County Hunter News

April 1, 2014
Volume 10, Issue 4

Welcome to the On-Line County Hunter News, a monthly publication for those interested in ham radio 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 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

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

The USACA award is sponsored by CQ Magazine. Rules and information are here:

http://countyhunter.com/cq.htm

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at:

http://countyhunter.com/marac_information_package.htm

The CW net procedure is written up at:

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

There is a lot more information at www.countyhunter.com . Please check it out.

Back issues of the County Hunter News are available at www.CHNewsonline.com

Want county lines on your Garmin GPS?

http://pages.suddenlink.net/w4ydy/hamlinks.html#County

Download the file to a flash card that fits in your GPS unit, turn it on, and the county lines should appear!

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

Notes from the Editor

1) N4CD Rumblings

The month started with another nasty cold front moving through that dropped temperatures over 60 degrees in less than 18 hours. That was the Sunday I got back from the trip to Harris County. From the low 80s on Saturday to near 20 on Monday morning with sleet and freezing rain coating the roadways and another 'day off' for many businesses and all the schools. Winter was not over yet. We're on a roller coaster. One

week – warm or normal, next week 30 degrees below usual temps for highs and lows. Yuk! We sent Storm Titan east. The cold stuck around another week. Now the Weather Channel is talking storm U and W and who knows how many more!

Not much mobiling in March here for N4CD. Did 190 Texas counties of 'putting out' counties in the Dec to March period, so I guess it's time for a break. This month there are major events on weekends that will keep me close to home. Conventions, auctions, hamfests and the like are scheduled. Before you know it, it will be time for the Michigan mini and then Dayton Hamvention. Warmer weather is in sight. At the beginning of April is the Belton (Bell County) hamfest so things start all over again with mobiling here and there.

Others around the country had to work around the weather. At the beginning of the month it was still below zero in MN. Don, AE3Z, had to postpone the trip to northern NY due to snow and bad weather. Dave, KW1DX, said it was too cold to run SSB for a while. I guess you can't work stations if you are shivering in VT. He did put out counties on his trip to Lamoille, VT and back. Brrrr! Mid month the mobiles made it out in WI with good weather conditions for the most part.

Radio propagation continues 'poor' for 80-20M, better on 17, and 'good' on 15 and 10m with the sunspot counts setting a new record for this cycle. A bit weird, but enjoy the sunspots while they last. It sure makes it hard to work 'cross country' on 20M though. Later propagation improved on 20m to the 'good' category.

2) Tax Time – April 15th is coming – if you have to file taxes.....

3) Reader Feedback

Another reader chimed in:

“Also on a weight watch.....I find that another great source for a low priced but healthy meal is to get a prepared salad in walmart.....I like the chicken cobb.....but there are others. And always fresh and crisp.....get an apple for later and diet soda or iced tea cold.....we carry a cooler for fresh cold fruit and water.....and about 1/2 the price of restaurants.....also....cooler for 2% milk and cheerios or special k cereal.....”

4) It's that 'Time of Year' again. Posted on the K3IMC forum:'

“I got an e-mail this would go into effect April 1st. FCC TO REINSTATE MORSE CODE TEST "It was a big mistake eliminating the Morse Code test," admits FCC official By Dan Romanchik, KB6NU Washington, D.C. – April 1, 2014 - Today, the Federal Communications Commission (Commission or FCC) approved Report and Order 14-987af which reinstates the Morse Code test for General Class and Amateur Extra Class licensees. "It was a big mistake eliminating the Morse Code test," admits Dotty Dasher, the FCC's director of examinations. "We now realize that being able to send and receive Morse Code is an essential skill for radio amateurs. As they say, it really does get through when other modes can't." Not only will new applicants have to take the test, but General Class licensees who have never passed a code test will have one year to pass a 5-wpm code test. Similarly, Amateur Extra class licensees that never passed a code test will have one year to pass a 13-wpm test. Those amateurs that fail to pass the test will face revocation of their operating privileges. Materials for administering the examinations will be distributed to Volunteer Examiner Coordinators by the end of April, so that they can begin the testing on May 1, 2014. "This isn't going to be one of those silly multiple-choice type tests," noted Dasher. "We're going to be sending five-character random code groups, just like we did in the old days. And, applicants will have to prove that they can send, too, using a poorly adjusted straight key." Technician Class licensees will not be required to take a Morse Code test, nor will a test be required for new applicants. "We discussed it," said Dasher, "but decided that since most Techs can't even figure out how to program their HTs, requiring them to learn Morse Code seemed like cruel and unusual punishment." When asked what other actions we might see from the FCC, Dasher hinted that in the future applicants taking the written exam may be required to draw circuit diagrams, such as Colpitts oscillators and diode ring mixers, once again. "We're beginning to think that if an applicant passes an amateur radio license exam it should mean that he or she actually knows something," she said. For further information, contact James X. Shorts, Assistant Liaison to the Deputy Chief of Public Relations for the FCC at (202) 555-1212 or jim.shorts@fcc.gov. For more news and information about the FCC, please visit www.fcc.gov. “

5) Kansas - Flatter than a Pancake - True or False?

“three geographers compared the flatness of Kansas to the flatness of a pancake. They used topographic data from a digital scale model prepared by the US Geological Survey, and they purchased a pancake from the International House of Pancakes. If perfect flatness were a value of 1.00, they reported, the calculated flatness of a pancake would be 0.957 "which is pretty flat, but far from perfectly flat". Kansas's flatness however

turned out to be 0.997, which they said might be described, mathematically, as "damn flat". “

So the answer is: True – Kansas is 'flatter than a pancake'!

Source: http://www.theguardian.com/education/2003/sep/25/research.highereducation2

6) Windows XP

There was an interesting article in QST this month about the XP operating system. Microsoft will stop 'support' officially for XP next month. From then on, they will only release a few security/security software updates, and that only for a two week period.

If you are running a Windows XP computer (not sold in about five years now), there is no 'upgrade' path to Windows 7 or 8. It's probably time to replace your computer.

Some of the new ham applications will not run on a system that old.

However, if you like your computer, you can keep it for another two years. After that, there will be no security updates or updates for Microsoft Essentials Anti-Malware, and you will be on your own for vulnterability. If you have other stuff, like financial records, on line banking, and other information you would not want compromised, it's probably time to think about a new computer. If all you use it for is Logger or similar program, well, that would probably work fine for a few years.

If you upgrade, some of your current ham applications might not work – might not be drivers for them on Win 7, and some of your old, old peripherals like printers (you still got that dot matrix printer?) might have no current drivers to run them.

However, for the same bucks, you'll get a whole lot faster and much higher memory/disk space machine.

It's a good article to read if you are a ARRL Member – in this month's QST.

7) Reader Feedback from a Long Time County Hunter

re W4CA and CW operation

“Ray has been running SSB-only since November, 2011 and I don't know why. As you know, he recently finished up running all USA Counties. That's a lot of counties to have transmitted from without ever doing CW since then.”

re the '336 situation

“I wish Jim would just hang it up. I can't stand his sourness on the air, nor his refusal to just be nice to others. Every time I hear him go into his worn out routines about phonetics and not interrupting the mobiles with questions it just embarrasses me. He seems to believe that county hunting begins and ends with SSB on 14336 and he refuses to even acknowledge that there are any other interests in county hunting besides those on his precious net frequency. I don't understand what's wrong with him or why he continues to be just about as anti-social as you can possibly get in amateur radio. And his "Dear Jim" emails are legendary. If you don't 'appear' on 14.336 he sends out warning messages.”

8) Propagation

The SFI and Sunspot Count have been way up there. In many of the state QSO parties, lots of contacts are being made on 15 and 10M. The lower bands are suffering (as is usually the case) during sunspot peaks. Hope you are making good advantage of the sunspot peak and propagation on the upper bands. It won't last!

On the Road with N4CD I

The Houston Vintage Radio Association holds its annual convention in February each year. This year it was at the end of the month. About 200 folks show up for it, and there are 2 days of auctions and programs for those interested in 'old radios' from the 1910 to about 1970 era – old broadcast sets, early TV sets, phonographs, and a large smattering of miscellaneous. There are table radios, console radios, 'tombstone' and 'cathedral radios', lots of hi fi stuff, boxes and boxes of tubes and 'paper' from repair guides to advertising material. About 600 lots of things were sold at auction. If you like 'tube

radios', it's a great event.

It's about 250 miles down the road from Collin County to the top end of Houston in Harris County – straight down I-45. That takes about a bit over 4 hours if you hit traffic at the 'right time' and the weather cooperates. . Much of the route is at 75 mph once you get away from Dallas or Houston. The miles fly by at 75 mph down through Navarro, Freestone, Leon, Madison, Walker, Montgomery winding up in Harris.

Since it was a Friday morning when I left, I had to leave at 6am to avoid the Dallas downtown rush hour – I have to head 25 miles right to the heart of downtown, then scoot out the south side. You don't want to do that an hour later because you'll sit for 2 hours going that first 25 miles. So I was up at 5:30 to have a quick breakfast, then head out the door and be on the road at 6. The temp was in the low 40s, and headed to the 70s for the next two days in Dallas, and even warmer in Houston. No complaints about that. We just got done with another five days of below normal weather courtesy of the last storm and 'polar vertex' spin off. It would be nice for 2 days then back to the freezer by Sunday. Oh well, up and down like a roller coaster.

Not much to report – made it through the early morning rush – still heavy but moves as long as no accident. By 7am it just creeps and creeps at 10-15 mph for 30-40 miles getting into downtown. There was only one detour on the way down there, and that was at the New Waverly exit on route 150 east over to San Jacinto County. A few folks had requested that on the last trip and it was not going to happen on this trip, but only a 10 mile detour on this trip. No sweat – easy to do. I still had time to kill as the HVRA convention didn't kick in till late afternoon. The weather was good till the Houston vicinity, then there were a few sprinkles and it drizzled the rest of the way in.

San Jacinto TX
Genuine Percy Pic

After the short detour to the county line, I stopped in the little town at a grocery store for some fruit to take with me to the hotel. They had some ripe bananas (with freckles) and I bought a few – otherwise you have to wait until they have freckles on the outside – or they can give you constipation. At least seniors might have that problem. Also bought some nice navel oranges at 50c each. Good way to start the day, and 100% better than orange juice which is just a pure shot of 'sugar'. The hotel charges about $15 plus for any breakfast so you don't want to necessarily spend your radio money that way – hi hi.

The Harris County sign is missing from the database and also missing from the I-45 route, as far as I can tell. Nothing there. Well, last issue I mentioned that Ron, N5MLP, lives in Harris. Nope, he lives in Montgomery just north of Harris but drives to work to Harris every morning (down I-45). No sign to take a picture of- all construction through there and a big fork in the road at the C/L. One of these days, he'll find another line to get get the pic. I missed getting it. Dang. One of 9 missing in TX.

I got to the hotel and checked in. After wandering around checking out the goodies that were up for auction, I then headed over to a local Subway and had a nice chopped salad for lunch. Wow – nice – 70 degrees outside, but no sun. Tomorrow promised to be even better, said the weather man – but lots of wind and humidity and not much sun.

The convention is held at a Marriott with an $89 room rate. It's a nice hotel (4 very large pillows on the bed) with good convention facilities. Likely 50 or so attendees stay there – the rest are locals in the Houston vicinity. Things start out with the 'tube and paper auction'. That consists of anything from boxes of tubes, maybe just a couple tubes like EL84 hi-fi amp output tubes (about $50 a pair), TV sweep tubes, and lots of old tubes

for old radios from the 20s and 30s and 40s. Tube caddies full of tubes and a few trays of tubes were up for auction. There were advertising signs, SAMS type manuals, Rider manuals – that had years and years of repair info and schematics of each year's worth of new sets, home radio course material, and books. You could buy some old QSTs and Radio magazines from the 1920s/1930s. They can go for big bucks – like $15 to $25 per year for the rarer ones in the 20's. It took 3 hours or more to go through the lots.

This year they had 3 large estates worth of equipment. It seems like many organizations with large populations of 'senior members', each year a few pass on. There were 3 large collectors who left truckloads full of stuff behind for their wives/family to dispose of, and this is where a good part of it wound up. They'll have some additional sales for more of the tube console radios during the year, too. The estate stuff was mixed in with the stuff up for sale from members.

I made a quick trip to the local Chinese Buffet (Panda Buffet) and loaded up the plate the greens – pile of broccoli, pile of green beans, pile of mushrooms – a few shrimp, then went back for giant plate of salad with lettuce, tomatoes, cukes, olives, onions, and the last plate was fruit. Made it back to the hotel in 40 minutes so as to not miss much.

The next auction, which starts around dinner time, was for plastic and transistor, table radios, some shortwave radios, like S-38s and Radio Shack DX models, a National NC-300, lots of boxes of 'miscellaneous' including parts cabinets, tools, magnifier lights, speakers, even more speakers and even more speakers, some hi-fi gear, and a lot of stuff that would sell for $10 and up a box or unit. Most had no reserve but starting price was $10 on all but the estate sale stuff that would sell and whatever price to move it, including down to a buck for a few items.

The only county hunter there was Rick, AI5P, who has been to a few radio auctions that I've attended before. There were 10 or so members from the Dallas area club and maybe 150-200 overall including wives/SO's, a few 'youth'. Over 90 people bid on items – but sometimes only one for a particular item.

Rick, AI5P with wood table radio

The sale lasted until 9:30 pm going full tilt , then you had the check out process where you paid and got your goodies. I bought only 3 small things the first day, which consisted of one set of books – one of which contained information on the Knight Solid State Dxer (only appeared in one issue of that book), a small box of parts, and a small parts cabinet with 50 or 60 'orange drop' 600v capacitors. Didn't spend much money the first day. A few folks wanted stuff more than I did – and they got it.

Rick, AI5P, bought a handful of radios the first day.

Then it was off to bed by 11pm. That was a long day for me. Morning came and I was up at 6:30 am. Had an orange, a banana, bowl of oatmeal, and cup of coffee in the room. Used the in room coffee maker to make the hot water to make the instant oatmeal. Saved a few bucks over the hotel breakfast ($$$).

Folks arrive and check in their goodies for the auction all morning. There were three technical/program meetings during the morning. The 3rd and 'big auction' of high dollar items, from $20 and up , started after noon and ran for 4 hours. I hit the exercise room in the morning. They had a nice one with a dozen machines, good strength machines like Nautilus or 'home type' gyms, dozen exercise bikes/walkers, treadmills, etc. Very nice. That and took a nice long walk around the hotel perimeter to get in my daily quota of 'keeping active'. Made it off to lunch – 'green meal'. I was set for the auction.

There were lots of 'tombstone' and 'cathedral' radios in nice cabinets, some restored. There was a Drake SPR-4 high end shortwave receiver, a Drake TR-4C with a/c power supply, DC power supply, low pass filter, all cables, speaker up for sale. (It sold in the

auction for $250 – a bargain – but in 'as is' condition. No guarantees other than you got what you saw.)

Drake Radios for Sale

In the back ground of this picture, you'll see a typical battery set in the left background and a 'cone speaker' in the middle background.

There were two Catalin radios in immaculate condition for sale. Care to guess what they sold for? Hint – big bucks – really big bucks. Just a 'low end' radio from the 1930s where manufacturers were trying to use cheaper materials than wood cabinets for their table radios.

One was a red marbleized radio – the other was a shiny black unit. Here's a picture of them. Take your guess as to what they sold for – I'll tell you at the end!

Addison Catalin Radios

During the day, they have an 'exhibition' and contest judging area where folks bring in entries in one of 18 or so categories for display. Everything from an audion receiver, to transistor radios, to a Philmore display of about 20 items in original boxes or unbuilt kits, a large collection of wet cell battery jars/systems, a radio built from a 1923 book with old parts – but recently, and other categories. You see some nifty stuff.

At the sale, there were speakers galore – from the 1920s type 'cone' speakers to the 'horn speakers' your grandpa/grandma listened to. There were battery sets (those that took big A batteries, usually wet cells, and B high voltage batteries, and some C bias batteries), and a/c powered Atwater Kents, and similar. One could buy a half dozen different one or two tube sets (BC). There were hi-fi/stereo amps – from 12w units to 50 -80 watt Marantz or tuners with high power amps built in. Those sold from $50 to $600! Just a chassis for a high power amp with the power and output transformers could go for hundreds of dollars. Those audiophiles eat up that stuff. You could buy a wind up Victrola, or 'grandfather clock' radio.

I had two items I was interested in – but they quickly went to the high end of my willing to buy price and someone else got them. Nothing I 'had to have'. I'll save my money for the next auctions where I know they'll be some goodies I really, really want. Hi hi.

Rick bought another half dozen radios – mostly wood table top units. His VW was getting full to the brim – it already had other stuff in it. Hope it all fit in.

There was time to goof of for a few hours before the banquet in the evening and dinner

program. I went outside for a bit to enjoy the EIGHTY DEGREE weather! Yeah! Not much sun, lots of humidity, but 82 degrees officially in Houston. It was going to change and change in a big way. By Monday morning they were expecting 37 degrees!

The speaker of the night at the banquet was an author of a book about the old radio programs of the west – the Tom Mix, Lone Ranger type radio programs that started in the 1920s and went up through the 1950s when TV took over. He went through the development of radio adventure series. It was good.

Then it was off to bed to get an early start the next day. The weather was going to change and not for the better. The best plan was to get home before the worst of it hit.

Sunday morning came. I was out of fruit, so I dropped by the local McD for an Egg White Muffin. 280 calories but way, way too much sodium. Senior coffee. Then it was on the road at 6:30am trying to beat the bad weather that another cold front would be bringing. OK was going to be hit with lots of ice/sleet, freezing rain and it was expected in Dallas by afternoon! It was time to get home! It was drizzling a bit in Houston and 64 degrees when I left. Almost shorts and tee shirt weather but that wouldn't do for where I was headed – north.

No problems till 100 miles north – when the temp dropped 20 degrees in 10 miles. Hmmm..time to kick in some serious heat – down to the 40s and dropping like a rock. The wind switched directions. There were now some rain showers that slowed folks down from 75 down to 50-55 at times but traffic still moved fine. I took a detour to the New Waverly food store and got some ripe bananas with freckles. Ate one as a snack. Five minute stop. Had to keep moving. Hustle. Bad weather was headed to the home QTH.

Half way home the temp is now down in the 30s. The weather front was where I was. The wind gusted 30-40 mph at times. Other than a few slowdowns for a few miles at a time, I was making good progress. The road surface was warm. It wasn't much later that the temps were in the 30s outside. Back to winter and the deep freeze. The further north I headed the colder it got. When I pulled into the driveway at 10:30 am it was 25 degrees.

The trip was 542 miles. I ran all the counties down and back with the bonus county of San Jacinto. I unpacked the stuff in the car. It was going down to the teens in the evening with more sleet, snow, freezing rain headed to my QTH for the next day. We'd hit the 50s and 60s by the end of the week.

About 30 minutes later I headed out to the grocery store to grab some fresh veggies. I wasn't in the store for more than 15 minutes and came out to a car encased in frozen rain. Yuk. Took five minutes for the defroster to melt the windshield so I could see and go home the one mile. It was 22 degrees. Winter! Yuk! I'm glad I didn't have to head to OK City, like one or two of the folks from the convention. Up there it was probably a sheet of ice (once again). The car is in the garage until the temps warm up in a day or two. No need to go out in potentially icy overpasses and bridges.

In the evening I-45 south of Dallas was shut down by ice and accidents. (where I had been earlier in the day) The next morning, no traffic moved on I-30 headed east – they had an ice of ice/sleet that packed on the roads forming a hard sheet of ice that turned into 'cobblestone' ice. There was a 20 mile backup of trucks. The state tried desperately to scrap the ice off the surface with little success and putting sand on it didn't do anything. It was too cold for 'ice melters' to melt the ice. Ah, winter misery.

Sunday is pizza night but it will be a 100% low carb, low sodium, veggie made from scratch pizza, gluten free. No more standard pizza for N4CD.....well, not much, at any rate. You never know where I'll be on a Sunday. Never say never – hi hi.

