

# County Hunter News

July 2007

Volume 3, Issue 7

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 7185.

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

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

## Notes from the Editor

1) Propagation bounces along the bottom of the sunspot cycle. County Hunters still manage to work HI mobiles (N8KIE) and Alaska mobiles (N6PDB/WA6OCV) in some of the tough counties, but from day to day you never know if you are going to be hearing much on any band. Ray, AB4YZ, is wandering all over, putting out the counties on 20cw and 40cw and 40SSB. Unfortunately, the 'adjustable' antenna gave out, so a good part of the trip will be 20M SSB, with cw run 'up 2' maybe.

2) More info this issue on the efforts of the very, very few ‘club promoters’ who still continue to seek ‘official recognition’ for the bogus club calls for awards like the prefix award, and to allow multi-op clubs to someone qualify as ‘individuals’ under the bylaws of the corporation. Their incessant attempts to sneak something through the committees (where most folks seem to be asleep or unaware of the rules they are under obligation to follow) should be stopped dead in their tracks. They’ll be trying again at the annual meeting in July to somehow make “at least 4 people’ the same as ONE (an individual). Or to allow ‘borrowed calls’ for prefixes with double, triple, and quadruple prefix ‘give a ways’ from a single mobile operator.

The exchanges already are pretty crazy, but I fall off my chair when I hear things like ‘**both** of us give both of you a 33 33 33’ and there is only one person in the car or at the microphone. Both of us? We got split personalities or ‘imaginary playmates’? I know 3 year old kids made up imaginary friends, but you’d think that adults would get past that?

3) There should be some good mobiles out on the road headed toward Denver in mid-July – on some good county putting out trips.

## More Pics from Dayton

Here's a few of the County Hunters at the 2007 Hamvention in Dayton

Randy does all the work for the MARAC CW Annual Contest



Randy AA8R, USCA #885



K4DI, Jim (ex WA4AFP, W4AFP)

He's been collecting for a long time, finally decided it is time to finish up!



K4SSU, Dave    SSB operator



K9JF, Jim, (not to be confused with N9JF)



KM4FO – Dwight



Jim NW6S, USCA 1090

## Mechanical Television

If you were born before 1925, you might remember the beginnings of television. Most people alive today have never seen a black and white only TV set from the 40s, 50s and 50s. However, before black and white TV, which got started in a big way after WW2, there was a 20 year period of development.

According to the IEEE, “The Russian Constantin Perskyi invented the word **Television** in 1900 at a meeting in Paris to describe devices that make pictures using electricity.” “Paul Nipkow (Germany) received the first patent for a TV-like machine in 1884. His mechanical system used a scanning disk that broke a picture into pieces and then reassembled it on a picture receiver.” The only thing missing was a ‘radio link’. There was no radio at the time!

John Baird in England is credited with the idea of sending TV pictures over the air. Baird first gave demonstrations in 1924, and again in 1926 to the Royal Institution, but failed to get financial backers for this idea. In the

USA, Charles Jenkins claimed to have sent moving images in 1923, but the first public demonstration was not until 1925.

From [www.earlytelevision.org](http://www.earlytelevision.org)

“Jenkins Laboratories constructed a radiovision transmitter, W3XK, in Washington D.C. The short-wave station began transmitting radiomovies across the Eastern U.S. on a regular basis by July 2, 1928. Jenkins wrote in 1929:

"This gave the amateur action-pictures to 'fish' for; and during August following a hundred or more had finished their receivers and were dependably getting our broadcast pictures, and reporting thereon, to our great help."

It was in this way that Jenkins actively promoted enthusiasm and experimentation in the short-wave radio community, and the U.S. experienced its first television boom, with an estimated 20,000 lookers-in. “

Mechanical TV was very inefficient. It required massive amounts of light at the transmitting end, and it required a very dark room at the receiving end with a 2 or 3 inch TV screen. Naturally, radio experimenters jumped on the bandwagon. There were all sorts of kits for hobbyists. You used your normal radio, or a short-wave radio, added a few tubes of circuitry to detect and amplify the image signal, and then feed it to a homemade or kit disk/neon tube assembly. If you were lucky, you got a picture when your local station ‘broadcast’ a TV signal if you were in a major city area. There was skip reception, but it was really marginal with fading and atmospheric distortion. This was ‘AM’.

Early TV consisted of mechanically capturing the image onto a photocell, and mechanically reproducing the image using a neon bulb as the light source. It was sent over the airwaves – right in the middle of the AM broadcast band or on frequencies just above - as a varying tone!



*1928 G.E. Scanning Disk Television Set (closed-open)*

*(c) TVhistory.TV Library*

Picture courtesy <http://www.earlytelevision.org/>

In the first sets, a spinning Nipkow scanning disk – one with a spiraling pattern of holes – was used to both get the image, and then to display the image. At the transmitting end, a photocell behind the disk fed a varying voltage to the modulator and the transmitter. A high intensity neon lamp was used at the receiving end. Due to the small number of holes that could be put in a practical size disk, resolution varied from 30 lines to 120 lines. (today you have 525 lines of resolution in a standard color TV).

From IEEE website: “Nipkow broke up an image into tiny bits by using a rotating "scanning disk." The disk had a spiral of holes bored into it. When the disk rotated, the holes would sweep over the whole image from top to bottom, slicing the image into 18 columns of information. Behind the disk were selenium photocells, which reacted to the light passing through the disk. The light from each of the 18 slices was converted to a varying electric signal in the photocell, and that signal was then transmitted to a distant



receiver. At the receiver, incoming information was reassembled into a crude picture. The flow of electricity from the transmitter varied the brightness of a light bulb, the light of which was projected through another rotating Nipkow disk onto a screen. “



Hollis Baird Kit or Assembled Unit

Picture [www.earlytelevision.org](http://www.earlytelevision.org)

A good illustration of how mechanical TV worked is here:

<http://www.lateralscience.co.uk/television/mechTV.html>

If you look at the TV above, you'll see that there is a tiny screen – and there is a big spinning disk in the unit above the cabinet or inside it. Both disks – the transmitting one and receiving one - have to be kept in sync to get a picture. Mechanical TV sets possibly could have been made with a thousand lines of resolution, but there was just a short period while they were 'the only thing'. In the larger cities, you might have a few hours a week of TV programs to watch, without too much action.

Other sets had spinning mirrors and other arrangements. There were at least a dozen US manufactures, and some people came up with their own. The great depression of 1929 to 1940 killed much of the activity and ability of folks to buy them, but hobbyists persisted.

Cathode Ray Tubes (CRTs) were limited to a few inches at the time, and were quite expensive, so that took more work to bring to fruition.

