# County Hunter News 

June 2021
Volume 17 Issue 6

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. We also cover some park chasing activities these days. 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 Frequencies are $14.0565,10.124 .5$, and 7056.5 , with activity occasionally on 3556.5 KHz . Also, there is SSB activity now occasionally on 7188 KHz . The CW folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155 , and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB . (21.336 and 28.336)

You can see live spots of county hunter activity at ch.W6RK.com
For information on county hunting, check out the following resources:
The USACA award is sponsored by CQ Magazine. Rules and information are here:

## http://countyhunter.com/ca.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 . Please check it out.
Back issues of the County Hunter News are available at www.CHNewsonline.com
De N4CD, Bob Voss, Editor (email: telegraphy@verizon.net )

## Notes from the Editor

## N4CD Rumblings

1) Sunspots - We got them...but we also have lots of 'solar wind' - negating the effects of sunspots in the $40-60$ range. Quite a few days with dozens of sunspots now but also with CME's kicking up the K index. K up to 5 at times.

2 ) Mobile Activity - - -Wow - mobile activity kicks into high gear. Lots of mobiles now planning trips - and AB7NK/K7SEN just completed 6,000 mile trip. Ron, KB6UF, headed to ME via many detours and counties and will be returning via MI! Planned trips are all set for NF0N, W0GXQ, K8ZZ, and others in the northern part of the country. So far this year, over 600 counties have been activated in state QSO Parties. WB4KZW also hit the road for some tough ones in MS.

3 ) CW Stats - we include the CW Stats compiled by Dennis, KK7X, Hope you sent in your totals after year end so you're listed and current.

## CW Stats via KK7X

Each year right after year end, Dennis, KK7X collects the current stats of CW county hunters and how they are doing toward the next time CW-Award. Some haven't updated in quite a while but here's the list. First column is end of 2020, followed by end of 2019, 2018, etc.

Call 20202019



## Gas Shortages?

Millions of people stuck at home for more than a year are expected to hit the road for much-needed post-pandemic vacations this summer. Good luck finding gas. Not that there's a looming shortage of crude oil or gasoline. Rather, it's the tanker truck drivers needed to deliver the gas to stations who are in short supply.

According to the National Tank Truck Carriers, the industry's trade group, somewhere between $20 \%$ to $25 \%$ of tank trucks in the fleet are parked heading into this summer due to a paucity of qualified drivers. At this point in 2019, only $10 \%$ of trucks were sitting idle for that reason.
"We've been dealing with a driver shortage for a while, but the pandemic took that issue and metastasized it," said Ryan Streblow, the executive vice president of the NTTC. "It certainly has grown exponentially."

Indeed, drivers left the business a year ago when gasoline demand ground to a near halt during the early pandemic-related shutdowns.

Not just any truck driver is allowed to drive a tanker truck. It requires special certification, including a commercial driver's license, and weeks of training after being hired. And while the jobs are more attractive than some long-haul trucking jobs that can keep drivers away from home for days or weeks at a time, it is strenuous, difficult work.

McCormick, who runs the workforce committee for NTTC, said another problem was the shutdown of many driver schools early in the pandemic. The pipeline of new drivers those schools would have produced has yet to be filled, she said. And then there's a new federal clearinghouse that went online in January 2020 to identify truck drivers with prior drug or alcohol violations or failed drug tests, which knocked about 40,000 to 60,000 total drivers out of the national employment pool.

In normal times, driver turnover can run around $50 \%$ on an annual basis, but that spiked to a roughly $70 \%$ annual rate in April of last year, according to Brad Fulton, director of research and analytics at Stay Metrics, a trucking recruiting and retention firm. Many of the drivers who hired on at tanker carriers last spring when the pandemic first hit left the field relatively quickly, sometimes taking jobs in industries such as construction, which
has been booming over the last year.
Tanker operators are raising pay to try to fill their drivers' seats, and raising the rates they charge customers accordingly. "I had to double my recruiting budget to get the same number of drivers," said McCormick.

Jeff Lenard, spokesman at the National Association of Convenience Stores, said his members are very worried about what the driver shortage will mean for their deliveries, especially with demand for gas already back up to $97 \%$ of where it was at this time in 2019.
"I've talked to retailers, they say there could be places where there are brief outages," he said. "If they have no fuel, they have no business. People aren't going to stop in for a sandwich if you don't have fuel."

Vacation hotspots are most at risk of shortages, and there were some sporadic outages reported in Florida, Arizona and Northwest Missouri during the recent Spring Break period, said Tom Kloza, chief oil analyst for the Oil Price Information Service.

But even if only a few stations run out of gas, that could spark a run on gasoline as drivers will start topping off their tanks to avoid running dry down the road, said Kloza.
"Imagine the hoarding with toilet paper and topping off of gas tanks that we see after hurricanes and you can see what might happen," said Kloza. The problem is made worse by the strong demand for gas, he added, which some forecast could top 10 million barrels a day for the first time ever at various points this summer.
"It doesn't take much - crowd behavior can provoke shortages," he said. Data from Adobe shows that a rebound in hotel bookings is running ahead of the rebound in airline bookings, with flights down $22 \%$ from 2019 while hotel reservations remain only $18 \%$ lower. That suggests that many people eager to travel again are planning to drive to their destinations, according to Taylor Schreiner, director of Adobe digital insights

All of this could put pressure on gas prices, which typically rise at the start of the summer as seasonal regulations take effect requiring the more expensive "summer blend" of gasoline needed to combat smog. The national average price of regular gas already stands at an average of $\$ 2.89$ a gallon, up more than $60 \%$ from a year ago when prices and demand were bottoming out. Kloza thinks the national average will flirt with $\$ 3$ a gallon this summer, and could top that level if any hurricanes hit the Gulf Coast or
there are any other disruptions to supply, such as a refinery fire.
Source: https://www.cnn.com/2021/04/27/business/summer-gasolineshortage/index.html

Turns out that you didn't have to wait till summer for 'gas shortages'. The hacker group DarkSide invaded the servers of the Colonial Pipeline System - and put them out of business. This was a ransom-ware attack. The Colonial Pipeline carries 100 million gallons of fuel for cars, trucks and airplanes every day from the Gulf coast refineries to all the states from FL to VA and in between. Naturally, with 'potential' shortages, people rushed to fill up their tanks, whether they really needed gas or not - and that, of course, did cause a shortage as over 1,000 gas stations ran out of gas as people horded it. At one point, $80 \%$ of all stations in NC were out of gas. There's a 25 day fuel storage there but getting it delivered 'all at once' can't happen. The pipeline is back in operation a few days later. Hmmm...anyone need any more toilet paper? Some folks have a 10 year supply in their garages.

So far, gas here in TX, OK, MO is about $\$ 2.70$ to $2.85 / \mathrm{gal}$. We'll see where it goes.

## Florida QSO Party

## AA4TI - county expedition 1664 CW 246 SSB

Really strange conditions from inland Florida. SSB with low power was nearly impossible to get a run going. I managed only one decent SSB run on 40 meters and none on 20. Propagation had good and bad swings. On CW I had huge pileups on minute and a short while later I was begging for contacts. FQP 2021 was a blast.

