

# County Hunter News

October 1, 2007

Volume 3, 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 attempt to provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, or provide news of upcoming events.

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

County Hunter Nets run on 14.0565, 10.122.5, and **7056.5**, with activity nights on 3556.5 on Tuesday evenings around 8-9pm Eastern Time. Also, with low sunspot activity, most of the SSB activity now is on 'friendly net' 7185 KHz. The cw folks are now pioneering 17M operation on 18.0915. (21.0565, 24.915.5, and 28.0565 when sunspots better). Look around 18135 or 18.132.5 for occasional 17M SSB runs.

You can see live spots of county hunter activity at [ch.w6rk.com](http://ch.w6rk.com)

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

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

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

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

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

There is lots more information at [www.countyhunter.com](http://www.countyhunter.com)

De N4CD (email: [telegraphy@verizon.net](mailto:telegraphy@verizon.net) )

## Notes from the Editor

1) Many good counties given out in September from dozens of operators. Quite a few received awards or got very close to finishing. County hunting is not only chasing individual awards, but helping your friends get their awards by putting out the counties as well. Unlike DXing, where you have almost zero chance of a friend going to N. Korea to give you a contact, in county hunting, folks will take the extra effort to get to those rare counties and 'put them out'. Ray, AB4YZ, finished up his Master's Gold award getting the LC WBOW from N8KIE.

2) September was a good month for county hunting. The ARK QSO Party with W3DYA activated about 30 counties – things were great on 40M for N4CD in TX till Sunday after he got 'too close' and no more copy. Many followed him around on his AR QSO party trip. Lots of activity and spots from this one mobile. Other than one other fixed station (K5XK) there wasn't much else happening in the entire state of ARK! Norm, W3DYA was running all bands 80-15 (not WARC) in the contest.

The TN QSO Party was very good. Propagation was challenging, but there were well over 100 spots for nearly every county in the state. Most of the activity was on cw, but a few stations were spotted on 40SSB and a few on 20M SSB. There were 8+ mobiles out there giving out counties and many fixed stations. These folks know how to 'have a party'. Many county hunters were heard working the many stations, plus some of the other folks who just show up for the QSO parties were in there, too.

Every year at the end of September, the Texas QSO pasty is held. What can you say? Not great band conditions, but lots of mobiles, including several multi-op mobiles, putting out nearly all of the TX counties in the QSO party. W3DYA, K5OT, and a dozen other mobiles out there 'putting 'em out'.

3) I heard from **Ed, W7GVE** (Mohave county AZ) recently. He wrote:

"I am a recent addition to the county hunter ranks. ...Many days I just run on my rig to monitor 14.0565 – I have my XYL trained to yell at me if I am away from the rig and she hears something on frequency. Does that mean I am becoming addicted, and if so, do you know of a cure?

My setup is quite spartanistic compared to most. My Triton IV was put to bed in 1985 and it slept until I woke it up in January of last year. I am now retired (age 66) and I have resurrected my ham career. I began by joining FISTS, as I am a CW only op. I tracked counties back into the 60s and 70s when I lived in WY – had 940 all on 40cw. I can't remember why I quit.

I'll soon be on 30M with a Ten-Tec Corsair. The Triton IV was before the WARC bands were available. 30 will be fun.

It's a fun bunch. As a US geography buff, it keeps me up on that subject."

4) I also heard from **Gary, K4EXT**, in Dade AL. He wrote:

I was actually into County Hunting back in the 60's and 70's as WA9WZV (Indiana) and WA9WZV/4 (Florida). I seem to recall having over 1500 counties confirmed ... all CW. I never applied for the lower levels of USA-CA ... not sure why though.

My original license expired in 1995 ... was too busy playing work slave and raising a family I guess. In 2002, I re-tested again along with both of my sons (Josh/KG4VBJ and Justin/KG4VBK). Soon thereafter I "vanitized" myself back to WA9WZV ... but then later "re-vanitized" myself to K4EXT.

Warning ... sad story is next! When we moved from Central Florida to Southeast Alabama in 1997, the moving company was kind enough to lose several of our boxes of belongings. Included

in the missing stuff were all of my ham logs and all of my QSL's (including 1500+ confirmed counties ... and who knows how many signed MRC's). Poof ... my ham history gone forever! At the time, it wasn't a big deal to me since I was QRT anyway with an expired license. But, now that I'm retired and back into ham radio (and especially County Hunting), I would sure love to have all of those old logs and QSL's/MRC's back!

So, in a nutshell, that's my story. I'm having a great time being active again passing out a not-so-rare Dale County, Alabama. Hopefully we'll be passing out lots of better ones from 'Bama real soon!

My son (Justin/KG4VBK) has installed HF gear in our van, so soon we'll be out there as K4EXT/M and/or KG4VBK/M passing out counties from Southeast Alabama and Southwest Georgia. Most likely we'll be CW only ... but may dabble with SSB on occasion. I like the idea of stopping on county lines and running the pair, so that will probably be our preferred operating method (at least initially)."

**4) Missed opportunities** - It seems the NC on 20M was calling for 'any mobile station ready to run'. A special event station, W1V up in VT called in. NC in his brusque manner intolerant of anything else than 'county hunter mobiles' got a signal report from the special event station, gave him a fast one back, and in the same breath said "Thanks for that" and then continued hollering for 'any mobile station ready to run'. So much for helping out fellow hams who go out of their way to give out contacts.

Now, W1V (year long special event call) , the Radio Amateur Club of Northern VT, has been on several weekends putting out lighthouses in VT in tough to work counties – Chittenden and Franklin and Addison and others. In the past, it seems the NC would have at least inquired about the county, and suggested the station find a clear frequency and give a quick call back with it, and NC would announce and spot the station in case anyone needed that county. VT counties are tough to get these days and if you have a loud portable station, why not? Except for a NC who is paranoid about anything 'off of 14.336', or not a 'mobile station'. So sad. The rest of the county hunters lose. I didn't see any spots for the special event station, so I guess

folks didn't go looking for it, and those that live and die by the spots missed out. I was out mobile that day. Some like the 1x1 prefixes as well.

If it had happened on 40M SSB, I'm sure there would have been a courteous exchange of information, and NC would have announced and spotted the portable station off frequency. That would have given the others the opportunity to snag the station and the 1x1 call. (I'm sure Ernie is thinking up an award to work all states with a 1x1 combo about now).

It's sad when folks pass by 14.336, have no idea what is going on (the net isn't announced as to what it is), and get blown away by NC for not knowing exactly what is going on the first time the operator says anything or 'checks in'. It would take no more than 15 seconds of 'valuable' net time – instead folks get to listen to hours and hours of 'any mobile station ready to run a county?'. No wonder county hunting is a quickly declining part of the ham radio activity.

**5) IC-706 Mark II on 17M** – apparently, some of the IC-706 transceivers have a stability problem on 17M. Larry, W0QE, posted a picture of how he put in a copper strap to ground the board here:

[http://www.bnk.com/W0QE/IC-706mkIIg\\_15-17mFix.jpg](http://www.bnk.com/W0QE/IC-706mkIIg_15-17mFix.jpg)

Here is the service bulletin #928 dated 2002 on the 706 Mark II. I have no problems with the original IC 706. It appears as RF feedback on the signal when the SWR is over 2:1, or you could have it from using a mag mount or other antenna giving you some RF in the car.

<http://www.qsl.net/icom/download/sb928.pdf>

**6) Grid Square Finder** – Want to find out what grid square you are in? QRZ.com has a new application that gives you the grid square for any address. Someone not put it on their card? You can track it down at:

<http://www.qrz.com/gridfinder>

Many of the VHF/UHF awards and contests now use grid squares for multipliers and awards.

7) **Solar Cycle** – the latest NOAA consensus is that the next solar cycle will begin after March 2008. See their predictions at:

<http://www.sec.noaa.gov/SolarCycle/SC24/index.html>

Another six months of rotten propagation – should be a good year for the low bands to fill in band-counties. Until next year, we suffer with few sunspots and difficult times on the ‘upper bands’.

8) **30 Meters** – Activity still continues on this band. Four folks finished working all on 30M and many others are getting their totals up high in numbers. Things should improve rapidly once we turn the corner on sunspots, but runs are still fairly good now, so let’s not neglect 30M. Most mobiles run the counties on 30M these days.

Some of the listed totals from W6RK top challenge web site:

W9MSE over 2800 worked

AA0IP over 2960

KC0JG over 2475

N4RS around 2300

K7REL over 2800

KS5A over 2100

AB7RW over 2100

Many are over 1000. Several approaching 3000! Lots of runs and counties happening on 30 and 40M now. Many are filling in band counties now on 40M as well. When you are out mobile, don’t forget to get on 30M and help those trying to get the 30M Single Band Award. While there are other bands to experiment with, right now the ‘meat and potatoes’ bands for contacts are 40m, 30m, and 20m.

9) **40 Years to USCA** – Bill, WA0KAQ has been working on and off for 43 years on his USCA and finally got the bug to finish up! He just received USCA #1157. He might hold the current record for longest time to complete the award.

9) **TX County Trivia** – if you visit

[http://txqp.net/forms/Texas\\_Ham\\_County\\_Table.pdf](http://txqp.net/forms/Texas_Ham_County_Table.pdf)

you can see the distribution of hams in Texas.

There are no resident hams listed in the following counties: Kenedy, Loving, Brooks, Terrell, Cochran, Cottle, Culberson, McMullen and Martin. Use it as a guide...there are one or two errors in it, but it gives you an idea of the distribution of hams in the state.

