County Hunter News

February 1, 2007
Volume 3, Issue 2

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 7038.5, 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 7178/7175.

You can see live spots of county hunter activity at ch.w6rk.com

De N4CD (email: telegraphy@verizon.net)

Notes from the Editor

1) This month we include the year end CW Stats from Elwood, KA3MMM. It's always interesting to see how well you have done in the past year, and how others are progressing toward their next level awards. Also check the status page for the County Challenge Award by W6RK and keep your totals current.

2) We include some follow up this month on the USA-CHA award, and the Arne Trossman "High Honors" Award.

3) Conditions have not been great on 20M during January. On the other hand, 40M activity, both SSB and CW, seems to be doing well. The bottom of the sunspot cycle is likely to occur in 2007, so we have another year or two of good 40M conditions to go. Many are filling in the 'band-counties on 40M SSB and CW. A few good contests are coming up in the next few months – see the Activities section.

4) **Marac CW Contest** – info from AA8R – "After the contest last year I receive several emails (mostly from mobiles) to try and change our contest to some other weekend to avoid the big guns from the other QSO Parties that weekend. Also, there was a vote taken at the 2006 National convention to move the contest to a weekend with fewer contest. We tentatively choose the last weekend in April thinking that the Florida QP would be the 3rd weekend in April. As it turns out the FQP is the last weekend in April. So 4-5 weeks ago I queried several of the mobiles to see if changing the contest weekend was still desired. It would appear that most of the mobiles now don't care one way or the other. Soooooooo, I am going to keep the contest weekend unchanged.

The 41st MARAC CW Contest will start 0000z May 5 and run until 2400z May 6th. I don't see any changes from 2006 rules and there will be a MIXED category again this year."

5) If you're headed to the Mini in San Angelo in February, you might pass by the country's largest wind farm at the moment:

"Texas has the largest operating wind farm in the world, the 735-MW Horse Hollow Wind Energy Center in Nolan and Taylor counties."

Source: http://news.yahoo.com/s/nm/20070123/sc_nm/utilities_wind_dc_1

Wind power grew by 27% last year, and is scheduled to grow another 26% in 2007. Now it generates 0.8% of all USA electrical power.

Several have posted trip plans, so please help out the mobiles run, and move off frequency, and get contacts for all they counties they pass through.

On the Road with N4CD- K5SF

One day I received a call from local county hunter Rich, K5SF. He suggested we get together for an eyeball – he lives about 10 miles away, so we decided to meet halfway at a local Burger King in the afternoon. I've heard Rich on the air quite a bit, and he has been working me on my recent trips. So it was time to meet.

Rich is a Data Base Administrator with American Airlines. Every day he has a one hour commute each way, so he put the ham radio in the car so he could catch some contacts on the way to and from work. He wasn't aware of county hunters at that point. The rest of the time, he is a family man and that keeps him pretty busy, especially when the daughter is home for the holidays from attending college.

When Hurricanes Rita and Katrina hit last year, he volunteered to help out with communications, and spent time down there providing badly needed communications for the folks who were providing relief. When the cellphone repair crews finally got the cellphone systems back up, he headed home. On the way home, he ran across the county hunter net with, fortunately, Bob, N8KIE, as net control. Bob talked him through the net procedures and coached him to run the first few counties. That got him started county hunting. Before that, he had been DXing.

He writes:

"CW is a favorite mode; however, I'm having to shift gears to copy code in the head. I was never that good, but now I'm forced to be better. I'll often send do CW while driving now as I've pretty much got that down, however I'm not up to 35wpm on everything yet.

I also enjoy contesting. My problem is I cannot do the DX contests too well from my current QTH. I've been trying to hook up with some local hams to operate here, however they have not worked out yet. I hope one day to have a contest station somewhere near by.

I am fairly fluent in Chinese and have been to mainland china several times. When China allowed foreigners an operators permit, I was able to get

one. I've operated now once in Shanghai, and once in Beijing during the 2006 CQWW SSB. Both times with tall towers and big antennas. I even wrote an article for the Chinese radio sports association. I might get the English version published here, but waiting on the right contact and NCJ.

I also enjoy making things. I design and build circuits for interfacing radios to computer stuff. I have the boards professionally made and do the layouts too. I've designed and built massive antenna switching networks, capable of 36 antennas routed to 6 radios. All computer controlled with touch screen displays. Lots of work but fun in the end, now waiting for a place to put it.

Next project is to see if that kind of automation will help the mobile operations, one of the most important things there is keeping everything very simple and also very reliable."

At home, he runs a Butternut vertical due to homeowner association restrictions. Most of the time you hear him, he is out mobile during the week. Sometimes he can take lunch out of the office and sit on the radio for an hour. He's active on both SSB and CW.

In the car he runs a Yaesu 857D with SGC amp, and a Tarheel screwdriver on the back of a Ford Taurus. He runs a separate battery for the SGC 500w amp.

Soon, plans were hatched for a K5SF/N4CD "county putting out" mobile trip to run some nearby counties in a one day trip. We headed out from the N4CD QTH in Collin running Hunt, Delta, Lamar, Red River, Titus, Camp, Wood, Rains, and Rockwall TX on a short loop. Folks always seem to need them – they are not on the interstates. Bands operated included 20 and 40 SSB and 20/30/40 cw to give the folks a chance to get all the band counties, plus the K and N prefix, and the stars, Bingo, MG, and Platinum. It's always fun to go run counties together.

Delta/Lamar is an interesting county line. If you look at a TX map, you might conclude it is a wet line. The key word there 'is'. At one time 100 years ago, it was a wet line. Then the river shifted a couple hundred feet to the south in a big flood, and the folks decided that the county line stayed where it was – and now it is on dry land. There are several like that in the eastern part of TX now – if you check Street Atlas, you can find a few

county lines you can run now since things shifted, even though the regular street maps don't have enough detail to show it.

K5SF, Rich, on a TX CL Line

Rich is fighting a 'noise problem' in the Ford. Fairly quiet, but copying 22s and 33s very hard with the engine running! 40M was excellent during the trip, with 25 or 30 worked in many places, but 20M SSB often produced only a few contacts. Most of the mobiles we worked were on 40M, either cw or SSB. Of course, with the screwdriver, we tended to listen a lot on 40M, either cw or SSB as that is where nearly all the mobile activity that we could hear was. There is no sense listening to dead air on 14 MHz, not hearing the mobiles running, when you could hear the same mobiles on 40M and work them! It was a fun trip.

It's also great to meet other county hunters and keep the enthusiasm going.

CHU Canada Changes

From Dec 8, 2006 ARRL Letter:

“CANADA'S 7.335 MHZ CHU TIME SIGNAL COULD GO SILENT, SHIFT FREQUENCY

Changes in international frequency allocations could force Canada's CHU time-standard signal on 7.335 MHz to go off the air, change frequency or get another license by next spring. The International Telecommunication Union (ITU) has reallocated the 7300-7350 kHz band from "fixed service" to "broadcasting," effective April 2007. CHU now operates there as a fixed service facility. CHU's other frequencies -- 3.330 and 14.670 MHz -- are not affected.

