

# County Hunter News

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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.

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CW County Hunter Nets run on 14.0565, 10.124.5, 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](http://ch.W6RK.com)

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

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

<http://countyhunter.com/cq.htm>

For general information FAQ on County Hunting, check out:

<http://countyhunter.com/whatis.htm>

MARAC sponsors an award program for many other county hunting awards. You can

find information on these awards and the rules at:

<http://marac.org/awards.pdf>

There is a lot more information at [www.countyhunter.com](http://www.countyhunter.com) . Please check it out.

Back issues of the County Hunter News are available at [www.CHNewsonline.com](http://www.CHNewsonline.com)

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

## Notes from the Editor

### **N4CD Rumblings**

1 ) I must have missed the memo about the MARAC mini in Idaho this year. There was no regular convention held this year, but it seemed a whole bunch of mobiles decided that heading to Idaho for a week was the right thing to do. Whoa...who did we have? N8KIE/NRLJ, Bob and Jacki, K5GE (and probably wife) , Gene and Mary Ida. KB0BA/N0XYL Lowell and Sandra passed on through. Kerry, W4SIG, hopped on a plane and was running ID counties. AB7NK/K7SEN, Mary and Neil, were running all over ID. It probably started when the Double Diamond Folks (K5GE,N8KIE) decided to head there and Terry, WQ7A, was at home chasing them on 40 and 75M. They were all working each other getting credit for the 'top award' these days. No one has earned that YET! If you needed ID counties, this was the time to be on the air!

2 ) Sunspots. What sunspots? Most days in the past month were zero sunspot days with just a few days having one sunspot group where the sunspot number got up to 12 or so (1 group, 2 sunspots). Worse, the solar flux bounced as low as 65 and sat at 66/67/68 most of the month making conditions not so great. To top it off, there were some days of coronal discharge solar winds kicking up the K index to 5 and the A index to the 35 level! We're bouncing along at the bottom of the sunspot cycle and we don't know for how long before things get better.

As the month wore on, sunspots would appear for a day or two then disappear. The solar flux was up at 68. However, along with that came some nasty geomagnetic storms, with the A index up to 35 and K of 5, caused by solar winds from coronal hole discharges (flares). Then back to SFI of 65.

We're not at historic lows. We've been averaging about 65% spot free days in 2019. The last cycle saw 71% spot free days before things got better.

## On the Road with N4CD I

Hmm...the trip was going to start on July 27<sup>th</sup> with a 650 mile haul up to Bethany MO – hitting one new park along the way. Two days before, I decided a 650 mile day on mostly half interstate and half 4 lane highways was a bit too far to go – especially since Highway 69 up through OK hit a lot of small towns along the way to slow you down. So I left a day sooner on Friday July 26<sup>th</sup> with a stop up in OK half way to the original destination. My goal was to make it to the Antique Radio Club of IL annual Radiofest convention in Addison, IL by the following Friday.

(For you POTA folks, all these parks have a corresponding K number....just drop the two FF and you have it. I use the WWFF numbers unless it's a POTA only park.)

### Day 1 – July 26 – Friday

The car was loaded up for a 12 day trip in the hot weather of TX. High 90s here and it would be toasty warm while I was gone. It's a good time of year to be gone. The route was up boring US 75 to US 69 up through Muskogee, OK to Joplin then up through MO north to Kansas City area – finally heading Northeast to some new never run parks on I-35.

The trusty 2016 Malibu had 101,829 miles on it when I left at 6:30 in the morning.

As I crossed the Red River at the top end of Grayson County near Dennison, I recalled an interesting article I read on the web recently. There was a special event station – W5I by the Grayson ARC – that was done to bring attention to the Red River Bridge War. Never heard of it? Me either. From Wiki and other sources

“The Red River Bridge War was a boundary conflict between the U.S. states of Oklahoma and Texas over an existing toll bridge and a new free bridge crossing the Red River. The Red River Bridge Company, a private firm owned by Benjamin Colbert, had been operating a toll bridge between Durant, Oklahoma, and Denison, Texas, carrying U.S. Route 69 and U.S. Route 75. (about \$1/car toll even back then in 1931!)

Texas and Oklahoma had jointly built a new, free span northwest of the existing toll bridge. On July 10, 1931, the Red River Bridge Company obtained an injunction against the Texas Highway Commission (now Texas Department of Transportation), keeping it from opening the new bridge. The company said that the highway commission had promised in July 1930 to buy the old toll bridge for \$60,000 (equal to \$900,000 today). In reaction to the injunction, the Governor of Texas, Ross S. Sterling, ordered that the new free bridge be barricaded from the Texas end.

On July 16, Oklahoma Governor "Alfalfa Bill" Murray ordered the new bridge open, by executive order. Murray issued this order on the grounds that the land on both sides of the river belonged to Oklahoma, per the Louisiana Purchase treaty of 1803. Murray sent highway crews across the new bridge to destroy the barricades.

Governor Sterling sent Adjutant General William Warren Sterling and three Texas Rangers to the new bridge to defend the Texas Highway Commission workers enforcing the injunction, and rebuilt the barricade that night. The next day, Oklahoma crews under Governor Murray's order demolished the Oklahoma approach to the toll bridge, rendering that bridge impassable.

The Texas State Legislature called a special session on July 23 to pass a bill allowing the Red River Bridge Company to sue the state over the issue, partially in response to meetings in Sherman and Denison, Texas, demanding the free bridge be opened. The next day, Governor Murray declared martial law at the site, enforced by Oklahoma National Guardsmen, and personally appeared at the site, armed with a revolver, hours before a Muskogee, Oklahoma, court issued an injunction prohibiting him from blocking the northern toll bridge approach. Murray directed the guardsmen to allow anyone to cross either bridge.

Murray discovered on July 27 that the free bridge was in danger of being closed permanently. He expanded the martial-law zone across the river, stationing guardsmen on both free bridge approaches. The injunction against the bridge opening was dissolved and the martial law order rescinded on August 6.

News of the dispute made national and international headlines.”

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County hunters might recall that OK owns all the land under the Red River itself. The County Line/State Line is the 'vegetation line' on the south side of the river.

The 'free bridge' was replaced in 1995 and a portion of it was preserved. As I zip over the Red River, I recall the Red River Bridge War from 90 years ago. BTW, both states coughed up the money, actually a bit more - \$100,000, to pay the owner of the previous bridge the promised amount. The previous toll bridge also stayed in limited service for 25 years before it was finally removed.

More at <https://www.heralddemocrat.com/news/20180721/red-river-bridge-war-was-local-civil-war>

There's actually a book written about it, too! <https://www.amazon.com/Red-River-Bridge-Texas-Oklahoma-University-Texarkana/dp/1623494052>

Back in 1931, the height of the Great Depression, 'free bridges' could mean the difference between work/no work and starvation. That toll bridge was 75c one way, or \$1/round trip when folks didn't even make that much some days working!

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While I was at it, I stopped at a bunch of repeat parks on the route.. Anything more than 10 contacts would count for a repeat activation for POTA. First up **Arrowhead** in OK which lies on Lake Eufala – KFF 2770 in Pittsburg County. 67Q quickly go into the log. Wow – that's a decent run with some new park chasers in the log. Head next for **Lake Eufala SP KFF-2789** in McIntosh OK - 51 QSOs from here. I've been at these parks a couple times before. All the parks today lie on lakes.

Up the road not too far is **Sequoyah State Park KFF-2803** in Wagoner County. Put 56 in the log quickly then moved Sequoyah Bay in Cherokee County OK for 46 QSOs. Coming up soon would be a handful of parks all around Grand Lake – a gigantic sprawling lake with lots of inlets and shoreline up in northeast OK.

Some you win, some you lose. I pull up at **Snowdale state park – KFF 2804**...and it is closed. Entrance was blocked with big gate and chain and sign saying 'Park Closed'. No reason posted why. Later I went to the state web site and learned the park had been

shut down a few days before due to flooding. Oh well. The camp sites were out of commission so they closed the whole park and beach area.

There was still time to run more parks so it was off to **Spavinaw** in Mayes County KFF-2805. There were 36 QSOs in the log from here on a repeat visit. Didn't stick around long or try for more. That was followed by **Cherokee State Park** KFF-2776 in Mayes County – same county again – for 17 quick QSOs – it was getting late in the afternoon. Anything over 10 is 'good' for a repeat.

I used the handy dandy app 'Where Am I' on my android spotting tablet to double check what county I'm really in. The list from county hunter dot com, referencing the parks to counties, is usually correct but lists this as 'Cherokee County' but it isn't. It quickly uses GPS, and shows your street address, town, county and GPS coordinates. Takes about five seconds to determine that.

The next park, **Disney Little Blue, KFF-2778** in Mayes County, about 2 miles from the last park, goes in the log late in the afternoon with 16Qs. I'm getting tired and hungry and the bands aren't all that great. It's also in the same county as the last 3 parks!

Headed to the Super 8 Motel in Big Cabin OK off the OK Turnpike, arriving at 6pm. Dinner was at the Cherokee Cafe in the small truck stop there – about the only place to eat here beside a fast food place – with a nice chicken breast, salad bar, green beans, pinto beans, roll, for \$9.90. 346 miles driven on the way to IL the 'county hunter/park activator' way on the first day. Band conditions OK but not super great for the repeat parks later in the day.

As for other mobiles on the 20M SSB net, Bob, N8KIE, was long gone on his way through WI headed toward ID – then later into NV and CA and off to HI. Gene, K5GE had traveled up to MN already and would head west from there. KB0BA/N0XYL were also already on the road heading west. AB7NK/K7SEN were also several days into their trip – headed first north to ND then west. There were lots of mobiles to chase! Hundreds of counties over the next two weeks!

## **Day 2 July 27 – Saturday**

More county hunters and park chasers are around on weekends. Today would start with a couple repeat parks until the very end of the day when I'd finally reach a new one. First up was the **Battle of Carthage Historic Site in Jasper County MO**. KFF-3337 early in the morning with 37Qs in the log.

You might recall that:

“The Battle of Carthage was the earliest full-scale battle of the Civil War, preceding Bull Run by 11 days. Battle of Carthage State Historic Site contains a quiet meadow and the spring that made the area an encampment for both the Union and Confederate troops during the battle. The area is little changed in its appearance since the battle was fought on July 5, 1861. A few minutes off of Interstate 44, the site interprets the battle that set the stage for a decisive showdown a month later at Wilson’s Creek.” This battle at Carthage was a victory for pro-Confederate forces.” Source – Wiki and state site.

Wilson's Creek to the south is also a park unit that I've visited, but not today – I'm headed north and another Civil War site is just north at **Battle of Island Mound site – KFF-3338** in Bates County MO. 74 QSOs go in the log quickly here. This was an 1862 battle site – a skirmish if you will. The Confederates suffered more losses.

From the state site:

“Battle of Island Mound State Historic Site preserves the site of the Toothman Farm, which the First Kansas Colored Volunteer Infantry used as its headquarters and renamed “Fort Africa.” Exhibits at the site interpret the Battle of Island Mound and its significance in the history of the state, the nation and the Civil War. Courage Trail, a half-mile trail around the site, includes wayside exhibits with more information about the battle.” This was the first engagement of black troops in the war and inspired other units to quickly form and fight for the Union.

From there it was a good haul up to **Wallace State Park KFF 1793** in Clinton County MO. Ran all the counties on the way up. 42 QSOs in the log from here. Work the bands – not much happening on 20M SSB but CW a bit better. Add in the rest on 30m CW and just a few on 40M CW. It's a weekend but the bands aren't cooperating.



Finally, I reach a new one – **Crowder State Park** in Grundy County MO – KFF – 1752. From here on out, I'll be pushing hard to get at least 44 QSOs from each park. I pull in at 2013Z and get to work. 10Qs show up on 20M SSB on net frequency, then I QSY since there are mobiles running left and right. Add in another 16 on 20M SSB, then go to 20m CW where 25 are in the log. So far good. Then to 30M with 10, and 11 on 40m cw. I'm happy – first success in a new park. Hopefully that trend will continue.

I'm into the 'roller coaster' hills of northern MO. Up and down, up and down, mile after mile.

That's it for the second day and I stop at the Super 8 Motel in Bethany, MO. Dinner at the Toot-Toot Restaurant with a nice buffet which was very good.

### **Day 3- July 28 2019 Sunday**

I've finally reached Iowa and the first park on the list is **Nine Eagles State Park KFF-2309** in Decatur County. This is a 1,000 acre park with a small lake, lots of hiking trails and a large campground. Arrive early in the morning and have a good run with 70 in the log thanks to many county hunters working me on several bands/modes and park chasers.



Next up to the west is **Lake of Three Fires SP KFF-2301** in Taylor County. The 20M SSB net is in full swing and 12 go in the log. I move to 20 CW for 22 more, 25 on 30M CW and 10 on 40m CW. Switch to 20m CW off net frequency and another 20 go in the log, plus chase a few others on various bands to wind up with 90 QSOs – a nice run.

A little bit of history of how the park got the name:

“The Pottawattomi tribe, a large group of Native Americans known as the "Fire Nation," once roamed the prairies of southwest Iowa and northwest Missouri. According to legend, two other tribes joined the Pottawattomi to form a loose confederacy known as "Three Fires." It is believed the three tribes held a great council meeting to join forces for protection against invading tribes. Runners were sent to wandering Indian nations to tell of the great rendezvous. Smoke from three fires signaled the exact location. The fires were built atop the highest hills so smoke could be seen from any direction. One such point overlooked the valley now covered by the waters of Lake of Three Fires. Three fires were kept burning as long as the three tribes joined together. If any of the fires went out it meant the tribes had left the area to continue on their own. Lake of Three Fires State Park was dedicated in 1935.”

Usual campground, a lodge built by the CCC folks, and other activities here. A bit off the beaten path – miles from anywhere in farm country.



Continuing the trip through the IA boonies, you arrive at **Viking Lake SP KFF-2325** – a never run before POTA park – Montgomery County. 92 QSOs go in the log. Usual picnicking, camping, lake activities, boating, etc. Many county hunter mobiles are out including N8KIE, NA8W, W4SIG, KB0BA/N0XYL, AB7NK/K7SEN, K5GE. The weather has been great – sunshine and no rain. There's time for one more today.

**Green Valley SP** in Union County is the next up – KFF-2291. It's got a 390 acre lake – and the usual campground, hiking, picnicking fishing and water activities. Had a good run from here with 94 QSOs in the log. The weekend helps run the QSO totals up quite a bit.

The nice thing about parks in OK, IA and IL is that there are no entrance fees. Free! In some states like TX, VT, MI, NY, you'll be paying lots in park entrance fees if you visit lots of parks in those states.

That night was spent in the Super 8 in Osceola IA. I ran some other counties as I ran through them in between the parks today.

#### **Day 4 – August 29 – Monday**

On Sunday, I noted from the map plan for the next day that I ran right by a State Forest. These are only currently in the Parks on the Air (POTA) system, not WWFF. With a short 1 mile detour or so I could hit **POTA park Stephens State Forest K-4662** at a campground entrance road. I posted a note on the POTA board. It would be in the same county (Lucas) as another park where I would need 44 QSOs so I wasn't going to be there long. You get credit in POTA for 10 or more QSOs. Note that KFF-4662 is a number assigned to a different entity entirely. Confusion! You've got to be careful to send this log only to POTA.

At 7:15 am in the morning (1217z) I snagged 10 QSOs on 40M CW- all county hunters – and that was it. Left after 8 minutes. That's all I needed. No one had run this park before – but it wasn't on the planned schedule of parks to be run that I put out and I didn't have an hour extra today to spend here. Only 40M was working at this early hour. I don't carry 80M but that would have been decent. Or maybe even 60M.



I arrived at **Red Haw SP 2317** at 1244Z (7:44am local time) in Lucas County. Ron, KB6UF, was off on a one day trip today in MS. Had a great run with 110Qs in the log. Bands cooperated a bit today and worked some on 17M CW -9 QSOs. It helps that only a few other contacts had been made from there before. This is a small park, with lake only for electric trolling motors, the usual campgrounds and picnic areas, etc.



Next up was **Honey Creek Resort KFF-2293** in Appanoose County IA. 80 QSOs in the log from here. I'm catching a few Park-to-Park contacts but not all that many.

County hunter mobiles are busy out west with 4 or 5 of them in Idaho today. N8KIE has made it to NV. Weather still great with high 80s, lows near 60 in the morning. That's great county hunting weather. At this park, you've got a 105 room lodge on the lake, lots of activities centered around the lodge and 20 other cabins, a few RV campsites. It's a bit different than the other state parks.



Next up is **Lake Wapello KFF-2302** in Davis County IA. From here, 107 QSOs go in the log. Bands cooperating again today. It's a 1,000 acre park with an artificial lake – that used to be a Boy Scout camp. There's a few camp sites here – RV – but most are tent sites. You can't go more than 5 mph on the lake.



Still time for one more – **Lake Keomah in Mahaska County KFF-2298**. I remember the days with Carol, KI0JD, and before that her call was N0LDT (Long Distance Telephone), used to run all the IA counties every year it seemed. She'd hit the county lines from end to end of the state and was in my log dozens and dozens of times! “Last County Contact Please!” was frequently heard on the nets when she reached a new one.....many county hunters will recall the those days when she 'put out' the counties. Iowa was her state to run and run and run. Few others ventured there.

Lake Keomah is a small park of 386 acres with a 75 acre lake. Only electric motors allowed on the lake. There's a lodge there you can reserve for special events like weddings.

“Keomah” may sound like an Indian name, but it is not. The name is derived from the first syllables of the two counties that helped finance the park over 50 years ago --Keokuk and Mahaska. The park was dedicated in 1934. Many of its facilities were constructed by the Civilian Conservation Corps (CCC).” ref: IA state parks site.

You've got camping and picnicking here.

I make 95Qs then head on in to the Super 8 Motel in Oskaloosa, IA. Dinner at the Asian Buffet – which was OK but not great.

The IA parks are open daily from 4am to 10pm!

## **Day 5 – Tuesday July 30, 2019**

The progression of IA parks is going smoothly. IA roads are in good shape – at least in the southern part. There are roller-coaster hills in some of the counties adjacent to MO – a continuation of the roller coaster hills in the northern part of MO where you go up and downhill 300-400 feet. Up/down/up/down for mile after mile.



