

# County Hunter News

March 1, 2012  
Volume 8, Issue 3

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

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

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

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

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

You can see live spots of county hunter activity at [ch.W6RK.com](http://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](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](http://www.countyhunter.com) . Please check it out. Back issues of the County Hunter News are available at [www.CHNewsonline.com](http://www.CHNewsonline.com)

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

## Notes from the Editor

### **N4CD Rumbblings**

Winter is here – the south half of the country is enjoying warmer than usual weather. Up north winter weather is 'happening' with usual snow storms, blizzards and weather pattern changes. Interstates have been shut down at times, and not many mobiles other than a few 18 wheelers are out and about in the 'north'. The Pacific Northwest has seen lots of rain and snow up in the mountains. Propagation has gone from 'so so' to bad – with some days of high geomagnetic activity and poor propagation. A few folks have finished off awards – it's usually slow this time of year.

Gas prices have spiked up another 35 to 50 cents per gallon – reaching close to 4 bucks a gallon on the west coast. Projections are for 4 dollar gas everywhere this summer and higher on the coasts. Ouch! It's about \$3.50 a gallon in TX going up a dime a week it seems.

We've got several county hunter events coming up – the Michigan MINI, then Dayton in May, the National in July in the northwest, and the 3M Re-union in Sept. The yearly series of QSO Parties has started – all so far with good activity.

1 ) **K3IMC Forum Page** - It seems that some of the 'folk's at MARAC had a hissy fit, and no longer will new awards be announced on the K3IMC forum page. Sad. Very sad. County hunter work real hard to earn the next award after USA-CA (and I'm sure K1BV will have no problem posting the latest issued USA-CA numbers on the forum) and it is truly a sad state of affairs when not only does 'the power that be' at MARAC not post newly issued awards on the forum, and not wanting others to post them there, either. In fact, the 'powers that be' had the current listed ones removed at one point.

No one knows when new awards are issued unless they happen to peruse the MARAC home page on rare occasion, which posts them a few days or few weeks after they are issued, or read the fine print in the MARAC RoadRunner way in the back among all the little print to find out what new awards were issued. No wonder fewer and fewer people remain in county hunting. Folks bust their butts to qualify for an award.....or help out folks to get it.....and when they do, no one even knows about it. When MARAC wonders why the membership falls year after year...just look to the things like this that show you how much MARAC really cares about having people enjoy the hobby of county hunting. Or be recognized by fellow county hunters for earning another 'notch' on the awards ladder?

When the new awards were posted, the rest of the county hunters had the ability to congratulate the folks on the new award. Not any longer. Maybe the MARAC board should have a meeting and discuss it a bit?

So...since likely 90% of you haven't heard about the latest awards....we'll detail many of them here in the County Hunter News. We've been doing it now for over 7 years and will continue as long as we can find out the info.

2 ) **Reader Feedback Department** - It's a small world....one thing leads to another - via email from Frank, G4HBI about the trip report last Thanksgiving where he headed through the Jamestown area – and the latest news was discovering the church where Pocahontas was married.

“My very good friend Eddie G4KHG send me a clip from the county hunters newsletter regarding Pocahontas. He knows of my interest.

I spend some holiday time each summer in a rented cottage in the village of Heacham in Norfolk. This was the country seat of John Rolfe who lived in Heacham Hall which sadly is no longer there, that is a story in itself. Anyhow, Heachem is where Pocahontas lived for the time she was in England and she departed for the nearby Kings Lynn on her ill fated return to America. You probably know all this anyway. Heacham is very proud of it's association with Princess Pocahontas and the village sign depicts her in great splendor and is very proudly displayed on the main road on the outskirts of the village. There is also an alabaster bust of her in the local church in memory. “

3 ) **New 60 meter rules**

The new rules for 60 meters go into effect on March 5, 2012. Now CW allowed. I'm going to have to put up a 60m antenna!

4 ) **W1AW Only receiver**

I stumbled upon some other links for a very simple W1AW only receiver. If you have the

inking to build a simple project for under \$10, check out "An Ultra Simple W1AW receiver' by Kitchin, N1TEV, published in QST May 1997. It uses a handful of parts, and is 'crystal controlled' on the 80M W1AW frequency using a color burst crystal.

ARRL members can access the QST archive for free. It's a two transistor, one IC design that runs off a 9v battery.

\* \* \* \* \*

## Mobile Activity – Jan 25 – Feb 25

Ed, **K8ZZ**, was out in CA on his 3 week trip running counties. He had 'antenna failure' but was able to resurrect some of it and continue operating. Then it was off to HI to run all the islands.

**KB0BA**, Lowell, and Sandra, **N0XYL**, were busy putting out counties in WI.

Larry, **W7FEN**, ran Santa Cruz a few times for the folks.

**KC7YE** headed down from OR down into CA and put out dozens of counties.

**N9AC** put out counties in FL

Mark, **N2MH**, put out counties in Northern New Jersey.

Terry, **WQ7A**, headed up to Whatcom WA and back.

Jerry, **K1SO**, mobile in VA and NC.

Kerry, **W4SIG**, took a trip to MS for a LC WBOW for W0EAR on CW.

**AD8P** was out in northwest OH.

Barry, **N0KV**, and Pat, **N0DXE**, left FL, through MS, AL, into LA, then into OK and back home.

Joe, **N5UZW**, took a nice trip all around MS for the folks.

Jim, **N9JF**, headed across MO, OK into the TX panhandle. Then back home through OK, MO getting the LC in OKLA for Doug, WA4UNS. Later he was in NE and KS.

Sandy, **WB4EVH**, spotted in a few in GA.

**NT7R** was spotted in some KY counties on SSB.

Dan, **AA0TT**, spotted in many states – big rig counties. He was one of the most active mobiles.

Jim, **N4JT**, headed from NC up to MD and DE, running a lot of them there. Busy on 40-17m in most counties, and hit 15, 12 and 10 meters when he had time.

Jerry, **W0GXQ**, took a long one day trip over to Kidder ND – a LC WBOW for Art, N4PJ for All CW.

Fred, **K0FG**, headed from AZ back through NM into TX. He took a side trip to Terrell, TX for NC4MO – and it was also needed by many. Then another side trip to McMullen, TX bringing Mike down to just a few to go for USACA. Then returned to very south TX. Afterwards headed back up to MO through lots of TX and OK counties.

Jack, **N7ID**, headed out for a few counties in ID. Then a few more later in the month.

Darl, **NA8W**, took a day trip in OH.

Dave, **KW1DX** ran counties on SSB and CW in MA. Headed out to Dukes, MA (he was good for Natural Bingo there too). Then some RI counties.

Paul, **WD9EJK**, ran counties in IL.

Larry, **W7FEN**, was out and about in AZ.

**WB5TMW, and Seth, N3MRA** were out mobile.

Mike, **KA4RRU**, left at 1000Z and headed down to FL running then on CW and SSB. There were contacts made at 1015z as some got out of bed early. He put out more counties while down in FL. A week later he headed back run running them on 20 and 17m cw. Oh, and occasionally on 20M SSB. Kept 17M cw busy from the counties as he went through them.

Jim, **K9JWV** showed up in Iron, UT, and NC4MO ran Cherokee NC

Jim, **K0ARS**, showed up in TX on cw. Then headed back to MO.

**W0NAC**, Matt, and Sharon, **N0LXJ**, put out a few in CO.

Norm, **W3DYA**, headed over to LA for the LA QSO Party. More coverage later.

Greg, **NM2L**, headed up to ME from GA. Had only 40M antenna, but showed up on 15M cw using same antenna, and on 30M using a tuner to tune it. Ran around in ME on 40M SSB and CW.

Steve, **AK8A**, headed down to south TX through LA and TX. Then ran a bunch down in way south TX. All cw.

Lon, **K0WJ**, spotted out mobile in KS

**N7LFX** was out and about in OR.

Gene, **K5GE**, headed over to Aransas, Victoria, Calhoun and other TX counties for the folks.

Scottie, **N4AAT**, headed up to NC for 2 days putting them out.

Mark, **W8MP**, headed north from GA up through TN to home.

Bill, **K2HVN**, headed on down to FL from DE.

## USA-PA N #15 WQ7A

Congrats to Terry, WQ7A, for earning the USA-Prefix Award “N” in January. You can drop him a congrats note at: [WQ7A@comcast.net](mailto:WQ7A@comcast.net)

## Bingo #339 N8OR

Congrats to John, N8OR, on earning the Master County Hunter Award, known as “Bingo” in January 2012. He'll now be busy working on his Master's Gold Award which he can start on.

You can drop him a note of congratulations at:

[N8OR@arrl.net](mailto:N8OR@arrl.net)

## Seventh Time #18 W4RKV

Congrats to Mitch, W4RKV, on earning Seventh Time around #18 in February 2012. He's off now to getting Eighth Time.

You can drop him a note of Congrats at:

[W4RKV\\_50@hotmail.com](mailto:W4RKV_50@hotmail.com)

## On the Road with N4CD I

I thought about going mobile for the weekend, but didn't get inspired. It would take 2 days to get down to the Gulf coast and be able to run many the 'needs' on the K3IMC page. Don< K3IMC, had run a bunch down there himself, too, but folks always seem to need things like Aransas, Calhoun, Matagorda, and without a Texas mini – even more were needed. Come the weekend, I wasn't motivated even though the weather was good.

After sitting around Saturday chasing K8ZZ out in northern CA and OR, trying to work him on 17M and 10M (not much luck on 10M), I checked the OK needs to see if I could do a 'day trip' up there. The credit card bills for the last trips hadn't even arrived yet. Hi hi.

John, N8OR, amazingly was down to one to go for Bingo – Blaine OK, and others needed counties nearby. Barry, N0KV and Pat, N0DXE had run many in OK– mostly on SSB filling

in a bunch of those needs. Art, N4PJ, had two to go for all cw and one was Caddo, OK...right next to Blaine. Some needed Jefferson. A plan hatched for a one day trip. Who knows when another mobile would wander through them? Or run them on CW? If you keep your foot on the gas, it's a 4.5 hour trip with no stopping time and no detours. Each way.

I didn't have much of a plan other than get up to Blaine the fastest way – then figure out what to do from there. I threw the suitcase in the car just in case that turned out to be more than a day. I notified John and Art and both said they'd be home. Same for the folks with needs posted for Jefferson and Stephens. I had a copy of the OK page from my coloring book and I put the needs on it...so after hitting Blaine, I could figure out the 'most needed' way to get back home.

I woke up early – 4:30am the alarm was set for 5:30 but, heck, I was awake, so I got dressed, had a breakfast nuked in the microwave and some coffee and juice and headed out the door and on the road at 5:20am in the morning. It was dark outside. Sunrise isn't until 7:30 or so in January. The temp in the driveway was 36 degrees. Usually I don't start much before daybreak – there's no one around to work! It's 100 miles or so to the OKLA border and no new counties to get there, so it was an early start. There was still lots of traffic on I-35.

It's 6.5 miles and 10 traffic lights over to the 121 Tollroad over to the Interstate– and from there, there's no traffic lights until you get off to run Blaine County 270 miles later. Up I-35 to Oklahoma City you go, then west on I-40. Ralph, WB4FFV was the first contact - on 40M cw- after I'd been on the road for 2 hours – up in OKLA. I was calling for each county, but either all the county hunters were asleep at 6am-7am, or no propagation on 40, 30 or 20M.

The temp dipped to the 20s up in OKLA before sunrise. I was sitting in a rest area on a county line as the sun rose. That's a nice feeling to watch it rise. The cw freqs were busy after 7:30 running through the counties – stopped a few times in rest areas to put them out on 20M SSB – easier for me to do it stopped, and be able to spot myself after finding a clear frequency, and pick the calls out of the pileups. When you get up by Oklahoma City, there are some noisy stretches of interstate too, so find a quiet spot and run them. A 'winter field day station' K8UO was sitting on 7188 for the first 4 hours of the trip. I didn't hear any net either side, either, so there was no 40M SSB for the first few hours.

In Canadian County off I-40 after five hours in the car, I had a 'hungries attack' so I visited a Denny's there for a filling breakfast, then it was on further west to the turnoff for Hydro, OK. You run into Caddo, OK - the Next to last WBOW for N4PJ – now he is down to just Kidder, ND to finish up his USA-CW. Looks like Jerry, W0GXQ has a planned trip to get that, too!