"On April 1, 2007, CHU needs to stop operating, change frequencies, or re-license”.

The Institute for National Measurement Standards at the National Research Council of Canada operates CHU. The Institute's Raymond Pelletier explains that while shutting down the 7.335 MHz facility -- "the most useful of the three we use" -- is the easiest solution, that option "could create problems for some clients who are counting on this particular signal."

The other possibilities are that CHU relicense as a broadcasting facility, change frequency to a nearby fixed service channel, which would require an investment in hardware and manpower, or shut down operations completely, Pelletier says.

He goes on to say:

"CHU is entering a phase where major investment in new transmitters will be required if it is to be kept operating."

The CHU code is also used as a radio clock, which can be used as a reference clock for an NTP time server. Software drivers have been written that can obtain the date and time from the code and that tune a digitally tuned radio to one of CHU's three frequencies to get the best signal.

Canadian time transmissions using the CHU call letters commenced in 1938 on the current frequency, but the service itself dates back to the early 1920s. The facility changed to cesium atomic clocks in 1967. In 1970 the responsibility of operating CHU shifted from Dominion Observatory to the National Research Council."

Many hams back in the 1960s/70s with inexpensive receivers which had a separate 'calibrated bandspread' dial often used the CHU signal on 7335 to set the 40M setting so the rest of the band was close, especially if your receiver did not have a 100 KHz calibrator. Now, with inexpensive transceivers having 0.1Hz accuracy, that function is not needed. For $20, you can buy an 'atomic' clock that syncs in with WWV to give you time to the second (and with some hardware/software, to better than nanoseconds).

County Hunting, My Story - by KI7WO

I could start out by saying it is all the fault of Bob N4CD, but perhaps I need to digress a bit.

My mother and father were both US Army Signal Corp. She was a teletype operator, and he was a teletype repairman. One day her machine broke and he was sent to fix it, and the rest of that story is history. So I suppose I get communications from both sides of the family, but I digress too far.

I started as a No-Code Tech in 1992. In the days before instant on-line licensing, I had about 7 weeks to wait for the actual license to arrive in the mail. During this time I began listening to the ARRL code tapes. Since that time I had tested up through Advanced and been happily contesting and working DX with my humble set up.

I started hamming in AZ, where if you had access to a beam it was quite easy. Point the beam northeast and work nearly all the USA. Occasionally having to swing a bit north or south, but no problem working CA off the back of the beam. Then I moved to MO and found that I needed an entirely different approach to propagation. Verticals.

It was Bill, AK0A, who got me started in RTTY and going on DXpeditions. In 2001 I went with a group from the Kansas City DX Club down to Belize, Central America. This was my first experience being on the "Wanted" end of a QSO.

About a year after Belize, Bill and I went to Costa Rica for a RTTY contest. This was where we met Henry TI2HMG. Henry was discussing putting together a DXpedition to TI9 Cocos Island. After much time and effort the plan was put in place. When we gathered in Costa Rica to depart for the Island, we found that few of us knew any of the other team members prior to our departure.

Since it was a several day trip to get to the Island, there was time for the team members to become acquainted. I was warned early on that N4CD is one of those "County Hunters".

At that time I didn't know anything about County Hunting and figured that if he was a danger to himself or others then surely he wouldn't be let out by himself.

It was a couple of years after the TI9 trip that I set upon the County Hunter frequency. I had listened for several days to get the feel of the Net operation. Then, on the morning of the 14th of June 2004, I jumped in with both feet. N5PR was the first mobile in my logbook quickly followed by K4SSU, AA4S, N5AWE and many, many more.

It didn't take long for me get cross ways with the net control, I can only presume that most of us had that experience, once or twice. I had received cards for about a thousand counties prior to CHing, after that the numbers started to climb. Some days filling several log pages in a day and sometimes taking several days to fill a single page.

The learning process continued. I added a 40 M antenna, because I found that I was missing some of the closer in stations, and then added 30 M since I was missing a bunch there also.

Getting close to the end of each state, I began looking at QRZ for potential contacts. Sent many E-Mails, and found that some bounced, some did not bounce but did not reply, some did reply saying that they were actually not

in the county of their mailing address, and the occasional reply that resulted in setting up a sked.

The recent technological advances, such as the Chat Room Alerts, the Special Needs page, and the Planned Trip pages have all helped greatly. A special Thanks to Terry WQ7A, for the spread sheet that I used to track the "Worked & Confirmed", and thanks to my XYL Kathy, who has done most of the driving during our road trips so I could sit in the back seat and play radio.

Now to the story of the last county. About 11 PM one night, I am dead asleep and the phone rings. I am foggy as I hear a voice in my ear saying something about do I still need some county? Then I hear something that only a County Hunter would say – (Now realize that this is the best recollection) – He says he has been on the road and is only 3 hours from home, but if I still need the county he will go get it for me. It was only 9 hours out of his way. I said yes, end phone conversation. At this point I think that I am wide awake, wondering if I just had a phone call or if I dreamed it.

The next day I have Leo, WY7LL, in the log for the WBOW. The BIG Thanks to Leo and his "very understanding" XYL, who was along for the ride. Leo may have another version of the phone call since he was the only that was really awake, we shall see.

My thanks to the many people who helped make this happen.

Alan KI7WO

More on USCA Story

USCA – More

The USCA program was started in 1961. It took months to get off the ground. The 'system' to assign up to the first 26 numbers (all Nr 1 followed by a letter) was publicized in the August 1962 CQ issue. The record books (all 10,000 of them!) finally showed up at CQ HQ, and were mailed out on September 14, 1961 to those who had pre-ordered. The first replies would

be given the lowest letters, but all up to a certain date to allow for mail delays, even from overseas, would be eligible for the Nr 1 plus letter.

One enterprising county hunter received his record book, tore it in sections, farmed it out to his office workers, and had it back in the mail within 45 minutes. K2PFC received award 1A for that effort.

Did you know the USCA Certificate was formally unveiled at the main banquet at the Dayton Hamvention, April 28, 1962? The first 26 numbers for USCA-500 went to the first ones to complete and mail in the application in the USCA booklet, which became available in the fall of 1961. After the first 26, the others were issued in order, with 91 being announced at the Hamvention. Those present received their awards, and only after the convention were the certificates mailed out to the others who had qualified.

Trivia: The first 'county putting out' trips were called C-Expeditions – for County Expeditions…aka DXpedition.

Arne Trossman Award

Some interesting developments and new information have surfaced since last month's stories on the creation of the USCA and on K9EAB. Ron, K2RP, sent me some issues of CQ Magazine from the 1962 era that contains additional significant additional tidbits.

There were two 'Awards of All Awards' – the CHC 200 requiring 200 different awards qualifying for CHC credit, and the Arne Trossman High Honors Plaque, which required not only the CHC-200 but also required 'contributing in a major part to hamdoms' news and hamdom's promotion both today and through the years.'