Mechanical systems were the only thing until Philo T. Farnsworth demonstrated all electronic TV in 1934, with the first broadcast in 1936. In

England the mechanical systems held on a bit longer, but in the US, they faded almost immediately. With WW2 breaking out, TV was shut down for the duration of the war. There was nothing but electronics manufacture for the military and ham radio operators went silent for the duration. After WW2, electronics had advanced considerably. Within a few years, a tremendous TV industry erupted.

Today, if you buy a TV set with “DLP”, you use a form of mechanical scanning. Inside your DLP set are micro-mirrors which take the light beam and scan them across the screen. Naturally, you get many lines of resolution today and full color, but the basic technology goes right back to the 1930s eras of mechanical TV sets!

Further reading at the following links:

<http://www.mztv.com/mz.asp>

<http://www.earlytelevision.org/index.html>

**You can visit the Early TV Museum in OH...**details at:

[http://www.earlytelevision.org/museum\\_information.html](http://www.earlytelevision.org/museum_information.html)

Each year in August, the Antique Wireless Association holds a conference in Rochester, NY. If you're a dyed in the wool antiques fan, there's quite a program, display of old sets, and auction during the 3 day event. (Hefty admission charged). In the past, it was a good excuse to mobile back to W2 land for a trip.

In 1933, RCA put the first 'all electronic' TV station on the air. It broadcast with 240 lines of resolution, 24 frames a second. The picture took 2 Mhz and the carrier was around 45 MHz. The mechanical sets were using frequencies in the 2-3 MHz range at that time. The FCC was established for the first time in 1934. It decided that TV broadcasting should be in the 42-46 and 60-86 MHz area. Radio experimenters, previously limited to frequencies below 30 MHz, were told to 'go up above 100 MHz'.

In 1936, RCA demonstrated an all electronic 330 line system, 30 frames per second, using 5.5 MHz of bandwidth. They made 100 sets and loaned them to employees around the NY area.

Other manufacturers chimed in, and soon the word ‘standards were heard. The FCC then changed the specs to 441 lines, 30 frames/sec, 6 MHz bandwidth. Not everyone agreed. Nineteen new TV channels were created, with 10 of them above 150 MHz. Channel 1 was 44-50 MHz. At the World’s Fair in 1939, television was announced and demonstrated to the public in a big way. Unfortunately, folks had still not agreed completely on standards. WW2 brought everything to a halt.

The FM broadcast industry was starting up in the late 30s. They wanted channels in the 43 MHz range, and got them. The FCC took back channel 1 – 44-50 MHz. The FCC jiggered the channels, so the first commercial channel was 50-56 MHz. It wasn’t until 1942 that the industry and FCC finally issued the NTSC specs – 525 lines, 30 frames, interlaced. TV progress stopped during WW2.

On June 25th of 1945, the FCC issued new standards. Only 13 TV stations on different frequencies. 500,000 TV sets obsoleted. Every broadcaster had to modify their transmitters. Channel 1 was still around – 44-50 MHz, but limited to educational use and 1000w max.

Two way radio was operating in the 72-76 MHz range. All sorts of interference problems arose by 1947. It wasn’t long before the FCC decided that two way radio had to move – and it moved them down to 44-50 MHz, and took away channel 1. Channel 2 was 54-60 MHz. So that is how Channel 1 managed to disappear on your TV set. Within a few years, 3 million sets had been sold, and by 1953, half of all homes in the USA had a TV set!

## NV4Z Finishes 6<sup>th</sup> Time

Mary, NV4Z, got her last county from Bill, KD7KST, who was mobile in Latah, ID. Now readers of the CHNews will recall that NV4Z is just one of the dozens ‘run off’ the “Club Net” on 14.336, so this is even more of an achievement for her as she operates only SSB from FL, which means 98% of all contacts are on 20M. It seems that a while back, the Net Mullah got into a spat and his ego won out. He refused to run NV4Z when she was out mobile, while she was getting some of the last counties for folks (gee, Jim,

‘thanks’ for running off good mobiles, and spending even more time going ‘Any mobile anywhere, not on my banned list, ready to run a county?’). Remember the days of ’20 on the list? Now it is ‘someone please talk to me’.....

Not only did ‘the club’ refuse to run Mary, of course, she could not get relays either on the net. Now, being located in FL and without big tall antennas, with the current propagation, getting some of those needed counties is a challenge. Mary was up to it. Others went out of their way in true county hunter tradition to help her out.

Bill made a special trip to get this last WBOW. It used to be a ‘big deal’ on net. Not lately. Half the folks finishing up are ‘run off’ of regular net frequency, or make a point to get it on 40M or a cw frequency. Sad state of affairs. It seems ‘running folks off’ is more important these days than running mobiles and taking pride in finishing off folks. Now it is ‘punishing folks’ that is more important to the club and the club henchmen.

Bill, KD7KST, said let whatever happens happen. He is perfectly content to stay on digital modes if he winds up ‘being run off’ SSB for giving a last WBOW to a ‘black listed station’. Isn’t that a sad state of affairs when a county hunter can’t even go out and get THE VERY LAST WBOW county, without wondering if the sicko in SC is going to have a fit and ban him, too? Like he has with several others?

Naturally, where things would normally have been done on 14.336 with the gentlemanly like net control stations of the past, now things had to be arranged off frequency. Bill, KD7KST had Mary’s phone number, and others as well. He would risk being ‘run off forever’ for simply giving a lat county WBOW to a ‘banned station’. You bet.

Now readers will recall that the Net Mullah ran off KA3DRO for the only reason that he gave Dave, KF0LZ, the last WBOW. Think about that. What sort of mental midget would do that? Of course, you read about the N9STL WBOW for Garfield MT in previous issues of the CHNews.(and the , ahem, inability to move KL1V off frequency to arrange a last WBOW due to interference from , ahem, the Net Mullah). Yet another case of the ‘club ego’ taking priority over any reason. Punishing folks on the ‘black list’ seems to be more important than helping county hunters. What type of sick personality does this on a regular basis?

How many more 'last WBOW' will he attempt to prevent? Is he going for the record on this? Everyone else is proud of LC WBOW they give out. The Club seems to take pride in how many it can try to prevent.

Every one else seems to cringe at the thought of the proud history of county hunters going after the last few for WBOW being tossed down the drain by the Net Mullah. Sad day for county hunting when this started, and even sadder as it continues. Yet despite his best efforts, county hunters go the extra mile to 'make it happen'.

