

County Hunter News

February 1, 2011
Volume 7, 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 provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

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

CW County Hunter Nets run on 14.0565, 10.122.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, with low sunspot activity, most of the SSB activity now is on 'friendly net' 7188/7185 KHz. The cw folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18135 or 18.132.5 for occasional 17M SSB runs.

You can see live spots of county hunter activity at ch.W6RK.com

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

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

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

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at: http://countyhunter.com/marac_information_package.htm

The CW net procedure is written up at:

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

There is a lot more information at www.countyhunter.com . Back issues of the County Hunter News are available at www.CHNewsonline.com

De N4CD (email: telegraphy@verizon.net)

Notes from the Editor

December was a good month for snagging some counties, but with winter weather moving in, the mobile trips and activities was down a bit from the feast during the summer months. There were opportunities for band counties with the CW DX Contest at the end of November (HI and AK counties to start), and the 160M and 10M ARRL contests.

Things slowed down quite a bit as SNOW and ICE and bad weather hit much of the US. Temps up north hit 45 below in MN, and 50 below in northern Maine, and many areas had sub zero wind chill for weeks. Dallas had a few inches of snow, Atlanta got socked in by ice, and the second major storm hit the east coast.

Then more snow fell. Temps continued in the single digits through much of the northern US. Then there were repeat snow storms back east, and lots of rain events as well. The west coast was socked time and time again by weather fronts, flooding, snowed in mountain passes, etc. No joy out there for mobiles.

Sunspots once again dropped off and the flux was down to 80 for a while. This cycle is having a real hard time getting going!

1) CW Status - The annual CW status report from KA3MMM is included at the end of this issue of the County Hunter News. Only about half the active cw folks reported their current status.

2) Mobile Diamond LC's - Bob KC6AWX has updated the awards section to include last counties for Mobile Diamond Award.

3) Mobile Activity in late Dec/January

Sandy, WB4EVH, was putting them out in GA on SSB. He's planning on running in the GA QSO Party in April with a 1x1 call, and will be on cw for it , too.

Matt, W0NAC, and Sharon, N0LXJ, took a nice trip around in KS running them on SSB and PSK-31

K2ZR headed from up north to down south to FL running them on 20cw.

Jack, WD4OIN, was out in SC running them on SSB.

Dennis, N6PDB and Susan, WA6OCV, headed out from home and ran in CA and NV then up to OR and WA. They went to San Juan, WA with WQ7A, then headed back to CA the county hunter way.

Ron, KB6UF, completed running LA again this year. Then he was off to FL on a trip. Later he made a day trip to MS to put out the southern counties there. Then more MS trips.

K0PY, Mike, was active in KS on CW.

Ton, K8YJ, spotted from WV down to GA.

N7LFX was out mobile in OR.

Jim, N9JF was off on various trips running in MO, IA, NJ, VA, NC, SC, SD, GA, and everywhere in between.

Jim, K0ARS was on giving out counties on his trips. He is usually on one band at a time.

Cliff, K6JN, and Nelda, W6XJN, headed back from CA to FL giving out counties the entire way. They headed a bit south to avoid the snows in AZ and NM.

Greg, NM2L, made a nice trip in GA.

KJ8V and KJ8W were spotted mobile in OH.

Seth, N3MRA ran many on 20M SSB.

Gene, K5GE, made a few trips around in TX putting out the MD counties.

Jack, N7ID, put out a few counties in ID. He's good for just about every award – stars, MG, MP, MD, Bingo, etc.

AK and HI counties were on during the CW North American QSO Party in early January.

15M was open, but not much happening on 10M. There was lots of activity in the SSB North American QSO Party on a following weekend.

Silver, N9QS, headed out from IL on a trip to FL for some sun and fun. Ran counties down and back.

Larry, N2OCW, put out a few in WV during January.

Scottie, N4AAT, was off running counties a few days. He was over in GA, and various places in SC. Then he headed up to NC and ran there.

Fred, K0FG headed west – along the interstate in CO, UT, AZ. Ran on cw and SSB. It's tough on 40M SSB from that far west.

Gene, WB4KZW was out and about.

On SSB , AA0TT and N3MRA spotted in many states on 20M SSB.

Bill, KM1C, spotted out and about in NC – new installation in mobile all set to go now.

Don, K3IMC, spotted on the Hawaiian islands. Bob, N8KIE went with him to Kalawao. Don showed up on the other islands. Conditions were not great but Don made contacts from all the islands.

K2RP, Ron, was spotted out mobile in a few counties.

Lowell, KB0BA, and Sandra, N0XYL, were running lots of counties in IA.

Terry, WQ7A, ran a few in WA.

Jack N7ID was out and about in ID.

Kerry, W4SIG, was out in TN putting them out.

We, NX4C, was out in TN as well.

Dave, KE3VV took the auto-train to FL and was out running counties there.

WD0T ran in SD.

4) Hawaii

Wow...it's a feast for Hawaii. First K3IMC goes and runs the HI islands. N8KIE went along

to Kalawao. Next month AA9JJ and N9QPQ are headed there, and later AF3X is going to run all of the islands. It looks like 17M worked well from there for them too.

Bob N8KIE sent in a brief report of their expedition to Molokai, the island that contains Kalawao County:

“Don K3IMC went to Molokai to run the county line of Kalawao/Maui.. We had a 8am flight on what turned out to be a Cessna Caravan. That is a single engine turboprop designed to haul freight. In passenger mode it seats 9. After an uneventful 30 minute flight we got our rental car, a Dodge Caravan, from Alamo and headed the 9 miles to the lookout parking lot.

We set up the Icom 7000, a Comet hatchback edge antenna mount and the 20m hamstick. We also had an Outbacker for the other bands. Don got about 140 contacts with 90 of them also working me. I worked 8 of the other 11 Master Platinum holders for Mobile Diamond and got my required 3 contacts on 20 and 17. We ran twice with a lunch break at the Subway in Kaunakakai. Don really needed the break after over 2 hours of almost constant contacts.

We were back in Honolulu a little after 5 pm. 20m was about 50/50 ssb/cw and 17 was mostly cw.

Frank, AA9JJ and Kay, N9QPQ will be here Feb. 5 and I will run all the counties with them. Don't feel like you need to work me as I am just the tour director looking for MP holders. I will gladly work whoever calls but working me just slows down the process. All last counties go the Don, Frank and Kay.

73 Bob N8KIE”

—:— —:—

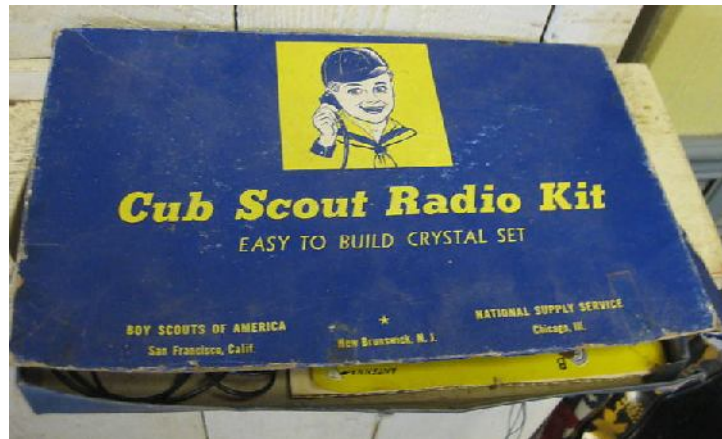
Note de N4CD – AA9JJ and N9QPQ have run all counties in the 'lower 48'. This will complete number 49, leaving only AK.

Terry, WQ7A, picked up Don and did most of the relays on 20M SSB with help from KC6AWX. Darrel, W6TMD and Jerry, W0GXQ pitched in on CW.

Boy Scout/Cub Scout Radios

Way back in the days (do Scouts build radios any longer? – probably not – likely some other project), one of the fun projects for many scouts was building a radio, either out of one of the scout handbooks, or from a kit offered specifically for scouts. Many kids were in the scouts for four or six or more years.

There were dozens of Scout Radios of various vintages, with lots of 'crystal radios'. Here's just one of the many seen on Ebay



Cub Scout Crystal Radio Kit

These were ultra simple radios – with a slide tuner on a coil – one end of the coil connected to antenna, one end to ground, with a galena crystal and catwhisker. Another very common one that kids from the 40s, 50s, and maybe even 60s will remember is the Philmore crystal sets.



Philmore Crystal Radio

For those born after, say, 1958, notice the little mechanism in the back of the picture above.

You had an adjustable 'cat whisker' which you diddle with until you found a 'hot spot' on the galena crystal usually held inside a small lead holder like shown above. That gave you your non-linear semi-conductor device that rectified the AM envelope and would drive a small earphone when you had a good antenna and ground connected to the set. Tuning was via a slide tuner on the coil. You were 'resonating' the antenna system. Selectivity – not very good. If you had more than one loud local station, you would usually hear a combination of both signals together no matter what you did.

If you hunt back through Boy's Life, you'll find a few other radios for the Scouts. In December 1953, they ran an article on “The Explorer Radio”. It used a two tube configuration – Pentode regen detector such as a 1T4, with 3V4 audio output tube. I think this was the “Explorer” Radio shown in the October 2010 issue of the CHNews – didn't know what it was at the time. It sold for over \$100 on Ebay!

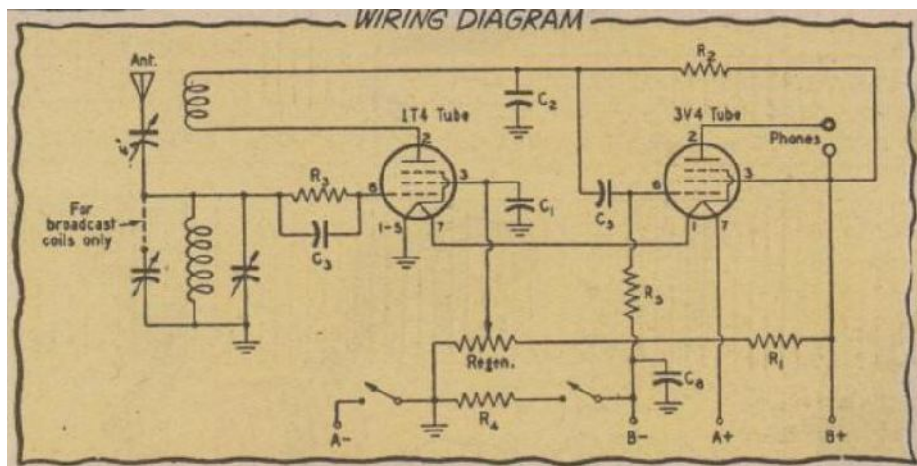


Radio Receiver Kit

Easily assembled is this **Radio Kit**. Antenna, earphones, receiver, but no batteries.

\$13.95 at your local Scout distributor or \$13.95 postpaid from National Supply Service, BSA, 521 W. 57th St., New York, N. Y.

Here's the schematic for the tube types out there



It's about as simple as you can get for 2 tubes. This had a plug in coil so you could cover both the AM bands and shortwave bands. It came with the plugs that went into readily available 4.5v and 45v/67.5v batteries.

We've shown the Air Champ 100 (October 2010 issue) – a one tuber for the broadcast band. Here's a site specifically about a fellow who got his hands on the instruction manual and recreated his 'first' radio using the same era parts.



Air Champ AC-100 Recreation

Visit the web site at: <http://www.qsl.net/k5bcq/REGEN/regen.html> for more pics and his story.

Here's an Air Champ Ad I found in Google Books – Boys Life December 1954! (Isn't the net great!). You could start with with a crystal radio, then a 1 tuber, then a 2 tuber.

BUILD YOUR OWN WORKING RADIO RECEIVER!

