Saturday and didn't think I could get the sweep. Everything fell into place Sunday and my last four were MIA, LCN, OTT and LYO all provided by different mobiles. Top mobile for me was K0S with 78 Qs followed by N0K(32), N0U(31), K0O(30), K0WHY(30), K0E(21) and W0O/N0R(15). Outstanding effort by all the KS participants, especially the 1x1s. I worked 31 of 33 of them.

**W0A (K0WA)** 320 cw 718 SSB Conditions were up and down the whole two days. Ran quite a few Europeans on phone and CW on 20. 15 meters was quite useless. 40 meters was so-so. I think I missed South Dak for a "state sweep."

**N2WN (TN)** Thanks to the mobiles: K0S (27), N0U (20), N0R (15), W0O (12), K0O (11), N0K (10), WY0I (6), K0E (5),W0W (4),W0L (3). Worked both of the bonus stations K0A and KS0KS, and managed to spell KANSAS and SUNFLOWER in two modes.

Propagation was great most of the time I was able to play. Weather was great here, so had a lot of yard work to enjoy. Sunday was almost exclusively a 20m game, seemed like there was more QRN in KS on 40 from the comments heard... Still not on PSK, but managed a couple RTTY QSOs.

Only missed two counties that I heard, K and F were the tough letters here. Heard one person announce that they had worked all counties, but the KS station sounded like he busted the call on Sunday. W0L sounded genuinely excited handing contacts out. A few folks obviously weren't hearing very well at all, spent too much calling and not enough time listening (some of them I could hear a half dozen or more stations calling from all over NA and EU).

**N8II (WV)** "working the KANSAS SUNFLOWER 1X1's was fun and I think I worked just about all who were on which were many spelling them 2 times over at least. The mobiles did a great job of criss-crossing the state activating all counties, I fell 3 short of working them all missing PHI, STA, SMI and still managed to be able to walk the dog once, eat meals, and not run myself into the ground. "

#### NOU (K5CM, N5KW) mobile - multi-op

(From Pam N5KW / N0U)

Having always driven Connie around the counties for the qso parties and never operated contest from the mobile, I charged my cell phone so I could play games while waiting for him to run the pile ups from multi county lines and wait to race off to the next spot. Much to my surprise and delight he announced somewhere along the way we were a multi op this time. He would run the cw and rtty and I could run the ssb operation. He must have noticed MY look of surprise or the lack of words (which is never an issue for me) cause he just had that wry little smile he gets when he has pulled a fast one over on me!

Away we go...After "MANY" revisions to the route and the plan of attack we finally decided to leave sat morn early and start in Montgomery county and then head to Chatauqua and Elk as we would be the only station in these two counties.

From the lack of roads I now understand why no one else jumped on this band wagon....At the Elk/Cowley line we saw one vehicle in the 30 minutes we were there.

The rest of the counties were pretty uneventful until I finally got my nerve and was ready for the mic (Note I've worked contest for over 35 years and never had this issue....just Writelog from the mobile.....) At the Labette/Cherokee/Crawford line I was finally ready. It was a blast. I admit at times afterwards I probably drove to fast to get to the next line so I could have my turn again!

Don't use precious road time or operating time trying to explain yourself to anyone at a gas station. Just agree from the beginning ....Yes, I am a weather spotter....

Sunday proved to be the most interesting however...We went to the Allen, Bourbon, Linn and Anderson 4 county line. We spent quite a bit of time on google earth making sure we could truly get there. You can....you just have to go through the farmers pasture! When the road dead ended at the farm, not wanting to trespass (or be shot) I did the right thing and knocked on the door... again and again and again, When the wife opened the door in a nightshirt and a pillow covering the bottom half I was just glad it wasn't the farmer himself. Needless to say it didn't take long to get permission.

All in all Kansas backroads were surprisingly beautiful to me especially in the Flint Hills and I'm looking forward to next years adventure except Connie will be doing some of the driving as you'll hear me on the air.

73 Pam, N5KW

#### W0BH/mobile

2011 is the 150th anniversary of Kansas statehood which made this the Kansas Sesquicentennial QSO Party. This year, we celebrated by spelling KANSAS and SUNFLOWER with the last letter of 33 1x1 calls. Several years ago, Jerry, K5YAA came up with the idea for the Oklahoma Centennial QSO Party. . I started out by hoping I could find 12 operators to spell KANSAS. When I saw how enthusiastic everyone was, we added SUNFLOWER! Besides 19 plaques to try for, operators who spell either KANSAS or SUNFLOWER get a certificate if they apply for one and send in a log. If they spell both, the certificate includes the 1964 Amateur Radio stamp issued by the postal service. Kansas stations activated all 105 counties, and preliminary reports indicate that John/N6MU worked them all!

On to the run. XYL Lorna (K0WHY - also a 1x1 call if you think about it!) and I were closely watching the weather forecast for storms and excessive heat advisories. When the weather service raised the forecast to 105 degrees in southwest Kansas, I decided on Friday afternoon, to switch vans to one that had air conditioning. I already had antenna mounts in place, but I had never installed a complete QSO party setup in the '91 Mazda MPV. After a hurried two-hour installation with wires running everywhere, the setup actually worked except for 15m SSB. With dark coming on and a morning departure, I called it good for the evening and crossed my fingers.

#### Saturday

Since the 14 Kansas mobiles had almost all the counties covered multiple times, I could actually start from home this year. With the sun up and the air still cool (well, cooler anyway), I rechecked tuning, spent a little time trying to get 15m SSB to work with no success, and got ready to head out for the 9 am start. The equipment included an Icom 7000 with remote mounted head, Logikey K-4 keyer, MFJ travel paddle, three Hustler vertical sets on triple mag-mounts (20SSB/40SSB/10, 20CW/40CW/15 and 80CW), two Dell laptops, Lind DC-DC converters for both laptops to eliminate inverter noise, NA software for logging, keying and rig control, and DeLorme GPS and Street Atlas software for navigation.

The Icom radio, GPS computer and FM car radio interface (so Lorna could listen in) are powered by the van battery. Everything else is powered by a big deep-cycle marine battery which runs the logging computer, keyers, and level converter the full 12 hours. A second identical battery is along for Sunday or for a jump start in case we stay too long at a county line. An external 12v fan blows air continuously on the radio. All antennas are tuned for my operating frequencies, so no tuner was installed, and I didn't have time to move over the voice keyer. I previously had major computer keying / RF feedback issues in this van, so I built a parallel port keying interface using a 4N25 opto-coupler. I used it in the Astro for the Oklahoma QSO Party but had never tested it in the Mazda. It worked. My CW no longer locked on whenever I went to 20m CW.

8:55 am found me ready to go at the McPherson / Marion / Harvey county line, three miles from my farm. Lorna stayed at home and finished packing. I got on 7038 as published, and there was John/N6MU waiting for me. We chatted for a few minutes, then logged 3 quick Qs, the first of 76 contacts John and I would make

throughout the weekend. My friend Alan/K07X from Wyoming was next and it went from there. Great starting conditions on both 40 and 20. After ten or so minutes of CW operating with the van running to keep the battery voltage up, I realized I was smelling exhaust. I'd parked with the rear of the van facing a very light wind, so I turned the van around before carbon monoxide poisoning became part of my writeup!

At 1426, I started SSB on schedule and had a nice run going for ten minutes. Then the computer crashed. I occasionally lock up the computer and can easily reset it, but this was a real crash. When I reloaded, the log file with 123 contacts wouldn't load. I tried to fix it for five minutes with no luck, so I left the pileup and headed for home to pick up Lorna. While Lorna finished packing, I sat in the driveway, switched to my backup computer, and started a clean, empty log file. Twenty minutes after the "crash" and fifteen minutes behind schedule, we headed out once again.

Band conditions stayed great on 40 and 20 throughout the morning, but the computer kept crashing. After awhile, I figured out that it only crashed when I was on SSB, and only on 20m .. exactly where I had RF issues before on CW. Every time the computer would crash, I had to restart, copy a new, clean log file, and start over logging from scratch. Losing the call history hurt the most. I wasn't worried about recovering the log file, but it certainly slowed down the rate. Finally I figured out that if I didn't press any keys while actually transmitting, no crash. That took a bit of extra concentration to do and I forgot a few more times, but it worked. Never a dull moment on 20m!

The Mazda goes faster than the Astro, so Lorna got us back on schedule after a few counties. The calls kept rolling in, and I started finding other 1x1 Kansas stations to work. Several hours in, I got my first Ohio QSO Party station and started keeping a count for them since their exchange requires a serial number. The Hawaii QSO Party made getting the Hawaii multiplier simple as well. Hurricane Irene also made her presence known by limiting calls from the northeast. I got updates from New York and other eastern seaboard states as I worked them, and I really missed hearing QSO party regular NT2A from NY (Gennady finally called in on Sunday). As the day warmed up, I finished my coffee and started looking around for the water jug. Nowhere to be found ... we'd forgotten to bring water .. not smart with a 105 degree forecast! A quick stop at a convenience store remedied that situation.

The day went smoothly and fast, but another intermittent problem popped up. Sometimes my audio would just stop. I'd wiggle headphone wires and the audio randomly came back on for extended periods before cutting out again. Finally, I realized I was accidentally stepping on the footswitch, a new addition this trip. I'd previously used finger push-to-talk, but that switch broke, so the footswitch was a late addition. The footswitch is a keeper for future trips .. it worked great. VOX doesn't work reliably in my mobile environment. Another time during a fast food stop, Lorna had just refilled her drink cup and noticed a wire crossing through the drink holder. I was operating CW. She moved the wire and everything went dead. Oops! After some frantic searching and nothing lighting up, I opened the hood and found the tripped circuit breaker in the radio / battery circuit. It reset it and all was well. No idea what happened, but as I said, a mess of wires!

The three-county lines are the most fun, but we weren't looking forward to the last one for the day because it was near a hog farm. Last year, the hogs won! This year, the wind was in our favor, but temperature wasn't. It was well over 100 degrees, so we parked and kept the engine and A/C on for 30 minutes. Besides the heat, the biting flies were out in full force. Lorna wasn't dressed for biting flies, so we were really glad we switched vans. After a nice run, Lorna put the van in gear and headed out. Suddenly, the check engine light came on, the first time it's ever done that in the Mazda. I suspected something with the cooling system. The engine temperature was fine. The oil was full, but the cap to the overflow container for the radiator had come completely loose. I added water, put the cap back on, and the check engine light stayed off for the rest of the trip.

Heading north for the final hour, we were treated to a beautiful sunset as I started thinking 80 meters. The antenna worked when I tested it at home, but when I switched to the 80m antenna and keyed up, there was a bang. At that exact moment, we'd hit a bird. Don't do that to me! We ended the day at Lorna's cousin's house a few miles across the Colorado border in Burlington with no idea how many Qs we had in the log. I stayed up late to recover and combine the 7 crashed logs. When I did, the total was 1290 combined contacts for the day, and I think I got them all back. I also added a string of ferrites to the level converter cable to try to solve the RF / computer crash issue. That worked, too. You can never have enough ferrites along in a mobile!

#### Sunday

Sunday found us heading back east on I-70 towards Goodland in Kansas. We crossed the border into Sherman county a few minutes before start time. The first 30 or so minutes were really slow with a few loud signals but not much activity on either 40 or 20. Lorna pulled into a fast food place in Goodland, picked up her morning coffee, and got breakfast for us both while I CQd on CW. About the time breakfast arrived, John/N6MU asked me to QSY to SSB. I told him we were eating and he immediately understood. A full mouth and CW work a lot

better than a full mouth and SSB! While I was eating and CQing in the parking lot, several Harley motorcyclists were eyeing both our van full of antennas and the clear blue sky. One asked, "Do we need to be worried?" Mistaken for a storm-spotter once again! "Not until later," I replied. That turned out to be prophetic. Later in the day, severe thunderstorms were forecast and made their appearance in a number of northwestern counties including ours. Fortunately, the KSQP was over by then. Shortly after we got on the freeway, the bands suddenly opened and the pileups were back.