Oh...Catalin radio – the red one sold for $1900. That's ONE THOUSAND NINE HUNDRED dollars. Two people really really wanted that one. The black one – sold for …...hold your hats.....$2100! Ouch! Three people were serious bidders on that one. They are 'fragile' and you'd better keep them out of the sun, and never, ever, turn the radio on. One teeny crack in the case and the value drops in half. Or less.

I had fun. Didn't find any shortwave regens to buy....but saw lots of interesting stuff and brought home a few goodies. I'll probably hit the one next year, plus the local one here. You never know what will show up!

Mobile Activity this Period

At the end of February

Karl, K4YT, was busy running loads of counties in GA, then into NC and finally home to beat the next snowstorm. He noted:

“Did 2800 miles and ran 104 new counties. Need to run 185 more counties for MP and to work 8 MP's.

Will try to get out again after the snow melts. Would like to finish off TN, NC, FL and GA in the Spring and then head North once the WX gets better. Maybe some flights to some of those last 8 for MP.

Hardly any activity on 40m & 30 so I eliminated stopping there. Will buy a 15m coil next and try running 15m on the next trip. “

73,
Karl, K4YT”

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Ray, AB4YZ, with ride along mini-me call W4CA, not good for most awards, headed north from FL to home. A few made bogus contacts with W4CA but most didn't. They've got the message. Logger gives you false contacts that really don't count. If you log them, you're cheating.

Mike, KA4RRU, was out and about in VA.

Paul, WD9EJK, put out a few in IL and WI on SSB for the folks.

Dave, KW1DX, headed up to VT for a ski trip. He ran counties up there and back, and a few days during the week when it was too cold to go skiing.

Rick, AI5P, headed east from NM to the Dallas area then south to the Houston area where he stopped by the HVRA vintage radio convention. In Marc, later he headed back up the east side of TX, then later across TX back to home.

In March

KC7YE, Jack, headed north from CA hitting Modoc and some other rare ones. Headed up through OR to WA.

KB9OWD, Ryan, was on in WI. Ran in the WI QSO Party later.

Jerry, N9AC, headed from FL to New Orleans running them along the way.

There were a few spots for DX stations (AK and HI) in the ARRL DX SSB contest the first weekend of the month. That sort of put a damper on SSB activity for that weekend as the band was infested by stations calling/working DX.

Mike, KA4RRU, headed over from VA to the Louisville, KY area. Got Lawrence, OH for a LC WBOW, too, with a short detour off the interstate.

K8ZZ, Ed, made s trip to eastern MI to put out some of the rarer ones for the folks. Later in the month he was out running a few more to meet folks needs.

Don, K3IMC, headed east from GA over to LA where he stayed about a week in Mobile, AL then headed back home.

Rick, W5QP was active up in MO.

WB5LFO, Gary, was seen on the road on SSB

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Lowell, KB0BA, and Sandra, N0XYL, were out on another trip in IA. Lowell noted on the K3IMC web site:

”Iowa trip... .. .. Just want to thank everyone who rode along with us on our Iowa trip during the past 3 days. We covered 38 counties, traveled 1050 miles, took photos of county signs and had a great trip. Lowell even did a few counties on CW! Next weekend we will be heading to northern Wisconsin to help my great grandnephew celebrate his 2nd birthday. Hope to hear you along the way. -- Sandra and Lowell”

Later in the month they were out in IA and WI.

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Dan, KM9X, ran a few in IN

KF7ZN, Ron, was spotted out and about in MT and ID on SSB.

WY0A, Butch, was spotted in AR down into MS on SSB.

Kent, KV7N, was out in ID

K8QWY, Ed, spotted in OH only SSB.

Karl, K4YT, took a trip up to Hudson NJ running counties up and back.

Team W8FNW and W4FNW were busy in FL after a few days rest on their trip. Got the TV antenna up and now back on the road.

Steve, AK8A, put out some in south TX.

Book Review of the Month

The Motor Club and the Wireless – Hancock – 1909

The Dot, Dash and Dare Cruise

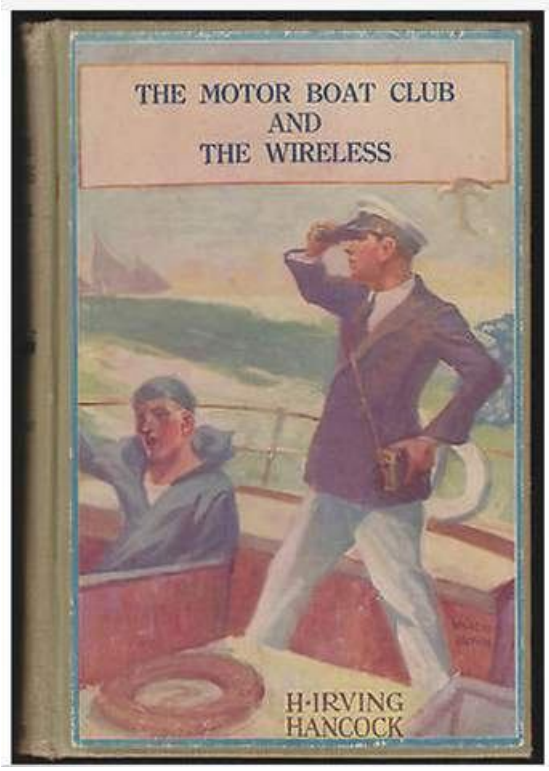
This one popped up on Ebay for sale when I did the search for 'Wireless' under books. With some investigative work, it turned out to be another 100 year old fiction book with wireless as a integral part of the story. Serendipity

This 'early' wireless tale can be found on the web and also in book form for a few bucks – it's the Motor Club Boys books – a whole series of them – at least 10 titles available on Project Gutenberg and this one available free at the following link.

https://archive.org/details/motorboatclubwir00hanc

This appears to be the second book in the series – and the only one that has anything to do with wireless! This one is #7,425,821 in Books on Amazon dot com – not exactly a 'hot seller' –

hi hi Back in 1909, you could buy this one for 50c new. Of course, back then the average wage was 22c/hr. So you would have to work over 2 hours to buy this book. It was advertised to an 'audience of kids from six to sixty'. (In 1909 no one paid income taxes or SS taxes – you took home what you earned). To put it in perspective, the feds and state take about 1/4 to 1/3rd of your paychecks. Sometimes even more.



Here's chapter 1 in entirety

CHAPTER I

A SPARK PUTS THREE BOYS AND A BOAT ON
THE JUMP

0, ho, ho — lil Tim!" grumbled Hank
Butts, vainly trying to stifle a pro-
digious yawn. This may be what

Mr. Seaton calls a vacation on full pay, but I d rather work."

It is fearfully dull, loafing around, in this fashion, on a lonely island, yet in plain sight of the sea that we long to rove over, ' ' nodded Captain Tom Halstead of the motor yacht ' Restless. ' '

Yet Hank just put us in mind of the fact that we're getting paid for our time," laughed Joe Dawson, the least restless of the trio of young Motor Boat Club boys.

0h it's all right on the pay end," agreed Hank, readily. But just think of a young fellow, full of life and hope, with a dozen ambitions and a hustling nature, taking up with a job of this kind!"

"What kind of job" inquired Captain Tom.

The job of being bored/' answered Butts, solemnly. 'I could have had that kind of job back on Long Island."

"Without the pay," amended Joe Dawson, with another quiet smile.

"But ten days of being bored does grow rather wearisome, even with the pay for a solace," agreed Tom Halstead.

Ting-ling-ling! The soft jangling of a bell from one of the rooms of the seashore bungalow, on the porch of which the boys sat, broke in on them.

"Hurrah, Joe! Hustle and get that message," begged Hank, almost sitting up straight in the porch chair, with a comical pretense of excitement. "It's sure to be from Mr. Seaton this time."

"Likely," grinned Joe, as he rose and crossed the porch in leisurely fashion. The jangling of the bell continued. The bell was a rather clumsy, yet sufficing device that young Dawson had attached to the wireless telegraph apparatus.

For, though this bungalow on a little island southwest of Beaufort, North Carolina, had an appearance of being wholly out of the world, yet the absent owner, Mr. Powell Seaton, had contrived to put his place very much 4n the world" by installing wireless telegraphy at the bungalow. On the premises was operated a complete electrical plant that furnished energy enough to send messages for hundreds of miles along the coast.

For Joe, the mechanical genius of the Motor Boat Club, had always had a passion for telegraphy. Of late he had gone in in earnest for the wireless kind, and had rapidly mastered its most essential details.

The bell told when electrical waves were rushing through the air at marvelous speed, though it did not distinguish between any general wave and the special call for this bungalow station, which was by the letters CBA."

When Joe Dawson went into the room under the tall aerials that hung from the mast, he expected to listen only to some message not in the least intended for this station.

Seating himself by the relay, with its Morse register close at hand, Joe Dawson picked up and adjusted the head-band with its pair of watch-case receivers. He then hastily picked up a pencil, shoved a pad of paper close under his hand and listened.

All this he did with a dull, listless air. He had not the slightest forewarning of the great jolt that was soon to come to himself and Ms comrades out of the atmosphere.

The call, whatever it was, had ended. Yet, after a pause of a few seconds, it began to sound again. Joe's listless air vanished as the new set of dots and dashes came in, clamoring in clicking haste against his ear drums.

' To Every Wireless Station — Urgent!" ran the first few words. Joe's nimble fingers pushed his pencil, recording letter after letter until these words were down. Then, dropping his pencil for the sending key, young Dawson transmitted a crashing electric impulse into the air, flashing through space over hundreds of miles the station signal, CBA."

Have you a fast, seaworthy boat within immediate call?" came back out of the invisible distance over the ocean.

A twenty-six-mile sea-going motor boat right at the pier here, ' ' Joe flashed back, again adding his signature, CBA."

' Good!" came back the answer. Then listen hard — act quick — life at stake!"

Joe Dawson not only listened. His thoughts flew with the dots and dashes of the wireless message; his right hand rushed the pencil in recording all of that wonderful message as it came to him. It was tragedy that Dawson wrote down at the dictation of this impatient operator far out on the Atlantic highways. Almost in the midst of it came a feverish break-in from land, and another hand was playing in the great game of life and death, fame and dishonor, riches and intrigue. All was being unfolded by means of the unseen, far-reaching wireless

telegraph.

As Joe listened, wrote, and occasionally broke in to send a few words, the dew of cold perspiration stood out on his brow. His fingers trembled. With a great effort of the will this motor boat boy steadied his nerves and muscles in order to see through to the end this mysterious thing coming out of space.

While this was going on, Joe Dawson did not call out to either of his comrades. With an instinct that worked as fast as the wireless messages themselves, young Dawson chose to put off calling the other motor boat boys until he had the whole startling tale to tell them — until he had in complete form the coming orders that would send all three of them and the Restless on a tireless sea-chase.

While this flood of dots and dashes is coming in from seaward, and from landward, it is well that the reader be put in possession of some information that will make clearer to him the nature of the dramatic events that followed this sudden in-pouring of wireless messages to the little 'CBA" bungalow station on this island off the North Carolina coast.

Readers of the preceding volume of this series, "The Motor Boat Club Off Long Island/' will at once recall that story, throbbing with the interest of human life — will remember how faithfully and wisely Tom Halstead, Joe Dawson and Hank Butts, all members of the Motor Boat Club, served that leader in Wall Street finance, Francis Delavan, and the latter 's nervous, wavering friend, Eben Moddridge. To such former readers the tale is familiar of how the Motor Boat Club boys aided materially in frustrating a great conspiracy in finance, aimed against their employer. Saved from ruin by the grit, keenness and loyalty of these three

members of the Motor Boat Club, Messrs. Delavan and Moddridge had handsomely rewarded the boys for their signal services.

As Hank Butts preferred, for family reasons, to spend his summers, and much of his other time, on Long Island, he had been presented with a thirty-foot launch, a shore lot at East Hampton, and a ' shack" and pier. Tom Halstead and Joe Dawson, fast friends and both from the same little Kennebec River village, preferring always the broad ocean, had been made the owners of the ' Soudan," a fine, seagoing, fifty-five foot motor cruising yacht built for deep sea work. Though the 'Soudan' had a very comfortable beam of fifteen feet, she was nevertheless equipped with twin gasoline motors that could send her over the waters at some twenty-five or twenty-six miles an hour.

With the gift of the boat to Tom and Joe came also a present of money enough to make the two new young owners able to put her in commission and keep her going for awhile.

It was not intended by Messrs. Delavan and Moddridge that Tom Halstead and Joe Dawson should be able to keep their new prize and property running for their own pleasure. On the contrary the givers of this splendid present believed that the two boys would ply under charter for wealthy pleasure seekers, thus making a splendid living. In summer there were the northern waters ; in winter the southern waters. Thus it was believed that Captain Tom Halstead and Engineer Joe Dawson would be in a position to earn a handsome income from their boat the year around. At any time, should they so choose, they could sell the boat.

Sell her? It would almost have broken honest, impulsive, loyal Tom Halstead s heart to sell this precious boat ! Joe Dawson, quiet

though he was, would have flown into a rage at any suggestion of his parting with his interest in the handsome, capable little craft!

The owners had re-christened the boat the Restless." Within ten days after the boys had left the employ of Mr. Delavan, Captain Tom had encountered Mr. Powell Seaton in New York. A few hours after that meeting the boys had had their boat chartered for at least the month of September. Then, after receiving their orders, they proceeded south to their present location on Lonely Island, Ye miles oif the mainland. They were accompanied by Hank Butts, who had left his small boat in other hands and accepted temporary employment on the Restless."

The island possessed an area of about half a square mile. The bungalow itself, a shed that was used as an electric power station, and a third building that contained a telescope and some other astronomical apparatus were the sole interesting features of this island.

After the chartering, and the payment of half the hire-money in advance for the month, not one of these Motor Boat Club boys had laid eyes on Mr. Powell Seaton. After cruising down from New York, and taking possession of the bungalow, as ordered, they had remained there ten whole days, idle and wondering. Idle, that is, except for running the electric power plant as much as was needed, making their own beds and doing their own cooking.

For what purpose had Powell Seaton wanted them and the 'Restless"! Now, as Dawson's

active fingers pushed the pencil through the mazes of recorded messages, that active-minded young man began to get a glimpse.

'Sounds like something big, Joe," smiled Captain Tom, his eyes twinkling under the visor of his uniform cap as he thrust his head in through the doorway.

It is," muttered Joe, in a low but tense voice. Just wait. I've got one to send."

His fingers moved busily at the key for a little while. Then, snatching up the sheets of paper on which he had written, Joe Dawson leaped to his feet in such haste that he sent the chair spinning across the room.

Such impulsiveness in Dawson was so utterly unusual that Captain Tom Halstead gasped.

' Come on!" called Joe, darting to the door. ' Down to the boat!"

Where it began Tom Halstead, but he got only as far as that word, for Joe shot back :

"To sea!"

At full speed — the fastest we can travel!" called back Joe, who was leaping down the porch steps.

Any time to lock up?" demanded Tom, half-laughingly

End Chapter 1

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As you can see – the story is about 3 boys on a 50 foot motor yacht and their adventures. There's constant use of the wireless to talk to land stations and other ships throughout the story. They face off with the 'bad guys' on several occasions, having to 'steal back' their stolen boat,

and then track down the bad guys as they sail up and down the east coast from their island base. It's a decent read and the price is right. The time is 1909 – even before the Titanic sank. Spark gap wireless and crystal type detectors with BIG antennas was the equipment of the day. Their range was about 60 miles, sometimes a bit further.

North Carolina – More

Late reports from NC QSO Party held last month:

de WA4PGM:

Totally a last minute decision to operate the NCQP. I had registered the call N4E earlier and asked my wife if she would drive and she said "How about asking Mike if he'll go". So a call to Mike and he had plans to attend a hamfest instead.

I decided to operate "Lone Ranger" until my wife says she'll drive. It was a early start Sunday morning to get to our starting point of Warren County, NC.

I had spent most of Saturday preparing the vehicle by installing 40 and 20 meter on a magnet mobile plus a 80m resonator mounted to the bumper hitch.

It was a early start Sunday morning to get to our starting point of Warren County, NC. At first smoke signals showed a horrible noise on 40 meters!! 20 was ok but still a little bit more noise than I had hoped. The noise blanker didn't help much and any troubleshooting didn't help. We arrived Warren and Northampton line at 9:15am with plenty on time to setup and check out the equipment.

We arrived Warren and Northampton line at 9:15am with plenty on time to setup and check out the equipment. At the start on the contest conditions seemed poor with only 84 contacts the first hour and I'm on my 3rd county. Conditions finally picked up with 20 meters being the

productive band. My SWR was a little high on 20 with a 2 to 1 so my signal couldn't have been the best. The antennas (80/40/20 Hustlers) seemed to play well with working stations in Europe and most of the USA.

To be honest none of this would have happened if it wasn't for my wife "Pam". She is a true sweetheart and what a trooper staying behind the wheel the entire QSO Party. We made a quick stop for her to pickup some snacks, gas, Micky D, Starbucks :), and to pee a couple times. N4E hit 25 counties and was back at it stopping point with 45 minutes to spare!!

20 meters takes top honors at being the most productive with 741 Qs. Thanks especially to the DX worked, DL, OK, HB9, ZS, others!!

40 meters was the toughest band with lots of engine noise but the band never seemed like it should if you know what I mean? 215 contacts

Once the sun went down I stopped and installed the 80m resonator. 48 contacts in the last few minutes of the contest.

The weather was great with temps in the 70's, sunny skies, prefect QSO party weather to be mobile in February. It was a lot of fun if I could cure the engine noise that would be awesome. Back home around 9:45PM we were both tired and ready to hit the sack. I asked Pam today if she would do it again next year and she replied, "I'm ready!"

With the side trips the trip was around 550 miles, 2 tanks of gas, a Icom 706MKIIG, laptop, Hustler resonators, and GPS. 25 counties.

Thank you everyone for the contacts and a HUGE thanks for the NCQP group. THANK YOU for your hard work promoting the contest, improving the contest, and the work after the contest.