I start out today at **Elk Rock State Park in Marion County – KFF-2287** – at 7:43am local – 1243z. Wow! 139 QSOs go into the log from here. You've got the normal camping and boating activities and equestrian trails for day use.

From the state site: “Elk Rock State Park is located on Lake Red Rock, one of Iowa's large impoundments. The area had been inhabited by Native Americans dating back more than five thousand years to the Archaic Culture. In 1842, the Sac and Fox Indians granted white settlers right to this land. The name "Elk Rock" has been attributed to the unusual rock formation which is located on the south side of the river in the park. Many towns accommodated the white settlers and traders including: Cordova, Dunreath, Fifield, Percy, Red Rock and Rouseau. Although these settlements no longer exist they were within the area now known as Lake Red Rock.

In 1960, the United States Army Corps of Engineers began construction on Red Rock dam which was completed in 1969. The Corps of Engineers leased land along the Red Rock reservoir to the Iowa Conservation Commission in 1969 for construction of North Elk Rock. In 1978, the state obtained a lease for property on the south shore of the reservoir. This land became known as South Elk Rock. Today Elk Rock State Park comprises the main Elk Rock Park area, which has both day and night facilities, and the bridge area that is a day use picnic area.

Lake Red Rock is a major stopping-off area for waterfowl and other migratory species in both spring and fall, including white pelicans and bald eagles. The reservoir area also serves as a habitat for other plants and animals species, including more than 200 species of birds, 54 species of trees, 62 species of wildflowers, 43 species of fish and 35 species of mammals.”



Next up is **Lake Ahquabi in Warren County – KFF 2295**. 91Qs from here. The bands are good in the morning – then fade away mid-day as propagation becomes more difficult to make contacts. You'll find a CCC constructed lodge here. There's a small lake of 115 acres good for fishing and swimming.

From the state site: "Ahquabi" is a Sauk and Fox word meaning "resting place," and it is a fitting name for this scenic 770-acre park. The park site was recommended by "Ding" Darling, nationally known Iowa political cartoonist and conservationist, and was dedicated in 1936. Many of its structures were constructed by the Civilian Conservation Corps (CCC) in the 1930's and remain available for the enjoyment of park visitors."



**Banner Lakes at Summerset Park - KFF- 2278** – is still in Warren County. Sometimes there are more than one park in a county – and, well, dang, I run them. You've got the normal picnicking, camping and hiking opportunities here.

From the state site: “Banner Lakes at Summerset State Park, Iowa’s newest state park, is nestled in the rolling landscape between Des Moines and Indianola on Highway 65/69, within minutes of the state’s largest metro area.

Many locals remember the area as Banner Pits, when the area was mined for coal by the Banner Coal Company in the early 1930s. According to an article dated September 15, 1932 in the Des Moines Tribune, “...the coal mining operation was the largest strip mining operation to take place in Iowa. The coal--an unusually good grade of Iowa product--could not be mined in the ordinary way because of the poor 'roof' and the proximity of the four-foot vein to the surface. It was covered by about 40 feet of earth and shale. The concerned decided to mine the coal by the open pit process and has been operating one of the largest electric drag lines in the country there since last January.” The article went on to say that in order to get the coal, it was necessary to dig a “young Panama canal” 115 feet wide at the top and 80 feet wide at the bottom. The huge drag line equipment used in the operation drew hundreds of spectators to the mine.

In 1954, the Department of Natural Resources purchased the 222-acre setting as a wildlife management area. As the years went by, recreation demands changed. Through the vision of the DNR and with encouragement from a host of supporters, a plan was developed in 2002 to transform “Banner Pits” into a state park with new and enhanced

recreation opportunities. The park was officially dedicated October 7, 2004 with more than 250 people in attendance. Only the second state park established in the last 27 years, Banner Lakes at Summerset State Park is a great addition to Iowa's state park system"

Good run from here with 117Qs in the log. Running all the bands on CW and one or two bands on SSB helps. Thanks to all the county hunters who work me a second time in a county and on the various bands. Some days it's a real struggle to get to 44, other days the propagation seems better and activity is high with many mobiles out on the road. AB7NK/K7SEN, K5GE, N8KIE are on their trips and folks are chasing them left and right out in those tough western counties.



I head for the next in Polk County – **Walnut Woods SP – KFF-2326**. 80 QSOs from here. From the state web site:

“Walnut Woods encompasses 260 acres of wooded bottomland along the Raccoon River. Within the park lies a large surviving natural stand of black walnut trees. More than 90 species of birds have been identified along the numerous foot and bridle trails throughout the park and along the river.

The valley in which Walnut Woods is located was created by the meandering of the Raccoon River. Since the park elevation is not much higher than the normal river level, constant changes can be seen in its banks. The most dramatic is where the river channel runs against the western edge of the park. Constant churning and washing in the past removed tons of soil, sand and gravel. In the mid-1980s, the most vulnerable areas of the riverbank were protected by rock "riprap" and special jetties designed to minimize erosion.

Located only minutes southwest of Des Moines, the park provides shaded picnic areas with fireplaces and tables and peaceful spots for river fishing. The park is open year-round and is perfect for cross-country skiing with 2 1/2 miles of ski trails. A pleasant equestrian trail is also located in the park.”

Oh, my – cross-country skiing – I'm getting too far 'north here' but it's the middle of summer. I'll skip this area in the middle of winter! I catch 12 QSOs on 17M CW and SSB! Not great but at times, the band is 'open'.



Time for one more today – **Big Creek State Park KFF-2281** in the same county – Polk, IA. It's getting late in the day – 2017z as I pull in – the time when 20M often fades away. Fortunately 20M SSB and CW put a good chunk in the log, with fair runs on 30 and 40M CW. 69 QSOs from here. It's 8 miles from NU0Qs QTH.

From the state site: “Big Creek State Lake was created as part of the Saylorville project to protect Polk City from floods. A diversion dam which forms the 866-acre Big Creek Lake was primarily developed as a flood control project but also offers a wide variety of recreation. Big Creek State Park and the adjoining public hunting areas provide recreation for visitors of all ages and interests. The focal point of the 3,550-acre complex is the lake.”

The GPS lady knows where most of the IA parks are, but not all. Before setting out, be sure you write down the street address of each of the parks. Sometimes you'll need them to get the GPS lady to navigate to the parks.

That night, I hit the Super 8 in Des Moines right off I-80. Tomorrow will be heading east to the border with IL – running half counties, half parks along the way.

IA is a bit frustrating with mile after mile of good road, but only 55 mph speed limits on nearly all of them. Only a few 4 lane major roads have higher speed limits other than the interstate. Distance seems to go by so slowly at 55 mph!

It's time for a break. More later.

## Sunspots I

'Terminators' on the sun trigger plasma tsunamis and the start of new solar cycles

The next solar cycle is predicted to take off within a year

National Center for Atmospheric Research/University Corporation for Atmospheric Research

In a pair of new papers, scientists paint a picture of how solar cycles suddenly die, potentially causing tsunamis of plasma to race through the Sun's interior and trigger the birth of the next sunspot cycle only a few short weeks later.

The new findings provide insight into the mysterious timing of sunspot cycles, which are marked by the waxing and waning of sunspot activity on the solar surface. While scientists have long known that these cycles last approximately 11 years, predicting when one cycle ends and the next begins has been challenging to pin down with any accuracy. The new research could change that.

In one of the studies, which relies on nearly 140 years of solar observations from the ground and space, the scientists are able to identify "terminator" events that clearly mark the end of a sunspot cycle. With an understanding of what to look for in the run up to these terminators, the authors predict that the current solar cycle (Solar Cycle 24) will end in the first half of 2020, kicking off the growth of Solar Cycle 25 very shortly after.

In a second study, motivated by the first, scientists explore the mechanism for how a terminator event could trigger the start of a new sunspot cycle using a sophisticated computer model. The resulting simulations show that "solar tsunamis" could provide the connection and explain the Sun's remarkably rapid transition from one cycle to the next.

Both studies were led by the National Center for Atmospheric Research (NCAR).

"The evidence for terminators has been hidden in the observational record for more than a century, but until now, we didn't know what we were looking for," said NCAR scientist Scott McIntosh, who directs the center's High Altitude Observatory and worked on both studies. "By combining such a wide variety of observations over so many years, we were able to piece together these events and provide an entirely new look at how the Sun's interior drives the solar cycle."

The research was funded by the National Science Foundation, which is NCAR's sponsor, NASA's Living with a Star program, and the Indo-US Joint Networked R&D Center.

Sunspot cycles are born after solar minimum, a period when the face of the Sun is quiet. As the cycle continues, more and more sunspots emerge, first appearing at about 35 degrees latitude in both hemispheres and slowly marching toward the equator over a decade before they fade again into the next solar minimum. The rough midpoint of this progression is solar maximum, when sunspots are the most abundant.

Predicting the timing of sunspot evolution is a major scientific goal, in part because sunspot activity is tied to the solar storms that can disrupt Earth's upper atmosphere and affect GPS signals, power grids, and other critical technologies. But such predictions have proven challenging.

For example, the Sun is currently in a solar minimum. Scientists know the relative peace means that the current solar cycle is wrapping up, but it has been difficult to say whether the new cycle will begin in a few months or a few years. McIntosh and his colleagues think their studies can provide more clarity, both into the timing of cycles and also into what drives the cycles themselves.

The researchers began by studying the movement of coronal bright points - ephemeral flickers of extreme ultraviolet light in the solar atmosphere. By observing bright points, which occur even in the relative calm of a solar minimum, the scientists think they have gained a more complete view of the solar cycle than if they focused only on sunspot activity.

The bright points first appear at higher latitudes than sunspots (around 55 degrees) and migrate toward the equator at approximately 3 degrees latitude per year, reaching the equator after a couple decades. The paths traced by the bright points overlap with sunspot activity in the mid-latitudes (around 35 degrees) until they both reach the equator and disappear. This disappearance, which the researchers call a terminator event, is followed very shortly after with a large burst of bright point activity at the mid-latitudes, marking the beginning of the next sunspot cycle.

In the new study that identifies terminator events, published in the journal *Solar Physics*, the scientists corroborate the bright point observations with a number of other observations from a variety of spacecraft- and ground-observing facilities stretching back over 13 solar cycles.

"We were able to identify these terminators by looking at data from a whole range of different measures of solar activity - magnetic fields, spectral irradiance, radio flux - in addition to the bright points," said University of Maryland scientist Bob Leamon, a co-author of the paper who is also a researcher at NASA's Goddard Space Flight Center. "The results demonstrate that you really need to be able to step back and use all the available data to appreciate how things work - not just one spacecraft or one observation or one model."

McIntosh and his team have identified that coronal bright points allow them to better "see" the solar cycle unfolding. But why does the sunspot cycle start surging in the midlatitudes a few weeks after the terminator?

The paper on solar tsunamis, led by NCAR scientist Mausumi Dikpati and published in *Scientific Reports*, explores the possible mechanisms behind the observations. It suggests that coronal bright points are markers for the movement of the Sun's "toroidal magnetic fields," which wrap around the Sun like rubber bands stretching in the east-west direction and migrate slowly toward the equator over the same two decades.

When these toroidal magnetic fields bob to the surface, they create sunspots along with the bright points they were already producing. As they travel, they also act as magnetic dams, trapping plasma behind them. When the toroidal magnetic fields from the Sun's northern and southern hemispheres touch in the middle, their opposing charges cause their mutual annihilation, releasing the pent-up fluid behind them in a tsunami. This fluid rushes forward, collides, and then ripples backward, traveling toward the poles at a rate of about 300 meters per second.

As the solar tsunami reaches the Sun's mid-latitudes, it encounters the toroidal magnetic fields of the next cycle, which are already marching toward the equator (this progression is marked by the path of coronal bright points) but traveling deeper within the Sun's interior. The tsunami buoys those magnetic fields, lifting them toward the surface and producing the remarkable surge of bright points - and accompanying sunspot activity - that marks the beginning of the new sunspot cycle.

"We have observed the sunspot cycle for hundreds of years, but it's been a mystery what mechanism could transport a signal from the equator, where the cycle ends, to the Sun's mid-latitudes, where the next cycle begins, in such a relatively short amount of time," said Dikpati.

As a body, the research provides a new way of thinking about the workings of the solar interior that challenges some of the conventional thinking about processes on the Sun. Whether or not the research is on the right track - and could improve our predictive capabilities - will soon get its first test.

There are a number of instruments that are ideally suited to observe the inevitable end of the current solar cycle and the start of the next, according to the authors. These include the Parker Solar Probe, which launched last August, the STEREO-A spacecraft, the Solar Dynamics Observatory, the Daniel K. Inouye Solar Telescope, and other assets.

"In the next year, we should have a unique opportunity to extensively observe a terminator event as it unfolds and then to watch the launch of Sunspot Cycle 25," McIntosh said. "We believe the results, especially if the terminator arrives when predicted, could revolutionize our understanding of the solar interior and the processes that create sunspots and shape the sunspot cycle."

[https://www.eurekalert.org/pub\\_releases/2019-07/ncfa-ot072319.php](https://www.eurekalert.org/pub_releases/2019-07/ncfa-ot072319.php)

## Trip Report – KB0BA/N0XYL

In late May, we traded our 2015 Chrysler 300 for a 2019 Ford Escape SEL. It took Lowell several weeks to installed the ICOM7000 radio. The biggest problem was

grounding. Finally we were ready to be mobile. As some of you know, I needed four counties to finish Master Gold. Lowell and I decided to make a trip to Pacific Northwest to get Boundary, ID, Tillamook, Yamhill and Deschutes, OR. Mission accomplished. Woo hoo! I am now ready to concentrate on finishing my third time (130 to go) and Master Platinum.

Our trip to Oregon was quite an adventure! It all started July 19th. The first leg was to travel west on I-80 to I-35, then north into the corner of Minnesota, and the Dakota's. We were surprised to learn the speed limit in Montana, Idaho and Oregon major highways was 80 mph. You know people -- if the limit is 60, they go 70. If the limit is 70, they go 80 and so on. We managed to avoid any crashes although the new vehicle has a tiny chip in the windshield and a broken lens cover for the left tail light.

After getting Boundary, ID, we continued our trip into Oregon. One morning we had a 20 mile detour on a narrow mountain road complete with a LOT of "S"curves and switch backs. The GPS lady had lead us back to where we had started that morning! Go figure.

We encountered strong wind one day. It tipped up the 4-mag mount antenna base but fortunately did not dent the roof. That evening we stopped at a hardware store, bought several heavy duty suction cups and parachute cord to tie the antenna down. Problem solved.

We tried giving KA9JAC a contact in Coos, OR but propagation was the pits. However, NF0N made a contact for a WBOW! He didn't know we were going to Coos so he was surprised as were we. We stayed overnight in Coos Bay, hoping Bob would be able to hear us the next morning. No go -- not on SSB or CW.

Around Canyonville, OR we noticed a helicopter with a bucket hanging beneath it. Oh Oh! Very soon we were traveling beside a forest fire that had been burning for several days. At last report it had covered 11,000 acres. The smoke was dense -- we turned off the A/C so it wouldn't suck in the smoke.



The Oregon Smoke

Traveling through Wyoming on the way home, the temperature was 84 degrees when it started to rain. In just a couple of minutes, it was 49 degrees with heavy rain and soft hail which splatted on the windshield. Fifteen minutes later, the rain stopped, the sun came out and the temp returned to low 80's. Freaky!

Our trip racked up 6,000 miles and yes, the vehicle has had it's oil changed! We're home now until September when we head to Ripley county, IN. Lowell no longer competes in the black powder muzzle loading trap matches, but we visit with the friends we've made over the years. We've been doing this trip twice a year since 1986, except for two June shoots. We plan to run some counties, in and around southeastern Indiana and some in Kentucky. After the shoot, we hope to spend a few days in Warrick Co., IN where Lowell's father, grandfather and great grandfather were born.

There will also be a trip to Allen county, IN in mid-November, and then northern Wisconsin for Thanksgiving with my oldest nephew and family. We will continue to check "needs" on the forum website. Maybe we can help you -- that's the fun part of county hunting for us -- helping others!

Sandra N0XYL

## On the Road with N4CD II

The Iowa trip continues trekking east along I-80. First up is **Rock Creek State Park in Jasper County IA – KFF-2319**. Arrive early at 7:19am after a good haul along the

Interstate 80. The sun is up at 6am here and I'm on the road early.



Even at this early hour, 96Qs go into the log. I'm having fun putting out the parks/counties. Not many DX stations make it in the log. Here, ON3SY and IW2BNA make it but most parks have no DX contacts. Band conditions just don't allow it from mobile stations. Maybe with bigger antennas (dipoles or GP's) you'd have better luck, but on the whole trip, not more than a dozen DX QSOs are in the log of 2,000 contacts. 70 contacts in the log from here. Things are working out well so far with contacts. I'm sort of surprised but conditions will change over the next week.

Here you have a large but shallow lake – average depth 9 feet and max is 18. You can use any size motor on your boat but the speed limit is 5 mph! There is 15 miles of shoreline – lots of bays and inlets. Lots of camp sites, kayaking, fishing, horseback riding, snowmobiling in the winter, etc.

Weather? 60F in the mornings and I'm really enjoying that. Back home it seldom drops below 80 at night at this time of year. But I will avoid the snow mobiling in the winter here! No thanks.

Continuing to the east you hit **Lake MacBride KFF-2299** in Johnson County IA. I arrive at 1530z (10:30am local). K5GE/m is in Colorado on his way home. AB7NK/K7SEN/m are in Kane, UT. Mike, KA4RRU is checking out the mobile getting set for a trip down to FL.

Put 70Qs in the log from here.

From the state site:

**“Lake Macbride State Park's 2,180** acres offer much to the outdoor enthusiast: fishing, picnicking, swimming, hiking, camping, boating and lots more. The park is located in two units. The northern unit lies at the end of County Road F-16, 4 miles west of Solon. Here you will find a modern campground, boat ramps, beach and boat rental, picnic areas and the park office. The southern unit is located off County Road F-28 (Fifth Street in Solon), 3 miles west of Solon. The southern unit offers a non-modern campground, boat ramps, picnic areas, and a prairie.