Things were going good. The 'speedy' cw county hunters were sending “A599“ or A 559....meaning 'also 599 or 'also 559'. Makes things go faster when 20 or 30 are calling and you can work through them quickly. Maybe more get through before you run out of the county (which I seldom do as I stop, but not always possible on interstate).



For example:

N4CD : QRZ  
Others: big pile calling - pick out WB2ABD  
N4CD: WB2ABD 599  
WB2ABD: A 599  
N4CD: R599 QRZ

Hydro, OK, is a small town and the county line is right in the middle of town. I hoped to run the C/L, but no joy. It's a town that used to be on Rt 66 – but the Interstate passed it by just to the south and folks just don't need to get off the interstate and stop at the little towns. It's got a population of 1000. Most work in the larger towns like Weatherford to the west.

For those curious about Hydro, OK  
<http://digital.library.okstate.edu/encyclopedia/entries/H/HY001.html>



Blaine/Caddo OK

Blaine OK - LC WBOW Bingo for John, N8OR

Caddo, OK – Next to LC WBOW N4PJ All CW  
Genuine Percy Pic\*

I stopped at the C/L sign, but it was noisy on 40M SSB. John, N8OR was on frequency, and he finished up his Bingo with a contact on 40M SSB. Now he can get busy working on his Master's Gold. There was too much noise to run well on 40M – but we tried. Next I headed a few miles north and turned into a big cemetery – parking at the rear away from everything and ran the county all bands. It was a good place to run the county.

It was taking a good 30 minutes to run all the bands – it was a weekend and propagation was decent. In the middle of the day, I headed up to 15 cw, but it wasn't as good as it was from south TX. I was getting 'too close' for many on 15m with normal skip K0DEQ was in there on 17M with his amazing signal on 17M – he manages to get through at 200-2000 miles on 17M many times. I rolled down the windows during stops – it was a nice 60 deg and sunny.

I looked at the time, and figured I could get over to Custer and Washita line and run that – about 15 miles away then head back to the southeast to get to home. If you go down highway **XX** about five miles, you've got a good line to run. The gas gauge was down to 1/4 full. I thought there would be a gas station at the exit, but there wasn't, so I backtracked up to I-40, headed east an exit or two and filled up the tank. It had been nearly 300 miles so far.

Checking the map it looked like I could zip down and hit Kiowa again (still needed), hit Grady and then head south through Stephens and Jefferson down to TX and home. It took a while.

In Caddo County, you pass through a town of Fort Cobb. Way back when in the Oklahoma Indian days back in the 1850s there was a fort there for ten years. General Custer spent a week there in 1858-59. The fort was occupied by both sides during the civil war.

The military post of Fort Cobb was established October 1, 1859, by two companies of the First Cavalry (formerly the First Dragoons) and one company of the First Infantry, under Major W. H. Emory. It was built of pickets and adobe, on the high ground east of the present townsite.

The fort was abandoned in 1869 and all operations moved to Fort Sill, OK. There doesn't appear to be any remains of the fort there preserved there.

Lots more reading here for the history buffs:

<http://www.forttours.com/pages/ftcobb.asp>

It was over to Highway 81 and straight south through Stephens, into Jefferson (LC for AB4YZ) and down into Montague TX – to 287 to 380 back to I-35 and home. I stopped for dinner – Sunday night – and reached home at 7:30.

Stats: 14 hours on the road – 577 miles – whew...too many to do regularly. However, we got John, N8OR, finished up and gave out a few more LC's and cleaned up some needs. Missed a few county hunters for their counties, but this was a spur of the moment trip without too much notice. Sometimes I just get the urge to go, and go!

-----

- Percy Pics - a curious mind asked 'What's a Percy Pic'. Long time readers of the County Hunter News will recall the way back issues where we exposed Percival Ford, KA1JRP (just plain rotten) and his sidekick 'club of one station' buddy. It seems Percy would bloviate, for hours on end, about certain county hunters like N9STL, KA3DRO, etc, not 'being where they said they were'. It really got them upset when N9STL headed to Montana to run her LC for WBOW for Master Platinum by working another MG holder from the county. They couldn't believe her trip there. Had to be 'made up' and run from here driveway at home! For 3 weeks, the 'twins' (clubs of one) trashed and bashed the station, despite the fact their fellow 'buddy' had met up with N9STL in MT for lunch. It all got put to rest quickly when the County Hunter news published the pictures of N9STL at the Garfield, MT county line sign. The same bloviating occurred with Ron, KA3DRO on his trip to MN. The County Hunter News published the pictures, and the BS out of SC and FL ceased. So now on trips, LC WBOW, etc, we put in “Percy Pics” just to avoid the bloviating and hot air and venom out of SC and FL. Hi hi. Now you know the history behind “Percy Pics”

I take the camera along to take pictures – don't always remember to do it, but for LC for the WBOW, it's a nice thing to do. I send off a high res picture to the county hunter. The ones we stick in the CHNews have to be low res pictures to save on bytes.

## The Hoax is Over!

**Forget global warming - it's Cycle 25 we need to worry about (and if NASA scientists are right the Thames will be freezing over again)**

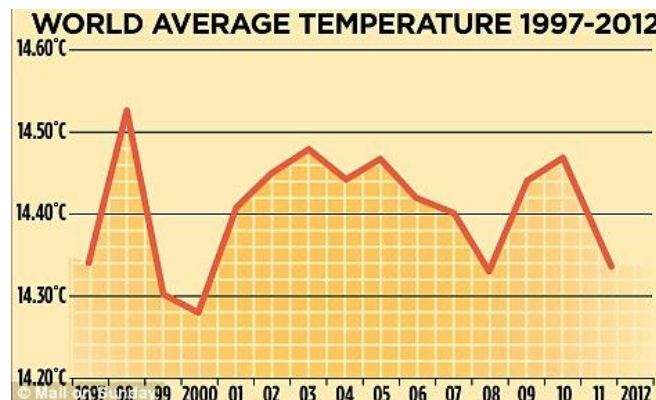
The supposed ‘consensus’ on man-made global warming is facing an inconvenient challenge

after the release of new temperature data showing the planet has not warmed for the past 15 years.

The figures suggest that we could even be heading for a mini ice age to rival the 70-year temperature drop that saw frost fairs held on the Thames in the 17th Century.

Based on readings from more than 30,000 measuring stations, the data was issued last week without fanfare by the Met Office and the University of East Anglia Climatic Research Unit. It confirms that the rising trend in world temperatures ended in 1997.

Meanwhile, leading climate scientists yesterday told The Mail on Sunday that, after emitting unusually high levels of energy throughout the 20th Century, the sun is now heading towards a 'grand minimum' in its output, threatening cold summers, bitter winters and a shortening of the season available for growing food.



Solar output goes through 11-year cycles, with high numbers of sunspots seen at their peak. We are now at what should be the peak of what scientists call 'Cycle 24' – which is why last week's solar storm resulted in sightings of the aurora borealis further south than usual. But sunspot numbers are running at less than half those seen during cycle peaks in the 20th Century.

Analysis by experts at NASA and the University of Arizona – derived from magnetic-field measurements 120,000 miles beneath the sun's surface – suggest that Cycle 25, whose peak is due in 2022, will be a great deal weaker still.

According to a paper issued last week by the Met Office, there is a 92 per cent chance that both Cycle 25 and those taking place in the following decades will be as weak as, or weaker than, the 'Dalton minimum' of 1790 to 1830. In this period, named after the meteorologist John Dalton, average temperatures in parts of Europe fell by 2C.

However, it is also possible that the new solar energy slump could be as deep as the ‘Maunder minimum’ (after astronomer Edward Maunder), between 1645 and 1715 in the coldest part of the ‘Little Ice Age’ when, as well as the Thames frost fairs, the canals of Holland froze solid. These findings are fiercely disputed by other solar experts.

‘World temperatures may end up a lot cooler than now for 50 years or more,’ said Henrik Svensmark, director of the Center for Sun-Climate Research at Denmark’s National Space Institute. ‘It will take a long battle to convince some climate scientists that the sun is important. It may well be that the sun is going to demonstrate this on its own, without the need for their help.’

He pointed out that, in claiming the effect of the solar minimum would be small, the Met Office was relying on the same computer models that are being undermined by the current pause in global-warming.

...it is becoming evident that factors other than CO2 play an important role in rising or falling warmth, such as the 60-year water temperature cycles in the Pacific and Atlantic oceans.

‘They have insufficiently been appreciated in terms of global climate,’ said Prof Curry. When both oceans were cold in the past, such as from 1940 to 1970, the climate cooled. The Pacific cycle ‘flipped’ back from warm to cold mode in 2008 and the Atlantic is also thought likely to flip in the next few years .

Pal Brekke, senior adviser at the Norwegian Space Centre, said some scientists found the importance of water cycles difficult to accept, because doing so means admitting that the oceans – not CO2 – caused much of the global warming between 1970 and 1997.

The same goes for the impact of the sun – which was highly active for much of the 20th Century.

‘Nature is about to carry out a very interesting experiment,’ he said. ‘Ten or 15 years from now, we will be able to determine much better whether the warming of the late 20th Century really was caused by man-made CO2, or by natural variability.’

Meanwhile, since the end of last year, world temperatures have fallen by more than half a degree, as the cold ‘La Nina’ effect has re-emerged in the South Pacific.

‘We’re now well into the second decade of the pause,’ said Benny Peiser, director of the Global Warming Policy Foundation. ‘If we don’t see convincing evidence of global warming by 2015, it will start to become clear whether the models are bunk. And, if they are, the implications for some scientists could be very serious.’

Read more: <http://www.dailymail.co.uk/sciencetech/article-2093264/Forget-global-warming--Cycle-25-need-worry-NASA-scientists-right-Thames-freezing-again.html#ixzz1lLxzCI97>

--- ---  
Note de N4CD – East Anglia is the University where Mann came up with his 'hockey stick', hiding the data – he is one of the renowned 'climate scientists' that led the push on Global 'Warming' and was exposed by his emails in fudging the data to show warming. He refused to share his data (oh, it got 'lost).

Now the same research center is admitting there has no been no warming in the last 10 years.

How 'inconvenient'!

## Winter Time County Hunting by Jerry, W0GXQ

When I witnessed Art, N4PJ picking up his next to last county for CW-I and mentioning Kidder North Dakota was the last for the WBOW, I offered to make the trip. We agreed that Friday, February 3<sup>rd</sup> would be the best day. I had checked the weather forecast on Thursday and the only thing that caught my attention was the fog advisory, but what the heck, I'd just have to drive a little slower. What I didn't pay enough attention to was the forecasted temperatures.

After driving fifty miles or so, I became aware that my antenna was starting to exhibit an unusual vibration. I opened the sun roof and saw that it was covered by a quarter of an inch of ice on the leading edge of the mast, and all of the resonators. I could see the forward guy lines which were the size of a pencil. I checked the power out indicator at 7056.5 and it appeared to be about 50w. I had to tune down to 7035 before I reached optimum resonance. This was when I decided to take the antenna down, clear the ice and dismantle it for transport. The sun didn't burn off any of the fog until I was 200 miles from home, or 17 miles from the Kidder line. Temperatures hung right at 24 to 25 degrees all the way.

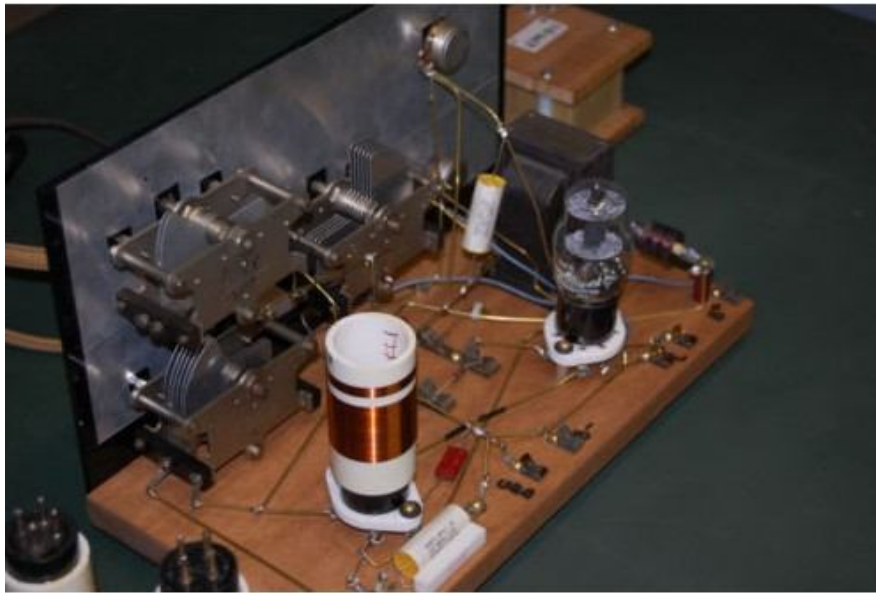
The hoarfrost was thick and of course the scenery was beautiful all the way over (what I could see of it). I had intended to get a picture of the county sign but didn't want to stop on the interstate. On the return trip, by the time I got to McIntosh, the sun was once again hidden by the fog. Of course when I got within 40 miles of home, the sun shone brightly for 30 minutes.