When Bill could not work Mary direct in Asotin, WA, the county before Latah, ID, telephone calls were made to set up a relay station. Joyce, N9STL could clearly hear both parties, so it was arranged that the contact would occur on 14.347. Mary and Bill exchanged reports successfully. With cellphones, advanced planning, and a bit of help from your friends, things happen.

As Joyce, N9STL puts it: "I feel that it was a happy day for Mary but a very sad day for all other county hunters. **To allow this to happen to Mary, and others, is a very sad thing. Mary has been county hunting for 18 years and to think that most county hunters allow KZ2P to get by with this crap is truly unbelievable.** What a shame that this exchange could not have taken place on 14.336 and Mary could have received the congratulatory messages that she so rightly deserved."

You bet. Ernie, W7KQZ got his last WBOW in May. Did it happen on 14.336? Not on your life. The mobile who gave it to him is one of the 'club' 'banned mobiles'. Along with a large number of active and previously active mobiles. How sicko can the Net Mullah be? What ever happened to county hunting? Where's Michael Moore when you need him?

The saga of the Net Mullah continues. MARAC has gone from 2000 members down to a quarter of that, most of it during his Net reign of terror. Hundreds or more have given up in disgust at what they hear on 14.336.

**Folks used to join MARAC because it represented the 'best' of county hunting.** Now, with the 20M net the 'hostile net' running off more and more experienced county hunters, and running off more and more potential recruits, trying to prevent more and more contacts, it seems that there is little

incentive to join or be a part of MARAC or the 'group' on 14.336 that allows this to continue. Sad, but for many "14.336 was the county hunter frequency" and have left the hobby because of the antics there. Also the constant 'dissing' of anyone they don't like. Recently, Percy, "Just Plain Rotten", apparently thinking he is the 'Florida enforcer', has been continuing the 'bashing and trashing routine' on the air of one of the long time county hunters. What would you expect? If he isn't happy county hunting, why doesn't he just point his motor-trike north and stay up in ME all summer?

We're lucky we still have active mobiles DESPITE the sicko Net Mullah on 14.336 And those interested in helping the County Hunters get their last for the WBOW despite the best attempts of the net mullah to foil them. CW is alive and well, and 40M rocks in the middle of the country.

Congrats to Mary for 'doing it the hard way' – 6<sup>th</sup> Time! Also to the mobiles who make extra effort to be sure that the contacts happy, despite NC. And to those who try to continue the ways of 'the old gentleman style' nets with courtesy and respect.

## **Diamonds tell tale of comet that killed off the cavemen**

Fireballs set half the planet ablaze, wiping out the mammoth and America's Stone Age hunters

**Robin McKie, science editor**

**Sunday May 20, 2007**

**[The Observer](#)**

Scientists will outline dramatic evidence this week that suggests a comet exploded over the Earth nearly 13,000 years ago, creating a hail of fireballs that set fire to most of the northern hemisphere.

Primitive Stone Age cultures were destroyed and populations of mammoths and other large land animals, such as the mastodon, were wiped out. The

blast also caused a major bout of climatic cooling that lasted 1,000 years and seriously disrupted the development of the early human civilisations that were emerging in Europe and Asia.

'This comet set off a shock wave that changed Earth profoundly,' said Arizona geophysicist Allen West. 'It was about 2km-3km in diameter and broke up just before impact, setting off a series of explosions, each the equivalent of an atomic bomb blast. The result would have been hell on Earth. Most of the northern hemisphere would have been left on fire.'

The theory is to be outlined at the American Geophysical Union meeting in Acapulco, Mexico. A group of US scientists that include West will report that they have found a layer of microscopic diamonds at 26 different sites in Europe, Canada and America. These are the remains of a giant carbon-rich comet that crashed in pieces on our planet 12,900 years ago, they say. The huge pressures and heat triggered by the fragments crashing to Earth turned the comet's carbon into diamond dust. 'The shock waves and the heat would have been tremendous,' said West. 'It would have set fire to animals' fur and to the clothing worn by men and women. The searing heat would have also set fire to the grasslands of the northern hemisphere. Great grazing animals like the mammoth that had survived the original blast would later have died in their thousands from starvation. Only animals, including humans, that had a wide range of food would have survived the aftermath.'

The scientists point out that archaeological evidence shows that early Stone Age cultures clearly suffered serious setbacks at this time. In particular, American Stone Age hunters, descendants of the hunter-gatherers who had migrated to the continent from Asia, vanished around this time.

These people were some of the fiercest hunters on Earth, men and women who made magnificent stone spearheads which they used to hunt animals including the mammoth. Their disappearance at this time has been a cause of intense debate, with climate change being put forward as a key explanation. Now there is a new idea: the first Americans were killed by a comet.

It was not just America that bore the brunt of the comet crash. At this time, the Earth was emerging from the last Ice Age. The climate was slowly warming, though extensive ice fields still covered higher latitudes. The disintegrating comet would have plunged into these ice sheets, causing widespread melting. These waters would have poured into the Atlantic,

disrupting its currents, including the Gulf stream. The long-term effect was a 1,000-year cold spell that hit Europe and Asia.

The comet theory, backed by observational evidence collected by the team, has excited considerable attention from other researchers, following publication of an outline report of the work in Nature

'The magnitude of this discovery is so important,' team member James Kennett, of the University of California, Santa Barbara, told the journal. 'It explains three of the highest-debated controversies of recent decades.'

These are the sudden disappearance of the first Stone Age people of America, the disappearance of mammoths throughout much of Europe and America and the sudden cooling of the planet, an event known as the Younger-Dryas period. Various theories have been put forward to explain these occurrences, but now scientists believe they have found a common cause in a comet crash. However, the idea is still controversial and the theory is bedeviled by problems in obtaining accurate dates for the different events.

'We still have a long way to go,' admitted West. 'But we have a great deal of evidence, from many sites, so this is quite a powerful case that we are making.'

<http://www.guardian.co.uk/science/story/0,,2083785,00.html>

## Club of One Still Trying

The teeny number of 'clubs of one' are continuing to press the attack to gain 'recognition' by MARAC for County Hunting awards. It seems that KE3VV, fronting for the "K2JG", "NA7XX" and "W1BQL" and "W4CA" clubs of one, proposed to give legitimacy via the back door to sham clubs.

When the 'club' isn't busy trying to run off mobiles, it is attempting to gain 'status' for the silly "K2JG" Club of One. As if anyone really believes that "JG" is anything other than the personal initials of the one and only club operator. Heck, if the one and only 'club' operator loves that call so much,



why not make it his own personal callsign? Give his 'imaginary friend' the boot.