Last month we suggested that Cliff Corne received the Arne Trossman High Honors Plaque and was the sole recipient. A column in CQ Magazine indicates that at least 10 of these were issued. No numbers were assigned – all those reaching that status level were 'equal'. Likely a few more were assigned until Arne Trossman left CQ Magazine a few years later.

References:

CQ Magazine, April 1962, p75
CQ Magazine, November 1961
CQ Magazine, July 1961, p 70
CQ Magazine, November 1962

The 'Broadband Internet/Broadband Noise' Problem

In the fall of this year, I signed up for Verizon's FIOS service – cable TV, broadband internet, and telephone service provided over fiber to the home. Overall, it seemed like a 'good deal'. Before that, I had Comcast Cable (now Time Warner) $55/mo, very inexpensive Comcast telephone service over the cable ($23/mo), and dial up internet $17/mo. I thought this would solve a lot of problems with dial up tying up the telephone line for 8 hours a day, and with a sweeping spur that crossed regularly through 10.114 when the phone was on-hook. The easy solution was just dial up internet while on the air, but that made it hard for folks to call me unless they knew the cellphone number! That system worked "OK" for five years.

So with great anticipation, the day of Verizon install approached. Things didn't go right from the start. It had been months since Verizon had put the fiber down the alley way in the back of the houses here. In the process, they damaged my lawn sprinkler system, and had to come fix that. The first installer came to 'put in the cable TV', nothing else. I told him to 'go away' until he had authorization to put in all three. I get both phone service and TV over the cable. He couldn't disconnect one without replacing both. That turned out to be a major glitch.

A week later, the Verizon tech returned, all set to give me all three services. I got cable TV, and broadband internet, but telephone service. They had managed to screw up the coordination of the phone number switchover. For the next 10 days, I had NO local phone service. But now I had a new BIG problem. The noise on 40M and 30M was near S9! Twenty four hours a day!

It didn't take long to figure out that the noise was coming from the Verizon equipment. If I disconnected the power supply, and the standby battery, the noise went down to the normal noise floor – which varies here from S1 to S5

depending upon which neighbors have what turned on, and how the power line down the street is doing. (It needs the insulators replaced every six months, but TXU seems happy replacing 'cheap' insulators with a three man crew every six months rather than spending a few bucks more on 'high quality insulators that would last years on the 7.5KV line). This was a real problem – no way to hear anything.

In order to operate, I had to run out to the garage and pull the plug on the Verizon equipment – no phone, no internet to watch or spot mobiles, no cable TV. Dang. And they were charging me $100/month for this? On rare occasions, my laptop would find someone's wireless wi-fi network and I could watch the spots. Some days not.

I obtained a giant bag of split ferrite snap-on beads from All Electronics, the FB-58 beads (http://www.allelectronics.com), and starting the normal procedure of putting as many ferrite chokes on all the leads leading to/from the equipment. No difference! Noise still near S9 on 40M SSB, and S6-7 on 40 and 30CW.

I called Verizon. I called them again and again, and all I got was "We are working on it". At a Plano Klub Meeting (K5PRK), I mentioned this, and several others said they were having similar problems some for six months! Not good! Verizon intended to put millions of these units around Dallas, and tens of millions around the country! Ham radio spectrum pollution! Even if fixing mine with chokes would work, what about all the other neighbors? With everything fenced in, one might not even know if they had it, just hear the noise. The mobile verified the noise loudest 'near the equipment' on the side of the house.

There are four separate units with the Verizon FIOS. A switching power supply that supplies 12v, and standby battery unit, both mounted in the garage, and an exterior mounted box where the fiber came in, and where the cable TV, CAT5 internet, and phone line came from. Near the computer is a 'modem' that hooks in with cable. The noise source was 'inside' their equipment, and naturally there were no schematics available, and nothing obvious.

My 30M and 40M antennas are just above the roof line – so they run within 10-15 feet of the units. There wasn't much room to move them further away, and with the high noise level, a few feet more separation wasn't likely

to make much difference. No one at 'Verizon' seemed anxious to do anything, and nothing happened for nearly two months. For others, it had been six months.

In November, I read an interesting article in Newsweek talking about Verizon's CEO and Chairman Ivan Seidenberg talking about the ambitions plans to install 50 million FIOS units. I tracked down an email for him, and sent him a nice note telling him about my problems, and asking that he 'find the right people' to come up with a solution to the broadband interference problem before they reached the 'millions' level. About ten days later, I had three different calls from three different people anxious to 'come look at the situation and resolve it'. Amazing.

Finally, someone who understood a little bit about RF appeared to 'look over the situation and verify it. Yep, he saw/heard the noise. He noted that the ground wire came out of the Verizon box, and connected to the power meter box with a 3 foot lead. He stated that the National Electric Code required that their ground wire go to down directly to the grounding rod which was a 6-7 foot wire run. OK. The previous cable TV box on the outside of the house had also been grounded to the power meter box as well. Seems that was 'standard practice' for installers, not wanting to dig down to find the ground rod. That wasn't likely to solve the problem, was it? Ground is ground, no? The power meter was grounded to the service box inside, which had a #6 or larger wire straight down to the ground rod.

Every main A/C power circuit breaker box will have a hefty wire to an 8 foot ground rod for lightning protection. That is 'code'. Often, the ground rod top is buried down a few inches and you have to dig to find it. Plus, it is likely somewhat corroded after 15 years (the code requires a thermal weld for the power ground so it stays connected). If you lose this ground, you might see more damage in nearby lightning strikes with surge voltages on the power lines. (If you don't have an accessible ground rod, 'code' requires the installer of the new equipment put in a new 8 foot ground rod!).

He then arranged to have the ground re-run by a tech, and come out with some help to try to isolate the problem more. Well, dang…moving the ground wire from A to B dropped the noise from S9 on 40M SSB down to about S4. Who'da thunk that? We were on the right track. The problem source was traced to the outdoor unit. It has a 12V to -48V converter for the phone line. (The rest of the box runs on 5VDC). But there is no way to get

to any of the circuitry. I had put ferrite beads (as many as I could get) on all the external leads – the CAT5 cable, the TV Coax cables.

Inside the box, two layers down, where the power leads come from the inside unit, essentially connected 'through the wall' with only a few inches of wire used, was a short 3 inch diameter loop of wire to the connectors. Just to see if that short piece of wire was the problem, I put two ferrite split beads on them, not expecting much. That was all that would fit in there. Barely. It was the only thing coming in and out of the box without ferrite on it, but it was only 12-15 inches in total length. Everything in and out of the inside box also had a half dozen beads on it.

Verizon box, the old Comcast box, power meter

Amazingly, the noise dropped to ZERO. On a good day now, the S meter sits at S1, and unplugging the unit makes no difference. (But usually there a few S units of local noise on SSB, S1 on cw – hi hi). We buttoned the equipment back up, the tech put a BIG NOTE right inside to call him if any service call, so any new tech wouldn't remove the chokes thinking it was

'foreign stuff' messing up the service. Now, I have my cable, broadband internet, and phone service and I can use them while on the air!