## KQ4D - county expedition - 1007 CW 153 SSB

As a station I used my IC-7300 with ASUS laptop and N1MM+ which handled expedition (Rover) mode well with the ROVERQTH and COUNTYLINE features. I
used a Bioenno 20 AH Lithium Ion Phosphate battery from N1ZZ as I did not want to chance running down my car battery in the middle of nowhere. Operating for hours at 100 W CW/SSB on the battery was no problem.

I had planned to use a $20 / 40$ meter 12 ft tall vertical dipole designed and built by Don AF4Z and me for DXpeditions fifteen years ago. However, I managed to break it while testing my station operating portable in FL during the GQP a couple weeks ago. So Don loaned me one of his newly designed FB-3 (20/30/40M) vertical dipoles, which worked great. All band switching is via the coax, so it was very easy to set up, and it operated flawlessly.

I took my travel trailer to Hardee Lakes Campground on Friday. I set up my firs site before the contest started. I started out operating a few miles away at four corners on County 37, which is so named because it is the corner of four counties. However, Hardee County at that point is about 100 feet off in the woods. So I operated from three counties there.
I went from there to the Hardee/DeSoto county line on US17. I operated there until 8:00PM when it was getting dark. Twenty meters was really open. I should have picked a site where I felt comfortable operating after dark, because I did not get to operate 40M or phone from that county line.

Sunday I operated a couple hours from the campground to have Hardee active on Sunday. Due to slower travel towing I only stopped and operated at my planned lunch stop in Highlands. I skipped my planned OKE/OSC stop to get to St Sebastian River Preserve on the BRE/IDR county line where I operated (through some heavy rain) until FQP end.

My plan Saturday worked pretty well with 756 QSOs, but fell apart somewhat on Sunday with only 404 QSO. But, there is always next year.

Thanks for all the Qs. Jan K4QD

## K4OJ Multi-op mobile 4385 CW QSO (ops KØLUZ N4KM NX4N)

Hi FQP Fanatical Friends,After the Virus Apocalypse last year and a truly "special" visit from Murphy in 2019, the K4OJ/m team was hungry to get back on the road for some FB FQP action. We we're not disappointed; what a blast! This was our 7th outing and we had great fun. Much to tell - read on...

B4 THE BALL - DANCING WITH THE RFI STARS:In 2019, I switched vehicles to my current SUV, a 2017 Toyota Sequoia - and, along with frequent Murphy visits, it was a disaster. Despite my best efforts and hundreds of hours of work, the 20 m station experienced S5-7 RFI from 40 m . I even blew up my K3 front-end during RFI experiments (ya know, cracked eggs to make an omelet...). K0LUZ lived with the RFI but at those levels we were missing an entire layer of small signal to work. Frustrating! So we agreed we would not do this again in 2021 until two conditions were met-1. All ops were fully vaccinated (that was the easy part) 2 . RFI has been abated to more managable levels. As team lead and VP of Latrines, my job is basically to keep Kevin and Red happy, drive them to counties on time and not get lost, and just let them run wild on the bands. They were watered, fed and (somewhat) rested but the chief challenge was the dadgum RFI. So I set out again to try to tame this tiger, and have worked on RFI abatement daily for the past two months. I've learned a lot and had some successes, and have relied on brilliant engineers like my friend K4SAV, VA6AM and K0BG's brilliant mobile website. Their inputs, direct or indirect over the years, have proven invaluable.

In the end, the 20 m RFI was improved to a manageable S2-4 - not optimal but workable!! And of course the K3's we use have clean TX, robust RX filters and super NB/NR functions to really aid this. And with zero RFI on 40 m or 15 m , so we declared it "good enough"! So, we hit de road, Man...

TAILS FROM THE ROAD - Positive, Negative and Just Plain Weird:Highlights:
Ain't no Meters... 40 m was *huge* with nearly 1800 QSO's (wow!) that kept Kevin busy day and night. Kevin made a Whopping 1000+40m QSO's on Saturday alone!

REDY ON 20: Big numbers on 20m too - Red made 2500+ QSO's despite Henny Penny's Solar Event with ESP signals and plenty of QSB. This is where the reduced RFI levels really paid off! I'm absolutely convinced Red would have put at least 300-500 Q's more if conditions had been better and signals stronger (he's done it repeatedly in the past).Terrific Teamwork: Ex. - Red would be trying to pull out a weak EU and asked Kevin to QRX until the QSO was complete; these two are simply wonder operators and team players. Much fun to watch them work together like that.

Get your Game-Face On: The new Sequoia was not nearly as roomy as my old trusy/rusty Suburban, so ergonomic sacrifices were required. One of the changes was switching to 87 key Gaming Keyboards. These are smaller, tactile but not too loud (I had to learn about red, blue and brown switches - I like brown); and they are waterproof
and tough as nails. And my ops love that they have backlit keys - great for nighttime operating. Good enough for weekend Online and HF Gamers alike!

Traffic: In the 9 years I have been doing FQP mobile, this was the lightest traffic I've ever seen. Not much police activity and much of the*endless* road construction on our route was completed. So nice! Come back another day: Very little rain and love bugs just a scattering of each. One 10min downpour near BRE was it. and no biting flies in MON (1st year ever).Rock solid station/antenna/power reliability - during the contest nothing stopped working, period. Almost boring, but careful what you wish for! The Pile ups! Both Red and Kevin enjoyed some Texas-sized pile ups, with truly A1 operators on both ends that kept it manageable and fun! With the higher activity we worried less about 'schedule' and often stopped in smaller counties to let 2nd and 3rd tier signal work us for the mults. Huge, extended pileups included stops in NAS, CLM, LAF, HEN, HIG and OKE. Hope you got what you wished for...MONROE! We headed through the Grand Dragon County of CLR for almost an hour before getting to that sweet little swath of paradise at MON. We stayed in MON for a full half-hour as headphones crackled with dx-style pileups especially on 20 m ; Red was exhausted but happy! Activity Levels were off the charts (thanks to all of you!). We were driving in CLR for about an hour and we *still* had a steady stream of callers - WOW! It was like that all weekend - thank you!

Murphy was largely kept at bay (see lowlights below). You may recall that in 2019 we lost our first hour, both stations, when a K3 died five minutes after the start of the contest and had to be replaced/rewired. BRO county-wide roadblocks cost us another hour. Gennie fuel line failure - you get the drift for 2019. But not this year!Driver was permitted to operate both stations during Gas/Nature breaks; oh my, I missed those sweet pileups!

Lowlights:We Be Jammin' Red Hot:
Red had to put up with intentional, persistent QRM, as well as multiple FIXED STATIONS IN THE MOBILE WINDOW (bad dogs!). Red fought valiantly but repeatedly was driven to QSY - really, really frustrating. Oh well, hope we can all respect the window next year.