I-70 was fast and Lorna actually pulled ahead of schedule which gave me more time for our first three county line. Not to be. The GPS road didn't exist, and we used up our spare time trying to find an alternative location. That ended up being a wagon-train set of ruts between two fields which fortunately ended at a fence just past the Logan / Gove county line. We were dragging across a bunch of sagebrush, so when we stopped, a strong burning rope smell wafted into the van. Worried about a fire, Lorna stopped the engine and checked. No fire, and the smell went away after things cooled down. After a really nice run, we headed out on what my GPS said was Highway 40. Highway 40 turned out to be a gravel road, but at least it went through. Later when we stopped at another fast food place, the burning rope smell was back. Lorna (the resident prairie ecologist) said that sage is oily and she was right, it eventually burned off and no more smell.

Heading to our last stop, John/N6MU called in to report needing only one more county, and N0U/m was heading that way. A little later, success. All 105 counties in his log! I felt like celebrating for all of us right then and there, but we had some time left on the clock. Lorna delivered me to our last stop right on schedule. Like the previous stop, this line was a new one for me. The three county line was in the center of a paved road, so we decided to find a high point on the Ottawa / Dickinson county line instead, since both were new counties. The last half hour was a great pileup .. the reason I keep doing this over and over again. Thank you thank you all for being there and making this so much fun! It was also really fun to work a number of Kansas 1x1 stations as I drove along. All seemed to really be enjoying themselves. I didn't spell KANSAS or SUNFLOWER, but perhaps I can make up my own word from KSAULOWER! I'm glad ops like VE3KZ were more successful. Bob reports working 32/33 of the 1x1 calls.

### Reader Feedback

from Alan, VK4AAR:

One of the pleasures I get is being able to indulge a long time habit of mine of following stories on maps. I get out my Rand McNally Road Atlas and follow the CHers routes as shown in their submissions. When towns, motels or other landmarks are referred to, I use Google Earth to track them down.

But whilst I like to read all the CHers trips I do find yours the most detailed and therefore the most interesting to me. When you went up from NM into CO I was hoping you would hit Gunnison and Hinsdale but the band had gone by then and I was in bed fast asleep. I really wish I could run a few counties myself but it would be a helluva lot more expensive for me compared to the Stateside boys as discussed in this latest edition, hi! Hi!

I have also bookmarked the links for the various State QSO Parties (Sept CHN) ready to get the necessary details when the time comes.

I also agree with a statement made somewhere in the latest issue regarding lack of CW on occasions. The other day I looked at the spots (W6RK) and was (dare I say it) disgusted that every spot going back to the previous day were on 14336 and two on 7188. Not a solitary CW spot and there must have been 40 or 50 spots ... maybe more I didn't keep back tracking to find the last CW spot! I simply turned the rig OFF as I've seen these days before. I had better things to do other than sit listening to band noise on 14056.5 and DX LSB on 7056.5.

Keep up the good work. Listen for me on CW in the first couple of hours before the band closes for me (about 1430z) ... I need all I can get in that miniscule window, hi! hi! Its after midnight anyway at 1430z and time to hit the sack.

# **USA - Five Mode Award**

**OBJECTIVE:** To make contacts with amateur radio stations in **All USA Counties** using five (5)different **Modes** for each county.

**SPECIAL RULES:** Each of the five contacts for each county must be made using a different **Mode.** 

The contacts may be made using any **Band** and may be made on the same **Band** or on any mix of **Bands**. Any of the **Modes** used to complete a particular county may be different from any or all of the **Modes** used to complete other counties.

For each listed **Mode**, variations in speed or other parameters (such as CW-R or PSK 63) do not countas separate or different **Modes**. **Modes** with variations in speed or other parameters are referred to as "**Mode** sets." Each **Mode** set is considered a single different **Mode** for purposes of this award.

The following **Modes** and **Mode** sets may be used for this award:

AM DV JT6M ROS AMTOR FAX MFSK RTTY ATV FM **MT63** SSB CHIP FSK31 **OLIVIA** SSTV **CLOVER** GTOR PACKET THOR CONTESTIA HAM DRM PACTOR THRO CW HELL PAX DSSTV HFSK PSK DOMINO JT65 Q15

Valid Contacts that are eligible for other MARAC awards may also be used for this award.

When at least one of the stations is a Mobile Operation, both stations may count the contact.

**AWARD LEVELS:** A separate award (certificate and mobile plaque) is available for each State All counties in a State must be completed for the award for that State. Each State award may be earned multiple times up to a maximum of ten (10) times, but only the first time is a numbered award. An applicant must complete contacts with all counties in a State (using five different Modes) before starting over in that State.

A special MARAC Trophy will be awarded for completing contacts using five different **Modes** in all **USA Counties**. There is no fee for the special MARAC trophy.

APPLICATION AND FEES: Standard application, logs, and fees.

### VE Test Sesssion – Kalawao Style

#### Kalaupapa, Hawaii Is Site of Second ARRL Remote VE Testing

#### 08/26/2011

From the sunny shores of Hawaii's Kalaupapa Peninsula, ARRL Volunteer Examiners gave a remote ARRL VE session on the morning of July 25. Well, at least it was morning in Hawaii, but it was late in the afternoon at ARRL Headquarters. What made this VE session so special that it was only the second VE session to be administered via Internet video feed. The first video VE session -- and the first-ever VE session in Antarctica -- took place in October 2010. Now there are two new radio amateurs in Hawaii's Kalawao County, just in time for the Hawaii QSO Party, August 27-28.

Not only was this VE session special due to its location, only one VE was at Kalaupapa for the exam. "This is where the Internet video feed came into play," explained ARRL VEC Manager Maria Somma, AB1FM. "Joe Speroni, AH0A -- who lives in Honolulu but went to the site at his own expense -- was at Kalaupapa, but Bev Yuen, AH6NF, and Ray Moody, AH6LT, were in Honolulu and watching on video. We also had three VEs here at ARRL Headquarters watching via video feed: Penny Harts, N1NAG, Steve Ewald, WV1X, and Rose Anne Lawrence, KB1DMW. These three administer many VE sessions each year here at ARRL HQ."

Kalaupapa is an isolated peninsula located on the island of Molokai in the Hawaiian Islands. From 1866-1969, those Hawaiians who were afflicted with leprosy (today called Hansen's disease) were removed from their families and sent to live at Kalaupapa for the rest of their lives, separated from society. Chosen by the Hawaiian Monarchy for its natural barriers to escape -- including some of the highest sea cliffs in the world and a coastline with high surf and hazardous ocean currents -- the site became a National Historical Park in 1980 with the aim to preserve, protect and interpret more than 200 historic buildings, archeological sites and the incredible stories of the people that lived and died there. Currently, about 90 people -- former patients, Department of Health staff and National Park Service staff -- live in the settlement of Kalaupapa within the park year round.

According to Yuen, there are physical barriers to enter Kalaupapa, as well as entry restrictions. "To get to Kalaupapa, you must either take a mule train or be an expert hiker; entry by sea is restricted," she explained. "The trail down to the peninsula goes down a very steep 1600 foot cliff and the trail is 3.5 miles. If you take a plane from Honolulu to Kalaupapa -- a distance of about 60 miles -- expect to pay at least \$500 for a round-trip ticket."

While there are modern communication systems (i.e., telephone, high speed Internet), Yuen said that Kalaupapa residents are concerned that there is no backup communications during the frequent power failures: "Having radio amateurs at Kalaupapa would give residents a form of backup communications. This became evident during the recent tsunami following the March 2011 earthquake in Japan. While little damage was done, residents had to be evacuated in the middle of the night to higher ground on the peninsula, and had limited connection with the outside world."

Kalaupapa residents interested in getting their ticket contacted the Civil Defense Amateur Radio Club which provides VE testing on Oahu, and asked the group what they could do to help the peninsula residents. "The OCDARC VE group had read about the ARRL VEC remote testing used for candidates in Antarctica," Yuen said. "While not as remote as Antarctica, the Kalaupapa peninsula is still a logistically and financially challenging trip. It would be difficult for even one VE to travel to the peninsula, but doing so for three VEs is a major burden. They requested and received FCC approval for a remote testing session. With enthusiastic support from the ARRL VEC Manager, Maria Somma, AB1FM, a testing session was set up for several residents who had been studying on their own for the Technician exam. Joe Speroni, AH0A, travelled to Kalaupapa to be the one needed VE on-site."

Two residents took the Technician exam and both passed. "On Monday, July 25 at 3 PM, we gathered in the ARRL VEC office to start the video conference exam session," Somma explained. "Testing was in the Superintendent's office, with the candidate's computer logged onto the ARRL VEC examination website. Six ARRL Volunteer Examiners observed the session. Three different interactive online Tech exams were available, so tests could be randomly assigned. The results were reported to the candidates within a few minutes of electronic submission to the ARRL VEC and VE team."

Moody, the Hawaii VE team manager who petitioned the FCC to hold the Kalaupapa test, participated from Honolulu. He was pleased with the result and how well ARRL remote testing software performed and said he hopes that the process can be applied to other isolated areas of Hawaii in the future. Yuen, the other VE participating from Honolulu, thought the process went well and the software worked flawlessly. "The emotions of those setting up this VE testing ranged from elation to despair as we confronted -- and solved -- a myriad of small problems that surfaced over the last couple of months," she said. "We are so grateful for the support of

the ARRL, especially Maria." The Oahu team also expressed their thanks and appreciation for the technical expertise provided by Jim Yuen, WH6GS.

Speroni, Moody and Yuen said they were pleased to know that Kalaupapa finally has ham radio operators who will be available when their normal communications go down. "There are plans for a permanent station at Kalaupapa," Yuen said. "You will be hearing ham radio operations from the county very soon. A small group of Oahu hams will be going to Kalaupapa to activate Kalawao County for the Hawaii QSO Party the last weekend of August, providing a rare contact for county hunters. While there, they will be assisting the new Technician licensees, and helping them to get on the air."

Source: ARRL Letter, published by the ARRL, Newington, CT 06111

Note de N4CD: Three new hams were licensed on Kalawao. They have no HF gear at the current time.

# Has Peak Oil Arrived?

Where Is Our Oil Price Collapse? (by Jim Quinn, The Burning Platform)

Make no mistake about it, without plentiful, cheap, and easy to access oil, the United States of America would descend into chaos and collapse. The fantasies painted by "green" energy dreamers only serve to divert the attention of the non critical thinking masses from the fact our sprawling suburban hyper technological society would come to a grinding halt in a matter of days without the 18 to 19 million barrels per day needed to run this ridiculous reality show. Delusional Americans think the steaks, hot dogs and pomegranates in their grocery stores magically appear on the shelves, the thirty electronic gadgets that rule their lives are created out of thin air by elves and the gasoline they pump into their mammoth SUVs is their God given right. The situation was already critical in 2005 when the *Hirsch Report* concluded:

"The peaking of world oil production presents the U.S. and the world with an unprecedented risk management problem. As peaking is approached, liquid fuel prices and price volatility will increase dramatically, and, without timely mitigation, the economic, social, and political costs will be unprecedented. Viable mitigation options exist on both the supply and demand sides, but to have substantial impact, they must be initiated more than a decade in advance of peaking."

In the six years since this report there has been unprecedented oil price volatility as the world has reached the undulating plateau of peak cheap oil. The viable mitigation options on the demand and supply side were not pursued. The head in the sand hope for the best option was chosen. The government mandated options, ethanol and solar, have been absolute and utter disasters as billions of taxpayer dollars have been squandered and company after company goes bankrupt. The added benefit has been sky high corn prices, dwindling supplies and revolutions around the world due to soaring food prices. **The last time the country went into recession in 2008, the price of oil plunged from \$140 a barrel to \$30 a barrel in the space of six months.** I'd classify that as volatility. We've clearly entered a second recession in the last six months. So we should be getting the benefit of collapsing oil prices.

But, a funny thing happened on the way to another oil price collapse. **It didn't happen.** WTI Crude is trading for \$87 a barrel, up 23% since January 1. Unleaded gas prices are up 54% in the last year and 43% since January 1. Worldwide oil pricing is not based on WTI crude but Brent crude, selling for \$113 per barrel, only down 10% from its April high of \$125. The U.S. and Europe consume 40% of all the oil in the world on a daily basis. Multiple European countries have been in recession for the last nine months. The U.S. economy has been in free fall for six months.

Some short term factors will continue to support higher oil prices. The Chinese continue to fill their strategic petroleum reserve, Japan is still relying on diesel generators for electricity post-tsunami, and the Middle East is developing a love affair with the air conditioner. But, it's the long term factors that will lead to much higher oil prices for myopic oblivious Americans.