***Easy Screw-Driver Assembly!
No Soldering! No Electricity!***

The pleasant 'fun' way to learn what makes radio 'tick!' Learn as you assemble. Learn part identification and their function in converting air-waves to audible reception! Screwdriver is **ONLY** tool required. All tedious work eliminated! Super-detailed diagrams, schematics & instructions to speed the project. It's a great thrill to tune-in on a receiver YOU made workable.



\$11.95
Less Bats.

2 TUBE RADIO KIT

Compact-size 'power-house' for standard broadcast-band local or distant signals! This complete, 'screwdriver assembly' kit includes a 4" Alnico P.M. Speaker. Sturdy, fibreboard carton converts into practical, portable cabinet! Tubes, wire, everything is in the kit—ready to assemble! (Scout Catalog No. 1805) AIR CHAMP MFG. CO., INC., N. Y. 56, N. Y.



\$7.25
Less Bats.

1 TUBE RADIO KIT

High-efficiency, modern standard broadcast-band circuit! Receives local and distant signals. Dry-cell battery operated. Complete kit contains: Earphone, tube, wire. Fibreboard carton makes attractive, portable cabinet.

(Scout Catalog No. 1804)

When ordering AIR CHAMP Radio Kits by mail, be sure to include catalog No.

CRYSTAL KIT

An ideal 'beginner-project' is a crystal receiver! Kit contains tuning coil, crystal, earphone, wire and step-by-step instructions. (Scout Catalog No. 1894)



\$2.95

AIR CHAMP Radio Kits featured at
SCOUT TRADING POSTS

Should you get a hankering to build one of these, you can buy a clone of the AC-100 in kit form for \$65 from

<http://peeblesoriginals.com/catalog/images/po-ac100-big.jpg>

That price has likely just kept up with inflation! Hi hi

Another Boy Scout Radio showed up on Ebay. (Sold for \$56) Here's the pic



“...this Aurora one-tube "Official Scout Radio - Model 1804" radio. The radio was offered in the late 1950s.. It's a very simple regenerative circuit, built around the 3A5 double-triode tube. The radio is powered by a 22 1/2 volt "B" battery and a 1 1/2 volt "D" cell. (Aurora was a plastics maker and sold over 200 kits – mostly model airplanes, cars, military vehicles which you assembled with Duco plastic cement, then put decals on and painted.)

The faceplate of this radio is blond in color and has two controls on it, the volume/power control and the tuning control. There are jacks for the headphone, ground, and antenna. The case of the radio is grey in color.”

You can see an ad for it in Google Books – an ad in Boys Life Magazine February 1958. Shown below....

There was also a model 1805 two tube version available, too! I'd love to get my hands on one of those!



In 1959, Aurora started offering a 2 transistor radio kits in addition to the tube ones. They had major spreads of several pages in each issue.

There were also two tube versions of the Air Champ AC-100– the AC-200 similar to above and others of unknown vintage offered that have sold on Ebay in the past few years. I don't know what years the Air Champs were offered.

Here's a two tuber

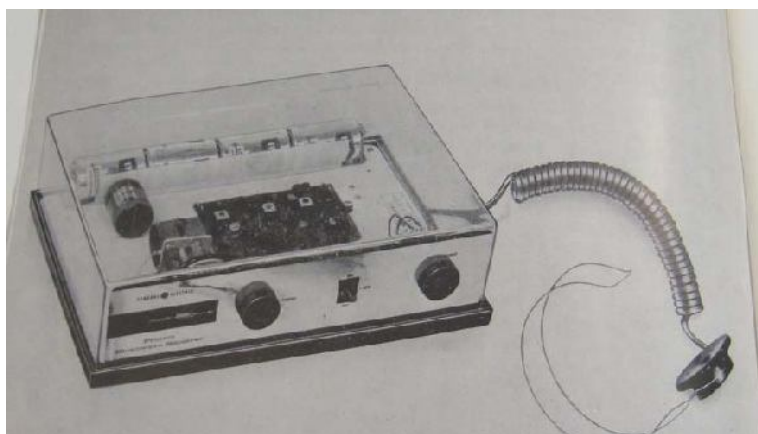


Air Champ 'Official Boy Scout' AC-200 Kit
Sold on Ebay in the past few years

Air Champ was located in New York City area, and sold crystal radios and 1 and 2 tube kits to the youth market back in the 50s and 60s. (Likely offered in the Sears catalog in the Boy Scout section, too). Then came transistors and I think they quickly faded away. Aurora did the same. Maybe one company bought out the other? Dunno! Or the Knight Kits and HeathKits took over.

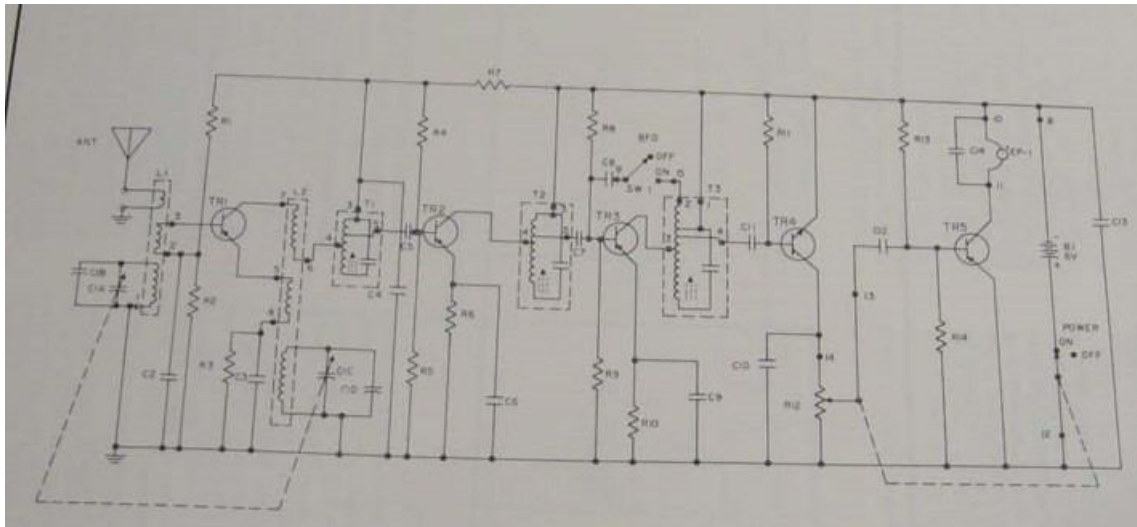
Back in the early 1950s, Hallicrafters sponsored a 'short wave listening' contest, giving away a dozen mid to high end receivers to the 'winners'. You had to be a member of the Boys' Life Radio Club (membership was free). Those were the days. (Well, they were before my time by about 5 years before I discovered electronics and radios).

Did you know that General Electric offered kit radios? As part of their Educational Series, they had a line of kits. Number 5 was a solid state 'shortwave radio'. (1970s?)



GE Educational Kit 150 Shortwave Radio Kit

Here's the schematic. Most hams should recognize simple five transistor superhet – you had to use headphones as it didn't have enough gain to drive a speaker. It showed up on Ebay. You assemble it and it has a nice plastic cover 12x9x5 inches so you can display the insides. Sold for over \$120!



Reader Feedback

From W4YDY

Bob,

Enjoyed your newsletter as usual. Page 24 was especially interesting because my First Cousin, Lemmie, W4QI, had the Breting 12 receiver in the 1930's. I think it was shortly after WWII that he replaced it with a National NC-240D. I enjoyed the 240D when I went to stay a few days at a time with him in the 50s. We lived about 150 miles apart.

When I was 4 years old, I saw my first ham station at his house in 1939. You can see pictures of his station on my web site at <http://pages.suddenlink.net/w4ydy/w4qi.html> and it shows his Breting 12 receiver. I must have decided then that I wanted to get a ham station because I never forgot going to his shack. Thirteen years later it happened and W4YDY was assigned!



Lemmie, W4QI Station – 1930s

73,
Dave, W4YDY

On the Road with N4CD I

I had the urge to put out counties. The weather had been up near 70 degrees for two days with strong south winds. Unfortunately all that nice warm air off the Gulf of Mexico also brought some severe storms right at the end of the year. Ron, KB6UF, had to move up his run in LA to avoid potential bad weather, and as I enjoyed the nice weather in Dallas, the storms formed to the east/northeast. I wanted to make a 3 day weekend out of New Years weekend, but Friday was likely to not be good weather wise.

That turned out to be true as that Friday major record setting outbreaks of tornadoes hit AR and MO, and there were heavy rains and storms in east Texas and into LA. So it was reduced to a two day trip down along the east side of TX. So many counties, so little time. More folks are around on weekends and holidays so that's the best time to run them if you can.

On Saturday at oh-dark hundred (6am leaving the driveway) I headed out to get to the first counties after 8am local – 1200Z about 110 miles away. Alan, VK4AAR was around along with a few east coast stations that early in the morning. My route was out I-20 to Smith,

Gregg, then down through Rusk and the counties along the east side of TX. The weather was dreary winter - very overcast – gray – no sun for the first half of the day. There wasn't much of a sunrise to write home about, either. It just got less dark slowly but no sun. The good news is that the bad weather had all moved far east.

Everything went well, and there were some MP holders around to give me credit for the Mobile Diamond Award. TX has a million acres of woods, and they are all in east TX. It was down through the Big Thicket and Piney Woods down close to I-10. I got as far as Hardin and Liberty, then headed west. There isn't much reason to head to San Augustine, Sabine, Newton and Jasper, TX, no less Hardin and Liberty. They are down in swampy humid rural Texas. (They do have some nice recreational lakes and fishing!)

Near sundown I found myself in Polk County and found a Super 8 Motel in Livingston. No bargain there but the other motels were Best Western and Holiday Inn Express – even higher. I pulled in a bit before sundown. The 3 motels listed in my GPS database didn't exist any longer. The Super 8 and others were 'too new' for it. Oh well – I wish Garmin would update that, but apparently they don't. It is now about 7 years out of date. Temps were near 60 degrees-pleasant but the cold front was approaching.

It was New Years Day, and the two restaurants in town– the Italian one and the Cajun Seafood place were closed for the holiday. That left the Chinese Buffet – they are typically open every day during the year. It was good. Oh, you also had all the fast food places open – McDonalds, Burger King, DQ, Taco Bell, Sonic so you wouldn't starve no matter what. It was going to be a chilly night down in the 30s.

The Super 8 had waffles for breakfast so I enjoyed one, a cup of OJ, bowl of Raisin Bran, and two cups of coffee before heading out early to get up to Trinity by 8am (1200Z). There was a nice sunrise on the way up to the county line, and nice clear skies. It would get up to the mid 50s.

Made it up there, but power lines are really a hassle in this part of TX. Lots of humidity and not great insulators and maintenance on them, so you get tremendous QRN. I had to move off the county line for SSB – just too high. That QRN was a problem all day. When you find a 'less noisy spot' you pull over and run on SSB. It was over through San Jacinto, through Walker to Grimes, Waller, Washington, Brazos, Burleson, Madison, and Leon.

Things went well- there were lots of folks around. It was quiet on CW between runs with not many mobiles out running, and on 40M SSB, K6JN/W6XJN were in MS, then into AL and finally reaching FL by Sunday afternoon. On 20M SSB and cw, Greg, KG5RJ was out running a few in TX, and Dennis N6PDB, Susan, WA6OCV, and Terry, WQ7A, headed over to San Juan, WA and put that rare one out. After, they headed different ways and ran a few more. Seth, N3MRA, ran some on 20M SSB but never heard him myself. A YL in Texas was running him on the net.