There Ain't No Meters; really!
15 m was open Sunday but only the smart few checked it out. As we traveled big counties in SFL, Kevin would QSY to 15 m to chum for QSO sharks. We had 45 takers - all with good signals from East to West coasts, VE and everywhere in between. Even
worked an LU... Where was everyone else? Hopefully folks will try our forgotten band next year.

No LUCK, LAK - Murphy gets cute: Massive road construction near our starting point meant we missed our first county of LAK; we made up enough time to add PIN at the end of the first day instead. So 47 total counties instead of 48 . Hopefully next year we'll be more prepared (and the roadwork finished!).

Murphy PowerPlay:
So I pull into the Publix parking lot meeting point and our ops get inside to familiarize themselves with the stations. When Red hits his first DIT, the generator dies...Noooo! Kevin and I start debugging. I accuse Red of secretly smuggling an SB-220 into his setup thus killing the gennie. His denials seemed genuine so Kevin and I keep debugging and figure out that the fuel cap to the gennie from the external tank was not tight and thus leaked air (so no siphon). UGH
Well, here we are - empty 50lb gen and full 351 lb external fuel tank next to it; and no way to get gas from one to the other...yikes!

The brilliant station engineer says, "We can use gravity!" and promptly asks his bestest buddy Kevin to hold the 351 lb tank above his head while we drain some fuel into the Gen. "Kevin, the fuel line it too short; can you please squat a little bit?" Tnx Kevin. With some gas in the gen once again and a retightened fuel cap the generator cranked up and kept going strong the rest of the weekend. But I still don't trust that 20m 5KW DIT!

## BREAKING NEWS - FQP DOPING SCANDAL!

Three weeks before FQP I was working on the SUV and stations and wrenched my back - ouch! So the first week it was Ibuprophen and cold/hot packs. The 2nd week I start to worry and go to my chiropractor but no treatment is working. Stiff as a board... The week of FQP I break down and talk to my doctor and beg her for good drugs - she prescribes a muscle relaxer *and* prednisone. Five day treatment on steroids finished Sunday and kept enough of the pain away to allow me to function and drive. FQP Leadership has demanded that I submit to a random drug test before FQP 2022...

STRANGE BUT TRUE ROAD TALES/TAILS:This driver really enjoys operating FQP but the Stations management, route planning and especially driving the road rally can be both challenging and very rewarding. Our state is so beautiful and the endless green fields, huge trees and inviting lakes/ponds make this part of FQP fun for me. However, I also noted some real weirdness including the following, *all* near the MON/DAD/CLR
tri-county line:

## LOST HIS HEAD:

After our trip at the MON line, we start into DAD and within a mile I see a $10-11 \mathrm{ft}$ alligator with a huge belly - and *no head*. Some of our local swampfolk must have enjoyed the souvenir. Or had a really tasty meal...(er, tastes like chicken?).

## I GWANNA FQP, MON:

So just as we started heading north on US27 in DAD after seeing our headless buddy, I'm going at a pretty good clip when I see something long in the road. Is it a branch? A Boa? Another Gator? NOPE!

Just chillin' there in the right hand lane across from the Seminole Casino is a 3-4ft Iguana. I had no time to react so I just aim the tires on either side and hope we both stay still. Immediately looking in my rearview mirror, both Guana and I say YIKES and he runs back to the edge of the road and into the grass unharmed...only in South FL.These are *not* Steroid delusions - promise! My grown children still don't believe me...oh Dad!

So there you have the 2021 FQP K4OJ MM/m adventure - it was a heck of a lot of fun and we'll be back next year when (hopefully) 15 m will grace us with her presence. We may or may not add a 3rd station accordingly. Red and Kevin and perfect teammates; we have great synergy and encourage and help each other.
vy 73/OJ,Chris, NX4N - K4OJ MM/m Team Lead

## N4CW multi-op mobile ops N4CW W4TMO - 2734 CW QSO

W4TMO and I knew we'd be up against some formidable competitors, but we had set our goal and went ahead with giving it all we had. Jim put together the route and made all the reservations for our stays in route; moreover, he did ALL the driving and some of the operating! I really am indebted to him for executing his plan so effectively; me?, I'm just the guy in the back seat playing with the radio!

We started our trip on Thursday around noon and headed southwest, stopping overnight near Atlanta. Friday we made it all the way to Pensacola, passing through Alabama...good roads, light traffic, a nice coconut shrimp lunch in Alabama! We were
unpacking the car at our motel in Pensacola when up drove Jack, K1KNQ! Later K1XX with W1MD driving pulled up...we joined them for dinner along with Jay, N4OX, and a ham buddy (sorry, forgot the call!). Saturday AM we met Marty, Charlie, and Jack at the Waffle house next door for breakfast and a discussion about the bad weather that was about to pass through (tornado warnings were issued, but the radar map indicated that the bulk of the weather was heading north of us). So our day started on time with a deluge, but we managed to get through it and started our county to county odyssey. That first day we got 28 counties covered and made 1046 Q's, then did our overnight stay outside Tampa.

Sunday, the second day, we started on time on the MTE/POL county line with K9CT being our first contact. From then on, it was county to county and pileup after pileup! We did get lost just once when the GPS gave us a weird route just south of Lake Okeechobee... that probably cost us time to cover another county. Jim recovered expertly and in that process provided Jack, W1WEF, with his last two counties for a clean sweep! We finished the day by sitting right in front of the STJ county line while in PUT. We had covered 30 more counties and garnered 1688 more Q's for a total of 2734. I had the best rates I've ever had in a contest!!! THANK YOU.

Pileups were manageable with only an occasional out-of-turn caller. I was absolutely delighted on Sunday when I heard the pileup chase away a "fixed" FL station start calling CQ right where I was... another THANK YOU! The "intruder" apparently forgot the rules about avoiding the "mobile window"!

With the great success we enjoyed, we marvel over AD4EB's performance; Jim and Melody, WELL DONE!

Stats: 2015 Prius (with driver!), K3, and 3 antennas: 20M "bug catcher" vertical (home brew by W4TMO), 40M "hamstick" from Quicksilver Radio (US made!), and 15M "Outback"... 40 and 15 mounted on roof rack.

Final note: we put on $4000+$ miles for this event, Thursday thru Monday!
All those calls and the patience for your turn to get a reply are deeply appreciated. 73, Bert (and Jim)

## W4AN mobile multi-op (KU8E, K4BAI ops) - 2436 CW QSO

It was nice to get on the road again in the FQP as W4AN/m. Missed last year because of COVID-19 and the previous couple years I was solo because K4BAI couldn't make the trip.

Conditions were unbelievable on 20 meters. It was open until maybe the last hour on Saturday night. On Sunday we spent some extended time in both FRA and GUL to make sure everyone worked those rare FL counties. For fun we drove over the three mile bridge to St George Island (NA-085) and we could tell the mobile antennas worked pretty good over and near salt water !

Hopefully everyone had as much fun as we did. It was a real rush working the big CW pileups. Also I hope we handed out some counties that everyone needed. QSL W4AN via K4BAI.