An effort to establish the wooded valleys of Mill and Jordan Creeks as a state park was initiated by the Iowa City Chamber of Commerce and J.N. "Ding" Darling, a noted Iowa Conservationist. To raise funds to purchase additional land for the park, lots were sold in the area.

In June, 1937 the park opened to the public. The name for the park was selected from several hundred contest entries. Thomas Macbride had a distinguished 40-year career as professor of botany and president of the University of Iowa. He has been called the "father" of conservation in Iowa. In 1895 he addressed the members of the Iowa Academy of Science on the need to establish a statewide system of "country" or "rural" parks.

The Civilian Conservation Corps (CCC) constructed a number of facilities at Lake Macbride in the 1930's including the beautiful stone shelter and beach building. In 1955, the lake was enlarged. A portion of the park borders Coralville Lake, one of Iowa's largest artificial lakes, constructed by the U.S. Army Corps of Engineers.”

You've got extensive trail systems – and in the winter – snowmobiling and cross country skiing. Remind me not to head to IA in the winter!



Next up is **Palisades-Kepler KFF-2310 in Linn IA** a bit to the north off the interstate.

“In the late 1890s, James Sherman Minott acquired 160 acres of timberland on the Cedar River and built a spacious inn for the accommodation of visitors. He also established a boat rental and sold lots for the building of summer cottages. Many people took advantage of this and soon the population of the area numbered over 200. Afternoon outings on the Cedar River, capped by a quiet dinner at the combined log cabin restaurant, general store, and hotel, were common in the early 1900s. Noted American poet Carl Sandburg was a yearly visitor to the "Palisades" during the 1920s and 1930s.

In 1922, Palisades-Kepler State Park was established. Much of Minot's original land had been acquired and the State Board of Conservation had taken special notice of the unique bold cliffs and proclaimed that "these palisades lining the Cedar River are quite special." In September of 1928, the Board of Conservation accepted the gift of property from the estate of Louis H. Kepler, essentially doubling the size of the park. The Board added his name to the park name. Since that time, almost 700 acres have been added to Palisades-Kepler.

In July 1934, a Civilian Conservation Corps company was established at Palisades-Kepler. Three barracks and a mess hall were built; then, work started on the building of many park facilities. The roads, hiking trails, entry portals, lodge and other timber and stone structures remain to give the park much of its rustic character. The C.C.C. camp of 200 young men closed in 1941.”

Lots of campsites, a nice lodge and other CCC constructed facilities, boating, fishing –

and winter activities.

From here, 76Q make it into the log.

Next up – **The Herbert Hoover Historic Site in Cedar County IA – KFF-0832.**

From Wiki:

“The Herbert Hoover National Historic Site is a unit of the National Park System in West Branch, Iowa. The buildings and grounds are managed by the National Park Service to commemorate the life of Herbert Hoover, the 31st President of the United States. The park was established in 1965, shortly after it was named a National Historic Landmark. It now encompasses 186.8 acres.

Hoover spent the first eleven years of his life in West Branch. The son of a blacksmith who practiced close to the town, Hoover was born in a small cottage in 1874. The family later moved nearby to the "House of the Maples", a two-story house. Within the next few years, Hoover was orphaned and left West Branch to live with relatives in Oregon. Hoover would go on to become a successful mining engineer, humanitarian, and President of the United States.

The birthplace cottage fell into private hands and became a tourist destination following Hoover's nomination to the presidency in 1928. After the Hoover family acquired the cottage in the 1930s, they worked to develop a park aimed at recreating Hoover's formative childhood experience. Among the buildings that now stand in the park are a blacksmith shop similar to the one owned by his father, the first West Branch schoolhouse, and the Quaker meetinghouse where the Hoover family worshiped. In the 1960s, the Herbert Hoover Presidential Library and Museum first opened to maintain Hoover's presidential papers and memorabilia. Herbert and his wife, First Lady Lou Henry Hoover, are buried under a monument designed by William Wagner. After the death of Herbert Hoover, an 81-acre tallgrass prairie was developed.”

You can spend a day here – but I just dropped by to make radio contacts. 84Q go in the log. This was a National Parks on the Air site so many contacts have been made from here – but few have been uploaded to the POTA database. Many who gave out the contacts back then for NPOTA are not involved in either WWFF or POTA. Only one operation in 2016, one in 2018 by N2CX (now SK) and now N4CD in 2019 here for just over 300 QSOs total in the POTA database..

Now I take a diversion to LeClaire, IA and drop by the **American Pickers** store there.

I've been there twice before. It's amazing to see some of the finds they have on display and they keep adding to them. In case you've never heard of them, it's a very popular TV show on the History Channel. They roam the country 'picking' at folks home to buy old advertising signs, motorcycles/memorabilia, oil/gas related things.

Wiki sums it up nicely

“ The show follows antique and collectible pickers Mike Wolfe and Frank Fritz who travel around the United States to buy or "pick" various items for resale, for clients, or for their personal collections. Danielle Colby runs the office of Wolfe's business, Antique Archaeology, from their home base in Le Claire, Iowa, and more recently at a second location in Nashville, Tennessee. The men go on the road, not only following up leads that Colby has generated, but also "free-styling" - stopping at places that look like they might hold items worth buying. They also pick some places more than once.

The series introduction is narrated by Wolfe and Fritz.

“ I'm Mike Wolfe. And I'm Frank Fritz. And we're pickers. We travel the back roads of America looking to buy rusty gold.

We're looking for amazing things buried in people's garages and barns. What most people see as junk, we see as dollar signs. We'll buy "anything" we think we can make a buck on. Each item we pick has a history all its own. And the people we meet? Well, they're a breed all their own.

We make a living telling the history of America...one piece at a time. ”

Mike and Frank explore people's homes, barns, sheds, outbuildings, and other places where they have stored antiques and collectibles. They call upon casual collectors, hoarders, and occasionally people who have inherited overwhelming collections of apparent junk. “

I looked around for 40 minutes or so.

You can find entire episodes on line to watch if you've never seen them, or are an American Pickers junkie. There's also a large store in Nashville if you get that way.

Checked in at the Super 8 there in town and then checked my spotting pad. My gosh, there was a park just 15 minutes away! So I head to **Campbells Island Historic Site KFF-0983** in Rock Island County IL, in the late afternoon. Takes a bit to find it as it is SMALL. Really small! You can easily drive right on by it and the GPS lady is off by a

mile. It's also on an island that occasionally floods – the entire island. Houses there are built upon stilts.



From the IL state web site:

“At Campbell’s Island, located in the Mississippi River near present-day Rock Island, was fought a day-long battle in the War of 1812. On July 19, 1814, a pro-British band of Sauk Indians led by Black Hawk attacked a force of United States regulars and rangers under Lieutenant John Campbell. The Americans were defeated, with the loss of sixteen American lives.

Campbell’s Island State Memorial consists of a North Carolina granite monument dedicated in 1908, in a mini-park overlooking the river. A bronze plaque on the monument base, attributed to sculptor A. L. Van der Berghen, commemorates the battle. The plaque foreground depicts two soldiers with rifles and a woman comforting a wounded soldier. In the background are several soldiers and a boat, with Native American warriors emerging from trees across the river. The other three sides of the base carry Wisconsin red granite tablets describing the memorial’s history.

A low concrete wall surrounds the monument, with an inner walk. A “peace garden” contains four concrete benches, arranged in a “Sacred Circle” design and decorated with mosaic tiles in Sauk and Mesquakie artistic motifs. Designed by area artist Kunhild Blacklock and dedicated in 1998, the garden was funded by a grant through the River Action Committee of the Quad Cities. “

I make 77Qs then head back to LeClaire, IA, for dinner at Happy Joe's – which had a buffet of pizza, pasta, chicken wings and salad on this Wednesday night. Their pizza is very good, too. Been there before on past visits. Soda and ice cream for desert thrown in for a price of \$10! Such a deal!

### **Thursday – August 1 2019**

Where is the summer going? Kids will be back in school in TX in a few weeks. I head out from the Quad Cities going east along I-80 toward Chicago. There are a string of IL parks spread out along the way to make it easy. I've got to be in Addison IL - near Chicago – by 3-4 pm on Friday for the ARCI Radiofest.

First up is the **Johnson Sauk Trail State Park in Henry County IL – KFF-1002**. I start fairly early at 1338z (8:38am local). This far east in the Central Time Zone the sun is up early still. The further east and north you go, the earlier the sunrise. The 'north' benefits from longer daylight hours during the summer -but pays the price for that with shorter daylight hours in the winter. I was enjoying all the sunshine! And lower temps with morning temps at 60F and afternoon temps just above 80F most days.



From here, 129 Qs go into the log! Amazing. The further 'east' you go, the more contacts you can gather on 40M SSB. Out 'west' and 'southwest' the skip is just not long enough to catch all the population centers back east. Only one other activator had been there before me (K8VOX – Julie).

From the state web site:

“Located on a glacial moraine that forms the beautiful, rolling hills of Henry County in north-central Illinois, the park sits astride a trail that led Native Americans from Lake

Michigan to the confluence of the Mississippi and Rock rivers. Johnson-Sauk Trail State Recreation Area features 1,365 acres and abundant recreation opportunities.”

There's a small 58 acre fishing lake (max depth 21'), plus the usual hiking trails, camping, etc.

Next up not far away was **Hennepin Canal State Park KFF-0997** in Henry County, IL with 85 QSOs. Two others had been here (NJ3K, K8VOX) with 33 Qs among them so it was still 'needed' by many. From the state web site:



“Constructed from 1892 to 1907, the Hennepin Canal played an important role in U.S. history and is listed on the National Register of Historic Places. The Hennepin was the first American canal built of concrete without stone cut facings. Although the Hennepin enjoyed limited success as a commercial and industrial waterway, its construction involved a number of engineering innovations, and its waterway, locks, aqueducts and adjoining towpath continue to provide a beautiful recreational resource.

The towpath provides 155 miles of hiking/biking fun from the Illinois River to the Rock River, with the feeder canal path to Rock Falls. Segments of the trails are open to horseback riding and snowmobiling in season. Fishing along the Hennepin is outstanding, and the canal is open to boating and canoeing (locks are no longer operational and must be portaged). Campgrounds and day use areas are located all along the canal.

Before exploring the wonders of the Hennepin Canal, stop in at the Visitor Center near Sheffield. Several displays help illustrate the canal's past, including tools used to build and operate it, as well as the natural features of the canal corridor. “

Wiki adds a bit more history – shortened here for our readers:

“Opened in 1907, the canal was soon abandoned because of railroad competition. It was resurrected in the late 20th century as a recreational waterway. Its former name was the Illinois and Mississippi Canal.

The Hennepin Canal was first conceived in 1834 as a connection between the Illinois and Mississippi River, but financial problems in the state delayed many public works projects. Pressure for transportation that was cheaper than rail convinced Congress to authorize preliminary surveys on the project in 1871. Construction began in 1892 and the first boat went through in 1907, reducing the distance by barge from Chicago to Rock Island by 419 miles. While the canal was under construction, however, the Corps of Engineers undertook a widening of the locks on both the Illinois and Mississippi Rivers. The new locks on those rivers were twenty and forty feet wider than the canal locks, making them obsolete before their initial use.

In the 1930s the Hennepin Canal was used primarily for recreational traffic. The Hennepin Canal was open to boat traffic until 1951 at no cost. Ice made from the canal's frozen waters was sold during the winters to help pay the canal's maintenance costs.

Although the Hennepin enjoyed only limited success as a waterway, engineering innovations used in its construction were a bonus to the construction industry. The canal was used as a training ground for engineers who later worked on the Panama Canal. Both the Hennepin and Panama Canals used concrete lock chambers and both used a feeder canal from a man made lake to water the canals because both needed water to flow uphill.

There are 33 locks on the canal. Fourteen of the locks had Marshall gates, which are unique to the Hennepin, and were raised and lowered on a horizontal axis. Five of the locks have been restored to working condition, although they are not used.

The state park spans five counties (Rock Island, Bureau, Henry, Lee and Whiteside) and is 104.5 miles (168.2 km) long.”

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You can run this in any of the counties – as long as you can get 'on the canal trail' – there are access points. I ran it at the visitor center.

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There's another canal in IL – the I & M – which was constructed earlier and was more successful. It helped make Chicago into an economic center before the railroads took over a century later.

From Wiki: “The Illinois and Michigan Canal connected the Great Lakes to the Mississippi River and the Gulf of Mexico. In Illinois, it ran 96 miles from the Chicago River in Bridgeport, Chicago to the Illinois River at LaSalle-Peru. The canal crossed the Chicago Portage, and helped establish Chicago as the transportation hub of the United States, before the railroad era. It was opened in 1848.

Illinois and Michigan Canal Locks and Towpath, a collection of eight engineering structures and segments of the canal between Lockport and LaSalle-Peru, was designated a National Historic Landmark in 1964.

Portions of the canal have been filled in. Much of the former canal, near the Heritage Corridor transit line, has been preserved as part of the Illinois and Michigan Canal National Heritage Corridor. “

It's not a park unit, so I didn't spend any time investigating it.

Next up was the **Mautino Fish and Wildlife Area – KFF-4141** in the system of parks – still in Bureau County, IL.



From the state web site: “Mautino SFWA is mostly unreclaimed strip mine ground containing several lakes of various sizes. The site contains 911 total acres, 891 acres of which are available for archery deer and turkey hunting, approximately 435 acres for upland hunting and 40 acres are available for dove hunting.”

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49Qs go in the log from here. Conditions aren't good and I don't sit around long in the same county.

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Next up is **Donnelley/DePue KFF-0990**. You can run this at two locations – one in Bureau County (with a visitor center) or one in Putnam County with an 'office'. I chose the new county location. That's not the best move. If you run this, go to the Donnelley location!

From the state site:

“The Donnelley/DePue State Fish and Wildlife Areas complex is managed primarily for migratory waterfowl. Frank C. Bellrose, world-renown waterfowl expert, designated this Great Bend as the entry point to the lower Illinois River valley, an important North American waterfowl migration corridor.

The Donnelley/DePue complex is home to a \$1 million State Duck Stamp Project, which was funded through State Duck Stamp dollars, State of Illinois Capital Development Board funds and Ducks Unlimited M.A.R.S.H. contributions. This project greatly increased the complex's ability to provide significant sanctuary with dependable food resources as well as increased services to the high hunting demands of northern Illinois.

These state wildlife areas contain a variety of wetland habitats critical to migratory waterfowl. Consequently, much of the 3,015-acre complex is managed for waterfowl feeding, nesting, resting, hunting and viewing.”

It took a while to actually find the 'office' in DePue – the web and the GPS point to the end of street and there is a sign 'no trespassing – authorized vehicles only'. There's an IL state park sign, though. Hmm.....It's a long way back to the other location. I carefully pull in looking for someone to talk to. No one around. Well, while 'waiting' to find someone to talk to, I sit among the large metal buildings which is a rotten radio location. Signals are blocked in half the directions and if you move away a bit from the building by 20-30 feet, there's a 10 foot high chain link fence which isn't any better for getting signals out – blocked. Hmmm.....well, while waiting, I put out the park. 30 minutes later, someone appears and talk about 'access' to the FWA. Nope, off limits from here. 'No one' from the public is allowed – – to enter and 'disturb' the wildlife. Hmmm...well, I ask if this 'office' is official park property and he said 'yes'. I asked if I could sit here another 20-30 minutes to make some 'radio contacts' and he agreed it was OK. So I did. Only managed to eek out 49 QSOs but that was enough to get over the 44 magic number threshold. No one had run this before. The DePue location is listed as an ' park office' but it's really just a small metal HQ building with no markings - with several large metal garages close by for construction equipment and trucks - that doesn't invite or want visitors at this location! Not even a doorbell or a sign on the building.

Go to the visitor center (official park property) in Donnelley to run this! There are wildlife observation points you can access from there, too.

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I was going to run Mattheisen State Park next – the GPS lady took me up the interstate to Rockford, turned me around back down the interstate, and 3 miles later said 'you've arrived'. Duh! No exit and no park! GPS lady had a major fail. I check with Mapquest and this park is located miles south of the next one – which is 10 miles to the south. So I head to another park nearby. Always have Plan B in case plan A fails.

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Next up is very popular **Starved Rock State Park. KFF-1027 in LaSalle County IL.** I arrive late in the day at 2055Z and the place is mobbed. There must be 500 parking spots and 80% of them are taken on a Thursday afternoon. There are crowds

everywhere. I head to the most remote spots in the parking lots to run this. 54Q go in the log but that's enough. To date, over 7 previous operations and 280Qs have been made from here. Norm, N9MM, camped here for a few days and made most of them.

From the state site:

“Starved Rock State Park on the Illinois River bluff in La Salle County is one of Illinois' most beautiful destinations. The park's 18 canyons feature vertical walls of moss-covered stone formed by glacial meltwater that slice dramatically through tree-covered sandstone bluffs. More than 13 miles of trails allow access to waterfalls, fed season runoff or natural springs, sandstone overhangs, and spectacular overlooks. Lush vegetation supports abundant wildlife, while oak, cedar and pine grow on drier, sandy bluff tops.

Recreational opportunities abound, from hiking to camping to fishing, boating and hunting. The Starved Rock Visitor Center is open year-round, and the 1930s-era stone and log Starved Rock Lodge offers luxury lodging, cabin rooms, and fine dining.

Starved Rock State Park's cultural history can be traced to 8000 B.C., with Native Americans tribes and European explorers documenting villages and encampments near the park along the banks of the Illinois River. The park's name is derived from a Native American legend of a band of Illiniwek who died of starvation atop the 125-foot sandstone butte.