10) **Dan, KM9X** reports on one run he made in Indiana/Michigan:  
(from the K3IMC forum)

“Stats on the run in IN and MI this week: I ran 31 counties on 20m and 40m, that is 62 runs. I had a total of 60 contacts in two days. 6 counties were needed for Master Gold. Thank God Ernie (W7KQZ) was there, as in most counties, he was not only the MG contact, he was the ONLY contact. 722 miles, 60 contacts... Barry MI was about 40mi out of my way and got two contacts.. glad one was a MG!.

It can't be the bands, I worked NC, GA, NY, TX, OR, CA, TN, MS, IA... just no one around, or maybe no one needs northern IN and southern MI.”

14) **Marac Certificate Numbers** - If you work toward one of the MARAC awards such as Big Rig, or YL mobile, and meet a certain level of counties (say 250 or 500 or 1000, and apply for an award, you will get the next certificate number – which might be #180 for any level. The next person applying for an award, at any level, will get the next number.

Unlike CQ Magazine, which issues one set of numbers for 500 counties, 1000 counties, etc, with a different series for each level, and with a set of numbers for ‘all’ (ie, you might have, if you applied for all levels of the award – USCA500 #3892, USCA1000 #3467, USCA1500 #2985, etc, and there will be a unique set of numbers for ‘all counties’, which you might have received number #1163. That means there were 3467 people ahead of you for the 500 level...but only 1162 worked ‘all counties’ before you did.

For MARAC, you might get Big Rig 250 counties #203. If you apply later for 500 counties, you will get a higher number – let us say #208. If you work them all, you might get Certificate Number #269. There is no way to tell from the number on the certificate how many have actually worked ‘all’ from the number, and it is not kept in the database on the marac.org page.

Most of this is ‘legacy’ issues, with the Big Rig, the YL mobile awards originally issued by others – in this case, the B&B shop, and they issued certificate numbers in a series regardless of the level you applied for the award to those awards that had levels. The Big Rig award was started by N9DEH. Thus, on my wall is Certificate 102 for Level 1 Big Rig award from the B&B Shop in 1995. MARAC with the “Joisey Gang” appropriated these award with the MARAC power grab, duplicating awards issued by others, driving them out of business.

Even if you worked ‘all’ counties for Big Rig, you would simply get a high number, with an endorsement for the number of Big Rig counties. Even if you work all YL counties, you simply get the next number, with endorsement for all. You might be the third to work them all, but your certificate will say #180 or something like that.

For the USA-CW award, different sequential numbers are used at each level, so like CQ Magazine, each level will tell how many have reached it before you, and the numbers assigned to all mean that many have finished before you. The Single Band is set up the same way.

Likely the YL-OM, USA-PA, Callsign Combo, will just have incremental certificate numbers, regardless of level issued – nothing is said in the award information.

15) I got a **note from Bill, N4NX**. He thought he had worked all the counties and was checking the cards. Suddenly he discovered that he had never worked Kalawao, HI. The other 3076 were done and confirmed. I suggested he contact Merv, K9FD, who lives on Molokai. Merv is a CW operator. (If you want SSB, you need to wait for someone else to head there). Fortunately, Merv and Bill hooked up on September 20, 2007, and now Bill is really done with USCA. We look forward to him getting his number.

16) **Broomfield, CO** - If you check the special needs on K3IMC, you’ll occasionally see a need for Broomfield, CO. Either the folks have been sleeping, or perhaps not up to speed on the MARAC database. Larry, W0QE does an excellent job of putting Broomfield on the map. If you see a special need for a county in which a resident county hunter lives, send that person an email and get them hooked up. It’s all about getting folks finished! Helpful suggestions can often quickly get that need taken care of.



## 25<sup>th</sup> Anniversary Compact Disc

It was August 1982 when the first Compact Discs began coming off the production line in Hamburg, Germany. Phillips and Sony were the creators of the technology and production of the first CD, which contained Strauss' Alpine Symphony. It was a gutsy call to go ahead with this venture.

Enjoying a production peak in the early 2000s at about 700 million per year, the future of the compact disc is uncertain. Initially, people rushed out to replace much of their music library with CDs, and music fans bought CDs by the hundreds of millions. With iPods and other devices capable of downloading and storing music, the era of the CD may be slowly fading. Soon, most music may be downloaded from the net. Sales are down to 500 million per year and declining rapidly.

According to the Dallas Morning News: "The CD still accounts for the majority of the music industry's recording revenues, but its sales have been in a freefall since peaking early this decade, in part due to the rise of online file-sharing, but also as consumers spend more of their leisure dollars on other entertainment purchases, such as DVDs and video games."

"The proposed semiconductor chips needed for CD players were to be the most advanced ever used in a consumer product. And the lasers were still on the drawing board when the companies teamed up in 1979."

(<http://www.dallasnews.com/sharedcontent/dws/bus/ptech/stories/081807dnbuscdanniversary.193029d.html>)

Who knows? In another 10-20 years, the CD may be as relevant as 78 and 45 and 33/13 records, 8 track tapes and reel to reel tapes, Edison wax cylinders, and the Victrola. In 20 years, you might have to either visit your grandparent's house (or if you are one), you might have to demonstrate what CDs were back in the 'good old days' to the grandchildren to see the 'old technology'.

## On the Road with N4CD – Part I OK

### Western OKLA

I kept looking at the OKLA needs – there were still a lot of folks needing a lot of counties in the western half of OKLA. Not many run cw there. Luckily, there was decent weather (hot but clear) coming up, and a hamfest in Cooke, TX to go to, so I decided to spend the weekend running around OKLA putting out nearly all of the counties in the west half. After all, the hamfest was ‘only’ 15 miles away from the Red River – border to OKLA. In the past two trips, I’d already done about 90% of the eastern part of OKLA.

I checked the K3IMC needs page for requested counties and sent out emails letting the folks know I would hit their counties. Hopefully they would be able to make it. I also took a few phone numbers to call in case folks didn’t show up, or I had to run off frequency on 20M SSB.

Folks needed this one and that one...so I just picked a route to hit just about all of them – and something I could do in 2 days so it was only 1 night on the road, plus both weekend days. Many can’t be around on weekdays, so it helps to run them on a weekend, provided it is not a major contest weekend (or EU RTTY contest which messes up 40M CW and sometimes 20CW). Conditions were not expected to be great, but the counties need to get run! On weekends like international DX contests or Sweepstakes, you can forget the mode in use, plus if SSB, the 40M cw band will also be affected by the DX stations operating there.

After a quick stop at the hamfest in Gainesville (small one) on Saturday morning, I headed up to OK, and started going west to Stephens, Jefferson, Tillman, Comanche, Kiowa, Jackson, Harmon, Greer, Beckham...then head north to Roger Mills, Custer, Dewey, Woodward, Ellis and Harper. There are fairly good roads in most of OKLA, and if you avoid the cities, no delays. KD4HXM needed some for MG, WD9EJK needed one (he is down to 40), NM2L is chasing them to finish up for first time, and there were lots others filling in counties for various awards. W0GXQ need Garfield. Kingfisher turned out to be popular. There had been a lot of flooding and rains in northern OKLA, but I saw only one road closed, and I didn’t need to take it!

For those planning trips, the K3IMC needs page is a good guide. In addition, at the top of the needs page, you can see the 'Most Wanted' counties by state. If you go to the [ch.w6rk.com](http://ch.w6rk.com) page, and look at the 'stats', you can also see how many times a particular county was spotted (relative rarity). Of course, for the cw folks, it does not good if all the spots were on SSB, or vice versa! However, those two sites give you an idea of how needed and how rare a county is. Naturally, if you run ALL the counties in a state, you'll give a lot of folks the counties they need! (and collect a few 'last county' (LCs) certificates for yourself if folks "do the paperwork").

This trip 17M worked better – at one run, I had 11 folks in the log on 17CW. N8II caught me on 17M SSB in a few (usually around 18.132.5 between the QSOs on the weekend. The DX was in, with DL3DXX, OK1VD, OK1KT, DL8MLD, LY2ZZ and others in there many times. I worked OH3JF once on 17 cw! Saturday was the OH QSO party, but I didn't have too much time to work too many. I caught a few late in the evening on 40M CW. I stayed in Woodward (lots of motels there) and headed east in the morning, catching Woods, Alfalfa, Grant, Garfield, Canadian, Grady, then east to I35, then home. At dinner time, I stopped at the Cracker Barrel in Lewisville, then headed the rest of the way home. About 950 miles in 2 days. A few times, I went to 20M SSB to catch a few who needed me – usually right after 40M SSB so someone would spot me off frequency on 20M, but a few times, I worked a mobile and moved off. That works better since some don't watch spots, and stay glued to 14.336 waiting for their county to show up there.

Larry, W0QE was out running in CO, Ron, KB6UF was running in LA, Bob/Anne, KA9JAC/KB8YVT were up in WI, and Kent, KL1V was trekking all over SD, MN, and IA on his trip. It was a busy weekend with the mobiles out and about. Bill, K2HVN was headed back east and ran a few, as did Sharon, KJ8F headed west. At times, wherever you checked, someone was running. Mobiles up and down 3 on 40M SSB! Joe, N5UZW and Dan, KM9X were running the 40M net, with help as needed from others.

That should clean up a lot of the OKLA needs. I missed a few counties, so there are some for others to clean up for a while. Likely I'll head in a different direction before going back!...its a long way to a 'needed county' or one I haven't run in a few months now. As to 'new transmitted counties' for me, I have to go 500 miles to get to new ones – still have over 1000 left to run for second time.

## Working toward Five Star Award

One of the awards that MARAC sponsors is the Five Star award. Everyone from day one can be working on this award. What is required is to work a total of 'five stars' in each county. A county hunter earns a star when they get their USCA number for all 3077 counties from CQ Magazine, the sponsor of the USCA award. If they work all counties a second time, getting the Second Time award, they are then 'good for two stars'. And so on up to 5 stars or more. For this award, you only need five stars total in each county.