The only other 'problem' I had was the modem next to the computer put out an annoying spur on 7237. (And a few other freqs not of interest). I occasionally work mobiles on 40M for the W6RK County Challenge award, so that was a pain to have to switch in the notch filter. That problem fixed itself! The CH net QSYed down to 7185, so no problem now! Serendipity.

The age of electronics has spurred a lot of innovation. Along the way, we find a few problems. While the Verizon equipment likely met 'Part 15' emissions requirement levels, it did 'interfere'. It was great that Verizon took the initiative to fix the problem (and maybe hopefully install a 3 cent part for a factory fix on this).

US-CHA Follow up

Last month the CHNews discussed the US-CHA award issued by Clif Evans, K6BX. This month, with the help of W8QOI, who sent his copy of the K6BX awards directory, with some 'addenda', perhaps more of the mystery is resolved.

From the addenda pages, later picked up in the Directory of Certificates and Awards, 1966 issue, is page US-1 dealing with the United States County Hunter Award. It has a note which reads:

"In connection with the CHC HTH awards program, the old CH/USA-CA Class is cancelled, and in its place is the CHC/US-CHA with the same requirements….. CHC/WAZ has been changed from the 40 zone count of CQ Magazine to the valid 75 zone count under ITU listings."

So from this, one might conclude that after Clif Evans left CQ, he changed his award program (creating US-CHA) and also changing his requirements for the CHC/WAZ award. Note his deciding that you needed to work 75 zones instead of the 40 for CQ Magazine. At that point, the CQ Awards no longer counted for 'anything' for **his** awards program, and he changed his just a bit to argue they were 'different'.

Unless someone else comes forward with other evidence that US-CHA existed prior to Clif Evans leaving CQ Magazine in 1965, all the evidence

points to the conclusion that the US-CHA was created after the USA-CA, after he resigned from CQ Magazine staff, as a competitive essentially equal award.

Peak Oil News

Peak Oil Ancestor – Coal

Now what does coal have to do with oil? A great deal, it turns out. Back in the 1700s-1800, England lead the 'Industrial Revolution', powered by coal. England was the region's top producer of high quality coal, exporting 25% of what it mined to Europe. At the peak of coal production, over one million workers were employed in the coal mines, and most of Europe's industries and trains ran on coal! Coal was an exponentially increasing energy source.

In 1856, Jevon predicted that coal production would eventually peak. At some point, it would take ever increasing amounts of effort and money to mine the coal. The easiest to get coal was mined first. The peak started in 1913, and started falling off thereafter. Today, England mines $1/10^{th}$ the coal it did back then. It followed a classic 'bell shaped' curve from start to now.

The peak of England's coal production was a turning point in history. When the USA oil production peaked in 1971, it was producing 20% of the world's oil. When England peaked in coal production, it was producing 20% of the world's coal. In the USA, the 'oil shocks' of the 1970s followed peak production. In England, a similar 'coal shock' rippled through Europe.

Quite possibly, the great depression of the 1930s was partially triggered by Europe no longer having access to all the energy it needed, as well as the worldwide decline of the British Empire. European politics changed. Germany was able to ramp up production. Italy, which had been dependent upon British coal, decided to join with Germany as an ally, in order to secure access to German coal, which had not peaked yet (that happened about 1940). Needless to say, the friendliness between Italy and Germany, started by having access to coal, had later worldwide ramifications! (WW2).

In the 1950s, England solved its coal shortage problem by turning to oil. Indeed, most of the oil exploration of the Middle East was motivated by England's (and the USA) need for energy. Much of the politics of the Middle East was dictated by England's need to control access to energy sources. England dominated in Iraq, and had great influence over what are today OPEC countries, and their neighbors.

Despite having 'lots of coal', most folks back then didn't realize that after you had depleted half of the resource, the cost to extract the remaining part, plus the difficulty of getting to it, would mean you would NEVER be able to produce coal at the same rate. The exact same is true for conventional oil. The world is at (or very close) to that half way point.

When England's primary energy source peaked, it triggered massive world changing events. It changed politics and alliances as people turned to those who could supply energy.

What do we see now? England becoming dependent upon Russian gas? Europe held hostage to Russian politics and turning a blind eye to whatever Russia decides to do? Things are changing. It's ALL about energy.

Goldman Sachs on Oil prices – Jan 12

'Strong demand should push oil prices to average $69 a barrel in 2007 despite a 15 percent slide this month caused in part by producer and broker hedging programs, Goldman Sachs said on Friday. U.S. oil prices have fallen nearly $9 since the start of this year to around $52 a barrel in a sell-off sparked by warm weather in the U.S. Northeast, the world's top heating oil consuming region, Goldman Sachs said in a research note. The price drop was exacerbated by a reduction of long positions by hedge funds, triggering sell or "put" options purchased by producers, the bank said."

"In the nearer term, Goldman expects volatile trade between $45 and $60 before a fundamental event pulls it out of that zone."

From the **Kuwait** Times Web Edition, December 26, 2006

"It was an incredible revelation last week that the second largest oil field in the world is exhausted and past its peak output. Yet that is what the Kuwait Oil Company revealed about its Burgan field. The peak output of the Burgan oil field will now be around 1.7 million barrels per day, and not the two

million barrels per day forecast for the rest of the field's 30 to 40 years of life, Chairman Farouk Al-Zanki told Bloomberg. He said that engineers had tried to maintain 1.9 million barrels per day but that 1.7 million is the optimum rate.

However, it is surely a landmark moment when the world's second largest oil field begins to run dry. For Burgan has been pumping oil for almost 60 years and accounts for more than half of Kuwait's proven oil reserves. This is also not what forecasters are currently assuming.

The news about the Burgan oil field also lends credence to the controversial opinions of investment banker and geologist Matthew Simmons. His book 'Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy' claims that ageing Saudi oil fields also face serious production falls. The implications for the global economy are indeed serious. If the world oil supply begins to run dry then the upward pressure on oil prices will be inexorable. "

News on Iran – reported via several news services

"Iran is suffering a staggering decline in revenue from its oil exports, and if the trend continues income could virtually disappear by 2015, according to an analysis released today by the National Academy of Sciences.

Iran's economic woes could make the country unstable and vulnerable, with its oil industry crippled. Iran earns about $50 billion a year in oil exports. The decline is estimated at 10 to 12 percent annually. In less than five years exports could be halved and then disappear by 2015. Iran's oil exploration and production facilities are rusting away as the Iranian government spends the current oil windfall to maintain itself in power. The country cannot generate enough investment capital nor develop the expertise it needs to boost oil production without foreign private investment. Internal consumption is also rising at 10% annually.

Oil production is declining and both gas and oil are being sold domestically at highly subsidized rates. Iran claims it needs 'nuclear power' to solve its energy problems. Iran flares off enough natural gas now for it produce four times the electricity that the nuclear plant it is constructing would generate, and much more cheaply too. That is just gas burned off. They haven't invested in the facilities to harvest that natural gas, but in order to produce

the oil, must burn it off. Other countries either use it, or re-inject it into the ground to maintain oil well pressures.