John Hussman describes the situation on the ground today based upon six economic conditions presently in effect:

There are certainly a great number of opinions about the prospect of recession, but the evidence we observe at present has 100% sensitivity (these conditions have always been observed during or just prior to each U.S. recession) and 100% specificity (the only time we observe the full set of these conditions is during or just prior to U.S. Recessions).

With 40% of the world in or near recession, how come oil prices are still so high and much higher than last year, when the economies in Europe and the U.S. were expanding? The number of vehicle miles driven in the U.S. is still below the level reached 43 months ago and at the same level as early 2005. The price of a barrel of oil in early 2005 was \$42. The U.S. is using the same amount of oil, but the price is up 112%. It seems the U.S. isn't calling the shots when it comes to the worldwide supply/demand equation.

It would probably be a surprise to most people that U.S. oil consumption today is at the same level it was in 1997 and is 10% lower than the peak reached in 2005. This is not a reflection of increased efficiency or Americans gravitating towards smaller vehicles with better mileage. Americans are still addicted to their SUVs and gas guzzling luxury automobiles. It's a reflection of a U.S. economy that has been in a downward spiral since 2005.

If the U.S. isn't driving oil demand in the world, then why are prices going up? There are three main factors:

- 1. Dramatic increase in demand from China and other developing countries.
- 2. A plunging U.S. Dollar
- 3. Peak oil has arrived

#### **Surging Developing World Demand**

The Energy Information Administration issued their latest forecast and it does not bode well for lower prices:

Despite continued concerns over the pace of the global economic recovery, particularly in developed countries, the US Energy Information Administration expects worldwide oil consumption to increase this year and next spurred by demand in developing countries. US oil consumption, however, is forecast to contract from a year ago. Worldwide oil demand, led by China, will increase by 1.4 million b/d in 2011 to average 88.19 million b/d and by 1.6 million b/d in 2012, outpacing average global demand growth of 1.3 million b/d from 1998-2007, before the onset of the global economic downturn.

China is now consuming over 9 million barrels per day. This is up from an average of 7 million barrels per day in 2006. Platts, a global energy analyst, put China's 2010 figures at 8.5 million barrels per day, up 11.43% from the previous year. The forecast for China's crude throughput in 2011 is an average of 9.24 million barrels per day up 8.5% from 2010. In the first seven months of this year, total crude throughput stood at average of 8.95 million barrels per day.

Standard Chartered Bank predicts that, by the year 2020, China will overtake all of Europe as the second largest consumer of oil in the world, and should catch up to the U.S. by the year 2030 as China's demand continues to rise while U.S. demand is expected to be flat. Chinese crude imports grew 17.5% in 2010 to 4.79 million barrels per day. China is importing 55% of its oil today versus 40% in 2004.

China's oil consumption per capita has increased over 350% since the early 1980s to an estimated 2.7 barrels per year in 2011. Consumption per capita has risen nearly 100% in just the past decade. Oil consumption per capita in the U.S. currently ranks among the top industrialized nations in the world at 25 barrels per year. However, today's consumption levels are approximately 20% lower than they were in 1979. The chart below paints a picture of woe for the United States and the world. China overtook the United States in auto sales in 2009. They now sell approximately 15 million new vehicles per year. India sells approximately 2

million new vehicles per year. The U.S. sells just over 12 million new vehicles per year. In China and India there are approximately 6 car owners per 100 people. In the U.S. there are 85 car owners per 100 people.

They call China, India and the rest of the developing world - Developing – because they will be rapidly expanding their consumption of goods, services and food. There will certainly be bumps along the way, as China is experiencing now, but the consumption of oil by the developing world will plow relentlessly higher. China isn't the only emerging country to show big increases in per capita consumption. The growth in consumption for several other countries far outpaces China. Consumption per capita in Malaysia has nearly quadrupled since the mid-1960s. Consumption in Thailand and Brazil has more than doubled to roughly 5.7 barrels and 4.8 barrels per year, respectively.

Developed countries, especially those in Western Europe, have experienced substantial declines in oil consumption. Today's per capita consumption in Sweden is roughly 12 barrels per year, down from 25 barrels per year in the mid-1970s. France, Japan, Norway and U.K. all use less oil on a per capita basis than they did in the 1970s. These countries have been able to drive down the consumption of oil by taxing gasoline at an excessive level.

Americans pay 43 cents in taxes out of the \$3.70 they pay at the pump for a gallon of gasoline. A driver in the UK is paying \$4 per gallon in taxes out of the \$9 per gallon cost. Gasoline costs between \$8 and \$9 per gallon across Europe today. The extreme level of gas taxes certainly reduces car sizes, consumption and traffic. Too bad the mad socialists across Europe spent the taxes on expanding their welfare states and promising even more to their populations. Maybe a \$6 per gallon tax will do the trick. Forcing Americans to drive less by doubling the gas tax is a quaint idea, but it is too late in the game. Europe is still made up of small towns and cities with the populations still fairly consolidated. Biking, walking and small rail travel is easy and feasible. The sprawling suburban enclaves that proliferate across the American countryside, dotted by thousands of malls and McMansion communities, accessible only by automobiles, make it impossible to implement a rational energy efficient model for moving forward. We cannot reverse 60 years of irrationality. Even without higher gas taxes, the price of gasoline will move relentlessly higher due to the stealth tax of currency debasement.

#### A Plunging US Dollar

The US dollar has fallen 15% versus a basket of worldwide currencies (DXY) since February 2009. This is amazing considering that 57% of the index weighting is the Euro. If you haven't noticed, Europe is a basket case on the verge of economic disintegration. The US imports a net 9.4 million barrels of oil per day, or 49% of our daily consumption. Our largest suppliers are:

- 1. Canada 2.6 million barrels per day
- 2. Mexico 1.3 million barrels per day
- 3. Saudi Arabia 1.1 million barrels per day
- 4. Nigeria -1.0 million barrels per day
- 5. Venezuela -1.0 million barrels per day
- 6. Russia 600,000 barrels per day

- 7. Algeria 500,000 barrels per day
- 8. Iraq 400,000 barrels per day

These eight countries account for over 70% of our daily oil imports. You hear the "experts" on CNBC declare that our oil supply situation is secure because close to 60% of our daily usage is sourced from North America. The presumption is that Canada and Mexico are somehow under our control. There is one problem with this storyline. US oil production peaked in 1971 and relentlessly declines as M. King Hubbert predicted it would. Mexico will cease to be a supplier to the U.S. by 2015 as their Cantarell oil field is in collapse. Most of the oil supplied from Canada is from their tar sands. Expansion of these fields is difficult as it takes tremendous amounts of natural gas and water to extract the oil.

The rest of the countries on the list dislike us, hate us, or are in constant danger of implosion. When the Neo-Cons on Fox News try to convince you that Iraq has been a huge success and certainly worth the \$3 trillion of national wealth expended, along with 4,500 dead and 32,000 wounded soldiers, you might want to keep in mind that Iraq was exporting 795,000 barrels of oil per day to the U.S. in 2001 when the evil dictator was in charge. Today, we are getting 415,000 barrels per day. Dick Cheney was never good at long term strategic planning. We better plant more corn, as our supply situation is far from stable. Maybe we can install solar panels from Obama's Solyndra factory on the roofs of the 65 Chevy Volts that were sold in the U.S. this year, to alleviate our oil supply problem. The reliability and stability of our oil supply takes second place to the price increases caused by Ben Bernanke and his printing press. The average American housewife driving her 1.5 children in her enormous two and a half ton Chevy Tahoe or gigantic Toyota Sequoia two miles to baseball practice doesn't comprehend why it is costing her \$100 to fill the 26 gallon tank. If she listens to the brain dead mainstream media pundits, she'll conclude that Big Oil is to blame. The real reason is Big Finance in conspiracy with Big Government.

Ben Bernanke is responsible for Americans paying \$4 a gallon for gasoline. Zero interest rates, printing money out of thin air to buy \$2 trillion of mortgage and Treasury bonds, and propping up insolvent criminal banks across the globe have one purpose – to deflate the value of the U.S. dollar. The rulers of the American Empire realize they can never repay the debts they have accumulated. They have chosen to default through debasement. It's an insidious and immoral method of defaulting on your obligations. Let's look at from the perspective of our two biggest oil suppliers.

A barrel of oil cost \$40 a barrel in early 2009. The U.S. dollar has declined 30% versus the Canadian dollar since early 2009. The U.S. dollar has shockingly declined 20% versus the Mexican Peso since early 2009. How could the mighty USD decline 20% against the currency of a 3rd world country on the verge of being a failed state? Ask Ben Bernanke. Our lenders can't do much about the continuing debasement of our currency, but our oil suppliers can. They will raise the price of oil in proportion to our currency devaluation. Since Bernanke's only solution is continuous debasement, the price of oil will relentlessly rise.

#### Peak Oil Has Arrived

"By 2012, surplus oil production capacity could entirely disappear, and as early as 2015, the shortfall in output could reach nearly 10 MBD. At present, investment in oil production is only beginning to pick up, with the result that production could reach a prolonged plateau. By 2030, the world will require production of 118 MBD, but energy producers may only be producing 100 MBD unless there are major changes in current investment and drilling capacity." - 2010 Joint Operating Environment Report



# **IEA China Oil Forecast**

We've arrived at the point where demand has begun to outpace supply and even the onset of another worldwide recession will not assuage this fact. World oil supply has peaked just below 89 million barrels per day. Supply has since fallen to 87.5 million barrels per day, as Libyan supply was completely removed from world markets. The International Energy Agency is already forecasting worldwide demand to reach 90 million barrels per day in the second half of

2011 and reach 92 million barrels per day in 2012. The IEA warns that "just at the time when demand is expected to recover, physical limits on production capacity could lead to another wave of price increases, in a cyclical pattern that is not new to the world oil market."



Projected global oil production through 2100

The world is trapped in an inescapable conundrum. As supply dwindles, prices increase, causing global economies to contract, and temporarily causing a drop in prices, except the lows are higher each time. The drill, drill, drill ideologues do nothing but confuse and mislead the easily led masses. We have 2% of the world's oil reserves and consume more than 20% of the daily output. We consume 7 billion barrels of oil per year.

Drilling for oil in the Arctic National Wildlife Refuge in Alaska and areas formerly off limits in the Outer Continental Shelf will not close the supply gap. The amount of recoverable oil in the Arctic coastal plain is estimated to be between 5.7 billion and 16 billion barrels. This could supply as little as a year's worth of oil. And it will take 10 years to produce any oil from this supply. The OCS has only slightly more recoverable oil at an estimated 18 billion barrels and the BP Gulf Oil disaster showed how easy this oil is to access safely. The new over hyped energy savior is shale gas. The cheerleaders in the natural gas industry claim that we have four Saudi Arabias worth of natural gas in the U.S. This is nothing but PR talking points to convince the masses that we can easily adapt.

And last but certainly not least, we have the abiotic oil believers that convince themselves the

wells will refill despite the fact that there is not one instance of an oil well refilling once it is depleted.

I wrote an article called *Peak Denial About Peak Oil* exactly one year ago when gas was selling for \$2.60 a gallon. I railed at the short sightedness of politicians and citizens alike for ignoring a calamitous crisis that was directly before their eyes. Just like our accumulation of \$4 billion per day in debt, peak oil is simply a matter of math. We cannot take on ever increasing amounts of debt in order to live above our means without collapsing our economic system. We cannot expect to run our energy intensive world with a depleting energy source. There is no amount of spin and PR that can change the math. Un-payable levels of debt and dwindling supplies of oil will merge into a perfect storm over the next ten years to permanently change our world. The change will be traumatic, horrible, bloody and a complete surprise to the non-critical thinking public.

"In the longer run, unless we take serious steps to prepare for the day that we can no longer increase production of conventional oil, we are faced with the possibility of a major economic shock—and the political unrest that would ensue." – Dr. James Schlesinger – former US Energy Secretary, 16th November 2005

We were warned. We failed to heed the warnings. If we had begun making the dramatic changes to our society 5 to 10 years ago, we may have been able to partially alleviate the pain and suffering ahead. Instead we spent our national treasure fighting Wars on Terror and bailing out criminal bankers. Converting truck and bus fleets to natural gas; expanding the use of safe nuclear power; utilizing wind, geothermal, and solar where economically feasible; buying more fuel efficient vehicles; and creating more localized communities supported by light rail with easy access to bike and walking options, would have allowed a more gradual shift to a less energy intensive society.