You can work five different mobiles each with a star, or one mobile with 2 stars and one with 3 stars, or any combination to get five or more stars. The longer someone has been involved in county hunting, the more likely they will have several stars.

So naturally, it helps if you have many mobiles out there with 3 and 4 and 5 stars or more running counties. Just for the heck of it, I took a look at the current listing of people with five stars – 85 of them, but two of them are SWLs, and about 10 are silent keys. So how many of the remaining 73 or so have been putting out counties lately?

I used the W6RK spotting site to see who has been active in the past year, giving out counties toward the Five Star award. Of the 73 or so who might run counties, you will find: ( from latest holder to oldest)

KC6AWX, K4UNF, N9STL, KA3MMM, K5VYT, W0RRY, W6TPC, W6TMD, K5RPC, ND3T, K5GE, AI5P, WA4WQG, W5VD, KD4NFE, N8STF, N4CD, WD9EJK, KA9PZS, W3CR, WG9A, KC3X, HB9RG, W0DSY, KC0JG, KI0JD, K8CW, NZ8Q, G4KHG, AK8A, KG5J, N4AAT. Scottie was the first to get 'five stars' back in 1992 who is still putting out counties. So of the 73 remaining people who have earned five stars, only about 32 of them are still actively putting out counties – some more than others. Of course, if you work some of those who no longer get out mobile, while you are out mobile, you get to count their five stars in their home county toward the award. (or if you catch them in a county hunter contest or other contest).

There are 131 people who have received four stars. If you take the 85 from that (since they had to have four stars in order to get to five), that leaves another 46 or so, but of that number, at least 10 are SK. Several others haven't been heard on the air in 5 or more years. So that leaves you with maybe 25 more possibilities with 4 stars from a single mobile. There are hundreds of mobiles with 1, 2 and 3 stars to help fill in the needs.

If you work teams, you might get stars from each operator. You can't count 'club calls' toward your star total – it is the stars held only by the operator, and without knowing who is operating, it just doesn't count. Someone with no stars using a club call (even one with multiple stars) can't give you credit for any more stars than that person is worth. (Just one of the many serious problems with 'club calls' out mobile.).

If you track awards by computer, it will automatically fill in the stars as you work mobiles with stars. Of course, you only get credit for the number of stars the mobile had if you worked them – if you worked N4CD the first year he was county hunting in the 1990s, you got 'no stars'. If you worked N4CD 7 years ago, N4CD only had a few stars at that time. Some have tracked this manually (there was at one time a workbook to track stars – had places to put the call of each of the star holders for each county). Now, the computer tracks it for you. Some still track it the old way.

That is just one of the awards that you can work toward from day one. Don't 'need the county' for USCA? Work it for the stars and for Bingo and for the prefix. Many starting out don't work the mobiles, thinking they don't need that county for USCA. Then, after they complete USCA, they are 'addicted' and don't want to stop.

There is the Bingo Award to work on, and plus stars plus prefixes. If you neglected to work mobiles along the way, suddenly you might be kicking yourself for not 'collecting' those contacts, even if you did nothing initially with them.

There are 100 different ways a contact can count toward awards, from prefixes to Nth time, to Bingo (and Nth time Bingo), Platinum, MG, YL, Big Rig, teams, and others – if they meet the criteria.

Anyone who gives you a 'star' is also 'good for Bingo' in every county, too.

However, just because a mobile has no stars, you may also need that mobile for USCA or Nth time, for the prefix or combo awards, or for Bingo if the mobile has an “X” in the call or has the correct letter that corresponds to the first letter of the county (or one of the words in the county name). There are usually many reasons for working just about any mobile out there.

## Peak Oil Update

Some snippets of news lately

1) **From CEO of Total** (one of the largest oil companies in the world)

“Chief Executive Christophe de Margerie says in an interview with the Financial Times Friday.

"The world has changed," de Margerie said. "It is not any more a concern about 'can you build more capacity and will you be faced with a problem of over capacity?', as it happened in the '70s and the '80s. It is much more a question 'can you (meet) the demand?'," de Margerie said.

"The demand is there and the capacity that we have is not enough," de Margerie said. The reason is that "there is a wish of certain countries to keep their reserves for the long term...they don't want to develop their reserves too fast," de Margerie said. Oil companies need now to persuade oil-rich countries to grant access to their reserves and "now you have to prove that what you bring to the local economy is needed and can be used for development," de Margerie said.”

2) From Kazakhstan, home of Borat:

“Italian oil and gas giant Eni SpA confirmed investors' fears about delays and cost overruns at its mammoth Kashagan oil project in Kazakhstan,” The announcement came as Eni, the world's sixth-largest oil company by market capitalization, reported that fourth-quarter net profit slipped to €1.52 billion (\$1.99 billion), 28% lower than the same quarter a year earlier, because of

lower refining margins, the depreciation of the U.S. dollar against the euro and production disruptions.” Kashagan will now need \$19bn to develop to the initial stage of producing 300,000 barrels a day by early 2011. That is up from the original estimate of \$10.3bn” (WSJ)

“Kazakhstan halted work at the huge Kashagan oilfield for at least three months on Monday, due to ecological concerns, and said it was probing customs violations there as it piled pressure on the Eni-led Western operators.

Kashagan's start-up delays and cost overruns have long irked Kazakhstan, which has threatened to revoke a permit held by the Eni-led group to exploit the world's biggest oil find in decades. “ (Reuters News)

The project is at least two years behind schedule and double the original price estimate, now coming in at \$20 billion dollars to first production. Kashagan is one of the most complex oil fields in the world, lying at the end of the Black Sea in shallow water with heavy ice in the winter time, and extreme pressures and extreme concentrations of hydrogen sulfide gas in the oil, with a complex geology.

The dispute is reminiscent of Russia's row with Royal Dutch Shell, which ended with the oil firm losing control of the giant Sakhalin-2 oil project to Russia's Gazprom after accusations of environmental infringements.

Kazakhstan's energy minister said in July the government was in talks with the group to revise the share of profit oil for Kazakhstan to 40 percent from 10 percent.

Kashagan's consortium on the Caspian Sea also includes Shell, Exxon Mobil Corp, Total and the Kazakh oil company KazMunaiGas.

The consortium has put off the original startup of the world's biggest oilfield discovery in 30 years to the second half of 2010 from an original target of 2005.

Industry sources say some in the Kazakh government are unhappy with what are now seen as overly generous terms signed with foreign companies in the 1990s, when Kazakhstan needed foreign investment to overcome a post-Soviet slump.

### 3) **South Pars (Iran) Natural Gas field**

From Total CEO: “As for the liquefied natural gas project of Pars, in Iran, de Margerie said the contract that had been negotiated before is no longer viable as its costs doubled.” There is a large gas field lying between Qatar and Qatar. Qatar calls it ‘North Pars’ and Iran calls it ‘South Pars’. The cost of LNG plants has more than doubled in the past 3 years due to shortages of steel construction pipe, the cost of rental of offshore drilling rigs, labor, and other material costs. Also, both countries are finding the geology of the field to be very complex (lots of little pockets with little interconnection) requiring significantly more investment to extract the gas.

From the Total CEO:

“Total CEO Christophe de Margerie said Thursday that his company had to be "pragmatic" over investment in Iran. Contractors were harder to come by in Iran and the costs of the project had doubled over three years, he said.

More broadly, de Margerie warned that rising supply-side costs could threaten new investment in the oil and gas industry. Using as an example Total's investments in Angola, he said the initial costs of the Girassol oil field had been \$3 billion for production capacity of 250,000 b/d. For the Akpo field in Nigeria, costs were about \$5 billion for 240,000 b/d of production, while a new project in Nigeria is now likely to cost \$7 billion for 160,000 b/d of output, he said.

The price of oil is no longer just about supply and demand but also inflation on the cost side, he said. Inflation in contractor services of 30%/year is not sustainable, said de Margerie. If crude prices are not sufficiently high then investment in heavy oil and CO2 capture and storage will not be possible, he said. Referring to extra heavy oil, de Margerie said that in some cases, costs were rising to \$50-\$60/barrel.” (Platts News)

4) **Oil prices** – back up to over \$80/bbl and OPEC in no mood (or ability) to increase production. Hmmm.....???? Prices hit \$82. Part of that price is no doubt the falling value of the dollar due to the USA horrific budget deficit numbers, and falling interest rates. Many economies elsewhere in the world are chugging along at full speed, including China. Each year,



China demands 5% more energy for its expanding manufacturing and auto base.

5) **Peak Phosphorus** – from the September ASPO Newsletter:

“An article by Déry and Anderson in the Energy Bulletin of 13th August finds that the production of phosphates, essential to agriculture, has passed its peak. Much came from the small Pacific island of Nauru, where production peaked in 1973, leaving a desolated land surface. Production in the USA evidently peaked in 1988 and the world as a whole a year later. Phosphates have increased crop yields enormously allowing the population to expand. The phosphorus is not destroyed being apparently excreted by those who eat the food grown on it.

This would seem to be a strong justification for the construction of anaerobic digesters, which can treat sewage and other organic waste, yielding methane gas from which electricity can be generated, and returning rich nutrients, including phosphorus, to the soil.

The issue of population is a sensitive one, to which some people take offence, but in logic it does rather look as if the six-fold increase in population during the First Half of the Oil Age may be matched by a corresponding decline during the Second Half.”

6) Algeria’s state-owned power company rescinded a deal to develop a \$7 billion gas project with two Spanish energy firms. Sonatrach blamed the Spanish for delays and cost overruns, described as an ‘industrial fiasco’. The Spanish firms called it an illegitimate appropriation by the state. All parties are seeking arbitration. (per the Economist Sept 2007).