This area has been home to humans from as early as 8000 B.C. Hopewellian, Woodland and Mississippian Native American cultures thrived here. The most recent and probably the most numerous group of Native Americans to live here was the Illinois, from the 1500s to the 1700s. Approximately 5,000 to 7,000 Kaskaskias, a subtribe of the Illinois, had a village extending along the bank of the Illinois River across from the current park. In 1673, French explorers Louis Jolliet and Father Jacques Marquette passed through here on their way up the Illinois from the Mississippi. Known as “Pere,” the French word for “Father,” Marquette returned two years later to found the Mission of the Immaculate Conception-Illinois’ first Christian mission-at the Kaskaskia Indian village. When the French claimed the region (and, indeed, the entire Mississippi Valley), they built Fort St. Louis atop Starved Rock in the winter of 1682-83 because of its commanding strategic position above the last rapids on the Illinois River. Pressured from small war parties of Iroquois in the French and Indian wars, the French abandoned the fort by the early 1700s and retreated to what is now Peoria, where they established Fort Pimitoui. Fort St. Louis became a haven for traders and trappers, but by 1720 all remains of the fort had disappeared.

Starved Rock State Park derives its name from a Native American legend of injustice and retribution. In the 1760s, Pontiac, chief of the Ottawa tribe upriver from here, was slain by a Peoria brave (sub tribe of the Illinois) while attending a tribal council in southern Illinois. According to the legend, during one of the battles that subsequently occurred to avenge his killing, a band of Illinois, under attack by a band of Potawatomi (allies of the Ottawa), sought refuge atop a 125-foot sandstone butte. The Ottawa and Potawatomi surrounded the bluff and held their ground until the hapless Illinois died of starvation- giving rise to the name “Starved Rock.”

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There are two less run parks nearby but time was short so I headed on in to the Super 8 in Peru for the night. Dinner at the Master Buffet (Chinese) – good.

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### Friday August 2, 2019

I needed to get to Addison – about 120 miles further east – by 3pm or so, but there was till time to run some parks today. I flip a coin – Mattheisen or Buffalo Rock still in LaSalle County. Both had very few Qs by others. As I headed on down to the Starved Rock area, the sign for **Buffalo Rock State Park KFF-0982** came up first so that's where I headed. Only 22 Qs by 2 others here ( KB3WAV/KC3RW - enough for a POTA activation each - but hardly enough to give it out to park chasers!), I added 75 more Qs to the total from here.



From the state site:

“Buffalo Rock State Park is located on a bluff which once was an island in the Illinois River. Now standing majestically on the north bank, this promontory affords a magnificent, sweeping view of the Illinois River. Located approximately 3 miles west of Ottawa in LaSalle County, this 298-acre park has long been a favorite picnic area, as well as a nature lovers’ delight. The area of Buffalo Rock was the home of the Illinois Indians when Louis Jolliet, the French explorer, and the Jesuit missionary priest Father Jacques Marquette made their trip up the Illinois River in 1673. Later, the Illinois tribe was virtually annihilated in protracted warfare with the aggressive Iroquois. “

There are only primitive walk in sites for camping so this is mainly a day use picnic area. Not a problem. I pull in and have a good run, then leave and head east. See lots of signs for the I&M 'canal corridor' as you pass over it many times.

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Next up is **Illini State Park KFF-0999** in LaSalle County (still). Arrive at 1408Z and get to work. Catch 4 park-to-park contacts right off the bat, then hit 20SSB for a good run. Then the CW bands to add in a lot more. There were 36 previous QSOs and I added in 86 more from here.

From the state web site:

“Illini State Park is the type of park you think of when you think of big picnics and family gatherings. With its rustic Civilian Conservation Corps buildings and riverside picnic areas, Illini State Park offers beautiful views and a sense of history not found in many other parks.

Named for the native Americans who once inhabited the area, the 510-acre Illini State Park is located south of the Illinois River between Marseilles and U.S. Route 6. In the mid-1920s, the U.S. Army Corps of Engineers built a barge canal to bypass the rapids. The canal borders the park, and visitors can watch as large barges pass through the Marseilles Locks. Less than a mile north of the park is the historic Illinois and Michigan Canal, completed in 1848 when the section from Marseilles to Morris opened.

Illini was dedicated as a state park in 1935. Hickory, ash, walnut, elm, cottonwood, oak and maple trees provide shade in the summer and beautiful colors in the fall. Wildlife abound year round.

Both tent and trailer campsites, including electric and sanitation service, are offered and some of the sites offer outstanding views of the river. River fishing is popular out of Illini State Park, where a boat ramp is available. “

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On to **Gebhard Woods State Park in Grundy County IL - KFF -0995**. The GPS lady gets you close if you enter the 'street address' but misses by half a mile. Don't blink as this is a small park and the entrance sign is essentially 'missing' with just a very small temporary sign.



From here, 59Qs go in the log. Time is getting short so just run CW bands.

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Time for a quick run at **Des Plaines State Fish and Wildlife Area** – KFF-4120 just a few miles of detour to get there. I've got to go half a mile north on the interstate – but it is almost stopped creeping along at 10 feet per second. Takes 20 minutes to go that half mile to the next exit to get off! Groan. Get there and work at getting to 44Qs. To date, 86Qs have been made by 3 others. I add in 57 more.



From the state site:

“Visitors will delight in the abundance of wildlife, restful picnic areas and variety of sportfishing species. Farmland and woodland, prairie and swamp, still water and shoreline offer unlimited opportunities for nature lovers and sportsmen. More than

350,000 people annually visit Des Plaines SFWA - an area of more than 5,000 acres, including approximately 200 acres of water.”

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Time to leave. I head to the Hilton Gardens Hotel in Addison where the Radiofest is held. (\$99/night convention rate).

Continued later.....

## Ohio State Parks on the Air

OK, it's that time again. In about a month, lots of Ohio state Parks will be on the air for the Ohio State Parks On The Air contest. This is our 12th annual event. It runs from 1400 to 2200 UTC on September 7th. .

As of August 6th, 33 of the 75 Ohio state Parks have activations planned.

Also, watch for activations in the days before & after the contest.

This is a SSB only contest, but lots of us who are activating will be also bringing our keys, paddles, bugs, etc.

I'll be posting info for the activators in the coming weeks. Unfortunately, some get in the habit of hanging on 80 Meters, and working only other Ohio State Parks. I hope to remind them not to forget 40 & 20 Meters this year.

Hopefully the rain will hold off, and we'll have a lot of activity this year.

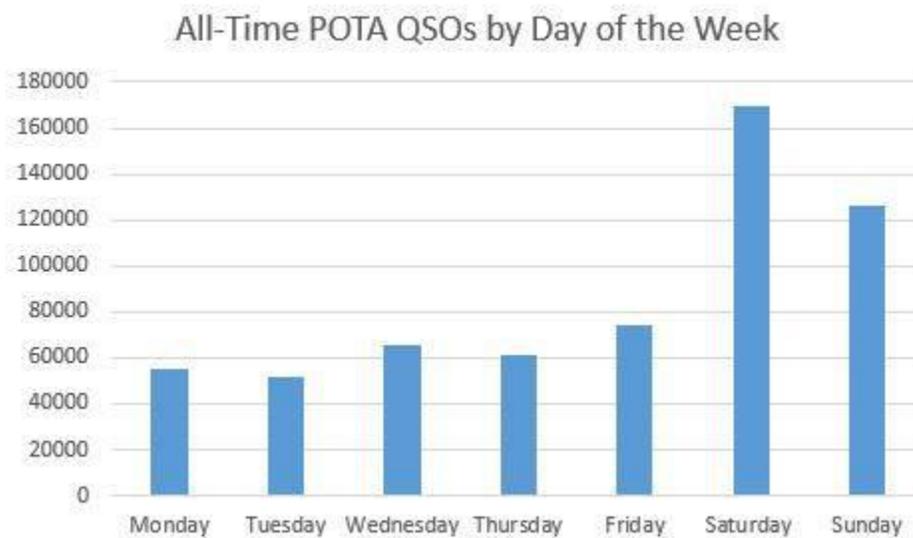
You can find out more about OSPOTA on our website at [ospota.org](http://ospota.org), and our facebook group (<https://www.facebook.com/groups/OSPOTA/>).

## POTA Statistics

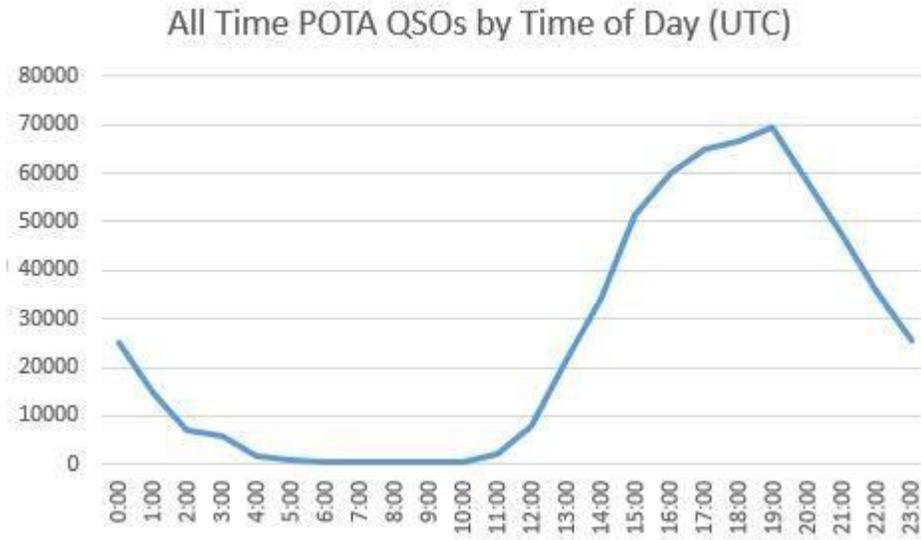
From the Parks on the Air Webpage:

Random fun POTA Fact! I was pulling some data and thought everyone might like this:

In terms of numbers of contacts, Saturdays are the busiest POTA days, and Tuesdays are the slowest.



In terms of numbers of contacts and UTC, the 19:00 hour is our busiest time of day and the 8:00 hour is our slowest time of day.



Happy POTAing!

## Pics from Bill, K2HVN

K2HVN sent along two pictures from his 'summer QTH' this year in Aroostook County Maine.



I've worked him from the various parks I've been in. If you need Aroostook, drop him an email. He's got some high QRN levels in the park – but maybe it will work out.

## Second District IOTA Expedition

There was a nice article in this month's QST the September 2019 issue on an expedition to an island 200 miles offshore from Nome AK. Naturally, for the IOTA folks, it's one of the 'rare ones'. VE3LYC set out to put this on the air for a DXpedition that was going to last a week. First he headed to Nome AK and stopped by at Ramon, AL7X, QTH for a night. If you've recently heard a big signal out of the Second District, it's likely from this fixed station. Here's a pic of Ramon's QTH. Note the nice Hex-beam up 60 feet above the house..



### **VE3LYC/KL7 NA-150**

Little Diomedede is a small island of 7.3 km<sup>2</sup> in the middle of the Bering Strait. It lies 36 km west of mainland Alaska and 3.9 km east of Big Diomedede Island, the easternmost point of Russia. The International Date Line passes about 1 km west of the island, whose cliffs rise sharply to 494 m above sea level. These islands were part of a now subsided land bridge, used by humans in their migration from Asia to North America more than 10,000 years ago. They were sighted by the Danish-Russian explorer Vitus Bering on August 16, 1728, St. Diomedede's day.

The island is home to 64 residents, whose village is located on the western shore. The Inupiat are known as the "walrus people", due to the role played by these mammals in their life and culture. Their community can only be reached year-around by helicopter, from Nome, 230 km away. Little Diomedede is part of the IOTA reference NA-150, in demand by 88.6% of the IOTA members. Organizing my trip in March aimed to take advantage of better HF propagation this season, as well as ice pack conditions, possibly allowing for passage and setting up camp at the northeast edge of the island, in order to avoid the massive rock wall obstructing the propagation path to NA and SA.

The radio station was setup in the mechanical room, on the ground floor of the local school, while my accommodation was on the third floor. Built in two stages, 1975 and 1983, the school enrolls now 17 students. A blizzard began soon after my arrival, lasting for five days. Northern cold winds pummeled the island at 65 km/h and -20C, bringing more snow on top of the largest amount ever witnessed by locals, 2.5 m high at times.

The wind switched from the south for the remainder of my stay, bringing warmer weather. Fog and freezing rain became common, preventing the helicopter landing,

which left me stuck on the island for an additional seven days.



I used an IC-7000 with a KPA-500 amplifier, and a multi-band wire vertical. The log includes 2667 QSOs between Mar 19 and 31, 2019, with 2456 stations in 58 DXCCs on 5 continents. About 17% of the contacts were on 20 m, 82% on 30 m, and 1% on 40 m. All QSOs were in CW, since the polar flutter and heavy QSB conditions made the use of the SSB less reliable. The continental distribution of QSOs was EU 59%, AS 38%, NA 2%, OC 1%, and AF <1%. “

Article from <https://irefradio.com/sponsored-dxpeditions/ve3lyc-kl7-na-150/>



As you soon figure out from the above article, very few US stations made it into the log – about 50 contacts out of over 2,500, and 30M was the band that worked the best from there. Almost no contacts on 40M. It was 'too far' from the US to there.

However, some did manage to work the Second District from the US, and many, many did from EU. I wonder how many county hunters got it?

## Mobile Activity in August

Starting at the end of July: (7/25)

W4SIG was running counties in UT, WY, OR, and ID.

AB7NK/K7SEN were in MT headed west to ID

KB0BA/N0XYL were already in ID, OR, on their trip west

AB4WL/KF4INA spotted in AL parks/counties

W8TZA spotted in MO

K5GE was in MT at this point headed to ID for several days of zipping all over ID. Circled back through CO, NM to TX later.

N8KIE was in MT headed to ID, NV, CA – then a flight to HI for 2 weeks – then a return trip to MI later. Put out Honolulu HI while in HI.

KB3WAV activated parks in PA (and the counties)

N4CD hit the road headed to IL and back

KB6UF was on the road in MS

WW5DD ran counties in TX

A few park activations like N4ZN, AB9CA/0, W4JL, WK2S, WB2SMK, were spotted with their counties on [ch.w6rk.com](http://ch.w6rk.com)

W8OP spotted running TN counties

NA8W was mobile in OH, IN, counties

WY0A spotted in TX, LA counties. Later ran many in FL. Then back through GA. Winding up in IL then QRT. Later headed to KS

K3IMC was over in MS headed through AR, OK, TX, KS, NM, CO, then back around through TX to home in GA.

KA4RRU headed out from VA down to FL and back

K8TE spotted in CO counties

KC3X ran a few in NC

K8ZZ headed to CO to join up with W0GXQ for a joint, several day trip around the state. Left KS via a few parks. Spent week running around CO, then headed back home to KS.

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Toss up between 'most active' mobiles this month. Long trips by AB7NK/K7SEN,

K5GE, N8KIE, KB0BA/N0XYL, W0GXQ, K8ZZ, K3IMC, WY0A, KA4RRU, N4CD, W4SIG....it was a good month for getting counties!

## On the Road with N4CD III

Each year, the Antique Radio Club of Illinois (ARCI) holds the RadioFest in Addison, IL at the Shriner's Center. There are several hundred members in the club – located around the Chicago area.

The Shriner's Center is a large building with auditorium and other rooms for meetings. They've got large parking areas for probably close to 800 cars so it is an excellent place for the Friday evening auction and the Saturday flea market.

### At the Auction

There was a good collection of things for sale – from old 1940s era TV sets with 5 or 7 inch screens, to a 30 or 35 lb 'portable' 7 inch TV, hundreds of old radios from 1920s - broadcast sets, consoles, tombstones, cathedrals, maybe 20 ham receivers from the 50s and 60s, grandfather clock radios. Here's a video of what was available at the auction.

[https://www.youtube.com/watch?v=X3B\\_G\\_eRLII](https://www.youtube.com/watch?v=X3B_G_eRLII)

There were radios that sold for \$35 and some that sold for \$1000. About 25% of the items did not receive the minimum bid.

### **From ARCI – auction results:**

135 people representing 21 states participated in the auction this year, which is almost the same as the 137 who participated last year.

53 individuals consigned lots, slightly down from the 59 last year (52 in 2017).

249 lots consigned, which was a 15% decrease from the 292 lots last year (229 lots in 2017). This lower number was largely driven by the club's decision to limit lots to 8/person and cap the maximum number of lots at 260 so the auction would end at a reasonable hour.

The average sale price was \$260, up from \$170 last year and \$155 in 2017.

177 of the 249 lots consigned this year sold. That means that there were 72 no-sale (reserve not met) lots this year, a no-sale rate of 29%, down from 31.5% last year (22.2% in 2017). Of the no-sale lots, 39 were radios, and 7 were speakers. The remainder of the no sale items were either advertising items, amplifiers, tubes, test equipment, televisions, parts, or documentation.

The total sales were \$46,045, up 35% from last year! Here's how those figures compare with the past 8 years:

#### Year Total Sales

2019 \$46,045

2018 \$34,050

2017 \$35,885

2016 \$32,900

2015 \$24,705

2014 \$37,783

2013 \$26,480

2012 \$25,300

2011 \$16,400

Compared to last year, the number of items in the \$50 ~ \$99 price range was nearly identical. The percentage of items in the \$100 and higher categories grew significantly while the number of items in the \$50 and under category was cut in half!

#### Hammer Price Lots Sold 2019 Lots Sold 2018

\$500 or higher 20 (11%) 15 (7%)

\$250 ~ \$499 24 (14%) 22 (11%)

\$100 ~ \$249 58 (33%) 57 (28%)

\$50 ~ \$99 45 (25%) 46 (23%)

Less than \$50 30 (17%) 60 (30%)

## Top 15 Lots Hammer Price

Webster Electric 1920's 6-piece radio \$3,200  
Troy Model 5X Peach Mirror Radio 1935 \$2,600  
Sterling Primax Cone Speaker \$2,100  
Capehart Pedestal Speaker \$1,600  
RCA/GE Dolls 1935 \$1,500  
Emerson Blue Catalin 1947 \$1,500  
Confucius Horn Speaker \$1,400  
RCA 77DX Microphone 1945 \$1,400  
EKCO A22 Round Radio G.B. 1946 \$1,400  
RCA 40X57 Golden Gate Exposition Radio \$1,300  
Sparton 557 Sled 1936 \$1,200  
Fada Bullet Green/Blue 1946 \$1,000  
Altec Speaker Pair \$800  
Dynaco System Incl: PAS-3X, FM-3, ST-35 \$750  
50 Hi-Fi Tubes, most N.I.B. \$725

The total sales of the top 15 lots was \$22,475, up from \$12,625 last year and up from \$13,590 in 2017. The quality of the top 15 items drove the higher overall totals for this year's auction. This may also be the first year that a donation item (Altec speakers) has made it into the top 15, which is great news for ARCI! ARCI's donation lots brought in \$1605 for the club. (TEK: The club donations help cover some costs of Radiofest 2019.)