At the February MARAC board meeting, according to the notes printed in the Roadrunner June issue:

“Dave (KE3VV) moved that the Board approve the Awards Committee recommendation to add the following rule on Club Stations to the General Rules for MARAC Awards:

“A Club Station belonging to an organization consisting of licensed radio amateurs may apply for and receive MARAC awards.”

There is no provision under the Bylaws for a 'club' to receive an award. MARAC is an organization that awards to individuals. Without changing the bylaws, you can't suddenly define 'clubs' with at least 4 members by FCC rules as being an 'individual'. Can't be done via the 'backdoor'.

Not only that, some clubs have classes of members that are NOT licensed amateurs. I guess that would rule out many clubs? Seems to be a poorly written back door attempt to break the bylaw restriction. According to this silly definition, your Boy Scout troop with some hams could apply for a MARAC award by having some contacts. It doesn't even say the club has to be an FCC licensed club. And this was written by a 'lawyer'? It even states it is an 'organization' that has the license, not an individual.

Continuing: “Applications for awards for a Club Station must be filed by the trustee of the Club Station, and awards will be issued to the Club Station through the trustee.”

I guess he wants to trash the bylaws? MARAC issues awards to individuals. Not to 'stations'. He doesn't even require the club to have an FCC license in the first part. So the Boy Scouts might not even have a 'trustee'. Maybe one of the Boy Scout members made a lot of contacts, and wants to get the award in the Boy Scout troop name?

KE3VV: “Contacts with a Club Station are Valid Contacts for MARAC awards, except for those awards that require a Valid Contact with the holder of a particular MARAC award. In other words, where the criteria for a Valid

Contact are the cal sign, mode, band, location, or other criteria that can be attributed to any club member who operated the Club Station with which a Valid Contact is made (such as Worked All USA Counties, BINGO, USA-CW, USA-Digital, Big Rig, 5-Band, or the USA Prefix Award), a Valid Contact with the Club Station may be used for that award. “

The rules say the operator MUST have as part of his or her call the correct prefix. The rules don't say you can borrow a call belonging to someone else. Club calls cannot belong to individuals, although the clubs of one seem to think so.

KE3VV: “Because Club Station awards are earned by the members of the organization collectively, no individual member operating the Club Station may make a Valid Contact for an award where the contact must be made with an operator who has earned a particular award (such as Master Gold, Master Platinum, Polaris, Gemini, King of the Road, 5-Star Award). A Valid Contact for this kind of award may be made with a club member who qualifies using his or her individual call sign.”

I can just see the nightmares that logging programs will have in complying with this bastardized situation. Let's see...count for some awards, don't count for others, but if you work the operator, it counts if he counts? Why bother with the phony club call contacts at all then? They are JUST WASTING NET TIME! Just work the operator, with ONE callsign, his/her own!

“After discussing the issue, Jerry (W0GXQ) moved to table and Dave (KE3VV) seconded. The motion to table was approved with 9 in favor, none opposed.”

Good to see sanity prevailed, at least at the February meeting. Do you think this will continue (sanity) or will the 'club promoters' keep bringing this up and up, trying to get it passed regardless of the bylaws?

This was not addressed at the May Board of Directors meeting but is 'awaiting a proposal' at the National Convention in July (which will have a

MARAC meeting). So do you want the silly ‘club of one’ to try and sneak this through? When the Bylaws specifically say that MARAC gives awards to individuals? Will someone try to ‘interpret’ this away? So 1 of the 500+ MARAC members can gain ‘legitimacy’? (gosh, almost sounds like ‘amnesty’). Only two ‘club of one’ has ever applied for a MARAC award, so it seems like trying to foist this “amnesty” and ‘special favor’ on the other 500+ MARAC members, defying the Bylaws, trashing the rules, is not the way to go. (the ‘CLUB” and his henchman Just Plain Rotten) (Sounds like the whining of a ‘poor rich kid’ with too much money! – ala Paris Hilton – trying to use a lawyer to get out of trouble).

Yes, club contacts count for USACA and for Nth time and CW....but there is no rationale to let ‘club’ stations apply for MARAC awards.

Issuing MARAC awards to ‘clubs’ is just stupidity flying in the face of very specific Bylaws. Do AB4YZ, KZ2P, W0MU and KZ2P really need ‘imaginary friends’ who help folks take ‘shortcuts’? Sicko!....do we need to change the rules to permit this mental deficiency to occur? No way!

## Kill-A-Watt Meter/Saving Watts?

Trying to save a few bucks on the electric bill? Here’s a device that is under \$25 that might help you do it. At least, it will let you know what some of your ‘appliances’ are taking for power, and how much you are paying per month (or year) to run them. Naturally, the big items are typically your refrigerator, freezer, electric dryer for clothes, air conditioner system, heat pump (if you have one), the blower motor on your heater, and any lighting that is on for hours a night (security lights outside and similar).



## Kill-A-Watt Meter

From Amazon..com web site : “now you can cut down on costs and find out which machines are actually worth keeping plugged in. Simply connect your appliances to the Kill-a-Watt electricity usage monitor and it will assess how efficient they really are. The unit's large LCD display counts consumption by the kilowatt-hour, the same as your local utility. You can calculate your electrical expenses by the day, week, month, or year while also checking the quality of your power by monitoring voltage, line frequency, and power factor. Now you'll know if it's time for a new refrigerator or if that old air conditioner is saving you money.”

I bought one of these a few months ago to do some ‘detective’ work around the house to actually measure energy consumption, and to figure out if it was time to buy some new things so save energy (and money). On the other hand, if things didn’t take too much power, it also eased my conscious about leaving them on all the time! (Of course, first you have to save enough to pay for the cost of the Kill-A-Watt meter!). There is no sense needlessly spending money on energy for the house when it could go into the gas tank for county hunting!

These days, there are lots of ‘power leeches’ in an average house. Timers for this, timers for that, clocks in this unit, remote control circuits in audio/video equipment, cable TV equipment, DSL modems, computers, security lights, night lights, door bell transformers, answering machines, GameBoy type things, thermostats –that take power during part or all of the day on a regular basis. Even if you don’t turn on a light, or run any appliances, there will be energy drain. Just how much is it, and can be do anything about it?

I determined that my 17 year old 20 cu foot GE side by side refrigerator takes 2.78 KWH (kilowatt hours) of power a day, average. At 14c/kwh in Texas, that is about 42c and day, or under \$15/month. If you live where electricity is less expensive (just about anywhere else), it would cost less. A new refrig is \$1500 or so for the same thing, so the payback would be 20 years if it used half as much power. I’ll wait until the fridge dies before buying a new one. It is fairly decent despite being 17 years old. It just needed its first repair. That was a good economic decision – spend some money to keep it running. Heck, maybe it will go another 17 years?