Band conditions were not the best, but I managed to make 556 contacts of which 213 were on

17 through 12 meters. Rarely did I catch anyone on 30 or 40 meters. Thanks to the folks who rode along, and I'm happy to have given out five last counties including the WBOW for N4PJ.

## Some stuff from Ebay

Here's something that showed up on Ebay. You can buy one of these 'new'



PV Scientific 'Old Style' Receiver (kit or wired)



from their website:

“This superb receiver is our most popular regenerative radio. Its sensitivity and selectivity are exceptional, and it is extremely easy to operate.

The circuit of this regenerative radio employs a 6A6 twin-triode vacuum tube to accomplish both regenerative detection and amplification of incoming radio signals. Its front panel includes dials for coarse-tuning, fine-tuning, volume control, antenna-tuning, and regeneration control.

Built on a finished, pattern-grade hardwood base, this regenerative radio receiver has antique 1930's parts and fixings. The set includes top-quality antique headphones, longwave and shortwave plug-in coils (550-1750kHz longwave and 29-46m shortwave), and all required batteries.

They sell a one tube and two tube kit – very expensive.

Kit available for \$250. Kit comes with wound oscillating coils and assembled front panels. You do all the wiring and finish the hardwood base. To build this kit, you will need a soldering gun, solder, sandpaper, and wood finish. You will need to read electronic schematic diagrams, follow instructions and picture diagrams to lay out parts, follow a vacuum tube pin layout, solder, apply power to a filament and a B supply in proper polarity, and make a simple wire antenna and ground arrangements. Building and operating instructions are included. “

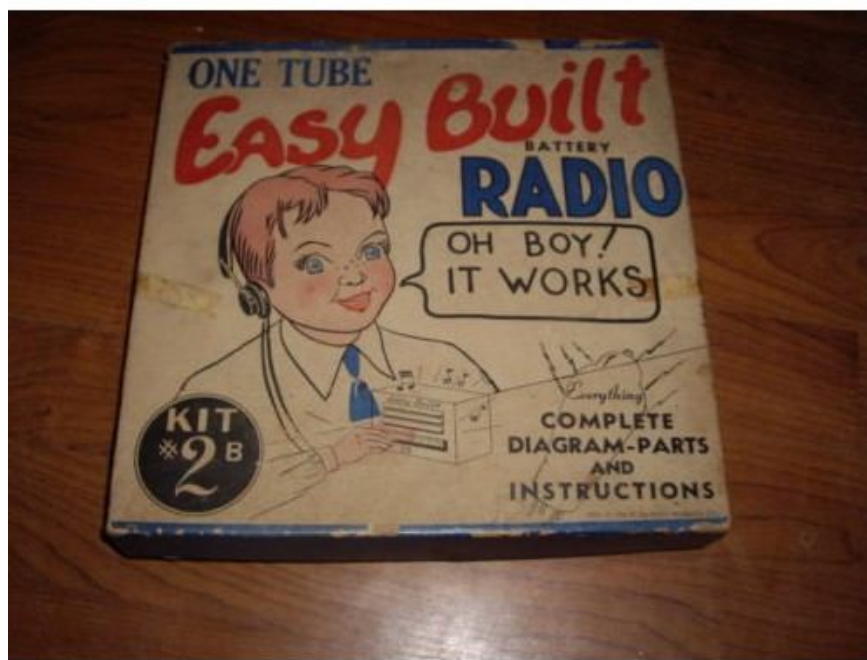
Here's where to buy a new one if you have lots of spare cash.

<http://www.arcsandsparks.com/twinregenerative.html>

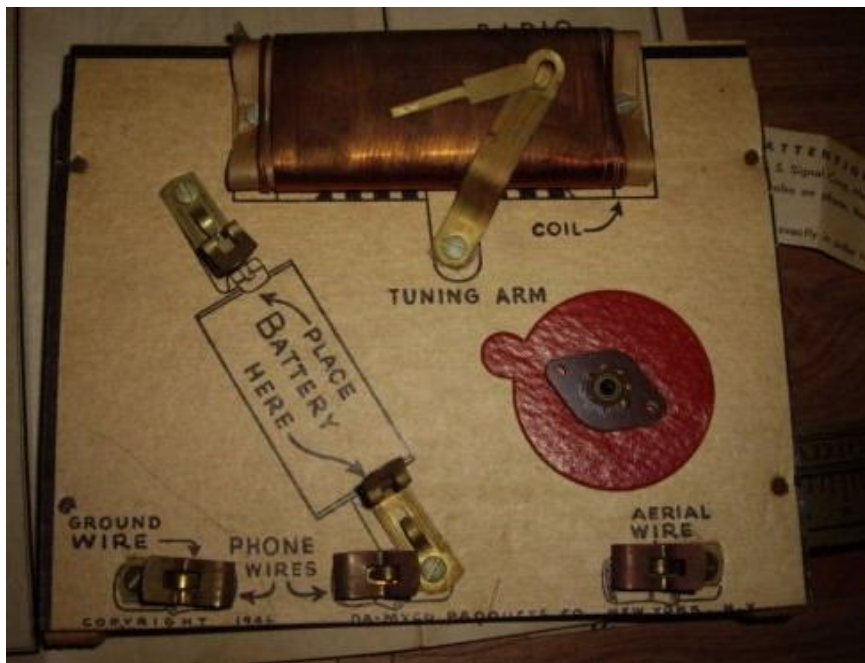
A built unit sold for \$220. You can buy a new one (kit) for \$250)



Here's another interesting 'goodie' that showed up. It's made by Da-Myco Radio Kit 2B and the instructions are dated 1946. It appears to be a one tube set using a slider on a coil for tuning, with a tube detector. It's hard to tell but it appears there are only 4 parts to this radio: the coil, the tube, the 1.5v filament battery and the earphone. Not even a bypass cap to keep RF off the headphones, or a cap to resonate the tuning circuit. All it does is try to resonate your antenna using a ground connection, like the most simple crystal set.



Da-Myco One Tube Set – circa 1946



Sold for \$140 bucks on E-Pay!

Da-Myco was headquartered on Cortland Street in New York City right after WW2. They made Dick Tracy two way wrist radio toys for kids, crystal radio kits, and Buck Rogers 'Sound powered' toys (that used a pair of wires between them. The 'wrist radio' was a simple crystal set that needed a long antenna and ground to work, but maybe it inspired a whole generation to then come up with modern cellphones! Now, you have your Dick Tracy style video and voice phone – 60 years ago, it was just a dream.

- - - - -  
This month, a Regency ATC-1 Converter showed up on Ebay. This was a 2 transistor five band device that took the ham bands and converted them down to the broadcast band (typically 1230 KHz) to provide an inexpensive mobile receiver using your car radio. We showed this in the November 2007 issue. Sold for a hefty price, too. This was the likely the first 'transistorized' product offered for ham use of any significance – other than a simple one or two transistor radio toy kit.

Here's an interesting page on the unit – complete with simplified schematic and brief circuit description. Not only did it down convert the ham bands, it also had a BFO built in for cw operation and a Q multiplier for AM.

<http://www.w8zr.net/vintage/receivers/atc1.htm>

Complete manual and service info here:

<http://www.w8zr.net/images/atc1%20manual.pdf>

-----

Here's another goodie from the past. I don't recall ever seeing one. It's a Hammarlund HC-10 Converter. As they describe it in their manual 'It is the back end of a modern receiver'. Designed to be used for radios designed before the SSB era, it attaches at the last IF tube in your older radio. It provides notch filters, filtering, and a product detector for SSB and CW reception, along with audio amplification, noise limiting, etc. (SSB without a product detector is not that great using just a BFO and an AM detector). It has 10 tubes and built in power supply. It would match your HQ-129X or HQ-100 era receivers.



Hammarlund HC-10 Converter

I've never seen one...then again, I wasn't in a position to be spending hundreds of bucks for the new fangled 'sideband' accessories of the day in the 50s. Maybe our 'senior' county hunters remember it, or some dedicated 'boat anchor' types.

The entire manual is on line at:

[http://www.k7jrl.com/pub/manuals/hammarlu/hc10/hc10\\_v6.pdf](http://www.k7jrl.com/pub/manuals/hammarlu/hc10/hc10_v6.pdf)

Here's another apparently VERY rare 3 transistor receiver made by Ivory Electric Co in the UK. It's an IVALEK. There is no info on the web about it. IVALEK made crystal radio sets, earphones and simple keys – during the 1940s and into the 50s.



Wow...lots of stuff is showing up on Ebay and other sites this month. Here's a 'ham goodie' from way back when (1950s) advertised on QTH dot com. It's a mobile converter that converts 80M down to the broadcast band so you can use it in your 50s or 60s car in front of the AM radio.



Tompkins Tunaverter

This unit made and sold from Refugio Texas by Tompkins Radio Products. It also had a BFO in it to allow you to tune in SSB. It covered only the top part of the band (the AM/SSB part). It ran off a 9v battery. You tuned your car radio to a fixed frequency (550 or 1600 depending upon the model). These were available in HF for 160, 80, 75, 40, 20, and 15 meters, with an SWL version at 14-18 MHz and a WWV converter. The BFO was an extra cost 'option'.

There were also VHF models for different frequency ranges. The VHF radio converter models are 273 (26.9-30 MHz = CB-10), 308 (30-38 MHz), 375 (37-50 MHz), 504 (49.5-54.5 MHz = 6 M), 1450 (144-150 MHz = 2 M), 1828 Air Craft Model (118-128 MHz) and 1564 (150-164 MHz).

The circuit appears to be a clone of the Regency ATC – but for only one band at a time.

You can read a review of it herein the 1966 73 Magazine review!

[http://www.archive.org/stream/73-magazine-1966-02/02\\_February\\_1966#page/n81/mode/2up/search/tunaverter](http://www.archive.org/stream/73-magazine-1966-02/02_February_1966#page/n81/mode/2up/search/tunaverter)

## 60 Meter Rules

The new rules allowing CW and data become effective 12:01 March 5, 2012

by the FCC:

The frequency 5368.0 kHz (carrier frequency 5366.5 kHz) is withdrawn and a new frequency of 5358.5 kHz (carrier frequency 5357.0 kHz) is authorized.

- The effective radiated power limit in the 60 meter band is raised by 3 dB, from 50 W PEP to 100 W PEP, relative to a half-wave dipole. If another type of antenna is used, the station licensee must maintain a record of either the antenna manufacturer's data on the antenna gain or calculations of the antenna gain.
- 
- Three additional emission types are authorized. **Data** (emission designator 2K80J2D, for example, PACTOR-III), **RTTY** (emission designator 60H0J2B, for example, PSK31) and **CW** (150HA1A, i.e. Morse telegraphy by means of on-off keying). For CW, the carrier frequency must be set to the center frequency. For data and RTTY the requirement to transmit "only on the five center frequencies specified" may be met by using the same practice as on USB, i.e. by setting the suppressed carrier frequency of the USB transmitter used to generate the J2D or J2B emission to the carrier frequency that is 1.5 kHz below the center frequency.

The New Rules go into effect as of 12:01 on March 5, 2012

The five channels are (center freq) 5330.5 5346.5 5358.5 5371.5 5403.5 kHz

## More Epic Greenie Fail

### **Another green-tech stimulus recipient files for bankruptcy**

In this year's SOTU speech, Obama bragged about having sunk money into "partnership" with the private sector to become a world leader in car-battery sector. Right on time, that "partner" filed for bankruptcy, too:

An Indiana-based energy storage company that received a \$118.5 million stimulus-law grant

from the Energy Department filed for bankruptcy Thursday.