Kenwood TS590SG Hustler mobile antennas on triband-mount for 40 and 15 meters 20 meters - 15 Meter Hustler resonator with DX Engineering Top hat

Jeff KU8E for the KU8E/K4BAI W4AN/m team

## N4FP multi Op (K2PS, N4FP ops) 1954 CW QSO

K2PS and N4FP had a great time touring Florida counties. Band conditions much better on Sunday but still areas with a lot of heavy line noise. Thanks for all the contacts. Flex 6400, 100 watts to Hustler antennas horizontally mounted on 3 foot mast attached atop car roof with 3 magnet mount. Managed to operate from 32 counties.

## AD4EB mobile 3431 CW QSO

2021 was another incredible FQP for Melody and I. We were concerned about the CME seriously affecting propagation, but it turned out not so bad. Several times signals were very strong, and then a few minutes later they were below the noise level. But overall, the recent solar activity brought the bands alive like I have not seen in a long time. The DX stations were loud, most notable were I4VEQ and VE3NNT, and there was plenty of short skip on 20 m to keep the rates high.

We had trouble staying on schedule Saturday due to road construction and just heavy traffic in some areas. So we had to skip stopping in Glades, and only had time to work 4 station. We had no trouble staying on schedule Sunday, and managed to operate from all the 49 counties planned.

The pileups were the largest and loudest I have ever experienced. The biggest were during Sunday afternoon, and at times were just a roar on 20 m . What impressed me the most was the cooperation the majority of the stations in the pileups gave each other, as they could easily have gotten out of control.

Kudos go to my wife Melody who had no trouble driving the 1,006 miles Saturday and Sunday. Many thanks Melody, you are amazing. There was a nice surprise waiting for her on an overpass on I-75 in Alachua County. Jeff, N4RKK, put up a homebrew sign on the overpass saying "TU MELODY" for her to see as we passed under. Unfortunately she did not see it, focusing on the road most likely, but he emailed us a photo of it after the contest and we really got a kick out of it. Thanks for your appreciation Jeff.

Thanks to all the people that worked us in the contest and hung in there during the pileups. And thanks to the FCG and Chris NX4N for having us in your terrific state and contest for the second time. This was our highest score ever in a QSO party, Florida knows how to pull off a party!

## 73 - Jim AD4EB and Melody KI4HVY

## K8MR mobile 2324 CW 286 SSB

Quite the contest! I wasn't sure what to expect given the geomagnetic storm forecasts, but things worked. I found signals to be down for much of the day on Saturday, finally picking up early evening. Sunday was a bit more normal. I did not feel impacted by storm QRN - I guess I already had quite enough QRN that I was making myself.

I took much advantage of county lines. I never found good parking spots on Sunday, but I did six county line stops on Saturday, including three with DeSoto. Charlotte, Sarasota, and Sumter were purely drive through operations. Once heading north on I-75 on Saturday night I had no quick or easy place to stop and reload the WinKey messages, so CHA and SAR were sent entirely by hand. CHA was not too tough to get out by hand, but I hope I didn't give too many people a HAR or SAN "multiplier" from Sarasota.

I also took advantage of salt water in Manatee, Hillsborough, and Pinellas. I was parked ten feet from the water in Manatee on Sunday morning, where I had a hundred QSOs on 20SSB. In HIL and PIN I was parked over salt water at the North Fishing Pier State Park.

The interesting sights award: my first ever roadside road kill alligator in Hendry county, and what appeared from a quick glance, a big electronic billboard in St. Petersburg that appeared to have about 30 lines of an error message.

The one hour off time was driving through St. Petersburg and Tampa on I-275. There is way too much traffic there to safely operate while driving. Otherwise I record the driving part and transcribe those QSOs later.

Thanks to all who followed us mobiles around the state. It was a lot of fun!
73 - Jim K8MR

## Delaware QSO Party

Was there a Delaware QSO Party? One was scheduled - but didn't hear a peep on 20 m CW from TX. Most folks caught a couple - and probably more activity on 40 and 80 m toward evening. Likely some DE stations busy working other QP's and not on the air calling CQ DE QP. Or working the New England QP. Looks like most of counties (3) were on the air - but probably $40 / 80 \mathrm{~m}$ mostly. Propagation wasn't all that great on 20 m . No one had much in the way of comments on the 3830 reflector to include.

## Ran All USA Counties

So far, 18 county hunters have made it to all 3077 counties and transmitted from them. There hasn't been an award in almost five years now - the last being in June of 2016. Who is going to join this group? First, KB7QO did it all SSB. Second, W1TEEE did it all CW. After that, half were SSB/FM only - and the rest mixed mode.

Here's the current list.

| 18 | K3IMC | $6 / 10 / 2016$ |
| :---: | :--- | :--- |
| 17 | N4JT | $3 / 5 / 2015$ |
| 16 | AB4YZ | $10 / 16 / 2013$ |
| 15 | AF3X | $7 / 12 / 2013$ |
| 14 | AI5P | $6 / 21 / 2012$ |
| 13 | N9QPQ | $6 / 3 / 2011$ |
| 12 | AA9JJ | $6 / 3 / 2011$ |
| 11 | KL1V | $8 / 6 / 2010$ (now KV7N) |
| 10 | N8RLJ | $10 / 26 / 2009$ |
| 9 | N8KIE | $10 / 13 / 2009$ |
| 8 | KK0L | $6 / 19 / 2007$ |
| 7 | N7ID | $4 / 19 / 2006$ |
| 6 | N7AKT | $2 / 24 / 2006$ |
| 5 | K0GO | $10 / 15 / 2002$ |
| 4 | N4CD | $7 / 20 / 2002$ |
| 3 | WA0SBR | $11 / 22 / 1998$ |
| 2 | W1TEE | $6 / 29 / 1991$ |
| 1 | KB7QO | $7 / 25 / 1988$ |

## Mobile Activity in May

At the end of April
Ron, KB6UF had reached NH and headed north to ME, ran ME counties, then paused a bit.

Mary, AB7NK, and Neil, K7SEN, were in TX headed east, thru a bit of OK, into AR, MS, TN, AL, GA, ....then finally a bee line back to AZ after weeks on the road.

Mike, KA4RRU, ran counties in VA, NC, SC, on his way to FL. Later returned via counties in western VA.

Rick, AI5P, was out and about in CO - hit a few parks as well

We had a weekend full of QSO Parties - first weekend of May
Ray, WB0PYF, noted in a few in MO
Then there was the AR QSO Party with half a dozen mobiles on 5-8-2021
Kerry, W4SIG, took a trip to MS with lots of MS counties.
Bill, K0DEQ, took a trip to IN and ran lots of counties there. Dozens and dozens.
Jerry, W0GXQ, left CO and noted in KS. He would join up and bumper chase K8ZZ through many KS counties for days. Up north through NE, IA counties to MN. For many, many days - weeks!

WY0A headed out on trip from TX, into LA then back into TX.
Mike, NF0N, headed out for NE and SD counties on a multi-day trip.
Ed, N8OYY, noted out in VA, into KY.
Bill, K2HVN, headed up to New Haven, CT
At the end of the month, NF0N still in SD, W0GXQ/K8ZZ still putting out counties in MN. They've been at it for over two weeks.