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Sadly there were not a lot of shortwave regens up for sale. One that was was a pristine Heathkit K-1 / K-2 receiver from the 1948-49 era. It was a 3 tube set with plug in coils. This one was in beautiful shape, with the original box, all plug in coils (BC, long wave and 2 shortwave), and as it turned out, a reserve price of \$550. It did not sell. Maybe folks would have paid \$350.



Heath came out with the K-1 in 1948 – it used 3 tubes (12C8, 12A6s) - a few months later replaced by 1626s in the K-2 version to save a few extra pennies. 1626's were everywhere at real cheap prices after WW2. They added a vernier in the K-2 version. It only shipped for a few months before being replaced by a simple superhet receiver in 1949. Thus they are fairly scarce. (N4CD has one in the collection).

Here's an interesting article on the K-2 version discussing the differences – and the comment “**All-Wave receivers are probably a Heathkit you won’t want to own unless you are a collector**”

[http://www.w6ze.org/Heathkit/Heathkit\\_081\\_K2.pdf](http://www.w6ze.org/Heathkit/Heathkit_081_K2.pdf)

article on the original with more info

[http://www.w6ze.org/Heathkit/Heathkit\\_080\\_K1.pdf](http://www.w6ze.org/Heathkit/Heathkit_080_K1.pdf)

There was one item I bid on and won. It was a modern working replica of a Marconi Magnetic Detector – usually called a “Maggie”. If you watch the Titanic disaster movies, you'll see these in action. The 'state of the art' at the time was using this detector after the famous Marconi 'Three Circuit Tuner'. The one I bid on was a working model, recently constructed, and lacking the clockwork drive. I'd love to have a real one in the collection, but real ones sell for \$30,000 and up if you can even find one up for sale. Maybe every five years one goes up for sale somewhere in the world, usually on high dollar auction sites like Sotheby. If you get to the AWA museum in NY state (near Rochester) or to the Titanic Ship tourist attraction in Branson, MO, you'll see real Marconi Maggies (both owned by Jim Kreuzer of NY). All Marconi Equipment is

now very, very, very expensive. Marconi never 'sold' equipment but leased it. He also 'leased' the radio operators on the ship. The radio folks on the Titanic worked for Marconi, not White Star Lines, the owner of the ship. Maggies all became obsolete when 'continuous wave' CW, generated by vacuum tube transmitters, came into use in the late teens. It could not receive CW – only spark generated signals. There was no further use for it.

## **The Magnetic Detector**

The magnetic detector was an early form of radio detector used during the early 1900s. The magnetic detector, or "Maggie" was found to be more reliable than the coherer, an earlier form of detector for wireless signals.

Although Marconi did not invent the magnetic detector, he did a considerable amount to develop it and as a result, it was sometimes referred to as the Marconi Magnetic Detector. Although the magnetic detector was later superseded by more sensitive forms of wireless or radio detector, the Maggie, provided useful service while it was in use.

The effects on which the magnetic detector is based had been observed as early as 1842. At this time Joseph Henry had been investigating the effects of electromagnetism and he discovered that magnetized needles became demagnetized when they were in the vicinity of a discharging Leyden jar.

Then in 1895 Ernest Rutherford took this idea forwards and used the concept to detect radio waves, or as they were referred to at this time, Hertzian waves. He managed to achieve signal detection using this process at a distance of just under a mile at the Cavendish Laboratory in Cambridge, UK.

The ideas used by Rutherford were further developed by Professor Ernest Wilson in 1897.

Later, knowing the limitations of the coherer, and especially thinking of setting new records for distance, Marconi realized the need for any improvements in receiver sensitivity. As the coherer was notoriously insensitive, he invested considerable effort into developing the magnetic detector which had distinct advantages and possibilities for further development. He patented his ideas improvements for the magnetic detector in 1902.

Rather than using a telegraph sounder which sounded when the coherer cohered, the magnetic detector used headphones in which the operator could actually hear the signal. Much of the work in optimizing and developing the concept for the Marconi magnetic detector was undertaken at the Chelmsford base of the Marconi company. Little was understood about the science and technology behind the magnetic detector, so much of the work was trial and error.

That said, the magnetic detector represented a major improvement in detector reliability. As a result, it was widely used in ships and became affectionately known as a Maggie. Marconi started to replace the detectors on ships through 1903, thereby considerably improving the performance of the systems he had installed and he gained an edge over his competitors.

After the invention of the magnetic detector its use became widespread. It was more sensitive and reliable than the coherer and it enabled signals to be directly heard in headphones. The magnetic detector was more sensitive and also more reliable than the coherer. As a result, it was widely used as the standard detector on maritime receivers between about 1902 until about 1914. They were particularly suited to use on board ships where they were relatively immune to their movements, unlike coherers which were not.

After this time it tended to be replaced by crystal and valve or vacuum tube detectors that were more sensitive. Marconi made considerable use of the magnetic detectors using them for his famous first transatlantic wireless transmission in 1901.

The magnetic detector had a number of advantages over the previous coherer detector used:

**\*\* Improved sensitivity:** the coherer had been notoriously insensitive – it needed sufficient signal to cause the filings in the coherer to cohere. The magnetic detector managed to provide a significant improvement, and the signals were actually heard in headphones.

**\*\*Improved performance in presence of interference:** Interference was a particular issue because the coherer would respond to any impulse. As headphones were used with the magnetic detector and the signal itself heard, it was possible for the operator to distinguish between the signal and interference.

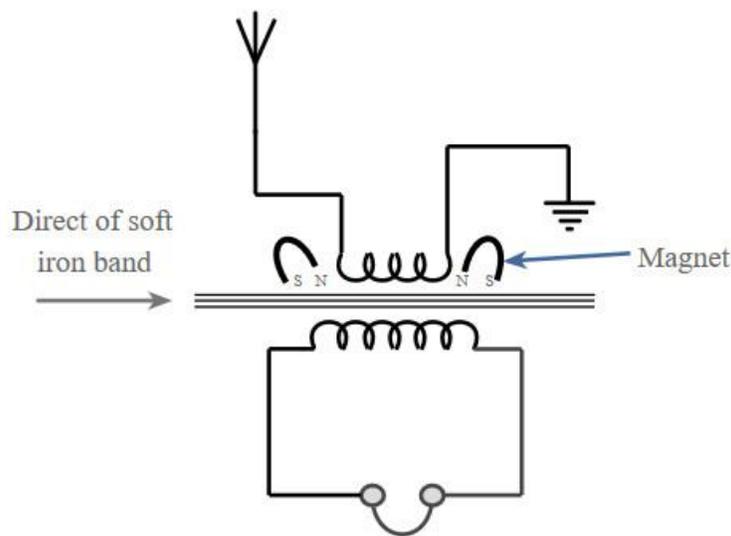
**\*\*Improved reception speed:** The coherer had a limited speed of operation - it needed to be decohered before another signal could be detected. The magnetic detector had no

such limitation. It was therefore possible to considerably increase the speed of transmission when using a magnetic detector.

Magnetic detectors were relatively complicated to manufacture and this made them expensive. As a result they were often outside the reach of amateur experimenters.

### Magnetic detector operation concept

The operation of the magnetic detector is based on the effects that electromagnetic radiation has on ferromagnetic materials. The basic magnetic detector normally comprised of a band of iron wires that moved continuously around two ebonite pulleys. The band passed through the center of two concentric coils of wire. The first coil often referred to as the primary was connected to the antenna circuit. The second coil, i.e. the secondary was connected to a telephone earpiece allowing the signals to be heard.



Operation of a magnetic detector

The magnetic detector operation is based around the fact that the magnetization of the soft iron wire has a certain level of hysteresis. The permanent magnets shown on the diagram of the magnetic detector are arranged to create two opposing fields but directed towards the center of the coils.

These permanent magnets serve to magnetize the iron band as it moves through the inductor – first in one direction as it enters the coil and then the other as it leaves the coil. As a result of the hysteresis in the magnetization process of the soft iron band in the detector, a certain threshold magnetic field is required to reverse the magnetization. As a result, the magnetization in the moving wires does not reverse in the center of the detector coil where the field reverses, but some way toward the departing side of the wires.

In the absence of an incoming radio signal the location where the magnetization of the moving band reverses is stationary with respect to the coil. As a result of this there is no flux change and no voltage is induced in the pickup or secondary coil in the magnetic detector.

When a signal is received and enters the magnetic detector coil, the operation changes. The rapidly reversing magnetic field from the coil exceeds the level required to overcome the hysteresis of the iron. This causes the magnetization change to suddenly move up the wire to the center, between the magnets, where the field reverses. The movement of the position of the magnetization change has an effect similar to suddenly moving a magnet into the coil. It causes the magnetic flux through the secondary coil to change, inducing a current pulse. As the secondary coil is connected to headphones, the current pulse can be heard as a sound.

As the transmission from a spark transmitter consists of a series of damped impulse waves, the sound heard in the headphones was generally a buzz, or sometimes even a more musical tone.

As described by S Bottone in his early book of 1910 entitled *Wireless Telegraphy and Hertzian Waves*:- “On placing the ear to the telephone, a distinctive ‘click’ is heard at every impact of the wireless wave on the aerial.”

The magnetic detector essentially consists of a low impedance input or primary coil, typically wound on a hollow glass tube. One end is connected to the antenna, and the other end to ground.

A second coil is wound on the glass tube and this forms a step up transformer as it has more turns on the coil than the primary. It forms a step up transformer enabling this winding to be connected to a set of high impedance headphones.

**The magnetic detector was able to detect spark transmissions that were used in that time; it was not able to detect signals that were an interrupted continuous wave,**

**like those from valve transmitters.**

The improved sensitivity over coherers meant that the magnetic detector was widely used in the days of spark transmissions up to the late 1910s when valve and other types of transmitters used continuous wave signals.

Source:

<https://www.electronics-notes.com/articles/history/radio-receivers/magnetic-detector.php>

Here's a recreation of the Titanic Wireless Room – recreated at a museum in Arborg, Denmark. On the desk top you see the famous Marconi 'Three Circuit Tuner' to the left and the magnetic detector in the center of the desk.



Here's what my replica 'Maggie' Magnetic Detector looks like. It's a 'working model' likely no where near as sensitive as the original one, nor does it have the 'clockwork'

mechanism to drive the iron wire belt, but it does work as you turn the crank on the right end.

The coils are wound with like #44 wire – teeny, weeny, wire and the iron belt is 35 turns of insulated #37 wire.



On Saturday, the flea market starts early in the morning but is in full swing by 9am or so. I partake of the great breakfast buffet at the Hilton (\$15) then head on out at 7am in the morning hunting for regens and other interesting things. I spied a Knight Kit Space Spanner (common) for \$40 asking – likely selling for less, and no other commercially made sets. I did run across one 'kit' type radio from the 1930s era. Looked like it used a '01A or similar tube as a detector. It came with 4 plug in coils – 3 in decent shape but needing some TLC and one seriously hurting coil. Didn't pay a whole lot for it.



Top view



Front view and coils

One variable with vernier for coarse tuning, one for fine tuning, and a 'rheostat' for regen control by controlling the filament voltage of the tube.

Here's a video taken in the flea market

<https://www.youtube.com/watch?v=6gS91f6o4X4&t=0s>

Spent a couple hours wandering the flea market and left. These days I pretty much

follow the 'one hand rule'. If I can't carry it in one hand, I don't buy it unless it is really exceptional and worth adding to the collection! I've got way too much junk.

Goofed off the rest of the day resting up for the trip home.

## 8 Meter Amateur Band Proposal

### **Petition for Rulemaking Asks FCC to Create a New 8-Meter Amateur Band 06/27/2019**

The FCC has put on public notice for comment a Petition for Rulemaking (RM-11843) that seeks the creation of a new 8-meter Amateur Radio allocation on a secondary basis. The Petition suggests the new band could be centered on an industrial-scientific-medical (ISM) segment somewhere between 40.51 and 40.70 MHz. The spectrum between 40 and 41 MHz is currently allocated to the Federal Government and, as such, within the purview of the National Telecommunications and Information Administration (NTIA). ARRL member Michelle Bradley, KU3N, of Maryland, filed the petition in May on behalf of REC Networks, which she founded and described in the Petition as “a leading advocate for a citizen’s access to spectrum,” including Amateur Radio spectrum.

“REC feels that the time is right for the Commission to open a Notice of Inquiry and eventually a Notice of Proposed Rulemaking, and in cooperation with the NTIA, this new band opportunity can be realized to spark the next generation of ‘makers’ in the fields of science, technology, education, and math (STEM), especially women and girls,” Bradley told the FCC in the Petition. “The more opportunities we give to make things, the more opportunities we have to build a pool of experts in STEM, right here at home.”

The Petition said the objective of a new band would be “an effort to foster experimentation into the propagation characteristics of this band midway between the 10- and 6-meter bands.” An allocation in the 8-meter band is available to radio amateurs in Ireland, where the Irish Radio Transmitters Society has developed a band plan for 40 – 41 MHz.

“REC perceives this spectrum can be used for weak signal experimentation and eventually general amateur use, especially along transatlantic paths using CW, SSB,

digital modes such as FT8 and digital voice,” the Petition said. “As no radios are mass-produced for this band at this time, this opens up new opportunities for ‘makers’ to construct transmitters, receivers, and antenna systems that can be used in this spectrum.”

REC anticipates “very low” usage of the new band, “with peak usage around sporadic-E episodes, operating events such as ARRL Field Day, and VHF contests, as well as during the peak of sunspot cycles,” Bradley told the Commission. “[W]e feel that the sharing of 40 MHz can be accomplished in a manner that serves the needs of the Amateur Radio Service while meeting the organizational missions of Federal Government agencies that utilize this spectrum.”

Interested parties may file short comments on RM-11843 via the FCC’s Electronic Comment Filing Service (Express). Visit the FCC “How to Comment on FCC Proceedings” page for information on filing extended comments.

## On the Road with N4CD IV

After two nights in Addison, IL it was time to hit the road headed home. I'm up early and on the road by 6:15am. The sun is already up here and there are miles to go to get home – about 1,000 the 'short way'. I've got to trek on down through IL, to MO, down along the river to Sikeston, MO for the night. I can hit some parks along the way but won't be stopping long at them. I'll aim for 45 or 50 contacts then skedaddle. (Need 44 for credit for a WWFF activation).

On the last trip here, I tried to run **Railsplitter State Park**. It's on the IL state maps, the AAA maps, and on the list of POTA sites in IL. I never found it. I spent 30 minutes hunting for it at the address listed and nearby. Nope. There was no one around to ask, either. I gave up. Just some Fish and Wildlife Area (FWA) not on the official list of parks. Skunked on the trip 2 years ago. This time I had done more research and knew the answer.

**Would you believe that Railsplitter State Park was renamed in 1995, more than 24 years ago, but state documents, maps issued by the state, still show it as Railsplitter? Wow!**

If you hunt for Railsplitter State Park on the IL parks web page now finally, you get:

“Edward R. Madigan (1936-1994) was honored for his lifelong dedication to state and national public service when Railsplitter State Park was renamed in his memory in 1995. The site is along Salt Creek in Logan County on the south edge of Lincoln. This 974-acre site is an ideal destination for those looking for a quiet and peaceful experience.

The State of Illinois acquired the land in 1970 from the Department of Mental Health. Development of the park started in 1971.

Species of trees now in the area include oak, walnut, sycamore, ash, hackberry and hickory. The park is the home of the largest sycamore tree in Illinois. Native birds and wildlife abound.”

OK....I now knew the secret. If you want to run IL park **KFF-1016**, navigate to the same place but recognize it has a new name. (By the time you read this, the POTA database and others will likely be up to date)



No one else apparently had figured this out as it was an 'all time new one' (ATNO) and just a mile or two off the interstate. The run went well with 61Qs from Logan County, IL.

Now it was zipping on down the interstate to the St Louis area. There's another never run park for POTA there – an ATNO- **Frank Holten State Park – KFF-4095** in St Clair County IL. Joyce, N9STL, used to keep this county on the air but is inactive lately after reaching Mobile Diamond status. I make 61Qs from here.

From the state site:

“Within view of the St. Louis Gateway Arch, Frank Holten State Recreation Area is an ideal destination for outdoor recreation in an urban setting in East St. Louis. The 1,080-acre St. Clair County park features the 18-hole Grand Marais Golf Course, two lakes for outstanding fishing, and plenty of open space for picnicking and other outdoors fun. The site is named for the late Frank Holten, who served the region in the Illinois General Assembly for 48 years.

The park features woodlands of Scotch pine, maple, oak, poplar, sycamore, tulip, redbud and wild cherry trees, blossoming flowers and bushes, and urban wildlife.

Frank Holten has one of the largest day use areas in the region, with picnic shelters, barbecue pits, and drinking water. The two lakes - Whispering Willow Lake and Grand Marais Lake - total more than 200 acres of water and 5 miles of shoreline. Whispering Willow Lake is stocked with largemouth bass, bluegill and channel catfish. Boat and bank fishing is allowed (10 horsepower limit for boating).

The 18-hole Grand Marais Golf Course, an athletic field, cross country course, basketball courts and a baseball diamond are among other attractions at Frank Holten. “

Nice park and I'm surprised no one has run it, but I guess not too many activators in the St Louis area.

After this, I head on down the interstate along the river. There are several parks in Jefferson County MO- just southeast of St Louis. First up is **Mastodon State Park KFF-3357**.

From the MO state site:

“Mastodon State Historic Site contains an important archaeological and paleontological site – the Kimmswick Bone Bed. Here, scientists discovered the first solid evidence of the coexistence of humans and the American mastodon in eastern North America. Today, visitors can learn about this discovery and how the landscape of Missouri looked in pre historic time. The site features a museum with an interpretive video, displays of ancient artifacts and fossils, and an impressive mastodon skeleton replica. Programs explain more about the significance of the site.