Iran produces about 3.7 million barrels a day, about 300,000 barrels below the quota set for Iran by the oil cartel, the Organization of Petroleum Exporting Countries. In 2004, Iran's oil profits were 65 percent of the government's revenues. Inefficiencies in the 'command economy' are the source of all its problems. Those problems might be our problems as their economy goes to heck, and that oil is no longer available for the rest of the world.

Iran had to shut off shipments of natural gas to Turkey just to keep its residents from freezing, despite sitting on one of the largest natural gas reserves in the world. It simply doesn't make the investments needed to produce it. The 'stone age' laws about no foreign participation means they are on a death spiral. (Death of their economy). Iran has signed dozens of memorandums of understanding, but has yet to follow through on any of them.

Russia

Anyone following any of the oil company news will have heard about Gazprom, the Russian state oil/gas company that is forcibly taking a majority position in every 'joint venture' in Russia – by coercion - By coming up with 'environmental violations' time and time again, to stop projects already underway, then 're-negotiates' existing contracts. Russia, flush with lots of oil profits now that oil is over $50/bbl, can afford to fund most of its oil infrastructure spending. It remains to be seen if foreign investors will be willing to sink tens of billions of dollars into ventures that turn out to be less profitable as the Russians insist on bigger and bigger portions of the profit pie, and confiscate the facilities built to date through threats and intimidation.

At the same time, Russia is struggling to maintain natural gas exports. Internal consumption is skyrocketing after the economic depression that has been going on for a decade starts to retreat. That means less available for export. Much of the Russian oil infrastructure is old and failing, and there is insufficient investment in new fields and technologies to maintain production for long.

Mexico News

Last March, the CEO of Pemex, Luis Ramirez Corzo, stated that the company needs to invest $20 billion annually for the next 20 years to maintain production. However, Pemex has invested only about half that over the past 5 years. Amazingly, as private oil companies around the world raked in record profits last year, **Pemex lost $3.75 billion**. Why? The chief reason is that the Mexican government loots the company to finance itself. Only a state-owned oil company can lose money when oil prices have been this high.

From ASPO (Association for the Study of Peak Oil):

January 2007 Newsletter

"One of the first year-end estimates of petroleum production last year (Oil & Gas Journal, December 18, 2006) indicates that worldwide crude and condensate production rose a mere 0.18%, from 72.26 million b/d to 72.39 million b/d.

Petroleum production is reported monthly or annually by various sources: the International Energy Agency, the US Energy Information Administration, the O&GJ, British Petroleum, OPEC, and others. It is reported using various categorizations that can include combinations of the following - crude oil, condensate, natural gas liquids, refinery gains, "unconventional petroleum liquids," ethanol - or all of the above. When these other figures roll in and are adjusted over the next few months, they will likely tell the same story: flat production, after several years of increases that averaged close to 2% per year.

Key factors behind 2006's production reality (using O&GJ data):

- Depletion continues to overwhelm new production in the North Sea (-9.6%);
- Most regions were flat (Asia-Pacific +0.6%, Africa -0.2%, Western Hemisphere -0.4%);
- Only Eastern Europe and the Former Soviet Union increased substantially (+4.3%);

- OPEC increased 0.7%, though production in Iran and Saudi Arabia declined; Iran has genuine production problems, while Saudi Arabia claims they cut production voluntarily.

So the key question here: have we reached peak production? We maintain that it's too early to tell. ASPO-USA won't be surprised if production of total liquids increases moderately over the next few years. However, for that to occur, we would expect that some disturbing recent trends-from geologic limits to nationalism and geopolitics-would have to slow if not reverse. But more importantly, we assert that the combination of difficulties posed by peak oil production are sufficiently challenging that we should act on that information now rather than delaying action based on hopes offered by optimists. "

"High prices and flat production shifted consumption patterns during 2006. As a group, early data shows that non-OECD nations consumed about 3.8% more (up 1.3 million barrels/day) than they did during the identical period in 2005. By contrast, in the OECD nations, consumption declined at least 1.3%.

Trends in individual countries tell varied stories. In China (#2 consumer) and India (#5), consumption grew unabated. U.S. consumers cut their demand by 1.1%, partly due to a warm heating season and partly in response to record high prices, though demand for gasoline continued growing despite a doubling of prices since 2002. Higher prices squeezed demand hard in some developing nations, from small (Ghana) to large (Pakistan and Bangladesh); a key symptom is the declining reliability of oil-fired electric power generation."

"Last year saw a major increase in the costs of exploring for and drilling for oil. These cost increases were so large and came so swiftly that they threaten to slow and scale back oil production projects in the years ahead.

Saudi Arabia's $50 billion program to offset depletion and increase production capacity has resulted in a major exodus of drilling rigs from the Gulf of Mexico. The Gulf's rig count has dropped from 148 in 2001 to less than 90 today. By contrast, the Saudis now have about 120 rigs in operation. This shift is largely due to the Saudis bidding up the price they are willing to pay for rigs. Rigs that were recently going for $190,000 per day are expected

to cost $520,000 per day in 2007. Inflation has pushed the cost of drilling a deepwater well in the Gulf to somewhere around $100 million each.

Cost inflation is also stifling prospects for the Alberta Tar Sands. A Shell project to increase production by 100,000 b/d has had estimated costs increase from $4 billion to nearly $11 billion in recent years. On a per barrel basis, this is six times as much as the first phase of the project cost. Cost estimates for the McKenzie valley gas pipeline that is to supply natural gas for tar sands extraction has increased from $5 billion to $9 billion in recent years. With investment costs like these, extraction from the tar sands may become too expensive to undergo rapid expansion.

Citing the rapid inflation in the cost of producing oil, the IEA estimates that **it would cost $20 trillion in new investment over the next 25 years** to keep energy supplies up with demand -- assuming the oil was available."

Miscellaneous News

Ethanol now provides 1.7% of US fuel with 15% of the corn crop. In five years, with the current crash program and dot com type craze in ethanol refineries and producers, it might reach 3%, consuming 25% of the entire USA corn crop. Meanwhile, it also consumes vast quantities of natural gas for drying crops and processing, vast quantities of diesel for farming and irrigation, providing a very debatable 'net energy gain'.

Many of the ethanol facilities are powered using **COAL**. More CO2 is released by the processing burning coal than is ever saved by using ethanol for fuel! Talk about 'ungreen'. Many ethanol facilities are also classified as 'food processing facilities', escaping most of the tough regulation of utilities that burn coal as well! You emit tens of millions of tons of coal byproducts into the atmosphere to convert corn into liquid fuel?

Most oil companies are cutting back exploration budgets due to the ever rising costs of finding new oil. The much touted Jack-2 well in the Gulf in 7000 feet of water was plugged, and the companies will drill a further test well in 2007/8 to see if the formation is promising enough to spend the billions to begin to extract oil from there. Nigeria continues to stew -– 25% of the oil production is shut down due to rebel activity. Russia becomes a less and less reliable source of energy and Europe is getting mighty worried they might freeze to death one of this winters with a natural gas shut off.