End date 516

## A Wooden Satellite (no joke)

The WISA Woodsat project, which is being sponsored by a plywood supplier in an unconventional PR drive, could place a wooden satellite in orbit by the end of the year, testing the suitability of treated wood as a cheap space material.

The wooden satellite is based on a basic, versatile CubeSat format, Kitsat, which is designed with educational use in mind. It retails for just $\$ 1,500$. The Woodsat project,
based in Finland, began with students across the country contributing parts to a CubeSat launched by balloon.

The latest mission is a joint venture between UPM Plywood, design house Huld and space tech firm Arctic Astronautics, which designed the Kitsat. The students are working with these organisations to build a hardier version of the Kitsat ('WISA Woodsat') for launch into polar orbit.

The launch will take place from the Mahia Peninsula launch complex in New Zealand, using a Rocketlab launch vehicle. It is hoped that the launch will take place before the end of the year.

The satellite will be 10 cm cubed, weigh 1 kg and will be covered on all sides by coated birch plywood from supplier WISA plywood, which is sponsoring the launch. The satellite will be powered by nine small solar cells. It will orbit at an altitude of 500550 km and complete a full orbit every 90 minutes. The plywood will be exposed to extreme temperatures, space radiation, and vacuum pressure.

A statement said: "WISA Woodsat will go where no wood has gone before. With a mission to gather data on the behaviour and durability of plywood over an extended period in the harsh temperatures, vacuum and radiation of space in order to assess the use of wood materials in space structures."

Once in orbit, a selfie stick will extend from the orbiting satellite, capturing photographs of the wooden box hurtling through space at $40,000 \mathrm{~km} / \mathrm{h}$. This will allow the mission leaders to monitor the impact of the environment on the plywood.

The plan is to use a simple, low-power receiver to pick up the satellite's signal and then broadcast information from its sensor suite and two cameras, using frequencies available for amateur radio.
"The wooden satellite with a selfie stick will surely bring laughter and goodwill," added mission manager Jari Mäkinen of Arctic Astronautics. "Essentially, this is a serious science and technology endeavour. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communication; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularise space technology."

If the mission is successful, it would validate the feasibility of treated wood as an inexpensive and abundant alternative material for use in space applications.
"We can test many things in our laboratories, but the ultimate test for space worthiness can only be done in space," said Ari Voutilainen, space project manager for UPM Plywood, speaking to The Independent. "The space industry is constantly looking for material innovations for spacecraft and space stations. We are working with the European Space Agency to see if wood and plywood in particular can be used for those purposes."

A haggis took flight by weather balloon to celebrate Burns Night this January. While reaching heights never before attained by a haggis in recorded history, it did not reach space, which is generally defined as 100 km above the surface of Earth (the Kármán Line).
https://eandt.theiet.org/content/articles/2021/04/selfie-stick-wielding-wooden-satellite-to-launch-by-end-of-2021

## Indiana QSO Party

Lots of stations on the air and lots on 40 and 80 m

## AE8M mobile 99 CW 82 SSB

I park to operate and the operating time of 4.3 hours does not include driving time between locations. 27 Q's were with IN stations, in 15 counties, all on 75/80.

## K9IU Portable multi-op OWEN IN 307 CW 363 SSB ops K7JOE K9BMR KB9YOJ KC9ZMA KD9DAB KD9GTU N9OIU N9VKU WBØSND WB9TLH

We had lots of fun at McCormicks Creek. Had 17 total visitors / operators and got the club on the air.

73 til next year K7JOE et al

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K9KJ - portable - IN - Lake - 94 CW 6 SSB
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Had fun at the Lasalle Area Nature Preserve. Got a chance to test out my buddipole and pit it against my ATAS120. Took the wrong antenna tuner and brought the one for my QRP rig, so I had to run about 20W max the whole time I used the Buddipole.

## KJ9C mobile 494 CW 58 SSB

## NOT MUCH I COULD DO AFTER DARK, TOOK TOO MUCH OF MY ATTENTION TO STAY ON THE ROAD

## WA9LEY - mobile -- 27 CW 119 SSB

Operated mobile from two Indiana parks, LaSalle State Fish and Wildlife Area and from Willow Slough, both in Newton County. I use a Yaesu FT891 to an ATAS120A antenna on a mag mount.

## K9IU portable 307 CW 363 SSB ops: K7JOE K9BMR KB9YOJ KC9ZMA KD9DAB KD9GTU N9OIU N9VKU WBØSND WB9TLH

we had lots of fun at McCormicks creek. Had 17 total visitors / operators and got the club on the air. 73 til next year K7JOE et al

## AC9EZ portable 120 CW 174 SSB

Another great INQP! Indiana activity seemed really good, with lots of IN counties on the air. Conditions on 80,40 and 20 seemed pretty good. 20 m was wide open to the 7 th Area QSO Party, with some propagation out to the NEQP. Due to a non-ham event being held on Saturday evening, I decided to enter as a portable entry this year. I had a good run on 40 m ssb, with some shorter runs on 40 m cw. Equipment used was my Yaesu FT-450d transceiver, Kent paddles, a 172 foot-long doublet (homebrew), and a
homebrew G5RV-style doublet with a random length feed line.
73 and hope to work everyone in next year's INQP!
de Jim ac9ez

## New England QSO Party

## W1DX mobile - 352 CW 49 ssb <br> Operator(s): K1DM W1AN

John W1XX scouted for potential sites on state and county lines and prepared the route and stops for our mobile operation. In addition to several good sites and backups he was able to locate one state line we could straddle and include three counties. The prior week he secured permission from the property owner for access. At this site and the others a light weight fiberglass telescopic mast on a tripod with a 40 M inverted Vee at 13 M was quickly set up for use. It was easily tuned for 20 M with the K 3 internal tuner.

For operation in Boston SUFMA, our white work van with roof racks and orange traffic cones were setup on a side street. Our tripod for the antenna was setup over an open manhole. We all had our hardhats, but the out of state "ham" plates gave us away allowing only an hour or so operation before we were chased.

Mike K1DM was CW operator and chief of tech support.
We did most of our operation on 40 M .
Counties and Qs
BRIMA 31
BRIRI 69
KENRI 77
PLYMA 128
PRORI 29
SUFMA 24
WINCT 43
NE Counties working us (21) were minimal due to band and operation times.

## N1E mobile (K1IB opr) 543 CW

Operating SO LP CW Rover in VT and NH mainly at six different county line or state/county line locations along the Connecticut River valley.

Operating was fun, but propagation conditions were absolutely stinko! Did the 7QP run this year? I never worked one station signing a 7QP county, and apart from a very few Californians I didn't work anything beyond TX and OK. No upper midwest either. Propagation to Europe was somewhat better. Some French and Belgian stations called in and a few from PA, DK and HA.