7) **Biodiesel Cost Problems**(From the Houston Chronicle)

“After an initial surge, the state's biodiesel industry is suddenly facing an uncertain future, which threatens to put some companies out of business.

They blame the slowdown on several setbacks for the industry, including a spike in the price of soybean oil, a common feedstock used to make biodiesel, and the loss this month of a key state incentive that had helped blunt the impact of that spike on producers.”

The energy bill making its way through Congress does not set any mandates for biodiesel, which has been slower to gain acceptance partly because fuel quality has varied widely among producers. Biodiesel production has grown rapidly in recent years, fueled by a \$1 per gallon federal tax credit, new federal clean diesel fuel standards and state air-quality regulations. By blending with conventional diesel, biodiesel burns more cleanly and releases fewer pollutants.

Domestic biodiesel production went from 25 million gallons in 2004 to more than 250 million gallons in 2006, and will exceed 300 million gallons in this year. Texas has become a major hub for biodiesel because of its ample soybean crop and energy industry infrastructure.

Since last summer, the price of soybean oil has risen by more than 50 percent, and it now trades at about 40 cents per pound. **With other costs added, biodiesel producers say they are now paying about \$3.50 per gallon just to make the fuel.** By comparison, the retail price of conventional diesel was under \$3 per gallon last week.

“The only way the biodiesel industry can get out of the current "death spiral" is to move to cheaper, nonfood crops and other feedstocks. Amid the run-up in costs, the federal \$1-per-gallon tax credit has helped keep producers afloat, but that credit is set to expire in 2009.

U.S. biofuel producers who have been receiving the credit even when exporting their fuel could lose the credit sooner than that. Congress is considering a bill that would make the credit available only to producers who make biofuels in the U.S. for domestic consumption.”

If you wonder where all your tax money goes – it goes to subsidize ‘alternative fuels’. Those folks need to find cost effective ways of making fuel, not soaking taxpayers for a buck a gallon subsidy (on top of other subsidies to grow/not grow crops).

### **Internal Consumption of Exporters**

From CNNMoney.com

“Soaring rates of domestic oil consumption will reduce crude exports from OPEC, Russia and Mexico by 2.5 million barrels per day by the end of this

decade, predicts a new CIBC World Markets study. Currently these countries account for roughly 60 per cent of global production.

Last year, OPEC members together with independent producers Russia and Mexico consumed over 12 million barrels per day, surpassing Western Europe to become the second largest oil market in the world. The CIBC World Markets report found that highly subsidized gasoline prices are often a significant factor in surging rates of domestic oil consumption found in many major oil producing countries.

With exports from OPEC, Russia and Mexico expected to decline by seven per cent over the next three years, markets will seek greater reliance on higher cost unconventional deposits. “

## On the Road with N4CD – Part II TX

### **Trip around TX**

Labor Day weekend was coming up. I thought about a big trip back east, but my sister who lives in MD had to work (couldn't get off for vacation) so I decided not to head that way to Warren County, NY. With a 3 day weekend, and so many people needing things in TX, I planned instead a 3 day trip to 'zip around TX'. The ambitious schedule called for 60 counties in only 3 days, with all put out on 20/30/40cw and 40SSB at a minimum, and 20M SSB and 17M CW for many. The prediction for the propagation was not great – expected A index in the 10-20s for several of the days.

I left Collin County at 6:15 am – still dark outside. First it was off to the Northeast corner of TX – Red River for LY2ZZ and several others, then down through Titus and Franklin to Cass and Marion (the last two for K5AAR), then down through Upshur to Rusk, Cherokee, Nacogdoches, Angelina and many others that are seldom run on CW. Down to Walker, TX and to the Interstate - and stopped for the night at a Motel 6 (\$45) in Huntsville. The Super 8 wanted \$82 – forget them – they are pricing themselves out of the market. Dinner was at the Golden Corral for \$10.

The first day, DX was in, but the A index was sky high...in the 20s....The log was still filled with CW and 40M SSB contacts. It had been a good day. Most people showed up for their needed counties. I hit the sack early.

I woke up the next morning at 5 am. Hmmm....bands don't open till 7am or later, but I got the car packed, 'walked through' the MacDonald's drive through window (my big antennas don't clear their 9 foot clearance) and got breakfast to go. Many are open 24 hours a day – for the drive through. Then, I gassed up the car – still only 5:45...so it was off to the next counties –completely dark – not much traffic – two lane roads – slight drizzle – and had run Walker County the day before. I drove through the rest of Walker, and by the time I got near the county line 40 miles down the road, it was near 7 am, the sun was finally up, and W6TMD and a bunch of others were waiting on 40M. That's 5 am California time for him.

Runs were made on all bands/modes then I headed basically south as far as I could go to the Gulf coast- Wharton, Matagorda, Jackson, Refugio, Aransas. I added in Matagorda, and a few who needed it weren't around. You never know where N4CD will wind up – I zigged instead of zagged and got the extra county. I was headed generally west on very lonely roads after San Patricio– 50 and 80 miles with no services – long way between 'towns' - now headed to Eagle Pass – right on the Mexican border and Rio Grande River. I also added in Zavala with a 2 mile detour.

The large Map Book of Texas came in handy. You can find these at service stations and truck stops. They are large (like 12 by 15 inches) with 150 pages of detailed maps showing many roads not on the standard TX map. Usually, if the road is not on the TX state map, I don't use it, but there are many opportunities to hit the corner of a county, or go a mile or two on a tertiary road and get to another county which isn't obvious from the standard map. The state map shows a little road up to Zavala, but doesn't give the number. It is easy to get on the wrong road – unless you have the large state map book. Many other states have the large version maps, and if you plan to run often in them, it is a worthwhile investment (about \$25). For example, in OKLA, you can get to a few counties on back roads that aren't shown on the state standard highway maps. They are available for quite a few states.

If you run with a laptop PC in the car, Street Atlas does show many of these roads, and using GPS, you can also get there and find the county line if not marked by signs. So far, I haven't been bitten by the computer bug, or want

to have all that hardware up front in the car and try to use it while driving. It helps to have a navigator to use all that. Of course, the best made plans often go out the window when you get to places that recently had floods, or where there is road construction, and see signs like “Road Closed – detour – 55 miles around” – something a county hunter doesn’t want to see. One year in KY on a trip with W0RRY, the first road was closed. We tried a second road 20 miles away in the same direction – it too was closed. That turned into a 100 plus mile detour to get us back on course! That can really mess you up when you are trying to put out all the counties in a state or area, and just ‘can’t get there from here’, or already have your motel reservations and find an extra 2 or 3 hours of driving to get from ‘here to there’.

The second day, I got to the town at 7pm – long day – Maverick County - I found motel and rested up, hit the Pizza Hut for their ‘meal deal’ (personal pizza and all you can eat salad bar) plus drink for \$6.99. That day I had stopped a few times too many times on county lines and ran the pairs – usually taking 30 minutes to finish up and move on. Time passes by as your having fun and giving out contacts. However, when you have lots of miles to go and a long trip, it’s a compromise between spending lots of time, and giving out the counties on all the bands and modes.

It was another day with high A – no DX at all – but still filled page after page with CW contacts on 30/40/20 and an occasional couple on 17M.

Many times I’ll run just SSB at every other county line, and run CW on the move if I can. That doesn’t work for ‘dead end’ counties, where you just come up to the edge of the county, stop at the line, then go back the way you came. The ideal situation is to have about 20 miles of road in each county, then hit a new one. Usually reality takes care of that, and sometimes its 3 miles, sometimes 60 miles in a county. If the driving conditions are poor, I’ll often stop to run the county rather than trying to see in pouring rain and operating/logging at the same time. Good weather helps speed the trip. The second day, there were a few deluges of rain in big showers along the coast.

The third day, the route was heading northwest along the river through Kinney up to Val Verde, then the long, long trek northwest back to Collin county. Lots of empty roads out there, but you can make good time if you don’t stop too often. It was up through Edwards and Sutton and Schleicher, Menard, Comanche, Erath, with detour to Somervell and Hood (always in

demand), Tarrant – corner of Johnson and Parker....for those you have to stop.

There is not much to see in Schleicher should LY2ZZ visit El Dorado....one tiny old motel....few gas stations. That was his LC WBOW. If he wants a county to visit – go to Kalawao, HI and enjoy the scenery! Skip Schleicher! It is the ‘county seat’ though.

It was getting near dinner time as I entered the ‘Metroplex’ (Dallas, Ft Worth and all the mid-cities and suburbs). On the way home, I was not far away from the Cracker Barrel, so the car took a detour in Lewisville (Denton CO) and stopped there for a county ham dinner – then home – 1455 miles in 3 days. Traffic wasn’t bad since it was a holiday, and I avoided the interstates for the most part. After the first 100 miles on interstates the first day, the only time I saw the interstates was crossing them on roads going somewhere else and a few miles in Tarrant County on the way home! Two nights on the road – and a bunch of gas in the car – price ranged from \$2.49 to \$2.90. Prices seem to have gone up 10-15c/gallon over the weekend.

Darrel needed Duval for the LC for an “N” prefix, and he caught me there and in some others he needed for MP. I guess it isn’t strange that most of the counties folks needed for MP were also the ones I hadn’t run recently (after I got my MG) and they were also counties I needed an MP contact from! Many others got the platinum (counts for every county hunter, new or long time one) and the folks ‘good for MP’ followed me around – KC0JG, N9STL, W3CR, N8KIE, N4UJK, AB2LS – giving me credit as well. Sooner or later, someone will wind up working all of them! Likely, the top folks are down to 400-500 needed now for the first part of the Master Platinum award.