The microwave only took 1 watt in the standby position. Good. No energy waster there. The clock is pretty efficient in that unit.

The 35 inch CRT Mitsubishi TV set amazing takes only 128 watts of power when on. It is also 17 years old, and it just died for the first time. I remember when tube type TV sets ran many 2-3 years before a tube went south. If you were lucky! Drug stores had tube testers and sometimes you could fix the TV set yourself. If not, off to the repairman, who had a god business going fixing all the TV sets.

Many of the larger LCD and Plasma TV sets take several hundred watts, up to 600-800 for the really big ones! So I wasn't too eager to spend a few thousand on the latest gizmos. I'm not bitten by the HDTV bug yet.

When many electronic devices are turned off, they still take some juice for the instant on feature and keep the clock running. The Mitsubishi TV takes between 1-2 watts in the off position – very good. Older ones took 5-20 watts. Manufacturers are finally getting concerned, and working on 'Energy Star' labels and reducing 'phantom loads. If there were ten million people in California or Texas that replaced old TVs/VCRs with new more efficient ones, they would save over \$100 million a year in electricity (and cause that much reduction in carbon production from fossil fuel power plants), just from the time they are in the 'off' position! Most TV sets (with CRTs) feed a small bit of power to the CRT filament to allow 'instant on'.

The 15 year old 25 inch RCA took 11 watts when off, 113w when turned on. The RCA VCR took 4 watts when 'off'. Both took some power to keep the clocks alive and to power up the 'remote control' circuit to allow you to sit in the easy chair and hit the on button. For that convenience, it takes 15 watts 24 hours a day, or \$1.50 per month in 'juice'. I have a switchable outlet strip for that TV set/VCR and I turn it off....I seldom watch that TV set in the 'other room'. Heck, if I left it on, it would take \$18/yr in electricity! Ouch! That's enough gas for 180 miles of county hunting.

It was on to the hamshack. Rig #1 is an ICOM 756 Pro II (bought after the TI9M expedition at a good price for a 'used radio). I had it on an ASTRON RS-20 power supply. Some surprising numbers came out!

With just the power supply turned on, it took 48-50 watts of power! A lot of power was being wasted. With the IC-756 on, the power supply required 98 watts of power. On transmit, it drew 500 watts. This is a power supply with a series regulator – produces 15-25 volts, then regulates down to 13.8vdc.

I had an ASTRON 30 amp switcher which I had intended to replace the old Astron and never got a 'round TUIT'. In the name of experimentation, I took out the old power supply and connected the switcher supply. Oh, my!

With the power supply only on, it took 8 watts. With the receiver on, the total draw was 62 watts. On transmit, it took 360 watts. (the IC756 supposedly takes about 20-23 amps on TX for 100 watt output). The switcher supply does kick on a fan every few minutes for 10 seconds to cool itself down, but that only takes a few watts for a few seconds.

Since this radio is often on 10 hours a day, the savings all day long would be about 40 watts – so for 10 hours that is 400 watt hours. In a month, 12,000 watt-hours, or 12 KWH. That is about \$1.68 savings a month, or \$20.16 a year at my electric cost. I paid for my Kill-A-Watt meter in one year's energy savings right there. The switcher weighs 1/3<sup>rd</sup> as much, is slightly smaller, and much more energy efficient.

If you had to buy a switcher new, it would pay for itself in 6 years if your electricity costs 14c/KWH. If your radio is on more than that, then you save even more. Since I had both supplies, it was time to use the more efficient one! If I could find a few more things to save energy, it would help tower the dang electric bill.

Of course, I had replaced some of the incandescent bulbs in the house with the new mini Compact Fluorescents (CFLs) in highly used locations. That can save a bit, but they don't fit all applications – my house has quite a few floodlights and the CFL floods just don't hack it yet. The 25-100w replacements seem to be mostly trouble free and work well, but you can't dim most of them, and can't run them off a mechanical timer as in a security light application. You need an expensive totally electronic timer for them.

The other radio in the hamshack is a 16 year old FT-1000 with built in power supply. No chance for 'upgraded supply' here, but it was time to see

how much juice it took. On receive, about 70w. On transmit, key down on cw – 926 watts for 200w output. Not too efficient, but since I transmit maybe 1 or 2% of the time, not too big a deal. But it does suck a lot of power, which is why it is on a separate circuit from the rest of the ham table gear. (arranged that when house built). So leaving that radio on (the 30/40m radio) for 10 hours a day will cost me about \$3/month, or \$36 a year. In addition, I have a DSP unit separately for the FT-1000 and GMT clock – they will take another \$1.00 or so a month to run. So the hamshack total, without lights is under \$6/month. ( the ATT digital telephone answering machine takes 1 watt – not enough to worry about – 10c a month)

Now on to the computer and TV stuff! I have Verizon broadband at the house. The cable TV box by the TV set takes 14 watts continuously – on or off! The DVD takes 1w off. The Verizon power supply for the outdoor unit/battery charger sucks 19 watts. Ouch. The timer for the lawn sprinkler takes 1 watt.

The computer is an energy hog. When it is on and operating it takes about 50 watts. When it sleeps it takes about 45w! Not much savings. Most of the time it is on 24 hours a day. 36KWH just for the computer - \$5/month. Now add in the monitor.... which takes 66 watts operating. When it goes into sleep mode, it takes less. The power speakers take 4 watts. The printer takes 6w in sleep mode, 20w getting ready to do something. So maybe there is room to switch off a few more things at night. Turning off the computer is a big pain – even with Windows XP, it takes 5 minutes for the computer to boot up and load all the programs it wants to load. But if electricity keeps climbing, that may be an option. Of course, in the summer time, you have to air condition all that ‘heat’ from the hamshack away, which means more dollars to run the a/c more.

Next time you go shopping for something, compare how much energy the devices use. Maybe you can save some dollars by choosing Energy Star rated devices and annual cost to operate. Of course, sparing using things like electric clothes dryers, turning up the thermostat a degree or two in the summer, and down a few in the winter can help out. Tracking down some of the phantom loads is a bit trickier taking something like the Kill A Watt meter.

## Global Warming Scare

<http://abcnews.go.com/Technology/story?id=3229696&page=1>

“NASA administrator Michael Griffin is drawing the ire of his agency's preeminent climate scientists after apparently downplaying the need to combat global warming.

In an interview broadcast this morning on National Public Radio's "Morning Edition" program, Griffin was asked by NPR's Steve Inskeep whether he is concerned about global warming.