## NS2N - fixed - NY 207 CW

good activity - short skip openings on 20 and 15 made things interesting thought I'd catch more on 160 m
thanks, neighbors !
NS2N

## W0BH - fixed - KS - 102 CW 98 SSB

Most of my contacts to the NEQP came on Saturday.
Thanks for the Qs!
73, Bob, w0bh

## WN4AFP - fixed - SC 148 CW 50 SSB

I had a blast chasing K2UA and NZ1U mobiles. Prop allowed me to work NE stations on four bands. Thanks to all the NE ops who heard my small peanut--whistle calls. I worked 53 mults including on of the rare ones... NANMA. I enjoyed working many of
my NE friends including W1WBB, AB1J and many more. 73s Dave WN4AFP

## 7 Land QSO Party

Conditions seemed decent for this QP. Not much in the way of sunspots but K index low and bands seemed good. Almost nothing on 15 m . At my QTH, caught all of two stations on 15 m to AZ. Probably could have worked a dozen or two but no one checking 15 m and maybe only a few places where skip worked. All spots 20 M and below. The SFI number was in the low 70s approaching 70 on the bottom side.

N4CD was mobile over in the local park and snagged 95 QSOs in 7 land in a few hours. There were a few mobiles out running - N7WA, K7TQ and many county expeditions or portables.

From the 3830 contest reflector:

> N7D - portable Esmeralda NV - 516 CW 264 SSB
> Operator(s): W6KC W6SW

Jim (W6KC) and Randy (W6SW) teamed up to operate a county expedition from the very small town of Dyer, Nevada in sparsely populated Esmeralda county. We had fun staying in a rustic BnB with beautiful views and were joined by our XYLs. There were no tall trees to get our dipoles very high, but they worked great anyway. We drove into town Saturday night with our XYLs to have dinner at the appropriately named The Boonies Restaurant, which was fun, but we missed 2 hours of prime time operating. It was exciting to have VY1JA call in on 20M CW, but missed ND \& SD for the WAS. We also missed half of the Canadian sections and only worked one other station in NV.

Portable rig: FT991A, KAT/KPA500 with a 20M Dipole and an Alpha-Delta 80/40M Dipole both up about 20 ft at the high end.

73, Jim W6KC \& Randy W6SW @ N7D - See the team at: https://www.qrz.com/db/n7d

## N1XP/7 county line expedition - 1606 CW

ORCUR/DOU. SO county line. Extended double zepp fed as a doublet for 80,40,20. Great conditions on open bands

## NN0G county expedition (and park)

7QP / POTA activation at Guernsey State Park (K-3298). Spent as much time as my domestic responsibilities and weather allowed. Finally quit about 23:00.

This was my first semi serious contest for a very long time. Will do it again.
Average rate was 40 , with it peaking over 100 for short runs. Not to bad for a FT891 running 100 watts into an EFHW antenna.

## K7RF - County Expedition - WASCO OR - 762 CW

Crazy 11h hour decision by Rocky (NE7D)\& myself to see if we could throw together an operation away from home in just a couple of days, including permission to use the site. Basically no water, no power, no planning. Murphy came close to blowing the thing up after the 3 hour trek to rural Wasco County. Conditions generally seemed good but with low inverted vees and LP there were many times when rates were pretty pathetic. However, those were offset by sporadic nice runs which kept us plowing ahead most of the contest. 40 was definitely our money band. Thanks to those giving us a call or hearing us call them.

## W7QM - County Expedition - (W6PH opr)- 640 CW

This started out to be a County Expedition to an abandoned brothel on US Hwy 6 just inside Nevada in Mineral County. The director of the Eastside Contest Group (W6SX) suggested trying the county line as Esmeralda County is close to Hwy 6 at the Cal border. On a 4WD map I saw a jeep trail that would go to the county line. I got to the spot about 7 am and found the jeep trail. I followed it up to a point that would be the border and found a $6 \times 6$ post about 8 feet high with no markings. But it is in the right place to be a county line marker. There was a good spot to set up. I erected my 40/20
vertical (a single 20 m trap) and guyed it as there were strong winds forecast. It took about an hour to get ready and my first contact was $8: 15 \mathrm{am}$. I was set up on the tailgate of my S10 Blazer with a folding chair to sit on, a very uncomfortable decision. I had the laptop inside a cardboard box to enhance the readability of the screen in the bright sun. It wasn't enough and I spent most of the time with my head inside the box to see the keyboard and logging window. I tried throwing a blanket over the box and my head but it kept getting in the way. I have to figure a way to alleviate this in the future. By 5:30 pm I had had enough and went QRT. It took about an hour to take down the antenna and stow everything and I headed back to Lone Pine at 6:30 pm.

I actually made contact with 320 stations but each contact counted as two QSO's being on a county line. I operated at 24 wpm because I felt that a faster speed would make it difficult to copy my exchange. Even so, I had many requests for repeats. I missed NJ, DE, LA, ND, and SD. I had 5 European mults and a single JO7WXN call in. VE3, 5, 6, and 7 were the only Canadians.

My thanks to K4XU and the others that sponsor this QSO Party. It was fun.

IC7000, 40/20m vertical, DXlog, Honda EU2000i generator, S10 Blazer
73, Kurt W6PH

## N7WY - County Expedition 517 CW 22 SSB

K3s, inverted vee with apex at 40 ft , battery power, N1MM Logger+.
First 93 minutes spent fighting with K1EL keyer. Suspect is now the RCA connection on the back panel. Time for some solder.

Quit 400 minutes early. 20 minutes later there was a horrendous show of cloud to ground lightning, high winds, and a smidgen of rain. I suspect the wind would have damaged some part of my antenna seen on QRZ.com. Fortunately I was able to get everything down before the lightning star

## NN7M - county Expedition - Harney OR 375 CW

Had a great time staying with friends an off grid cabin. If all goes well, I'll be back with
better antennas and more power.

## N7XU - mobile - (K4XU opr) -877 CW QSO

Long day in the saddle. My driver was W7AM, a recent addition to the CODXC. He had never seen a good part of the outback Oregon and was eager to see the country. There is a lot of empty space in Eastern Oregon. Several of the counties have no intelligent life forms which is what shapes my route.

After doing the 500 mile route I dropped Richard off around 6PM local at his car and I went off to a couple of my favorite quiet spots where I can pull off the road and work the low bands. 20 m became non-productive about 7:30PM and I changed out the 20/15m antenna for a single 40 on the fender mount. The screwdriver on the trailer hitch was used for 40 m at the start. When changed from 40 m , the screwdriver went to 80 m . Hitch mounting the screw driver renders it half as efficient as a fender mount but this High Sierra screwdriver is too much load for a fender mount.

Low band conditions were quite good and judging from the number of DX stations worked, 20 m was in good shape. I checked 15 m a couple times but it was empty. The slowest hour was 20Z: 25 QSOs going through the John Day river canyon, a place best suited for moon bounce. It was raining cats, the first rain since November, and the first time in 16 years of 7QP. It cleared by 22z. Richard was happy.

Missed ND, SDn and 9 of the 13 VE mults. So with 8 DX the mults were 62 , a record for me.