Conditions were ‘not good’ the whole weekend, yet I kept logging 10-15 on 20M cw for each county and 10-20 on 30M in many counties, and 10-20 on 40M in most counties, plus 10-25 on 40M SSB, and a good handful on 20M SSB. There were few mobiles running on 20M SSB, and most when they ran worked only a handful of people, sometimes less. After about 10am, 17 opened and usually I worked 2-4 stations on 17M. Not great, but things should rapidly improve in the next year or two. Over 300 counties have been spotted on 17M so far.

I pulled some stats from the weekend just for the heck of it. Runs spotted over the three day weekend included:

**On Saturday 9-1:**

Counties spotted on 20cw: 19  
30cw: 21  
**40cw: 30**  
40SSB: 24  
20M SSB on net: 17    off net 10

**On Sunday 9-2**

Counties spotted on 20cw: 48  
30cw: 46  
40cw: 42  
**40SSB: 52**  
20SSB on net: 29    off net: 14

**On Monday 9-3**

Counties spotted on 20cw: 20  
30CW: 46  
40CW: 44  
**40SSB: 97**  
20M SSB : 52 on net    4 off net

Wow...did you see the 97 counties spotted and run on 40M SSB in one day? Almost twice as many as on the 14.336 net. Half again as many counties were run 'off frequency' on 20M SSB on Saturday and Sunday while NC was sitting around 'waiting for any mobile station to run a county', and not all the off frequency runs were spotted either. Lots of counties on cw for the folks and lots of counties on the friendly 40M SSB net. Joe, N5UZW, Dan, KM9X, and Randy, AD4IA, with help from Joyce, N9STL, Larry, W0QE, and others kept 7185 KHz frequency humming in great fashion.

N4CD was spotted in 16 counties on 17M. Conditions were not all that good over the weekend. Most times had just 2 to 4 QSO on 17M, and most after 10am and before 4pm. That, I guess, is part of being a 'pioneer'.

There's a broadband data station on 10.1225 in TX. I hear it in the afternoons at home, and it was on S2-S3 most of the afternoon in south TX. Not sure what and where, but it is annoying and makes copying weak signals tough. Anyone else hearing it?

So the OKLA and TX trips hopefully whacked off a bunch of needs on the needs page. You never know where N4CD will wind up, though. State QSO parties are coming up, so lots of opportunity to go out 'giving out counties'.

## Big Big Big Wind Farms

TXU (with Royal Dutch Shell) has just announced plans to build the world's largest wind farm in Briscoe County, TX (in the panhandle). The 3,000 megawatt facility will cost several billion dollars. What is unusual about this is that the facility will 'store' wind power energy.

At off peak times at night, the plant will compress air, and store the compressed air in underground caverns. The air is released and hearted with natural gas to run turbines that generate electricity. The wind-compressor technology is in operation elsewhere in the US, but this would be the largest installation. It will take 4-5 years to construct, and consist of about 1000 windmills.

## 505 European Experimental Beacon

A ham band at around 500 KHz (600 meters) has been proposed as something that the ham community would like. It would be a sliver of a band. If you have a very, very good receiving set up, you might just hear this! Hopefully, the USA will get some more experimental beacons.

News - There is now a new Czech beacon active on 505.060 kHz.

Frequency: 505.060kHz



Power: 1W ERP max

Location: Breclav, JN88KS

Mode: CW 6WPM / QRSS3

Text: Identification '*Beacon OK0EMW JN88KS*' in regular CW at 6WPM is followed by 2x CALL and QRA locator in QRSS3.

Aerial: Inverted-L with 23m vertical and 102m horizontal sections

The results of ERP field-measurements (2180m from the aerial) is 0.95W ERP

All reports, snapshots and information about signal are welcome!

In the USA, the FCC has issued experimental licenses to 21 stations around the country. Activity continues. More info at:

<http://www.arrl.org/news/stories/2006/11/10/101/?nc=1>

## Cellular Coverage in OKLA

My last trip to OKLA I found what seemed to be backwater places as far as cellular service goes. When I need to make and receive calls, there was no service. Here's a Verizon coverage map of southeast OKLA.



phone patch). By 1976, only 535 people had a mobile phone in the entire NYC area, with over 3000 on the waiting list!

Imagine only 23 calls maximum at one time in the NYC area! In most other areas, there were just a handful of channels. There was no yakking back then. Calls were very short, to the point – and for very good reasons. In the 50s, many phones were ‘IMTS’ – improved mobile telephone service, no longer requiring an operator to place or receive calls. Channels were limited.

The concept of using small coverage cells and frequency re-use was written about in 1947, but the FCC was not eager to allocate large chunks of spectrum for it at VHF or UHF. There were too many other users vying for the spectrum.

In 1958, AT&T requested the FCC allocate 75 MHz of spectrum at 800 MHz, way up there. Fortuitously, the transistor, invented in 1947, was able to operate at higher and higher frequencies and do more and more. European countries began to deploy simple medium size cell systems, getting ahead of the US technology wise. It took 10 years before the FCC even began to consider the FCC proposal for cellular allocations.

Meanwhile, CB radio was created and was supposed to fill a major communications need – it did for a few years, until everyone bought an inexpensive CB, and the band became so crowded with casual yakkers and truckers that businesses could not conduct any useful commutations. It was all 10-4 Good Buddy, “Ya got a copy on me?”, and other inane conversation on every channel – including the extra ones when they expanded it to 40 channels. Forget that as a ‘useful tool’. It got out of hand quickly. (11M used to be a ham band, too, in the 50s).

The FCC was bombarded by other radio carriers, who wanted an opportunity to provide cellular service. AT&T put in a demonstration system on the railroad between Boston and NYC, providing phone service with smaller cells along the rail corridor, with ‘handoff’ and computer control of the system. It was for payphones in the rail cars.

Again, luckily for cellular, Intel came up with the first microprocessor circuits in 1971. It took lots of ‘logic’ for a mobile phone to work, and with

a microprocessor, you could eliminate hundreds of discrete transistors or small integrated circuit blocks.

In 1974, the FCC allocated a large block for cellular, allowing two trial systems to be constructed, one by Motorola in Chicago, and one by AT&T in the Washington DC area. It was several years later before the trials actually happened. Marty Cooper of Motorola came up with the first 'handheld' about then – it weighed nearly 2 lbs. These first systems met the AMPS standard – Advanced Mobile Phone Service. It was analog, not much different r.f wise than your 2M mobile. The cost of the trials was staggering – on the order of \$40,000 to \$50,000 for each mobile in the system!

The FCC decided that one license in each area would go to the incumbent local telephone company. By this time, AT&T had voluntarily divested itself of the local companies, doing only 'long distance'. The other license would be up for bid. The first licenses were awarded in 1983, and the very first systems soon went on the air in the 'top 30 cities'. Most of the phones were either mobile installations, or 'bag phones' – a mobile in bag that you plugged into a cigarette lighter to use, or if you had to be portable, with a battery pack – a large one!



Transportable of 'portable' phone circa 1983

The Motorola handheld was very expensive, and usually only worked in downtown areas or nearer to cell sites. Coverage was optimized for the mobiles.

By 1990, cellular was running out of capacity. Several new digital technologies would allow for more users on channels at any given time. Within a short period of time, TDMA and CDMA arrived. Europe had selected yet another standard – GSM. Each had weak and strong points. However, one requirement was each radio and system still had to handle the AMPS standard, in case someone either had, or wandered into an area only with the ‘old’ AMPS standard. Like in Pushmataha OK – but those systems only worked well for mobiles with external antennas in the boondocks.

The USA began conversion to digital in the 1990s. Each operator selected what technology they wished to use. Verizon and Sprint selected CDMA. Others selected TDMA. Even with that, it was obvious there wasn’t going to be enough channels for enough people. The FCC allocated new spectrum for even more service, this time at 1900 MHz. All the new systems would be digital with five licenses, some larger, some smaller, auctioned off.

The new radios then had to be dual band, and often multi-mode, since one technology might be used on 800 MHz and another on 1800 MHz.

The AMPS equipment was power hungry. Mobiles had to continually listen for a page (call) –taking up lots of battery power. Digital systems allowed mobiles to ‘sleep’ for large portions of time, waking up for a short period every second, then going back to sleep and saving power for a second. Digital also used less power on transmit, so your handheld tiny transceiver will operate for days on a single charge!

But if you go to southeast OKLA, the only service in parts of Pushmataha County is old analog AMPS and not much of it! All the features disappear, like caller ID, voice mail, and other goodies. You’re lucky to make or receive calls unless you are right on top of cellsites, as they are listening for higher power mobiles with external antennas, not handheld inside the car. Even standing outside, most of the area is tough to find coverage with your ‘flip phone’ or equivalent.

I’m happy to report that service is a lot better in the western half of OK, but a few times when I went to call someone ‘NO SERVICE’ was what I saw.

Harmon County not too good! (See how many towns there are in the 'north half – hi hi -). IF you absolutely need coverage in the boonies, then the very expensive satellite phones are the only thing you can depend on the 'middle of nowhere – the Iridium type phones). They'll work just about anywhere on Earth except the North and South Pole, and countries that forbid operation within their borders.

## Report from Paul, WB2ABD

Norm, W3DYA, was going to be driving back to Texas after doing his family visiting thing back east, and I was planning to "get out", so we decided to meet up in Fairmont, WV. Norm and I go a-way back to the mid 60's, when you could scoop counties with portable operations on the QRP calling frequency on 40M CW. We'd work each other on and off over the years, usually in some contest or another. When I was seriously challenged to do USACA by W2FXA ( SK ) in the latter 80's, I was pleasantly surprised to find my ol' buddy "NM" still in there pitching.