Meanwhile, Joe Sixpack has no clue about peak oil, and is happily patting himself on the back, saying 'Gas prices are down – it's time to buy a new SUV or pick up truck'. Yes, with a mild winter, demand for oil is down. Don't count on it staying down, unless we have a recession. Things in the oil patch are stretched to the limit.

Master Platinum Again

Dan KM9X wrote on the K3IMC forum:

"I was shocked to find we can work on the Platinum Award from the start. The ones with the logging programs have this done for them. Those of us without probably didn't know. I just found out a month ago and have gone back through every log looking for contacts with Master Gold holders."

There are two requirements for a contact to be valid. They have to be after February 12, 2003 and they have to be after the person you work has received his/her Master Gold award. You can work all 3077 counties while you are working on USACA or Bingo or Teams or YLs or Five Star by working the mobiles with MG. (not just "good for MG", they have to have their MG already).

Of course, regular readers of the CHNews have seen this over and over again, but in case there are new readers, we repeat it.

Several are now at 2400 worked. Many are at the 1500-2000 level and rising fast as more and more mobiles get their MG awards. Like the other awards, the first 1500 are easy, the next 100 are fairly easy, and then it gets a bit tougher as you wait for mobiles to go to where you need them.

Being active on 40M helps, as several of the most active mobiles have been 'run off' the 20M SSB net by 'you know who' on his rampages, so you'll have to catch those MP counties on CW or on 40M SSB. Not to worry, since there is almost no useful propagation most days on 20M anyway!

My prediction is the first Master Platinum Award will be earned in 2009-2010. Both Kalawao and Second AK have been run – often the 'tough ones' requiring a long, long wait for someone to go there and activate them.

In January, N9STL, N7AKT, and AA9JJ put out counties toward MP.

N8KIE does Kalawao

From Bob, N8KIE:

"Running Kalawao, HI is like a county hunters DX-pedition. Once you get there, (to the island of Molokai), all that you have is what you have brought. IslandAir only allows 50 pounds per person baggage allowance, so it gets tight. The antennas are carried in a fishing rod tube. It is important to make sure that they are loaded onto the airplane before you get on. I carry everything else in my carry on. Don't assume anything.

The first flight out of Honolulu is 6 am, then about every hour after that. When planning a trip, reserve the car first (Dollar), then a room if you are spending the night. The airplane is almost never full. It is a twin turboprop Dash 7 with about 35 seats. If it is raining or low clouds there will be serious delays.

The aircraft flying to Molokai

Operating is fairly easy, no power lines for miles, on top of a mountain ridge with ocean in every direction. The parking lot is at about 2500 to 3000 elevation. (The 'county line' runs through the parking lot).

Parking Lot at the Kalawao Overlook

It is straight down to the ocean on the north side. I use battery clips and a quad mag mount on the roof. I don't run the engine while operating SSB and ran for 33 minutes of 14.336 without low voltage problems. Dollar rents Dodge Stratus cars which have a much larger battery than the imports.

View down to the lower portion of Kalawao

I had a very good trip with 96 SSB QSOs, 35 on CW and 15 PSK31 contacts. Ross, N0ZA, finished MG and KD7KST got a LC for PSK. Thanks to Matt, W0NAC, for suggesting that I run PSK and helping to get it running. Everyone was very patient and I worked EVERYONE that I heard."

73 Bob N8KIE

de N4CD: Bob was the first to give out the HI counties good for the Master Platinum Award.

Awards Issued

USCA #1148, Mike, K8XF, January 8, 2007
Third Time #201, N2OCW, Larry, 12/12/2006 (correction on number)
Master's Gold #23, N0ZA, Ross, January 16, 2007
USC-CW II #17, W0QE, Larry, January 4, 2007
USA-Prefix K #13, W7KQZ, Ernie, 12/28/2006
Third Time #202, N3RM, Randy, January 21, 2007

Events for County Hunters in February 2007.

Very little activity for previous years in the VT, DE, and NNY contests in past years. Have yet to hear anyone in the NNY one, and only had 2 or 3 stations in the DE and VT one. Others typically good - MN excellent.

From ARRL Contest Calendar, courtesy ARRL, Newington, CT 06111

Minnesota QSO Party -- CW/Phone, sponsored by the Minnesota Wireless Association from 1400-2359Z Feb 3. Frequencies (MHz): CW 1.810, 3.550, 7.050, 14.050, 21.050, 28.050, SSB 1.870, 3.890, 7.230, 14.290, 21.390, 28.420. Categories: QRP, SOLP, SOHP, VHF, MS, MN Mobile-Single Xmtr, and MN Mobile-Unlimited. Exchange: Name and MN county or S/P/C. QSO points: SSB -- 1 pt, CW -- 2 pts. Score: QSO points × MN counties (MN stns use States + Provinces), each counted only once. For more information and MN QSO Party software: **www.w0aa.org**.

Ten-Ten International Winter Phone QSO Party -- sponsored by Ten-Ten International from 0001Z Feb 3-2359Z Feb 4, 10 meters only. Exchange: Call sign, name, QTH and 10-10 number (if a member). QSO points: nonmembers -- 1 pt, members -- 2 pts. Score: total points. For complete rules: **www.ten-ten.org**

Delaware QSO Party -- CW/Phone/Digital, sponsored by the First State ARC (FSARC) from 1700Z Feb 3-0500Z Feb 4 and 1300Z Feb 4-0100Z Feb 5. Frequencies (MHz): CW -- 1.825, 3.550, 7.050, 14.050, 21.050, 28.050; Phone -- 1.860, 3.960, 7.260, 14,260, 21.360, 28.360; Digital -- per current band plan; Novice and Technician -- 25 kHz above sub-band edge. Categories: SO, MS, MM, Mobile; HP (>150 W), LP, QRP and Mixed/CW/Phone. Exchange: RST and DE county or S/P/C. QSO points: CW and Digital -- 2 points, Phone -- 1 point. Score: DE stations -- SO points × DE counties (DE stations use S/P/C) × power multiplier. All multipliers count once per mode. For more information: **www.fsarc.org**.

Vermont QSO Party -- CW/Phone/Digital, sponsored by the Central Vermont Amateur Radio Club from 0000Z Feb 3 to 2400Z Feb 5. Frequencies (MHz): 160-10 meters and VHF/UHF; CW 40 kHz from band edge; Phone -- lowest 25 kHz of General segment and entire Novice/Tech 10m band; VHF SSB-50.200, 144.200, FM-146.49, 146.55. Categories: SOAB, MO, Club, Rover. Exchange RST and VT county or S/P/C. QSO points: Phone -- 1 pt, CW or digital -- 2 pts. Work stations once per mode up to four QSOs per band. Score: QSO points times VT/NH/ME counties plus Vermont Club Stations (VT stations use S/P/C) counted only once. For more information and list of club stations: **www.qsl.net/w1bd**.