Ener1 is asking a federal bankruptcy court in New York to approve a plan to restructure the company's debt and infuse \$81 million in equity funding. ...

The Energy Department, in 2009, approved a \$118.5 million stimulus-law grant for EnerDel, a subsidiary of the company that develops lithium-ion batteries used in electric vehicles. The grant was part of a broader program aimed at promoting the development of electric-vehicle battery technology.

President Obama touted the program in his State of the Union address this year. "In three years, our partnership with the private sector has already positioned America to be the world's leading manufacturer of high-tech batteries," he said.

Vice President Joe Biden visited last year the day after President Obama's State of the Union Address. The Ener1 Chapter 11 filing came a year to the day after Vice President Biden visited the company's Greenfield plant—and a year to the day after Biden's aide wrote on the White House website: "They expect to expand the manufacturing and assembly operation in Greenfield from 80 workers today to over a thousand by the start of 2013."

We saw this coming last October, when CBS first reported on Ener1's shaky financial position. At that time, the company had spent \$53 million of the grant and had pledged to create 1700 jobs from it in total. When the story got reported, Ener1 traded at 11 cents a share, down from its December 2008 peak of \$9.40 and **the \$3 per share price when the Department of Energy decided to invest in a company that had lost two-thirds of its value.** The share price was five cents by the beginning of this month, and is now at two cents a share.

Don't forget, too, that the \$53 million spent by October created jobs ... 33 of them.

Source: <http://hotair.com/archives/2012/01/26/another-green-tech-stimulus-recipient-files-for-bankruptcy/>

More likely just another case of Obama bailing out those who bundled and raised campaign funds for him. We taxpayers 'invested' after the stock had cratered and the company was already failing. Your money. Your kids money. Your grandkids money.

# Minnesota QSO Party

The mobiles were out: K0PC, N0PI, N0IJ, W0ZQ, W0AA, N0HJZ, KT0R, KC0DMF, N0UR, NR0T, KE0G, NV0P, and more.

The band turned flaky with the A index headed over 4 and the flux dropping, limiting the activity on 15 and 10. Some fixed stations had 25 contacts on 15m – but here in TX, just one QSO with MN On 15cw despite frequent checking. 20 and 40 were the bands for most of the activity with some on 80cw during the last few hours as it came to an end.

From the 3830 reflector:

**N0HJZ mobile (757 Qs):** “My goal was to operate in 14 counties.

I had really dense fog at the start, and the resulting ice on the antennas made for a slow start. I had to take the antenna down and thaw it in the car for five minutes. Then it would work correctly.

Thanks to everyone who followed me around. I stayed on 20M Phone and had a blast. I actually got ahead of schedule and added two counties to my trip.”  
He had only 9 QSOs on 15M.

**KE0G/rover (377Q) -**

K3/10 at 5 watts, and a K1 at 5 watts, not simultaneous. Rover, using a 34' vertical in 4 counties, and a sloping OCF dipole in one county. Had a great time! Thanks for all the action - an average of 1 QSO per minute while on the air (6:20 hours). Was fun to hear all of you on. Big Sig of the day was Dick, n0im/m in Goodhue County, who likely passed within 1/4 mile of my loc, "pegging" the S-meter bars on the K3 ! 72 & 73, Dan ke0g

**W0ZQ/mobile (1030Q)**

Weather for this years MnQP was great; temperatures near 40 and little



to no snow so I could safely operate on the roads right at the county lines. We did have fog in the morning, and I did get lost once because of it, but the cars compass pointed me in the right direction .... always trust your instruments. I operated this contest as a single-op single-op running CW while stopped and fone while driving. The fone contacts get saved on a voice recorder where I can enter them into the CW log after the contest ends. When stopped I was using a MFJ manual tune screw driver with a 12' whip. I only had one visitor while stop where I had to ask the pile-up to standby - a farmer who wanted to know what I was up to. After I explained, he was pretty interested and wanted to know more, and I ended up talking ham radio with him for about 5 minutes .... good PR but bad for rates. Many thanks to everyone for all the Q's and hope to see you in the WiQP in six weeks .... hopefully the wx will hold. 73, Jon.

### **N0IJ/mobile (1122Q) – NX0X driver**

What a blast. Warm wx but lots of ice fog which made driving difficult at times and collected on the antenna. Big problem in the first couple hours with power for laptop and screwdriver. Either have faulty battery or bad charger--use two car batteries in tub to avoid computer hash. After half hour of adapting, ran laptop off of car and everything worked perfectly. Couldn't adapt the screwdriver controller so had to limit band changes somewhat to conserve power. Super driver, NX0X, managed to catch up to our schedule, but there was no recouping the lost time.

Really fun to hear the regulars following us in each of the 24 counties: N2CU 31, WB2ABD 26, W0BH 27, KB9S 24, K0RC 21, N9AUG 19, K0TG 19, K0TO 19, W0PI 19, WA3HAE 18, W0EAR 18 & N2WN 17. Bunch more over 10! Thanks folks! During our early problem with power, we became disconnected from APRS for about 3 hours.

I've never heard such pile ups, which translates to a lot of support for our contest--much appreciated. Drove 714 miles for the day--525 during the 10 hour contest and the rest getting to the start and coming home after the finish. Did make one 5 minute stop! (besides the fixing)

Rig: K3 to KJ7U screwdriver on top of 2012 Subaru Outback.

### **K0PC mobile – W9DND driver -1206 QSO**

This was MNQP number nine for the team of K0PC & W9DND. Once again it was great fun for me operating but I truly don't understand why John comes back year after year to drive. I appreciate him but I don't understand him.

The last few years we have avoided visits by Murphy. This year we didn't need him, all the problems were self inflicted. To start, I left home a half hour later than I should have. After all the planning that goes into this event, I had a brain drain and thought I should be leaving at 6:00 AM instead of 5:30. We made it to the start in time but the rush caused me to fumble with antenna installation and tuning that is normally easy. Had only one QSO in the first 12 minutes as a result.

The other problem was a shifting VFO. I didn't know why but without warning the VFO would move 500 Hz or so in the middle of a run. I didn't always notice it right away so I'm sure I left a lot of people behind in the pileup. Using the VFO Lock didn't help. On Sunday, when I was cleaning out the car, I realized that the hand microphone was plugged in and was jammed down in the center console. The up/down buttons on the mic must have been pressed on occasion by the jostling. The VFO lock doesn't affect the up/down from the mic. Lesson learned, leave the microphone at home.

Thanks to the 224 unique stations that called in over the contest. A great turnout! Special thanks to all the repeat offenders who make the contest fun. Among those there are three who deserve special attention. Paul WB2ABD was my first QSO and came back for 33 more. Jules N2WN had the second highest QSO count (27) and ran QRP. Bob W0BH made the most of our 26 QSOs by working us in every county (24).

Here are the other top hitters from MNQP 2012: K1ZZI 27, K2KW 25, N2CU 25, N9AUG 23, W0EAR 23, KB9S 21, N4VV 20, K4AMC 19, VE3KZ 19, AF9T 18, K0HNC 18, K0RC 18, K0TG 18.

**K2RW:** “First time in the MnQP. All the mobiles really make this contest fun. I caught a few 80m QSOs at the start of the contest, but the band was dead until the last 50 minutes, and overall a bust for QSOs. I missed 2 counties (KIT/MRS).”

**WB2ABD:** “Missed MRS and MAH . 40m was tougher sledding than I'm used to. ....great contest as usual!

**VE3KZ:** “My first participation in the MN QSO Party. After some experience in the QSO Parties to the south I thought it was time to try one where the snow was on the ground. I was born only 50 miles from the MN border and the names of many counties were very familiar. Well it is tougher going north than south even though the distance to MN from here is very nearly the same as to GA or KS. The ionosphere is not homogeneous!

Eight of the mobiles were worked more than 10 times with K0PC and W0ZQ leading with 17 each and N0IJ close behind at 16. N0IJ and K0PC, giving 12 and 11 new multipliers respectively were the most productive for me.”

**N6MU (CA)** :” MN sigs were extremely loud on 10 meters but I had to coax most to go there, hi.” -

He had 10 QSOs on 10M.

### **W0BH (KS)**

Another fun MNQP! The bands were semi-OK from Kansas this year. 20 came in strong twice for several hours, and 40 was good all day, although really weak at times. I made a few 80m Qs right off the top, but got most of them in the last hour.

Great job by the mobiles as always! Many thanks to N0IJ/27, K0PC/26, N0PI/19, W0ZQ/18, N0EO/15, W0AA/12, KT0R/9, KE0G/7, N0UR/4 and W0FZ/4, N0IM/3, NV0P/2 and K0BBC/2, NR0T/1 and KD0CVO/1. Since I couldn't work mobiles on 20 for most of the day, the 40m Qs were really appreciated.

The loudest consistent mobile signal into Kansas this year goes to K0PC/m, which helped me work him in all of his counties. N0IJ/m wasn't loud most of the time, but managed to pull me out every time I tried, so I'll give him the "best ears" award for several ESP-type Qs. I especially appreciated always knowing where to find N0EO/m as he covered the far northwestern counties. I missed two

of those counties last year and was determined to put them in the log this time.

Overall, I worked 111 unique Minnesota stations, missing Fillmore, Kandiyohi, and Wilkin counties. I know they were all active and heard people working them on 20 when I couldn't hear them.

The Minnesota Wireless Association and associated organizers and sponsors along with the fixed stations put on a great show every year from mostly snowy Minnesota. You did it again!

## Even More Greenie Fail

Consider today's collapse of electric car company Green Vehicles an object lesson in why it's a bad idea for cities to invest in the risky business of start-up car companies--perhaps especially start-up electric car companies. The city of Salinas, California learned that lesson today as Green Vehicles shut its doors, costing the city more than \$500,000.

Starting any company is a risky proposal--most don't make it past their first few years. Starting an electric car company can be even riskier, as governmental regulation of the car industry sets an expensive barrier to entry, and the nascent technologies in electric car development are costly and can shift direction quickly.

Green Vehicles was working on a three-wheeled electric car called the Triac 2.0, intended as a freeway-capable commuter car with a range of 100 miles and a top speed of 80 mph. It used a 30kW permanent-magnet electric motor, and a lithium-ion battery pack. It was targeting retail prices near \$25,000. Another vehicle, called the MOOSE, was a utility van-type vehicle built as a neighborhood electric vehicle (NEV).

Though the company's web page is still operational, there is no notice about the company's current situation. According to local ABC news affiliate KSBW, Green Vehicles president and co-founder Mike Ryan has said all of the company's funding is gone. He reportedly notified

city officials that the company was finished via email.

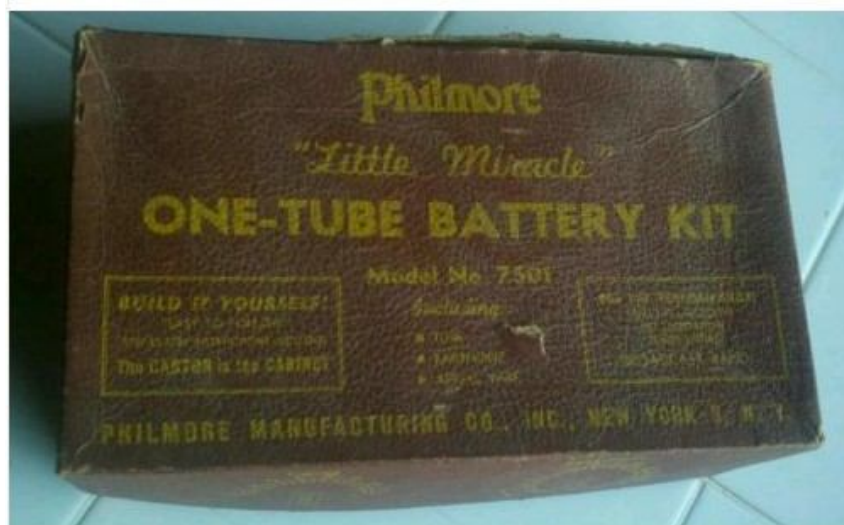
Green Vehicles had promised it would create 70 new jobs and tax revenue of \$700,000 per year.