We've done nothing to prepare for the onset of peak oil. Until this foreseeable crisis hits with its full force like a Category 5 hurricane, Americans will continue to fill up their M1 tank sized, leased SUVs, tweet about Lady Gaga's latest stunt, and tune in to this week's episode of Jersey Shore. Meanwhile, economic stagnation, catastrophe and wars for oil are darkening the skies on our horizon."

Source; http://investorvillage.com/smbd.asp?mb=4288&mn=78405&pt=msg&mid=10911809

# **County Lines on Garmin GPS**

If you wish to have county lines appear on your GPS, please go to:

W4YDY's page here:

http://pages.suddenlink.net/w4ydy/hamlinks.html#County

You will download the file to a flash card that fits in your GPS unit, turn it on, and the county lines should appear!

# Colorado QSO Party

Held Labor Day Weekend, this had good participation from about two thirds of the counties in CO. Missing in action again were nearly all of the CO county hunters – not a peep from many save Larry, W0QE who got on to put out his home county of Broomfield and Jim, AD1C who was on most of the contest period. Disappointing to say the least, with half a dozen county hunters there who sat this out.

I needed 3 in CO, and snagged one, and missed one other than was run. Many others snagged needed counties. From TX, 40m was 'too short' for much of the state and 20m was 'too long'. Hmmm...if only we allowed 30M in the QSO Party – hi hi.

There were two or three mobiles to chase with W0ZA the most active on cw.

From the 3830 reflector:

N6MU (CA) 4 multipliers (counties)

"Conditions and activity on CW down from last year. Activity Saturday afternoon consisted of waiting for the three mobiles to change counties. Top mobile for me was W0ZA with 23 Qs followed by W0HXB with 12 and W0ETT with 11. Thanks for all the Qs. 73...

KOUK (fixed CO)

I want to thank all the Colorado stations for getting on and working the Colorado QSO Party plus all the out of staters.

Its a pleasure to have PPRAA step up to sponsor the contest. For years we had "NO" QSO Party to get behind. Thus we must support and encourage the PPRAA to continue the tradition and to hopefully make the contest easier for all.

Started on 160/80/40 working cw and over to ssb this lasted till about 1500z when 20mtrs started and then did a bit of 40/20 and looks at 15mtr. Moved and was moved by several station between the bands. K5KG was the best to ask for moves and fun to work George on so many bands and modes. 15mtrs at first was non existent but latter opened to certain area of the east coast.

Did work W0ETT on his hernia repair mobile trip from Parker and round back thru Parker El Paso, SAS CLC etc.

W0ZA had the strongest mobile cw signal. Heard and worked Greg but later didn't hear him.

W0MOE, K0YW, were on from near Durango which was good to hear. K0DU came on and found me and I moved him to 15mtrs and 10mtrs. Jerry was doing some work and had other antenna disconnected.

K0IZ worked from Teller Co. and he was running 20mtrs.

Over all I found the band conditions so so. I never do real well on 20mtrs I think its due to small tribander but I worked who I could hear and those that heard me.

Please let encourage others to get on next year.

Bill Brown, KOUK

#### W0ANT – fixed CO

"One thing I really enjoyed was working CW in a contest a lot. One thing I found

funny were the anti contesters they kept following me thinking I cared. This was definetly the funnest contest ive ever done. 73! Anna W0ANT

**KG0Z (W4WZ operator)**: "I had planned on going to Lake County Saturday afternoon but the big Breckenridge Rubber Duck Race was scheduled on the Blue River and got caught up in the excitement and didn't make it to Lake. SRI! Conditions seemed only fair but was surprised when a VK called in on 40CW Saturday morning late and heard a loud JA as well. 20CW was OK and even had a couple of EU's call in. 15M was open but no one was up there."

OK...here's to poop on the rubber duck race

"On race day today, the Blue River will be dappled with more than 10,000 little yellow ducks stretching from the Maggie Pond by Main Street Station to the Riverwalk Center in Breckenridge. The Rubber Duck Race consists of three races — a Corporate Race, a Kids Race and The Great Rubber Duck Race.

The race's inception was with the Adams Street Cafe; The Summit Foundation, (then called the Breckenridge Foundation), took the event over its second year. The organization started leasing ducks a few years in, storing them in the executive director's basement (they now live in a storage facility). The ducks are reused every year, and even though some get lost in the mix each race, The foundation owns more than 15,000 rubber ducks. "

Source: http://www.summitdaily.com/article/20110903/NEWS/110909961/1078&ParentProfile=1055

#### WORAA - fixed CO

"This was a disaster weekend for me. I wish participants would read the rules, although I doubt that will ever happen. The only Colorado County I worked was El Paso (where I was located). Never heard any other counties in Colorado. Contests on holiday weekends should be eliminated. This was my worst showing in this contest in 5 years of participation. Oh well, maybe next year... Thanks to those who gave me a contact and also for patience when asked to repeat. Oh, and I forgot to thank the lid who was whistling for his dog on 20 meters. I told him I had heard his dog about 20 kHz up the band. He took the hint and finally left. Hope he found the dog."

#### AD1C (fixed CO)

"Same buggy CoQP WriteLog module as last year. I could not tell if I had worked

a multiplier one only one mode, so I wasn't sure whether I should move people. Some other RTTY contest going on Saturday, so avoided that mode.

4 DX stations called in (SP, DL, LU and one other). Missed RI, VT, DC, NC(!), HI, AK and ND. Also missed all VE except VE3 (where was VE7?!?!?!). There seemed to be a decent amount of CO activity; it always surprises me when I can work in-state on 20 and 40 meters (no 80 meters here).

Doubled my score from last year. I'm sure Bill K0UK still smoked me in the LP/mixed mode category like he did last year."

# Solar Cell News

#### Photon recycling technology from Alta Devices enables 28.2% solar-cell efficiency

**Santa Clara, CA-**-A laboratory made gallium-arsenide (GaAs) thin-film photovoltaic (PV) solar cell from Alta Devices achieves a 28.2% conversion efficiency of sunlight to electricity, beating the previous record of 26.4% for a solar cell with a single p-n junction. The efficiency value, independently confirmed by the National Renewable Energy Laboratory, was made possible using a photon recycling technique.

Photons absorbed by a PV material kick electrons into the conduction band and leave behind holes. Many of the electrons that pass out of the cell are lost in the semiconductor when they recombine with a hole to produce either waste heat or a new photon. But by carefully growing a high-quality single crystal of gallium arsenide, Alta Devices says that 99% of the recombinations result in new photons that then create a new electron-hole pair and give the electron another chance to be captured as electricity; hence the term photon recycling. The Alta team also improved the reflectivity of the metal contacts on the back of the solar cell so that any photons exiting the cell are sent back in for possible reabsorption.

Because efficiency decreases in a production process once cells are packaged, Alta CEO Christopher Norris says, "We assume we will ultimately be able to achieve modules that are around 26 percent, and that's plenty to be competitive with fossil fuels." The theoretical maximum conversion efficiency for a solar cell with a single junction is 33.5%. "We can see a path to 30 percent with our same design right now," says Norris. Adding a second junction could also increase the energy output.

Alta says that GaAs is naturally better at converting light to electricity than the chief contenders, such as silicon and cadmium telluride (CdTe), but it tends to be more expensive. Low-cost materials, such as amorphous silicon, CdTe, and copper indium gallium selenide (CIGS), are less efficient; CdTe cells are around 12%. Alta solves this problem by using only a

small amount of a high-quality material in an epitaxial liftoff process--a thin film of gallium arsenide about 1 micrometer thick. Norris says an Alta module should cost about the same as a CdTe module but produce three times the energy.

The epitaxial liftoff process was developed by Eli Yablonovitch, an engineering professor at UC Berkeley and a cofounder of Alta. Alta is working on a pilot production line to produce samples of its solar cells sometime this year and expects to have early commercial shipments by late next year, Norris says. The company raised \$72 million to develop its production process.

Source: <u>http://www.laserfocusworld.com/articles/2011/08/photon-recycling-technology-from-alta-devices-enables-28-2-solar-cell-efficiency.html</u>

A photovoltaic cell that reaches record-breaking efficiency could make solar energy competitive with fossil fuels, says the company that created the cell.

The theoretical maximum conversion efficiency for a solar cell with a single junction is 33.5 percent. "We can see a path to 30 percent with our same design right now," says Norris. Adding a second junction could also increase the energy output.

The more efficient a solar cell is, the faster it pays back the cost of manufacturing and installing it. But efficiency and cost have been at odds with each other in solar cell design. Gallium arsenide is naturally better at converting light to electricity than the chief contenders, such as silicon and cadmium telluride, but it tends to be more expensive.

The most efficient materials are single-crystalline semiconductors, but those are usually pricier. Low-cost materials, such as amorphous silicon, cadmium telluride, and copper indium gallium selenide, are less efficient; CdTe cells are around 12 percent efficient. Alta solves this problem by using only a small amount of a high-quality material—a thin film of gallium arsenide about 1 micrometer thick.

"That is the whole trick. Don't use much gallium and don't use much arsenic," Norris says. He says an Alta module should cost about the same as a CdTe module but produce three times the energy.

The company cut down on the material cost by using a process called epitaxial liftoff, developed by Eli Yablonovitch, an engineering professor at the University of California, Berkeley, and a cofounder of Alta. Technicians start with a GaAs wafer as a seed layer and grow a thin-film photovoltaic device structure on top of that. They peel off the thin film, attach it to a metal backing, and finish processing it into a solar cell. The process leaves the original wafer, which they can reuse for the next batch of solar cells.

Alta is working on a pilot production line to produce samples of its solar cells sometime this year and expects to have early commercial shipments by late next year, Norris says. The company has raised US \$72 million to develop its production process.

# Tennessee QSO Party

Another good one this year with several mobiles out doing a great job. Mobiles out were: w4nz, n4zz, w4sig, ad8j, n4q, and w40qg. N4BBB KJ4BIX-

from K3IMC Forum

**W4SIG:** TNQP, thanks for all the qsos! Other than the pouring down rain on the curvy, dark back-country roads late at night I had a blast. Over 1000 qsos during the contest period. Sorry I had to cut out a few of the planned counties, but was just running out of time.

from the 3830 reflector

#### N4Q (N2WN operator) – QRP mobile (3 counties?)

Another QRP Themed TQP under the belt. Shortened my run this year, dropped CLAI as there was participation from fixed stations. Figured I would spend more time in Union and Knox as they were looking to be light, if any, participation. Turned out a number of KNOX stations played, never heard Union.

Horrible power line noise in Union on all bands, but made the high bands really tough. Knox and Grainger were quiet other than some storm related QRN, but it was much lighter than expected. Hot and humid out, had a few looks from passerbys.

Looped back to KNOX before heading home as high band conditions improved.

Thanks to the "regulars": WB8JUI, VE1RGB, K4BAI, WA2VYA, NO3M, DL3DXX, N8II, N4PN, K9YC... even managed a mobile W4SIG. My thanks to everyone who played for a bit and supported the Tennesse QSO Party. You folks are the best!

Note de N4CD – he was spotted just once during the contest. (Knox CO) Then on from the home QTH later

#### W4NZ multi-op mobile (W4NZ, N5WR)

"This was a 2-man team effort with Erik N5WR and I. We had a plan for covering 25 counties in the middle and eastern parts of the state. Actually, this was very similar to last year's route except we ran this one in reverse, traveling through the middle Tennessee counties first and the eastern counties late. The hope was that propagation on the higher bands would be better while driving westward and better on the lower bands late in the eastern counties. We were very surprised at the great short skip on 20m.

Our Georgia and Alabama neighbors were loud the whole trip. Encountered rain showers much of the afternoon but not bad. Surprisingly, not much QRN either. But, after sunset and just when we needed to install the 80m antenna, heavy rain set in when we made a pit stop in Cumberland county. (Just because you're under a gas station canopy doesn't mean you won't get soaked!) The extra time it took here plus having to travel a bit slower in the pouring rain left us about 15 minutes short of reaching our last county, Bradley. It was good to find that Bogdan W4EEH was active from there. Still, our route covered just under 500 miles.