The rig is a TS-480, HP laptop and a MORTTY. The homebrew antennas have an open coil at 40" and as much "whip" above as the law allows - 13'6" max height. The vehicle is a very rf-quiet VW Jetta diesel.

Thanks for all the QSOs and my thanks to all the 7QP state captains who make this one of the best attended QSO parties in the land.

Dick K4XU

## K7TQ mobile 632 CW QSO

24 counties in the four states of MT, ID, OR, and WA. It was difficult to find then keep a fq on 20 m , so we spent more time on 40 m than in previous 7 QPs . Big storm around Boise in the early afternoon. A pleasant surprise in IDADA and IDIDA from deep in the Salmon River canyon.

Full story and pictures at https://sites.google.com/site/randyk7tq/home/2021-7th-call-area-qso-party

## KK6MC - mobile - 403 CW

We got a later start than intended. I did a mobile effort and had to get over a few issues with battery voltage at the beginning. After I got that sorted out, operations were pretty smooth. Propagation was good, 20 M was open from the beginning and 40 M was open most of the day, but there wasn't much activity on 40 M in midday. I checked 15 M a couple of times and called CQ, but there was nothing on. Still it doesn't help to try.

I appreciate the fixed stations who followed me around and were aware when I changed counties. There were places in canyons where I could not get out all that well, and that includes the freeways of Phoenix, which all seem to be below ground level. Tucson and Phoenix were noisy, as one expects, but most of the trip was pretty QRN free. Lots of activity on 20M mid day and 40M late, so it was hard to find a clear spot to run. On a day like Saturday, with lots of activity in four QSO parties, running can be tough for a mobile.

Thanks to Virginia for driving.

## N7WA mobile 457 CW QSO

One of these days, I am going to run a mobile operation and it will be eazy-peazy... no problems whatever... ok... enough... enough! You can stop rolling around hysterically on the floor. That's not nice. This year, I messed up my published schedule, there were self-inflicted computer issues, Winkeyer lockups, plus high winds pushing me all over the road towards the end of the day.

I was looking forward to this 7 QP run. Last year, the pandemic and health problems with my wife contrived to keep me home. I even invited along one grandson, Chris, who I haven't interacted with for over a year, to ride along. (Too young to drive unfortunately.) I did warn him! It would be boring each time I stopped to operate and to bring
entertainment for himself. (Oh, and forget about cell service on the back roads of eastern Washington so limited messaging and on-line apps with his phone.)

Chris, has never been more than 50 miles from home, never-mind over the mountains into eastern Washington which is way different than the wet side. On the way, he learned about county's, the unique geology of EWA, saw large farms, ranches and windmills, met cows on the road, and learned that tumbleweed is real stuff.

We started on the Okanagon/Ferry County line, one of my favorite spots. Got there half an hour early and started setting up the computer which didn't want to talk to the radio. I finally gave up as starting time arrived. Despite the early hour, only two Q's on 80M, four on 40 M , but 20 M was going pretty good. Probably would have done better going straight to 20 M at the start. Oh, as I stored the computer before leaving OKA/FER, I saw the computer serial connections had pulled out of the KXPA100. Considering it was a right angle connection, I don't know how that happened but I blame my early start for not figuring it out sooner. <sigh!>

As we headed for Douglas County, I saw another problem. The GPS said I would be there a lot later than my published schedule. I expect I picked the wrong coordinates (I have several) for Douglas County. That required some adjustments for Douglas and the Lincoln/Grant County stop. I had enough time loaded into lunch that we were able to get back on schedule after that. By lunch, I had 144 in the log, mostly on 20M. The surprises were DL, TK, and JA in the log.

After lunch, it was down to the Adams/Whitman county line. I worked three Q's and the keying stopped. Computer or WinKeyer? QRX! Rebooted, tried again. Died again. QRX! I worked about a dozen guys by hand (after I dug some paper out of the backpack) until the pileup cleared. Then, I decided to try a ferite on the USB cable to the Winkeyer. Success! No problems with that the rest of the day. It was one of my more successful stops with about 70 Q's in the log. (Always carry extra ferite.)

The next two stops, Garfield and Columbia/Walla Walla had us headed south and west. Finally, towards home. Both were decent and trouble free. We could see trouble ahead as we crossed Walla Walla County headed for Franklin County. At first, it looked like thunderheads further south towards Oregon but as we got closer to Franklin, the wind really picked up and so did the dust. After doing my run sitting in a State Park, the amount of dust on the computer was pretty obvious.

We picked up dinner and I made a decision of only one more stop. It was supposed to be Benton County followed by the Klickitat/Yakima County line. I just went with

BEN/KLI. It would knock an hour off the trip and YAK is pretty well activated. The wind driving to BEN/KLI was really hairy and I drove much of it in the middle of the road at reduced speed. Fortunately, it's not busy road and nobody passed us going the other direction for 30 miles. BEN/KLI was another great stop. I could tell the evening was going to be good conditions. However, for us, after an hour, we were done and it was time to head home. Chris got to sleep almost all the way.

All-in-all, it was a great trip and nice to get out in the world. Driving and operating is never efficient but I knew that going in. The "mobile window" is a disaster. It was wall-to-wall non-mobiles. I am not sure there is a solution but I want to think about it a bit. People complain when there aren't enough rovers/mobiles but it's hard to be heard over the clamor. It was obvious when I got spotted and I and other mobiles really appreciate it.

Thanks for the great QSO Party.

## COVID May 2021

As of mid-May, over 150 million US folks have received at least one shot, and over 100 million are fully vaccinated. The age limit is now down to age 12 for Pfizer shots, and soon will be down to 2 month olds by the end of the year.

Infections are falling in most states but not all. There are some troublesome spots and too many 'reluctant' to get their vaccine shots. Things won't be back to normal till EVERYONE gets on board.

Our local radio club is going to try to have in person meetings starting mid-June. The meeting place is a large room - 100x150 feet in a church annex - so we can spread out. They are still working out the details - and in person attendance may be limited. It will also be live on ZOOM as well.

Hamfests seem to be coming back starting August - so we'll see. Some are being held in large outdoor areas like drive in movie theaters and similar venues so you can have 10 feet between sellers and six feet or more between buyers and sellers.

Hopefully by fall, 200 million US folks will be fully vaccinated - or more! Pfizer shots
can be given from age 12 upwards.
If you haven't had your shots - sign up. If you want this to end, and not keep coming back, get your shots! Now! ASAP! Don't be a typhoid Mary or Joe type.

Around here, grocery stores still require masks and everyone wears one. Same for entry into restaurants. There are sports events going on - baseball games - but masks required when not eating/drinking. Mid-May, the CDC announced no more mask requirement for vaccinated folks outdoors, and up to states to determine where indoors. Walmart is now going mask free for vaccinated folks. Others likely to quickly follow.

The trajectory is good. Source: Info from the NY Times

The CDC has issued advice that vaccinated people no longer need to wear masks outdoors and likely most indoor places - starting mid May. Some businesses will still require masks and of course, the mask free initiative is only for fully vaccinated people. If you're an anti-vaxxer, keep wearing your mask and just hope you don't come down with a deadly disease, or one that gives you fried brain, permanent organ damage, or floppy inoperative penis, the side effects of a severe case of COVID-19. (beside death).