The day started out nicely enough with good runs in Crawford, Mercer and Lawrence PA. Then it started raining heavily, really slowing things down. For those that were around during the early evening of August 20th, understand that we had some terrible weather to deal with. I could only describe it as having come from a hurricane (remnants of Erin, as it turned out). I wound up following a semi because it was the only thing I could see besides the immediate two dashed lane marker lines in front of my truck - I dared not stop. That truck finally turned off, and I followed, and the rain let up some. I was in Canonsburg, PA - a familiar stopping point. ( I pulled into a very crowded Mickey-Dees, and after standing around for a few minutes, realized the place was closed for remodeling, and they were auctioning off everything except food).

I then realized that I had missed the exit that would get me to Hancock WV, but I could get the next one to Wheeling. I ran Ohio Co. in the bright sun, drove up to Hancock, and it starts pouring again. Believe me, changing the wander-lead on an Outbacker can really get old in a hurry. Soaking wet old. The torrent let up a bit, and I saw my antenna was about 2 wavelengths from

a 200 ft. cliff to the west. If I was weak, you know why. Came down to run Brooke and then Marshall. This last one for the day was done with a thunderstorm lurking a few hills over (sorry to make NM2L wait so long for this county). Norm also ran into weather difficulties on his way over, but made it safely ... and on time.

This is where I shoulda kicked myself in the exhaust muffler ... after doing Marshall, I figured I could stay on US 250 and get over to Fairmont. I'd be late a little bit, but that's ok. I should have known better. I recall many years ago taking WV 7, possibly the worst road in these United States ( I remember having to remove the antennas because they couldn't navigate the overgrown vegetation that was scraping the roof , somewhere after the unmarked wash-out - and no place to turn around ). It joins up with US 250, it's bigger relative. Believe me, it's just about as bad.

Rain, fog, thunder, twist, turn, brake, up, down, hairpin, brake, twist, turn, jeez no guardrail? - Cameron, WV - look at map, groan, swear, two cows on this side of the fence, ( repeat all of this to Hundred, WV - drive thru the middle of a junkyard - repeat again to Metz - trooper waiting at the bottom of a hill in a 25 MPH zone). There was no CH activity, and the only thing that saved my soul was the Gold Channel on Sirius radio. Over three, and I counted them, **three hours** later I pull into Fairmont. Of course, the agreed upon motel meeting was 3 exits down from there, but I was just happy to hit the bright lights. And my profound thanks to the gracious YL at the convenience store for pointing the way. If you think I made any of this up, go ahead and drive from Moundsville to Fairmont. There should be a MARAC award for surviving this trip.

Norm was very understanding, as any seasoned roadrunner would be. Of course, I was starving, and Norm already ate (everyone has their limit of understanding), but we were there for our "mini" and it lasted til almost 2AM ( now, why didn't I get a bag of snacks at that convenience store?). Strangely, although my shoulders hurt like the dickens, I wasn't tired. I explained what happened on this trek along US 250. Some sage advice from Norm - look at a WV map (he was born there, you know) - if the road isn't green or blue, it won't be fun driving it. Having run all of WV except for Pocahontas, I agree - like I said, I should've known better!





Paul, WB2ABD – at the ‘mini’

I haven't been to a convention since '95, so he brought some more recent photos, and now I know what most of you guys look like. One older photo shows me actually having hair! Yikes! We got into county hunting, our bouts with cancer, family, religion, politics, etc. This continued the following morning at The Bob Evans for more than an hour. We snapped some pictures (can't have a "convention" without those) and we were on our way. I'm sure "NM" would agree, we had a real great time. Some of my non-ham friends were mystified to find out I went all that way to meet a guy



that I've only seen a few times in my life ( well, I ran some counties too, right?). But that's what hamming and County Hunting are all about. Friendships that last forever. Yeah, we all hustle counties, go mobile, watch W6RK spots, - ( and hopefully make some spots and assist on QSP's, right fellas?) - but if I never touched a radio again, I know I have a great friend in Texas ... Smith County.



Norm, W3DYA – at the ‘mini’

After breakfast, I had intended to get into west central PA to touch some stuff on the needs lists, but instead of navigating over the hills, I decided to take I79 up to I80 and head ESE. I worked Jonas, LY2ZZ , who was waiting patiently from the evening before, when I ran Greene, PA in the sunny cool morning: guess he waited a long time too. Zipped up to I80, turned east, and BAM, the weather front came in for Round 2. My mind said ... hopeless... I could come back here on a more reasonable day. Then I found out my keyer quit. I had glued little spacers to the cabinet of a reworked MFJ/Bencher unit, and the glue unglued thanks to US 250, no doubt), shorting some wires and pulling the key line off the jack. I was wondering why the speed kept

going back to default ... my fault. Another project to do. There's nothing wrong with the keyer board ( K1EL K12 kit - I recommend it if you want a project to do). The problem was the engineering portion of the installation. “

## Early Electric Buses

From the Economist September 2007

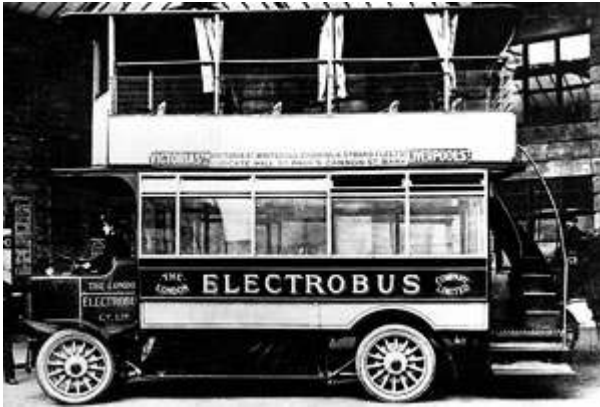
“On Monday July 15th 1907 an unusual bus picked up its first passengers at London's Victoria Station before gliding smoothly off to Liverpool Street. It was the beginning of what was then the world's biggest trial of battery-powered buses. The London Electrobus Company had high hopes that this quiet and fume-free form of transport would replace the horse. At its peak, the company had a fleet of 20 buses. But despite being popular with passengers the service collapsed in 1909. The history books imply that the collapse was caused by technical drawbacks and a price war. It was not. The untold story is that the collapse was caused by systematic fraud that set back the cause of battery buses by a hundred years.”

Now begins a tale of intrigue, as we recount what happened 100 years ago at the largest trial of electric buses in the century. Even today, the largest system of the last 15 years of electric buses runs in Chattanooga, TN with just 12 buses. Santa Barbara now has 20 buses and is adding another 5. So what went wrong?

“At the beginning of 1906 there were only 230 motor buses in London. They were widely reviled for their evil smells and noise. At any one time a quarter of them were off the road for repairs.” The electric buses used 1.5 tons of lead-acid battery to haul up to 34 passengers. One bus could run 40 miles on a full charge. After half a day, the bus would return to the depot, and a battery swap would be made, allowing it to run all day. It took just 3 minutes to swap out the battery tray. They were quite reliable.

“In April 1906 the London Electrobus Company floated its shares on the stockmarket. It wanted £300,000 to put 300 buses on the streets of the capital. On the first day the flotation raised £120,000 and the share offer was on course to be fully subscribed. But the next day some awkward questions surfaced. The company was buying rights to a patent for £20,000 (£7.5m, or

\$15m, in today's money) from the Baron de Martigny. But the patent was old and had nothing to do with battery buses. It was worthless and a scam. The investors sued for their money back. The company had to return £80,000. The investors would have been even less impressed if they had had any clue about the identity of the “Baron”. He was a Canadian music-hall artist living in theatrical digs in south London.”



London 1907 Electric Bus

Now it turns out that Martigny was a front man for Edward Lehwiss, a German lawyer and serial con artist with a taste for fast cars and expensive champagne. The London Electrobus company struggled to make money. Lehwiss set up a network of front companies to siphon off the companies money. One was the Electric Vehicle Company of West Norwood, the constructor of the buses. It took orders for 50 buses at 31,000 Pounds per bus, but delivered only 20. Lehwiss skimmed off 1/3<sup>rd</sup> of any money the company could raise.

The company finally went bankrupt in 1909. Lehwiss bought the buses at the liquidation auction for 800 pounds and sold them at 4 times that price to Brighton, where they ran for another six years. This was a testament to the well constructed buses – at a time when the average motor bus lasted less than a year.

So when you hear about ‘new revolutionary’ electric bus systems, there isn’t much new – it was all done 100 years ago. Unfortunately, the speculators and scam artists put the electric bus back over 100 years in development –

just think how clean cities might have been if this had been allowed to develop without interference from a scam artist!

At the same time, over a dozen bus companies were in operation in London, and half of them failed – just too many competitors trying to stake out market share. It turned into a ‘transportation bust’ like the dot.com bust a few years back. Other systems in Berlin, Paris and in USA cities started to see tough competition from motorization – yet electric vehicles were on the road in large number up until WW2. With the introduction of mass production by Henry Ford, the cost of the gasoline powered car plummeted and spelled the end of the electric car era.

If you look at:

<http://books.google.com/books?id=5689qa8vrLQC&pg=PA182&lpg=PA182&dq=electric+bus+1907&source=web&ots=VKBINvVbha&sig=hk8zvfgGnIK8Ak71o3PtDzUFopQ#PPA2,M1>

You’ll find an interesting history of electric vehicles. In the USA at the turn of the century, there were 20,000 to 30,000 electric vehicles – a good percentage of everything on the road. There were over 10,000 delivery trucks in the USA – many which kept running until WW2.

## Bill, WA0KAQ, Finishes USCA

Bill, WA0KAQ after 43 years of county hunting, was awarded his USCA by CQ Magazine. He might hold the record for longest time to complete USCA! Here’s a picture of Bill holding the certificate



Bill, WA0KAQ, Proudly holding his USCA

## Top Tier Gasoline

Source: Click&Clack – the Car Talk Folks

So you're out county hunting and need gas. There's an Exxon station and a Chevron station side by side, at the same price. If you want the 'best gas' which one should you visit?