All together conditions were pretty good. The pile-up were amazing(and fun!) Thanks for your patience as we sorted 'em out. We didn't work as many DX stations as in the past but DL3DXX was solid on both 20 and 40m with a total of 18 QSO's. Thanks, Dietmar!

Other QSO leaders:

WA2VYA(32),KV8Q(28),AA3B(27),WB8JUI(26),K4BAI(25),N4PN(24),W4UCZ(24),N8II(2 3),K5LH(22),N6MA(21),W5SL(20).

And a whole bunch between 15 and 20 Q's:

W9RE,W8TM,W0BH,VE1RGB,NO3M,K9NW,K1ZZI,AA8IA. Thank you all for following alongwith us. It certainly made the trip FUN!

#### N2WN – QRP Grainger TN

"Great work by the mobiles with W4SIG sounding like they had the gnarliest pileups on 40. W4NZ, N4ZZ, AD8J, WB4CHH made the log, wish there were more Qs, but happy with what I had. Definitely need a second radio.

The lone RTTY QSO was with WB4YDL. Tried calling a few times, but no go. Band hopping cut down on time for RTTY and SSB too.

I moved a few and moved when asked most of the time. Not much DX, pointed to EU a number of times, but the bands didn't seem to want to yield much.

#### WOBH KS

I got on for the first few hours, then took a nap. That really revived my spirits as did the FB mobile action:

N4ZZ/26, W4NZ/19, W4SIG/8, AD8J/5, N4Q/3, W4OQG/1, KJ4BIX/1. I didn't pick up KJ4BIX until late, but when I did they were really loud. I asked them where they'd been operating, and they said up around 14320. I never looked that high, but won't make that mistake again!

#### N4ZZ multi-op mobile

Another fun filled Sunday Tn QSO party was had by the N4ZZ/m team. This was one of the more challenging mobile contests for us, due to continuous rain from start to finish. Our trusted driver/navigator, Melody, got us through all planned 25 counties safely.

Thanks to all who worked us, expecially the following who found us most often: KV8Q (31) FB Tom, W0BH (26), WA2VYA (26), N8II (24), W4UCZ (24), WB8JUI( 24), AA3B (23), N6MA (22), W8TM (22), K5LH (21), DL3DXX (20), N4PN (20), N4UC (20).

#### 73 - Jim AD4EB - Don N4ZZ - Melody KI4HVY

#### AD8J rover

This became quite a one man production with the addition of a generator and a SB-220 to the mobile. The amp did make a difference but also created some big pile ups. It also melted some of the shrink tubing on the 20 meter hamstick. That antenna seemed to get hot in one spot. The 40 and 80 meter whips seemed to be the same warmth over the whole length. This was one of my most enjoyable mobile expeditions as no problem developed.

# Some unusual items from Ebay

Here's a 1930s kit – apparently there were some problems with what was supplied in the kit, like the front panel not the right one for the chassis, which was not as shown in the diagrams – which may be why it was never built in the early 1930s.

It's a Philmore regenerative receiver – with two type 76 triode tubes – one a regen detector, and one a half wave rectifier. These are 'indirectly heated' tubes with a separate cathode. It's an A/C DC set running right off the line, and your headphones have full B+ across them. It came with one plug in coil.







Philmore '2' tube receiver

You can tell from the chassis layout shown on the schematic, and the pic of the chassis, that everything is different – tubes and coil not laid out the same. Also, the front panel doesn't have holes that line up with the holes in the chassis. These are 6.3v tubes – and the set has a monster big dropping resistor to drop the 117 v to supply the two filaments of the tube (12.6v total). "Most" of the parts were included in the kit. Tubes are, of course, extra cost and not included.

#### - - - - - - - -

There are quite a few DIY 'build a radio' kits on Ebay these days. Some are almost no assembly other than put a few parts together. Here's a super-regen for the FM band. (Yes, a super regen will detect FM, but like all super-regen receivers it is 'wide as a barn door' when you try to use it on the ham bands. For anyone who ever used a Heathkit Tener, Sixer or Twoer, you'll know exactly what I mean.)





Schematic of 3 transistor super regen kit FM receiver

The bandwidth is VERY wide, but on the FM band, with 75 KHz deviation, that's not a problem. The receiver is subject to being pulled on frequency by off frequency stations. In most places with more than 2 or 3 FM stations, this might not work very well!

Note de N4CD – well, I sprung for one of these kits. \$15. It goes together in 2 hours – no soldering. It has a plastic board and you put the parts together using screws in the plastic board. You've got to keep your hand on the tuning dial as it is very hand sensitive. It's also crappy audio, but still an 'interesting kit'. It's got small parts so get out the magnifying glass or have a teenager help you build it. There are better kits to start on.. It comes with Pre-assembled tuning module (one transistor) – the super regen front end followed by two stage direct coupled audio amp driving high impedance crystal type 'ear bud' earphones

### On the Road with N4CD

The Mena Hamfest is held each year in southwest AR. It's a small hamfest in a nice scenic state park with a couple hundred people showing up each year. Many of them come in RVs and some tent camp for the weekend. It's the same weekend as the AR QSO Party, so you can kill two birds with one stone – hamfest and QSO Party the same day. The weather was supposed to be nice – temps in the 80s up in AR. No bad weather expected.

Joyce, N9STL, was out this weekend running counties in IL, KY and IN, so I spent a lot of time on 40M SSB trying not to miss the counties I needed for Mobile Diamond. She went out solo for a couple day trip.

I headed out on Friday up through some of the needed counties in OKLA – It was up route 75

from my QTH up to Stringtown, OK, where I headed across on highway 43 through the boonies of OKLA. That route hits Pushmataha County, often needed – then up through Latimer to Haskell, which Ron, N5MLP desperately needed. A short jog to the east, then it was south into LeFlore. I messed up a bit, and wound up taking the entire length of the The Talimena Drive (26 miles).



A view from Talimena Drive. The photograph was taken in late October by Arron Walden.

"It starts 8 miles (12.8 km) west of Talihina, SH-1 splits off of US-271. This begins the final 26 miles (41 km) of the highway, officially named the Talimena Drive because it runs from Talihina to Mena, Arkansas. This highway, a National Scenic Byway since January 2005, runs through the Ouachita National Forest and the Winding Stair Mountains, and has no shoulders. It features special 'vistas' - parking lots placed off the road at especially scenic parts of the highway. At either end of the Talimena Drive, signs are posted stating that the highway is closed during cold and foggy conditions, and that no snow control is provided. It's up and down and around all the hills – sort of like the Blue Ridge Parkway in VA/NC.

The height of the mountain peaks on the Drive causes the oaks and pines to grow so much slower and shorter than the rest of Southeast Oklahoma. On a hot summer day, the winds on the Talimena Drive may be a good 10 degrees cooler than other nearby locations.

SH-1 ends at the Arkansas state line. The roadbed continues on as Highway 88, toward Queen Wilhelmina State Park and the city of Mena, Arkansas."

Source: Wikipedia

Well, before you get to Mena, you arrive at Queen Wilhelmina State Park and the site of the Mena hamfest. Each year the sponsors set up two giant tent like pavilions so the hamfest goes on rain or shine. In addition there's a flea market of maybe 30 cars each year selling things. There's also a lodge up there and it's full each year with hamfesters. Several hundred camp in the state campground.

I got there Friday afternoon -not too many goodies I had to have but I spent a few bucks. After 2 hours, I headed on down to the town of Mena and the Sun Country motel(\$79 plus tax) for the night. Dinner was at the local China Buffet.(\$8.45) Early in the morning I hit the MacDonald for an Egg McMuffin Sandwich and senior coffee, then it was 'up the mountain' to the hamfest. There were a few interesting things there, but I didn't spend much.

Let's see..there was a nice Heathkit station from the 1950s. Apache Transmitter (100W plate modulated AM) with the matching receiver, the SB-10 SSB adapter, and Warrior KW amplifier – original owner, nice shape. They guy wanted to sell it because 'he didn't want to haul 400 lbs back down the mountain'. There was a Heath AT-1 transmitter – but it looked rough. We opened it up – no tubes, line cord had been cut off, extra hole in front panel. A good parts radio for someone who needed it. I passed on that. There were a few newer rigs for sale, and a few dealers were selling everything from coax, ARRL Handbooks, connectors, new radios, and other ham accessories.


One of the two large tents and folks selling stuff at Mena

I spent about 1 1/2 hours there – checked out all the new people who had arrived or were arriving in the small flea market. I got set to leave and go run some counties in the AR QSO Party. I fired up the radio in the parking lot – and, duh!.....things were flakey with the transmitter output. Murphy had struck. I checked and, dang, the coax connector to the back of the radio was bad – the shield on the lead from the radio to the antenna switch was broken off at the end.

Well, I guess if you need to buy a short jumper cable, the best place is at a hamfest! (not 200 miles away!). I walked back over to the hamfest and searched for a 3 foot jumper cable. I wound up having to buy a 10 foot jumper with connectors for \$10, then it was on my way in the QSO Party. I use the antenna switch for the 40M SSB antenna (Hamstick), the 20M SSB antenna (4 foot mast with 20M Huster resonator horizontal) and the main antenna - 6 foot mast with resonators for 40cw/20cw/30cw/17m and 15m. (the 15M doesn't seem happy on that mast).

Chuck, NO5W, had put out a map of which counties would be activated in the AR QSO Party. One of the group of counties 'not claimed' was the northwest corner of AR. I decided I'd hit the 'mountain counties' and give them out – lots of twisty back roads up that way through Newton, Madison, Carroll, etc (as W3DYA found out!). It's not like TX or KS with flat roads that you can zip along at 50-60 mph – it's all 25 mph switchbacks, or 40 mph roads that meander up and down ridges, back and forth over rivers, and wherever the cows wandered in the past, and the deer found mountain passes to get over the hills. I'd run about a dozen counties.

Ron, N5MLP needed Franklin, AR for a LC for MP, so I'd be sure to run that on SSB.

As I left the hamfest, there was WA5BDU/m in Scott AR putting it out on the QP. That was where I was headed. I was in Polk. We passed each other – the S meter hit 60 over S9. Soon, I was in Scott, and he was in Polk as he headed to the hamfest.

Things went reasonably well – the bands were not great, and there is usually not a tremendous amount of participating in the AR QSO Party, but you never know. Weather was good – once or twice just a few sprinkles on the windshield, otherwise just nice sunny day in the 80s. There were county hunters that gave me most of the contacts, and some of the regulars – like N6MU, John, W0BH, K4BAI, AA8IA, WB0TEV (TX) on also. It was also the ARRL VHF contest week, so likely many potential contesters were busy on VHF. I worked about five fixed stations in AR, but more were spotted.

I dropped down on 40M SSB in just about every county – wasn't contesting there on the 40M but since I had lots of extra time in the counties, why not? Folks needed them on SSB and some county hunters are not CW folks. Plus I had to listen for N9STL there.

On Saturday I drove about 330 miles, winding up in Crawford County (City of Van Buren) at the Motel 6 (\$38 including tax). I met up with my YL friend who lives there and we had a nice dinner at Big Jake's Steak House. I had a salad – I've packed on too many pounds lately.

Come Sunday and it was time to head on home – slowly – so as not to be too far away from N9STL and 40M range to KY.

It was 8am in the morning and I knew the only person likely to be on 20M was VK4AAR – so I got on and gave him a contact before I ran out of Crawford County headed west. I was headed west on I-40 and going over to Cherokee for N0KV. He was off working on their repeater in Douglas County but I hoped he would be listening as Pat, N0DXE alerted him. He's working hard on his MG (about 130 to go). Before you know it, I ran through Sequoyah over to the road north to Cherokee – up to Ten Killer lake and recreation area. That part of OK has lots of lakes and rivers for recreation – lots of folks have summer places there, and there are major camping grounds. I hit the county line (substation there) but just beyond found a nice place to park in the boating company lot. There was a nice house way up on a hill to the east - would be a great ham QTH. Across the street was a sales office for 'vacation homes' – probably condos and a bunch of them behind the office. Decent spot to run the county.

Then it was backtracking on I-40 to get to route 59 south down through Leflore County. A short jog on highway 9 for a few miles west to Haskell- horrible noise on the main road, but they were kind enough to have a narrow county line gravel road that got away from the main road power lines totally within 500 feet with no power line along it. Great – ran Haskell/Leflore there. Then it was south on 59 - and 259 - for 40-50 miles - winding my way down the mountains to McCurtain which more than a few needed.