For anyone wanting to stretch their legs, the site offers three trails, including one that leads to the site where the bones and artifacts were found. The park also offers picnic

sites, a picnic shelter, a playground, a special-use area for organized youth groups, and a wildflower garden that attracts birds and butterflies.”



From here, 64Qs go into the log. Others had been here before and now there are 232Qs from the park. I'm zipping along the interstate and see a sign to Herculaneum. That rings a bell – there's a state park site here! Same county but I decide there's still time to run it and still make it to Sikeston, MO, a few hundred miles further south by dinner time.

So the next up is **Governor Daniel Dunllin's Grave Site – KFF-3351** – in the same county. Just a small parking area for maybe 8 cars, then a walkway to to the grave site.



From the state web site:

“Reflect on the greatness of the Mississippi River and the legacy of public schools that Gov. Daniel Dunklin left Missouri at Gov. Daniel Dunklin’s Grave State Historic Site.

Perched on a bluff above the river at Herculaneum, the grave of Missouri's fifth governor provides a quiet place to reflect on Missouri, then and now."

you also find:

"Dunklin began his political career in 1815 with appointment as sheriff for Washington County by territorial Gov. William Clark. In the same year, Dunklin took as his bride, Emily Haley (1797-1851). He built a small tavern in Potosi, and it soon became the general meeting place for the discussion of society and politics.

In July 1822, a group of delegates from Washington County met at Dunklin's Tavern to nominate a representative to the state legislature. Dunklin was nominated and later elected, serving in the legislature from 1822 to 1823. Following his term, he spent the next four years in Potosi, living off profitable investments in the mines.

He returned to politics in 1828, being elected as lieutenant governor. Four years later in 1832, Dunklin was elected Missouri's fifth governor. While Dunklin was governor, the Platte Purchase added additional land to northwestern Missouri.

Gov. Dunklin is often called the father of Missouri's school system. He sought to establish public schools on a firm and stable basis. In 1835, the General Assembly passed a law establishing the public school system in Missouri. The law outlined the minimum school year, established the basic curriculum, and allowed for local taxation to support schools. In the field of higher education, Dunklin recommended in 1834 that a site for a state university be chosen and partially funded through the sale of land. Five years later, the University of Missouri became a reality."

Dunklin ran into financial problems and the estate was sold – all but the small cemetery set aside.

The park today consists of a one acre cemetery for the Dunklin family and the access way.

I made 64 contacts from here – doubling the previous tally of Qs listed on the POTA site. Didn't stick around long.

I headed on down to Sikeston for the night zipping along the interstate, having to see a few more signs for parks but not having the time to stop by. Maybe next trip next year? We'll see. There's not many places to cross the river here – so you travel hundreds of miles up either one side or the other of the river before being able to cross.

Motel that night – Super 8 Sikeston/Miner and dinner at Lambert's Cafe – the 'home of throwed rolls' – where you won't leave hungry! Had the BBQ pork steak dinner – which comes with 3 sides – and all the rolls you could eat. I was stuffed. \$15. The place was mobbed but I snagged a seat 'at the bar' (just 3 seats) and avoided the 45 minute wait at 6pm on a Sunday evening. There must have been 300-400 people there and parking for that many! It's a very popular place.

## **Monday August 5, 2019**

I'm on the home stretch now – I could make it home by dinner time – but elect to run a few parks in AR that have eluded me until now. I can hit several and get most of the way home by dinner time.

First up is an interesting site- **Davidsonville Historic Site in Randolph County AR – KFF- 1079** . As I'm driving along AR Highway 25, I see signs that say “ Roads Unsafe When Under Water”. Really? The road runs right along the shore of the Black River....

K0ATZ has been here before with 50Qs. I add in 50 more – mostly on CW. He runs 100% on SSB. The A index is 4, the K is 3 and we are beginning to experience the effects of a coronal hole discharge and solar wind messing up propagation. Contacts are harder to come by.

Wiki provides some background:

“Davidsonville Historic State Park (formerly Old Davidsonville State Park) is a 163-acre Arkansas state park ...situated on a border between The Ozarks and the Arkansas Delta. The park preserves the remains of the abandoned frontier town of Davidsonville. The town was one of Arkansas Territory's first settlements when founded in 1815, serving as an important river port town on the Black River. The former townsite was made into a state park in 1957.

There is evidence that the site was occupied by French colonists prior to the 1803 Louisiana Purchase. Archeologists have discovered evidence of Native American use of the site as early as 4,000 BC. The 1822 courthouse was apparently built on top of an Indian mound which was built before 1,100 AD.

Davidsonville was founded in 1815 and rapidly became the most important town in northeast Arkansas Territory, but was abandoned by the 1830s. The community served as a river port town on the west bank of the Black River, near the confluence of the

Spring River and Eleven Point River with the Black River. The town was an important stop on the Southwest Trail and featured several important frontier establishments. In 1817 the first post office of Arkansas Territory opened in the town, followed in 1820 by the first federal land office of the territory. In 1822, the first courthouse of Arkansas Territory was built in Davidsonville. The town became the county seat of Lawrence County, which at the time comprised roughly the northern third of Arkansas.

Shortly after the town's founding the Southwest Trail was rerouted onto higher ground, bypassing Davidsonville. New towns appeared along the trail's new route, diminishing Davidsonville's importance. In 1828 the land office was moved to Batesville, about 60 miles southwest. In 1829 the county seat and courthouse began a series of moves to a number of other towns. Today there are very few remains above ground. The townsite, which had been a grid of streets with a central square where the courthouse stood, now looks like a grassy field with a few trees. Only upon closer inspection does one begin to see hints of the former town. The park's interpretive signs point out where certain buildings used to stand. By the time of Arkansas statehood in 1836, Davidsonville was essentially abandoned. “



Had a decent run considering conditions.

For the next park – in the next county – Lawrence – is **Powhatan State Park – KFF-1112**. K0ATZ has been there with 50 SSB QSOs. I add in 57 more, nearly all on CW.

From the AR state park site:

“The uniqueness of this park is in its preservation: all six historic buildings stand in their original 19th-century locations. Built on a hill to overlook and welcome Black River steamboat traffic, the 1888 courthouse contains exhibits interpreting the commerce and culture of Lawrence County from Reconstruction through the early 20th century and is free to the public. Guided tours by knowledgeable interpreters are available in the remaining historical structures, including a log house, school, church, and jail. Popular among families, Powhatan bridges the past to the present. Located on Hwy. 25, this park is worthy of a stop. Lake Charles and Davidsonville are within 15 miles, making it possible to visit three state parks in a day. “



The park is officially closed on Mondays – but I run into a ranger who advises me the best place to run is up by the courthouse in the parking lot there – nice and high up. No problem.. Do and have a decent run considering propagation which is getting worse as the day goes on.

Wiki adds a bit more info:

“Powhatan Historic State Park is a 9.1-acre Arkansas state park in Lawrence County, Arkansas. The park contains the 1888 Powhatan courthouse which served as the home of county government from 1869-1968. Today the structure displays items of cultural and historical significance and hosts the park's Visitor Center. The park includes four additional historical buildings and the Arkansas History Commission's Northeast Arkansas Regional Archives. A tour of the historic structures is available. Powhatan served as an important stop for traffic on the Black River until the installation of the Kansas City-Memphis Railwayline two miles north in 1883 significantly decreased the need for river transportation.”

Within a few miles of the other two parks, you can run **Lake Charles State Park – KFF\_1089** – and still in Lawrence County. Start on 20M SSB and snag 10Qs there,

then it's off the 20,30 and 40 cw. Naturally, K0ATZ has been there with 53Q SSB and I add in another 55Q, mostly CW. A index kicking up to near 30! Yuck. (K0ATZ has been 'everywhere' in MO and northern AR).

From the state site:

“A half-hour from Jonesboro and about 1.5 hours from Memphis, Lake Charles State Park is a peaceful place located on a 645-acre lake filled with bass, crappie, bream, and catfish. In fact, it’s the place where the largest number of 20-inch bass have been caught in Northeast Arkansas. A full line of bait and tackle is available at the visitor center from March through October. There are 60 campsites, a third of which are Class AAA, with many spots right on the water. A yurt offers an additional lodging option. The park is also a great getaway in fall and winter months with four hiking trails and a 3-D archery range (open November through February). “



Now it's time to skedaddle and head on toward TX. I make it as far as Hope AR in southwest AR – the opposite end of the state - Hempstead County and call it a day around 5pm. I've stopped at the Super 8 here frequently.

One mile up the road you can run a POTA only park – **K-3791 – the Cherokee Trail of Tears (Southwest route)**. I make a quick stop and make 14Qs likely-split. Gone in a few minutes. (the road to Historic Washington is the old trail).

But wait – there's still time. I can run the 8 miles up the road to **Historic Washington** for a 'quickie' activation there – Park KFF-1106. I make a quick 14Qs, spotting myself

only on the County Hunter web page and POTA page.....then bug out headed back to the motel. Well, it took the better part of an hour but it's dinner at 6pm at Dos Locos Gringos with a "Kind of Big Dilla' (Quesadilla).

Next morning I head on home the couple hours – with a short detour of less than a mile to **Spring Creek State Forest Preserve – KFF-4423-** Dallas County - for a quickie activation. I've run this over 60 times so far – mainly on Wednesdays for the CW Test. Make 18Q and head on home the 25 miles. Whew. Lots of miles in 11 day trip. Had fun! Brought home a few goodies and gave out over 2,000 contacts.

Thanks for riding along and all the Qs.

## Maryland DC QSO Party

The MDC took place in early August. Band conditions were not great and the Worked All Europe contest was on the same weekend and is very popular with thousands of US folks. There apparently were no CW mobiles.

From the 3830 contest reflector:

**WB8WKQ - fixed - MI 9 SSB 45 SSB QSOs 14 mults**

Very slow contest. Took a four hour break. I don't think conditions were very good. My score is about half of what it was last year. Didn't hear any CW mobiles. Thanks for the Q's.

**W5TM fixed – OK - 15 cw 8 mults**

Very slow. MD Dc must have been in WAE.  
Thanks for the QSO's  
Ed

## **K0BAK rove report Saturday, Aug. 10**

My rove of 7 parks in southern Maryland (5 of which were KFF, the other two being State Forests) started as a plan to participate again as a mobile station in the MDC QSO Party. Originally I was going to travel to the area the day before for an overnight stay while activating most of these parks before the MDC QP began, then activate parks in MD counties on a slow rove toward home. However, responsibilities prevented me from traveling on Friday, so my plan changed to activate these parks in a one-day rove on Saturday. I was glad to give relatively-rare Saint Mary's County to MD QP participants, but I decided to just submit a checklog to the QP so I could ignore their ill-advised rule against self-spotting.

The van station had some trial improvements. I bought a Flex 6500 from a fellow club member (for a generous price) more than a year ago, intending it to eventually be the van's main radio. I had been using it from home for a few months to get used to operating it, but I wanted to take it on the road to battle-test it before spending more time integrating it with VHF+ station automation. One of the many advantages of that radio is a rack-mount kit that came with it. I was very pleased with its performance on the road, having no interface issues, seemingly better noise suppression (I think), and most of all no lockups as I had experienced on my old Flex 3000. The 6500 also came with the Maestro network-connected physical remote control head, but I couldn't mount it in the van in time so I just used SmartSDR software running on my existing rack-mounted computer and large monitor.



Two other van additions were creature-comfort improvements ... a large office chair to

replace my little round stool, and a DC-powered RF-quiet fan to get a little air exhausted out the back door. The big chair of course takes up \*a lot\* of room, but at least it didn't slide around when I put it on its back for driving, and sitting on the chair prevented the leg and back pain I had experienced trying to balance my big butt on that small stool.

I left home a little after 4:30am EDT, aiming to arrive at the farthest park before the 10am start of the QP. About halfway I met my daughter to deliver some of my wife's award-winning jams and jellies, which I think is the real reason my wife encouraged me to do this exhausting one-day rove. I continued on to my first park, the large Point Lookout SP. There I hoped to set up at a museum on park property near the entrance, but that road was gated. Continuing to my backup location in a large open parking lot, I passed a park store and operated there instead to save a bit of travel time. Since I was ready to go 30 minutes before the QP started, I decided to just do a normal non-QP activation. 29 contacts in the morning on 40m wasn't bad.

The next park St. Mary's River SP has several possible operating points; the location I chose beforehand had a well-defined and pretty large flat parking lot, so it was nice to have my first straightforward parking stop there. Since the QP was underway, I had switched over to a N1MM log configured for the MDC QP rules and CQed for both the QP and parks. 27 contacts on 40m were made here, very similar to the previous park. Exactly 27 contacts on 40m again, the trend was pretty clear.

Calvert Hills SP was the better part of an hour away, mostly backtracking on the route I took earlier that morning to the first park. Although it seems inefficient, this sometimes happens when I want to spend the morning hours to get to the farthest park first and work my way back to the last stop of the day (home in this case).

Continuing back across the two-lane bridge over the wide Patuxent River, I found that Calvert was a very popular park with rolling hills and several small parking lots. The gate attendant nicely waived the park fee after I told her about operating from and promoting parks. She directed me to the largest most open lot as I requested. There were only about 4 slots left in the entire lot, and the other lots I passed on the way seemed to be full, so I was lucky to find anywhere to park. I was disappointed to find band-wide noise on 40m in a repeated pattern. My SDR panadapter let me find minimums in the noise patterns and I squeezed into a slot where I couldn't hear another station, though the noise floor was high enough even at that minimum that I couldn't be sure. Though I was listening at a noise pattern minimum, the overall band noise had to affect my RX sensitivity. Only 16 contacts on 40m were made, and almost every one was a struggle. It was a relief to switch to relatively noise-free 20m, where I made 7 contacts. Although everything else about this operation was difficult, I was happy 3 activators called me

here for park-to-park contacts, yielding 13% park-to-park contacts with no effort on my part.



40m interference

I was really fatigued from getting up at 3:30am and roving almost 10 hours, and was increasingly fouling up on-air, so after crossing the Patuxent bridge for the third time I stopped to get a Monster energy drink that wouldn't kick in for a half-hour. I arrived at the horse-oriented Greenwell SP to find a self-service fee box and a longish 10mph dirt road. Noise was not an issue here and I netted 25 contacts total, very similar to most of the other parks, though with a higher proportion on 20m. The last park of the day was Newtown Neck SP across to the western side of the peninsula, another relatively new park with little information on the web. During planning, I found a turnaround area on the bay that was marked as a canoe rental point; I didn't find any other obvious place to park except just off the access road. When I arrived I was happy to see that the turnaround had an official sign for the SP. I had my most contacts here, 39, despite being tired and wanting to get started back home. I uploaded my logs to Google Drive, shutdown the station, and began the longish drive home.

The WWFF log was sent to my fine coordinator earlier today.

== Stats ==

5 WWFF parks activated (out of 7 total):

KFF-1590, KFF-1600, KFF-1562, KFF-1576, KFF-1585

476 miles driven

17 hours on the road

\$110 spent out of pocket

150 contacts in WWFF parks out of 196 total

No DX

== Top Chasers ==

KD8EDN and WB4OSS scored a clean sweep, contacting me in all my seven activations, spanning seven hours of operation and travel. Thanks guys, I really appreciate you following me around all day.

The following chasers got me at six activations, one short of a clean sweep: W0ZAP, K8KP, K8RAT, WB9OWN. Thank you all.

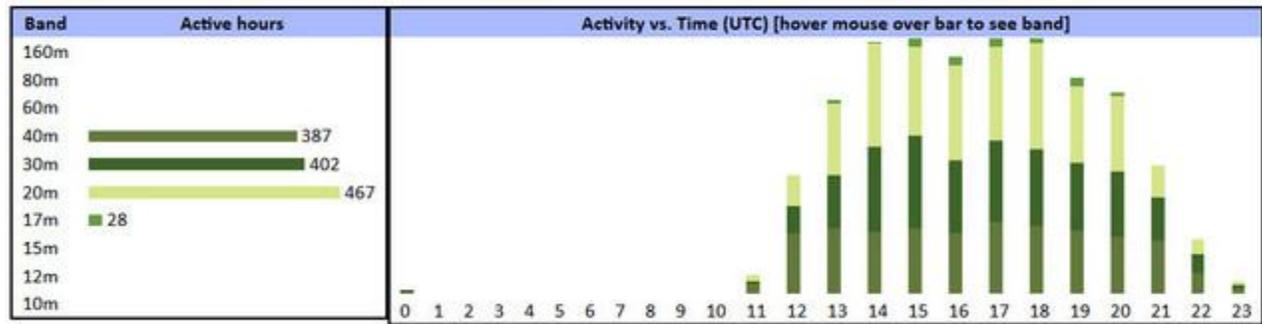
## RBN 'Heat Index' Site

I ran across an interesting site – the RBN (Reverse Beacon Network) - “Heat Index” site - that shows activity of different stations. For example, if you type in N4CD, you'll see the RBN has picked me up a whole bunch of times in the past year

The site shows RBN activity when you call 'CQ CQ CQ de YOURCALL'. When I run parks, after the first bunch on a band, I call 'CQ CQ CQ POTA de N4CD' and that will get picked up by RBN - and some of the park chasers watch RBN to find stations out in parks. It also, as previously noted, gives you relative signal strength readings so you know if you are getting out and how well.

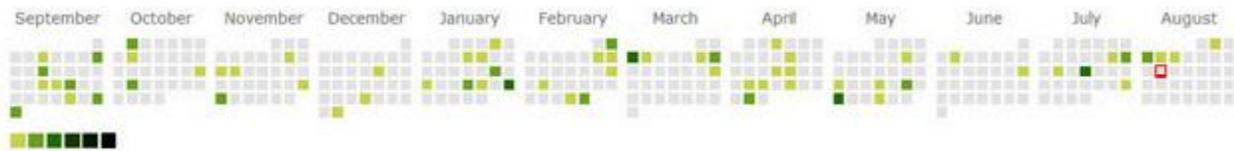
Here's the 'map' for N4CD

Hours (in 365 days) with at least one RBN spot: 653 (1.8h / day). EU: 109, NA: 651, AS: 0, SA: 42, AF: 2, OC: 4. Rank: 722



You'll note it tracked 387 hours of operation on 40M, 402 on 30M and 467 hours on 20M. It shows the time of day when the activity took place over the past three years.