[http://www.greencarreports.com/news/1063336\\_start-up-electric-car-company-green-vehicles-folds-costs-city-500000](http://www.greencarreports.com/news/1063336_start-up-electric-car-company-green-vehicles-folds-costs-city-500000)

## More Things from Ebay

It's been a good month for spotting 'goodies' on Ebay. Nostalgia from the 40s,50s, and 60s.

Here's a one tube set by Philmore. It's constructed on a supplied plywood base. Then you cut off the side of the box for the 'front panel'. It uses a 3V4 tube in a regenerative circuit for the broadcast band. There's labeling for the controls on the side of the box. During the 30s, 40s, and up into the 50s, many low cost 'kit radios' for youngsters were simply built in the box they came in, or used part of the box for the 'front panel'. (We've shown some of the Scout tube radio kits that were built on a plywood board which was then put into the shipping box in previous issues).



This is what you would get for parts, along the instructions on how to built it.



Naturally, a one or two transistor radio will run circles around these tube radios, but they didn't develop transistors back then. This kit probably made in the late 1940s or early 50s.

Here's another early mobile goodie off Ebay. It's a transmitter for 80/75 meters made by MARS. According to the description, it ran about 10-12 W of AM modulated signal. It requires a crystal or external VFO, and of course, external power supply. The power supply could be a dynamotor, vibrator pack, or new fangled solid state inverter – depending upon your budget and junkie box.



MARS “Thunderbird” 80/75M AM Transmitter

Tube line up – 12AU7 audio pre-amp – using a carbon microphone. 6AQ5 modulator and 6AQ5 final rf tube. Imported from Japan – maybe early 60s? Could be configured for 6v or 12V filaments. (older cars had 6v systems).

More pics of the unit here

<http://smg.photobucket.com/albums/v652/ranickel/MARS%20Thunderbird/>

I wonder how many county hunters back then used something like this?

## Delaware QSO Party

It was an exciting DE QSO Party. For the first time in umpteen years (since a county hunter mobile ran all 3 counties during the QP), all 3 counties were on the air on 20M! (last few years, one or more counties showed up only on PSK and then on 40m during the day).

Bill, **K2HVN** was busy on SSB and CW from Kent, DE and on multiple bands.

**N3ME** was on 20 ssb from Sussex, and **KA3HED** showed up on SSB from New Castle to complete the sweep!

**KB3IWV** was spotted on 40M SSB in Sussex, DE.

It's usually a sleeper, but the alert county hunters spotted the stations so all could grab what they could. Bill also spotted himself quite a few times (allowed in this QSO party) to alert the folks.

## Brother Island, New York

**Inside the lost island of New York: Eerie pictures of the abandoned leper colony just 350 yards from the Bronx**

Just 350 yards from the crowded tenements of the Bronx, it was first occupied in 1885 as a quarantine centre for contagious diseases and became the city's only official leper colony.

The notorious 'Typhoid Mary' - the first healthy carrier of any disease ever to be identified - spent years confined in its bleak woodland.

Closed in 1963, it is now a haunting labyrinth of crumbling ruins. Protected birds are its only inhabitants and the waters around the island are patrolled by armed coastguards who ensure the sanctity of the former quarantine zone is never violated

Meanwhile, the hospital, staff and patient quarters and forced drug rehabilitation centres are slowly reverting to nature.

'This has got to be one of America's most important places to visit,' he said. 'Historically it has



had a notorious and sometimes sinister reputation.

'It was established as a forced quarantine camp for people suffering from infectious and often fatal diseases such as typhoid, scarlet fever, yellow fever and typhus. There were six people suffering from leprosy confined here in wooden huts.

'New York was taking in a huge number of immigrants in the late nineteenth and early twentieth centuries - and new arrivals were forced to live in crowded and unsanitary conditions.

'Diseases would inevitably spread and once the health authorities identified a person as having a communicable disease they were seized and forced to live on North Brother Island - unless they were rich enough to afford a private clinic.

'Conditions were bad - the mortality rate among patients was high and the recovery rate low.

'There was no telephony in those early days so once people were grabbed and taken there - they were often never heard from again by their families.'

The island is officially only open to a select few bird experts, who have a particular interest in its colony of black-crowned night herons, and city patrol officers - though a number of bloggers have detailed illicit trips to its shores.

Source: <http://www.dailymail.co.uk/news/article-2094823/New-York-leper-colony-Eerie-pictures-inside-abandoned-world-lost-island.html>

- - - -

This is the NYC version of Kalawao – which was the leper colony (and still is) of Hawaii. You can't get to Border Island, NY. Harder than getting to Kalawao, although I'm surprised some enterprising drug growers aren't infesting the island.



Border Island, New York

## Wall Street Journal on 'Warming'

Perhaps the most inconvenient fact is the lack of global warming for well over 10 years now. This is known to the warming establishment, as one can see from the 2009 "Climategate" email of climate scientist Kevin Trenberth: "The fact is that we can't account for the lack of warming at the moment and it is a travesty that we can't." But the warming is only missing if one believes computer models where so-called feedbacks involving water vapor and clouds greatly amplify the small effect of CO<sub>2</sub>.

The lack of warming for more than a decade—indeed, the smaller-than-predicted warming over the 22 years since the U.N.'s Intergovernmental Panel on Climate Change (IPCC) began issuing projections—suggests that computer models have greatly exaggerated how much warming additional CO<sub>2</sub> can cause. Faced with this embarrassment, those promoting alarm have shifted their drumbeat from warming to weather extremes, to enable anything unusual that happens in our chaotic climate to be ascribed to CO<sub>2</sub>.

Although the number of publicly dissenting scientists is growing, many young scientists furtively say that while they also have serious doubts about the global-warming message, they

are afraid to speak up for fear of not being promoted—or worse. They have good reason to worry. In 2003, Dr. Chris de Freitas, the editor of the journal *Climate Research*, dared to publish a peer-reviewed article with the politically incorrect (but factually correct) conclusion that the recent warming is not unusual in the context of climate changes over the past thousand years. The international warming establishment quickly mounted a determined campaign to have Dr. de Freitas removed from his editorial job and fired from his university position. Fortunately, Dr. de Freitas was able to keep his university job.

This is not the way science is supposed to work, but we have seen it before—

Why is there so much passion about global warming, and why has the issue become so vexing that the American Physical Society, from which Dr. Giaever resigned a few months ago, refused the seemingly reasonable request by many of its members to remove the word "incontrovertible" from its description of a scientific issue? There are several reasons, but a good place to start is the old question "cui bono?" Or the modern update, "Follow the money." Alarmism over climate is of great benefit to many, providing government funding for academic research and a reason for government bureaucracies to grow. Alarmism also offers an excuse for governments to raise taxes, taxpayer-funded subsidies for businesses that understand how to work the political system, and a lure for big donations to charitable foundations promising to save the planet. Lysenko and his team lived very well, and they fiercely defended their dogma and the privileges it brought them.

Speaking for many scientists and engineers who have looked carefully and independently at the science of climate, we have a message to any candidate for public office: There is no compelling scientific argument for drastic action to "decarbonize" the world's economy. Even if one accepts the inflated climate forecasts of the IPCC, aggressive greenhouse-gas control policies are not justified economically.

A recent study of a wide variety of policy options by Yale economist William Nordhaus showed that nearly the highest benefit-to-cost ratio is achieved for a policy that allows 50 more years of economic growth unimpeded by greenhouse gas controls. This would be especially beneficial to the less-developed parts of the world that would like to share some of the same advantages of material well-being, health and life expectancy that the fully developed parts of the world enjoy now. Many other policy responses would have a negative return on investment. And it is likely that more CO<sub>2</sub> and the modest warming that may come with it will be an overall benefit to the planet.

If elected officials feel compelled to "do something" about climate, we recommend supporting the excellent scientists who are increasing our understanding of climate with well-designed instruments on satellites, in the oceans and on land, and in the analysis of observational data. The better we understand climate, the better we can cope with its ever-changing nature, which has complicated human life throughout history. However, much of the huge private and government investment in climate is badly in need of critical review.

Source: <http://online.wsj.com/article/SB10001424052970204301404577171531838421366.html>

## Who are your Neighbors?

<http://neighbors.whitepages.com/>

Find out who your neighbors are up and down the street and on the next streets. Nifty.

## Vermont QSO Party

This has usually been a 'yawner' with not a whole lot of activity. A few stations got on 20M and made it a bit more exciting. The VT QSO Party web site listed stations for 9 of the counties, but maybe they showed up on 40 and 80M SSB in the evenings, or on PSK. No spots for them other than as noted below.

At least one on 20cw..and three stations and two counties on SSB spotted...

W2HDI was spotted on 40 SSB and showed up on 20M SSB in Lamoille. I think he lives in Stowe, VT.....KB1FRW and W1NVT were on 20M SSB from Chittenden.

From 3830 reflector

W7KAM had 8 QSOs and worked 5 counties on 20m SSB + 40SSB

KS4X also worked five counties on SSB. (20 and 40)

# A Forgotten Radio Inventor

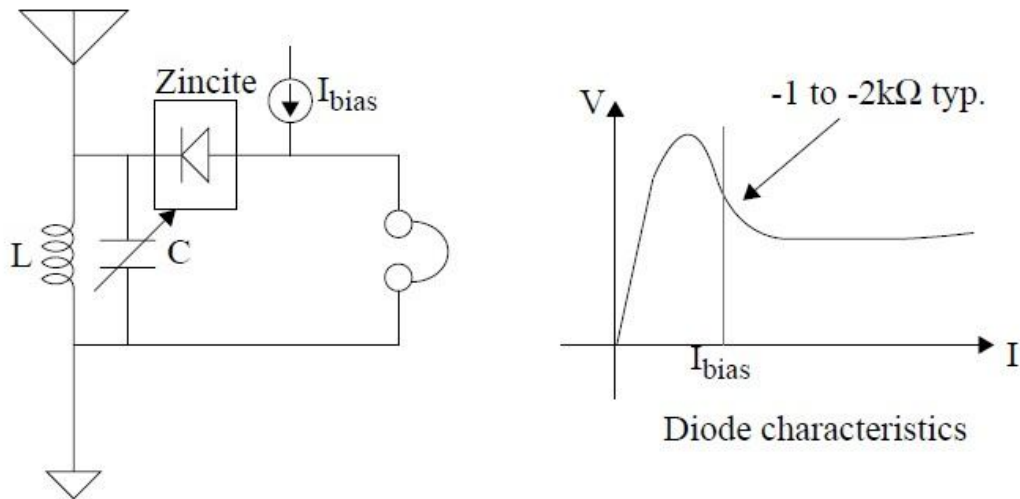
Surely one of the most amazing (and little-known) stories from this era is that of self taught Soviet engineer Oleg Losev and his solid-state receivers of 1922. Vacuum tubes were expensive then, particularly in the Soviet Union so soon after the revolution, so there was naturally a great desire to make radios on the cheap.

Losev's approach was to investigate the mysteries of crystals, which by this time were all but forgotten in the West.

Even more startling than his insights into the behavior of LEDs was his discovery of the negative resistance that can be obtained from biased point-contact zincite (ZnO) crystal diodes. With zincite, he actually constructed fully solid-state RF amplifiers, detectors and oscillators at frequencies up to 5MHz a whole quarter century before the invention of the transistor! Later, he even went on to construct a superheterodyne receiver with these crystals.

True, one had to adjust several bias voltages and catwhiskers, but it nevertheless worked (see Figure 14). He eventually abandoned the "crystadyne" after about a decade of work though, because of difficulties with obtaining zincite (it's found in commercially significant quantity in only two mines, and they're both in New Jersey), as well as the problem of interstage interaction inherent in using two-terminal devices to get gain.

FIGURE 14. Losev's Crystadyne receiver (single stage)



The reason almost no one in the U.S. has ever heard of Losev is simple. First, almost no one has even heard of Armstrong -- it seems that there isn't much interest in preserving the names of these pioneers. Plus, most of Losev's papers are in German and Russian, limiting readership. Add the generally poor relations between the U.S. and the U.S.S.R over most of this century, and it's actually a wonder that *anyone* knows who Losev was. Losev himself isn't around because he was one of many who starved to death during the terrible siege of Leningrad, breathing his last in January of 1942. His colleagues had advised him to leave, but he was just too interested in finishing up what he termed were "promising experiments with silicon." Sadly, all records of those experiments have apparently been lost.