All gasoline sold in the USA meets EPA rules – so you can put anything in your car, and it will run OK. The only difference between different brand gasolines is the additive package that is put in. But some brands use additives that do a better job of keeping your valves and electronic throttle clean.



In 2004, several car makers were unhappy with the detergent performance of gas because they were finding deposits inside the engines. So they created some new tougher standards than the federal ones. They called the gasoline that meets these higher standards “Top Tier” gas. Only some companies sell the ‘top tier’ gasoline – QuikTrip, Chevron, Conoco, Phillips 76, Shell, Entec, MFA Oil, KwikTrip/Kwik Star, Somerset, Aloha Petroleum and Texaco. Who doesn’t? Exxon, Mobil, BP, Gulf, Amoco, Sunoco and others. Does it matter?

Some car makers think so. If you use non-top tier gas, you can get rid of any carbon buildup after 100,000 miles by using Top Tier fuel for 10,000 or 20,000 miles. It’s rarely irreversible. If you want to be sure never to get any buildup, use Top Tier gasoline most of the time. The list might change from time to time, and you can check to see who currently meets the ‘top tier’ standard at [www.toptiergas.com](http://www.toptiergas.com)

If it is a choice between Exxon and Chevron – maybe you now want to visit the Chevron station?

## Getting Folks Finished Up

It’s been another good month, with many finishing up and many others closing in on various awards. Bill, N4NX, sent me an email saying somehow he had overlooked Kalawao, HI. I zipped him back an email saying maybe Merv, KF9D, could help him out. Not long after, I received another email – They had worked each other for WBOW LC. Merv is a FB cw op who lives on Molokai.

Wayne posted his needs. He’s been inactive in county hunting lately, down to just 4. One of them was Broomfield. Anyone who has been in county hunting knows that W0QE has a big signal out of Broomfield. Within a day of posting those needs, the two had gotten together, and now Wayne is down to 3 (as of Sept 25) for WBOW. Time to get him finished up, too!

Bob, N8KIE, took a nice trip to NE, NY, NJ, and PA. Ray, AB4YZ, was down to just a few, and Bob, N8KIE gave him the last WBOW (Bucks, PA) for Master’s Gold on the friendly 40M SSB net. Bob, N8KIE, cleaned up lots of needs, but it was challenging for many to catch him with the high

noise levels in many areas, and the intense broadcast on 40M in NY. Conditions on 20M were absolutely rotten. He was also mobile in some of the counties and ran out of them before going to 20M SSB, or 40M. It's hard to find a place to stop in some of those counties (where you don't get lost – you get off an exit, and wind up on another 6 or 8 lane road, try to exit, and wind up on another 6 or 8 lane road. No obvious way to find spots to pull into a park or somewhere else that might not have high QRN.

Larry, N2OCW, is closing in on MG, and Terry, WQ7A, doesn't have too many go to either. Both have accumulated enough points for the award. Jerry, W0GXQ, needs about 45 for MG. Bob W0DFK needs only 5 for MG. N7PIB has 19 listed needs for MG.

NU0Q is down to about 35 for first time, N0LXJ just needs 10 or so, N9KNJ has 39 needs listed. WA6OCV is down to 20 for USCA.

Many others are closing in on various awards. Mobiles are still out running with continued good weather in most parts of the country. Let's get a few more finished up!

## On the Road with N4CD- Trip Back East

September had been a good month, so I decided to take a big trip back east to fill in a lot of counties. The weather was good, no hurricanes headed into the East Coast, and I felt the urge to 'put out some counties'. In addition, N8KIE, Bob, was headed to New England, where I needed many Platinums, and it would be easier to catch him further east than trying from TX on 20M with marginal or no propagation.

I needed to fill in a bunch of transmitted counties, and could get a few MP counties myself by transmitting from the county. This was going to be a 'on the run' trip with no planned stopovers, so I would go from sun up until 6-7pm most days, trying to get in as many counties as I could. I was usually up and ready to go at 6:30am, and tried to hit the first counties after 7 am or so. With trying to put out the county on 20/30/40 cw and 40M SSB, it typically would take 25-30 minutes to get all the contacts in. If I could, I'd run county lines on SSB and cw 'on the run'.

So the car was packed for a 10-12 day trip, and I set out headed east. The first county I had to run was Arkansas, AR, one of three remaining MP needs in the state. Of course, I ran all the counties all along the way getting there. I waved at Joe, N5UZW in ARK, AR, but just hit the bottom end of the county and didn't have spare time to drop by. Maybe next time. He was running the 40M net for most of the trip with is big signal.



N4CD mobile at Sunrise  
“N4CD is an early bird”

It was then into MS to keep going the first day. I made no motel reservations. I headed through to Sunflower, and then started to look for a motel. Oops...It was Saturday night, and there was a big blues festival that had filled up motels for a 100 mile radius around the town of Greenville. No rooms at the Super 8, or Days Inn. Fortunately, a little motel, the “Executive Inn’ (wishful thinking on their part) had a room and that’s where the first day ended. No wireless internet there. I discovered that the Huddle House restaurant has country ham breakfast items, but not county ham dinners. So I had breakfast at 7pm with country ham.

It was hot and humid- and there were a gazillion crickets around. Definitely still summer! I was up early the next morning heading for new counties. It



was across the top of MS and across the top of ARK. Progress was slow with so much time spent in each county running.

If I am seriously putting out counties, often I can only get 300-350 miles in a day, and that is from sunrise to sunset. If you run fewer bands, or don't worry about constantly 'running out' of the county into another during the run, you can make a lot more progress. I'd rather stop and continue the run in the county, then hit the next county and be in the next. About the only time that changes is when I am headed back home after many days on the road via the interstate, then it is whatever county I am in at the time, and if I run out, well, that's it.

I usually stopped to run 40M SSB (on a county line if possible) and did the cw 'on the run'. That wasn't always possible as some were 'dead end counties' where you ran them, and then left and headed back in the other direction. Others were wet lines. I made it across to Lauderdale, AL on the second day. Ray, WG6X said there was a new Super 8 Motel, so I found it and stopped for the second night. Not much around it in the way of places to eat. It was Sunday, and that is usually pizza night, so I ordered delivery and just recovered from a long, long day.

Runs on 40M were excellent, lasting 10 minutes, and cw was doing well, too. The Super 8 had wireless internet, but it didn't work. Even worse, there was a wireless modem plugged in a high receptacle in the room with blinking LEDs that kept me awake for a while, until I put two towels on top of it. It had a note on it – "please do not unplug". Apparently others didn't like the blinking lights either. Nice motel, but they need to get the wireless internet fixed! Yet another reason why Super 8 is failing it's customers.

On the third day, it was into GA, with its many counties. Texas has the most counties (254) but GA isn't too far behind with 159. I needed to run many for second time transmit (about 90) , and could pick up some platinum counties for myself (I had missed others in many of them – just no propagation, or ran on the wrong bands for me). Many needed GA counties on cw as well, so hopefully I'd get many counties for many folks. I planned on running 68+ counties or so there, but sometimes an extra one gets thrown in, sometimes I forget to get to one or the route has to change.



### N4CD Lumpkin GA – LC for N5KGY

Anyone who has been to GA realizes it is easy to get turned around. There are lots of secondary roads with literally no numbers – you get on them, and sometimes there is an unmarked fork in the road, and you have no clue which way to go. I usually avoid them, but sometimes they can save 15-20 miles of driving, if you don't get lost. About half the time, you wind up getting lost, so it is a toss up. GPS would definitely help. I haven't gone that route yet, but if I get lost a few more times, it may come down to that. I try to keep things relatively simple. Ed, N4UJK, earned the nickname "Magellan" for his ability to wind up in an unplanned county in GA. It's very easy to do if you use the back roads in GA – it's easy to do even on the main roads. The Georgia state issued map is difficult to use. However, everyone seems to need whatever county you wind up in!

The third night was another Super 8 – and their wireless internet didn't work either. Hmm.....I'm not a big fan of Super 8, and if many can't get their internet working, I'm going to be even less of a fan. Dinner at Shoney's.

After a bunch of GA counties, I headed over into SC for some, then back into GA. I forgot to run McCormack as I entered the state with a couple mile detour, so I had to make a 30 mile detour to get back to it before leaving the state. Darn!

It took days to do just a part of GA, and I still have another 8 to go to finish off that state. So many counties – so little time. It's harder to plan trips doing some counties in one state, then into another for a few, then back, but

it lets you pick up some an easier way that just staying in one state, and having to make longer trips to get the counties in the next state over. Later in the trip I would be in NC, get one or two in GA and back into NC, or be in GA and go up and get two in TN. After you have run counties for a while, with a few left here and there, you look for the easiest way to get the remaining ones, and that is often zigging back and forth across state lines.

One has to be careful – if you have been sending ‘GA’ for 3 days, wind up in NC, and folks aren’t careful and you careful, you could be sending ‘Clay GA’ instead of Clay NC – or be spotted in the wrong state - there is one in each state, which really confuses folks and gets contacts logged wrong. The W6RK site has checking so if you see ‘Speed Warning’ it is a possible indication of a spot that has gone astray for one reason or another. With W6RK, you can easily ‘unspot’ a wrong entry, and it gets deleted from the database in the event an error occurs.

Jerry, W0GXQ, needed Glasscock GA for a LC, so I adjusted the route a bit to catch that one, and several others. Unfortunately, had to leave out one, and some needed that one too. The route is always subject to change, but I try to run most of what I have indicated, and throw in a few bonus counties if I happen to clip the corner of an unexpected county – sometimes the map doesn’t show it, or you can’t be sure until you are actually there.