I wound up finally hitting I-45 and zipped on up the road. The speed limit is 70, the slow lane moves at 78-80, and the folks in the fast lane go a lot faster. For about 150 miles, it seems no one cares how fast you go. (It's 250 miles from Houston to Dallas with not a whole lot in between!). Every now and then the fast lane slows a bit, and the idiot Texas drivers will sit 20 feet apart going 80 mph waiting to go 85 or 90 in the fast lane. It doesn't take much when you have 20-30 cars sitting no more than a car length apart to have a major 30-50 car road wreck in 5 seconds. I usually stay in the slow lane and stay far enough behind the car in front. That nonsense goes on till Ellis County when the speed limit drops to 65, and there must be some police around giving out some tickets. (traffic still moves at 70-75 mph there). Not much later you are into Dallas and 8 lane roads with all sorts of traffic but idiots will still be trying to do 75 mph there despite 60 mph limit. When traffic is light, you can make a lot of miles quickly. When some idiots collide, it can take hours to go anywhere.

I made it home safely, unloaded the car, then headed over to Cici's Pizza (Sunday Night) to celebrate another successful county putting out trip. There weren't too many posted needs for TX – so likely filled in a few for some, whacked off a few needs here and there, and added 23 new MD transmits to the log putting 1000 miles on the car in two days. It gets harder and harder to keep adding them since everything close in is already run. Time for some big road trips away from the home area!

So that is how I started out the New Year – with a county putting out trip. Hope I hit a few you needed.

Making your Own Diodes

If you want to try your hand at making your own diode, Allan Charlton, of Sydney, Australia, says:

"When I was a kid in a small town in Tasmania, Australia, our school was at the base of a hill, and the local radio transmitter was on top of the hill. We had lots of fun with crystal radios.

This is how we made our diodes:

Take a small length of glass or plastic tubing--an inch of the case of a plastic pen works well. Close one end with wax, sealing a wire through the wax. Pour a little copper oxide into the tube: enough to cover the end of the wire. Fill the rest of the tube with copper filings or turnings. Poke a wire into the copper filings or turnings (but don't let it go down to the oxide)

and seal the end of the tube with wax.

Can't find copper oxide? Throw some copper wire into a fire. When it's cool, scrape the oxide off the wire. Yes, there are two oxides of copper, a red oxide and a black oxide, and they both work well. We preferred the red, but I have no idea why."

France's Solar Bubble Pops

Everybody knows about Spain's solar bubble, but did you know France had one too?

Two years ago, the National Assembly adopted one of those solar "feed-in tariffs" — a cute misnomer for a mandate that forces utilities to buy expensive renewable electricity at ridiculously high prices. Flush with visions for the solar future, the legislature set the price at 546 euros per megawatt-hour, almost ten times the market price of 55 euros that customers pay for electricity from other sources. Electricite de France (EDF), the national utility, was obligated to buy from all comers, covering the costs with a special levy on other customers.

The result was an avalanche of expensive rooftop projects. Whereas EDF had received only 7,100 applications a year for such connections before 2008, by last December it was fielding 3,000 per day. "We didn't see it coming," French lawmaker Francois-Michel Gonnog told Bloomberg News. "What is in the pipeline this year is unimaginable. Farmers were being told they could put panels on hangars and get rid of their cows."

Now costing 1 billion euros per year, the program does not expire until 2017 and has put the utility in trouble. The utility is now 57 billion euros in debt. Plans to upgrade its aging fleet of 53 nuclear reactors — which provide 75 percent of France's electricity — have been thrown into doubt. The utility has been forced to raise the renewables levy on other customers from 4.50 euros to 7.50 euros per megawatt-hour, but financial analysts say they will have to pay up to 12.90 euros — almost 25 percent above the market price — for EDF to break even.

Unlike Spain, which entertained hopes of becoming a world leader in solar manufacturing, France seems to have created its bubble out of sheer delusions over the "renewable future." "Most panels installed in France were made in China with a highly questionable carbon footprint," Environment Minister Nathalie Kosciusko-Morizet told parliament last month. "Policies should create jobs in France, not subsidize Chinese industry."

They should also recognize that running the world on solar energy is a disastrously expensive fantasy."

Source: <http://www.nationalreview.com/planet-gore/257549/france-s-solar-bubble-pops-carl-shockley>

- - - - -

Not to worry here – Obama is already calling for more than the 60 billion a year we throw down the renewable rat hole, mostly for ethanol. Remember he promised to 'skyrocket' your utility bills, and this is one way the Greenies will do it demanding high tariffs be paid for sky high priced solar (with panels made in China, of course). They'll be forcing you to buy uneconomic solar from those out to make a fast buck by draining the tax payer and utility consumer.

Brain Test

If you can read this, you have a strange mind too

Can you read this? Only 55 people out of 100 can.

I cdnuolt blveiee that I cluod aulacly uesdnatnrd what I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdnig to a rscheearch at Cmabrigde Uinervtisy, it dseno't mtaetr in what oerdr the ltteres in a word are, the olny iproamtnt tihng is that the frsit and last ltteer be in the rghit pclae. The rset can be a taotl mses and you can still raed it whotuit a pboerlm. This is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the word as a wlohe. Azanmig huh? Yaeh and I awlyas tghuhot slpeling was ipmorantt! If you can raed this forwrad it

Now for the Bad News

From NASA dateline 1/3/2011

Current prediction for the next sunspot cycle maximum gives a smoothed sunspot number maximum of about 59 in June/July of 2013. We are currently two years into Cycle 24 and the predicted size continues to fall.

Predicting the behavior of a sunspot cycle is fairly reliable once the cycle is well underway (about 3 years after the minimum in sunspot number occurs. Prior to that time the predictions are less reliable but nonetheless equally as important. Planning for satellite orbits and space

missions often require knowledge of solar activity levels years in advance.

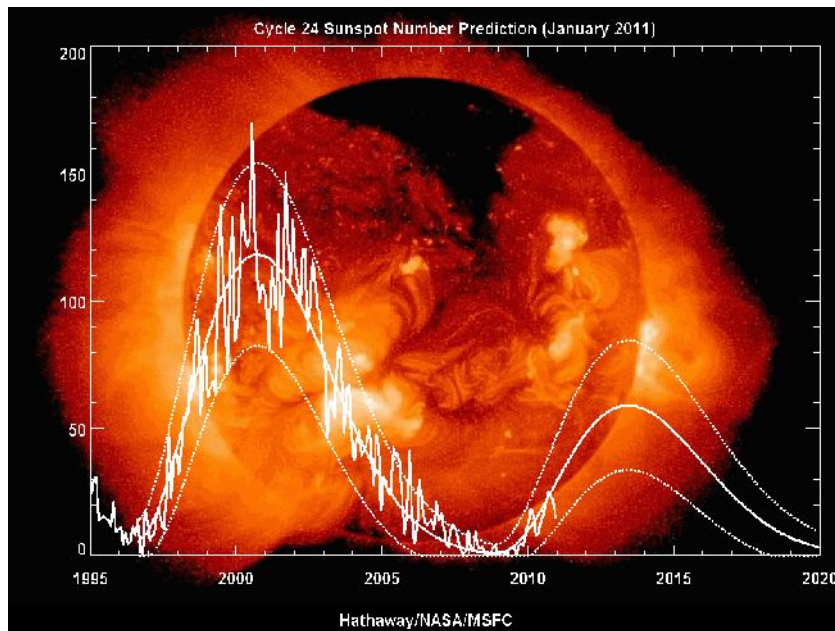
A number of techniques are used to predict the amplitude of a cycle during the time near and before sunspot minimum. Relationships have been found between the size of the next cycle maximum and the length of the previous cycle, the level of activity at sunspot minimum, and the size of the previous cycle.

Among the most reliable techniques are those that use the measurements of changes in the Earth's magnetic field at, and before, sunspot minimum. These changes in the Earth's magnetic field are known to be caused by solar storms but the precise connections between them and future solar activity levels is still uncertain.

Of these "geomagnetic precursor" techniques three stand out. The earliest is from Ohl and Ohl [*Solar-Terrestrial Predictions Proceedings*, Vol. II. 258 (1979)] They found that the value of the geomagnetic *aa* index at its minimum was related to the sunspot number during the ensuing maximum. The primary disadvantage of this technique is that the minimum in the geomagnetic *aa* index often occurs slightly after sunspot minimum so the prediction isn't available until the sunspot cycle has started.

An alternative method is due to a process suggested by Joan Feynman. She separates the geomagnetic *aa* index into two components: one in phase with and proportional to the sunspot number, the other component is then the remaining signal. This remaining signal has, in the past, given good estimates of the sunspot numbers several years in advance. The maximum in this signal occurs near sunspot minimum and is proportional to the sunspot number during the following maximum. This method does allow for a prediction of the next sunspot maximum at the time of sunspot minimum.

A third method is due to Richard Thompson [*Solar Physics* **148**, 383 (1993)]. He found a relationship between the number of days during a sunspot cycle in which the geomagnetic field was "disturbed" and the amplitude of the next sunspot maximum. His method has the advantage of giving a prediction for the size of the next sunspot maximum well before sunspot minimum.



We have suggested using the average of the predictions given by the Feynman-based method and by Thompson's method. However, both of these methods were impacted by the "Halloween Events" of October/November 2003 which were not reflected in the sunspot numbers. Both methods give larger than average amplitude to Cycle 24 while its delayed start and low minimum strongly suggest a much smaller cycle.

The smoothed *aa* index reached its minimum (a record low) of 8.4 in September of 2009. Using Ohl's method now indicates a maximum sunspot number of 70 ± 18 for cycle 24. We then use the shape of the sunspot cycle as described by Hathaway, Wilson, and Reichmann and determine a starting time for the cycle by fitting the data to produce a prediction of the monthly sunspot numbers through the next cycle. **We find a starting time of May 2008 with minimum occurring in December 2008 and maximum of about 59 in June/July of 2013.**

As the cycle progresses, the prediction process switches over to giving more weight to the fitting of the monthly values to the cycle shape function. At this phase of cycle 24 we now give 40% weight to the curve-fitting technique of Hathaway, Wilson, and Reichmann. That technique currently gives highly uncertain (but smaller) values.

Note: These predictions are for "smoothed" International Sunspot Numbers. The smoothing is usually over time periods of about a year or more so both the daily and the monthly values for

the International Sunspot Number should fluctuate about our predicted numbers. The dotted lines on the prediction plots indicate the expected range of the monthly sunspot numbers. **Also note that the "Boulder" numbers reported daily at www.spaceweather.com are typically about 35% higher than the International sunspot number.**

Source: <http://solarscience.msfc.nasa.gov/predict.shtml>

- - - - -

de N4CD

The latest prediction – well, you can forget about giant openings on 6M and likely 10 and 12M are not going to get going at all. It's going to be a real disappointment. Even worse, if the trend continues, the next cycle might be horrifying low.

Back in the 1600s, the sun went 110 years with almost no sunspots (the Maunder Minimum). Some predict we could repeat that. During that interval, Europe suffered the 'Little Ice Age' (which Al Gore conveniently forgets about during his global warming presentations) where the average temperature dropped, the canals froze over, and massive suffering occurred with extreme winters for decades.

On the Road with N4CD II

The weather had not been great for a while, and I was a bit bored with staying home. . It's the season in TX for a cold snap, then back to the 50s, then another cold snap and dreary weather. It's better than the snow back east and the sub zero temps up north, but it still gets old in the winter. Occasionally we'll also have 60s and 70s for a few days.

Not many mobiles were out running so there wasn't much to chase. The days were short but sunset was now 20 minutes later than in December. It was still the middle of winter. A few folks had posted needs, but not many were listed on K3IMC Special Needs site for TX. As is often the case, folks wind up needing 30 or 50 or 120 and don't post them. Otherwise, they need things in ID, AK, and other northern places where few mobiles venture in the months of winter. In September, all but 4 of the 254 TX counties were on the air for the Texas QSO Party, and that filled in lots of needs!

There was a hamfest coming up in Fort Worth, TX about an hour through the maze of 6 and 8

lane highways to the west (at non rush hour times) . I decided to check it out Friday afternoon when it opened – and had to take the radio along since K3IMC was scheduled to be in Kalawao with N8KIE in the afternoon about the time the hamfest started, with the ONLY day of operation there on Friday.