80 - 48 Qs
40 - 215
20 - 741

1004 QSOs

73 Kyle, WA4PGM aka N4E/mobile

K5YAA Trip Report – AR/LA

K5YAA Trip Report

1750 miles round trip running 3 counties in Oklahoma, 2 in Texas, 29 Parishes in Louisiana, 6 counties in Arkansas and 1 in Missouri - a special one for W4SIG. A total of 41 if my calculations are correct. I had very little trouble other than Sunday morning on the Rapides Vernon Parish line where I had to reboot my laptop 3 times. Lot's of RF in the cockpit. I finally saw the problem when a large, halo like blue spark showed itself around the PL259 at my 2 position antenna switch. It had worked its way a bit loose. Don't know why unless its the railroad tracks and potholed roads I have traveled. The amp was pumping most of its RF inside the van instead of out to the antenna. Hand tightened it and, magic, things started working. My Power Master power meter read 1200 watts at one point during the episode - the AL811H is rated at 800 watts. Either the generator juiced up the AC or the AL811H was feeling its oats talking into a loose PL259. That power meter is a high dollar one and has always been accurate. 1200 watts - wow we are talking now! I decided to crank down the drive from my K3 to around 50 watts instead of the usual 70 watts. Left it there the rest of the trip and had no more "funny" watt meter readings. I got a report that my dits and dahs sounded too long. I attribute that to the episode with that blue spark but I have zeroed in on the AL811 amp as the culprit that doesn't seem to like high speed CW. I don't have it running in QSK mode - that would burn up the RX/TX relay after a while. I have the settings on the K3 to key the amp and keep it keyed during a transmission. My Tokyo amp gets much better reports but it doesn't like the high SWR that occurs when you go past a bridge railing or even the concrete walls on the interstate. I don't use the Tokyo mobile anymore. I told Hollis I will be looking at various amps that are available but only after I burn up the two AL811s I have! One thing I noticed in Louisiana was a complete absence of dead animals on the roads. No roadkill to be found anywhere. After realizing I had seen NO dead animals on the road I decided I would not eat at any place other than a regular chain type restaurant in Louisiana. My theory is that the chunks of meat in Louisiana gumbo and maybe etoufee could well be harvested from the road! Why else would there be no dead animals on the roads? Just a theory. Something that is not in short supply in Louisiana is local policemen. They are sitting in every little town in every parish in Louisiana. I got to talk to three of them on Sunday alone. Two of them got their writing utensils out. I'll have to call to find out the damages. All in a days county hunting work I say to myself. Sunday, due to the blue spark and local police was the worst of my

several days on the road. You have good days and you have bad days my Texas Grandma used to say. My run to check out the mobile was a success in my eyes. I think the whole setup may well hold together for this years QSO Party season. I am getting pretty good at recognizing weaknesses and getting them shored up before they become disasters. As far as operating, I actually had a bit of fun doing the digital thing. The K3 has a little display on front that shows what is being sent and also received. All I needed was a letter or two to recognize the call. Diddle diddle - back I went with TNX 599 Others? Here they came. I tallied up 15-20 digital Qs at every stop on the trip. Diddle diddle. Buuuurrrp. One of the highlights of the trip was an eyeball with OM Joe N5UZW. He looks just like he sounds. A real good fellow. We talked County Hunting for 2 hours and showed each other our radio trappings. I met his prized pooch called Mozart. Joe takes Mozart along with him on the road and has water and food bowls permanently installed for Mozart in his truck. A lucky dog and a good friend to Joe for 14 years now. Enough for now - its tired out and tomorrow will bring more radio activities. Thanks to all for their untiring efforts to follow me along. I appreciate the QSOs and hope I contributed to your tallies toward even more awards. 73 - Jerry K5YAA

Local police aside - mobiling is a fun past time I have come to enjoy. Running high power stirs 'em up but I still have to hear them answer which can be a challenge. Had a handful of callers on 15/12 and 10 I just couldn't pull out so apologies if you called and all you got was AGN or ? and a new QRZ or CQ in your face! Here are a few of my numbers from the OK/TX/LA/AR/MO trip. Total QSOs - 2,528 Digital - 800 SSB - 169 Making CW - 1,559 Band by Band Breakdown - 10 and 12 were open much of the time but only went there due to requests or having a bit of extra time at a stop. Some DX on both bands. 17 was the DX money band however. 10M - 69 12M - 111 15M - 245 17M - 362 20M - 1401 30M - 160 40M - 176 80M - 4 <- These were at the Desoto/Sabine line when it got late. 117 DX QSOs during peak hours each morning. A CO3 called me on 12M rather late in the day. We exchanged names etc. and had a regular QSO - something a little different! Like DX Hogs there are County Hunter Hogs! I'm glad to serve those guys up with new band and mode counties. They add spice to the log and also are some of the most helpful when it comes to spots and information. Quite a few NEW call signs on the CH frequencies - at least new to me on this trip. Glad to have them show up. My next episode will likely be the Oklahoma QSO Party Mar. 22 and 23.

WA44UNS

My last NJ trip... thanks... (more)

Message: My last trip through northern NJ on 1/20/14 was quite successful... thanks to

everyone who sent in Last County apps. That trip so far has resulted in the most LCs I've received for a one day trip.

Again, thanks to all CHers

Amateur VLF Spans the Ocean

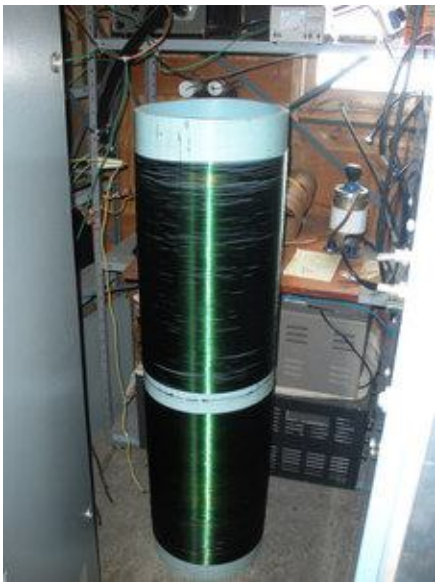
In what's believed to be a "first," a very low frequency (VLF) signal from a ham radio experimenter in New York was heard across the Atlantic. Bob Raide, W2ZM, was transmitting on 29.499 kHz under a Part 5 Experimental license, WH2XBA/1. His very slow-speed (QRSS) CW signal was initially detected in the UK just before 0000 UTC on March 3 by Paul Nicholson, an SWL, and later by Mike Dennison, G3XDV, and Markus Vester, DK6NM, in Germany. Nicholson also copied a 29.501 kHz transmission from Dex McIntyre, W4DEX, in North Carolina, operating as WH2XBA/4.

"In recent weeks a number of amateur tests have been running from the USA to Europe around 74 kHz and at 29.499 kHz using several hundred watts to large antennas," blogged Roger Lapthorn, G3XBM. He said that signals on 74 kHz were "well copied," but that "the surprise" was detecting the 29.499 kHz signal. "As far as I know, these 29.499 kHz VLF signals are the first amateur VLF [transmissions] to span the Atlantic — fantastic results by well-equipped stations using suitable receivers and good software."

Warren Ziegler, K2ORS, who is on the Experimental license as WH2XBA/2, told ARRL that he and several other radio amateurs have obtained Part 5 licenses to experiment on 500 kHz and on 137 kHz. "It got so 137 kHz was becoming routine, that my signal was copied hundreds if not thousands, of times all around Europe, North America, and South America," he said. Ziegler has been a participant in the ARRL-sponsored experimental operations on 500 kHz as WD2XSH/23. He said Raide wanted to be the first amateur signal to span the Atlantic on VLF, which he defined as between 3 kHz and 30 kHz, so Ziegler applied for and received the WH2XBA Experimental grant, and included Raide and four others on the license.

"I was ready," Raide told ARRL. His transmitter has a 3CX3000A7 tube in the final,

running grounded grid and generating 800 W. The effective isotropic radiated power (EIRP), however, was estimated to be approximately 1 mW. To operate on 10,000 meters, Raide has a 90 foot vertical antenna using a reconfigured Zepp, fed via a huge loading coil that is 4 feet tall, more than 1 foot across and comprised of some 2000 feet of #14 wire. He employs a few thousand feet of "chicken wire" for his radial system.



29 KHz Loading Coil

The transmission consisted of "XBA" sent at a rate of 120 seconds (2 minutes) per dot and 360 seconds (6 minutes) per dash of CW. In the UK Nicholson copied the signal on software using a PC sound card with a preamplifier ahead of it. His antenna is a pair of orthogonal loops, each 20 meters square, at ground level, transformer coupled to the preamplifier.

"It is actually a makeshift temporary antenna set up for a site test about 3 years ago," Nicholson explained. This summer he hopes to rebuild it with a larger area and more copper in the loops to improve sensitivity "and steel guys to make it sheep proof."

Ziegler said German and UK experimenters have been experimenting at frequencies below 9 kHz, which is unregulated. Stefan Schaefer, DK7FC, was detected in Iceland — some 900 miles distant — while transmitting in this frequency range to a kite-borne antenna. — Thanks to Warren Ziegler, K2ORS, Bob Raide, W2ZM, and Joe Craig, VO1NA

- - -

Courtesy of ARRL Newsletter, ARRL, Newington CT 06111

- - -

If you recall the early wireless, Marconi favored 250 meters and 500 meters as the frequencies he would use for ship to shore communications, with most of it at 500 Meters.

He built a transatlantic phone station in NJ, with one end transmitting on 33 KHz and the other about 60 KHz – but ran GIANT somewhat directive antennas and kilowatts of power to provide one duplex voice channel. (It wasn't very good but it was the only thing there was). You paid over $50 for a 3 minute call)

AT&T continued transatlantic radio phone service until the mid 1950s when the first undersea cable with amplifiers was installed (TAT-1) that could carry 136conversations at once. TAT-1 was actually two cables – one in each direction. Later they increased the capacity to 48 channels. Now, a single fiber optic cable can handle over 1 million times more capacity. (TAT-14 uses 16 Wave length Division channels at 10 gigabits per channels per fiber with two active and two backup fibers per cable).

County Sign Database Project

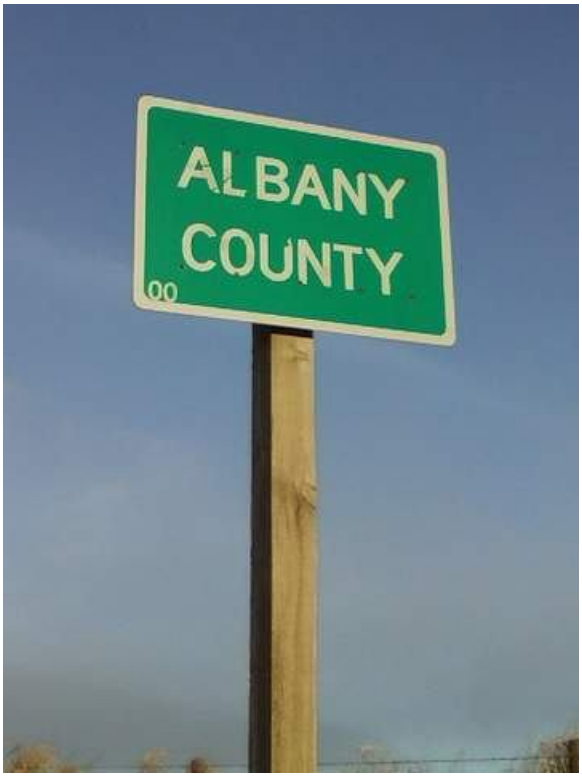
County hunters for the last year or two have been helping Gary, K4EXT, to have a picture of all the 'county signs' around the country. It's up now to 2400 and counting down to the goal of 'all'.

Here's where the database is located.
http://www.charchive.com/cntys.asp

Here's where to check to see if a sign is 'needed'

http://www.charchive.com/cntyneed.asp

Alan, KO7X, sent in the last two missing in WY – Albany and Laramie. Here's his picture of Albany WY



Albany, WY by KO7X

He's finished the state – got the last sign. That joins just a few states that have all of them done now.

Mary, AB7NK, with K7SEN, sent in the last two from Arizona. It's now 'done' too – complete.

A few were added in FL.

Navajo AZ by AB7NK/K7SEN

Terry, WQ7A, sent in Benton, OR – still a couple to go there.

WA4JA, John, sent in 5 or so from TN. Here's Maury, TN

Maury TN – by WA4JA

There's 25 county signs yet to go in TN.

Michigan is missing 25 counties – maybe some of the folks headed to the mini in April can fill in some for the database! Maybe?

Here's where the needs are listed:

http://www.charchive.com/cntyneed.asp

Here is how we are doing, state by state - how many done/county total
as of 3/19

AK – done
AL 42 of 67 done
AR – done
AZ – done
CA 38 of 58

CO - 60 of 64 finished
CT - 0 for 8 ! Gotta find those signs or a building with 'county' on it
DE - done
FL – 28 of 67 - needs a lot of work and lots of hams live there!
GA 87 of 159 - lots of room for improvement!
HI – done
IA – 85 of 99
ID 39 of 44
IL 56 of 102
IN 64 of 92
KS – 90 out of 105
KY 76 out of 120
LA – 27 of 64
MA – 7 of 14 - gotta find those signs folks – or a building
MD 12 of 24
ME 12 of 16
MI 58 of 103 - good time coming up with Mini – bring along camera!
MN 70 of 87
MO 106 of 115
MS 37 of 82
MT 55 of 56 - just one to go!
NC 80 of 100
NC 24 of 53
NE 89 of 93
NH 6 of 10
NJ 4 of 21
NM 27 of 33
NV 13 of 16
NY 45 of 62
OH 64 of 88
OK - done
OR 28 of 36
PA 25 of 67 – needs a lot of attention!
RI 0 of 5 - not a good record!
SC 40 of 46
SD 61 of 66
TN 65 of 95
TX 247 of 254
UT 26 of 29
VA 79 of 106

VT – 11 of 14
WA 35 of 39
WI – done!
WV 51 of 55
WY – done!

That leaves a lot of pictures to be 'snapped' and sent to Gary, K4EXT, to put into the database. This is a major project and everyone can pitch in! Rick, W5QP has been filling in lots in OK and AR and MO – trying to get those done. Others are gettting the last few in their states or nearby. Many states only need a couple to be 'done'.

We have the mini in MI coming up. That should give a dozen folks an excuse to take a detour to and run the county with the missing sign! Other than interstates which are hard to stop on (and when you enter a state on the interstate there is low probability of a county line sign there – too many others there instead), if you are on smaller roads, there's almost always a county line sign! Or a big 'welcome to County A' there too!

Then there is Dayton – another excuse to grab a missing county sign or six, and the National which should help fill in California! Only a bit more than half of MI is done, and only 2/3rds of CA is done, leaving lots of opportunity.

I'm sure all these county lines have been run time and time again (do you have any pictures in the old picture file that would help?).

Let's get all 3077 into the database! Joint project – everyone pitch in.

Here's one from K8QWY -

Perry/Licking, OH Line by K8QWY

Paul, N7JPF sent in this one

Clackamas OR by N7JPF

Silver, dug a bit deeper into the files and send in another batch to Gary. Here's one of the new ones he sent in (from 2005)

N9QS Montgomery, IL

Jerry, K5YAA, sent in some from his trip to LA

Avoyelles, LA by K5YAA

Lowell, KB0BA and Sandra, N0XYL, added in even more in their last trip to IA.

KB0BA/N0XYL Kossuth, IA – (SNOW!)

Rick, W5QP, sent in some MO

Macon, MO by W5QP – what's that white stuff?

Here's one from Rory, WY0A and son KD0TWY, Casey. They sent in some from their recent trip. Then sent in dozens from MS and FL.

Casey, KD0TWY Attala MS

Lightning Protection

Every year, county hunters invite lightning right into their shack – probably without thinking about what happens when Mother Nature hands them some thunderstorms to deal with. You can do a lot to not invite damaging lightning into the hamhack with some basics in lightning protection.

During thunderstorms, electrical charge passes between cloud masses and the surface of the earth in the form of violent arc discharges which we recognize as lightning. Discharges also take place between clouds, but as they pose little threat to ground installations the main concern is with discharges to ground.

The damaging part of a lightning flash is the so-called 'return stroke' in which charge is transported along an already-established ionized pathway between the cloud and ground.

In the time domain, the peak current in the return stroke is reached after a few microseconds and the current then falls to half its peak value in a further 50us or so. Some flashes comprise two or more strokes whose individual characteristics correspond with those of single strokes, but which are separated by 50 to 100ms.

10% of strokes exceed 80kA
50% of strokes exceed 28kA
90% of strokes exceed 8kA

That is THOUSANDS of amps, folks. It wants to go somewhere. Your task is to make sure that the current and the voltage, for the most part, stays OUTSIDE the hamshack, house wiring, equipment and accessories such as computers.

One reference suggests that lightning protection systems should be designed assuming a peak current of 200kA and maximum di/dt of 200kA/us. We're getting a bit technical, but the di/dt is the rise/fall time of the 'hit'. It's a 'spike'. That is important.

It is often imagined that lightning conductors must be of very large cross-section in order to avoid being melted by passage of the very large lightning discharge current.

Much more important considerations are the **inductance** of the wire and the ability of the conductor to withstand the large electro-mechanical forces caused by the passage of the current. If we take the case of the 200kA stroke defined above, an inductance of only 1uH will cause a potential difference of 200kV ($V = -L \, di/dt$).

The objective of conventional lightning protection systems is to minimize the damage to equipment and danger to personnel which occurs when a lightning stroke passes to ground by a direct strike to part of the installation. When an antenna support structure, or the antennas mounted on it, are struck, a current of many kiloamperes is suddenly injected into the system to which they are connected. Protective measures are essential to ensure that :

1. All the lightning current passes to ground without passing through sensitive components which are prone to failure;

2. The passage of the lightning current does not generate sufficient potential differences between various components of the system to give rise to flashover or hazard to personnel

The antenna structure is the most commonly struck point in the equipment of a radio station. If the current can be diverted effectively to ground before it passes into the communications equipment, many of our problems will be reduced.

The base of every structure, whether a self-supporting tower, a radiating mast or a transmission line gantry, must be grounded to the mass of the earth by a connection which has as low an impedance as is practicable. In fertile lowland regions the achievement of a low impedance ground connection is simple, but in arid conditions, or areas of solid poorly-conducting rock it presents a more difficult challenge.

In those installations where antennas are mounted on the roofs or walls of buildings, no effective ground path may be provided by the building. It is therefore necessary either to connect the antenna installation to the lightning protection system.

The idea is to give the lightning the best way to get to 'ground'. That is

a) At the base of the tower or support structure

b) Before it enters the house

c) Before it enters the equipment

Grounding the Tower and the Feedline and Cables!

Many hams miss this. We'll explain why this is CRITICAL.

Standard Grounding Connections

The recommended resistance-to-ground of a lightning protective ground system is 10 ohms, but lower values will generally reduce the incidence of side-flashing and damage to equipment.

The standard ground connection in most ground conditions takes the form of a number of long conducting spikes driven into the ground, or conducting plates buried in it. The critical features of the arrangement are the integrity of the contact between the ground conductors and the earth around them (drive spikes into undisturbed ground where possible), and the inductance of the conductors by which they are bonded to the base of the structure.

For 'commercial systems' you might see requirements like this:

Where possible the ground conductors should extend below the water table, even in the driest part of the year. Spikes may be easier to drive more deeply, but in general the much larger surface area of buried plates makes them a better choice when conditions are not ideal. The objective should be to get 4 square meters of ground contact surface close to the base of a tower or mast. The conductors which provide this contact area must be connected to the base of the structure by wide, low inductance straps; typically one plate 0.5 sq.m. in area (that is 1 sq.m. allowing for contact with both sides) should be buried adjacent to each leg of a tower. Many ground systems built with driven rods have excessive inductance in the interconnecting straps (and in the rods themselves if they must penetrate a long way to the water table). When designing ground systems, remember that sharp-radius bends have a significant series inductance (sharp bends are often encountered at the point of connection at the top of a ground spike).

Copper is traditionally used for ground conductors; the critical feature in selecting materials is not so much their low resistance, but their low rate of corrosion and long life when buried. The cost of a good ground connection may appear high, but it must

be set against the lower costs of repair and outage time resulting from failure.

For most hams, a single good quality ground rod at each corner of a tower is usually sufficient. Make sure yours hasn't corroded away if more than five years old.

A typical installation is shown in Figure 1. The equipment room contains transmitters and receivers connected to an AC power supply and to incoming and outgoing signal lines. Various antennas are mounted on a steel structure and connected to the radio equipment by coaxial cables . A number of important features of the lightning protective system are now identified.

a,b,c The outer conductors of all the coaxial cables which run from the structure are bonded at three points:

i. At their upper ends
ii. At the point of exit from the structure
iii. At their point of entry into the equipment building.
iv.

Bonding at the upper end of each feeder and at the point of exit ensures that no potential difference will exist between the steelwork of the structure and the feeders at any point. If this bonding is not provided, side-flash may cause damage to the feeders.

Why is this important? Really important?

What we want to do is to 'shunt' and 'divert' the lightning energy. Let's say a medium size strike hits the top of your tower. Instantly, the top of your tower might go to 200,000 volts above ground. Wow! You thought your tower was 'grounded'? Remember that -L di/dt? What it means is the lightning worries about the INDUCTANCE it sees. Your tower might be 'one ohm' from top to bottom and a '10 ohm ground'. It's a 'spike' with very fast rise time. It's worried about INDUCTANCE.

That means two things. The top of the tower goes to 200,000 volts and all sorts of 'current' flows instantly. Your tower won't melt. The energyh in the spike won't melt a tower, Or #6 or #4 wire. Right? But at the same time, the top of your feedline is suddenly 200,000 volts above ground! Remember that. The top of your feedline is 200,000v above ground, or some high number. Even if is 20,000 V, you don't want that in your hamshack. The shield of your coax is 20,000 or 200,000 v above ground – the SHIELD!