New Hampshire QSO Party -- Phone/CW/Digital, sponsored by the Great Bay Radio Association from 0001Z Feb 10 to 0001Z Feb 12. Categories: SOAB, MO (QRP, LP, HP). Frequencies: 160-10 meters, VHF, UHF. Exchange: RST and NH county or S/P/C. QSO points: Phone -- 1 pt, CW/Digital -- 2 pts. Total score: QSO points × NH counties (NH stations add states and provinces plus 1 DXCC entity). For more information: **www.w1fz.org**

Louisiana QSO Party -- CW/Phone, sponsored by the Thibodaux ARC, W5YL from 1500Z Feb 10-0300Z Feb 11. Frequencies (MHz): CW 1.840, 3.540, 7.040, 14.040, 21.040, 28.040; Phone 1.865, 3.865, 7.255, 14.255, 21.365, 28.465, VHF 50.095, 50.135, 144.050, 144.210. Operating categories. SOAB (Phone, CW, Mixed) and Rover (LA stations only). Exchange: Call, RST, and S/P/C or LA Parish. QSO points: Phone -- 2 pts, CW -- 4 pts. Total score: QSO points × LA parishes or S/P/C counted once per mode. Rovers add 50 pt bonus for each parish activated. Add 100 points for QSO with W5YL. For more information: **www.w5yl.org**.

Northern New York (NNY) QSO Party -- all modes, sponsored by the Ogdensburg ARC from 0000Z Feb 10-2359Z Feb 11. Categories: SOAB only. Frequencies: 80 meters-70 cm, CW 40 kHz from bottom of the band (20 kHz from Novice band edge), SSB-lower 25 kHz of General allocation, entire Novice 10-meter sub-band, VHF-50.200, 144.200, 146.49. Exchange: RST and NNY county and S/P/C. Total score: QSOs × NNY counties or S/P/C counted once only. For more information and bonus points: **www.nnyara.org**

FISTS CW Winter Sprint -- CW, sponsored by FISTS International CW Club from 1700Z until 2100Z Feb 10. Frequencies: 80-10 meters, work US/VE stations. Categories: SO, SO-QRP, Club. Exchange: RST, S/P/C, first name, FISTS number (non-FISTS Power output). QSO points: FISTS members -- 5 pts, nonmembers -- 2 pts. Score: QSO points × S/P/C (count each only once). For more information: **www.FISTS.org**.

CQ WW 160-meter SSB Contest, 0000Z Feb 24-2400Z Feb 25

Mississippi QSO Party -- CW/Digital/Phone, sponsored by the Vicksburg Amateur Radio Club from 1500Z Feb 24-0300Z Feb 25. Frequencies (MHz): CW 3.545, 7.045, 14.045, 21.045, 28.045; Phone 3.862, 7.238, 14.275, 21.375, 28.375; VHF 50.130, 144.220, 146.55, 446.00. Work stations once per band and mode. Categories: Fixed Station and Mobile. Mobiles may be worked again as they change counties. Exchange: RST and MS county or S/P/C. Score: QSOs × MS counties (MS stations add S/P/C). For more information: **w5xx@vicksburg.com**

North Carolina QSO Party -- CW/Phone, sponsored by the Forsyth Amateur Radio Club from 1700Z Feb 25-0300Z Feb 26. Frequencies (MHz): CW 3.540, 3.740, 7.040, 7.140, 14.040, 21.040, 21.140, 28.040, 28.140, Phone 3.860, 7.260, 14.260, 21.360, 28.360. Categories: SO, Mobile, Club, all stations 100W max. output. Mobiles may be worked again as they change counties. Exchange: RST and NC county, ARRL/RAC section, or DX prefix. QSO points: phone -- 2 pts, CW -- 3 pts, NC mobile -- 3 pts (either mode). Score: NC stations -- QSO points × NC counties + ARRL/RAC sections + 1 DXCC entity, others -- QSO points × NC counties (max 100). 50 bonus points for working Cherokee or Dare counties (150 for working both) and 50 points for working W4NC or W4WS (150 points for both). Mobiles add 100 bonus points for each NC county activated. For more information: **www.w4nc.com**.

There are a few other contests, including the NA Sprint SSB – you need to read those rules carefully but an opportunity for some band counties perhaps. As always, contest activity available weekly at:

http://www.hornucopia.com/contestcal/index.html

Picture Gallery – February 2007

The first county hunter gathering in March of 1969 – some of the folks

JACKSON, MISSISSIPPI MARCH 8 & 9, 1969

BACKROW	L TO R
K4ARF	ROY
WB4KGJ	JOHN
WA4FAT	BILL
W5PWG	DAVE
W4YWX	PAUL
W5POH	PATTY

FRONTROW	L TO R	
K5KDG	STEVE	
WA4AFP	JIM	
WA4LMR	BOB	
K7ZJP	JULES	(WA5WWW)
W5HDK	BEN	
W4NXD	DOC	
WOYLN	CLYDE	
W4RMT	DOC	

CW Totals from KA3MMM, Elwood

STATUS OF COUNTIES WORKED ON CW AS OF THE END OF EACH YEAR

CALL	2006	2005	2004	2003	2002	2001	2000
KR1B				2499	2421		1983
VE1BES			1930	1796	1342	925	
AD1C	3026	2954	2857	2609	2087	1141	526
KT1M							2507
KA1Q		1350 #2	1320 #2	1235 #2	1161 #2	901 #2	500 #2
VO1SF			2929	2987			
W1TEE				2583 #2	2282 #2	1864 #2	239 #2
KO1U	2418 #2	3033	2881	2122	1378		
KL1V	1595	1441	1269	612	506	313	
WA2AKB	1621	1621	1614	1579	1400	526	
N2CQ				1489	1385	923	
N2CWG						2315 #3	163 #3
WA2EYA					2810	2798	2798
W2EZ				3075 #2	3065 #2	2997 #2	
K2HVN						3037	3025
NM2L	2677	2213	1695	764			
AB2LS	1250	449					
N2MH		634	46				
K2NJ	2730	2083		1675			
N2OCW	2687						
OK2PAY							
K2RP	2275	1730	1410	1000			
NO2W	1589	1589	1589	1566		1310	
N3AHA	2830	2309			2222		
W3BBO						1586	
DL3DD			3059	3056	3051	3039	3026
W3DYA	3057 #2	3056 #2	3051 #2	3046 #2	3036 #2	3030 #2	2978 #2