Source: <http://www-smirc.stanford.edu/papers/chapter1.pdf>

## More Greenie Fail Yet

The Las Vegas Sun reports that Amonix, Inc., a manufacturer of solar panels that received \$5.9

million from the Porkulus, will cut two-thirds of its workforce, about 200 employees, only seven months after opening a factory in Nevada.

Just seven months after California-based solar power company Amonix Inc. opened its largest manufacturing plant, in North Las Vegas, the company's contractor has laid off nearly two-thirds of its workforce.

Flextronics Industrial, the Singapore solar panel manufacturer that partnered with Amonix to staff the new \$18 million, 214,000-square-foot plant, laid off about 200 of its 300-plus employees Tuesday.

The company scaled down at all levels of employment at the plant — which was hiring as recently as three months ago — from entry level assemblers, process engineers, production supervisors and quality-control techs, according to one employee who was laid off.

Culberson said layoffs were made across the board.

Lewis said employees were confused and disappointed when they heard the news and were directed by human resources to look for other local jobs in retail.

The Las Vegas resident, who worked various assembly jobs at the plant, said it took him more than a month to secure the job last year and is frustrated to be back at square one.

"It's setting me back," Lewis said. "Now I have to fish for another job. It was hard getting that job and now this."

With a promise to bring hundreds of clean energy jobs and boost the hard-hit North Las Vegas economy, the plant was heralded as a success earlier this month by Mayor Shari Buck in her state of the city address.

Amonix received a \$5.9 million investment tax credit through the American Reinvestment and Recovery Act in 2010, and another \$12 million in private capital helped finance the plant.

Source: Las Vegas Sun

## Louisiana QSO Party

This turned out to be a strange weekend. Murphy struck with a vengeance. First, N5NA, one of the 3 mobiles who had posted trips, had to cancel due to illness. That left W3DYA and KU5B to run a good part of the state. About halfway through the contest, KU5B had antenna problems. First 20M wasn't working. The about noon time, other bands stopped working and he went QRT. I didn't hear any mobiles on SSB, but there were a few parishes available on

CW and probably six spotted on SSB. There was a 100 point bonus station on 20 and 40M. I didn't see more than 2 or 3 on 10M and just a few on 15 meters. The sunspots weren't with us on this one.

Norm, **W3DYA**, was busy with the flying saucer antennas – running 80 through 10m.

From the 3830 reflector:

### **N5NA (TX)**

I had planned to operate the LAQP as an in state mobile but caught a bug earlier in the week and had to cancel my trip.

I worked a total of six different stations in the LAQP but only two mobiles which accounted for 14 of my 19 QSO's. I'm sure that total would have been higher but KU5B/m had to QRT due to antenna problems leaving W3DYA as the only mobile. It was good to hear the other four LA fixed stations on CW, especially W5YL, the bonus station.

**W5WZ (ouachita, LA)** - 632 SSB contacts 25 CW – 5.5 hours!

I've never experienced rates like this in the Louisiana QSO Party. I had a 60-minute period from 1851 to 1952 that netted 178 QSOs, and a 120-minute period from 22:21 to 00:21 that netted 297 Qs (149/hr).

Worked All States on 20 meter Phone during the contest.

**K5ER/AA5LA** Multi OP - Ouchita, LA 734 SSB 1 CW Q

Louisiana Contest Club member Bobby, AA5LA, doesn't have his towers up yet, so I invited him to Multi @ my house. Planned to run Multi-2, but computers refused to talk, so just ran Multi-Single. Antenna issues prevented use of the mono-banders, so we had to plug the tri-bander directly into one rig, eliminating the possibility of SO2R. When automation is working right, its really easy to run bands with a mult, while still running on primary rig, but it was convoluted with the hybrid system this weekend.

20 stayed open longer than expected, and the rate was good, so we stayed there. Made a bunch of Q's, but lost lots of mults by not moving sooner. Missed



WAS by only 3 - RI, AR, and OK. Did manage to get KG4 for a new dxcc entity, and XE3/K5ENS, a club member who moved to XE last year. Missed the bonus station, but still managed to top last year's score by 45K.

Thanks much to all who stopped by. The Louisiana Contest Club tries to insure that there are many opportunities for everyone to get a Louisiana contact in the LAQP, and preliminary reports show we gave out several thousand contacts. Thanks for your interest and hope to see you again next year. For those needing confirmation, my log will be uploaded to LOTW by Sunday night.

## History of Germanium Crystal Diodes

Here's a very interesting web page (about 20 pages long) full of illustrations and a history of crystal diode radio germanium crystals. Worth a look!

<http://semiconductormuseum.com/MuseumLibrary/HistoryOfCrystalDiodesVolume1.pdf>

## Natural Gas -Sierra Club – Corruption

### **How the Sierra Club Took Millions From the Natural Gas Industry**

Bryan Walsh in Time Magazine broke the big story this week that the Sierra Club received over \$25 million from the natural gas industry to serve as a corporate shill for the natural gas industry's attacks on the coal industry. Walsh wrote: "TIME has learned that between 2007 and 2010 the Sierra Club accepted over \$25 million in donations from the gas industry, mostly from Aubrey McClendon, CEO of Chesapeake Energy—one of the biggest gas drilling companies in

the U.S. and a firm heavily involved in fracking—to help fund the Club’s Beyond Coal campaign. Though the group ended its relationship with Chesapeake in 2010—and the Club says it turned its back on an additional \$30 million in promised donations—the news raises concerns about influence industry may have had on the Sierra Club’s independence and its support of natural gas in the past.”

McClendon and Chesapeake Energy several years ago funded a multi-million dollar advertising campaign against the coal industry called “Face it, coal is filthy.” Two months ago, it was revealed that McClendon and Chesapeake had given as much as \$100 million to the American Lung Association, one of the most reprehensible of the environmental pressure groups, to fund the ALA’s “Fighting for air” disinformation campaign.

more info here: <http://ecocentric.blogs.time.com/2012/02/02/exclusive-how-the-sierra-club-took-millions-from-the-natural-gas-industry-and-why-they-stopped/?iid=ec-main-mostpop1#ixzz1lMocyBoz>

## New Hampshire QSO Party

This was better this year than many of the past years. I noted five counties on the air – Rockingham, Cheshire, Hillsborough, Strafford, and Merrimack, most on SSB but a few on CW. Most were spotted and relatively easy to work if you were far enough away for propagation. I’m sure there was 40 activity but almost none was spotted. (one on cw). And one sole contact on 10m SSB.

About 12 stations made it on for the contest – which is much better than most previous years where it has been hard to find 3 or 4 stations on the entire period. Noted on the W6RK spot site: N1IX, AD1T, AF1T, KA1SKY, W1ZUD, W1END, W1WQM, K1ZR, W1STT, N1QC, W1BHC, K1LKP, NM1JY. ( If you happen to need a NH county, searching the W6RK can sometimes lead you to a station, and you might be able to sked them for a needed county. ) The New England QSO Party typically brings out even more stations and usually a handful of mobiles, putting all of the NE counties on the air, but much of the activity is on 80 and 40m to allow the NE stations to work each other. Likely some were on other modes and just not spotted for the folks.

It was held the same weekend as the LA QSO Party and the OMISS test – so you could find

some others to work in between hunting for the few NH stations. For example, WA2USA/4 showed up at a lighthouse on an island in Franklin, FL. He counts for a 'no star' county since he was portable, plus of course a 2x3 call, and a "W" prefix. There was a station on in Orleans VT in the OMISS contest (relatively rare) – loud – on 20M SSB, so I spotted him. Maybe some that needed it got it.

AD1T was working stations by the hundreds all day long – at times he was going by call areas to sort things out.

From the 3830 reflector

**N4PN (GA)** - 40 cw 79 SSB – worked all 10 counties!

“Thanks to all who showed up...maybe get all the bonus stations on next year.... Nice to have K1JO show up late Sunday afternoon from Coos county for the last one...

**N5NA - TX** (11 cw Q – 5 mults)

This is my first time working the NHQP. I was surprised at the amount of activity. It would have been nice to work a mobile or two.

The New Hampshire QSO Party is one that does not allow any 'entries' to be submitted where spotting was used. I think they'll be changing the rules next year. The idea should be to get the most people working the most amounts of counties and helping folks find their needed counties in NH without having to spend 24 hours tuning up and down the different bands hoping to find their last needed ones.

## New Ham Band

It's official -- delegates attending the 2012 World Radiocommunication Conference (WRC-12) have approved a new 7-kilohertz-wide secondary allocation between 472-479 kHz for the Amateur Radio Service. Agenda Item 1.23 had both its first and second readings in Plenary Session on Tuesday, February 14; to become part of the ITU's Radio Regulations, each Agenda Item must be read twice in Plenary Session. While the Final Acts will be signed on Friday, February 17 at the close of the Conference, the new allocation will not take effect until it is entered into the Radio Regulations. No date has been set for this, but it is unlikely to be earlier than January 1, 2013. In any case, no amateur can use the band until his or her national

regulations are revised to implement the allocation.

“This is a fantastic achievement for the Amateur Radio Service,” IARU President Tim Ellam, VE6SH, told the ARRL. “A new allocation for spectrum is always something that should be celebrated. The success on this issue is due to the hard work over the last four years from our IARU representatives, as well as the volunteers from the numerous IARU Member-Societies who have worked within the ITU process on behalf of their national administrations. This is excellent work from our team in Geneva, and from those who have assisted from their home countries.”

Agenda Item 1.23 originally called for a 15-kilohertz-wide spectrum in parts of the band 415-526.5 kHz, taking into account the need to protect existing services. The initial idea was 495-510 kHz, but according to ARRL Chief Executive Officer David Sumner, K1ZZ, this was in conflict with the Maritime Mobile Service. WRC-12 delegates approved Agenda Item 1.10, which called for a worldwide exclusive allocation to the Maritime Mobile Service of 495-505 kHz. Discussion of this allocation to Maritime Mobile “has been in the works throughout the conference preparation (i.e. since 2008),” Sumner explained, “and was the reason why the MF amateur allocation could not be made in this band as some amateurs had hoped. That’s why we had to look elsewhere and is what put us in conflict with aeronautical radionavigation.”

According to Colin Thomas, G3PSM, CEPT Coordinator for Agenda Item 1.23, WRC-12 delegates moved forward early in the Conference with what he called a “compromise proposal” for the new allocation. “Progress was made with a compromise proposal on Agenda Item 1.23, drafted to take into consideration the views of those for and those against an Amateur Service allocation around 500 kHz. This proposal suggests a 7-kilohertz segment between 472-479 kHz, very close to the CEPT position of 472-480 kHz.”

The new allocation calls for a worldwide secondary allocation to the Amateur Service at 472-479 kHz, with a power limit of 1 W EIRP. A provision has been made, however, for administrations to permit up to 5 W EIRP for stations located more than 800 km from certain countries that wish to protect their aeronautical radionavigation service (non-directional beacons) from any possible interference. Footnotes (see below) provide administrations with opportunities to “opt out” of the amateur allocation and/or to upgrade their aeronautical radionavigation service to primary, if they wish to do so. In addition to these protections for aeronautical radionavigation, the Amateur Service must avoid harmful interference to the primary maritime mobile service. Quite a few additional administrations -- mainly in the former Soviet Union and the Arab states -- added their country’s names to the Footnotes prior to the Agenda Item’s consideration in Plenary.

More than 3000 participants -- representing more than 150 out of the International Telecommunication Union’s 193 Member States -- are attending the four-week conference. About 100 Observers from among the ITU’s 700 private sector members -- along with international organizations, including the International Amateur Radio Union -- are also in

attendance. A number of WRC-12 delegates are radio amateurs, with many of them operating at 4U1ITU, the Amateur Radio station at ITU Headquarters. The station has been using the call sign 4U1WRC throughout the duration of the Conference.

#### Footnotes to Agenda Item 1.23

5.77 Different category of service: In Australia, China, the French overseas communities of Region 3, the Republic of Korea, India, Iran, Japan, Pakistan, Papua New Guinea and Sri Lanka, the allocation of the frequency band 415-495 kHz to the aeronautical radionavigation service is on a primary basis. In Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Latvia, Uzbekistan and Kyrgyzstan, the allocation of the frequency band 435-495 kHz to the aeronautical radionavigation service is on a primary basis. Administrations in all the aforementioned countries shall take all practical steps necessary to ensure that aeronautical radionavigation stations in the frequency band 435-495 kHz do not cause interference to reception by coast stations of transmissions from ship stations on frequencies designated for ship stations on a worldwide basis.