"I have no doubt that a trend of global warming exists," Griffin told Inskeep. "I am not sure that it is fair to say that it is a problem we must wrestle with."

**"To assume that it is a problem is to assume that the state of Earth's climate today is the optimal climate, the best climate that we could have or ever have had and that we need to take steps to make sure that it doesn't change," Griffin said. "I guess I would ask which human beings — where and when — are to be accorded the privilege of deciding that this particular climate that we have right here today, right now is the best climate for all other human beings. I think that's a rather arrogant position for people to take."**



## How About a Steam Powered Car?

Several items crossed the editor's desk this month

From <http://www.gizmag.com/go/4936/>

“A large percentage of the energy released when petroleum is burned disappears out the exhaust system as heat. This has always been the case but the amount of energy released looks set to be cut by more than 80% thanks to a new system devised by BMW. BMW's announcement of the new technology is somewhat of a technological bombshell as it adds yet another form of hybrid automobile – a turbosteamer. The concept uses energy from the exhaust gasses of the traditional Internal Combustion Engine (ICE) to power a steam engine which also contributes power to the automobile – an overall 15 per cent improvement for the combined drive system. Even bigger news is that the drive has been designed so that it can be installed in existing model series – meaning that every model in the BMW range could become 15% more efficient overnight if the company chose to make the reduced consumption accessible to as many people as possible.

Combining the innovative assistance drive with a 1.8 litre BMW four-cylinder engine on the test rig reduced consumption by up to 15 percent and generated 10 kilowatts more power and 20 Nm more torque. This increased power and efficiency comes for, well, ... nothing. The energy is extracted exclusively from the heat in the exhaust gases and cooling water so it is essentially a quantum leap in efficiency.

The Turbosteamer is based on the same principle of the steam engine: liquid is heated to form steam in two circuits and this is used to power the engine. The primary energy supplier is the high-temperature circuit which uses exhaust heat from the internal combustion engine as an energy source via heat exchangers. More than 80 percent of the heat energy contained in the exhaust gases is recycled using this technology. The steam is then conducted directly into an expansion unit linked to the crankshaft of the internal combustion engine. Most of the remaining residual heat is absorbed by the cooling circuit of the engine, which acts as the second energy supply for the Turbosteamer.”

“The components for this drive have been designed so that they are capable of being installed in existing model series. ...The engine compartment of a four-cylinder model offers enough space to allow the expansion units to be accommodated. Ongoing development of the concept is focusing initially on making the components simpler and smaller. The long-term development goal is to have a system capable of volume production within ten years.

See also Wikipedia at: [http://en.wikipedia.org/wiki/Steam\\_car](http://en.wikipedia.org/wiki/Steam_car) for more reading.

## “It’s the Oil, Stupid”

from: <http://www.financialsense.com/editorials/engdahl/2007/0521.html>

No. “It’s the oil, stupid.”

Hereby hangs a tale of cynical dimension appropriate to a Washington Administration..What’s at stake in the battle for Darfur? Control over oil, lots and lots of oil. “

The case of Darfur, a forbidding piece of sun-parched real estate in the southern part of Sudan, illustrates the new Cold War over oil, where the dramatic rise in China’s oil demand to fuel its booming growth has led Beijing to embark on an aggressive policy of—ironically-- dollar diplomacy. With its more than \$1.3 trillion in mainly US dollar reserves at the Peoples’ National Bank of China, Beijing is engaging in active petroleum geopolitics.

Africa is a major focus, and in Africa, the central region between Sudan and Chad is priority. This is defining a major new front in a new Cold War between Washington and Beijing over control of major oil sources. So far Beijing has played its cards a bit more cleverly than Washington.

In recent months, Beijing has embarked on a series of initiatives designed to secure long-term raw materials sources from one of the planet’s most endowed regions—the African subcontinent. No raw material has higher priority in Beijing at present than the securing of long term oil sources.

Today China draws an estimated 30% of its crude oil from Africa. That explains an extraordinary series of diplomatic initiatives which have left Washington furious. China is using no-strings-attached dollar credits to gain access to Africa's vast raw material wealth, leaving Washington's typical control game via the World Bank and IMF out in the cold. Who needs the painful medicine of the IMF when China gives easy terms and builds roads and schools to boot?

**In April 2005 Sudan's government announced it had found oil in South Darfur which is estimated to be able when developed to pump 500,000 barrels/day. The world press forgot to report that vital fact in discussing the Darfur conflict.**

If the US Government is able to get a popular acceptance of the charge genocide, it opens the possibility for drastic **"regime change"** intervention by NATO and de facto intervention by Washington into Sudan's sovereign affairs.

The genocide theme is being used, with full-scale Hollywood backing from the likes of pop stars like George Clooney, to orchestrate the case for a de facto NATO occupation of the region. So far the Sudan government has vehemently refused, not surprisingly.

The US Government repeatedly uses "genocide" to refer to Darfur. It is the only government to do so. US Assistant Secretary of State Ellen Sauerbrey, head of the Bureau of Population, Refugees and Migration, said during a USINFO online interview last November 17, "The ongoing genocide in Darfur, Sudan — a 'gross violation' of human rights — is among the top international issues of concern to the United States." The Bush administration keeps insisting that genocide has been going on in Darfur since 2003, despite the fact that a five-man panel UN mission led by Italian Judge Antonio Cassese reported in 2004 that genocide had not been committed in Darfur, rather that grave human rights abuses were committed.

The United States, acting through surrogate allies in Chad and neighboring states has trained and armed the Sudan Peoples' Liberation Army, headed until his death in July 2005, by John Garang, trained at US Special Forces school at Fort Benning, Georgia.

By pouring arms into first southern Sudan in the eastern part and since discovery of oil in Darfur, to that region as well, Washington fuelled the

conflict that led to tens of thousands dying and several million driven to flee their homes. Eritrea hosts and supports the SPLA, the umbrella NDA opposition group, and the Eastern Front and Darfur rebels.

US development aid for all Sub-Sahara Africa including Chad, has been cut sharply in recent years while its military aid has risen. Oil and the scramble for strategic raw materials is the clear reason. The region of southern Sudan from the Upper Nile to the borders of Chad is rich in oil. Washington knew that long before the Sudanese government.

US oil majors have known about Sudan's oil wealth since the early 1970's. In 1979, Jafaar Nimeiry, Sudan head of state, broke with the Soviets and invited Chevron to develop oil in the Sudan. That was perhaps a fatal mistake. UN Ambassador George H.W. Bush had personally told Nimeiry of satellite photos indicating oil in Sudan. Nimeiry took the bait. Wars over oil have been the consequence even since.