Now, many hams invite that full jolt of electricity into the shack! They bring their insulated feedline right down the tower, then over into the house without grounding it along the way. (Or, maybe they ground it outside the house.)

Think of a voltage divider. The top of the tower is 200,000v above ground. The bottom of the tower, let's say for easy computation, is near zero volts above ground. (low INDUCTANCE path to ground at the bottom of the tower). If you bring the feedline right into the shack, or entrance point, you brought the WHOLE 200,000v over to the house.

However, IF you ground the shield of the cable to the base of the tower, or where it comes into the house, what do we have? Let's say you have a 100 foot tower, and you ground the feedline to the tower at 1 foot above ground. You now have $1/100^{th}$ of the voltage at the top of the tower on the shield of the coax headed toward the house. The lightning doesn't like the 'inner conductor' by far. It's inductance is 'too high' (skinny wire compared to the shield, right?). OK, still with me. We have now reduced both the CURRENT and the VOLTAGE headed toward your house by grounding the shield at the base of the tower. . By a factor of close to 100!! (if you bring your feedline off the tower at 8 feet up to run to the house, then by 92% if bonded to the tower at that point where it leaves the tower!

If you want to protect your rotor, you don't want a lightning strike coming down the mast, and directly THROUGH the rotor. You should have a good solid flexible ground strap AROUND the rotor from the mast to the platform on which the rotor sits. Put it on the other side (180deg spacing) from the feedline so they don't tangle as it rotates around.

Next.....you have to provide the same lightning protection to the rotor cable conductors. The top of the tower is 200,000 v above ground. The rotor case is at the same voltage. The rotor cables are at the same voltage. You've got voltage spikes headed toward your rotor control box, looking for a way to 'get to ground'. (usually through the rotor transformer to the a/c line).

One way to address his is to use GE MOV type devices at the base of the tower. Put in a small box with terminal strips or use plugs/sockets. There a couple bucks each, or even cheaper at a hamfest. Billions are made to put into those 'power strips' for computers. Even better – bring the rotor cable down, put a few small diameter turns in it(coil up a b it of it), then bring it up into the box with the terminal strips. Lightning hates inductance and hates going 'back uphill'. Ground the box and one side of the GE-MOV

protectors to the tower.

Here's a quick video on it

https://www.youtube.com/watch?v=CiBXN82vzNQ

At the top of the tower, have a few feet of mast above the antenna. You'd rather a nice steel mast take the hit rather than some point beyond the trap of the antenna – which might zap the trap on it's way to ground.

Bonding at the base of the structure and the point of entry to the building reduces the amount of energy which is allowed to enter the building.

OK...so we have reduced the voltage/current we can reduce by TWO orders of magnitude by grounding at the base of the tower on the feedline. No ground on the coax shield? You invite the full voltage and a good chunk of the current into your shack.

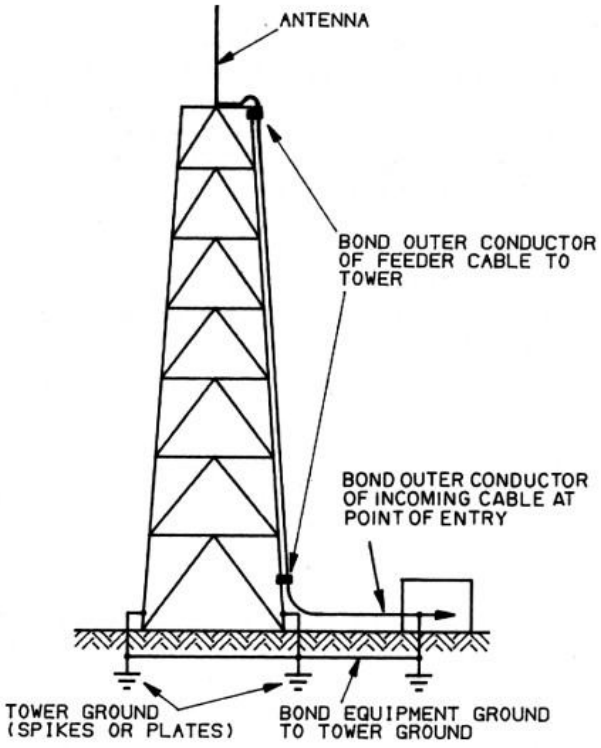
Now, we still have a bunch of voltage/current in the 'spike' headed to your shack. It's not zero, and it could be thousands of volts. Ground ain't quite ground. Remember, your tower ground might be a few ohms. The lightning is going to split – most of the current will head to "ground" at the base of the tower. Some will follow the shield on your coax straight to the house. The base of the tower still might be 10,000 v above ground instantaneously. That's better than 200,000v.

If you have a few feet of extra feed line, coil it. Remember, it's all about inductance.

So what do we do next? Yep, we ground the feedline at the ENTRY point to the house. Let's say we can now reduce that voltage/current spike by giving that lighting a LOWER inductance path to ground with a ground system (ground rod) outside the house. Maybe another times 10 reduction?

What else can we do? If you run the coax underground to the house....the lightning spikes don't like that. Higher inductance – less voltage spike produced! If you put a loop in the coax as it leaves the tower....more inductance....less 'voltage spike' produced headed toward the house. Lightning hates INDUCTANCE. Same where it enters the house AFTER you ground it. Lightning also hates to go up again.

OK...now we have given the lightning paths to ground – at the base of the tower – and before it enters your house. Another ground rod where it comes into the house. What else can we do? There are some really simple steps you probably never thought of. These some from Kenny Guthrie, GE's “lightning guru' for 30 years.



Remember, lightning is going to take the easiest path to ground. If you don't have your rig in use – don't have the feedline connected, but grounded instead. Some coax selection switches have a 'ground' position. That only works, of course, if you have a ground connected to it! Or you can disconnect the cable before it gets to the equipment, and hopefully connect it to ground – otherwise sparks may be flying off the end.

If your tower gets hit.....you're probably also going to see 'induced spikes' on the power line, or maybe you are going to get the hit ON the power line, which comes through your entrance box into your hamshack – and sees that lovely ground you have attached. to your ham radio! Wow! Paths to ground, right through the power transformer of your ham rig (instant death). Not good. If that coax is connected, you got ground paths.

Heck, if the only ground you have on your rig is that of the antenna.....up the feedline and down the tower.....well, that's one path to ground. If you have above ground power line – there's a chance of a power line 'surge' or spike.

Can we reduce that? Yep, you can buy a 'whole house' protector for about $50 and wire it across the service entrance. If you lose appliances regularly due to lightning strikes, you might want to invest in one. They go right at the service entrance on the house side of the main breaker. Also check you still have a ground rod connected to your power entrance box. After 20-30 years they can corrode away, leaving you with no ground.

We wan to give the lightning the best path to ground.....

Whole House Protectors

http://www.homedepot.com/p/GE-Whole-Home-Surge-Protection-Unit-Panel-Mount-THQLSURGE/100143165?N=5yc1vZbm05Zlo

What else can you do? Inductance. Simple inductance. Remember the 'hank' in the a/c power cord when you first got the rig? Excellent source of 'inductance' to keep power line hits OUT of the radio and to make the path through your radio 'higher inductance' to a/c line spikes. Leave the a/c coil coiled! Or coil it up again! Inductance!

Want even more protection? Run the coax through a STEEL pipe. Lightning hates inductance. The coax inside the pipe makes the lightning want to run on the outside of the steel pipe, NOT the inside. It's inductance. Ground the steel pipe at the 'tower end'. A couple feet helps – 20 feet is even better. WE want to make the lightning want to take another path (the tower ground, the ground outside the house) rather than travel all the way to the rig.

What is the worst thing you can do? Run the coax down a non-conducting guy or rope directly outside the house and entering the house without being grounded! You've just 'invited' the full lightning voltage/current to be headed right inside - that top of the tower when hit (or even with an induced voltage from lightning hitting 100 feet away) will go THOUSANDS or tens of THOUSANDS of volts instantaneously....for micro seconds – but that is all it takes. Thousands of amps can flow for microseconds.

Kenny Guthrie, the GE Lightning Guru, would show mountain top installations and what he often found. When you didn't have enough line cord to leave it coiled – put a few knots in it. Three knots out to be sufficient. You laugh? He showed half a dozen cords where the first one or two knots had been jumped by the voltage spike and 'burned over' and the 3rd wasn't. Likely saved a thousand bucks worth of two way equipment many many times. And of course, spend $5 to buy yourself a power strip with lightning protectors in it. Run your computer off a UPS type supply with built in surge protection. It's the 'hiccups' on the line that can wipe out a computer switching supply.

Remember, it's convincing the lightning to stay outside. Most of it. You can't ground all of it away. Your rig will likely survive a 1,000 v spike. A good rig is designed for that level of hit. Computers aren't. Nor are 'computer' input and output ports like USB ports. If you hook your rig to a computer – that's a whole 'nother subject to cover for protection.

There are also devices, like the Transitrap, that give the inner conductor of the coax a 'spike protector'. Ron, KA3DRO offers some ideas on how to install these in weather resistant housings a bit later in the newsletter. This is one more step but do it after you have the grounds installed. Putting one at the base of the tower and where it comes into the house gives you convenient grounding points to connect to.

Bottom line – GROUND the coax where it comes off the tower. Ground the feedline again before it comes into the hamshack. Put as much inductance in the path of the feedline, and the least amount in the grounding wire/straps to get the spike to ground, to convince most of the energy to head to ground before it has a chance to enter the house.

Check that your power entrance/power box ground really exists. In wet soils, many folks give a yank on their 8 foot ground rod and discover it is only 1 or 2 feet long when it easily comes up. You might have to hunt a bit as many of them are pounded a few inches under the soil – or wind up there after years. That power box ground is also there to insure 'neutral' is really grounded there for safety reasons in your house (and so those GFI protectors work) .

Hope this shed a bit of light on the lightning issue. Hopefully we'll be hearing less about 'lightning damage' if folks get on the ball and get their installations up to snuff.

Grain Brain – Health Book Review

You know that once N4CD gets on a streak, it's dive in and digest as much as possible to get 'informed'. Reading also helps the brain stay alert, along with exercise. This book was mentioned in many posts on one of the boards I visit, and was a PBS special during the first week of March – and that piqued my curiosity so I sprung for the book at the local Sprouts store. It's not out in paperback yet – still a hardcover best seller although used ones can be found on Amazon dot com.

Grain Brain – by David Permlutter, MD

from his website:

Renowned neurologist David Perlmutter, MD, blows the lid off a topic that's been buried in medical literature for far too long: carbs are destroying your brain. And not just unhealthy carbs, but even healthy ones like whole grains can cause dementia, ADHD, anxiety, chronic headaches, depression, and much more. Dr. Perlmutter explains what happens when the brain encounters common ingredients in your daily bread and fruit bowls, why your brain thrives on fat and cholesterol, and how you can spur the growth of new brain cells at any age. He offers an in-depth look at how we can take control of our "smart genes" through specific dietary choices and lifestyle habits, demonstrating how to remedy our most feared maladies without drugs.

In Grain Brain, Dr. Perlmutter offers suggestions on how to fuel the brain properly with

sound nutrition. These basic changes can help alleviate, or even reverse brain disease, eliminate brain fog symptoms, and improve memory and energy levels.

Since its publication, Grain Brain has reached #1 on multiple Best Seller lists, including those from The New York Times, Wall Street Journal, and USA Today. Grain Brain is now published in multiple languages and is available in 20 countries across the globe.

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The premise of his book is that folks need to:

1) Cut all sugar and high fructose sweetener out of their diet. Cut out all but stevia for artificial sweeteners. The others just trigger your 'sugar center' to crave more real sugar and you'll be hungry in two hours. No soft drinks, no OJ.

2) Cut all foods containing gluten out of your diet. That includes all bread, cakes, pancakes, biscuits, breaded anything, nearly all cookies, snacks, etc. No wheat, flour, and most grains out of your foods. No foods with 'gluten' added – which is most processed foods, most 'packaged dinners'. Or hidden in sauces, gravy (flour) , and other common products.

3) Run from MSG, used as a 'flavor enhancer'. Many buffets load up the food with MSG although it is now recognized worldwide as a problem. It is mono sodium GLUTAmate.....gluten – high strength. Bad, Bad Bad for you. You will also find it listed on ingredients of different names: Maltodextrin, Soy Protein, Rice Protein, HVP, etc. It's snuck in under various names in most 'prepared' foods.

Watch the 'glycemic index' of what you eat. Some foods (like OJ) have as much sugar as a can of Coke, which is 14 teaspoons! And it instantly all heads to the brain. You get a 'sugar high'. It's 'cocaine' for the brain and it triggers all sorts of body responses including the pancreas going into overload to handle the blood sugar increase. Not good.

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He is a neurologist focused on brain health. Did you know that 50% of all people older than 85 will suffer from Alzheimers? 50%! He says that is due to consuming gluten and sugar, your brain chemistry has changed. It is getting 'clogged up' by plaques which form from 'inflammation'. He also suggests that up to 50% of Americans suffer from

some form of gluten sensitivity, even though the don't suffer typical 'celiac' disease problems. The only way is to get a gluten sensitivity test, or better yet, just eliminate gluten from your diet. Your local store that specializes in healthy food will have an entire section of 'gluten free' foods these days.

Your brain weighs 3 lbs, has over 100 thousand miles of blood vessels, contains more connections than there are stars in the Milky Way Galaxy and is the 'fattest' organ in your body. You need 'essential fats' in your diet – from nuts and seeds – and yes, eggs and whole milk, and avocados. You don't need a single carb to live, yet most Americans get over 50% of their calories from carbs (refined sugar) and junk food.

For starters, diabetes and brain diseases are this country's costliest and most pernicious diseases, yet they are largely preventable and uniquely tied together. Having diabetes doubles your chances for brain disease. What triggers diabetes are inability to handle SUGAR and the overwork most people force on their pancreas and other organs to deal with the sugar overload.

Until 2000 years ago, sugar wasn't in the human diet. Period. It was protein and fats. Then agriculture began in a big way and humans started eating grains. However, the amount of gluten in today's grains is at least 40 times higher than 2000 years ago. We've bio-engineered through selective breeding and hybridization gluten levels in grain that are fantastically higher, much higher than the human body was designed to handle.

What is the Standard American Breakfast? Bowl of Cereal? High gluten grain, with loads of sugar (check the label), and other 'preservatives' and 'flavor enhancers' and near zero nutritional value other than empty calories. In fact, the 'food industry' had to 'fortify' white flour by putting BACK into it niacin and just a few vitamins to be able to call it 'food'. Or maybe a 'breakfast' muffin , or worse, 'donut' that's loaded with sugar.

Morning snack? Sugar laden something – donut – and maybe that Starbucks drink with 20 teaspoons of sugar and 800 empty calories. Oh, yes! It rings the brain's 'sugar pleasure center' and you'll be craving another one an hour or two later after the 'sugar high' wears off.

Lunch? Sandwich on gluten laden bread, or worse, greasy hamburger on gluten/sugar laden hamburger roll. And a 'supersized' 800 calorie soft drink that also gives the brain a 'cocaine type' sugar high, spikes blood sugar levels, triggers insulin production to handle it.

Bottom line: Ya gotta cut the sugar to near zero. Cut the soft drinks out entirely. Eat an

orange rather than gulp your OJ which is concentrated sugar and almost no nutrients of a real orange. Eliminate gluten (white, rye, 'whole grain') from your diet. Eat essential fats every day, preferably every meal.

It's a good read. He suggests you eat protein at every meal. Moderate amounts, of course 9 3 to 4 oz!), and the right kind. Eggs, grain fed beef, wild fish. Minimize high glycemic index foods.

Here's a link detailing some of the glycemic indexes for common foods

http://www.health.harvard.edu/glycemic

Here's more on the book – from an interview he did

“The brain thrives on a fat-rich, low-carbohydrate diet, which unfortunately is relatively uncommon in human populations today," he says. Carbohydrates typically thought of as healthy, even brown rice, 100% whole grain bread, or quinoa—mainstays of many of the most health-conscious kitchens—cause disorders like dementia, ADHD, chronic headaches, and Alzheimer’s, over a lifetime of consumption. By removing these carbohydrates from the diet—harbingers of inflammation, the true source of problems that plague our brains and hearts—and increasing the amount of fat and cholesterol we consume, we can not only protect our most valuable organ, but also potentially, undo years of damage.

Cholesterol, for example, long vilified by the media and medical community, actually promotes neurogenesis (the birth of new brain cells) and communication between neurons, to the degree that studies have shown that higher levels of serum cholesterol correlates to more robust cognitive prowess.

The book is also not without serious consideration for cardiovascular system, citing study after study to reaffirm that it’s not fat and cholesterol, but carbohydrates and certain fats—and not the fats that you would think—that are the true enemies of heart and vascular health.

Carbohydrate consumption leads to blood sugar elevation obviously in the short term, but also, in the long term as well. Persistently challenging the pancreas to secrete insulin to deal with dietary carbohydrate ultimately leads to insulin resistance, a condition directly associated with increased risk for dementia. What’s worse, insulin resistance is the forerunner of type 2

diabetes, a condition associated with a doubling of Alzheimer's risk. In a recent report in the Journal of Alzheimer's Disease., Mayo Clinic researchers showed that individuals favoring carbohydrates in their diets had a remarkable 89% increased risk for developing dementia as contrasted to those whose diets contained the most fat. Having the highest levels of fat consumption was actually found to be associated with an incredible 44% reduction in risk for developing dementia.

So-called "complex carbs" may actually represent a more significant threat to health than simple sugar in that they may not only raise blood sugar, but keep it elevated for a more prolonged period of time. Foods can be evaluated by their glycemic index which measures not only how high blood sugar will be elevated by the consumption of a particular food, but also takes into account how long it will have this effect. So the higher the glycemic index, the more damaging are the effects of elevated blood sugar. Whole grain bread for example has a dramatically higher glycemic index when compared to pure table sugar.

Ultimately, continued challenges of our bodies with high glycemic index foods leads to elevation of fasting blood sugars. This is of paramount importance as recently published in New England Journal of Medicine. In this report, researchers found that a fasting blood sugar even in the range that most doctors would consider to be normal, levels far below what would qualify for the diagnosis, are powerfully associated with developing dementia.

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even in the range that most doctors would consider to be normal, levels far below what would qualify for the diagnosis, are powerfully associated with developing dementia.

Two forms of fat that are vitally important for brain health are cholesterol and saturated fat. In the Mayo Clinic study mentioned above, it was found that those individuals consuming the most saturated fat experienced a 36% reduction in risk for developing dementia. And this comes on the heels of data now indicating that saturated fat consumption has absolutely no relevance in the area of cardiovascular risk as recently described by Dr. Glen Lawrence in the journal, Advances in Nutrition.

Saturated fat is a fundamental building block for brain cells. It's certainly interesting to consider that one of the richest sources of saturated fat in nature is human breast milk.

Similarly, cholesterol is vital for a well functioning brain. Cholesterol functions as a brain protective antioxidant. It is the raw material from which our bodies make vitamin D, a fundamental player in preserving brain function. In addition, cholesterol is the precursor for the sex hormones estrogen, progesterone and testosterone – all of which contribute to healthy brain function. While the brain constitutes about 2-3% of our total body weight, an impressive 25% of the body's cholesterol is found in the brain. So when the FDA last year began requiring consumer warnings on certain cholesterol lowering medications related to memory decline and other cognitive issues, it wasn't surprising. Indeed, it has now been shown that in the elderly, those folks whose cholesterol levels are the highest may have as much as a 70% risk reduction for dementia.

So yes, I am absolutely an advocate for grass-fed beef, pasture raised eggs, and coconut oil is on the top of my list. Getting these life sustaining, brain nurturing fats back on the plate while substantially reducing carbohydrates paves the way to brain preservation, enhancement of function and reducing the risk for Alzheimer's disease – a disease for which there is no treatment whatsoever.