5.82 In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles 31 and 52. In using the frequency band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. In using the frequency band 472-479 kHz for the Amateur Service, administrations shall ensure that no harmful interference is caused to the frequency 490 kHz. (Emphasis added)

5.A123 The maximum equivalent isotropically radiated power (EIRP) of stations in the Amateur Service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of EIRP to 5 W in portions of their territory which are at a distance of more than 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the Amateur Service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service.

5.B123 The use of the frequency band 472-479 kHz in Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia and Yemen is limited to the maritime mobile and aeronautical radionavigation services. The Amateur Service shall not be used in the above-mentioned countries in this frequency band, and this should be taken into account by the countries authorizing such use.

Source: ARRL, Newington, CT 06111

## Regenerative Receivers in the 21<sup>st</sup> Century

Regenerative receivers go back to the 1910 era – when vacuum tubes were first invented and used in 'communications receivers'. You would have thought, with decades worth of articles, that everything there was to know about regen receivers would be known, and nothing new under the sun invented.

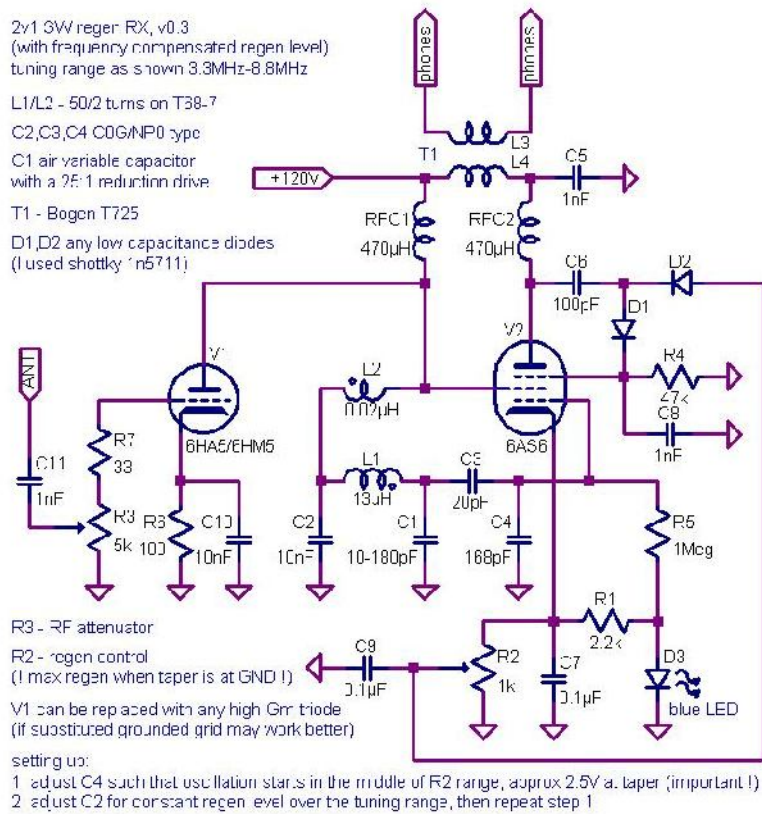
If you go back to the 1930s QST articles, they were trying hard to improve the regen – finally coming up with what they called the 'regenerode' radio – where the regen circuit was used at the IF frequency, and converters put in front of the unit. You'd use the regen receiver only at one frequency – the IF - and have the tuning done by a VFO that was used in the down converter. In other words, maybe you'd have your regen at 1.7 MHz, and put a converter from 7 and 14 MHz to convert down to 1.7 MHz as the 'front end'. Shortly after, with that much complexity, it was not much more to simply build regular IF system – cost of parts dropped and kits to build superhets and factory wired

Guess again! There are still folks out there working on improvements to regenerative receiver design. In the solid state area, N1TEV publishes new articles about the latest in solid state regens, but here's an interesting thread on TUBE based regens. The same principle he is working on for tube designs is applicable to solid state units.

One of the major problems of regen receivers over a wide frequency range is the constant need to adjust the regen control – the feedback control. It's all part of the frequency dependence of the feedback networks. In some sets, like the Knight Kit Span Master, you had both a coarse and fine regeneration control to get you at the exact 'peak'.

What if one could come up with a system that would eliminate the need for constant twiddling of the regen control as one changes frequency?

Here's a new circuit design:



You will note that rather than a simple feedback network, the design uses a two branch feedback system that compensates for the 'tilt' in a normal feedback circuit. This results in a constant setting of R2 over a much wider frequency range.

If you are interested in following the thread, check out

<http://theradioboard.com/rb/viewtopic.php?t=3714>

## Interesting Flea Market Find

Here's a rare mobile transmitter from the 1950s era found at the Santee swapmeet for 20 bucks according to an on-line post on QRZ.com.



Babcock MT-5B Transmitter

It used a 6146 in a 25w category AM transmitter. An external power supply for the HV was required – back then often a war surplus dynamotor. It was introduced in 1954 and sold for \$119 less power supply. The “B” model replaced the MT-5 which had sold for \$99. You needed crystals, or an external VFO. It took about 350v on the plates of the final tube. Very compact.

The modulator used a pair of 6AQ5s.

## Latest Sunspot Prediction

This just in, the latest sunspot cycle prediction from NASA, and it doesn't look good: <http://solarscience.msfc.nasa.gov/predict.shtml>.

Two weeks ago NASA released a revised prediction stating the cycle should peak in late 2013 at a smoothed sunspot number of 96. The latest outlook estimates a peak in early 2013 at 63, about 35 percent lower than the prediction from two weeks ago. We hope it isn't true.

— — — — —  
NASA PREDICTION 2/16/2012



The current prediction for Sunspot Cycle 24 gives a smoothed sunspot number maximum of about 63 in early 2013. We are currently over three years into Cycle 24. The current predicted size makes this the smallest sunspot cycle in about 100 years.

The prediction method has been slightly revised. The previous method found a fit for both the amplitude and the starting time of the cycle along with a weighted estimate of the amplitude from precursor predictions (polar fields and geomagnetic activity near cycle minimum). Recent work indicates that the equatorward drift of the sunspot latitudes as seen in the [Butterfly Diagram](#) follows a standard path for all cycles provided the dates are taken relative to a starting time determined by fitting the full cycle. Using data for the current sunspot cycle indicates a starting date of May of 2008. Fixing this date and then finding the cycle amplitude that best fits the sunspot number data yields the current (revised) prediction.

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

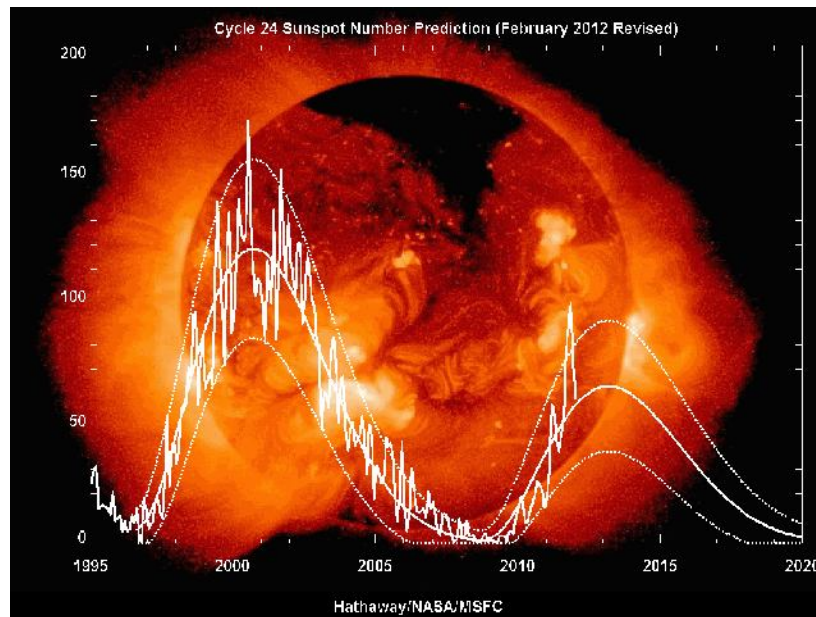
was "disturbed" and the amplitude of the next sunspot maximum. His method has the advantage of giving a prediction for the size of the next sunspot maximum well before sunspot minimum.

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  $70 \pm 18$  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 latitude drift data to produce a prediction of the monthly sunspot numbers through the next cycle. We find a maximum of about 63 in early 2013. The predicted numbers are available in a [text file](#), as a [GIF image](#), and as a [pdf-file](#). 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 66% weight to the amplitude from curve-fitting technique of Hathaway, Wilson, and Reichmann *Solar Physics* **151**, 177 (1994). That technique currently gives similar values to those of Ohl's method.

**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](http://www.spaceweather.com) are typically about 35% higher than the International sunspot number.**

Another indicator of the level of solar activity is the flux of radio emission from the Sun at a wavelength of 10.7 cm (2.8 GHz frequency). This flux has been measured daily since 1947. It is an important indicator of solar activity because it tends to follow the changes in the solar ultraviolet that influence the Earth's upper atmosphere and ionosphere. Many models of the upper atmosphere use the 10.7 cm flux (F10.7) as input to determine atmospheric densities and satellite drag. F10.7 has been shown to follow the sunspot number quite closely and similar prediction techniques can be used. Our predictions for F10.7 are available in a [text file](#), as a [GIF image](#), and as a [pdf-file](#). Current values for F10.7 can be found at: <http://www.spaceweather.ca/sx-4-eng.php>.



- - - -

There might be less fun than anticipated with the higher bands. Dang. Way less than the last cycle is now the forecast. (do you have whiplash yet? The prediction has been up and down for the past five years, but the last few years tend to indicate the trend. Stay tuned. We're sort of in the doldrums now with things way down from a few months ago. )

## On the Regen Receiver Trail

You never know what sort of interesting items appear. One of my friends ran across this radio and bought it for me. It's a RACO (Radio Constructors Co) Model DX-4 Regenerative Receiver.



RACO DX 4 regen receiver

This was a five band set that tuned from 3.3 meters down to 550 meters – or roughly from 550Khz to 60 MHz. For the first four bands, it was a regenerative receiver. For the last band from about 26 to 60MHz, where you had to put in a coil for each of the desired bands (10, 7.5 and 5 meters), the set would be a 'super regenerative' set. It used 4 tubes – a 6J5 regenerative detector, a 6J5 first audio tube, a 6K7 super regen detector, a 6V6 audio power amp and a type 80 rectifier tube. All single function tubes. The speaker field coil was the power supply filter choke.

From another friend who has some of the only RACO information on the net:

“Raco was part of the legendary Cortlandt St./Liberty St. (Radio Row). The building that Raco was located no longer exists. It was located kitty corner from the block that once had the World Trade Centers. Raco was basically part of the Radio Row manufacturing scene, a backroom manufacturer that manufactured ultra economically priced radio gear made specifically for the ham market. Most of the parts were probably acquired from the neighboring radio shops. Racos were ultra budget receivers for the depression era ham who really couldn't afford much, even a basic Hallicrafters. If you look in the back pages of mid 1930s "Short Wave & Television" magazines, you'll find ads for a lot of very simply made ham gear from various micro manufacturers that made up part of "Radio Row". The DX-4 is nothing more then the Super Clipper minus the 2 stage tunable RF section. Raco products make a fascinating souvenir from the legendary and iconic Radio Row.”

RACO made an RF preamplifier with 3 states of RF amplification and filtering, 4 different receivers from a 4 tube DX-4 to the 6 tube top of the line Super Clipper- still a regen, to a 2 and 3 tube set, and advertised at least 5 different sets. There were at least a dozen other 'manufacturers' building kits and selling them to SWL types, usually 1 and 2 tube sets. Times were tough. This was in the middle of the 1930s depression. Cash was hard to come by. Never heard of radio row? Here's some interesting history from Wiki:

“New York's Radio Row (1921–1966) was a warehouse district on the Lower West Side of Manhattan, New York City. Harry Schneck opened City Radio on Cortlandt Street in 1921,

creating Radio Row. Radio Row was torn down in 1966 to make room for the World Trade Center. It held several blocks of electronics stores, with Cortlandt Street as its central axis . The used radios, war surplus electronics (e.g. ARC-5 radios), junk, and parts often piled so high they would spill out onto the street, attracting collectors and scroungers.