Chevron found big oil reserves in southern Sudan. It spent \$1.2 billion finding and testing them. That oil triggered what is called Sudan's second civil war in 1983. Chevron was target of repeated attacks and killings and suspended the project in 1984. In 1992, it sold its Sudanese oil concessions. Then China began to develop the abandoned Chevron fields in 1999 with notable results.

Chad and Darfur are but part of the vast China effort to secure "oil at the source" across Africa. Oil is also the prime factor in US Africa policy today. George W. Bush's interest in Africa includes a new US base in Sao Tome/Principe, 124 miles off the Gulf of Guinea, from which it can control Gulf of Guinea oilfields from Angola in the south to Congo, Gabon, Equatorial Guinea, Cameroon and Nigeria. That just happens to be the very same areas where recent Chinese diplomatic and investment activity has focused.

"West Africa's oil has become of national strategic interest to us," stated US Assistant Secretary of State for Africa, Walter Kansteiner, back in 2002. Darfur and Chad are but an extension of the US Iraq policy "with other means"—control of oil everywhere. China is challenging that control "everywhere," especially in Africa. It amounts to a new undeclared Cold War over oil.

## Hamcom 2007 Report

In early June, about 8000 gather for the Dallas area “Hamcom” convention. A few county hunters show up each year for the gathering, and I’m always on the hunt for interesting treasures. In the flea market a few ‘oldies’ like Heathkit Single Bander SSB radios, and some early SSB transceivers, but I managed to resist picking up much more ‘stuff’ to keep in the house.

Alan, K8CW, left the antenna business, so getting hardware for antenna system construction is a bit more difficult. Barry and Alan supplied ½ inch thick wall mast, which could be tapped to take 3/8 x 24 hardware, the standard for mobile antennas. Alan is now ‘out of stock’ on everything, so even finding some of the common items is getting more difficult.

There are several sources of mast, including Hustler for the shorty 2 footers, and the standard 54 inch long one. DX Engineering sells several different lengths.

For top end hardware, some have made their own out of 1 inch hex aluminum stock. You can buy a commercial 3 way adapter (120 degree spacing) from Cedar City Sales ([www.cedarcitysales.com](http://www.cedarcitysales.com)) like the following, and other dealers may have them.



He was charging 10 bucks at the hamfest for it.

Several stock the inch long threaded short pieces to connect mast sections, or connect resonators to the multi-way. WB0W has 1 inch threaded stainless socket set screws, like Alan K8CW provided, and MFJ and others make short threaded adapters (with a tiny slot for a screwdriver).

WG6X reports that [www.texasbugcatcher.com](http://www.texasbugcatcher.com) can supply GLA stainless masts in any length you want. Jeffrey, AF3X, reports that [www.dxengineering.com](http://www.dxengineering.com) can supply several different length stainless masts. So if you need a new antenna system, you might check them out.

If you have an old mast with ends that don't work any more, you can cut the end off with a hacksaw, and tap the ends for a 3/8 x 24 thread. One local hardware store here carries the 3/8x24 taps (about \$5) and the 21/64ths size drill from which to tap the hole. That can help you 'save' some mast section (now a couple bucks a foot) for future use.

While at the hamfest, I ran across Stan, AC8W, who ran mobile on the way down and back on cw, and Bob KK5MI, who moved a year ago, took down the tower, and is now in a deed restricted area (no towers allowed). He is still on from the mobile occasionally, but commented he can only hear a few fixed stations, and never the mobile, so he doesn't turn it on often.



Bob KK5MI at Hamcom 2007

Another long time county hunter, but fairly inactive these days, Jerry, NN5B, previously WD5BEO was enjoying the 'fest.



NN5B- ex WD5BEO, Jerry

He's been fairly inactive – just not that much on the bands these days was his sentiment, plus he is keeping busy with other things.

## The World is Awash in Oil

Well, that is what CERA, Cambridge Energy Research Associates would have you believe. There some of the 'Cornucopeans'. Wish for oil and it will magically appear.

From [http://www.econbrowser.com/archives/2007/06/post\\_mortem\\_on.html](http://www.econbrowser.com/archives/2007/06/post_mortem_on.html)

“In the summer of 2005, Cambridge Energy Research Associates received a lot of publicity for their optimistic assessments of near-term oil supplies. Two years later, it's interesting to see how the details of those predictions have been borne out so far.

The foundation for CERA's optimism seemed to be quite concrete. Daniel Yergin stated the case this way in July of 2005:

There will be a large, unprecedented buildup of oil supply in the next few years. Between 2004 and 2010, capacity to produce oil (not actual production) could grow by 16 million barrels a day -- from 85 million barrels per day to 101 million barrels a day -- a 20 percent increase. Such growth over the next few years would relieve the current pressure on supply and demand.

Where will this growth come from? It is pretty evenly divided between non-OPEC and OPEC. The largest non-OPEC growth is projected for Canada, Kazakhstan, Brazil, Azerbaijan, Angola and Russia. In the OPEC countries, significant growth is expected to occur in Saudi Arabia, Nigeria, Algeria and Libya, among others. Our estimate for growth in Iraq is quite modest -- only 1 million barrels a day -- reflecting the high degree of uncertainty there. In the forecast, the United States remains almost level, with development in the deep-water areas of the Gulf of Mexico compensating for declines elsewhere.



While questions can be raised about specific countries, this forecast is not speculative. It is based on what is already unfolding. The oil industry is governed by a "law of long lead times." Much of the new capacity that will become available between now and 2010 is under development."

"CERA also at the time publicly released this graphic of the contribution by specific individual countries to the anticipated increase in global capacity, predicting that global oil production capacity would increase by 5.5 million barrels per day (mbd) between 2004 and 2006"

So how did their forecast turn out? They predicted significant rises in 11 countries, with a gain of 5.5 million bbl/day. What did we wind up with? Only 1.5m bbl/day increase!

"But CERA overestimated production by a significant margin in every one of these countries-- **missing 11 out of 11 can't be solely bad luck**. Nor in my opinion can it be attributed entirely to the principle, "things take longer than you think," though I have no doubt that's also a factor."

"But I think it is safe to conclude that in general, depletion of the oil from existing fields has been more significant than CERA had anticipated, which is one reason they systematically erred on the side of predicting more oil than we actually are seeing. Mature fields naturally and necessarily enter a period of declining production. That means that remarkable new oil fields, like the ones detailed in the first CERA table above, do not guarantee that annual production will increase. Big new discoveries every year are necessary just to keep annual production from declining."