Over the past decade we have witnessed a changing landscape in terms of refinement of the cholesterol markers as they relate to cardiovascular risk. Whereas cholesterol itself was first targeted, emphasis soon moved to LDL as it was given the name "bad cholesterol," despite the fact that LDL's role is to deliver life sustaining cholesterol to every one of our body's cells. I'll say parenthetically that whatever marketing team attached the "bad " surname to LDL must have been well rewarded! We then saw emphasis move to the importance of so-called "particle size" as being an important marker of cardiovascular risk – and rightfully so, size really does matter.

Now the focus of attention has gone back to LDL in recognizing that it truly represents a potent risk factor when it has become oxidized. Oxidation represents the damage that can occur to proteins by the action of chemicals called free radicals. So, measurement of oxidized LDL is now showing up on comprehensive heart disease blood panels, and with good reason. The

empowering science here is that LDL gets oxidized when it is bound to sugar, a process called glycation. And this process is directly related to fasting blood sugar and therefore relates to a person's choice to consume carbohydrates – or not. In evaluating cholesterol in and of itself, I do not define any upper limit in terms of cardiac liability.

Gluten free isn't new or a fad. It's the diet that humans have consumed for more than 99.9% of our existence on this planet.

I must and should defer to the most well respected peer-reviewed literature that now indicates that gluten consumption leads to the amplification of a specific protein called zonulin which increases permeability of both the gut and blood brain barrier as described by Dr. Fasano in the above reference. Gut permeability activates inflammation and inflammation is a cornerstone of some of the most pernicious brain disorders including Alzheimer's disease, multiple sclerosis, and Parkinson's disease. What is so compelling in a very positive light is that this occurs in all humans and may be the key to a vast number of human maladies including a vast number of other inflammatory disorders as well as autoimmune diseases, and even cancer.

In addition, the gluten issue aside, whole grain bread has an incredibly high glycemic index and this poses an equally powerful threat to brain health."

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Worth your consideration. If you read this book and Fuhrman's Super Immunity (last month's health book), you'll find differences. Fuhrman is a proponent of near zero meat/dairy and giant quantities of 'greens' – and the GBOMBS as discussed last month. No sugar but whole grains allowed. You get your protein from plant matter (mostly beans). 4-5 fruits a day. No other source of carbs. Low fat milk if you insist. Low fat everything.

On the other hand - -

Perlmutter advocates protein at every meal – eggs or meat/fish, but zero gluten and sugar in the diet, and stay away from beans unless prepared from raw beans. He notes you need 'essential fats' at every meal as well. Limited fruit – near none other than berries. He's a super low carbs person. But full fat milk and butter are fine. He wants you to be getting those 'fats'.

So here you have N4CD – trying to figure out a compromise between the two. No sugar, of course....and watching the carbs, but getting a bit more meat/fish protein in the diet and don't feel guilty about a 1 real egg/rest of it eggbeater omelet for breakfast every couple days! (no pancake mix as what you would get eating out as they add it in all the time for increased volume).

Another book to review by next month. We'll see where that takes us.

On the Trail of Regens

Radio Shack P-Box Kits

Here's an interesting item from Ebay. Back in the 1960s, Radio Shack come out with a line of kits called P-Box kits. You would built them on a plastic base, with push in spring loaded terminals. One of the kits was a 'one tube radio' that was a grid leak detector AM radio. Here's another one – a shortwave 3 transistor regen circuit kit.

It used some early transistors in a simple regen detector followed by two stages of amplification. You still needed to use an earphone as there wasn't much gain in the audio chain with the first generation consumer transistors. This unbuilt kit is up for sale starting at $150.

Later, Radio Shack would sell another kit with a regular plastic cabinet and printed circuit board inside that was also a 3 transistor radio kit. There were two versions of that. Radio Shack/Archer also made a 3 tube shortwave kit (rather rare) before that.

Now, Radio Shack is closing 1,100 stores around the country and lost it's focus on what

the millennials want to buy these days. It will be interesting to see what happens in the future. I remember those first Radio Shack computers – I couldn't wait to get a TRS-80 machine, with the 9 inch black and white monitor, the 'expansion' interface that allowed one to have up to two 265K each floppy 5 1/4 inch drives, and a printer (Epson dot matrix for me) attached. Wow! Came with BASIC and you could buy all sorts of other things for it. Word Processor? Electric Pencil – upper case only!. Ah, the 'early days'. Then it was on to IBM PCs, XT's, AT's in quick order. Likely a lot of other 'boomers' started out that way, too. Remember those Commodore 64's? Timex ZX-1? Apple II? KayPro? Ah, nostalgia. Half the people in the US have never heard of them. They were born after 1990 – hi hi!

Harrison Radio Fultone II

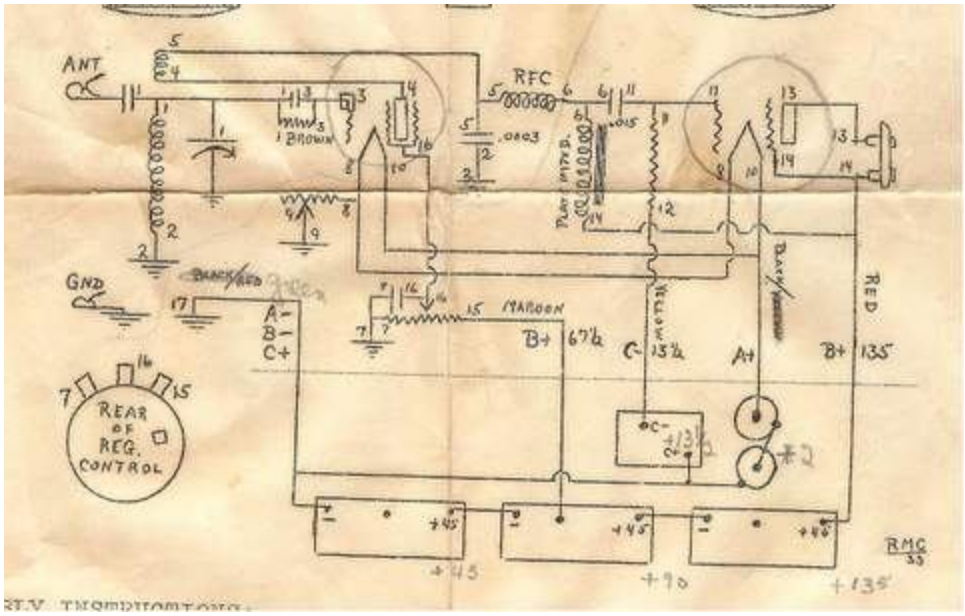
Last month we showed the Harrison Radio Fultone II two tube regen front view. I've got a bit more info on it now – it uses a type 32 screen grid regen detector in a conventional tickler circuit, with an audio choke coupling it into a type 33 pentode audio amp. You need 2v on the filament (2 x 1.5v dry cell battery) and 3 45v "B" batteries.

The 32 is a four pin tube with grid cap on top – 2v filament at 0.06 amps. The 33 tube is a five pin tube that takes 2v at 0.26amps. Likely this is long before most 'senior' hams remember tons and tons of octal tubes – which later changed to small 7 and 9 pin sockets and tubes. This radio would eat up A batteries pulling over .3 amps just to light up the filaments! Hope you got some good ones.

One 45v battery for the detector stage, and two more series on to provide 135v for the audio amp. It takes headphones although with a good antenna this might be able to drive a small speaker (with output transformer) on louder stations. There's a one side, one page sheet which leads one to believe this was a kit radio not long after 1931/32 when those tubes first came out. There's one plug in coil with it that covers 350 to 550 meters (or the 'lower part' of the broadcast band (550-960 KHz). Like most "shortwave rado" circuits of the day, it used a 140pf or so main tuning cap, so you would need 2 coils to cover the BC band, but it worked much better than a 365pf variable that most broadcast sets have. The shortwave dial gets 'stretched out' too much otherwise and the coil gets too small giving you bad L/C ratio. You could buy sets of coils designed to work with the 140pf main tuning capacitor at your local distributor or via mail order.

Harrison Radio Fultone II kit

Here's the schematic



Harrison Fultone II Regen Circuit

National SRR Five Meter Super Regen

The FCC authorized use of the five meter band (56-60 MHz) in the early 1930s. You could run mobile there (one of the few bands allowed – it was 10m and up only! No HF as we know it). The National SRR was one of a few rigs that National offered. It used plug in coils

The filaments take 0.9 amps at 6v. If you were going portable and operating off dry cells, you could yank the audio tube and use headphones instead and save a few tenths of an amp.

National SRR Front Panel


National SRR Top View

This radio was designed primarily for the five meter band, but coils were available for the 160,80, 40, 20, 10m bands as well, where it would operate as a standard regen receiver. You had to operate it on DC filament power to use it on HF to avoid hum as the detector/pre amp were not in separate shielded compartments like on the SW-3 designed for 'short wave'. You could buy one in 1934 or so for $25 – a lot of money during the depression era.

This one sold for $230 on Ebay this past month. .

more info here on the rig

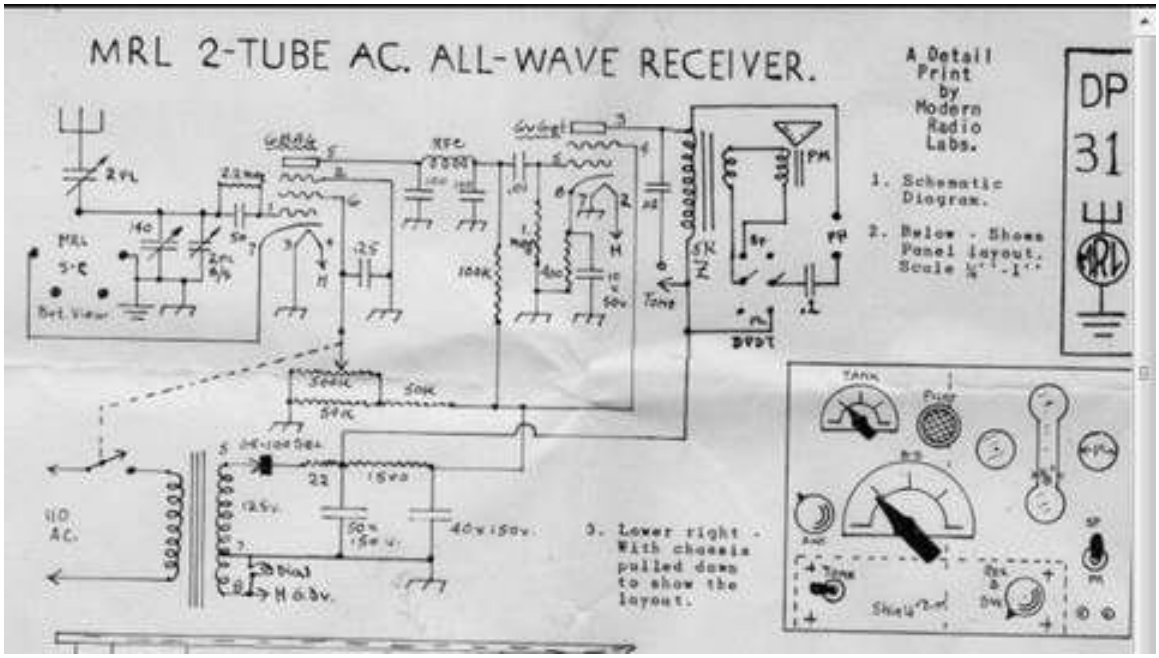
http://www.prismnet.com/~nielw/nat_list/srr.htm

schematic here

http://retrotechnologist.blogspot.com/2013/02/the-national-companys-srr-receiver.html

MRL Two Tube Radio

In the past month, a set of coils for the MRL Two Tube shortwave set appeared on Ebay. Not the radio, though. MRL (Modern Radio Labs) produced kits, mainly crystal sets and one tube sets. I've never seen this one mentioned, so I'll include it. Only the set of coils was for sale, but they came with the information sheet on how to build the radio – a Hartley detector followed by a 6V6 audio stage.



They mention their first two tube set used a 6C6 with a 42 audio amp. This should work a whole lot better. It had a built in power supply with one of them 'new fangled' selenium rectifiers. Well, there's something new you learn every day. One more to keep a eye out for at hamfests!

Other than using the speaker on local broadcasts, you'd likely be using earphones to hear any of the shortwave stations. It's not going to work any better than a Knight Kit basic Ocean Hopper (a 2 tube design). You really need another audio stage with 20 dB gain to use a speaker.

Idaho QSO Party

K7Tm and WW7D were out mobile giving the folks counties to chase. W1AW/7 was in the QSO Party giving out counties. All the 'portable' stations were likely good for the No Star award, as was WW7D/m. Several other fixed stations were noted.

WW7D/mobile - 655 cw 155 SSB contacts

"It was lots of fun activating 26 counties from Teton to Washington for the IDQP. Conditions seemed even better this year than last. Many thanks to folks who followed my progress and made QSOs over multiple counties. "

OM2VL – fixed - DX

Excellent condx on high bands. I try CQ on 10/15/20m and had really big pileup, but unfortunately only few stations from IDAHO ...

I worked 24 different counties.

Most QSO's with:

WW7D/M 21/16 (QSO/CTY)
K7TM/M 13/5
W1AW/7 12/6 (worked also on 80m!)

73 Laci OM2VL

WC7Q – WA- Fixed – 21 cw QSO 20 mults

“Doesn't Idaho have any cw ops. I only worked four during 9 hours of operation. If it wasn’t for WW7D mobile the test would have been a bust. Thanks Darryl, I worked you in 12 counties and only missed you in CAN due to a weak sig. You made the test a success for cw ops.”

Sam WC7Q

N6MU – fixed CA – 43 cw 33 ssb qso - 27 cw mults 24 phone mults

“Sparse pickings except for WW7D/m who gave me 52(68%)of my 76 Qs. Would have been more but I couldn't hear him on 15 at all Sunday. Another display of skip distance as K7TM/m was in the far northern counties and was loud Sunday on 15. Thanks to those few who did participate. 73...

John, N6MU “

Transi-Trap Installation by KA3DRO

A Transi-Trap is a commercial unit sold by many ham dealers. It's designed to go 'in line' with your coax, and provides a convenient grounding point, and an internl 'surge protector' – a gas tube device that fires when the inner conductor reaches a certain voltage (that above that seen on the coax during normal 'high power' transmissions.

You can read up on the various types available here

http://www.alphadeltacom.com/

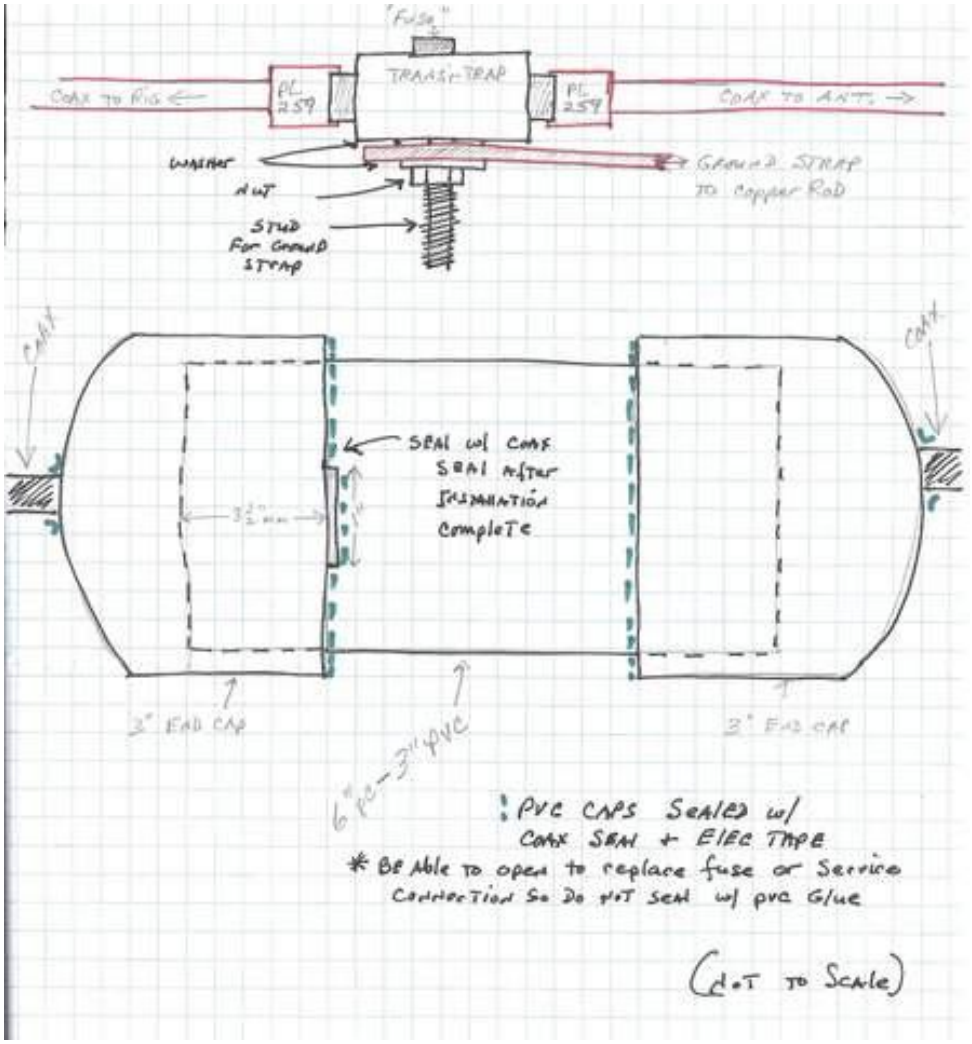
They have units perfect for at the base of the tower – with a coax connector on each side. They also have antenna switches with built in protection. That works as long as you have a good ground connected.

Here's what Ron wrote”

“.....perhaps a bit 'overkill' but guess I am a bit paranoid after the last lightning hit. The

tower was well grounded. Three copper rods with #4 solid copper wire – one attached to each leg outside the perimeter of the concrete holding the tower. But the coax was not previously grounded – in hindsight, a dumb move.

I bought the Transi-Trap unit and designed a capsule to add weather protection for the unit. I was told that the Transi-Traps were weatherproof – provided the coax connections were sealed, so I added coax seal where they connect to the unit, but have also enclosed the entire unit in some P:VC that I had. It was 3" (ID) and I cut off a 6 inch long piece for this project . I drilled holes at each end cap just large enough for the coax to pass through, enclosed the trap inside as shown, made a slit big enough for the 1" woven ground strap, with soldered ends – to pass through. Then I will seal the ends with tape. I'm not going to glue the PVC since it will be able to disassemble for service/testing, if needed. This will be mounted about a foot above the ground on a piece of treated 4x4 that I have in the scrap pile.



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de N4CD

Ron lost his rotor on the last hit .and antenna parts.

Scottie, N4AAT took four or five hits and blew up a couple rigs in the past few years.. Had a couple of expensive rotors fried. He did not have the coax grounded where it came off the tower.
Nor protection in the rotor lines.

You can't guarantee you'll 'survive' a lightning hit but you can greatly reduce the odds of a hit damaging equipment. You want most of the energy to NOT travel on the feedline

and to NOT enter the house. You do that by giving it a much better way to get to ground, rather than entering your house/equipment.

"Greenie Tech Failure"

'Cleantech' Gets Clocked By 60 Minutes, and the Usual Suspects Try to Make Lemonade

Abound Solar. A123 Systems. Beacon Power. Brightsource. Compact Power. ECOtality. Ener1. Evergreen Solar. First Solar. Fisker Automotive. Nevada Geothermal. Range Fuels. Solyndra. SpectraWatt. SunPower. Vehicle Production Group. Vestas.