Along the way, you run past the Three Sticks State Forest Monument. (Also a state park there).

The three "sticks" stand for LAND, WOOD, and WATER. A dedication sign on the sight reads: "In Appreciation of the Leadership in the Rapid Development of Our State Roads, Water, Recreation, Forests

"LAND --- WOOD --- WATER"



It's dedicated to a few Congressmen who 'brought home the bacon"

I got to McCurtain, and sure enough, it was just as noisy as the last time I was there. Fortunately, about a half mile into the county, there's a gravel road to the east – with no power line – go about 1000 feet and it's nice and quiet to run McCurtain. Missed N0KV – he needs that one too for MG. Then it was a slight backtrack north to hit route 144 to the west – through the boonies! Not much there for 50 miles. Then down through Choctaw and back into Lamar, TX, west to Fannin, then home.

The temps had gone back up. It was 95 and hot when I got back home, with temps expected up to 104 in the next few days to likely break the all time temp record for days above 100 degrees during a summer. Dang. Well, the trip north was a good break from the hot temps. Not a whole lot of contacts for the miles driven, but some folks needed the counties so we put them out.

The transmission in the 2009 Malibu didn't work any better (kept dropping out of sixth gear into fifth) so it is back in the shop so they can look at it – let a mechanic take it home. The only way you would know if is you look at the tach- you are cruising along at 60-70 mph and should be turning about 1900-2000 rpm...and suddenly it is up at 2400 rpm and staying there. Dunno what the problem is – 70,000 miles on it – with 100K engine/transmission warranty. Stay tuned. - Well, after 3 days of letting them 'test driving' it – they seemed clueless to just find the problem. I zipped down there, and demonstrated the problem in less than five minutes on the Tollroad at 65 mph. The tech scratched his head - his computer attached to the car said the transmission controller was telling the transmission to downshift for no apparent reason and stay in 5<sup>th</sup> gear. Now they have to figure out why. When there are 'no codes' in the car, they don't know what to fix! OR where to start.

Norm, W3DYA was out running in the AR QSO Party on Saturday – I heard him one or two times. We were 'too close' most of the time. On Sunday, he turned his radio off as he headed home (and missed some he needed that I went through). I also needed some he went through on the way home as he listened to his CD player. Bands were rotten on Sunday! It was a missed opportunity but maybe we would have been 'too close' to hear each other.

## New Nanotube Memory Technology

A team of scientists at Stanford University has used carbon nanotubes to create nanoscale versions of two next-generation memory technologies. The results help demonstrate that alternatives to flash memory will perform well even when scaled down below 10 nanometers in size—a range where silicon memories won't function.

Flash memory is everywhere; it is the dominant storage technology in smartphones, tablets, and cameras. But the technology is approaching its density limit: With features smaller than about 16 nm, physical limitations—like charge leakage and damage from the high voltage needed to write information—will render the devices too error prone to be useful.

To assess the alternatives, IEEE Fellow H.-S. Philip Wong, a professor at Stanford, and his colleagues constructed tiny versions of two different types of memory that are being eyed as eventual successors to flash— resistive random-access memory (RRAM) and phase-change

memory (PCM). The team presented its results earlier this month at the 2011 Symposium on VLSI Technology, in Kyoto.

Like flash, both memories are nonvolatile, meaning they can retain information even when no power is being supplied to them. But the new memories promise to be far speedier and easier to miniaturize. They can also write and read smaller sets of bits than flash can, saving power in the process.



A schematic of an RRAM cell made of crosshatched carbon nanotubes and aluminum oxide

After years of research, companies are announcing their intentions to introduce PCM and RRAM technology in products in the near future. But engineers are still sorting out how well these chips will ultimately function, particularly as they are miniaturized in the coming years.

"One of the key questions is how far the technology can scale," Wong says. To investigate, his team set out to build memory cells about as small as is currently feasible, using 1.2-nm-wide nanotubes as electrodes. At that diameter, metal wires are very difficult to construct and suffer from high resistance as electrons scatter off grain boundaries and surfaces. Carbon nanotubes—rolled-up sheets of 1-atom-thick carbon—are better conductors.

To create the new memory structures, the team grew nanotubes on quartz and then applied a 100-nm-thick layer of gold that when lifted up pulls the nanotubes with it. The gold-nanotube layer is then placed on silicon, to which it adheres. Then the gold is etched away with chemicals to leave the nanotubes on the surface.

Wong's group used this transfer process to create a 6- by 6-nm RRAM cell consisting of two crosshatched layers of nanotubes separated by a layer of aluminum oxide. Information in the

memory is changed by applying a voltage across the nanotubes that is sufficiently high to create a conductive path through the normally resistive aluminum oxide. The team was able to create a fully operational memory cell that switches with less than 10 microamperes of current and about 10 volts. That's consistent with projections from other experiments, says Wong, and a sign that RRAM will scale well.

The team's PCM, which was constructed using a mixture of germanium, antimony, and tellurium, also proved promising. The researchers found they could switch an estimated 2.5-square-nanometer cell of the stuff from its conductive, crystalline phase to its resistive, amorphous phase with a current of just 1.4  $\mu$ A —less than one-hundredth the current used in existing PCM cells.

The current that Wong's group used is consistent with the programming current reported by Eric Pop and his colleagues at the University of Illinois at Urbana-Champaign, who reported tests of the first carbon-nanotube-based PCM in Science in April.

"I'm excited they were able to reproduce our results," Pop says. He reckons that with further miniaturization and a change in materials engineers could cut the power consumption of PCM by another factor of 10.

Pop's team created its nanotube memory by laying phase-change material down in a gap along a horizontal carbon nanotube. Wong and his colleagues created a vertical version of this memory, in which phase-change material is sandwiched between bottom and top electrodes. This configuration is more compact than horizontal designs, Wong says, and will allow PCM cells to be scaled down much the way flash memory is today.

One big remaining question, Pop says, is the durability of PCM, which is particularly uncertain at smaller scales. Last year, a team from IBM and Macronix—two companies with an interest in developing PCM—showed that repeated operation can damage the structure of the phase-change material around a memory cell's electrode, limiting its lifetime.

Source: http://spectrum.ieee.org/semiconductors/nanotechnology/alternative-memories-get-the-carbon-nanotube-test

# ARKANSAS QSO PARTY

The mobiles from Texas headed to ARK to run their state. It seems ARK has a real problem getting any mobiles out itself. K5END was scheduled to go mobile but was apparently 'no show'. (No spots, not in anyone's log). Kerry, W4SIG, was coming from TN to help out but

had a last minute cancellation. That left NO5W, W3DYA, N5NA, and N4CD as the primary mobiles in the state QSO Party. The ARK folks did manage to get 10 or so fixed stations on the air for the contest.

Propagation....from the ARRL Letter: "Numerous CME events disturbed the Earth's magnetic field. The planetary A index record shows September 9, 10 and 12 were the most active days, with the index at 36, 33 and 27"

Ouch.....A index of 33 doesn't make for great conditions!

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#### From W3DYA via email

"Not much to brag about in the AR QP and nothing much exciting.

I got started fine in Clay county and was able to run four counties all close together. After that it was a lot of driving and stopping to run. Didn't operate much while moving because most of the roads were just too narrow with hills and turns everywhere.

I've never upgraded my GPS map, so I got a couple of surprises when it showed me out in open space with no road. Fortunately, the county lines showed up OK. Haven't had that happen in other states... yet!

When the NA Contest started at 0700 CDT (2400Z), I had just finished Conway and decided it would be useless to continue. I couldn't hear any mobiles and not much space available to even call.

I mounted the Hustler resonators because rain was forecast for the weekend. Of course, it didn't rain a drop where I was. And I couldn't tell any difference in performance between the Hustlers and flying saucers! So I will be cleaning up the FS resonators and use them in TX QP, they ride a lot better on the mast!

Thanks to all who followed the mobiles around; they made it a fun event!"

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Comments from the 3830 contest reflector:

#### K5LH (TX)

Score includes two QSOs with AA5AR. Had very little time for this one and geographical proximity to AR is a real handicap in TX. Mobiles were great as usual: NO5W, W3DYA, N4CD, WA5BDU. Wish there were a CW-only category for those of us who cannot operate phone (apples/oranges). See you in the TXQP.

#### WB0TEV (TX)

Not a serious effort here, just made some QSOs as I wandered in and out of the shack today. Being in Texas, 40m was the only band usable. Unfortunately the way the rules read, Arkansas counties do NOT count as multipliers for stations within Arkansas, so there is little incentive for the mobiles (or fixed stations for that matter) to spend much time on 40m when 20 will be more productive. Thus stations in Texas like me don't get much action from this QSO party. Ironic, since I believe all of the major mobiles running around Arkansas today were from out of state, mostly from Texas! (NO5W/M, W3DYA/M, K5END/M & N4CD/m

#### W4UCZ (GA)

"Band conditions from Georgia to Arkansas were classically "Anti-Goldilocks" for most of the day. Too long for 40 and too short for 20.

Thanks to the Texas mobiles for lighting up Razorback land. I was born and raised in North Little Rock (ex-KN5TST in the late 1950s) and used the mobile runs to brush up on my Arkie county geography.'

#### N6MU (CA)

"Score includes two bonus Qs with AA5AR. Virtually no activity on SSB. Kudos to the four mobiles who comprised 80% of my Qs. Top mobile for me was W3DYA with 22 Qs followed by NO5W with 21, N4CD with 9 and WA5BDU with 5. Band conditions were up and down and the mobiles would disappear for hours at a time. 15 was open most of the day and most of the Qs were with the mobiles. Sure could use some more homegrown AR activity. 73..

#### VE3GTC (ON)

I was out operating portable and QRP. Conditions where not that great but I did hear a number of Arkansas stations working the QSO Party. I managed to work all that could hear on 20 meters.

#### W0BH (KS)

"Kept the radio on throughout the day and found NO5W/m (8), W3DYA/m (7), and N4CD/m (5) running around the state. The bonus station AA5AR was on a lot, too, but few other AR stations were heard.

#### KN4Y (FL)

The CW mobiles made it a QSO party otherwise I would have less than 10 contacts. The bands were flaky but readable. I worked only one station on 10 and 15-meters. It is good to have the State of Texas mobile operators helping a neighboring State to avoid a QSO party CW melt down.

#### NO5W (with N5NA) multi-op mobile

When N5NA sent me an invitation to do an ARQP mobile multi-op with him I had several thoughts:

Negative Wows -

1. Wow, that would be pushing it with the Texas QSO Party only two weeks away

2. Wow, 360 miles just to get to the starting point would be quite a drive

Positive Wows -

1. Wow, this would be a good opportunity to make a shake down cruise of the new Win 7 laptop

2. Wow, this would be a good opportunity to do a multi-op with Alan

3. Wow, I might even stop for lunch on the way home to see friend K5CX's new QTH up in northeast Texas.

4. Wow, knowing K5CX he might even put a steak in front of me.

Since it looked like the positive wows had it over the negative ones, off I went on Friday, headed from Houston to Eldo-ray-do Arkansas. Arriving there I found another party in progress -- namely a birthday party for Alan's 92 year old dad, Curtis. I was privileged to be included in that celebration as Curtis is a lively fellow and likes to entertain with many stories. After those festivities we turned in and we were up early Saturday to get on the road for the QSO party.

Things started out ok but there was some RFI getting into the touch pad of the laptop, especially on 40m. Not a big deal since we were able to solve it with a wireless mouse. Due to some difficulties with the hard drive protection cutting

in due to the road vibration we had decided to try to run the software from a memory stick. This worked but it seemed to result in some sluggishness of the logging application so we reverted to running from the hard drive with the protection sensitivity set to trigger at a higher level of vibration.

Operating that way all was well as we made our way along the route until we stopped for lunch. Following lunch we began restarting everything and the logging application would not restart under Windows 7. The Win 7 in-progress circle would just spin for a bit and die with the application refusing to appear even briefly. It appeared as if Win 7 had somehow black-listed the software so after several attempts and with time a-wasting we decided to toss the Win 7 machine and use the old, but reliable, Dell D400 running XP. No problem there as we ran the rest of the course without so much as a hiccup. This was disappointing but hey, it was a shake down cruise and Win 7 lost. Disappointing since the screen on that new machine sure handles the glare a lot better than the old D400.