"I can readily grant that if the world's remaining oil were located in peaceful, capitalist democracies, more could be produced. But the fact is, we have no choice but to be counting on oil that is vulnerable to disruption by hurricanes in the Gulf of Mexico, war in the Middle East, and chaos in Africa. And who knows how the games of Venezuela's Chavez and Russia's Putin will ultimately be played out? I am willing to assert with near certainty that somewhere in that group, there will be significant disruptions in oil production over the next five years. Actual oil production is virtually guaranteed to end up below any theoretically calculated capacity. Call these above-ground risks if you wish, but they are clearly going to be important factors determining the price and availability of crude petroleum over the foreseeable future.

Two years ago, Cambridge Energy Research Associates overstated the case for optimism about near-term oil supplies. But you already noticed that the last time you bought gas, didn't you?"

Next time you hear Daniel Yergin at CERA on TV, remember his track record. Up to bat 11 times, and 11 strike outs in 2 years. A pretty solid record of being DEAD WRONG.

## June Happenings

Not much mobile wise for N4CD in had happened in June. On day, Frosty, W0FP, called on the phone and casually mentioned he needed Navarro, TX for a last for Bingo. It's about 80 miles down the road, but right through the middle of the city of Dallas. I suggested Sunday might be the best time, after the big hamfest. I had to rebuild the antenna system after the last trip, so I temporarily used a two section mast sitting around. The weather was getting hot (mid 90s) and the humidity up there, but it was a good day to go out. Not bad getting through downtown Dallas to I-45 then, but even at 9am Sunday there is more than enough traffic to go around. It was summer, too...hot.

I ran Ellis, then into Navarro and Frosty got his last. Not too many more for him to finish up. Navarro was also one of about 12 in TX that I need to run for MP, so it worked out well when N9STL and WG6X (both with MG) showed up for a contact, giving me credit for the county. Since it was still early, I decided to run a few more counties on a different way home. About 240 miles roundtrip for a short 'county putting out' trip. Not much activity on 30M! Even tuning across the band there were only 1 or 2 signals at most! 20M had some DX in the morning, and was a good band for contacts. 40M SSB was "OK" and 40cw provided a half dozen or so contacts per county. They weren't especially 'rare' counties. Nothing to write home about.



Ellis/Navarro CL, Texas – LC for W0FP

N4CD/m On the access road

Possibly I'll get out on another trip later in June. Weather has been stormy with major floods just north of me, and 20 times the normal rainfall in June. We needed it, but some places got it all at once (10 inches in 4 hours). It's been a stormy season in the Midwest as well. Hopefully the weather will cooperate for the folks headed to Denver for the convention

## IEA expects oil prices to soar

Some analysts feel crude could top \$80 (U.S.) a barrel later this year

<http://www.theglobeandmail.com/servlet/story/LAC.20070613.ROIL13/TPStory/Business>

“World oil prices will rise sharply in the second half of 2007 unless OPEC increases production, the International Energy Agency said yesterday, as some analysts predicted that crude could top \$80 (U.S.) a barrel later this year. In a report, the IEA raised its forecast for crude demand this year by some 200,000 barrels a day, and lowered its expectation of non-OPEC supplies by 100,000.

However, officials from the Organization of Petroleum Exporting Countries have so far resisted frequent calls from the IEA - which represents 26

industrialized consuming countries - to open the taps to reduce pressure on prices. "We would very much hope that OPEC production is at its seasonal low at the moment," David Fyfe, analyst at the IEA, told Reuters news service. "We definitely do need more crude oil."

Despite a steep runup in prices, the agency forecast the global demand will increase by 2 per cent this year - or 1.7 million barrels a day - to 86.1 million. China is expected to lead the growth, with oil demand there rising by 6.1 per cent.

"Global markets on the global oil side have tightened up quite a bit," said Bart Melek, a commodities analyst with BMO Nesbitt Burns Inc. "I do think we're going to get \$70-plus crude as summer driving season peaks."

But he added that, unless OPEC increases production, the market will be undersupplied in the second half of the year.

"I think we could easily get to \$80, depending on the circumstances of course," he said, adding geopolitical tensions between the United States and Iran, or hurricanes in the Gulf of Mexico could spark price spikes.

"OPEC needs to ramp up production to meet the shortfall, and fast!," the analyst wrote in a report yesterday. Without a production increase, any minor supply disruption could cause prices to spike above \$80 a barrel in the second half of this year, he said.

In adjusting his forecast upwards, he cited strong global economic growth, improved discipline among OPEC members, lower-than-expected non-OPEC supply growth, and the apparent unwillingness or inability of consumers to reduce demand in the face of high prices.

Mr. Blanch also noted that inflated oil-field development costs are also driving crude prices. He estimated that the **new projects in Canadian oil sands now require a price of \$60 a barrel in order to achieve the double-digit rate of return commonly demanded by investors.**"

Hmmm....OPEC 'unwilling' ? or just plain not able? It's going to get interesting!

## Awards

Second Time #370, KM9X, Dan, 6/3/2007  
Sixth Time #29, NV4Z, Mary, 6/4/2007  
Bingo #291, K8QWY, ED, 6/9/2007  
Second Time #371, N4SMH, Roger, 6/12/2007  
Bingo #292, W0FP, Frosty, 6/20/2007  
Fifth Time #82, WV1Y, Ken, 6/20/2007

## Operating Events in July

Slim pickings – but right during the weekend of the National Convention – should be a few mobiles on the road to catch up with!

**Colorado QSO Party** -- Phone/CW/Digital, sponsored by the Pikes Peak Radio Amateur Association from 1200Z Jul 15-0400Z Jul 16. Frequencies (MHz): CW -- 1.850, 3.550, 7.050, 14.050, 21.050 and 28.050 MHz; Phone -- 1.870, 3.850, 7.250, 14.250, 21.350 and 28.450 MHz; RTTY -- 3.575, 7.090, 14.090, 21.090 and 28.065 MHz; PSK -- 1.8073, 3.583, 7.073, 14.073, 21.073 and 28.123 MHz; VHF/UHF -- per band plan. Categories: SO, MS, MM, Mobile (SO, SO+Driver, MO), School; HP/LP/QRP and CW/Phone/Digital/Mixed each category. Exchange: RST and CO county or S/P/C. QSO points: CW and digital -- 2 points, Phone -- 1 point. Work stations once per mode per band, mobiles may be worked again as they change counties. Score: QSO points × CO counties (CO stations add S/P/C) × power multiplier. For more information: [www.ppraa.org/coqp](http://www.ppraa.org/coqp)

That's it for this month!