I heard the commotion start on 20M SSB as K3IMC, a 'club station call', and N8KIE showed up from the county line of Kalawao/Maui an hour early. I was sitting at the end of a road with a great shot west and fairly low noise in Ft Worth – not easy to do. In the mobile the signal was 30% copy but it was hard to tell who they came back to – but the reports were usually copyable with the multiple repetitions. The first run went on for at least 30 minutes with what seemed like 40 or 50 'two two's' relays.

On 20M SSB, traditionally expeditions from rare places like Nantucket, MA, San Juan WA, the Hawaiian islands – go on until there is no longer anyone wanting to work them. A break is taken every 10-15 minutes to see if other mobiles need to be moved. Then it goes on till no one is left calling.

Terry, WQ7A picked them up and did relays. It was an 'unfriendly net' so I didn't plan on a relay. Scottie was only hearing them 33, too, back east. I'd wait for cw. Didn't need them for anything else other than Mobile Diamond. The cw run went on for a long time too. Good copy on cw. Darrel, W6TMD, did the cw relays.

It looked like they also had a good run on 17m and some on 15m as well, but I didn't have time to wait to see. I headed in to the Hamfest that started at 3pm.

There wasn't a whole lot at the hamfest – it's a small one with maybe 100 tables. I found a 1937 ARRL Handbook and added it to the 'old technology' shelf. My friend had brought two small goodies I was hunting for, so that was good. The hamfest is also on Saturday with more folks, but a lot of the good stuff is sold on Friday, so you need to be there to snag them. I did find one unusual thing for a hamfest – a brand new N4UJK Magellan County Hunting Map Book – for a buck! Wow. There was also a Ten-Ten County Hunting book in there too for 50c, so I bought it. It had maybe 40 or 50 entries in pencil. I'd never seen one of those either. No great finds on Friday.

On Saturday I headed over to the hamfest early before 8am, and was done checking out the few new things added. There was an outdoor flea market, but since it was drizzling, only 2 people were out there under canopies. By 9 am, I had seen it all twice again and discovered no new bargains or things I had to have, so I took off west for west Texas. The weather was overcast, in the 40s, and nothing to write home about. Occasionally I had to use the wipers. My route was out I-20. You can run pairs of counties with short detours going west for the next 300 miles, and that's what I did.

Once you leave Ft. Worth you are soon out in 'west Texas'. You can see miles in any direction

and the horizon in 360 degrees. There is a scarcity of trees in most of west TX. The one thing you see a lot of is barb wire fences – thousands of miles of them.

This was the weekend for the SSB North American QSO Party that would start at 1800Z (noon TX time local), so I had to make tracks while I could. I expected the QRM to move in about that time on SSB. It was two by two going west – Eastland/Stephens, Shackelford/Callahan, Jones/Fisher, etc. Usually I take a few 'percy pics' and I snapped a few of the county lines when I stopped at them, or for last counties. It took about 40-50 minutes to get to the next pair once you were finished running, on average. There's only one big city for the next couple hours to head to – Abilene. After that, it's a long way to the next 'city'.



Stephens/Eastland, TX – Saturday- drizzle

Larry, W7FEN desperately needed Jones, and we snagged that for him. It was west out to Borden and Scurry and other less run ones, with the day ending in Big Spring, TX (Howard County) at the Motel 6 there. I'm glad I made a reservation since they appeared to be 'No Vacancy' in the morning when I checked out. Dinner that night was at the truck stop next door. Big Spring is named for a single spring that used to deliver 100,000 gallons of water a day. Then the railroad moved in, and townfolk put in water wells, and the aquifer providing the water dropped in level so the spring went 'dry' in 1920. Now, the actually put other water into the spring so you can see how it looked 100 years ago. With a few decades most of the aquifers in TX will be drawn so far down that things will revert to near desert status out that way.

In the morning, there was frost on the windshield that took a few minutes to scrape off. Yuk – winter time. The temp was 28 degrees with high humidity. I grabbed a Canadian bacon and egg biscuit, and cup of coffee next door at the truck stop, then headed out northwest to Dawson – a bit of fog along the way! Along the road there were spots with temps down near 20. Yuk.



Martin/Howard, TX - Sunday morning
Flat and not much of anything around

Sunday went well – zipping through the sparsely populated areas of TX - Dawson, Scurry, Mitchell, Andrews, Gaines, etc. Billy KD5YUK needed one there for a LC. The weather cleared up a bit and it got up to the 60s with some sun. The speed limit on the 2 lane roads is often 70 or 75 mph so you can make some good time here when you aren't stopped on a county line. Some of the locals fly by you at 85 mph. In 20 miles of driving, other than really small towns, you might see a few other drivers on the roads – or maybe zero. Most of the traffic stays on the main roads between 'cities' of which there are few.

If you stop in a small town, you'll likely be surrounded by pick up trucks. They outnumber cars about 2 to 1 out that way.

I pulled out the big Texas Map book to see if I could whack the corner of Gaines, and yes, there is a small gravel road that does that – and I could go on it and hit the C/L. Alas, no sign for the county line. It was rough but I only had to go a very short distance. There's close to a 4 way at Gaines/Martin/Dawson and Andrews, but no signs on the road showing the 4th. If you have a computer, maybe you can find it. Well, I ran Gaines by itself. The little gravel road has 3 or 4 drilling rigs along it– and you have the strong odor of hydrogen sulfide and other noxious fumes there. It's not unusual in that part of Texas with natural seeps. In plain language, a lot of places out there STINK! Hi hi. Likely the county line was under the big powerline that crosses the road.

I hadn't posted a detailed route – in the winter time, that often depends upon weather conditions out west – you zig and zag to avoid problems – and sometimes the road is shut due to flooding or who knows what – and you can't get there from here easily. I go till it gets dark – then stop. I leave in the morning at sunrise, and when I'm half way through my trip time, I turn around and head home. Not to worry. I was doing OK so I added in Lea, NM – with a 20 mile extra distance you can whack the southeast corner of NM, then head south back into Winkler.

Population of Lea County is about 55,000 people.....not much compared to the 'suburb' I live in with 280,000 people in just one 'town'. Watch out for the signs “Caution – drifting sand on road” along here. Texas has sand dunes!



Entering Lea, NM from Andrews, TX
Nice blue skies and getting warmer – 60 Deg

http://www.duneguide.com/sand_dune_guide_kermit.htm

There was no problem, and it was back into TX and toward the Loving/Winkler line. Loving County is down to a total population under 70. If you poke a hole in the ground, out comes oil. No drinking water around other than what is hauled in. I headed down through wonderful Mentone, TX (the 'town' in Loving County) to Reeves and Ward, then circled back around toward home.

Way back when, this area had a few springs – but the draw down of aquifers means there isn't any water around other than the Pecos River – which doesn't have much water it a lot of the time. Strange things happen in Loving County. It's the only county in TX to be incorporated twice. The first time, way back when, the NY Times started to do an investigation on corruption in the county. The folks in office fled, taking all the county records with them. Texas then decertified the county. Later it was incorporated a second time.

In February of 2006, Loving County became the focus of a New York Times article detailing an alleged attempt by Libertarians Lawrence Pendarvis, Bobby Emory, and Don Duncan to "take over" Loving County and its county seat, Mentone. According to the article, Pendarvis and his associates, part of the Free Town Project, planned to buy parcels of land in the county, then move in enough of their supporters to outvote earlier residents and take control of local government. According to a website for Mr. Pendarvis' movement, their objectives were to "remove oppressive Regulations...and stop enforcement of Laws prohibiting Victimless Acts

among Consenting Adults, such as Dueling, Gambling, Incest, Price-Gouging, Cannibalism, and Drug Handling." Additionally, the group sought "to ensure that the Sheriff's Office or the Town Police are never allowed to waste valuable Town resources...to oppress our residents by the investigation or enforcement of violations of Laws that punish Truancy, Drug Trafficking, Prostitution, Obscenity, Organ Trafficking, BumFights, and other Victimless 'Crimes'."

Although Pendarvis, Emory and Duncan claimed to have legally bought 126 acres in Loving county in 2005, and registered to vote accordingly, the county sheriff, Billy Burt Hopper, determined that this land had been sold to a different buyer. Misdemeanor charges were filed against the three men, who had left the state by this time. Pendarvis claimed to have a canceled check to prove his purchase of the land in question, but no deed was ever produced, and the original landowners denied having sold land to Pendarvis or his associates. The three were subsequently featured on a "wanted" poster issued by Sheriff Hopper and the local Texas Rangers (displayed at Hopper's office), and threatened with arrest should they return to Loving County.

It wouldn't take much for a 'commune' to move it and win an election when the entire population is about 70, and only a portion of them are legally registered voters!

They had tried this "Free Town" project in Grafton, NH in the 2003 time frame, with even less success. A few of them still live there.

It's not all bad news there. According to the census bureau, there is NO one below the poverty line there, either! It's flat desert territory.

After Loving, Ward, it was full speed ahead on I-20. Out here the speed limit on the interstate is 80 mph, and folks are doing that plus some. I took the first exit once I hit Ector and with a 2 mile detour hit the nice line of Crane/Ector and ran that. There is a short stretch of Crane on I-20 but no exit to get off and run it. The speed on the interstate drops to 70 or less from Ector east to the LA border 500 miles plus away.

Since I was 'county putting out' I wanted to run Crane on SSB and CW – on 4 bands – which takes about 20-30 minutes usually. Folks don't get out that way very often off the interstate.

The rest of the day was spent on real back roads getting down to Reagan, Glascock, and Upton – no reason to go there unless you are a county hunter. Really these are in the 'middle of nowhere'. After running those, I had to figure out which way to head since there isn't a motel headed generally east within 50 miles – and settled on going east to Tom Greene for another 100 miles. Sterling County doesn't have a single motel.

There is good cellphone coverage out there – which is amazing since the most often seen thing here is oil rigs and storage tanks, not houses or people – which are few and far between. I reserved the Motel 6 100 miles ahead. Don't plan on getting any gas, either. If there are gas

stops, they are all automated co-ops and it takes a special card to get the pumps to work.

A few hours later as it was getting dark, I pulled into Tom Greene County - San Angelo and the newly remodeled Motel 6. Hmm...no bedspread – just fancy blanket. No carpet on floor – some wood laminate. Usual bathroom with circular type shower. Not bad for \$40. Basic except for the large LCD TV- maybe 40 inches across. Slept well that night. If you stay in a Motel 6, bring your own clock – none in the rooms. Wake up calls usually get you up when needed. (Most cellphones also have an alarm function on them if you want a back up wake up call!)

San Angelo is another town going back 150 plus years in TX. It started out with Fort Concho – in the middle of Indian territory - and grew to the current 100,000 people. The railroad came, and it became a major center. It's one of the few large towns out that way. It's the county seat. Fort Concho has been restored so you can visit it and see what life was like 150 years ago in 'Indian Territory'.

As you all know, it was Sunday so that is traditionally 'pizza night' and I headed over to the Pizza Hut for dinner about a mile away. It was dark, cold, and dreary and I didn't fill up the gas tank. Then back to the motel, not passing a gas station. Big mistake. I finished reading the last novel by Sue Grafton – U is for Undertow – great murder mystery series. It's out in paperback now.

In the morning you could barely see your own nose with the dense fog. I found the way to the McDonalds across the street – slowly...very slowly ...and had breakfast. Maybe 50-75 foot visibility. They now serve oatmeal with fruit for breakfast! It was pretty good. I found my way to 380 east with the GPS but didn't pass a gas station that I could see- it was really soupy. The speed was 20-30 mph with maybe 100 foot visibility. It stayed that way for 2 hours.

You know it is foggy when you don't have to slow down for 30 mph school zones with the speed limit 60 or 70 – you are already doing under that that speed!