These names are inspiring, uplifting, and so very green. And there are many more, as that list is only a subset of the dear departed whose headstones litter Heaven's Eternal Garden of Federal Clean Energy Subsidy Boondoggles Memorial Park. Earlier this month, *60 Minutes* broadcast a report on the unbroken string of failures endured by taxpayers under various Department of Energy subsidy programs for "clean" and "renewable" energy — adjectives curiously devoid of actual definition — a political/bureaucratic effort comprising subsidized loans, grants, price supports, tax credits, guaranteed market shares, and other such subventions, all authorized by Congress amid the deafening self-applause so characteristic of the Beltway. Thus does the federal black hole — politicians, bureaucrats, and "experts" joined at the hip — consume vast amounts of resources financed with other people's money. This is part of an endless effort to prove that they are just as smart as real businessmen, and, of course, is on endeavors which subsidize their various constituencies.

"Cleantech" is the sanitized term for this broad array of subsidized energy technology beneficiaries: firms producing batteries, solar devices, wind power components, "efficient" autos, "alternative" electricity, "renewable" electric generating facilities, *ad infinitum*. Together with "clean" and "renewable," Cleantech is a word that obscures the less-than-clean, life-or-death tug of war among interest groups competing for snout privileges at the federal "clean energy" trough. As an aside, under some conditions,

particularly when the subsidies take the form of an investment tax credit, no actual "clean energy" output is needed for the subsidies to flow. The term hides also the unreported reality that there is little "clean" about "clean energy": It has environmental advantages over conventional energy only if we ignore the adverse environmental effects of "clean energy."

But let us put that aside. The *60 Minutes* report displayed its customary lack of rigor and obvious questions not asked, characteristics and habits so common among modern journalists. A prominent example of the latter: Why, precisely, are subsidies needed if Cleantech really is economic, that is, if indeed it is the future of energy? After all, private-sector investors support risky and cutting-edge technologies in myriad industries as a matter of course without taxpayer subsidies; why has Cleantech proven to be a series of subsidized boondoggles?

Correspondent Lesley Stahl seems to accept the lazy excuse that the "venture capitalists and Internet geniuses" who have provided the private venture capital necessary to qualify for the federal subsidies have been too unfamiliar with the idiosyncrasies of the energy market, thus yielding the dismal performance of these politicized investments. The implication is that the outcomes — the number or magnitude of taxpayer-funded failures — would have been far better had it been energy-sector professionals making the investment decisions and running the companies.

Then why have they failed to do so? That the energy-sector professionals have chosen en masse to stay away in the absence of substantial government support provides a clear signal that something other than amateurism is the underlying source of the problem. The reality is that "clean energy" simply is very costly and uneconomic — in a word, uncompetitive — due to the inherently unconcentrated energy content of sunlight and wind flows, due to their intermittent availability and thus their unreliability, and due to the difficulty of sharp improvements in battery technology. And due to the vast increase in natural gas supplies and the resulting decline in prices brought by advances in horizontal drilling and hydraulic fracturing.

In short, the *60 Minutes* report sees half of the forest clearly: After "$100 billion in loans, grants, and tax breaks … [Cleantech] suffered a string of expensive tax-funded flops." What Stahl fails to see is the central cause of this failure both massive and massively subsidized: "Cleantech" by its very nature cannot compete.

What is fascinating is the circle-the-wagons response of the supporters of these boondoggles. Department of Energy spokesman Bill Gibbons retorted as follows:

> Simply put, *60 Minutes* is flat wrong on the facts. The clean energy economy in America is real and we are increasingly competitive in this rapidly-expanding global

industry. This is a race we can, must and will win.

Wow. Beyond the utter emptiness of that non-rebuttal — what does it mean to say that the clean energy economy is "real"? — note that it ignores the central point, to wit, the large financial losses that are the operational definition of federal "clean energy" programs. Like Sherlock Holmes's dog that failed to bark, Gibbons fails to list even one "clean energy" project that has proven viable without subsidies. As far as the increasing competitiveness asserted by Gibbons, the endless travails of electric automobiles — so beloved of bureaucrats and politicians everywhere — are illuminated by sales figures that speak for themselves, particularly in comparison with, say, pickup trucks, despite large subsidies for the former. And perhaps Gibbons is too busy making excuses for abject government failure to have noticed the Energy Information Administration estimates for the projected costs of conventional and renewable power generation for plants entering service in 2018 (using year 2011 dollars per megawatt-hour):

Coal	100.1
Natural gas combined cycle	67.1
Nuclear	108.4
Wind (on-shore)	86.6
Wind (off-shore)	221.5
Solar (thermal)	261.5
Hydroelectric	90.3

The estimate for on-shore wind power is likely to be far too low for various reasons, among them the poor average availability ("capacity factor") characteristics of renewables and the resulting costs of needed backup capacity, but that is an issue for another day. The central observation here is the rather obscure basis for Gibbons's assertion about the "increasingly competitive" nature of "clean energy." Precisely what is the basis for that claim?

In an email response to the *60 Minutes* report, Peter Davidson, executive director of the Department of Energy Loan Program Office, informs us that "in the last four years, the U.S. has more than doubled electricity generation" from such sources as wind and solar,

a fact that is rather beside the point; no one doubts that large subsidies attract resources. And: "In 2012, wind was America's largest source of new electrical capacity," a fact that hides the enormous political obstacles confronting construction of conventional power plants, and that blurs the distinction between production capacity and the actual production of electricity. The EIA estimate of average availability for, say, natural-gas combined cycle plants is 87 percent; for wind it is 34 percent.

The comedy highlight of Davidson's email missive is the assertion that:

> After the Energy Department financed the first five utility-scale [photovoltaic] solar power plants in the U.S., the private sector stepped in — supporting the construction of the next 10 utility-scale PV solar power plants in the U.S. *without DOE support*. (Emphasis added) After DOE… established a framework for how to successfully finance these projects, the private sector took over.

Wow again. Note the sleight of hand in terms of the absence of "DOE support." Davidson forgets to mention the massive federal subsidies for solar power provided outside the purview of DOE, among which is a 30 percent investment tax credit on capital expenditures if placed in service before 2016, and/or a production tax credit of $22 per megawatt-hour. A recent EIA analysis finds the following federal subsidies and support for electricity production in fiscal year 2010, in year 2010 dollars per megawatt-hour:

Natural gas	0.63
Coal	0.64
Hydroelectric	0.84
Biomass	2.00
Nuclear	3.10
Geothermal	12.50
Wind	52.48
Solar	968.00

Got that? Federal subsidies and support for solar power per megawatt-hour are roughly 1,500 times those for gas-fired power; for wind power it is about 83 times as high. Davidson goes on to laud DOE support of "advanced vehicle technologies," a series of boondoggles and embarrassments that are the lifeblood of late-night comedians, as noted above.

Not to be outdone, Joe Romm of the Center for American Progress informs us that "clean technology is booming by every key indicator," and then in a series of charts descends into a classic exercise in Beltway obfuscation:

- *Costs are falling and installed capacity is rising for solar photovoltaic components*. Yes, costs have been falling sharply in the face of large Chinese subsidies for the production of the components, but that is hardly an indication of increasing competitiveness, and rising installations reflect both the Chinese subsidies and the massive U.S. subsidies summarized above. What do these "data" offered by Fromm have to do with the financial losses borne by taxpayers for Cleantech? In a word: nothing.

- *Costs are falling and installed capacity is rising for on-shore wind components*. Actually, Fromm's chart shows that wind power costs have been roughly constant for the last 20 years. (Fromm is too sloppy to tell us whether his data are adjusted for inflation; since his chart shows costs rising in the mid-to late 2000s, it may be reasonable simply to assume inflation away as a first approximation.) In any event, the same point applies: This has nothing to do with competitiveness properly defined or the taxpayer losses due to "clean energy" projects.

- *LED lighting costs are falling and the installed number of LED lights is rising*. Is Fromm kidding here? In the face of an increasingly stringent ban on the sale of traditional incandescent bulbs — unenforced by the federal government due to legislative riders sponsored by Representative Michael Burgess, but tell that to the home improvement stores and other large sellers of light bulbs — it is not surprising that cumulative installations of LEDs would rise. Nor is it surprising that some scale economies might be achieved as increasing numbers of such bulbs are forced upon the market. What really is interesting is how expensive such bulbs remain despite federal subsidies for development costs. And, again, none of this has anything to do with the various Cleantech financial fiascos.

- *Costs are falling and cumulative sales are rising for electric vehicles and batteries*. Wow yet again. Of all the fiascos and embarrassments characterizing the Cleantech effort, the electric vehicle/battery saga is the most distressing or amusing — take your pick — of all. (See above.) The central point remains: Sales heavily subsidized tell us little about underlying competitiveness, and the utter failure of electric vehicles in the market despite those large subsidies tells us much.

“Clean and renewable” energy has proven so costly and so uncompetitive that even the Europeans are backing away from their own mandates rapidly. The basic reality — one that cannot be neutralized by any amount of Beltway blather — is that “clean and renewable” energy in almost all of its manifestations is far too expensive and unreliable to compete. That is what explains the endless failures of the federal subsidy programs, that is what drives the *60 Minutes* report, and that is the underlying truth that lays waste to the rationalizations offered by the DOE propaganda machine and its apologists. These subsidy programs yield only pure resource waste and excessive costs even as they represent a federal trough for special interests, one at which only white elephants feed.

http://american.com/archive/2014/january/cleantech-gets-clocked-by-60-minutes-and-the-usual-suspects-try-to-make-lemonade

On the Road with N4CD II

The road didn't go too far on the second weekend in March. Fortunately I got in most of my county hunting in the past 3 months with over 190 of the 254 counties 'put out', so I could 'goof off' with other events in this month, including two good auctions, one non-ham convention, and one hamfest at the end of the month.

The Vintage Radio and Phono Society (VPRS.org) holds it's Spring Auction in March. About 100 people bring stuff and buy stuff – mostly broadcast type radios from the early 1920s up to the '60s and '70s. Most of it is tube stuff. This year the tables were overflowing with all sorts of stuff, from at least 50 table radios (wood, plastic) to 30 large consoles, to 50 lots of miscellaneous tubes, and a small sprinkling of ham gear.

As far as the ham stuff goes, there was a Hallicrafters HT-40 Novice type transmitter up for bid (sold $45), along with 3 or 4 Hallicrafters receivers (S38-B, SX-99, Sky Buddy), one IC-735 with PS and Ant tuner – didn't sell with reserve at 300, a stack of Swan radios – A 350, 120, MX-40, and power supply that sold for $150. That was about the ham gear there.

You could buy one of the first super het receivers – using 215 type tubes – for only $600 (didn't sell)and some other rare radios (Neutrawound – didn't sell at 700 min bid). It had a separate oscillator tuning control from the main tuning – they did not track.

There was a DeForest crystal set from 1920 – asking price $250 min bid – didn't sell. Lots of other table radios and 'tombstone' and 'cathedral' radios did sell for prices up to several hundred dollars for the rarer ones and those is pristine or restored condition.

That took nearly all day, and on the way home, the “Spring Showers' appeared with a 'severe storm watch' and 'potential tornadoes' possible this evening. Looks like we are now into 'severe storm weather. My neck of the woods is just on the edge of the main 'tornado alley'. So when I plan to go west, you are darn sure I keep a sharp eye out for the weather. It will move north as the summer progesses and the warm weather moves into the plains.

I read in the paper today – lots of tumble weeds out in west TX and in NM. Seems a dry winter – and drought type conditions, spin off massive quantities of tumble weeds, so if you are traveling out that way, don't be surprised to see them – sometimes piled up a couple hundred feet along fences and 4 or 8 feet high! Up north, apparently the bad winter weather season has spawned massive numbers of pot hole. Long stored away in road worker's basements, they are now being deployed all over the cities and roads up north, requiring lots of work this summer to fix them permanently. Hi hi Actually, the use of massive quantities of salt and the freeze/thaw cycles are generating them by the millions.

Wisconsin QSO Party

The mobiles were out and running. Lots of county hunters participated as mobiles – from W9MSE, KB9OWD, NN9K, plus a lot of the regulars in the state QSO parties were out mobile in WI. Other resident county hunters like Mark, W9OP, got on from the home station to hand out the QSOs. It was a real 'party' with lots of cw activity (and of course, lots to chase on phone). Most of the counties in WI made it on the air for the event.

W9DND mobile with K0PC

The long winter in this area came to an end on Sunday. We finally broke through the freezing temperatures to hit the mid 40s. It looks like the WIQP weather genie is back at work.

John, W9DND, and I ventured out for another great run through western Wisconsin. We ran the same route as last year and it worked very well. The roads were in very good shape with a few potholes to keep us awake.

Our score was down considerably from last year (about 20%) but we didn't have any problems. We operated primarily on 40M & 20M throughout the day. We went to 80M for the last half hour or so. I reconfigured the antenna a bit this year to try to get it to tune on 15M but it still doesn't want to go there.

We had 227 unique calls in the log with an array of heavy hitters who followed us all day.
23 - KV8Q
16 - AA4FU
16 - OM2VL
14 - N0UR
14 - W1END
14 - W9EAU
13 - K9NW
13 - KQ3F

Thanks to these and everyone who make this event so much fun. The West Allis RC deserves commendation for sponsoring WIQP every year.

73,
Pat K0PC & John W9DND

N0IJ mobile

This one is always a lot of fun--just not as much fun this year as last! Found condx and participation down, at least in the areas we traveled in. Hard to

say for sure, as I had some problems with the K3--low audio. Had to run both AF & RF gain wide open, and still had a hard time hearing--apologies to those I missed. Also, forgot the rx button was pushed on 80 from the DX contest, which was embarrassing and explains why 2 counties had no 80 near the end! Very happy for: Driver, Terry, W0TVD, who piloted us through some of the worst roads in the state, that we survived a 4 wheel slide through slush on a back road in CHI, that I was able to hold my cookies down (barely) during the same stretch of road, that we made all 18 of our counties, and all the folks who followed us around and provided so many Q's. Not so happy about the rig issue, the fact the Q count was down so much, and the out state mult count was way down-- missing such as NV, ID, NE, ND, SD, AR, MS, LA, SC, VT, and ME, plus only getting VE3 in Canada.

Amazed at all the dx activity, in fact the undercurrent of EU callers made copy tough at times on 20. OM2VL in the log 17 times plus gave him 2 other counties before the contest. What a signal he has on 40.

QSO leaders: KV8Q/22, N2CU/21, OM2VL/17, N0IM, K9NW & AA4FU/15, N0UR/14,
and several with 12. Thanks!!

John, N0IJ op
Terry, W0TVD driver

WE9V – fixed Kenosha, WI 375 cw 374 SSB QSO

After a 10 year hiatus (excluding a short part-time effort 3 years ago), it was good to operate this one again. What a fun time. It was hard work trying to keep track of and work all the mobiles. You guys do such a fantastic job. I worked 69 of the 72 counties. I believe one was activated but I missed it (JACkson), and I'm not sure about the other 2 (CLArk and WOOd). I only missed 2 states, RI and OK. Was surprised to work VY1, but missed "easy" VE2 and VE6.

WI9WI mobile – Murphy struck!

After a good start this turned into a disaster. I had intended to activate IOW, GRE, LAF, ROC, WAL and JEF to add 5 new counties (excepting IOW) to the list of

counties I have operated from solo mobile in the WIQP. I set up in IOW near the IOW/GRE county line. Everything worked fine, and after 45 minutes I pulled up the road into GRE. After 45 minutes there I moved on to LAF. That took about 30 min to get to my operating spot.

When I turned on the radio it had trouble
adjusting the tuner to the 40 meter antenna. I use the tuner in the K-3 because the antennas are very narrow banded. After one QSO, I noted smoke coming out of the K-3. I quickly turned it off and checked everything. I turned it back on and it still wouldn't tune properly, with more smoke coming out of it. I again quickly turned it off.

At first I thought the problem might be the tuner, but
after a bit of thought I figured the problem must be the coax, although it has worked fine for years. Not wanting to further abuse the K-3 I put my spare radio, an IC-7000 in line and changed the coax. Everything now worked fine. I started making QSOs on 40, and after 13 QSOs in 8 minutes my RV battery failed. This should not have happened. It is a glass-mat battery less than 2 years old and has done a fine job in several mobile and camping/field day type operations. I keep it charged and have it on a maintenance charger when I'm not using it.

Now my choice was to quit or put the radio on the vehicle battery. I
really didn't have the proper tools to put it on the car battery, so I drove back home which took about 50 minutes. I thought of just quitting but after a bit more thought I decided to put the radio on the car battery and drive to Rock Co which would take about 25 minutes and pass out some QSOs from Rock. With proper tools it only took about 10 minutes to hook up to the car battery and I drove to Rock. I turned everything on, and now the IC-7000 wouldn't tune into either the 40 meter Bugcatcher or the 20 meter Hustler. I switched coaxes again, but no joy. Quick investigation seemed to point at a loose antenna connection within the tuner.

So I quit, went home, unpacked everything and had
a beer. Monday morning I got everything on the table and started checking things out. First I checked out both radios in my normal station configuration. No problems. I took the K-3 apart and could see no obvious damage in spite of the smoke the previous day. It and the internal tuner worked fine. The coax connector to the antenna on the LDG tuner for the IC-7000 was slightly loose. I tightened it up, and it and the radio worked fine. Next I checked out the coax.

There was an intermittent short in the PL-259 that attached to the radio. I have used this coax for years, and I guess it was done in by a lot of wear and tear. I threw it way. I expect the smoke from the K-3 was coming from dust on the heat sink for the finals which overheated when the tuner was trying to match a short circuit. The K-3 seems to have no issues after this abuse. So the bottom line was a wasted day when the weather was about as good as we've had for months and band conditions were good. The radios are fine. I'm not sure what the issue is with the battery, but it is under warranty, so even if it is bad I'll get something out of it. I used a new car for this one. On the old car I had a power cable with PowerPole connectors already attached to the battery for just such circumstances. I've got to do it to this one, it might have saved me a lot of trouble.

Thanks to all the participants and thanks for the few QSOs I did make.

Next year.

73

Jim
WI9WI

NE9U mobile (with KK9K N9CBA)

Originally our plan for 2014 WQP was to try the M/M category. But with the crappy cold weather in Wisconsin, we could never get motivated enough to work on our vehicle or antennas.

So we ended up using the same antennas we used last year. KK9K just bought a "new" used K3, so we decided to use it. We also decided at last minute to use a different vehicle with more leg room for the back seat operator. Trouble was we didn't test either out until about 2 hours before we left for our trip north on Saturday morning. The vehicle had pretty bad spark plug noise. But the K3 noise blanker seemed to do a pretty good job eliminating it. 40 and 80 seemed pretty dead, but it was noon Saturday so we assumed it was just mid day propagation. So off to the Northwoods we went!

Got to the cabin, turned the heat on and went back to town for our traditional

Steaks. Steak place was closed until fishing season opens in May! Only other option unless we wanted to drive 30 miles was the local bar and grill. They had pretty good burgers and KK9K hit the $100 jackpot on what I'm sure was a legal game of chance. That paid for our night!

We went out for breakfast Sunday morning and then made the 30 minute trip to our starting line. Hmmmm....40 still sounds crappy. 20 wasn't too bad though.

And that's how it was all day for us. When we got back home we did an A/B test on the K3 vs. a K2 and s1 sigs on the K3 were 20/9 on the K2!!! oh oh. Either the Rig had a problem on 40 and 80 meters or we had a very serious case of operator error....neither of us had used a k3 before and we probably had something in the menu options totally screwed up...it will be interesting to see what KK9K eventually finds out. Sorry to those who called us and we couldn't hear...we were alligators. I'm amazed we worked as many as we did on 40.

Other than that we had our usual fun time. Weather was good. Roads were horrible (bumpy...pot holes...etc....) Worked a lot of DX this year but that was expected. Tried 15 meters but didn't seem to be anyone there listening for us...it sounded good though! We also downloaded an APRS App for my phone and people say that really helped in tracking us into new counties.

Well, hope to see everyone in 2015....maybe M/M!!! This was N9BCA and I's 23rd year I think. Year #2 for KK9K with us.