Radio conditions were not the best (actually they were very poor) but we did manage to attract a good group of followers and tried to put in equal time on 40m and 20m. Both bands were very noisy in the rural parts of Arkansas where most of our route took place. Many signals were just at the noise level and couldn't be pulled through. Our apologies if you were one of those. Thanks to the following who contributed more than half of our QSOs: N6MU(21), N6MA(21), KN4Y(16), NT5O(15), AC5K(13), W1END(12), KO1U(11), K8QWY(10), N3RJ(10), W0BH(9), K5WAF(9), VA3XOV(9), WA7JHQ(9), K5LH(8), K9EN(8), K5KDG(8), ND3R(8), N6WIN(7), W4UCZ(7), KE8M(7), WA6KHK(7), K5GE(6), K7ZYV(6), AD1C(6), KI0I(5), N8CIJ(5), WB2ABD(5). Our most active counties were Miller(45), Ashley(41), Bradley(39), Drew(39), and Calhoun(39).

All in all it was a lot of fun and well worth the drive -- I'd certainly do it again next year. Thanks to Alan for inviting me and to his wife Kay, sister Carolyn, brother-in-law Bill, and, of course, Curtis for their hospitality.

And yes I was able to stop and visit with K5CX and his wife Anita N5AOK, and steak was served for lunch along with a lot of other good stuff. Thanks H.O and Anita.

Soon, September 24-25, it will be time for another running of the Texas QSO Party. Hope to put you in the log on that old Dell D400 running XP.

73/Chuck/NO5W

#### WA0MHJ/m

First time in ARQP. I was poised and ready as a VHF contest rover in northern MN, but the 6 meter band never opened. I decided to switch to ARQP. Thanks to the mobiles who pulled another mobile out of the noise. I was surprised with the lack of success in the KSQP on 20M with a beam at 100 feet at my home station, compared to the success in this event with a mobile whip.

73's Mark WA0MHJ

# **3-D** Computer Chips

Computer maker IBM has gone into partnership with a glue specialist to create 'skyscraper' computers - building huge sandwiches of silicon chips by sticking layer after layer of chips covered with tiny components together.

It's hoped the process will create smartphones and PCs up to 1,000 times faster than today's - which may be on the market as early as 2013.

The company, 3M, also make heat resistant glues, adhesives used in the aerospace industry and sticky tape - but the hi-tech glues created in collaboration with IBM could actually be the key step towards making the next evolutionary leap in computing.

Today's attempts at piling chips vertically - known as 3D packaging - face problems from overheating. New glues could potentially conduct heat through a stack of densely-packed chips and away from logic circuits that could be burnt out by the heat.

The research aims to create 'stacks' of up to 100 layers of silicon.



Crucial to the development of the new chips will be techniques that allow IBM to slather glue over 100s of chips at once. Current techniques for gluing chips are described as being akin to frosting a cake slice by slice.

'This material fits underneath computer chips when they're attached to printed circuit boards the unique part of what we're doing is that our glue conducts heat out to the edge of the sandwich,' Mike Bowman, marketing manager for 3M says. 'Our glue will spread heat more evenly through the chip. With conventional chips, with just one or two layers, but once you're stacking chips, the problem can become very severe.'

Today's chips, including those containing 3D transistors, are in fact 2D chips that are still very flat structures,' said Bernie Meyerson, a vice president of IBM Research, in a statement. So far, most increases in computing power have been driven by scientific breakthroughs that allow chip makers to etch ever-smaller circuits onto ever-smaller chip wafers. The new '3D' approach could accelerate gadgets such as tablet computers to unheard-of new speeds.

'Our scientists are aiming to develop materials that will allow us to package tremendous amounts of computing power into a new form factor – a silicon skyscraper,' said Meyerson. 'We believe we can advance this, and create a new class of semiconductors - faster, with lower power usage, ideal for tablets and smartphones.'

Other 3M glues are used in hi-tech industries such as solar power, as well as in markedly lower-tech environments such as carpentry.

Both companies did not speculate on a release date for the new technology, but insiders speaking to tech sites such as The Register said versions could be on the market as early as 2013.

# Connecticut QSO Party

What if they gave a QSO Party and now one showed up? Well, it seems one or two did show up...but that was about it.

I went hunting for CT stations – found K1PU in Middlesex and spotted him, and that was the only CT station I heard in 3 hours of listening. Later in the day, the Salmon Run started and the bands filled up with other activity. There are only a handful of counties in CT, and just 7 or 8 stations could have put them on the air, each for 3 hours or so, and it would have been a decent day for chasing CT. But no......(wait till the New England QSO Party when most show up). One mobile – just one county hunter mobile...could have run the whole state in way less than a day and put them out. Maybe we'll have to drag some TX mobiles up there next year...seems TX mobiles have 'saved' a few QSO parties lately. Where are the other mobiles?

The ONLY station spotted was K1PU.....was no one else listening? Likely another station or two was on!. Some reported having 4 contacts for the QSO Party with CT stations!

From the 3830 contest reflector:

#### AB1OD (Hartford, CT)

My apologies to those who suffered through my calling CQ on CW. I started learning CW just a few months ago (heck, I haven't even been licensed a full year yet), and while I'm reasonably comfortable playing S&P with CW, this weekend showed that I still have a long way to go.

When not abusing CW, I did encounter some good, non-macro-dependent PSK31 operators. I couldn't attract many responses with RTTY, but those contacts turned into some nice QSOs, rather than mere contest exchanges.

With Connecticut being such a relatively small state, a CT QSO party would have the potential to be a nice little, laid back affair...if there weren't so many other contests occurring at the same time. The CW portions of the bands were dominated Saturday by the SAC and Salmon Run, and later Saturday, PSK-space beyond the 20m zoo was filled with the QPSK contest. (Phone was mostly off-limits to me due to an XYL feeling under the weather, and my needing to stay quiet so she could sleep.) And RTTY....well, as one operator put it, "don't see too many guys doing RTTY these days" outside contests. That turned into a FB QSO, actually.

## Want Jobs?

#### Want More Jobs? The Low-Hanging Fruit Is Energy

..... but let's assume that you actually do want to help create a million or more jobs, while simultaneously increasing government revenues by many billions of dollars. How would you do it? It's actually easy: just stop the irrational antagonism to energy development that is America's most glaring public policy failure.

The energy consulting firm Wood Mackenzie released a report on Wednesday that attempted to quantify the additional jobs and revenue that would result from a relaxation of the federal government's current anti-energy policies. You can read the report in its entirety, but here is the bottom line:

Wood Mackenzie's analysis found that U.S. policies which encourage the development of new and existing resources could, by 2030, increase domestic oil and natural gas production by over 10 million boed, support an additional 1.4 million jobs, and raise over \$800 billion of cumulative additional government revenue.

Wood Mackenzie compared a "current path case" against a "development policy case" to derive these figures. This is the current path case; i.e, continuation of the Obama administration's policies:

• The "Current Path Case" assumes the following policy and regulatory initiatives:

• Continued "slow walk" of Federal permitting for offshore Gulf of Mexico

•The case assumes an increase from current offshore exploration and development activity levels, but not back to pre-Moratorium rates

• Tighter Federal hydraulic fracturing and water disposal regulations which are beyond the current state regulations

• Slow down of onshore drilling due to increased cost of well completions. Results in a negative impact on development economics

• No opening of new areas for exploration and development

• No new exploration and development in frontier areas of Alaska, Eastern Gulf of Mexico, Atlantic and Pacific offshore, and Federal Rockies

• Restrictions on new pipeline development from Canada

• Curtailment of oil sands pipeline infrastructure into the U.S.. No development of the Keystone XL pipeline or other future Canada to U.S. pipelines

If the federal government got serious about job creation, we would have the development policy case:

• The "Development Policy Case" assumes the following policy and regulatory initiatives:

Opening of Federal areas that are currently "off limits" to exploration and development
Commencement of leasing, drilling and development activity in currently closed regions. Regions to be opened include: Eastern Gulf of Mexico, portions of the Rocky Mountains, Atlantic OCS, Pacific OCS, Alaska National Wildlife Refuge (ANWR) – 1002 Area, National Petroleum Reserve, Alaska (NPRA) and Alaska offshore

- Lifting of drilling moratorium in New York State
- Commencement of drilling and development of Marcellus shale in New York State
- Increased rate of permitting in the offshore Gulf of Mexico
- Allows for a return to pre-Moratorium exploration and development activity
- Approval of the Keystone XL and other future Canada to U.S. oil pipelines

• Facilitates additional Canadian oil sands development, thereby increasing the demand for U.S. supplied equipment and infrastructure

• Regulation of shale resources remains predominately at the State level

• Environmental regulation of shale gas and tight oil plays are not duplicative or unduly burdensome. Permitting levels are at sufficient rates to develop resources in a timely manner

What is remarkable is how quickly jobs would be created, if only the federal government would get out of the way:



Total U.S. Employment: Development Policy Case less Current Path Case



All of this, of course, is the effect of drastically increased energy production, which will ease the cost of energy:



Now imagine all that plus the jobs and economic boost if as a stimulus program we got a plan to put the refueling infrastructure in place so a major portion of the US trucking fleet could switch to natural gas.

Source: Berry Petroleum Board – Investors Village

Note de N4CD - Do you think the anti- business, anti -fossil fuel, eco-whack oriented Obama will actually try to create jobs in the energy industry? Don't bet on it. To date, he has shut down more parts of the industry than you can shake a stick at, has his EPA goons going after company after company, and could really care less about jobs in the energy sector.

Remember, it's only UNION construction jobs(non shovel ready), and UNION teachers that he is really worried about!....those unions funnel hundreds of millions of dollars to democratic candidates, so why shouldn't taxpayers throw 100 billion Obama-bucks at them? (and nothing at the oil/gas industry and, in reality, nothing but negatives, reams more regulations, delay, obstructions, lawsuits and getting in bed with greenies who can find a 'endangered' bacteria or similar critter somewhere that might 'allegedly' be affected if someone builds an oil well 300 miles away.

There are a million jobs waiting for the NEXT President to create.

## **Coming New Cars**

One of these might be in your future. Who knows how they will be for RF noise in your radio?

One of the ways hybrids achieve big efficiency gains is through something called a start-stop system: When a Prius rolls to a halt, so does its engine, saving fuel and boosting miles per gallon. The car's advanced battery keeps the lights on and the stereo buzzing until the pedal is pressed and the engine restarts.

In the U.S. that kind of efficiency gain hasn't been available in regular cars because their leadacid batteries would go dead in months if they had to restart the car so often. But new federal efficiency standards are encouraging automakers to wring every mile out of a gallon of gas, and a battery design from Johnson Controls the Milwaukee-based industrial giant that makes a third of all auto batteries, will help. The company is currently retrofitting a factory west of Toledo to begin making its advanced batteries, which will power start-stop systems in conventional autos beginning next summer.

The efficiency gain is modest, improving mileage by about 5 percent, but will save a sedandriving family about \$100 a year in gas costs and could have a large aggregate impact. It's a tweak that will help the auto industry meet a new mandate by President Barack Obama to improve its corporate average fuel efficiency by 100 percent, to 54.5 mpg, by 2025. "It's not a wholesale change. It lets the automakers build on what they're already good at," says Craig Rigby, Johnson Controls' head of product engineering. "That's what I think is the beauty of start-stop."

Johnson Controls' advanced batteries employ a technology that was first used in the 1980s for fighter jets. A typical car battery uses a gallon of acid and water as an electrolyte, which enables the electrical charge to flow but also eats away at the battery's innards. In the advanced

battery, the electrolyte is stored in an absorbent glass mat, which has the look and feel of a strong paper towel. It serves as a pathway for the electrical charge and limits the exposure of important components to the corrosive electrolyte, thus prolonging the battery's life.

Stop-start systems, which include not just the battery but brake sensors and other custom car parts, should add about \$500 to the purchase price of a new car, according to Johnson Controls. They've been used in conventional cars in Europe, where gas can cost more than \$8 a gallon, for about five years. Mike Wall, an analyst for IHS Automotive, estimates stop-start systems will be installed on about 20 percent of new vehicles in North America by 2017, up from about 2 percent now. "This is sort of a bridge that will help us get from here" to an all-electric future, Wall says. Ford Motor plans to start selling vehicles with start-stop systems next summer, although it declined to specify the exact models and prices.