Joyce, KD8HB, needed Concho for a LC for TX and I was headed there. George, KD8HA is active again on SSB. He's watching out for Joyce's needs. Joyce even got on SSB once on Saturday to see if I would hit Concho. They used to run all over the country as a team on SSB before there was a team award, and with Joyce running on cw. I probably worked them in several hundred counties, and those KY counties she ran on CW were really tough to get. Recently they had a few (mis)adventures out doing some county putting out. Hopefully they'll get things straightened out in the mobile and make a few more trips! George has worked 'em all five times, and Joyce is working on the 8th time!

I reached the county line of Tom Greene/Concho and made a quick contact with her, then moved on to get to another 'new line' of Concho/Runnels to run it on all the bands. I sat there for 20 minutes running all bands. N9QS needed it for last, but he was off in FL.



Concho, TX in the heavy fog – ~200 ft visibility here

Then I noticed the gas gauge was quite a bit under half and I was headed to some real back roads with no towns in sight for the next 80 miles. I decided to make a detour to Rowena (5 miles) in southwest Runnels County- but – no gas station there. The 'main street' is a half mile of abandoned boarded up buildings on both sides of the road off the main highway now. Depressing! This was a town that used to be – like many in west Texas. Population now is probably 450 and most of them are retired, farm, or work in San Angelo. Route 87 is the main highway now, but even there only a few buildings along it are going concerns. I couldn't see all that much anyway with the heavy fog.

There are a few oil/gas wells around, and some make some money on royalties, but you wouldn't know it by downtown Rowena – hi hi

Rowena was on the railroad line in 1800s – got up to near 1000 people in the 1930s. About the only thing you can say about it now – it was the birth place of Bonnie Parker of Bonnie and Clyde fame.

Well, it was plan B – on to Paint Rock, TX, hoping there would be gas there. I had to pass through it anyway. I still had 150 miles of gas left according to the car computer so that would get me somewhere even if I had to take a 30 mile out of the way detour later.

In twenty miles I arrived in Paint Rock, TX (one of four towns in Concho County). . You've probably never heard of it. There isn't much reason to head there. When I operated on 6m from central VA in the 70s, there was a lonesome ham who would call me all the time the band opened from TX to VA (lots in the summer). He always wanted to yak – but never had anything new to say. He was in 'Paint Rock, TX'. So that always stuck in my memory. He'd always be on 6m. Always. Call CQ and he'd be the one to answer. Day in and day out. It got old quick. I almost dreaded calling CQ. I imagined Paint Rock a town in the middle of nowhere. That

was 'right on'. It's an hour from anywhere. If you lived a few miles outside of town, you were isolated.

The current population of Paint Rock according to their sign is 305. It's the county seat of Concho County which has a population of about 4000, with 1300 of them prisoners in the biggest town in the county - Eden.

There was a general store and gas station there in Paint Rock. One pump – unleaded and that was it. (It didn't take credit cards- you had to pay inside). Gas costs about 10c a gallon more than in the towns - \$3.08/gal. I added some to the tank so I wouldn't sweat bouncing on empty down the road. I really don't like that feeling and out west, I usually fill the tank when it is down to half. My bad.

Paint Rock is named after the Indian pictographs on the cliffs of the Colorado River.

<http://www.gourmetgarlicgardens.com/paintrock.html>



There are a lot of wet lines in that part of TX with the Colorado River separating the counties so there were lots of single county runs. After Coleman, Mills, San Saba, it was time to head on home to beat any rush hour on the MLK holiday Monday. The car zipped up through Brown and Comanche. I have about 50 miles of heavy traffic on 6 and 8 lane highways to get home from the west once I hit Tarrant - and it is no fun at rush hour – it takes at least twice as long and if someone has an accident or other backup – it can take 3 or 4 times as long. Just one snowflake and mass panic occurs in the “DFW Metroplex”.

I ran through Erath and Hood (ran the CL on SSB, and each individually on the run on CW). Then N5KGY mentioned he needed Tarrant for a LC. Wow...I usually skip that since I'm headed through lots of traffic and multi-lane roads and QRN from industrial buildup – but I

made sure to run it on 40M SSB for him. I'd just run it 3 days before, too! It's hard to give out LC's in TX with 254 counties. Then I hit the 50 miles of six and 8 lane roads. Traffic was moderate. You see more cars in 30 seconds here than you might see in 3 hours out in west TX. Or maybe even all day!

It all went well and I was home by dinner time. 1000 miles plus and two dozen counties added to the Mobile Diamond transmit log. A few folks got Last Counties, and no snow, blizzards or sub zero temps to report, either. Just a few hours of pea-soup fog.

Joe, N5UZW, was doing NC most of the time on 40M, with assists from Scottie, N4AAT, back east, Larry KA0SHC, Ernie W7KQZ, looking from out west, and others were jumping in if they heard folks calling. I listened on 20M SSB and there was lots of nothing going on up there, and I even ran a few counties there but few takers. 17M was great with some runs of 14 to 16 folks, and 30 meters worked well most of the time. 40M SSB gave the most contacts. Fred, K0FG headed west and was in CO and UT into AZ by the time I got home. Tough to make contacts from that far west on 40M. Ernie, W7KQZ, was picking him up.

JO7WXN worked me again. He has a big station away from home that he uses on the weekends. He's worked me on both 20 and 17M.

He dropped me a note by email.

“Dear Bob san

Thank you for the information.

My radio shack is away from house at 27km.

I should get up for that at 4 AM though I want to go every morning.

If such a thing is done, my wife will become a killer. Hi

I will built the next tower in the spring of this year then I can QRV on 40M and 30M.

Hope to see you again!

73

Toshi

J07WXN also JF1RDC

Otherwise, the DX was scarce. SP5SA, OK5KE, and DL3IAC in the log, but that was it, and only a few times. Maybe the others had caught all they needed in the TQP.

If Toshi gets hooked, he might wind up being the second JA to ever get USACA. He runs a IC756 Pro III , KW amp and 11 el tri-bander beam and 4 el duobander for 12 and 17.

Hope I ran something you needed. I try to keep TX off the 'most wanted' list. Up to 331 separate counties run for Mobile Diamond with credit in all but 10 so far. I'm chugging along toward the magic '500' number, but of course I won't stop running counties after that! There are 3077 counties that folks need for something! For USACA, Bingo, Nth time, Prefixes, MG, MP, MD, Five Star, USACW...and on and on.....

Faster Computer Chips

Scientists unveil chip which could make desktop computers 20 times faster

Scientists have created an ultra-fast computer chip which is 20 times faster than current desktop computers. Modern PCs have a processor with two, four or sometimes 16 cores to carry out tasks. The central processing unit (CPU) developed by the researchers effectively had 1,000 cores on a single chip.

The developments could usher in a new age of high-speed computing in the next few years for home users frustrated with slow-running systems. The new 'super' computer is much greener than modern machines - using far less power - despite its high speed.

Scientists used a chip called a Field Programmable Gate Array (FPGA) which like all microchips contains millions of transistors - the tiny on-off switches which are the foundation of any electronic circuit. FPGAs can be configured into specific circuits by the user, rather than their function being set at a factory. This enabled the team to divide up the transistors within the chip into small groups and ask each to perform a different task.

By creating more than 1,000 mini-circuits within the FPGA chip, the researchers effectively turned the chip into a 1,000-core processor - each core working on its own instructions. The chip was able to process around five gigabytes of data per second in testing - making it

approximately 20 times faster than modern computers.

FPGAs are not used within standard computers because they are fairly difficult to program but their processing power is huge while their energy consumption is very small because they are so much quicker. While most computers sold today now contain more than one processing core, which allows them to carry out different processes simultaneously, traditional multi-core processors must share access to one memory source, which slows the system down. The research scientists were able to make the processor faster by giving each core a certain amount of dedicated memory.

This is very early proof-of-concept work where we're trying to demonstrate a convenient way to program FPGAs so that their potential to provide very fast processing power could be used much more widely in future computing and electronics. While many existing technologies currently make use of FPGAs, including plasma and LCD televisions and computer network routers, their use in standard desk-top computers is limited. However, we are already seeing some microchips which combine traditional CPUs with FPGA chips being announced by developers, including Intel and ARM.

Computer Chip Innovations

American scientists have developed a new type of computer memory that should allow a quicker start-up time and lead to more environmentally-friendly PCs. They have come up with a single 'unified' device that apparently combines the advantages of the two usual forms of memory.

The system, developed by researchers at the North Carolina State University is still being tested. But it is thought it might be a step towards PCs that start immediately because they will not need to retrieve data from the hard drive.

Traditionally there are two types of computer memory devices. Slow memory devices are used for data storage such as flash drives and memory cards. These allow information to be saved for extended periods of time and are called non-volatile devices.

Fast memory devices - such as random access memory (RAM) or the variation DRAM let the computer work more quickly but cannot save data once the computer is turned off.

They need a constant source of power and are therefore known as volatile devices.

Researchers claim to have combined the two into a 'double floating-gate field effect transistor', the FET. This combines DRAM's speed but also a longer-lasting storage mode. Dr Paul Franzon, professor of electrical and computer engineering at the NC State, said: 'We've invented a new device that may revolutionize computer memory.'

It could ultimately allow manufacturers to make machines that boot up instantly because the information it needs to start would be in its fast memory. Servers could also then be powered down when they are not in use. At the moment, most servers keep using up energy regardless because they cannot be turned off without affecting performance.

The device invented by NC State stores the data as a charge - like non-volatile memory - but a special control gate gives quick access to the stored data. Dr Franzon says his team investigated the FET's reliability and believe it can have a 'very long lifetime when it comes to storing data in the volatile mode'.

Source: : <http://www.dailymail.co.uk/sciencetech/article-1350665/Computer-memory-breakthrough-lead-greener-PCs.html#ixzz1C9wBdYID>

LA QSO Party

I received the following letter from N5NA:

“You guys need to join us for the Texas invasion of Louisiana. KU5B, K5END, and myself plan to activate 58 of the 64 parishes in LA for the QSO party on February 12. I think Chuck, NO5W, will also be joining us to pick up the last 6 parishes but I don't have his route yet.

Our route plans are at <<http://laqp.eqth.net/>> It would be great if we could put six Texas mobiles on the road in LA. They won't know what hit 'em!

The more activity the better!

73, Alan N5NA”

de N4CD – I'll be off on a trip...but W3DYA is headed there.....and there's always KB6UF to put some out in his home state. It could be really big this year!

- -

Newsflash

From W3DYA on the K3IMC Forum:

Just posted my trip plans for the LA QP on 2/12/2011.

Counties I plan to activate:

Claiborne, Bienville, Webster, Bossier, Caddo, De Soto, Red River, Sabine, Natchitoches, Rapides, Avoyelles, Evangeline.

CW only, 40, 20, 15, 10, 80M, QSY on request - quit when it gets dark.

GL and 73, Norm, W3DYA

80 Meter Night

comments from 1/4/2011

W0GXQ: The Tuesday 80m Night-Out was lots of fun . . . with eight (8) mobiles (by my count) participating. Included were N9JF, AA8R, K4EXT/KG4VBK, KN4Y, N5XG, W4SIG, KB6TAL, and W0GXQ. Over thirty counties so far (N9JF still out at 0345z). Randy is keeping stats on the Tuesday evening mobile activity on Eighty. Good to see some new callsigns this evening.

KN4Y: I had forgot how far it is from Franklin county line to the Jefferson county line on Hwy 98, but glad you-all hung in there. I ran Franklin county by a boat ramp and I was amazed how strong the signals were. Except for few stations all were 599. See (hear) you the next outing.

WB2ABD: "I couldn't be there for the whole shebang, but when I walked in I found a double last county sitting on the table (tnx N9JF). I was amazed at how well KN4Y and KB6TAL were coming in ... hard to tell they were mobile, despite the band being somewhat noisy. I missed about 10 for 80m by not being at the rig. "

AA8R: "80m is almost coast to coast.....but what was I thinking going out ... tackling Chicago

traffic! All in all, it was fun and I will do it agn. Still working on getting antennas up yet at the portable QTH.