KE0G – QRP Mobile - 237 cw contacts

K3/10 at 4.5 watts. Several wire antennas: 34' vert dipole, 34' up with 66' wire sloping down, and a 100' long inv vee up 30' at center. Lots of activity, thanks for your copy of my QRP, I enjoyed the contest. 73, Dan ke0g

WA0MHJ – mobile

I started the day late, so I ran the route in reverse and trimmed it to four counties only. Driving solo with the operating position in the rear seat of the Suburban necessitated drive and park operation.

I started in the parking lot of a sports bar where inside everything was in full swing. (Yes a Sunday afternoon polka band / dance.) Without a dance partner, I continued down the road.

I finished the contest at a "way off the beaten path" little bar/restaurant, where I persuaded them to allow me to enjoy a cold one while finishing the last 15 minutes. Curiosity by the locals, and I told them to tap on the truck window, and I gave them a quick tour of what I was doing. Back inside for a dinner plate size pulled pork sandwich, and I then left for home. Thanks for all the Q's in the short burst I was on. For me 15 meters seemed very hot. Too bad there was not more activity there.

N4PN - fixed GA - 144 cw 97 ssb

Lots of activity packed into a short 7 hours. Missed four counties
Wood, Clark, Dunn and Iron..sure all were on...I heard Iron on 40m
but couldn't run him down...
More Q's and one more mult this year compared to last year...

OM2VL – fixed – DX 151 cw 26 ssb qso 67 mults

First time in WI QP. Thanks for the nice QSO's. Many times I had problem the USA wall, but I can made QSO's with all stations which I heard.
Missed only 5 counties: CLA, FON, JEF, OZA, WOO.

Most QSO's with:
N0IJ 18/14 (QSO/CTY)
W9DND 17/14
NE9U 15/13
W9MSE 11/11
W9HB 10/10
NG9Y 8/8
KE0G 6/3
WA0MHJ 5/3
KB9OWD 5/4

Before the contest I had confirmed only 34 counties from WI, now I need only

CLARK county ... maybe next year :)

73 Laci OM2VL

W9EAU Muilti-Op fixed WI
Operator(s): W0AIH K0TG KB9S N0KD KB9AZZ WB9NTO KB9WPC KG0KM

This one is always a lot of fun. Since 1999 W0AIH has been hosting a multi-op at his antenna farm for WIQP. In 2002, we started using the Eau Claire ARC club callsign W9EAU. This year started slow with a lot of problems. Paul had to fix the 40 meter dipole just before the start and we had to work on a number of other issues during the first hour.

Every year our goal is to work all the Wisconsin counties but somehow we have always come up just short. With 15 minutes left we were down to only needing Adams county. We all thought that this was going to be another year of missing our goal by just one county. Then NE9U/ADA was spotted. A minute later Adams county went into the log for the sweep with 2 minutes to spare!

Thanks Paul W0AIH for hosting us another year.

KC7QOP Oregon Trip

Lee, KC7QOP, sent in the following report:

Here are a couple county line signs from Oregon. I think you already have Tillamook, but I didn't see Lincoln on the list. I wanted to get a photo of the Clatsop County sign, but it was dark and raining by the time I got there. Maybe next trip.

Lincoln, OR by KC7QOP

I included the sign for the D River in Lincoln County because there is some controversy about whether or not its claim of "world's shortest river" is true or not. The sign has been posted on the Highway 101 bridge over the D River, in Lincoln City, for many years, perhaps as far back as the 1930s, according to some old timers in the area. The residents of Lincoln City have been doing battle with fans of the Roe River, near Great Falls, Montana, since the 1980s.

The D River was originally measured at 440 feet long, flowing from the outlet of Devil's

Lake in Lincoln City to the Pacific Ocean. In 1988, a group of high school students from Montana appeared on the Tonight show and announced they were petitioning the Guinness Book of Records to recognize the Roe River as the world's shortest, at 201 feet in length. They were successful and the Roe was listed in the Guinness book. The Roe River flows into the Missouri River, and the people of Great Falls like to boast they have the nation's shortest river flowing into the nation's longest river.

Of course, the folks in Lincoln City didn't take this lying down. They measured the D River at what they call "extreme high tide" and came up with a length of 120 feet, which would make the D River shorter than the Roe River. The problem with this, obviously, is that the tide moves in and out, making the river shorter on some days and longer on other days. If they wanted to be fair about it, they would probably measure at mean high tide, but they were in no mood to grant any mercy to the students from Great Falls, and insisted they had regained the title. I don't think they ever removed the sign, so it appears they were determined to keep the title of "world's shortest river," no matter what. It's all in the spirit of good fun. At least, I hope so.

73 de KC7QOP --Lee

Virginia QSO Party

This is MAINLY a 40M/80M event as VA stations try to work each other. There were a few dozen that made it to 20M and some higher, but I heard nothing on 15M despite supposedly good conditions.

WB2P – fixed – NJ had 188 SSB QSO, nearly all of them on 40M, working 93 multipliers!

K1PKS – fixed ME – had 56 CW QSO – with 75% of them on 40/80M – and had 27

multipliers

K0ZR in Loudon County VA had 956 CW QSO with 87 on 10m and 186 on 15M.

N4CF – Louisa VA made 203 SSB QSO, all of them on 80/40M, and 162 CW QSO with all but 12 of them on 80/40M. (Get the picture?).

KN4Y – fixed – FL – 71 CW QSO with 70% of them on 40/80M. He noted

"Worked only CW and found only two mobiles one time,most activity with fixed stations. Saturday was mostly 40-meters and Sunday 20-meters, with a brief run on 80-meters. Lost last 3 hours to a thunder storm and power outage. Need more to get off the padded chair and into a car seat. On a scale of 1 to 10 this VA QSO party was somewhere in between. Heard nothing of VHF or UHF"

K4YCR fixed – Bedford, VA? 87 QSO, all but 2 on 80/40M

WN4AFP – fixed – SC 45 cw - 91 SSB QSO – All 40M – 62 multipliers

W1END – fixed – ME 19 on 80M, 47 on 40M, and 16 cw on 20M

"Don't think there were any serious mobiles in this bash but the fixed stations were out in full force. I finally tuned 20 meters at the right time and found the mob had migrated there. In the last two years I found nothing on 20. Thanks to the organizers and everyone who showed up. "

NN4RB – fixed – Campbell, VA - 123 SSB on 40, 72 on 80M SSB, zero on 20

KC7YE/K1TKL Meet Up at the County Line

Paul, K1TKL, sent in some pictures from his meet up with Scott, KC7E at the county line of San Diego/Imperial CA. Here's some pictures

Jack, KC7YE

Paul K1TKL

Paul wrote:

February 19th mobile operation with Jack,. KC7YE. and Paul,.K1TKL,.at the county line of San Diego and Imperial on route 78. Jack had the equipment to do the spotting as I switched bands and then Jack helped with picking calls out of the pileup. I operated 40, 20, 17, 15, 12, and 10. Had to change sticks as I switched bands. A high noise level location to operate from as 18 wheelers abound on this road; in addition, we had off road motorcycles to add to the acoustic din.

After the operation, we had lunch at Carlee's in Borrego Springs..

73 Paul K1TKL

Oklahoma QSO Party

Mobiles were out and running. I missed the first hours of the test as I was off at an auction, but the spots show that they left the starting gate and it was coverage all over the state. Norm, W3DYA headed north to run in the test. Bob, W0BH, came down from KS. Residents K5CM, Connie, and Jerry, K5YAA were out. Kerry, W4SIG, while on a trip to Dallas, headed north to participate in the OK QP. Several fixed stations got on to put out their counties. AF5Q put a few on the air on cw. This contest spans two days, so you get a break between the Saturday and shorter Sunday sessions. One or two mobiles were out on SSB, too.

At the N4CD QTH, I missed most of the first day. Caught a few late on Saturday on 40M but not all mobiles were coming to 40M. Sunday even fewer mobiles made it down to 40M consistently as the other bands were 'too good'. I could hear K5YAA and his high power mobile S3-S5 on 20M but his local noise was too great for him to hear me apparently. Lots of others were calling and never heard either.

Fortunately I didn't need any in OK at this point so I didn't cry in my cup of coffee. Later in the day, no mobiles were spotted on 40M and I turned the radio off and did other things – shaving pent a few hours tuning and no mobiles found on 40M.

From the 3830 reflector.

AD0DX mobile Multi Op

Due to work constraints we could only be active on Sunday this year. I had 4 other hams in my van and it was their first time in a mobile contest and we had a lot of fun. Because they were not cw operators, we operated mostly phone and everyone had a turn on the microphone.

Operating the contest were:

Ron, AD0DX
Brad KD0TXA
Aaron, AA0RN (now that is an awesome callsign!)

David, KD0WGG
Ben, W0BDY

We set up so that Aaron, myself and Ben were in the bench seat in the van behind the driver Brad and his son David riding shotgun.

Aaron was the navigator using a laptop with DeLorme Street Maps, then myself with the radio and the key, and then Ben with the logging computer using N1MM. They were both new to each program but being teens that are computer savvy picked them up very quickly.

We got off to a late start... I guess I assumed the contest started at 9am and was quite surprised as we were driving towards the OK border from KS at 8:15 and I heard N4PN calling 'CQ Oklahoma'. Oops. I had a quick QSO with Paul and he confirmed that yes indeed the contest had started and so now we were rushing to the OK border just a little faster.

We worked 2 or 3 stations in North Dakota, which doesn't always happen. We worked W1END in NH but very few stations in the 1st callsign district.

I also had a problem with my CW antenna early in the contest. As I was changing between the two antennas via the antenna switch, the background noise went to zero on the cw antenna. Unplugging the coax from the switch and plugging it directly to the radio solved the problem. I'll need to look at that this week.

We had a great time in the OKQP and hope to be back for a full weekend effort next year.

I will be W0H in the Missouri Qso Party Apr 5/6th, hope to work you there.

73's,

Ron, AD0DX/m

K5YAA Mobile with W5LE 2133 CW QSO!

Well, another FB State QSO Party in the books. Gene and I had a

very good time as the mobile performed well with only two or three minor difficulties. The laptop needed resetting a couple of times and we got off course a couple of times too. Both of those items seem to happen on every run regardless of preparation. They were overcome quickly with - hopefully - only minor irritation to the stations waiting.

We were in 40 counties - making all but WAGoner on Sunday - we just ran out of time. We didn't make CREek on Saturday evening as planned but made it up Sunday - likely the reason we didn't make WAGoner. Once behind always behind!

Band conditions were so good on 15 and even 10 meters, 40 suffered. 20 meters was the heavyweight but 15 was really a winner which was a nice surprise compared to prior years. DX Qs accounted for 26% of our total QSOs. A grand percentage. There were times on 15 and especially 10 when DX signals far outweighed Stateside in strength. A very special occurrence for a couple of Oklahoma characters in a mobile unit. We had European QSOs right up to Saturday evenings finish - 0056Z - or almost 1AM European time. Thanks to all the DX that stayed with us for all of the party. We hope you got some new counties out of the deal.

We want to acknowledge the following DX stations for their tenacity. All of you had monster signals most of the time and if we missed your calling on 20 meters hopefully you got us on the higher bands.

Station	Q Count
OM2VL	64
LY5A	52
DL3GA	49
HA8IB	43
OH6NIO	39
YV5OIE	36
UA3AGW	34
DL5ME	32
DL8MLD	27
DL6KVA	23
DL4CW	23
ON4AAC	19

SM5ALJ 16

There were several DX stations that only had a single day to operate but they made a number of QSOs while the bands were so good. G3XVR and DL3DXX come to mind. Thanks again for so many of you DX stations for staying in the chair and waiting for us to move from county to county.

Of course there were many US and a Canadian, in particular, who "chased" us all over the 40 counties we ran. We worked every state except ND, SD (those Dakotas again) AK, and RI (KI1G never showed up!). All Canadian provinces except VO, VE2, VE4, VE8 and VY1. VE5KS had 41 QSOs with us. Thanks John for your many calls.

The following stations placed 20 or more Qs in our log. Thanks folks for your persistence and for taking time to follow us around. Each of us who do the mobile thing in these parties count on much from the ops who plan and execute their chase of the mobiles. From our end the pileups are great fun which is what the hobby brings to most of us.

Station	Q Count
N6MU	66
N4PN	53
W1END	37
W1EQ	34
N3RM	34
N2JNE	33
KN4Y	31
K7TM	30
K7VAY	29
W1DWA	28
WA2VYA	28
K3TW	27
W7GF	25
K2DSW	25
N3KR	24
K4YT	23
K8MFO	20

Now a few statistics.

Oklahoma Counties worked - 11 <- we rarely went to 40.
DX Countries worked - 19 <- 10 meters was wide open
Canadian Provinces worked - 6
States worked - 46

These states had only one callsign in our log.
AR - K5KDG
ID - K7TM
NH - W1END
NM - N5PR
HI - K9FD/KH6

Thanks to those ops for representing their states.

The following stations were EASY to pick out of the pileups,
either due to their unique fist or unique sounding transmitters.

W8WVU, DL4CW and N2JNE.

UA3AGW and LY5A had heavy echos much of the time they called.
Made them pretty easy to recognize also.

Gene and I (Jerry K5YAA) want to thank all who joined us in this year's OKQP. We had a grand time seeing much of the state and loading the log with callsigns, many of which we have heard and worked many times over the years. Also, a FB thanks to Connie, K5CM and his crew for organizing this year's OKQP. A thankless task that requires hours of planning and effort.

My personal thanks to Gene and his XYL for their Saturday night hospitality which saved me a drive back home.

Best 73, Jerry K5YAA and Gene W5LE

Rig: The Oklahoma Land Rush Mobile equipped with a K3, AL811H amplifier, Honda ei2000 and a Tarheel antenna. An older Dell laptop that keeps on ticking running N1MM Logging. You can see photos of the setup on my QRZ page.

Note: I have had reports of "squeaky" CW dits coming from the mobile. I have it narrowed down to the amp and am in the process of finding a Solid State amp that can withstand the mobile environment of Hi SWR when you motor under a bridge or next to the dividers on Interstate highways. Even with the "short" dits it seems most can copy, even at high speeds, so my search for a different amp may take a while so I can locate an amp to improve the sound of my CW. I love CW, as most of you know, so I will continue my search.

UA3AGW – DX

Thanks so much to Connie K5CM and his team for organizing this nice QSO party! I have really enjoyed high activity compared to recent WIQP, IDQP and VTQP. And due to frequent match with RusDX contest it was my 2nd or 3rd QRV in OKQP during some 10 years of active county parties participation. Furthermore - as many guys did - I was sharing it with LAQP.

Great sigs on 15 from Jerry K5YAA/m with 34 Qs/27 Counties of which 14 were new ones for my collection. Good sigs from Connie K5CM(16 Qs/16 Cnty) and "vy QRS" Ron AF5Q (11 Qs/11 Cnty), while Bob W0BH (9 Qs/8 Cnty) and Norm W3DYA (7 Qs/7 Cnty) were much weaker here in Moscow - probably they were running LP. Strongest fixed stn was W5CW followed by W5TM, K5WE, N5OK and N5DY who had nice sigs even on 10 mtr band.

Since there is absolutely no chance to compete from EU Russia with many DL guys,OM2VL and LY5A - I was looking for maximum County score and succeeded working 55 of them which appears to be a great achievement for my city lot modest DX'ing setup. With new rule change in OKQP for DXCC mults I would recommend mobiles to give a special chance to DX callees from every new county they enter, something like "QRX USA, nw QRZ DX" hihi! Beause sometimes it's really impossible to break thru NA stations huge piles.

Once again thanks to everyone who worked me in OKQP and see you in other parties and regular big contests!

Dima, UA3AGW

N4PN – Fixed GA - 212 cw 108 SSB 74 multipliers

“Seemed like low activity at the start but along the way, business picked up...

Thanks to W0BH for 54 Q's, followed by K5YAA (all CW)53, K5CM 40, AF5Q 38, WB0TEV & W3DYA 19, K0WHY (all SSB) 17, and altho Ron got a late start on Sunday, AD0DX 13...

Thanks also to all the fixed stations...really good operators..
Missed Cimarron with Russ, K0ZZR. That was the tip there would be no sweep....also missed him in Harper. Don't know what happened to Tillman....

The sponsors did a great job....all counties on again this year..
Congrats to at least one, John, N6MU, for another sweep.

73, Paul, N4PN”

N6MU – 278 cw 141 SSB Clean Sweep! - All 75 counties.

“Thanks to all the great mobiles I managed another sweep this year. Once again AF5Q gave me the last counties. A special thanks to K5ZZR who braved the endless miles of the Panhandle to provide those all important counties. Top mobile with at least 20 Qs was K5CM with 94 followed by K5YAA(66), W0BH(58), AF5Q(50), W3DYA(45) and K0WHY(26).

Ten was open both days for me but only to the eastern part of OK. I asked lots of stations like W0BH to try ten but couldn't hear a peep while W3DYA, K5CM, W5CW, K5YAA, etc, were booming in. Very frustrating example of skip distance that kept my bonus points down, hi.

Thank to all the participants for another chapter of one of my favorite Parties! 73...”

John, N6MU

note: John made 24 cw and 8 ssb QSO on 10 meters.

If more comments are filed, we'll continue them next month

On the Road with N4CD

There was a radio auction over in Garland, TX, about 20 miles from my house on the 22nd of March, run by Sargent Auctions. Same weekend as the LA and OK QP's. Dang. Can't be everywhere at once!

The equipment to be auctioned was the estate of an individual in the San Antonio,TX area and consisted of nearly 400 items of equipment, including a dozen Hammurlund and National receivers, a few Johnson transmitters like the Adventurer, a Galaxy transceiver, a tower/antenna – where you take it down and move it, a couple of National Regen receivers, a rare Japanese WW2 simple transceiver. It would also be on line at Auction.Zip. It was 'as is, where is' so you really wanted to be there. Some of it was missing all the tubes, transformers, and other vital parts. Others appeared complete or maybe minus one tube.

Here are pictures of a few of the less seen items.

Japanese VHF One tube Transceiver Model 99-6

From the website below:

The 94-6 (94 Mark 6) was a miniature single-valve portable transceiver that was used by the Japanese Army during WWII, as part of a series of Army radios. The name is derived from the Japanese year of development 2594 (1934), with the Mk.6 version being the smallest model. Although the radio was intended for the infantry, it was also used for various 'special' purposes.

The radio is extremely small for the era, and is suitable for voice and morse transmissions in the VHF band (25-45.5MHz), divided over three frequency ranges. It was intended for tactical (i.e. short-range) communication, up to 2km.

Development of the radio began in 1934 and the first units were delivered in 1935. Initially the radio was only suitable for a single band, but a few years later (around 1937) the range was extended and a three-position band selector was added. According to the name plate, the radio shown here was manufactured in February 1943.

Japanese radios like the 94-6 are very rare. In WWII, during the heavy fights at Guadalcanal, American Marines captured a number of them and immediately put them

to use for their own communication [1]. Apparently the radios worked well, but were only suitable for short-range communication. Immediately after WWII, the US ordered the destruction of all German and Japanese war-time equipment, which is why so few of these beautiful radios have survived.

http://www.cryptomuseum.com/spy/94-6/index.htm

The Japanese radio started out at a $500 bid and got up to $600. Too rich for my blood! Woowie!

National SW-4

National sold their first shortwave set, the SW-2 in 1927. It had an RF pre-amp stage and a regen detector with plug in coils and would cover 2.6 to 20 MHz. Here's a picture of one

National SW-2 Two Tube Regen
Wish I had one!

In 1929, they added two more tubes to the design (audio amps) and had the SW-4

National SW-4 Four tube set – well, turned out to be a SW-5

The SW-4 was heavy and expensive, and as soon as the market crashed in 1929, became 'unaffordable'. They added another tube, giving the set push pull output with a tube count of five – and it was, logically the SW-5 (duh!). It was costly and only the 'upper class' folks could afford one.

In 1931, they introduced the SW-3

National made the SW-3 solidly yet cost conscious, so it was very popular and over 10,000 sold. The SW-3 required headphones. All of the National Receivers had a pre-amp stage that outperformed just about competitive model that didn't. The SW-3 was very stable and used by the airline industry as it was relatively light weight, and humidity resistant due to the new plastic used for the plug in coil forms.