N4CD – Glasscock, GA - LC for W0GXQ

Eventually, after a few days more in GA, giving out dozens of counties, I finally made it out of GA and headed into SC. I needed to run about 2/3rds

of the state – I hadn't been there in a while other than a quick trip down the interstate two or three years ago. So I zigged and zagged up the east side, across the top, and finally into North Carolina. Scottie, N4AAT, normally takes care of most of the SSB needs (he has 5 stars and MG and the N prefix). More on the SC county hunting next month.

As I headed north in Mecklenburg county, NC, Bill, KM1C gets in touch and we arrange an eyeball meet off the Interstate. Bill was staying there while the wife was at a convention there – we had a 20 minute eyeball. He's been busy putting out the NC counties lately – after moving there from New England, where he ran around and gave out many up that way with his big signal. He enjoys putting out counties as much as collecting them now, so we'll likely hear lots more from him. In late September, he's been running around in western NC.



KM1C, Bill, and his Mobile  
Mecklenburg, NC

See previous issues of the CHNews for trips Bill took up north to run Dukes and other counties, including pics.

N4CD then headed west to run the western few in NC, and zig down into GA to run the top row there, and get Polk and Bradley, TN. Progress is slow.

I do NOT recommend you use highway 178 into Transylvania. There aren't any good roads in the entire county as it is very hilly, and every road twists and turns worse than WV and eastern KY. Going up 178, you have about 5 solid miles of switchbacks at 15-20 mph until you reach the top. You are so busy turning the steering wheel back and forth, and it is on the south side of a steep ridge, you can forget about running the county. The 'main road' in the county isn't that much better – you're lucky to average 30mph across the 'main road' through the county. I had to stop to run on SSB. Not enough hands! Things were better to the west. According to a local at a store I stopped in at for a snack, the roads to the north are even worse! Wow!

If you are going to run counties on SSB on the run, consider a microphone on a headset type arrangement. I use an external speaker with the 706. Just make sure it doesn't look like a 'headset' which might get you a ticket in some states if it covers one or both ears.

I dipped in GA to run some there across the very top part of the state, then stopped in Cherokee, NC at the Best Western in Murphy – long day, but it was time to finish up and head home. Their wireless internet worked perfectly. Dinner was at the China Buffet (good Chinese Food buffet restaurant chain).

N5PR needed Graham, NC. I was off early in the morning so he had to set the alarm clock to wake up 5 am his time. I first went to Swain on Highway 19/74.. Ooops...that is not the way to get to that county to put it out.

You hit a bit of Clay County again, then start going down a giant river valley. By the time you hit Swain, you are really descending down in a big valley along side a river, with large steep tall ridges on both sides. The further you drive into the county, the further down into the canyon you go. Radio reception is horrible. And it gets worse. After 5 miles, I turned around and headed back. I tried to work stations from along side the road, but it was difficult to get out. I really didn't get to work too many from there. I suppose eventually you find a good spot to operate. I didn't have the time to drive to find out. Dang.

By taking Highway 129 to the west, you immediately go into Graham - but you are at the bottom of a big ridge (to the west) with rotten radio conditions. If you drive a few miles up the hill, you can stop on top with great reception! N5PR got his last.

Here's at the bottom – early in the morning with fog in the valleys. Perfectly clear and sunny at the top.



County Line, Graham/Cherokee, NC – LC for N5PR  
Go up the mountain to run Graham!

N4CD then headed west to zig down into GA to run the top row there, and get Polk and Bradley, TN. Progress is slow. I got all the ones in North GA, threw in Walker, GA as a bonus, then hit the Interstate. That night I stopped in Murphreesboro...the Motel 6 right down the street from where the 3M mini used to be held. The Subway where we ate lunch is gone. There is a new pizza place nearby behind the Super 8 – and it was Sunday night, pizza night.

The next morning I was on the road at 5:20am after breakfast at the Jack in the Box – I can make it through their drive in windows – no overhangs. Then it was the old 12 hour trek from Murphreesboro to home along the interstates – 700 miles. Two very short stops on the way home. It was good to get home after 10 days on the road. I came in the back way to avoid the Dallas Metroplex rush hour mess.

Overall, things worked out fairly well. I caught N8KIE in about half the counties I needed, and missed him in half – just on the wrong band, or no

propagation, or he had too much noise to pull me through. I caught up with many that needed LCs, and with 30/20/40M, there was usually a band that worked for cw contacts. 40M SSB was good for most of GA, MS, AL, TN, NC – a bit far for SC, but still many contacts there. The DX was in, with OK2EC, OK1SD, OH3JF, DL3DXX, LY2ZZ, and DL6KVA and DL5AWI making it into the log.

With being ‘back east’ I added quite a few new band counties on 40M SSB, working mobiles that are nearly impossible to catch at that distance much of the time from TX. I also caught a few needed counties on cw for my third time cw, added about 100 new transmitted counties for second time. So many counties, so little time. The car ran well – about 28-29 mpg on most roads, but only 23 or 24 in the hills (Transylvania NC and that area). The car is up to 168,000 miles headed for 200,000. The other rear power window decided to crap out – seems the Buick LeSabres have a very high failures in the power windows – like 95% after 5 or 6 years. I managed to wedge it in the up position and continue the trip.

Now it’s time to extract all the info out of the logs and see what I snagged along the way. Almost time for another oil change – the car lets you know when the oil needs changing. (has oil life sensor). Which way next? Well, there’s a hamfest in Belton the first weekend of October. I usually head down that way, and maybe I can give out some counties for MG that folks need. Many of the other needs should be cleaned up by the TQP!

It was a long trip but fun – conditions not ‘great’ but with 3 bands (20,30,40) one or more worked. K8ZZ was filling in band counties for the top band. N9STL took a 2 day trip, and I caught up with her to nearly clean up IL for MP. N8KIE was busy on SSB, and KM1C was out running counties along with a few others – most of the action was on the lower bands – 40SSB and 40CW and 30CW. Much of the time, the only thing coming in on 20M was DX and the west coast!

The A index was often high, the SFI is 67 (indicating zero sunspots). After the first few days, I gave up on 17M. With SFI at 67, its not going to be good. When the SFI gets up to the low 70s, 17 should be better – and in a year or two, should be good. I guess now is the time to get all those 40M band counties in the log! In a few years, we’ll be talking about how short the skip is on 40M most of the time!



## Awards

Bingo #296, W8QOI, Raleigh, 8/30/2007  
USCA #1157, WA0KAQ, Bill, September 3, 2007  
Third Time #209. W7GQK, Abe, September 2, 2007  
USCA #1157, N9ID, Mike, September 6, 2007  
USCA #1160, AJ5JX, Randy, September 24, 2007  
Third Time #132, Ed, KN4Y, September 17, 2007  
USCA #1159, Ron, K2RP, September 15, 2007

## Operating Events for County Hunters

From ARRL Contest Corral (courtesy ARRL, Newington, CT)

**California QSO Party** -- CW/SSB, sponsored by the Northern California Contest Club, 1600Z Oct 6-2159Z Oct 7. Frequencies: 160-2 meters. Categories: SOAB (HP >200 W, LP, QRP), MS, MM, CA County Expedition, Mobile, Club, School. SO work 24 hours only. CW QSOs in CW subbands, except 160/6/2 meters. Stations on a county line count as a single contact for QSO points, but both counties may be claimed as multipliers. Exchange: serial number and state/province (DX send DX) or CA county. QSO points: CW -- 3 pts, Phone -- 2 pts. Score: QSO points × CA counties (max 58) or CA stations multiply by states and VE call areas (max 58). For more information: [www.cqp.org](http://www.cqp.org)

**Pennsylvania QSO Party** -- CW, Phone, PSK31, RTTY. sponsored by the Nittany ARC from 1600Z Oct 13-0500Z Oct 14 and 1300Z-2200Z Oct 14. Frequencies (MHz): CW -- 1.810 and 40 kHz above band edge; Phone -- 1.850, 3.980, 7.280, 14.280, 21.380, 28.480; mobiles 5 kHz below the listed frequencies; PSK31 on 28.120, 24.920, 21.070, 14.070, 7.080, 3.580. Categories: SO (HP >150 W, LP, QRP), MS, MM, SO or MS Portable, Novice/Tech/TechPlus, Mobile, Rover. Exchange: serial number and



ARRL/RAC section (PA stations send PA county). QSO points: CW -- 2 pts on 160 and 80, 1.5 pts on other bands; Phone -- 1 pt., PSK31 and RTTY -- 2 points. Score: QSO points  $\times$  PA counties (PA stations use PA counties + ARRL/RAC sections + 1 DX)  $\times 2$  if QRP or  $\times 3$  if Novice/Tech. Add 200 points for each QSO with the bonus station (see Web site). PA mobiles and rovers add 500 points for each county with 10 or more QSOs. For more information: [www.nittany-arc.net/paqso.html](http://www.nittany-arc.net/paqso.html)

**Illinois QSO Party** -- CW/Phone, sponsored by the Western Illinois ARC from 1700Z Oct 21-0100Z Oct 22. Frequencies (MHz): 160-2 meters, CW -- 50 kHz above band edge, Phone -- 3.890, 7.290, 14.290, 21.390, 28.390. Categories: IL-Fixed, IL-Portable, IL-Mobile, IL-Rover, Non-IL. Work stations in each county, county line contacts count for 1 QSO from each county. Exchange: RS(T) and S/P/C (IL stations send county). QSO points: Phone -- 1 pt/QSO, CW -- 2 pts. Score: QSO points  $\times$  IL counties (IL stations use states + IL counties + VE provinces + up to 5 DXCC entities). Count additional DX for points, but not multipliers. For more information and new Rover/Mobile rules: [www.w9awe.org/ILQP%202007%20Rules.pdf](http://www.w9awe.org/ILQP%202007%20Rules.pdf)

Several good opportunities to work band counties and needed counties in those states- all very well done QSO parties with lots of activity!

That's it for this month! See you next month!