Last night stats will add 9 mobiles running 31 counties to the Excel spreadsheet. “

W4SIG: “Now THAT was a lot of fun!! Thanks to all the gentleman mobiles that were out and to those that ran net control. I worked more counties during that 2 hour window than I did all day on the other nets! Justin was an ole pro running Washington county. “

K4EXT :”Justin and I had a good time. Even got a couple of new counties on CW for myself! And, as promised/predicted, I mangled a good number of callsigns while running “

N9JF: “Close to 40 counties run this evening on 80! Conditions not as good as sometimes, but I still worked stations from coast to coast from KY and WV. Not too shabby!”

comments from 1/18/11

It looks like bad weather – snow, ice and worse kept most mobiles home.

N9JF was out in IA and ran a few despite snow – then headed back to the motel, and N5XG ran a few around his home QTH in TX.

Randy AA8R reported freezing rain in Chicago and AE3Z had white stuff falling.

Here's a list of who has run what for the past six weeks or so! (from Randy AA8R)

CALL	Date	County	St
N9JF	1/19/2011	PLYMOUTH	IA
N9JF	1/19/2011	SIoux	IA
N5XG	1/18/2011	DENTON	TX
N5XG	1/18/2011	PARKER	TX
N5XG	1/18/2011	WISE	TX
N9JF	1/18/2011	POCAHONTAS	IA
N9JF	1/18/2011	BUENA VISTA	IA
N5XG	1/12/2011	TARRANT	TX
N5XG	1/12/2011	JOHNSON	TX
N5XG	1/12/2011	ELLIS	TX
N9JF	1/12/2011	BEN HILL	GA
N9JF	1/12/2011	TElFAIR	GA
N9JF	1/12/2011	WHEELER	GA

KB6UF	1/11/2011	WALTON	FL
KB6UF	1/11/2011	OKALOOSA	FL
KB6UF	1/11/2011	SANTA ROSA	FL
KB6UF	1/11/2011	BALDWIN	AL
N9JF	1/11/2011	LAURENS	GA
N9JF	1/11/2011	WHEELER	GA
KB6TAL	1/5/2011	PINAL	AZ
KB6TAL	1/5/2011	GILA	AZ
KB6TAL	1/5/2011	COCHISE	AZ
KG4VBK	1/5/2011	WASHINGTON	TN
KN4Y	1/5/2011	FRANKLIN	FL
N5XG	1/5/2011	SOMERVELL	TX
N9JF	1/5/2011	MONTGOMER	
N9JF	1/5/2011	Y	KY
N9JF	1/5/2011	BATH	KY
N9JF	1/5/2011	ROWAN	KY
N9JF	1/5/2011	CARTER	KY
N9JF	1/5/2011	CABELL	WV
N9JF	1/5/2011	PUTNAM	WV
N9JF	1/5/2011	KANAWHA	WV
N9JF	1/5/2011	FAYETTE	WV
N9JF	1/5/2011	RALEIGH	WV
N9JF	1/5/2011	SUMMER	WV
N9JF	1/5/2011	GREENBRIER	WV
W0GXQ	1/5/2011	POLK	MN
W0GXQ	1/5/2011	MAHNOMEN	MN
W0GXQ	1/5/2011	CLEARWATER	MN
W4SIG	1/5/2011	HUBBARD	MN
AA8R	1/4/2011	KENDALL	IL
AA8R	1/4/2011	WILL	IL
K4EXT	1/4/2011	SULLIVAN	TN
KN4Y	1/4/2011	WAKULLA	FL
KN4Y	1/4/2011	JEFFERSON	FL
N5XG	1/4/2011	HOOD	TX
N9JF	1/4/2011	CRAWFORD	IN
N9JF	1/4/2011	HARRISON	IN
N9JF	1/4/2011	FLOYD	IN
W0GXQ	1/4/2011	BELTRAMI	MN
K0PY	12/29/2010	HARVEY	KS
K0PY	12/29/2010	McPHERSON	KS
N9JF	12/29/2010	BLACK HAWK	IA
N9JF	12/29/2010	BUCHANAN	IA
N9JF	12/29/2010	BENTON	IA
N9JF	12/29/2010	LINN	IA
N9JF	12/29/2010	JOHNSON	IA
N9JF	12/29/2010	WASHINGTON	IA

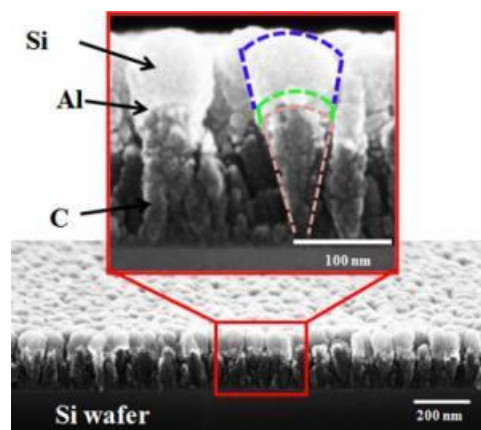
N9JF	12/29/2010	HENRY	IA
N9JF	12/29/2010	LEE	IA
N9JF	12/29/2010	CLARK	MO
N9JF	12/29/2010	LEWIS	MO
N9JF	12/29/2010	GRUNDY	IA
N9JF	12/29/2010	HARDIN	IA
N9JF	12/29/2010	HAMILTON	IA
W4SIG	12/29/2010	FAYETTE	TN
KOPY	12/28/2010	SALINE	KS
KOPY	12/28/2010	RUSH	KS
KOPY	12/28/2010	BARTON	KS
KOPY	12/28/2010	RICE	KS
KOPY	12/28/2010	RENO	KS
N9JF	12/28/2010	OBRIEN	IA
N9JF	12/28/2010	CLAY	IA
N9JF	12/28/2010	BUENA VISTA	IA
N9JF	12/28/2010	POCAHONTAS	IA
N9JF	12/28/2010	WEBSTER	IA
N9JF	12/28/2010	WOODBURY	IA
N9JF	12/28/2010	MONONA	IA
N9JF	12/28/2010	HARRISON	IA
		POTTAWATTA	
N9JF	12/28/2010	MIE	IA
N9JF	12/28/2010	MILLS	IA
N9JF	12/28/2010	FREMONT	IA
N9JF	12/28/2010	ATCHISON	MO
N9JF	12/28/2010	HOLT	MO
N9JF	12/28/2010	ANDREW	MO
N9JF	12/28/2010	BUCHANAN	MO
N9JF	12/28/2010	DeKALB	MO
N9JF	12/28/2010	CALDWELL	MO
N9JF	12/28/2010	LIVINGSTON	MO
N9JF	12/28/2010	LINN	MO
W4SIG	12/28/2010	MARSHALL	MS
W4SIG	12/28/2010	BENTON	MS
W4SIG	12/28/2010	TIPPAH	MS
W4SIG	12/28/2010	SHELBY	TN
N4JT	12/22/2010	PITTSYLVANIA	VA
N4JT	12/22/2010	HALIFAX	NC
N4JT	12/22/2010	WARREN	NC
N4JT	12/22/2010	GRANVILLE	NC
N4JT	12/22/2010	VANCE	NC
N4JT	12/22/2010	PERSON	NC
N9JF	12/22/2010	MAHONING	OH
N9JF	12/22/2010	COLUMBIANA	OH
W4SIG	12/22/2010	MARSHALL	MS
N4JT	12/21/2010	CASWELL	NC

N4JT	12/21/2010	PERSON	NC
N4JT	12/21/2010	HALIFAX	VA
N9JF	12/21/2010	STARK	OH
N9JF	12/21/2010	STARK	OH

That's well over 100 counties run in a short time!

Nanotech News

An entirely new type of nanomaterial developed at Rensselaer Polytechnic Institute could enable the next generation of high-power rechargeable lithium (Li)-ion batteries for electric automobiles, as well as batteries for laptop computers, mobile phones, and other portable devices.



The new material, dubbed a "nanoscoop" because its shape resembles a cone with a scoop of ice cream on top, can withstand extremely high rates of charge and discharge that would cause conventional electrodes used in today's Li-ion batteries to rapidly deteriorate and fail. The nanoscoop's success lies in its unique material composition, structure, and size.

The Rensselaer research team, led by Professor Nikhil Koratkar, demonstrated how a nanoscoop electrode could be charged and discharged at a rate 40 to 60 times faster than conventional battery anodes, while maintaining a comparable energy density. This stellar performance, which was achieved over 100 continuous charge/discharge cycles, has the team confident that their new technology holds significant potential for the design and realization of high-power, high-capacity Li-ion rechargeable batteries.

"Charging my laptop or cell phone in a few minutes, rather than an hour, sounds pretty good to me," said Koratkar, a professor in the Department of Mechanical, Aerospace, and Nuclear Engineering at Rensselaer. "By using our nanoscoops as the anode architecture for Li-ion rechargeable batteries, this is a very real prospect. Moreover, this technology could potentially be ramped up to suit the demanding needs of batteries for electric automobiles."

Batteries for all-electric vehicles must deliver high power densities in addition to high energy densities, Koatkar said. These vehicles today use supercapacitors to perform power-intensive functions, such as starting the vehicle and rapid acceleration, in conjunction with conventional batteries that deliver high energy density for normal cruise driving and other operations. Koratkar said the invention of nanoscoops may enable these two separate systems to be combined into a single, more efficient battery unit.

The anode structure of a Li-ion battery physically grows and shrinks as the battery charges or discharges. When charging, the addition of Li ions increases the volume of the anode, while discharging has the opposite effect. These volume changes result in a buildup of stress in the anode. Too great a stress that builds up too quickly, as in the case of a battery charging or discharging at high speeds, can cause the battery to fail prematurely. This is why most batteries in today's portable electronic devices like cell phones and laptops charge very slowly -- the slow charge rate is intentional and designed to protect the battery from stress-induced damage. The Rensselaer team's nanoscoop, however, was engineered to withstand this buildup of stress.

Made from a carbon (C) nanorod base topped with a thin layer of nanoscale aluminum (Al) and a "scoop" of nanoscale silicon (Si), the structures are flexible and able to quickly accept and discharge Li ions at extremely fast rates without sustaining significant damage.

The nanoscale size of the scoop is also vital since nanostructures are less prone to cracking than bulk materials, according to Koratkar.

A limitation of the nanoscoop architecture is the relatively low total mass of the electrode, Koratkar said. To solve this, the team's next steps are to try growing longer scoops with greater mass, or develop a method for stacking layers of nanoscoops on top of each other. Another possibility the team is exploring includes growing the nanoscoops on large flexible substrates that can be rolled or shaped to fit along the contours or chassis of the automobile.

Winter Weather 2010/2011

From John Maudlin Newsletter:

"Climate as a whole goes through cycles. If we look to the past, we can better understand the future. There is a reason Australia is undergoing severe rains and that the north of the US and

Europe are experiencing serious winters.

There is a reason the weather is so harsh this winter, and a big part of that is Kamchatka, or more specifically volcanic activity in the Kamchatka Peninsula.

First, the Pacific is going through a cooler period, called La Nina (with this one being particularly strong), and the Atlantic is going through a warmer period. This would normally change weather patterns in rather predictable ways. But then throw in the Kamchatka volcanoes, which are throwing massive amounts of dust into the air, causing the Arctic to be even colder and Arctic winds to push farther south, and you get a very drastic change in patterns.

Australia's wheat crop is down by 10%, but the bulk of it has been so damaged by the worst rain in a hundred years (by far) that it is no good as human food and can only be used to feed animals. Throw in drought in Russia, severe drought in Argentina, floods in Brazil and Venezuela, odd weather in the agricultural parts of China, and you get rising food costs all over the world – all because Putin cannot keep his volcanoes under control. (But hey, he's controlling everything else!)