It also has a graphic of how many hours per month



You can type in other calls – whether county hunters, regular folks, contesters, etc. However, if you call 'CHN de N4CD' the RBN probably won't pick you up. It's looking for the “CQ CQ CQ XXX de” format.

<https://foc.dj1yfk.de/activity/N4CD>

It doesn't seem to do well on SSB, then again most County Hunters don't call “CQ CQ CQ' on SSB.

## K0BAK's Canadian Rove

K0BAK's Canadian Park Rove – Great story and pics. Something different for reading on a slow county hunting day. Detailed rover report through the Canadian Maritimes and parks.

[https://sites.google.com/view/petekobak/hamradio/cnpota/maritimes-rove?fbclid=IwAR0OpbQVVrc6gNeNTI57q39\\_e6yQnT7nLKk5boZLFFp\\_pkDgcn6sxRagyr](https://sites.google.com/view/petekobak/hamradio/cnpota/maritimes-rove?fbclid=IwAR0OpbQVVrc6gNeNTI57q39_e6yQnT7nLKk5boZLFFp_pkDgcn6sxRagyr)  
g

## On the Trail of Regens I

On Ebay this month, an interesting item showed up. Apparently at some time in the past, someone offered a kit to make a one tube regen set with an 'audion' – the first tube produced by DeForest. Decades later. Here's a pic of the unit as they told you to build it and the tube they supplied – an original Soy Labs tube. It had a filament that needed 2v but not more than 3v, could handle a plate voltage of 25v at no more than 5 milliamps..... and the filament probably would last 100 hours or so. Well, they actually had two filaments so you could use one, then switch over. They were expensive in the day – probably almost the cost of a new car!

You'll note on the left side of the tube, it had a 'light bulb' type base! It was just a modified 'light bulb' with a grid and 'wings' (plate). This is 1910-1915 type technology. The grid and plate leads come out the other end – just two wires. The seller was asking \$499 initial bid. No thanks, but a working audion tube can go for hundreds of bucks.



This wasn't a period regen as the patent for regens wasn't filed until 1914, and practical regen sets did not appear until there were 'decent' vacuum tubes during/after WW1. So this was a later kluge of technology to try and do something that wasn't done 'in the day' of audion tubes. The audion tube was basically an audio amplifier, and first used as a single stage after the detection – either a maggie – on the way out- or a crystal detector.

You see some strange things on Ebay. This is one of them.

## Some Titanic Radio History

The wireless equipment on board the Titanic was the most powerful of any vessel in the merchant marine fleet, only equaled by that on board her sister ship the Olympic. The standard Marconi transmitter on board ships at that time was a ½ kW spark generator. That on the Titanic was a 5kW quenched or rotary spark generator. The difference in power output was amply demonstrated because when the disaster occurred the Titanic was initially able to contact ships at a greater distance; however, the increased power also effectively drowned out or jammed signals from being sent or received on board vessels in close proximity.

The power for the transmitter was obtained using the 110 volts DC from the ship's lighting circuit applied to a generating plant, which was a 5 kilowatt motor generator yielding 300 volts at 60 cps, which was then applied to a transformer yielding 20 kilovolts. Two backup power supplies were also available, an independent oil engine had been installed on the top deck and a battery of accumulators provided as an emergency supply.

The wireless equipment was housed on the boat deck close to the bridge. There were four parallel aerial wires extended between the masts separated by lightweight booms. The down leads were connected to the instruments in the wireless house

The Titanic's sea trials were carried out as she sailed from Belfast en route to Southampton on 2nd April 1912. Jack Phillips and Harold Bride had helped to install the equipment and on sailing it was in perfect working order. However, that did not last as they soon discovered that when the quenched spark transmitter was subjected to a heavy workload the secondary of the transformer windings had a habit of shorting to the metal casing.

The workload on the transmitter was caused because it was in almost constant use. Captain Smith sent many sea trial reports to Bruce Ismay (Managing Director of the White Star Line). In addition the ship's owners delighted in sending Marconigrams to their friends. This was added to the necessary testing of the equipment by keeping in contact with coast stations, which kept the two operators very busy.

Titanic arrived at Southampton late on 3rd April, sea trials only having taken some 36 hours. Both wireless operators went on leave. Jack Phillips returned on April 6th to check on the delivery of spare parts. Harold Bride arrived back shortly before midnight on April 9th. Jack Phillips and Harold Bride worked six hour shifts with Phillips working from 8 am to 2 pm and 8 pm to 2 am and Bride taking the alternate six hour shifts.

At noon on 10th April Titanic left Southampton for Cherbourg. In 1912 wireless was a novelty, especially to the first class passengers, they delighted in sending messages to their friends and relations. Both Phillips on the Titanic and the operator at the Isle of Wight would have been very busy sending and receiving messages. Bride would have taken over at 2pm and would have been on duty when Titanic berthed at Cherbourg at 7 pm. Two hours later Phillips would have been at the Morse key as Titanic set sail for Queenstown sending and receiving messages from the Isle of Wight and the Lizard stations. She arrived at Queenstown at 12.30 pm on 11th April and left for New York an hour and a half later carrying 1316 passengers and 891 crew.

On leaving Queenstown, Phillips and Bride would have maintained contact with Crookhaven for as long as possible, perhaps within a 200 mile range by day and 350 miles at night and perhaps the Titanic maintained contact for the next 24 hours. Thereafter contact would be made with other ships, many of them sending good wishes to the Captain on Titanic's maiden voyage.

Each night at 1am GMT the high power station at Poldhu, Cornwall would send "Ocean News" the daily news bulletin for ships and this would have been received on the Titanic on the 11th, 12th and 13th April, however on 14th April she did not, or could not, receive the signal. "Ocean News" was received by the SS Minnehaha whose wireless operator then passed it on to the Titanic. On 14th April 1912 the last news of home would have been read on board the Titanic sent by wireless and relayed by a ship that had been involved in an SOS two years earlier.

In his evidence to the Titanic accident enquiries Harold Bride reported two significant facts. The first was that a problem existed with the spark transmitter during the sea trials, and the second was that in the first two days of the voyage that they sent over 220

messages to the various shore stations. These factors led to reduced power output from the transmitter and so repairs were required.

On 13th April and early morning of 14th April Phillips and Bride set about repairing the quenched spark transmitter because the secondary of the spark transmitter was again shorting to the metal casing. They had less traffic to send and they used the time to do the required running repairs.

On 14th April the Wireless Room on board the Titanic received no fewer than seven ice warnings.

The Titanic transmitter once again showed signs of shorting between the secondary winding and metal casing and repairs were again attempted during the afternoon of 14th April. It is known that the ship carried a back up transmitter and it is thought that this was a simple ½ kilowatt spark generator as was commonly supplied on merchant ships at that time. The range of this transmitter was considerably less than the 5 kilowatt quenched spark transmitter which had been fitted and which was causing problems.

During the day or so when contact was made with shore stations, the numbers of messages the passengers had mounted dramatically. Jack Phillips came on watch at 8pm on 14th April and must have been delighted to be able to make contact with the shore station at Cape Race and start sending the pile of messages he had in front of him. He received the ice warning from the SS Mesaba at 9.40 pm. The two forward lookouts, Frederick Fleet and Reginald Lee, went to their posts at 10pm on the 14th and “shared a few words about the ice problem”. This information probably came from the Wireless Room via the bridge. At 11.40 pm Fleet reported an iceberg dead ahead to the bridge. The bridge replied, “Thank you” but nothing else was said or heard.

At 11pm the wireless operator of the nearby Californian called him to warn of ice in the vicinity. The signals from the Californian unfortunately jammed the contact between the Titanic and Cape Race. Jack Phillips wanted to send his traffic and the jamming made it impossible; he replied to the Californian telling him to “keep out”; this was not a rude message but was one used to stop one station interfering with another while it was already sending traffic to a coast station. (On this occasion it was probably the most unfortunate thing that Jack Phillips could have sent because he missed the ice warning that Cyril Evans was going to send – the Carpathia was 10 miles away – stopped in an ice field of large icebergs. The radio operator decided to call it quits for the evening after the Titanic was unwilling to listen to ice warning).

Between 11.00 pm and 11.40 pm Phillips was in contact with Cape Race sending the

large pile of messages that had built up while the ship was out of range of shore stations. The distance, noise and interference on the frequency made the sending and receiving of the messages difficult; constant repetitions were needed to ensure that the messages were received in full and correctly.

Phillips was at his Morse key at 11.40 pm when the Titanic hit the iceberg and he felt the slight shudder as the ship was scarred by the iceberg

Shortly afterwards, Captain Smith entered the Wireless Room and told the Wireless Operators that the ship had hit an iceberg but not to send anything until he returned. He came back five minutes later with the ship's position and told them to send the distress call. The initial signals were received by a number of ships including the SS Birma and RMS Baltic, both ships were clear that Phillips sent both CQD and SOS.”

story from <https://www.radioofficers.com/archives/rms-titanic/>

- - -

Unfortunately, the nearest ships monitoring the radio were hours away. There likely was a surface inversion which made the iceberg impossible to see until the last minute, the seas were 'calm' which did not show waves against the iceberg that would have revealed it sooner, and the message flow from Titanic's wealthy passengers all conspired to create a 'worst case' situation.

This triggered the immediate passage of the Radio Act of 1912 which tried to regulate the spectrum. Hams were banished to wavelengths shorter than 200 meters (frequencies above 1.5 MHz) which were considered 'useless' at the time. Broadcasting did not exist. Marconi and the maritime industry used the 'long wave' spectrum from 200-600 meters, which Marconi primarily using 250 and 500 meters, and mostly 500 meters. Every ship had to listen for 'quiet time' following every 15 minute segment for a minute – to hear SOS messages. No one could transmit in that window. All ships carrying more than 50 passengers had to have radio equipment.

It wasn't till the major advances brought about by WW1, especially in the vacuum tube industry – the creation of the VT-1 and VT-2 tubes, that decent performance could be achieved above 1.5 MHz.

In the interim, most ham stations could talk 5-25 miles. A really good one maybe 50

miles and a truly exceptional one up to 100 miles. The ARRL was established to be able to 'relay' messages from station to station – say between NYC and Chicago – in 15-25 mile hops. (The American Radio Relay League).

Hams were totally off the air in WW1 as the US went to war. Over in EU, they were off the air sooner.

Spark transmitters were in use up to 1926 when they were banished to the realm of 'antiques'.

## Solar Cycle Update

from NASA release of June 12 2019

“Scientists charged with predicting the Sun’s activity for the next 11-year solar cycle say that it’s likely to be weak, much like the current one. The current solar cycle, Cycle 24, is declining and predicted to reach solar minimum - the period when the Sun is least active - late in 2019 or 2020.

Solar Cycle 25 Prediction Panel experts said Solar Cycle 25 may have a slow start, but is anticipated to peak with solar maximum occurring between 2023 and 2026, and a sunspot range of 95 to 130. This is well below the average number of sunspots, which typically ranges from 140 to 220 sunspots per solar cycle. The panel has high confidence that the coming cycle should break the trend of weakening solar activity seen over the past four cycles.

“We expect Solar Cycle 25 will be very similar to Cycle 24: another fairly weak cycle, preceded by a long, deep minimum,” said panel co-chair Lisa Upton, Ph.D., solar physicist with Space Systems Research Corp. “The expectation that Cycle 25 will be comparable in size to Cycle 24 means that the steady decline in solar cycle amplitude, seen from cycles 21-24, has come to an end and that there is no indication that we are currently approaching a Maunder-type minimum in solar activity.”

The solar cycle prediction gives a rough idea of the frequency of space weather storms of all types, from radio blackouts to geomagnetic storms and solar radiation storms. It is used by many industries to gauge the potential impact of space weather in the coming years. Space weather can affect power grids, critical military, airline, and shipping

communications, satellites and Global Positioning System (GPS) signals, and can even threaten astronauts by exposure to harmful radiation doses.

Solar Cycle 24 reached its maximum - the period when the Sun is most active - in April 2014 with a peak average of 82 sunspots. The Sun's Northern Hemisphere led the sunspot cycle, peaking over two years ahead of the Southern Hemisphere sunspot peak.

Solar cycle forecasting is a new science

While daily weather forecasts are the most widely used type of scientific information in the U.S., solar forecasting is relatively new. Given that the Sun takes 11 years to complete one solar cycle, this is only the fourth time a solar cycle prediction has been issued by U.S. scientists. The first panel convened in 1989 for Cycle 22.

For Solar Cycle 25, the panel hopes for the first time to predict the presence, amplitude, and timing of any differences between the northern and southern hemispheres on the Sun, known as Hemispheric Asymmetry. Later this year, the Panel will release an official Sunspot Number curve which shows the predicted number of sunspots during any given year and any expected asymmetry. The panel will also look into the possibility of providing a Solar Flare Probability Forecast.

“While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the sun can occur at any time,” said Doug Biesecker, Ph.D., panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center.

An example of this occurred on July 23, 2012 when a powerful coronal mass ejection (CME) eruption missed the Earth but enveloped NASA's STEREO-A satellite. A 2013 study estimated that the U.S. would have suffered between \$600 billion and \$2.6 trillion in damages, particularly to electrical infrastructure, such as power grid, if this CME had been directed toward Earth. The strength of the 2012 eruption was comparable to the famous 1859 Carrington event that caused widespread damage to telegraph stations around the world and produced aurora displays as far south as the Caribbean.

The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. It is comprised of scientists representing NOAA, NASA, the International Space Environment Services, and other U.S. and international scientists. The outlook was presented on April 5 at the 2019 NOAA Space Weather Workshop in Boulder, Colo. For the latest space weather forecast, visit <https://www.swpc.noaa.gov/>

## Sunspots II

From Space Weather Dot Com - comments on the above article

Solar Minimum (i.e., the Nadir of Cycle 24 which is the "Start" of Cycle 25): late in 2019 or 2020.

(Note, this is a  $\sim 1.33\text{yr}$ \* Minimum Window; \*we'll assume "late in 2019" means sometime in the period Sept-Dec 2019, and "2020" means sometime in 2020. However, based on clarification from the silso.be article---\*\*\*linked below, which states, "minimum between the current cycle 24 and cycle 25 is predicted to occur between July 2019 and September 2020"---this gives a 1.17yr Minimum Window.)

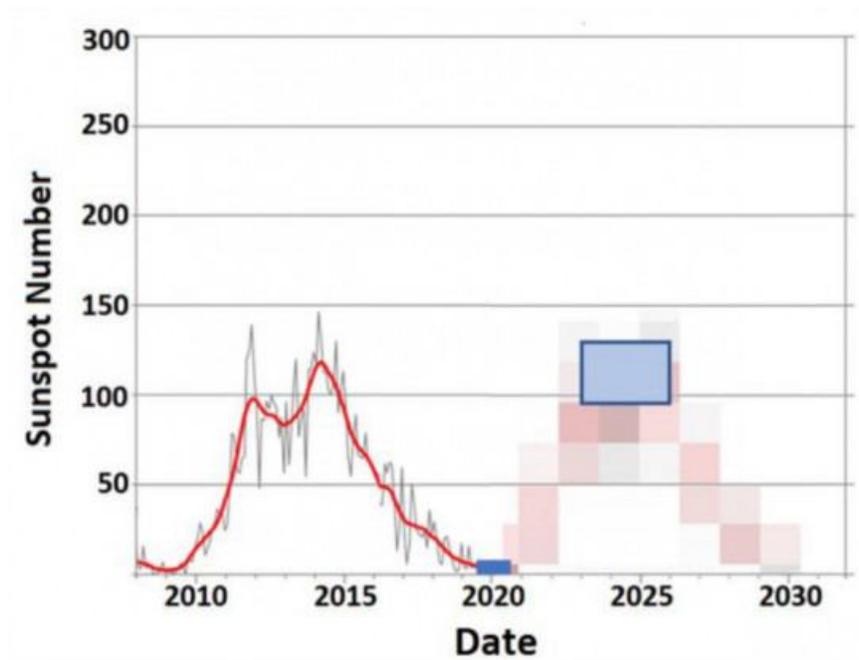
Solar Maximum (Peak): between 2023 and 2026.

(Note, let's assume they mean between the beginning of 2023 and the beginning of 2026, which is a 3yr Window Peak; however, combined with the 1.17yr Minimum Window, this means they predict Solar Maximum to occur (i.e., the Rise Time) sometime within 2.25-to-6.5 years after Solar Minimum.)

Sunspot Peak Range: 95-to-130.

(\*\*What does this mean? Are they referring to the peak of the "Monthly Mean", or the peak of the "Smoothed-Monthly"?)

sunspots



<https://www.spaceweatherlive.com/community/topic/1524-solar-cycle-25-predictionsforecasts-by-the-panel-nasa/>

## Ran All USA Award

With all the mobiles out there and running, sooner or later, someone else is going to finish up running all 3077 counties and be the next to get the “Ran All USA” Award. To date, the list is:

18 K3IMC 6/10/2016

17 N4JT 3/5/2015

- 16 AB4YZ (SK) 10/16/2013
- 15 AF3X 7/12/2013
- 14 AI5P 6/21/2012
- 13 N9QPQ 6/3/2011
- 12 AA9JJ 6/3/2011
- 11 KL1V/KV7N 8/6/2010
- 10 N8RLJ 10/26/2009
- 9 N8KIE 10/13/2009
- 8 KK0L (SK) 6/19/2007
- 7 N7ID (SK) 4/19/2006
- 6 N7AKT/N4AAT (SK) 2/24/2006
- 5 K0GO (SK) 10/15/2002
- 4 N4CD 7/20/2002
- 3 WA0SBR (SK) 11/22/1998
- 2 W1TEE (SK) 6/29/1991
- 1 KB7QO (SK) 7/25/1988

OMG.....seems N4CD is the only one still alive and kicking in the first 8 to have finished running all the counties! KB7QO was the first – did it all SSB. W1TEE was the first to do it on CW and was 90% done on second time before his car/finances gave out. WA0SBR was famous for his meticulous planning providing dates/times for his arrival and the next county line on trips to run all the counties in a state, plus his bi-annual trip around South Dakota to give them all out every year. A few only ran the toughies (Nantucket, Dukes, AK, HI, etc) only on 2M FM working a partner to finish up. N8RLJ transmitted all the counties on 2M FM as she toured the country end to end with

N8KIE, who put them out on SSB.