WA3GNW		1737	1604	1511			
WU3H	3057 #3	2946 #3	2445 #3	163 #3	3005 #2	1126 #2	2999
N3HOO			1821	1500			
OH3JF		2973	2922	2903	2869	2823	2709
VE3KZE		3046	3035	3031	3016	2987	2864
KA3MMM	1044 #6	3048 #5	2643 #5	3075 #4	2959 #4	2128 #4	3069 #3
VA3NN		2714	2063	1462	993	938	766
WD3P		712 #3	678 #3	297 #3	3075 #2	3041 #2	2962 #2
WA3QNT	2638	2634		2573	2563	2542	2522
KE3VV	2779	2535	2134	1365			
KC3X	222 #2	170 #2	30 #2	2695	1693	1449	1174
N3XX	11 #2	3067	3061	3054	3027	2966	2848
AE3Z	1630	1593	1395	1297	1187	850	
W3ZUH			1645	800	1631		
VK4AAR				1058			
N4AKP	869 #2 ?	1489 #2		1264 #2	3072	3024	2886
N4CD	2759 #3	3065 #2	2715 #2	3056	3013	2769	2496
DJ4GJ					2389	2143	
W4GNS	1010						
N4HIM						2268	1875
KA4IFF					2812 #2	2769 #2	
G4KHG	1434	1374	1182		1033	916	861
W4NBS				665			
KR4OE	1461	1313	1216	1177	1135	1082	722
WD4OIN	2674	2539	2138	1369	660		
W4RKV	2761 #2	2788	2682 #2	2588 #2	2482 #2	2386 #2	2317 #2
N4RS	191 #3	2225 #3	3075 #2	2973 #2	2645 #2	2004 #2	3050
WD4SIG			3030	3030	3030	3030	3030
K4UNF	1556		820				
KW4V		3073					
WB4VFN	2899	2667	2301	500			
AA4VN			1619	1364	1078	853	830
W4VQ		947	471 #2	3058	3035	2939	
KM4W						1674	1452
K4XI	3064	3050	3011	2956	2844	2620	
KB4XK		2443	2261	2147	1892	1698	1494
KN4XP		1155	108				
W4XT		2184	2167	1931	138		
KN4Y	2954 #4	2634 #4	1760 #4	3070 #3	2988 #3	2789 #3	2333 #3
W4YDY	2789	2462	2175	1513	786		

K4YFH		2819	2577	1575			
K4YT	1871						
AB4YZ		2685	2214	1900 #2	1380 #2	2489	
KS5A		2983	2883	2427	2038	833	
K5AAR	2926 #2	2362 #2	493 #2	3055	2899	2074	
W5AL		2805			2174	2001	
DL5AWI	2457	2317	2140	2006			
NN5B						2676	
KR5C	397 #2	3071	3034	2940	2701	2282	2087
WC5D	1904 #2	1456 #2	834 #2	500 #2	3077	3071	
N5EBD		1833	1248				
KT5H	1711	924					
KG5J						3063 #2	3029 #2
K5OT	3026	2902	2669	1801			
WB5P					1125	569	
N5PR	2412	910					
N5XG	3071	3066	3052	3004	3004	2878	2671
K5XY			343	211	48		21
KC6AWX		1202	1025	871	881	770	
WD6CKT	3071	3063	3035	2871	3003	2983	2919
NA6E				2523			1193
NV6I		721	430	2010	LOST	BUNCH	OF LOGS
W6IYS					1113 #2	823 #2	
DL6KVA	2267	2140	1937	1525			
W6OUL		1680	1606	1265			
W6RK	2142	1856	993				
NW6S	2870		2556	2278	1235		
SM6TEU						1829	1758
W6TMD	2949 #2	2742 #2	2286 #2	876 #2	3062		3001
KB6UF	2122	1531		500			
KE6US			1125				
SM6VR	2808	2665	2419	1853			
AD6Z		3030	2890	2777	2484	2180	1715
AA7CP	1034 #2						
K7DM		2777	2622	2312	2028	1230	894
K7DZE				1727	2514	1448	
KL7GN		2607	2543	2521	2483	2483	2387
K7INA		2764	2705	2500	2120	1528	
WA7JHQ	2178 #2	1065 #2	3059	2922	2740	2297	2176
KG7Q			2887		1897		
K7REL	2946 #2	1865 #2	2915	1458			
AB7RW	2430 #2	3076	3062	2943	2776	2144	

WA7SLD		1660					
W7SSM						1978	
W7TSM		2247	2290	1934	1697	1388	810
K7VAY	3077	3042	3002	2963	2853	2356	
NA7W	1932	1258	660	660	249		
KI7WO	1635	1030	802				
N7WO	1854	1599	1198				
KK7X			1760	1637	1632	1558	1512
AK8A	2850	2649	2385	2172	0 - fire	1927	1829
W8CE	3022 #2	3003 #2	2951 #2	2845 #2	2611 #2	2257 #2	1324 #2
K8CW	2397	3074 #2			2927 #2		2829 #2
K8GSA				515	12		
KD8HB		3064 #4	2983 #4	2589 #4	3066 #3	2672 #3	
K8IW	2933	2838	2724	2495	1934	1340	
W8JJ	779	510	391				
W8LSV		2100					
K8MFO	3077	1939 #2					
K8MW				3006 20/m	2969 20/m	2914 20/m	2651 20/m
K8OHC	1812	1797	1756	1687	1590	1429	1385
KB8OMG	3072	3027	2862	1659			
W8OP		1017	836	788	397		
WD8OWA	3006						
W8PN		2886 #2	2869 #2	2863 #2	2855 #2	2852 #2	2830 #2
W8QOI	2343	2147	1748	1006			
AA8R	2717	2464	2307	1848	427	285	
KM8U	2885 #2	2870	2825	2796	2739	2775	2651
AD8W	2373	1950	1677	684			
W8WVU		3056		3050	3047	3038	3022
W8YL		3040		3040	3038	3028	3009
K8ZZ	2737	2319	1478				
NF9A		2863	2848		2719	2222	1882
N9AG		2545	2506	2460			
WD9BCG		3003 #2	3003 #2	3001 #2	2974 #2		
VE9DH		2425	1954				
AB9E			1947	1564			
W9GBH	2404	2332	2300	2045	1907	1513	1060
W9HR					2932	2682	2268
KA9JAC	2511	1747	1158		412		
N9JF	2415	1657			<1000	>1000	
NN9K	2625 #2	3072	2748	2101	1368	1070	630

AA9KH	3053 #2	2631 #2	1731 #2	547 #2	6 #2	2970	2194
ND9M		3044	2923		2811		
W9MSE	2052 #4	3041 #3	2913 #3	2277 #3	3074 #2	2982 #2	2859 #2
W9MYY				2834 #2	2831 #2	2741 #2	
N9STL	2499	1666	49				
K9WA	2988 #2	2815 #2	2525 #2	1390 #2	3069		
DL9YC				424	407	325	
AA9ZZ		1925					
AC0B	689						
K0CO						7	
KY0E	2298	1789	680				
W0EAR	2457 #5						
W0GXQ	2648 #3		3077 #2	2726 #2	1201 #2		2978
KB0GZR						1082	
AA0IP	2980 #3	2720 #3	942 #3	3062 #2	3007 #2	2785 #2	2362 #2
KC0JG	3053	2947	2725	2472	2156	1711	684
K0LG			1186	888	789		587
NF0N	2252	1862	1403	820			
K0PY		1079	1190	1042	1008	785	1250
NU0Q	2718	1440	321				
W0QE	3076 #2	2723 #2	3073	2787	2110		
W0RRY		2952	2782	2242	1916	1677	1108
NX0X	1737	1608	1233	488			
N0ZA		3068	3069	3039	2950	2711	2031
K0ZT		3062	3055	3001	2773	2541	2334
Updated	1-15-07	KA3MM					

That's it for this edition of the County Hunter News! Contributions always welcome.