If those volcanoes don't back down, there is the real possibility that this year's bad weather could repeat.



“Basically, both the Pacific and Bering plates are subducting (sliding beneath) under [the Kamchatka Peninsula] and each other. Just as fenders crumple during a car wreck, so the

Kamchatka Peninsula surface is buckling with mountain ranges. When the ocean plates sink deep enough, portions are melted by the intense heat generated within the mantle, turning the solid rock into molten magma. The magma bubbles up through the crust, ultimately bursting to the surface and forming volcanic eruptions.

“As a result of all this geological activity, Kamchatka tends to be somewhat active – but recently it has been ridiculous! Since late November, Kizimen, Sheveluch, Karymsky, and Kliuchevskoi have been erupting almost constantly. Most of the eruptions have ranged from 2-10 km (1.2-6.2 miles) high. While the smallest eruptions have caused only minor local disruptions, the larger ones have entered passing fronts, cooling temperatures, altering air pressure, and increasing precipitation.

“Volcanic ash screens out incoming temperature, cooling the air below. This lowers air pressures which, in turn, changes wind patterns. In particular, in polar regions it appears to weaken the Arctic Oscillation winds. When the Arctic Oscillation turns negative, that is, when the winds weaken, the cold air normally trapped around the North Pole surges south.”

It’s possible we’ll see a repeat next year. This could further exacerbate food costs and force emerging-market central bankers to fight inflation by allowing their currencies to rise. Weather makes a difference.

Greenie Agenda Run Amok

“California's utilities are spending \$548 million over seven years to subsidize consumer purchases of compact fluorescent lamps. But the benefits are turning out to be less than expected. One reason is that bulbs have gotten so cheap that Californians buy more than they need and sock them away for future use. **Another reason is that the bulbs are burning out faster than expected.**

California utilities have used ratepayer funds to subsidize sales of more than 100 million of the bulbs since 2006, most of them made in China. It is part of a comprehensive state effort to use energy-efficiency techniques as a substitute for power production. Subsidized bulbs cost an average of \$1.30 in California versus \$4 for bulbs not carrying utility subsidies.

Anxious to see what ratepayers got for their money, state utility regulators have devoted millions of dollars in the past three years for evaluation reports and field studies. What California has learned, in a nutshell, is that it is hard to accurately predict and tricky to measure energy savings. It is also difficult to design incentive plans that reward—but don't overly reward—utilities for their promotional efforts.

When it set up its bulb program in 2006, PG&E Corp. thought its customers would buy 53

million compact fluorescent bulbs by 2008. It allotted \$92 million for rebates, the most of any utility in the state. Researchers hired by the California Public Utilities Commission concluded earlier this year that fewer bulbs were sold, fewer were screwed in, and they saved less energy than PG&E anticipated.

One hitch was the compact-fluorescent burnout rate. When PG&E began its 2006-2008 program, **it figured the useful life of each bulb would be 9.4 years. Now, with experience, it has cut the estimate to 6.3 years, which limits the energy savings.** Field tests show higher burnout rates in certain locations, such as bathrooms and in recessed lighting. Turning them on and off a lot also appears to impair longevity. “

Source: <http://online.wsj.com/article/SB10001424052748704259704576033890595565026.html>

De N4CD – Not to worry. With all the taxpayer funded rebates, 'allowances' to the utility companies, high electric rates – California has lots of money to waste on “greenie projects”, right? It's only 30 billion in the hole just for the current year, and getting worse year by year. It's follies like this that make you wonder if there is any hope for 'lib land' and the eco-whacks.

Likely 10,000 jobs or more have been 'created' in China due to these actions. None in the US. In fact, the last US light bulb factory shut down last year, putting hundreds out of a job.

It turns out with 'energy saving bulbs' , people turn on lights and leave them on for many more hours a day, not saving all that much energy. Why turn them on and off when they take 'so little energy' to run? And they 'last so long' you don't have to worry about replacing them often, and you get 'cheap' subsidized bulbs anyway!

Why Your Mobile Works

12V lead acid battery? Simple? Don't bet on it!

Einstein never learned to drive. He thought it too complicated and in any case he preferred walking. What he did not know—indeed, what no one knew until now—is that most cars would not work without the intervention of one of his most famous discoveries, the special theory of relativity.

Special relativity deals with physical extremes. It governs the behavior of subatomic particles zipping around powerful accelerators at close to the speed of light and its equations foresaw the conversion of mass into energy in nuclear bombs. A paper in *Physical Review Letters*, however, reports a more prosaic application. According to the calculations of Pekka Pyykko of the

University of Helsinki and his colleagues, the familiar lead-acid battery that sits under a car's bonnet and provides the oomph to get the engine turning owes its ability to do so to special relativity.

The lead-acid battery is one of the triumphs of 19th-century technology. It was invented in 1860 and is still going strong. Superficially, its mechanism is well understood. Indeed, it is the stuff of high-school chemistry books. But Dr Pyykko realised that there was a problem. In his view, when you dug deeply enough into the battery's physical chemistry, that chemistry did not explain how it worked.

A lead-acid battery is a collection of cells, each of which contains two electrodes immersed in a strong solution of sulfuric acid. One of the electrodes is composed of metallic lead, the other of porous lead dioxide. In the parlance of chemists, metallic lead is electropositive. This means that when it reacts with the acid, it tends to lose some of its electrons. Lead dioxide, on the other hand, is highly electronegative, preferring to absorb electrons in chemical reactions. If a conductive wire is run between the two, electrons released by the lead will run through it towards the lead dioxide, generating an electrical current as they do so. The bigger the difference in the electropositivity and electronegativity of the materials that make up a battery's electrodes, the bigger the voltage it can deliver. In the case of lead and lead dioxide, this potential difference is just over two volts per cell.

That much has been known since the lead-acid battery was invented. However, although the properties of these basic chemical reactions have been measured and understood to the nth degree, no one has been able to show from first principles exactly why lead and lead dioxide tend to be so electropositive and electronegative. This is a particular mystery because tin, which shares many of the features of lead, makes lousy batteries. Metallic tin is not electropositive enough compared with the electronegativity of its oxide to deliver a useful potential difference.

This is partly explained because the bigger an atom is, the more weakly its outer electrons are bound to it (and hence the further those electrons are from the nucleus). In all groups of chemically similar elements the heaviest are the most electropositive. However, this is not enough to account for the difference between lead and tin. To put it bluntly, classical chemical theory predicts that cars should not start in the morning.

Which is where Einstein comes in. For, according to Dr Pyykko's calculations, relativity explains why tin batteries do not work, but lead ones do.

His chain of reasoning goes like this. Lead, being heavier than tin, has more protons in its nucleus (82, against tin's 50). That means its nucleus has a stronger positive charge and that, in turn, means the electrons orbiting the nucleus are more attracted to it and travel faster, at roughly 60% of the speed of light, compared with 35% for the electrons orbiting a tin atom. As the one Einsteinian equation everybody can quote, $E=mc^2$, predicts, the kinetic energy of this extra velocity (ie, a higher E) makes lead's electrons more massive than tin's (increasing m)—and heavy electrons tend to fall in and circle the nucleus in more tightly bound orbitals.

According to special relativity, a particle traveling with speed v behaves like a particle that's more massive by a factor, γ , given by

$$\gamma = (1 - v^2/c^2)^{-1/2}.$$

The effect of relativity on a lead–acid battery's electrode materials is opposite but not equal. In lead, the increase in effective mass causes the outer electrons to sink closer to the nucleus. In lead oxide, it deepens the empty potentials into which free electrons can fall. Lead becomes a worse cathode, but lead oxide becomes an even better anode. For tin, γ is a nonnegligible 1.07, but for lead, γ is a chemistry-changing, battery-boosting 1.25.

The stronger charges on the heavier lead nuclei attract electrons more powerfully, so they reach 60 per cent the speed of light compared to tin's 35 per cent.

That has the effect of making metallic lead less electropositive (ie, more electronegative) than classical theory indicates it should be—which would tend to make the battery worse. But this tendency is more than counterbalanced by an increase in the electronegativity of lead dioxide. In this compound, the tightly bound orbitals act like wells into which free electrons can fall, allowing the material to capture them more easily. That makes lead dioxide much more electronegative than classical theory would predict.

And so it turned out. Dr Pyykko and his colleagues made two versions of a computer model of how lead-acid batteries work. One incorporated their newly hypothesized relativistic effects while the other did not. The relativistic simulations predicted the voltages measured in real lead-acid batteries with great precision. When relativity was excluded, roughly 80% of that voltage disappeared.

Pyykkö and colleagues calculate that lead-acid batteries would generate only 0.39 volts without relativity. With them, they predict 2.13 volts, in good agreement with the measured 2.11 volts.

That is an extraordinary finding, and it prompts the question of whether previously unsuspected battery materials might be lurking at the heavier end of the periodic table. Ironically, today's most fashionable battery material, lithium, is the third-lightest element in that table—and therefore one for which no such relativistic effects can be expected. And lead is about as heavy as it gets before elements become routinely radioactive and thus inappropriate for all but specialized applications. Still, the search for better batteries is an endless one, and Dr Pyykko's discovery might prompt some new thinking about what is possible in this and other areas of heavy-element chemistry.

Source: The Economist January 2011.

The next time your battery goes dead, you can blame those electrons for dropping out of near warp speed and not putting out the juice as predicted. Hi Hi

QRZ Alternatives

QRZ (www.QRZ.com) went to the useless category for a day or two, having removed the counties from nearly all listings. This makes it 'useless' for county hunters, other than getting an address to which to send a QSL card. A day or two later, it was back to normal.

In any event there are alternatives to use that still list counties.

<http://wm7d.net/perl/ulsquery.pl> is one that works similar to the way QRZ works.

Another is <http://www.eham.net/callbook/search>

For up to 30 queries a day, you can use <http://hamcall.net/call>

Scottie, N4AAT, Scores Number 1

Scottie, N4AAT, has earned the FIRST of the 1x2 Call Combo Awards! The Call Combo awards are earned by working all counties with a 1x2 call, such as N4CD, or for the other awards 1x3, 2x2, 2x3, 2x1, 1x1, and any other combos that come along.

There are more 'firsts' out there to be earned – like Natural Bingo, No Star, Mobile Diamond, and maybe some of the other prefix awards.

Congrats Scottie on #1!

Awards

Five Star #49	Dick, K5VYT	Jan 5, 2011
Five Star #50	Ray, AB4YZ	Jan 14, 2011
Second Time #400	Ron, N5MLP	Jan 6, 2011

Second Time #401	Jim, NW6S	Jan 20, 2011
Fourth Time #149	Les, KW4V	Jan 14, 2011
Fourth Time #150	Ray, AB4YZ	Jan 14, 2011
Bingo #325	Gary, WD6CKT	Jan 10, 2011
Bingo IV #6	Scottie, N4AAT	Jan 14, 2011
Mobile to Mobile #14	Jim, N4JT	Jan 24, 2011
Call Combo 1x2 #1	Scottie, N4AAT	Jan 24, 2011
Umpteenth Time (13 th) #1	James, KZ2P	Jan 14, 2011
Eight Time #7	me-too K2JG	Jan 14, 2011

Upcoming Events for County Hunters

Yaa Hoo!....it's state QSO Party time once again! In addition there are some other events that you might want to check out! It's been a while since QSO Party season.

February 5 – 6

Ten-Ten Winter Phone QSO Party - Call sign, name, QTH, 10-10 number www.ten-ten.org
Feb 5, 0001Z - Feb 6 2359Z

Vermont QSO Party RS(T) and VT county or S/P/C vtqsoparty.westriverradio.org
Feb 5, 1300Z - , See Web site in multiple periods Multiple operating periods; CW band edge + 60 kHz; SSB 1.89, 3.89, 7.29, 14.29, 21.39, 28.39.