So when will the next county hunter finish all? KB0BA/N0XYL? K5GE? W4SIG? Who else is in the running? On average, less than one person a year qualifies for this tough to get award!

## Kansas QSO Party

At the tail end of the month, the Kansas QSO Party was held. 15 mobiles/portables were out and all 105 counties were on the air – both modes! Over 55 1x1 calls were used so if you are working on prefixes and 1x1s, it was a bonanza. Full report next month as reports trickle in after the event. Half a dozen county hunters participated in the QP. Always a good one, put together by Bob, W0BH, who motivates the troops and gets all the counties on the air.

From the 3830 reflector:

**K0A mobile (K5CM, N5KW) - 1692 cw 778 SSB**

We were starting in mid-Eastern Kansas so Pam and I spent Friday night in Fort Scott. We always enjoy visiting some of the older "Down Towns" in Kansas. The Bourbon county court house was already locked but enjoyed checking out the outside and taking some selfies. Pam and I had just said I wish the flag was out for the picture and about that time a gentlemen came out and apologized for not having the Flag flying but said the flag pole was being repaired.

We had a more exciting Saturday night spending the night in Wellington, KS. We both considered the motel to be a little creepy because there was not much lighting and very few people were staying there. We carefully checked out the room and all seemed OK. Then all of a sudden someone was "POUNDING" on the door. I said "who is it" more "POUNDING" I pulled back the curtain and peek out. Four Cops were outside fully armed with their flack jackets on. I decided best to open the door. They said I meet the description of someone that had just robbed Penny's Dinner across the street, after a closer look at me decided I was older than the reported description. The officer then asked me if that was my truck parked there. Yes I said. Then he said Hi I'm W1... and stuck out his hand.

We had a friendly conversation about the KSQP and lack of repeaters in the area. Conditions were fair considering we are at the very bottom of the SS cycle. It was easy to copy some of the EU DX on 20 meters, but difficult to copy any of the close in state side stations. 80 was good in the early daytime but hard to get stations to listen for me there.

Pam, N5KW did most of the SSB operating and the driving (750 miles), I did the CW. Others seem to like the 1x1 calls, but I don't because of the loss of identity of the operators. Was great fun as always. Thanks to Bob W0BH for all his efforts in putting it together.

73, from Connie and Pam K5CM/K0A / N5KW

### **W0ZQ ( W0O mobile ) 1076 CW**

It was a fun time running the KSQP as a mobile solo op. We had cool weather this year starting out with a temperature of 65 degrees, and with the highest temperature recorded on Saturday afternoon at just 77; this MN boy thoroughly enjoyed that! A sprinkle of rain on Saturday, but more serious day long rain on Sunday. The Sunday rain did cause my tuner to run erratically on 40m resulting in occasionally funky keying. I ended up placing a paper coffee cup upside down just above the coil to help keep the rain off of it, that seemed to calm the tuner down. From 22 KS counties I worked 14 unique DX stations led by DL3DXX (22, 2 on 40m), OM2VL (13, 1 on 40m), DK2OY (5), DL8USA (4) and HA8IB (4).

Signals from DX were often better than stateside with lots and lots of QSB. Conditions at time seemed good, then within a minute stations would disappear. Overall, the only thing you could do was just keep plugging away. I did run for a little bit on 80m on Saturday evening around 8:30pm but we had big thunderstorms just west of me that made working the band difficult this year. Those storms blew over me during the night time hours with 4 hours of constant lightening. A big thanks to my MN friends who provided 47 Q's from 15 different stations. And as always a tip of the hat to Bob, W0BH, and his team for sponsoring such a fun event. Thanks everyone for the Q's. PS: I will upload to LoTW in a few days for county hunters. 73, Jon

### **DL3DXX 228 CW**

What a weekend !

Mobiles worked:

K0A(25),K0I(18),N0D(14),N0E(4),N0K(16),N0Q(5),N0R(21),N0T(13),N0U(6),  
N0W(24),W0B(14),W0I(4),W0O(22)

Missed a few q's and mults where my 20m 4 el mono bander up 12m was not big enough to hear the station. Happy to make 30 q's on 40m with a single vertical loop. Down to 4 needed KS-counties (Grant,Ottawa,Stanton,Wichita)

Thank you for all contacts, back next year

73 Dietmar

**N6MU - fixed - CA 305 cw 26 SSB**

Boy, that was a nail biter! With less than a minute to go, W0O/DON gave me the Sweep for the ninth year in a row.

What a great group of mobiles. Those with at least 10 Qs included: K0A/K0I with 34 Qs each followed by N0R(33), K0O(32), N0W(30), N0D(26), N0T(25), N0K(24), W0C(11) and K0T(10).

Kudos to all the fixed stations as well. There were 1x1s everywhere. In 431 Qs I only worked three non-1x1s(KE0EK/KS0KS/N0CVW).

Still one of my favorite Parties. A big thanks to Bob, W0BH, for orchestrating this show year after year. Well done once again my friend! 73...

John, N6MU

**W0K (K3PA) - fixed KS 337 cw 1539 SSSB**

Thunderstorms on Sunday were tough but worked through with RX antennas. Had antenna arcing problems that limited me to low power on 20 most of the contest. But as usual, a deep pool of stations to work which never quite ran out. Thanks to all!

**W0S (K0JB) 433 cw 1069 ssb**

Many tnx to W0BH and the tribe of mobiles that make this a swingin' Party. I had very

good luck with mults Day 1, then added SD and SK, leaving WY PE and the 3 Frozen North territories on the table.

It doesn't help the score much but I love chasing fellow 1x1s and again had great luck, nabbing 27 of them for 41 Qs (not counting some multi-county strings). I squeaked out spelling KANSAS by using KS0KS for a wildcard S, ditto for QSOPARTY using KS0KS for Y. I worked no U or E so my sunflower didn't bloom, and my road never got built due to lack of Ls.

Some very fun runs and with a final surge I busted 1500 Qs.

### **W0A (K0WA) - fixed KS - 264 cw 991 SSB**

We've had to accept the rotten band conditions that we have with no sunspots. but some of this was ridiculous this weekend. Some station louder than heck and others just a whisper above the noise floor. Worked quite a few Europeans. Two South Americans station also called.

Twenty meters tends to go flat around 3 pm in the afternoon. Forty was rather disappointing, but it is summer time. Thunderboomers did not help.

Missed HI, NE, and OK Worked many RI which is quite unusual. Also many WV were on the air. Again rather unusual.

## **Ohio QSO Party**

Several mobiles were out and running including K8MR, AE8M, W8UE. Full report next month. From the early posters on 3830 reflector:

### **K1LT - fixed OH - 480 cw QSO**

I think the 2019 Ohio QSO Party is the first time I've touched a radio

since Field Day earlier this year. But the switching power supply worked fine because I tightened the loose setscrews. The headphone audio worked fine because I wound the stereo FM transmitter power cord around a toroid. I don't know why I didn't do that sooner.

My 40 meter vertical erratically produced high SWR. Since it is ground mounted, I ran outside a couple or 3 times to jiggle connections and look for problems. The coax connector has never been water proofed. On the other hand, it looks nearly perfect after 15 years. On the other other hand, the shell of the connector was never soldered to the braid. I finally twisted it hard and that seems to have cured the problem today. Maybe its time to replace that feedline as that piece of coax is quite ancient.

Last year I had decent success following the mobiles on 80 meters and occasionally on 40 because propagation on 40 was poor. This year conditions on 40 were maybe even worse which perversely made tracking the mobiles even easier. Found K8O and K8RYU almost immediately. I somehow missed K8MR until he got to HARR. After that, I think I followed almost everyone everywhere, except W8UE who had a very weak signal here.

What a wonderful collection of mobiles this year! I hope they all had fun and come back next year. As a result of the excellent mobile coverage, I worked 81 of the 88 counties, all on CW. Assuming each of the mobiles operated CW in each scheduled county, ROSS would be the only county that didn't have CW activity. There was one station on the schedule, and I am betting he was phone only.

Last year I wished for one more ambitious mobile. Looks like I got my wish many times over, with W8UE scheduled for 13 counties, not to mention N8KR and K8RR and AE8M scheduled for 4, 3, and 2 counties, respectively. Unfortunately I missed most of the counties W8UE visited. Hopefully W8UE's 3830 report will give me a clue about how to work him more often next year.

Mobile Station	Counties Scheduled	Counties Worked	QSOs Missed	Counties
K8MR	26	21	36	

K8O	29	24	24
W8UE	13	2 !!!	2
K8RYU	9	9	10
N8KR	4	4	4
K8RR	3	2	3
AE8M	2	4	5

total: 84 17% of total QSOs!

I didn't work very many of the mobiles on any bands except 80 although I did work K8MR on the high bands in mine and adjacent counties HOCK, FAIR, and PICK. Given the strength of his signal, one more county distance might work for 20 and 15. The 10 meter HOCK signal was pure ESP.

More time chasing the mobiles meant less time working DX on 20 so my state multiplier count is down. I did work DL3DXX and OM2VL on 3 bands each. Missed states DE, KY, ID, NV, AK, SD, and ND.

Equipment: K3S, P3, Alpha 8410 loafing, 2nd K3, P3, and tribanders and verticals. I need to make more antennas available to the second radio. More relays!

**N4PN - fixed - GA 151 cw 142 ssb**

Thanks to the sponsor and all the hard work to make this party a great success again this year. Hats off to Jim, K8MR and the "gang" for their efforts. 20m was almost a "no-show" but 40m and 80m saved the day. K0O/m lead the way here with 22 Q's and K8MR/m with 18 Q's. Great activity from other mobiles/rovers and fixed stations.

73, Paul, N4PN

## **K8MR mobile 810 cw 25 ssb**

A beautiful day to be driving around Ohio with long time friend K3LA. A good thing it was not a hot day, as the A/C in the 2007 minivan is dead with an estimate of \$2500 to fix it, i.e it ain't getting done.

Unfortunately neither were the bands hot. 40 was long, with nobody closer than Tennessee being loud. For the first few hours I had better results on 20 than on 40, an unusual thing for this part of the country. With few loud signals I didn't get motivated to more guys to SSB, which requires a pretty loud CW signal to be able to make the same QSO on SSB. The few times I listened on phone I heard few signals, and very few guys heard me when I called them on 75M.

80, though even it was odd in the first few hours, came through however, with well over half the QSOs being there. Top full hour rate was 140 Qs around 0200z, mostly on 80. The 10/15 QSOs were running the bands with K1LT as we passed nearby, plus an earlier double on 15 while near NF8O in Carroll county.

The major navigation error was when the back seat driver told the front seat driver to stay on US23 heading into Columbus until I-70, rather than I-270. So we ended up with a nighttime tour of downtown Columbus. Nice city, not so nice radio location. One good traffic delay: a cleanup from an earlier breakdown or accident on I-71 in Ashland county, allowing much more time there with very good rates than would have happened in the usual 15 or so minutes there.

Thanks to all who participated. I hope to be out on the roads again for one day in the Pennsylvania QSO Party in October before migrating south for the winter.

73 - Jim K8MR

## **K8RR - Rover - 155 cw 106 ssb**

First time out on the road for OhQP and found a few good rover locations on the fly. Weather was very nice! Did pretty well for an impromptu effort. Managed to make contacts from six counties; first HOLM, then STAR, COLU, MAHO, TRUM and ended the night in ASHT with a nice few hours of SSB and CW on 80. That was fun being the "DX"! The great day was capped by a fantastic view of the Milky Way while taking down the portable antenna. I'm thinking about not using "/R" next year since it seemed to trip up some ops and

"/county" might help prevent dupes.

Thanks for the contacts from all over. Looking forward to next year with better advance prep.

73 Rod K8RR (the new one)

**AE8M mobile – reported 170 cw and 64 SSB QSOs and ran 4 counties.**

**K8O mobile (W8CAR, K8NZ ops) reported 751 cw 58 SSB QSO -**

**KU8E -fixed GA - 144 cw 136 ssb**

Great job by K8MR and K8O (W8CAR and K8NZ) rovers. Thanks to them for all the QSY's to SSB. That's why my multiplier total is pretty good. A quick count shows 39 QSO's with K8MR and 31 with K8O.

**KN4Y fixed - FL 44 CW 25 counties**

This was a HF visit back to my State of birth, always enjoy the trip. I could not always locate the mobiles. At dark the storms started.

**NA8V - fixed - MI - 130 cw 87 ssb**

Great activity from Ohio! Was a little surprised to start working on 80/75m early in the 17z hour but that was a very good thing. 40 was really dismal here. Kept waiting for it to shorten up but it never did. Turned the amp on for 40 after the first several failed attempts at QSOs, ran LP on 80m until the very end when the band lengthened but it didn't help so I gave up an hour early. By my reckoning, worked 71 unique counties.

Great mobile/rover activity:

k8mr:	15
k8o:	14
k8ryu	9
ae8m	6

ac8uw 3  
n8kr 2  
k8rr 2  
w8ue 2

Greg/na8v

**K8T multi-op (AD8J, W3NO, WA3C) 617 cw 765 SSB**

Compared to last year, we had 585 fewer phone Q's and 37 less CW Q's. However we had the same number of mults each year. Thanks to the mobiles, especially K8MR that we managed to work 17 times and K8O with 12 Q's. Rover station K8RYU was in the log 10 times. We worked all states on SSB but missed DE and ND on CW. We had 7 counties that we never worked on either mode.

## Hawaii QSO Party

The same weekend as KS and OH, the HI QSO Party was held. Propagation wasn't the best but there were opportunities to snag many of the HI counties. FT-4 and FT-8 could be used in this Party as well as the other two.

It will be interesting to see how the digital folks did!

**From 3830 reflector:**

There were reports from a few dozen. Some had '12' multipliers, most less. From the east coast – most worked just a handful of stations. Mults included working the same entity on different bands – work on 20, 40 get 2 mults. No idea of how many 'counties' were on the air as there were a dozen or so multipliers, like Ford Island in Honolulu County. Very few QSOs reported on digital mode – just a couple.

**KH6CC 314 cw 13 digi**  
Operator(s): KH6AFQ KH6BMM KH6ZM NH7D

Station: KH6ZM

## **N6RO - fixed - CA 25 cw 18 phone 1 digi**

Was rather serious about this contest, but didn't sit in the chair much, just watched cluster spots in my TV room! Missed some 15m activity on Sat.AM, and a few RTTY QSOs until I got RTTY running. Sunday produced nothing except 30 KWH for PGE to run the A/C (100F outside), and fruitless CQing. Still, a fun event. Aloha.

## **Awards Issued**

from CQ Magazine, NX0X Awards Chairman

USACA #1268

Joao – CU3AA

July 27th, 2019.

from the August MARAC Roadrunner:

Bingo II #104

Paul, NS2N

3/5/13

Bingo III #42

Mike, NF0N

7/28/2109

USA Single Band 20M #33

Jack, WD4OIN

11/15/2013

USA Single Band 30M #5

Tom, N4RS

5/5/2019

USA Single Band 40M #34

Ken, AB4WL

7/6/2019

US Prefix N#23

Ron, N5MLP

4/25/2019

US Prefix N#24

Dave, W4YDY

6/14/2019

Polaris #481	Ed, N8OYY	7/6/2019
Digital Level 1000 #18	Ken, AB4WL	7/10/2019
County Challenge Level 4 #54	Ken, AB4WL	7/10/2019
Worked All Counties 5th #118	Mike, NF0N	7/11/2019
Worked All Counties 9th #11	Chuck, W3CR	7/27/2019
Last Counties Given 1500 #2	Ron, KB6UF	7/17/2010
Last Counties Given 350 #66	Lowell, KB0BA	7/19/2109
Last Counties Given 2700 #1	Bob, N4CD	7/28/2019

## Operating Events for County Hunters

Busy busy month with over 500 counties up for grabs in WA, TX, IA, ME, NH, NE, AL. Many also have a digital category so if you are a digital fan, keep your 'screens' open and be looking for them – PSK, FT-8, FT-4.

Sept 1 1800z to 2 0300z  
**Tennessee QSO Party** CW Ph Dig  
 RS(T), county or SPC  
[tnqp.org/rules](http://tnqp.org/rules)

7 1300z to 8 0100z  
**Nebraska QSO Party** CW Ph  
 County or SPC (FT8: grid square)  
[qcwa.org/2019-ne-qso-party-rules.pdf](http://qcwa.org/2019-ne-qso-party-rules.pdf)

7 1400 7 2200 3.5-28  
**Ohio State Parks on the Air** - SSB only  
 OH park abbreviation or “OH” or SPC

ospota.org

14 1400z to 15 2000z

**Texas QSO Party** CW Ph Dig

RS(T), county or SPC

[www.txqp.net](http://www.txqp.net)

14 1500z to 15 0300z

**Alabama QSO Party** CW Ph

RS(T), county or SPC

[www.alabamagsoparty.org](http://www.alabamagsoparty.org)

21 1400z to 22 0200z

**Iowa QSO Party** CW Ph Dig

RS(T), county or SPC

[www.w0yl.com/IAQP](http://www.w0yl.com/IAQP)

21 1600 22 0359 3.5-28

**New Jersey QSO Party** CW Ph Dig

RS(T), county or SPC

[www.k2td-bcrc.org/njqp](http://www.k2td-bcrc.org/njqp)

21 1600z to 22 2200z

**New Hampshire QSO Party** CW Ph Dig

RS(T), county or SPC

[www.w1wqm.org/nhqso](http://www.w1wqm.org/nhqso)

21 1600z to 22 2359z

**Washington State Salmon Run** CW Ph Dig

RS(T), county or SPC

[www.wwdxc.org/salmonrun](http://www.wwdxc.org/salmonrun)

29 1200 to 29 1500z

**Maine QSO Party** CW Phone

RS(T) county or SPC

[ws1sm.com/MEQP.html](http://ws1sm.com/MEQP.html)

That's all folks ! (8 27 19 )