Well, it turned out the listed 'rare' SW-4 was really a SW-5. We took a real good second look at it with others – sure enough- the insides were different and it had five tubes in it. The SW-4 is 'rare' compared to a SW-5, but both were made in much smaller quantities than the SW-3. The front panels are extremely close in looks.

Just a sampling of the list of ham goodies (there were lots of other things including VT-1 tubes, VT-2 tubes(500 bucks each), VT-4 tubes ($150 bucks for just one!), boxes of assorted tubes, some shop equipment, a hundred pieces of test equipment, maybe 20 old broadcast radios from the 20s to the 50s, a cathedral and a tombstone radio from the 30s likely).

Here's a few more of the radios sold:

NC-88, HQ-129X, RME VHF 152, Gonset Communicator - $45, Johnson Viking 6N2 VFO, Johnson Viking 6N2 ($35), TX, NC-300 TX, Johnson Speedex Bug - $65, Hallicrafters HT-9 TX giant, big, heavy unit - $170. ,

Meissner Signal Shifter TX, Hallicrafters S-41, Hallicrafters S-29 TX, HRO-50T1 TX, NC-240D RX, Viking Ranger II TX, National FB-7 RX (super het) - $70, Galaxy V Transceiver, NC-303 RX, half a dozen military receivers, and the list went on for 400 items. Whew! A lot of the stuff also weighed 100 lbs or more as the tube gear weighs a lot. You need a strong heavy duty bench to put these on!

There were 10 years of bound 1930s QSTs (sold $10), a RBC receiver that goes on a battleship, and the battleship restoration folks from the BattleShip TX and some other group bid it up to $220 for the 120 plus pound unit. Heavy and designed to go where the 18 inch guns could fire, and not shift the frequency on the radio even 1 Hz. Or, back then, cycle/sec. Hi hi. One early Signal Corps radio with 4 VT-4 tubes sold for $600 (likely just for the tubes).

N4CD would up with a few goodies like a full National coil set that goes in an SW-5 (10 pairs of coils) – Ouch! Rare, another SW-3, the SW-5, a National 5880 power supply for the a/c version of either, some ham radio and QST magazines – real cheap, and some misc but I did a good job of following the 'one hand' rule. If it couldn't be carried in one hand, I didn't buy it. (other than the box of QSTs). Helps cut down the junque at home! It took all day (9 to 4pm) to sell all the items, with 5 hours of it on the internet so all could bid/win items. The OK and LA QSO Parties were going on – dang, I missed a few needed counties in LA, but they'll still be there. Caught a few after I got home just before 5pm.

National receiver Coil Set

An AK “Breadboard' receiver in mint condition, with factory tags still on it, sold for $1100! That was the 'top ticket' item other than a metal working lathe with a gigantic set of tools ($1400). You could have filled up a van with $30 and $50 ham gear if you were into restoration or boat anchors. Hopefully it will be a while before the next big auction so I'll have time to restock the piggy bank for buying some goodies here and there! At the auction, you pay a 5% buyer premium and TX state sales tax. Hmmm. Meanwhile, it's hamfest season again! Some good ones will be coming up around the country! Maybe some rare regens will show up!

Louisiana QSO Party

Mobiles were out and running. Fixed stations filled in some other counties. N5NA headed over to LA for the test. Now resident NO5W was busy putting them out on CW along with W5WMU.

N4CD was off at an auction and missed 90% of the QP, but did manage to snag a couple new ones from NO5W before he went QRT late in the evening. Still more counties to go in LA, though, for me. Can't be everywhere at once. It was rough copy on LA on 40M and didn't hear much other than N5NA. NO5W was not able to copy my signal on 40m- probably high local QRN – bad power lines there in southern LA and condx were not good.

From the3830 reflector:

N5NA Mobile - 960 QSOs

I've operated mobile several years in the LAQP and this year is the best score I've ever made. Band conditions were very good with good signals from Europe on 15m. I'm always amazed by the DX I'm able to work mobile. I was even able to work OM2VL on 80m although he had a tough time copying my signal.

We made a few unscheduled stops and wrong turns in the morning putting us about an hour behind where Streets & Trips said we should be by lunch. Then in Jonesville in Catahoula Parish we encountered a "checkpoint" in which the local PD was stopping everyone wanting to check license and insurance. I've never seen THAT before. We waited in line at least 20 min for our turn. Even with the delays we made it to our last parish, Caddo, in plenty of time at 0106.

Murphy usually doesn't ride along on my QSO party adventures but this time when I tried to move to 80m I found the SWR on my Scorpion would only drop to about 16:1. It's always worked great on 80m. So back to 40 & 20. Later I decided to just use the tuner in the K3 to tune the Scorpion on 80m then discovered the tuner was already turned on. Once I put the tuner in bypass the Scorpion tuned perfectly! Take that Murphy!

Thanks to the following stations for contributing more than half the QSO's: WA6KHK(34), OM2VL(31), KQ3F(28), DL3GA(27), DL5ME(27), YV5OIE(26), WA2VYA(24), K2DSW(23), K8MFO(21), K0DEQ(20), LY5A(20), DL6KVA(17), K4BSK(16), W3BBO(16), KN4Y(15), OH6NIO(15), N3KR(14), HA8IB(14), KI0Y(14), KE0G(13), KI0I(13), K0HNC(12), DL8MLD(12), W8KTQ(11), K0PVW(11), W0GXQ(11), and VE7CV(10).

Equipment: K3, Scorpion SA-680, Dell D630, CQ/X Logging Software, and Chevrolet C2500.

Thanks to everyone who called and thanks to my wife, K5AKS, for a long day driving!

AA5AU – fixed LA

My first ever Louisiana QSO Party. I like the new dates. Didn't have much time for this one, but it was fun. I was surprised at the big pileup on 20M CW but had to QRT for dinner with an hour to go. Hope to put in more time next year!

73, Don AA5AU

OM2VL – DX 82 cw 21 ssb

First time on LA QP. Unfortunately at the beginning of the contest I didn't copy NO5W and missed many parishes. Thank you very much for the nice contacts and new ones!

WKD total 39 different parishes.

Most QSO's:

W5WMU 44/15 (QSO/Parish)
N5NA 30/19
NO5W 11/11

note de N4CD – if more comments are filed on the 3830 reflector, we'll bring them to you next month.

A year of QST - 1930

One of the things that followed me home from the auction was a decade of QST magazine – the entire decade of the 1930s in nice bound volumes. Didn't really need them, but for $5, it's fun looking through them before I pass them on to someone else. It was late in the day and one else wanted them, so I got them for five bucks just to clear out the estate inventory.

What was going on in 1930? What were the hot button issues? It might tickle your 'technical bone' a bit...but here's how the decade started out with the Editorial in Jan 1930 QST.....some snippets

"A glorious international opportunity comes with the opening of that portion of our 14000 kilocycle band to telephony...We have here the opportunity to attempt by voice the numerous communications feats which we have done by the key. Who will be the first to talk to far off places? Communication with them by telegraphy has become a common place , perhaps on occasion too much of a commonplace, but here is a chance that fires imagination and challenges the best technical practice of which we are capable. We do these things by code but it will be quite da different sort of job to duplicate them by 'phone. When we succeed we shall have done a real piece of radio engineering. .....

If world-wide amateur telephony becomes a commonplace, how much may we not quicken those ties of international friendship which comes from amateur contacts?

The way to these glories is beset with technical challenges. It is doubtful that anything other than crystal-control on the transmitter will give sufficient stability and freedom from 'wobbulating' to put understandable speech across the oceans on these frequencies. Or that anything less sensitive that a superheterodyne will suffice to receive these voice signals satisfactorily. Unfortunately telephony always has been expensive. A good 'phone station has cost about three times as much as a comparable telegraph station. So we must realize tfrom the start that transocean telephony will be neither easy nor cheap.....snip.... …." end quotes from Editorial

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At the end of the previous year, the FCC authorized the use of 14.100 to 14.300 for AM. The ARRL figured your could get 13 channels of AM in those 200 Kc/s of spectrum – 13 QSOs at once. Remember, signals wandered around back then – folks drifted up and down as their tuned circuits varied with heat from the tubes and RF currents! Worse,

most of the transmitters of the day ran on direct a/c on the plates! For AM, you would need to run the transmitter on 'pure DC' high voltage if you could.

To use the new 'phone privileges, you had to have an Amateur Extra license (20 WPM) or prove to the FCC Chief Engineer that you had the technical competence to get on phone (technical experience, radio certificate, etc) once you had your 10wpm license.

In the first year issue, there was much discussion about 'out of band' signals of amateurs – on all bands, but especially 40m and 20M. The technology of the day was power oscillators that ran at moderate power levels – built on breadboards – and most of them drifted terribly. Most folks used regen receivers as super hets were just starting out and much more expensive. There were articles about how to build you AM rig to get on the air using 4 or more tubes. The screen grid tube was new and being introduced into the regen receivers as RF amplifier stages and detectors and audio amps. A pentode for audio amp service would be available a few years later.

There are numerous articles on a/c powered receivers. The first tubes required DC supply on the filaments – and only in the mid 20s did tubes have a/c filaments (indirectly heated). At HF, the problem with hum was bad and folks had to design circuits from scratch using a/c tubes. There were articles on 'low cost transformers' and rectifiers – sometimes 'do it yourself' chemical rectifiers – hams couldn't afford those big rectifier tubes on a 'depression era' budget. If you didn't shield the receiver, it would pick up hum fields from nearby transformers and other electrical appliances.

There were articles about transmitter design starting with lower frequencies then multiplying up up to 20M – a new concept at the time for most.

Electrolytic condensers were available for the first time. Up till then, it was mostly paper capacitors. New designs were being announced all the time.

July 1930 has an article about building a 2 tube converter to use in front of your broadcast radio given you a lower 'IF" frequency and saving you the trouble of building all those stages. (early shortwave converters were actually regen detectors and just used the audio stages of a broadcast receiver).

Nov 1930 had an article on regen receiver design with an RF stage and a separate oscillator from the detector tube in a regen pair design. Interesting. Used 201A type tubes with a 200 detector tube, followed by two '12 audio tubes.

There were also articles about building your own 50w phone station, and on the cover of

Nov was a listing for a $45 phone station including power supply! Wow...but $45 in 1930, right at the bottom of the depression (well, it got worse in '31 and '32), was month's of savings on the salaries paid back then, if you had a job at all (25% unemployment). Money was tight for most people. Few could afford factory built ham gear.

That was 'state of the art' in the 1930 era. Lots of ads to check out, too – that don't appear on the QST archives on line. More next month – as I digest a few more years of the wayback issues.

I did find one ad from Leeds radio. The unit they were selling looks nightly like the 'strange box' I acquired at the AWA flea market in Rochester, NY last year, and for which no one had an idea where it came from. It came as part of collection of receivers sold in MA as part of the Eli estate auction. It was built like a battleship out of aluminum plate 1/8th inch thick, with self contained batteries Now I suspect it was sold by Leeds Radio in the 1930 time frame. They were a constructor of lab equipment and offered SW kits and parts to hams via ads in QST. They were located on Radio Row in Manhattan, NYC. You never know what you find when you dig through back issues. Likely the 'mystery' has been solved!

Super Computer News

Rensselaer Polytechnic Institute unveiled a new petascale supercomputing system, the Advanced Multiprocessing Optimized System, or AMOS.

With the ability to perform more than one quadrillion calculations per second, AMOS is the most powerful university-based supercomputer in New York state and the Northeast, and among the most powerful in the world. In addition to massive computational power, AMOS has high-performance networking capabilities with a bandwidth of more than four terabytes per second—more than the combined bandwidth of 2 million home Internet subscribers.

This combination of speed and networking is unique among the world's university-based supercomputing systems, and will enable Rensselaer and its partners in academia and industry to better tackle highly complex, data-rich research challenges ranging from personalized health care, to smart grids, to economic modeling.

AMOS is a five-rack IBM Blue Gene/Q supercomputer with additional equipment, and represents the latest milestone in the decades-long close collaboration between IBM and Rensselaer. In January of this year, IBM provided a Watson cognitive computing system to Rensselaer, Watson at Rensselaer, making it the first university to receive such a system.

Both AMOS (a reference to Rensselaer co-founder Amos Eaton) and Watson (named for IBM founder Thomas J. Watson Sr.) are housed in the Rensselaer supercomputing center which has been renamed the Center for Computational Innovations (CCI). This combination of AMOS's balanced supercomputing power and Watson at Rensselaer's ability to understand the subtle nuances of human language and sift through vast amounts of data uniquely positions Rensselaer as a world leader in data-related research, innovation, and education.

"This new petascale system will enable Rensselaer researchers to easily explore and analyze massive amounts of data empowering discovery and creating new opportunities for breakthroughs," said John E. Kelly III, senior vice president and director of IBM Research, who was recently elected a member for the National Academy of Engineering for his extraordinary contributions to the United States semiconductor industry. "Together, Rensselaer and IBM are strengthening our commitment to leading at the critical intersection of Big Data, high performance computing, and the new era of cognitive systems."

"If every person in the world performed one simple mathematical calculation per second continuously without sleep or any breaks, it would take the whole of humanity nearly two days to compute what AMOS could do in a single second," said Christopher Carothers, director of CCI and a professor in the Department of Computer Science at Rensselaer. "It is such an exciting time to be at Rensselaer. By entering the petascale with AMOS, we are better positioned than ever before to change the world."

AMOS is a critical cornerstone of the Rensselaer Institute for Data Exploration and Applications—known as The Rensselaer IDEA—which serves as a hub for Rensselaer faculty, staff, and students engaged in data-driven discovery and innovation. The institute is anchored in the strength of Rensselaer in six primary areas: high performance computing, web science, data science, network science, cognitive computing, and

immersive technologies.

Working across disciplines and sectors, The Rensselaer IDEA empowers students and researchers with new tools and technologies to access, aggregate, and analyze data from multiple sources and in multiple formats. Related projects and programs span the entire spectrum of high-impact global challenges and opportunities, including basic research, environment and energy, water resources, health care and biomedicine, business and finance, public policy, and national security.

The Rensselaer IDEA connects three of the university's critical research platforms: the CCI supercomputing center (AMOS and Watson at Rensselaer), the Curtis R. Priem Experimental Media and Performing Arts Center, and the Center for Biotechnology and Interdisciplinary Studies.

- See more at: http://news.rpi.edu/content/2013/10/03/amos-among-world%E2%80%99s-fastest-and-most-powerful-supercomputers#sthash.D76QIJhb.dpuf

Awards Issued

Sixth Time #48	Terry, WQ7A	3/23/2014
11th Time #3	Scottie, N4AAT	3/20/2014
Bingo VI #2	Scottie, N4AAT	3/18/2014
Master Gold #61	Dennis, N6PDB	3/19/2014

Upcoming Events for County Hunters

APRIL 4 - 5

Mississippi QSO Party - 2014
RS(T) and MS county or S/P/C
www.arrlmiss.org
Apr 4, 1400Z - Apr 5, 0200Z
CW 50 kHz above band edge; Phone 3.862, 7.195, 14.270, 21.370, 28.370 MHz;Digital per band plan

Missouri QSO Party
RS(T), serial, MO county or S/P/C
www.w0ma.org
Apr 5, 1400Z - See website
CW 1.820 and 40 kHz from band edge; Phone--1.880,3.825,7.220,14.250,21.380,28.350 MHz

Montana QSO Party
RS(T) and MT county or S/P/C
www.fvarc.org
Apr 5, 1800Z - Apr 6, 0600Z

APRIL 12

New Mexico QSO Party
Call sign, name, and NM county or S/P/C
www.newmexicoqsoparty.org
Apr 12, 1400Z - Apr 13, 0200Z
CW-1.82,3.55,7.045,14.05,21.05,28.05,50.095; SSB-1.85,3.815,7.26,14.28,21.38,28.38,50.13 MHz

Georgia QSO Party
RS(T), S/P/C or GA county
www.georgiaqsoparty.org
Apr 12, 1800Z - See website CW 1.815,3.545,7.045,14.045,21.045,28.045,50.095; Phone 1.865,3.810,7.225,14.250,21.300,28.450,50.135 MHz

Better have your INCOME TAXES Finished! Uncle Sam is waiting to hear from most of you!

APRIL 19

Michigan QSO Party
Serial and MI county or S/P/C
www.miqp.org
Apr 19, 1600Z - Apr 20, 0400Z
CW 45 kHz from band edge,Phone 3.825,7.200,14.250,21.300,28.450 MHz

Nebraska QSO Party
RS(T), NE county or S/P/C
www.qcwa.org/chapter025.htm
Apr 19, 1800Z - Apr 20, 1800Z
CW 1.805 and 35 kHz above band edge,Nov/Tech--10 kHz above band edge; Phone--1.915,3.865,7.265,14.265,21.365,28.465,146.460 MHz

South Dakota QSO Party
RS(T) and SD county or S/P/C
www.w0blk.com
Apr 19, 1800Z - Apr 20, 1800Z
CW 3.58, 7.035, 14.07; Phone 1.845, 3.855, 7.180, 14.255, 21.355, 28.455 on SSB; RTTY 3.585, 7.038, 14.075, 21.075 MHz; PSK - Clg Freq

North Dakota QSO Party
RST and ND county or S/P/C

www.w0nd.com
Apr 19, 1800Z - Apr 20, 1800Z
CW 1.850, 3.550, 3705, 7.050, 14.050, 21.050, 28.050; Phone 1.870, 3.850, 7.250, 14.270, 21.350, 28.450; VHF+/Digital per band plan

APRIL 26

Florida QSO Party
RS(T), FL county or S/P/C
www.floridaqsoparty.org
Apr 26, 1600Z - See website See website

DAYTON HAMVENTION – MAY 14-16, 2014. County Hunter Forum 4pm Friday with dinner after at Golden Corral. Tim W8JJ is the moderator. More details to follow.

Tim sent along the following information on the Forum:

Friday, May 16, 2014

4:00 p.m. – 5:00 PM County Hunting Forum

Tim Eklin, W8JJ - Forum Moderator

Tim holds USA-CA #1203 and is currently attempting to work all US counties using CW. He also enjoys operating mobile to activate needed counties on multiple bands and modes. Tim will serve as host and moderator for this year's forum.

Lowell Tennyson, KB0BA and Sandra Tennyson, N0XYL – 1st Speakers

Lowell holds USA-CA #1154 and Sandra is USA-CA #1214. This mobile OM/YL team can frequently be heard running counties across the United States. They are two-time recipients of the "Mobile Team of the Year" award sponsored by MARAC. Lowell and Sandra will discuss their approach to county hunting. They will also share their

equipment configuration and operating techniques along with some stories from the road. Lowell and Sandra offer a unique perspective on county hunting as a mobile team.

Mark Pinsky, W8MP – 2nd Speaker

Mark holds USA-CA #1187 and will discuss his county hunting experiences as he travels worldwide and seeks out other amateur operators including county hunters. He is a commercial airline pilot and often coordinates visits with hams during lay overs in cities all over the globe. He holds the following DX call signs, JG1DVR and 9G5MP. Mark enjoys putting a face with a call sign and often surprises county hunters by scheduling an eyeball QSO when he is in their area. He will also share his most recent ham radio interests involving remote station operations.

We will also have introductions of all county hunters present at the forum so you can put a face with those familiar class signs that you hear on the air. It's a lot of fun and an opportunity to get off your feet for an hour after walking the ham fest all day. A dinner gathering is planned following the forum. More details will be provided as we get closer to the event.

Please join us!

W8JJ 03/23/14

Wear your callsign name/badge if you remember to bring one along!

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April 2014 QST – Is everyone up to speed on the 'new' coax described on page 45? New "Monax" coax with interesting properties. Very good on SWR. Also, if you need an antenna for restricted space, you can always build a TuneTenna to cover the bands. Just a bit of work to get one up and running.

That's all folks! See you next month. 73