Minnesota QSO Party Name and MN county or S/P/C www.w0aa.org
Feb 5, 1400Z - Feb 5 2400Z CW 1.850,3.550,7.050,14.050,21.050,28.050; SSB 1.870,3.850,7.250,14.270,21.350,28.450.

Delaware QSO Party RS(T) and DE county or S/P/C www.fsarc.org
Feb 5, 1700Z - Feb 6 2359Z CW 1.825,3.55,7.05,14.05,21.05,28.05,50.95; SSB

1.86,3.96,7.26,14.26,21.36,28.36,50.135; Digital per band plan.

February 12- 13

Louisiana QSO Party - Call sign, RS(T), LA parish or S/P/C

laqso.w5yl.org

Feb 12, 1500Z - Feb 13 0300Z

CW 1.84,3.54,7.04,14.04,21.04,28.04; Phone 1.865,3.865,7.255,14.255,21.365,28.465; VHF 50.095,50.135,144.05,144.2

New Hampshire QSO Party - RS(T) and NH county or S/P or "DX"

www.w1wqm.org

Feb 12, 1600Z - , See Web site

CW - 1.815 and band edge + 45kHz; Phone - 1.875, 3.935, 3.950, 7.235, 14.280, 21.380, 28.390.

February 26 -27

Mississippi QSO Party- RS(T) and MS county or S/P/C

www.arlmiss.org

Feb 26, 1500Z - Feb 27 0300Z

CW 3.545,7.045,14.045,21.045, 28.045;Phone 3.857-862-867,7.238,14.275,21.375,28.375;VHF 50.13,144.22,146.55,446.

North American QSO Party - Name and S/P/C www.ncjweb.com

Feb 26, 1800Z - Feb 27 0600Z

North Carolina QSO Party- RS(T) and NC county or S/P/C www.w4nc.com

Feb 27, 1700Z - Feb 28 0300Z

CW 3.54,3.74,7.04,7.14,14.04,21.04,21.14,28.04,28.14, Phone 3.86,7.26,14.26,21.36,28.36.

The above courtesy of the ARRL Contest Corral, ARRL, Newington, CT 06111

<http://www.arrl.org/files/file/Contest%20Corral/2011-02.pdf>

You can also check the weekly contests at

<http://www.hornucopia.com/contestcal/weeklycont.php>

Other Misc Stuff

MI Mini in April 28-30

Dayton Hamvention in May

National – Duluth MN – July 6-9th

Frank, AA9JJ, Kay, N9QPQ and Bob, N8KIE scheduled to hit the HI islands as follows next month:

2-6: Kauai

2-7: Honolulu

2-8: Maui & Kalawao

2-9: Backup for other counties

2-10: Hawaii

Jeffrey, AF3X is headed to HI and AK to run all of them. Here's his sked:

April 27-29: Hawaii, HI

April 30-May 1: Honolulu, HI

May 2: Maui/Kalawao, HI

May 3: Kauai, HI

May 4: No runs.

May 5: Third, AK

May 6: Third, Fourth, AK

May 7: With KL1V- Fourth, Second, Fourth, AK

May 8: Fourth, Third, AK

May 9: Third, AK

May 10: Third, AK

May 11: First, AK

CW Status from KA3MMM

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

CALL	2010	2009	2008	2007	2006	2005	2004
VE1BES							1930
AD1C	3064	3057	3045	3044	3026	2954	2857
KM1C			2070				
KA1Q						1350 #2	1320 #2
K1TKL	2967	2705	1820	851			
KO1U	543 #3				2418 #2	3033	2881
KL1V	2078	1943	1808	1730	1595	1441	1269
WB2ABD	3070 #2	2964 #2					
WA2AKB				1621	1621	1621	1614
WV2B	808	773		505			
NM2L	1686 #2	1125 #2	35 #2	2952	2677	2213	1695
AB2LS				1600	1250	449	
N2MH				944		634	46
N2OCW	940 #2	649 #2	3000	2992	2687		
K2RP					2275	1730	1410
NO2W				1589	1589	1589	1589
N3AHA				2971	2830	2309	
DL3DD							3059
W3DLM	1300	984					
W3DYA	2311 #3	1489 #3	474 #3	3072 #2	3057 #2	3056 #2	3051 #2
WA3GNW						1737	1604
WU3H		1150 #4	785 #4	3073 #3	3057 #3	2946 #3	2445 #3
N3HOO							1821
OH3JF						2973	2922
VE3KZE						3046	3035
KA3MMM	3032 #6	2872 #6	2412 #6	2125 #6	1044 #6	3048 #5	2643 #5
VA3NN			2939	2901	2849	2714	2063
WD3P						712 #3	678 #3
KA3QLF	2531						
WA3QNT				2641	2638	2634	
KE3VV	712 #2	3074	3052	2983	2779	2535	2134
KC3X	3035 #2	2786 #2	1492 #2		222 #2	170 #2	30 #2
VA3XOV	2399 #2	3073	3042				2929
N3XX					11 #2	3067	3061
AE3Z	1854	1818	1806	1942	1630	1593	1395

W3ZUH							1645
N4AAT	2524 #2	1050 #2		2			
N4AKP	263 #3	3037 #2	2918 #2	2411 #2	869 #2	1489 #2	
K4AMC	1594 #2						
NU4C	1766						
N4CD	2977 #4	2394 #4	3064 #3	2903 #3	2759 #3	3065 #2	2715 #2
K4EXT	2782	1814	1431	727			
W4GNS	2554			1882	1010		
AA4GT			1992				
W4HSA		2576 #2	2210				
G4KHG				1436	1434	1374	1182
N4JT	2926					2443	2261
WB4KZW		3052	2937				
KR4OE	1842	1678	1614	1555	1461	1313	1216
WD4OIN	3011		2902		2674	2539	2138
N4PJ	2921						
W4RKV	2844 #2	2810 #2	2793 #2	2775 #2	2761 #2	2788	2682 #2
KA4RRU	2162	1636		658			
N4RS	2629 #4	1924 #4		3035 #3	191 #3	2225 #3	3075 #2
W4SIG	794 #2						3030
K4UNF			1278	1835	1556		820
WA4UNS	2093	835					
KW4V	3062 #2	2874 #2	2231 #2			3073	
WB4VFN			3067	3015	2899	2667	2301
AA4VN							1619
W4VQ						947 #2	471 #2
K4XI	2962 #2	2462 #2	1387 #2	3071	3064	3050	3011
KN4XP				2125	1638	1155	108
W4XT	2447					2184	2167
KN4Y	3008 #5	2868 #5	2610 #5		2954 #4	2634 #4	1760 #4
W4YDY	986 #2	3053	2967	2936	2789	2462	2175
K4YFH				3075		2819	2577
K4YT		2959		1233	1871		
AB4YZ	3054					2685	2214
KS5A						2983	2883
K5AAR			3073 #2	3055 #2	2926 #2	2362 #2	493 #2

W5AL						2805	
DL5AWI		2670		2541	2457	2317	2140
WC5D					1904 #2	1456 #2	834 #2
N5EBD						1833	1248
K5GE	627 #2						
K5JF	1608	1047 #2	326 #2	69 #2	397 #2	3071	3034
K5OT				3075	3026	2902	2669
N5PR	3023	2968	2882	2634	2412	910	
N5XD			726				
N5XG	2950	1984 #2		3072	3071	3066	3052
K5XY		132	131	131			343
KC6AWX						1202	1025
WD6CKT	700 #2	500 #2	250 #2	3077	3071	3063	3035
KM6HB	2305	1561	1049				
NV6I						721	430
DL6KVA	2636		2439	2398	2267	2140	1937
W6OUL						1680	1606
W6RK					2142	1856	993
NW6S	131 #2	3050	3004		2870		2556
KB6TAL	2988						
W6TMD	1460 #3	1333 #3	3056 #2	3002 #2	2949 #2	2742 #2	2286 #2
W6TPC		276	234				
KB6UF	3023	2957		2336	2122	1531	
KE6US							1125
SM6VR	3029	2998	2914	2860	2808	2665	2419
WG6X			2714	2491			
AA7CP				1246 #2	1034 #2		
K7DM						2777	2622
W7FEN	2316	2252	2036	2029	1932	1258	660
WE7G	2191						
KL7GN						2607	2543
K7INA			2972			2764	2705
WA7JHQ	2965 #2	2897 #2	2784 #2	2569 #2	2178 #2	1065 #2	3059
N7JPF	18						
W7KQZ			2569				
KG7Q							2887
K7REL	433 #4	2949 #3	2347 #3	41 #3	2946 #2	1865 #2	2915
AB7RW	3073 #2	3062 #2	3010 #2	2886 #2	2430 #2	3076	3062

KS7S						1660	
K7TM	2602						
W7TSM						2247	2290
K7VAY				QRT	3077	3042	3002
KI7WO		3045	2929	2631	1635	1030	802
N7WO	2449		997	1994	1854	1599	1198
KK7X	1965	1814	1772				1760
AK8A		3077	3056	2995	2850	2649	2385
N8CBW	2						
W8CE			3075 #2	3060 #2	3022 #2	3003 #2	2951 #2
N8CIJ	2445	1132					
K8CW			2885 #3		2397 #3	3074 #2	
KD8HB	3050 #5	2709 #5	630 #5			3064 #4	2983 #4
K8IW	3005	2997	2982	2952	2933	2838	2724
W8JJ	1599	1356	1103	940	779	510	391
W8LSV						2100	
W8MP				327			
K8OHC			1842	1814	1812	1797	1756
WD8OIN				2795			
KB8OMG				1683 #2	3072	3027	2862
W8OP						1017	836
K8OOK	1986	1900	1720				
WD8OWA					3006		
W8PN						2886 #2	2869 #2
K8QWY		2570 #2		3057			
AA8R	1930 #2	751 #2	3059	2921	2717	2464	2307
KM8U			2885 #2	2885 #2	2885 #2	2870	2825
AD8W			2889	2699	2373	1950	1677
W8WVU						3056	
W8YL						3040	
K8ZZ	1064 #2	605 #2	3072	2952	2737	2319	1478
NF9A						2863	2848
K9AAA		2402					
N9AG						2545	2506
WD9BCG						3003 #2	3003 #2
VE9DH						2425	1954
W9GBH	2182		2547	2431	2404	2332	2300
N9ID	2748	2554	2296	2121	1711	924	
KA9JAC	3049	3014	2950	2819	2511	1747	1158
N9JF	2896	2851	2779	2637	2415	1657	
NN9K	1470 #3	1555	865 #3	3064 #2	2625 #2	3072	2748

		#3					
AA9KH			3064 #2	3069 #2	3053 #2	2631 #2	1731 #2
ND9M		3070		3066	3064	3044	2923
W9MSE	2835 #5	1401 #5	3061 #4	2955 #4	2052 #4	3041 #3	2913 #3
N9QS	3039 #2	2908 #2	2562 #2	1364 #2	3053	2947	2725
K9RF			2813				1947
N9STL				2940	2499	1666	49
W9UX				2883			
K9WA			3057 #2	3025 #2	2988 #2	2815 #2	2525 #2
AA9ZZ			25 #2			1925	
AC0B		1101	985	897	689		
KY0E	3068	3018	2885	2617	2298	1789	680
W0EAR					2457 #5		
W0GXQ	1207 #5	2912 #4	502 #4	3049 #3	2648 #3		3077 #2
K0LG	2448	1968					1186
NF0N	3046		2773	2548	2252	1862	1403
K0PY						1079	1190
NU0Q	542 #2	3072	3061	2976	2718	1440	321
W0QE		2102 #4	3073 #3	2819 #3	3076 #2	2723 #2	3073
W0RRY						2952	2782
KA0SHC	2929						
NX0X		2009	1966	1888	1737	1608	1233
Updated			1-12-11	KA3MMM			