The efficiency push is good news for Johnson Controls: The advanced batteries are twice as expensive and three times as profitable as traditional ones, according to the company.

*The bottom line: Johnson Controls' start-stop batteries improve mileage by about 5 percent and will help carmakers meet new efficiency standards.* 

Source: http://www.businessweek.com/magazine/gasoline-cars-get-a-mileage-jumpstart-09012011.html

# Salmon Run QSO Party

The stations were on by the dozen. Counties to be had by the dozen. County hunters showed up in droves to work the stations – a good QSO Party. I heard Russ, K7INA putting them out. Terry, WQ7A, went mobile. Dozens of fixed stations with good signals were spotted on the W6RK site. Activity was on 20M during the day, on 15 and 10m on Sunday, and shifted to 40m and 80M later with lots of activity.

There were two or three mobiles - N7WA and WW7D noted. Oh, and WQ7A on SSB.

Some WA stations had over 100Q on 15 meters and over 80 on 10M. 10M opened for much of the country to the northwest for a nice change! The solar flux was way above 140 and the sunspot number over 170. Let's hope it gets even better soon. Not a peep on 10M here, but lots of loud fix stations heard on 15m.

From the 3830 contest reflector:

#### N7WA mobile multi op

In the planning for this mobile run my goals certainly exceeded practicality in turns of time versus mileage. Originally, I had planned to run along the southern border of Eastern Washington, head north after reaching Idaho, and then catch the two most northwestern counties before running home up the middle of the state along I-90. A "check engine" light two hours into the run (as we entered the east end of Benton County) made for a change in plans and a bit more caution. We decided to cut off the most easterly and northerly part of the trip and the prospect of getting stuck out in the Palouse kept my stomach in a knot for a few hours. In retrospect, the truck continued to run fine (and the light went away after getting home) but the journey was probably still more than one that could have been done in a day.

That said, it was fun having a posse that checked in at every border crossing and the weather and scenery were worth the trip alone. Plans for next year might be to take two days and also have a driver that can share the radio duties. Also, some kind of switching arrangement that makes it easier to change bands. I could have probably done well on 15M if I had been willing to stop the truck to change antenna coils and that had been the intent until the engine light came on. Then the goal became "just keep going". Thanks to all that pulled my weak signal out. I hope you all got your clean sweeps.

Counties Run: Klickitat, Yakima, Benton, Franklin, Walla Walla, Columbia, Garfield, Whitman, Lincoln, Adams, Grant Kittitas

Counties we had to bail on: Asotin, Spokane, Pend Oreille, Stevens"

#### KN4Y (FL)

I operated CW and heard and worked one mobile, but fixed stations galore, I busted the CW wasp nest and the fixed station kept coming. It was like free beer. I worked most of them on 10, 15 and 20-meters. I stayed up past midnight but 40-meters was not good from there to here. Saturday night I was forced to shut down and watch the Florida State football game. Great party. Next year train more mobile operators to operate mobile.

#### KK7S (king, WA)

I managed to carve out a few hours here and there to play in this one. It was fun to hear 15M wide open today where I got a loud and crystal clear call from

England that shocked the heck out of me. The bands must be better overall because I did almost as well as last year even with 4 fewer hours of operating time. Thanks for all the Q's and enjoy the salmon!

#### K7HBN (Snohomish) – 567 cw contacts

"Having 10 and 15 open on Sunday a real plus. I only missed 3 out of state mults, VE4, VE8, and ND, but a few DX mults especially the M0 on 15 added to the fun.

#### K7RLD (WA)

This was my first real contest since the mid 60's. Things are sure a lot different today. I tried to spread between CW and SSB but obviously operating total CW would bring the score higher.

#### K7SR County Expedition (Island, WA)

Thanks to Mike K7SR for letting us use his call. We were operating from the northeast end of Camano Island, with one Steppir vertical, one Steppir beam, and an 80m dipole. Rigs were a K3, Icom746Pro, and an FT897 used for 80m phone. We were almost set up in time for the contest start, having only started about 3pm on Friday; Saturday, wind and whitecaps in Port Susan made us glad not to be in tents. Rain on Saturday evening and into Sunday morning, even more so. It was great hearing many of the familiar calls, and Salmon Run sure seems like the harbinger of the upcoming contest season.

#### N7PP County Expedition 3100+ SSB QSO 2500+ SSB QSO! WOW!

"The South Hill Contest Club, N7PP. Operated from Ft. Flagler State Park on Marrowstone Island in Jefferson County. This year we decided to operate from the west side of the state and see if we could maintain our top score status from our 2007, 2008 and 2009 Eastern Washington expeditions. Thanks to all of the SHCC operators and support staff. MVP this year is Carol Hudson, K7LAZ's XYL. She was always there lending a hand, asking what she could to to help. She can wrap up coax and rope better than anyone and gave the group a bit of class. What great fun to be able to run em' again on 10 meters. Our liability insurance, required by the Washington State Parks, arrived the Tuesday before the weekend contest, that was a real panic. Thanks to Ft. Flagler's Rangers Zimmerman and Crimmins. Sorry to the woman who wanted to get married at the location of our SSB antenna, however, WE had the special use permit !" note: Almost 400 QSOs on 10 meters alone!

## New Engines for Cars

The auto industry is hoping to teach consumers new math: Eight will be six, six will be four, and now four can be three.

Ford Motor Co. this week pulled the wraps off what it says is the smallest engine it has ever built: a three-cylinder, 1-liter engine destined for a Ford Focus next year.

The engine is shorter than a legal size sheet of paper, but Ford promises consumers they won't feel any difference from today's 1.6-liter engines when they step on the accelerator. The engine will produce 118 horsepower, compared to about 70 horsepower per liter on existing Ford four-cylinder engines, the company said.

Using sophisticated electronics and turbochargers that squeeze more power from a gallon of fuel, Ford, Volkswagen AG and other auto makers are out to challenge one of the key tenets of marketing cars through the years: There's no replacement for engine displacement.

Volkswagen is already marketing its three-cylinder Up compact car using a variation of the slogan from its 1959 U.S. launch of the Beetle. Along the streets around the Frankfurt auto show this week, VW has signs that read, in German, "small is big."

VW Chief Executive Martin Winterkorn said the Up is a key model for the company's plan to grow in the strategically important small-car segment. There will be versions tailored to the individual markets across the globe, such as India.

BMW AG recently showed its i8 concept car with a three-cylinder engine that is used to supplement the battery.

Selling a three-cylinder car in the U.S. could prove challenging. U.S consumers may be migrating away from V8 and V6 engines but the last time a three-cylinder was sold in the U.S. dates back to the 1990s with the Suzuki Swift and General Motors Co.'s Chevrolet Metro. GM dropped the Metro brand in 1997 as gasoline prices dropped and Americans' buying preferences moved to sport-utility vehicles and bigger cars.

"It will be tough," said Chrysler Group LLC Chief Executive Sergio Marchionne. "I know lawn mowers that have more displacement."

But Ford's top marketing chief Jim Farley said the move to small is on and the shift to smaller engines will be dramatic over the next several years. Its engine uses turbocharger and cast-iron block for performance.

"When I look at customer data in the U.S., I have never seen fuel economy more important than it is now," Mr. Farley said. "Fuel prices go up and down but customers now know at any time it could go above \$4 a gallon."

Ford has witnessed this cylinder migration first hand. In August alone, 57% of the F-150

pickup trucks sold were equipped with V-6 engines over the V-8 version. Two to three years ago, almost no F-150s were sold without an eight-cylinder engine.

Andrew Fraser, gasoline powertrain director at Ford of Europe, said attracting customers to the three-cylinder will all come down to what he called the "and" factor.

"They don't have to compromise and they will get better fuel economy and they will get more power," Mr. Fraser said. "It is that `and' mentality."

Source: WSJ

Note de N4CD – get set to see six and eight speed transmissions standard in cars as they try to achieve the new required MPGs. 3 cylinder cars are not 'new'. The Geo Metro from the 1980s used a small 3 cylinder engine – some county hunters got 50 mpg from them. It was the same car as the Suziki Swift. The new Smart Car ForTwo uses a 1 liter 3 cylinder engine. Small 'kei class' cars in Japan usually have 3 cylinders, and the Europeans have half a dozen offerings of 3 cylinder gas and diesel engines. Get set to see more of them here.

## South Carolina QSO Party

There were a handful of stations on SSB but very slim pickings on cw for the county hunters. I worked four stations on 20m SSB and CW– and that was all I could find in all the hours. A few others were spotted on 40M and 80M, but that was it. No mobiles as far as I could tell.

#### K4NAB (Aiken)

Had a blast. Too bad more SC stations were not on the air. Can't wait for next year!

#### AB1OD (CT)

Probably would have worked a few more SC stations, but I was enjoying the good conditions on 10, 12, and 15....but those bands weren't really conducive to getting to SC.

N4JF (AL) - wow - he managed 62 SSB QSO and 11 on CW.

# WHERE WERE THE MOBILES AND CW GUYS ? MOSTLY 40 SSB. DID WK W4CAE FOR 300 BONUS POINTS.NICE WKG OLD FRIENDS AND MAKING NEW ONES.

### **Sunspots**

Tad Cook, K7RA, reports: Compared to the uneventful past few years, sunspot activity was truly remarkable this week. The daily sunspot number for September 16 was 173. We haven't see numbers like this in more than six years, when the sunspot number was 181, way back on July 5, 2005 in Solar Cycle 23. The solar flux reached 150.1 on September 18. Just six months ago it was slightly higher, 153 on March 7 and 155 on March 8, but prior to that the only higher number was 157.3 on August 22, 2005, about 7 weeks after the sunspot number of 181.

Source: ARRL Letter

### Tail end notes

1) The Chevy dealer thinks it has fixed the six speed transmission problem in the Malibu. They replaced the 'TCM' – Transmission Control Module- so we'll see this coming weekend in the Texas QSO Party. Took 8 days for them to do it. (and 3 visits over 3 months).

2) Chevy will be introducing diesel engines, probably in the 2013 Cruze. The engine will likely get 50 mpg on the road. Hopefully, it won't be too noisy with the 'high power' injectors for the diesel system. If you want the diesel, it will cost another \$2400 or so.

3) Six speed transmissions are coming to many cars. Audis may have eight speed automatics as manufacturers try to ramp up and meet ever tougher requirements.

### Awards

Fourth Time #153	Matt, W0NAC	9/5/2011
Ninth Time #6	Scottie, N4AAT	8/24/2011
Bingo #334 Bingo #335	Sandra, N0XYL Pat, N0DXE	8/26.2011 9/5/2011
USA-PA K #23 USA-PA K #24	Matt, W0NAC Jim, N4JT	8/24/2011 8/31/2011
Five Star #51	Bob, N8KIE	9/3/2011

### **Events for County Hunters**

California QSO Party Serial and state/prov/"DX" or CA county <u>www.cqp.org</u> Oct 1, 1600Z - Oct 2, 2200Z

Arizona QSO Party RS(T) and AZ county or S/P/C www.azqsoparty.org Oct 8, 1600Z -

Pennsylvania QSO Party Serial and ARRL/RAC section <u>www.nittany-arc.net</u> Oct 8, 1600Z - See website CW--40 kHz above band edge and 1.810; SSB--1.850, 3.825, 7.200, 14.280, 21.380, 28.480.

Iowa QSO Party RS(T) and IA county, state/prov, or "DX" www.wa0dx.org Oct 15, 1400Z - Oct 15, 2300Z

New York QSO Party RS(T), NY county, state/prov, or "DX" <u>www.nyqp.org</u> Oct 15, 1400Z - Oct 16, 0200Z CW--1.820, 3.550, 7.050, 14.050, 21.050, 28.050; Phone--1.870, 3.825, 7.200, 14.290, 21.350, 28.400.

Illinois QSO Party RS(T) and IL county or S/P/C www.w9awe.org Oct 16, 1700Z - Oct 17, 0100Z

CQ World Wide SSB Contest - bad weekend to try SSB mobile! RS and CQ zone cq-amateur-radio.com Oct 29, 0000Z - Oct 30, 2359Z

Thanks to ARRL Contest Corral, October issue of QST Magazine, ARRL, Newington, CT 06111

http://www.arrl.org/files/file/Contest%20Corral/2011-10.pdf