The New York Times made an early reference to "Radio Row" in 1927, when Cortlandt Street celebrated a "Radio Jubilee". The Times reported that "Today... Cortlandt Street is 'Radio Row,' while Broadway is just a thoroughfare." The street was closed and decorated with flags and bunting, and the Times reported plans for New York's acting mayor Joseph V. McKee to present a "key to Cortland Street" to the then-reigning Miss New York, Frieda Louise Mierse, while a contest was held to name a "Miss Downtown Radio."

Meyer Berger recalled that, as a child, "On Saturday mornings, I used to venture from Brooklyn with my father to Radio Row on Cortlandt Street in Lower Manhattan, where he and hundreds of other New York men moved from stall to stall in search of the elusive tube that would make the radio work again. Later, my brothers went there with him in search of television components. Radio Row was a piece of all our interior maps.

In 1930, the Times described Radio Row as located on Greenwich Street "where Cortlandt Street intersects it and the Ninth Avenue Elevated forms a canopy over the roadway.... The largest concentration is in the block bounded by Dey Street on the north and Cortlandt on the south, but Radio Row does not stop there; it overflows around the corner, around several corners, embracing in all some five crowded blocks." It estimated 40 or 50 stores in the vicinity, "all going full blast at the same time.

World War II was unkind to Radio Row, and in 1944 the Times lamented that the "one-time repository of nearly everything from a tube socket to a complete radio station" was "bargainless and practically setless, too, due to wartime scarcities" but that it still catered to "tinkerers and engineers" and that an "old spirit" and "magical quality" were still there.

Radio Row rebounded.”

Then along came plans for redevelopment and the world trade center!

“Plans for the use of eminent domain to remove the shops in the area bounded by Vesey, Church, Liberty, and Fulton streets began in 1961 when the Port Authority of New York and New Jersey was deciding between the east side of Lower Manhattan and the west side near the Hudson and Manhattan Railroad terminals.

After the decision was made to raze the streets on the west side for the World Trade Center, local opposition emerged. Sam Slate reported on this for WCBS Radio in 1962:

Shaping up in New York City is a legal battle of overriding importance. Its outcome will

conceivably affect us all. If the considerable power of the Port Authority is allowed to dispossess the merchants of Radio Row, then, it is our conviction, no home or business is safe from the caprice of government.”



Radio Row – NYC 1936 (dig those old cars!)  
and the 'el' (elevated railroad) in the background!

Oscar Nadel headed the committee of small business owners opposing the condemnation proceedings. He estimated that 30,000 people worked in businesses generating \$300 million per year. The Port Authority offered \$3,000 to each business as compensation regardless of the size or length of time it had been located in the area. The court case was titled *Courtesy Sandwich Shop v. Port of New York Authority* and the final appeal was lost by the small business owners in November 1963 "for want of a substantial federal question".

After the closing of these stores, the concentration of radio retailers was not duplicated elsewhere in New York.”

- - -

de N4CD: Just about the time I got my ham license, and all the local hams said 'You missed out on all the bargains on Radio Row'. Most of what was left of radio row disappeared into obscurity never to be seen again. The last stores were closing down about the time I was old enough to travel to NYC to see them, not that I had any real money as a teenager to spend there – hi hi.

More reminiscing on Radio Row here:

[http://www.antiqueradio.com/Sep02\\_RadioRow\\_Steinhardt.html](http://www.antiqueradio.com/Sep02_RadioRow_Steinhardt.html)

In retrospect, NY City's Radio Row was the first 'casualty' of the World Trade Center. From a ham and electronics perspective, it was a terrible loss.

## The Smallest Transistors

Scientists have taken a first early step toward escaping the limits of a technological principle called Moore's Law by creating a working transistor using a single phosphorus atom. The atom was etched into a silicon bed with "gates" to control electrical flow and metallic contacts to apply voltage, researchers reported in the journal Nature Nanotechnology. It is the first such device to be precisely positioned using a repeatable technology, they said, and may one day help ease the way toward creation of a so-called quantum computer that would be significantly smaller and faster than existing technology.

Moore's law states that the number of transistors that can be placed on an integrated circuit doubles every 18 months to two years, and it's predicted to reach its limit with existing technology in 2020. Cutting the size of a transistor to a single atom may defeat that concept. "We really decided 10 years ago to start this program to try and make single-atom devices as fast as we could, and beat that law," said Michelle Simmons, director of ARC Center for Quantum Computation and Communication Technology at the University of New South Wales, Australia. "So here we are in 2012, and we've made a single-atom transistor roughly 8 to 10 years ahead of where the industry is going to be."

Moore's Law is named for Gordon Moore, the co-founder of Santa Clara, California-based Intel Corp., the world's largest chipmaker. He first described the phenomenon in a 1965 report that was later cited by others with his name attached to it.

There is a limitation to the latest finding: The atom must be kept at minus-391 degrees Fahrenheit to keep it from migrating out of its channel, the report said. Because of this, the result should be seen as a proof of principle rather than an initial step in a manufacturing process, the researchers said.

"These results demonstrate that single-atom devices can in principle be built and controlled with atomically thin wires, where the active component represents the ultimate physical limit of Moore's Law," the researchers wrote in the report.

"If you want to make a practical computer in the long term, you need to be able to put lots of individual atoms in," Simmons said in a video supplied by the university. "And there you find that the separation of the atoms is quite critical."

So-called quantum computers would operate by controlling the movement of electrons in an atom. While the latest finding brings science closer to determining whether quantum computing may be successful at a large-scale level, it remains an open question.

Read more: [http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2012/02/20/bloomberg\\_articlesLZLNZ0D07SXKX01-LZO0R.DTL#ixzz1mvxgTLro](http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2012/02/20/bloomberg_articlesLZLNZ0D07SXKX01-LZO0R.DTL#ixzz1mvxgTLro)

## Another Regen Spotted

One thing leads to another. Have you ever seen one of these? From a Western Radio ad in the 50s (Pop Tronics 1958) .....a very obscure extremely rare radio



**NEW - MIDGET SHORT WAVE RADIO**

**GETS STATIONS 12,000 MILES AWAY!**



Tunes ALL foreign short wave bands. London, Paris, Moscow, Australia. ALL Amateur bands 160 to 10 meters! ALL long distance Air Force and Air Line aircraft, Ships at Sea, AF overseas broadcasts, State-County Police, Industrial bands—U.S. Radio broadcasts. Tunes 500 KC to 40 mc.—600 to 7 meters! NOTHING LIKE IT ON THE MARKET ANYWHERE AT ANY PRICE. Super-regenerative Receiver. Short antenna included—Hook up in 1 second! PORTABLE SELF-CONTAINED—POWERED WITH RADIO BATTERIES SOLD EVERYWHERE. NO AC PLUGS! Size only 4½" x 6" x 4". Wt. complete —3 lbs. Calibrated hi-ratio easy tuning dial. Wonderful for Boy Scouts, tourists, vacations, amateurs, short wave listeners. EVERYONE CAN NOW HEAR THE WHOLE WORLD TALKING!

**SEND ONLY \$4.00** (bill, ck, mo) and pay postman \$12.95 COD postage on arrival or send \$16.95 for postpaid delivery. Complete easy to wire kit includes all parts, tubes, broadcast coil, plastoid cabinet, instructions—(set of long life batteries \$2.99 extra). COMPLETELY WIRED AND TESTED — POSTPAID IN USA \$21.95. Easily a \$49.95 value. Order now before price goes up — GUARANTEED — AVAILABLE ONLY FROM:

**WESTERN RADIO Dept. BRM-5 KEARNEY, NEBR.**

### Weskit Space Rambler Receiver

It's a battery powered 'midget' tube radio that tunes from 500 KHz to 30 MHz. It came with 4 plug in coils, and used a single tube (3A5?) with a triode regen detector and one audio stage driving 2000 ohm headphones. Not much info or anything else other than what is in the ad. It says it's a 'super regenerative' receiver, but I'd bet it is just a regen. Looks like one tuning knob, one regen control knob, and you need headphones to use it. Plus of course, an external antenna and ground. I've never seen one or even heard of one!

The ad says wonderful for Boy Scouts, tourists, vacations, amateurs, short wave listeners. It had a vernier dial (no bandspread).

From the web – posted by Lawrence Beshore: : “ This was one of the many products designed and built by my father. He owned Western Radio of Kearney, Nebraska. His name was Paul Beshore and to me and my brothers he was a brilliant man. He had many reasons for designing the way he did. First among those was he always tried to make the product affordable. This alone allowed many people to get involved in radio and all that went along with the technology. “

Anyone ever actually seen one?

Weskit also made and sold a ONE tube transceiver – the model BN-1 It used a 3A5 dual triode. One half for a very low power crystal controlled transmitter, the other side for a one tube regen detector. With their base loaded 3 foot whip, they said you 'can work a base station up to 8

miles away'. oh...crystal controlled CW only, of course. With a larger antenna, you could probably work a few hundred miles with your QRP output. With 180V of battery, it could run about a watt to watt and a half input. (It ate batteries – but all radios back then did).

<http://picasaweb.google.com/112953220987882592505/WeskitBN1Schematic?gsessionid=OsTdzpPfyKoA45v5blEB9A>

<http://www.kb6nu.com/the-wesco-bn-1/>

[http://home.comcast.net/~sheldon\\_wh/bn1.html](http://home.comcast.net/~sheldon_wh/bn1.html)

IF you ever see one of these at a hamfest ...>BUY IT.....and send N4CD the bill and the radio.

## Awards Issued

USA-CW #125	Don, W0EAR	January 30, 2012
USA-CW # 126	Art, N4PJ	February 3, 2012
Seventh Time #18	Mitch, W4RKV	February 1, 2012
Umpteenth Time (14) #1	James, KZ2P	January 30, 2012
Me Too 9 <sup>th</sup> Time #7	Me Too, Club of one -"JG"	January 30, 2012
Bingo #339	John, N8OR	January 29, 2012
Bingo III #21	Terry, WQ7A	February 1, 2012
Bingo III #22	Ron, KB6UF	February 1, 2012
Bingo III #2	Paul, WD9JEJK	February 1, 2012

## Upcoming Events for County Hunters

### March 3-4

ARRL SSB DX contest – all weekend. A real bad weekend for trying to run counties on SSB. County hunter beware! Especially 40M. Opportunity for AK districts and HI counties if you need them. It can get crowded.

### March 10-11-12

Idaho QSO Party  
1900 March 10 to 1900Z March 11  
[www.nx7tt.com](http://www.nx7tt.com)

Wisconsin QSO Party  
1800 March 11 to 0100 on March 12  
[www.warac.org](http://www.warac.org)

## March 17-18

Ten-Ten Mobile QSO Party

March 17 0001z to 2359z

[www.ten-ten.org](http://www.ten-ten.org)

Oklahoma QSO Party

March 17 1300Z to 0100 on March 18

March 18 1300Z to 1900Z

<http://k5cm.com/okqp.htm>

Virginia QSO Party

March 17 1400Z to 0200 on March 18

March 18 1200z to 2400Z

<http://www.qsl.net/sterling/ufl.htm>

North Dakota QSO Party

March 17 1800 to March 18 1800Z

<http://www.k0ln.com/ndqso12.pdf>

## March 24-25

CQ WW WPX SSB contest – another good weekend to not be a SSB county hunter. Beware!  
However, you can work 'em all for prefixes and counties.

Info from

<http://www.arrl.org/files/file/Contest%20Corral/2012-03.pdf>

- - - - -

## APRIL

Michigan Mini – coming up in April

### **2012 Michigan Mini Update:**

**The 2012 Michigan Mini will be hosted by K8ZZ and W8TVT and will be held at the Holiday Inn in Traverse City, MI.**

**Thee hotel has granted us an extension, so the cutoff for the special room rate is now April 13th!**

**April 26, 27 & 28, 2012**

Hotel contact info here:

<http://www.tcwestbay.com/>

## MAY - SEPT

Don't forget to make your reservations for Dayton Hamvention – motel and entry ticket, and to sign up for the 3M Reunion - and reserve for Mary Bo-Bos Chow-Down with W9GBH. Details last issue for the 3M.

The County Hunter Dayton Dinner will follow the forum from 4-5 pm on Friday. More details to follow.

National County Hunter Convention – July – sign up now.