Change in New U.S. Covid-19 Cases and Deaths Since Jan. 1


Based on 7-day moving averages By The New York Times | Sources: State and local health agencies and hospitals
ince Jan 1 of this year, cases are down $80 \%$. Deaths are down nearly that amount. However, 600,000 Americans have died from COVID so it is not a trivial matter. New variants being generated in India still have the potential to make life miserable for all. Likely booster shots to handle those will be required this fall/winter along with your normal flu shot, of course. People are STILL DYING from it, and even if you don't die, there are weird side effects - like early Alzheimers,
" The COVID-19 virus has confounded and confused the public, doctors, and scientists alike by its ability to infiltrate numerous body parts, areas, and organs. Now, a new study out of Miami is sure to make all male readers shudder for a moment. University of Miami scientists have, for the first time ever, discovered traces of COVID-19 within penile tissue.

Even worse, these traces were discovered long after recovery, suggesting the virus may stay in mens' genitals for months on end. As if that isn't enough to leave many a man feeling uneasy, researchers also theorize that the "widespread blood vessel dysfunction" caused by COVID-19 could contribute to erectile dysfunction.
"Our research shows that COVID-19 can cause widespread endothelial dysfunction in organ systems beyond the lungs and kidneys. The underlying endothelial dysfunction that happens because of COVID-19 can enter the endothelial cells and affect many organs, including the penis," says study author Dr. Ranjith Ramasamy, associate professor and director of the Miller School's Reproductive Urology Program, in a release. "In our pilot study, we found that men who previously did not complain of erectile dysfunction developed pretty severe erectile dysfunction after the onset of COVID-19 infection."

Just like so many other conditions being linked to COVID, like increased risk of heart disease or neurological symptoms, researchers say the nerve damage caused by the coronavirus may cause ED, or it may only worsen the condition. Additionally, earlier research involving Dr. Ramasamy reveals evidence that COVID-19 can invade the testicles of some infected men.
"These latest findings are yet another reason that we should all do our best to avoid COVID-19," adds first author Eliyahu Kresch, a medical student working with Dr. Ramasamy."

Source: https://www.studyfinds.org/virility-the-virus-covid-found-in-penile-tissue-may-even-lead-to-erectile-dysfunction/
"We are learning that a significant number of hospitalized COVID-19 patients have various degrees of brain impairment. As a medical community, we need to monitor these patients over time as some of them may develop cognitive decline, attention deficit, brain fog, or Alzheimer's disease in the future."

## https://www.j-alz.com/content/three-stages-covid-19-brain-damage-identified-top-neurologists-journal-alzheimer-disease

Worldwide, the death toll is at 10 million and rapidly increasing in the third world and countries like India. The US and Europe now have 'turned the corner' but nasty variants can be generated and spread here as well. Stay safe. Get vaccinated. Don't plan
overseas travel any time soon. Don't socialize with non-vaccinated folks. Avoid them like the plague - it's that bad.

## On the Road with N4CD I

The AR QSO party was coming up - and I could be in AR to put out a few counties for that in AR. But first - a handful of new parks not run by me in OK on the way there. I'm working on getting to 1,000 parks activated - so need to run a bunch more to get there. So far, I've run all the counties twice. There won't be a third time - I've run out of oomph to finish doing that, but I'm up to 1,000 transmitted counties the third time for those keeping track. So...now the objective is to run more parks than anyone else. I did pretty well in NPOTA having transmitted from more parks than anyone else in 2016. Now I need another 35 parks to reach the 1,000 level for Parks on the Air. This trip would add in more so sooner or later I'd get to 1,000 activated parks. Who else is crazy enough to do it? Some other activators are at the 600 level now. N4CD plans to get there first!

I also needed only one county in AR (Marion) for $6^{\text {th }}$ time $\mathrm{CW}-$ and I could get that with 'self credit' by going there and making a contact. If WQ7A, K5GE or N8KIE were around, I could get some Double Diamond counties - but I'm not sure anyone is going to get that award any time soon! There were a few needs posted on K3IMC 'needed counties' site, too. I'm just not that excited about Double Diamond.

## Thursday May 62021

I headed out on a Thursday morning of what would be a rainy 4 and $1 / 2$ day trip up to OK, across into the top row of counties in AR, then wandering southward and then to home via dozens of plus parks. I've been over most of OK and AR already, so now it is getting to the hard to run ones in hard to get through counties up in the 'hills' of northern AR where the roads are never straight, you spend hours getting to and from parks in the boonies, and eventually work your way to the east via 'the scenic route'. Hi hi. You can't be in too much of a hurry in the top part of AR. POTA keeps adding parks mostly smaller WMAs (Wildlife Management Areas) and Scenic Natural Areas(SNAs) - down to dozens to hundreds of acres. Throw in things like state museums in OK and 'state fishing lakes' in OK, AR and elsewhere - and there are 8,600+ parks now you can
run. Back east in MD/VA, there are probably 500 parks within a 300 mile diameter circle. Out here in TX, not so many - maybe 100 if you're lucky- they're really spread out.

The weather forecast was not great - chance of lots of rain and storms and temps in the 60s for most of the trip. Hey, it's May but someone has stolen 'my Spring'. It should be shorts and tee-shirt weather, temps in 80s, but now it's long pants and heat on in the car for nearly all the trip. Only a few hours would require sunglasses. The windshield wipers got a work out with all the mostly drizzle for 4 solid days. There are lots of little twisty roads in the north part of AR.

The good news, if you're looking for a bright spot, is that the dust on all the dirt/gravel roads was minimal. You WILL travel on gravel/dirt roads to get to a lot of these smaller parks and especially the SNAs. My car probably gained 50 or more pounds of weight with mud packed in the wheel wells and underneath. It needs a real good car wash.

The first park on the trip was three hours north of the QTH and I headed out early (6am) up route 75 - and more route 75 to Holdenville in Hughes County, OK. Ran counties on the way up - no one around early - but did find folks in Pontotoc.

Holdenville State Fish Hatchery - K-8272 - was the first run for the day. Like many others on the trip, it's a POTA only park. I had a good run with 70 QSOs in the $\log$ in less than an hour. You can tour the place during the week. They raise a lot of bluegills here and likely other fish. Didn't take the tour. Easy park to run. (during the week likely gates closed on weekends). Call ahead if you can only make weekends.


From the web
'WPA projects both directly and indirectly affected fish and wildlife. More than 300 fish hatcheries were built or enlarged nationwide. Creating fish hatcheries was important economically, as well as for sport fisherman". Many exist today - but many went by the wayside.

After the run, I headed to Heyburn WMA in Creek County, AR - K-8124 and KFF-5568

## From the state site:

The Heyburn WMA is a 5,865 acre tract surrounding Heyburn Lake. It has numerous post oak-blackjack ridges and old abandoned agricultural fields. It is located south of Hwy. 33, east of Hwy. 48, and north of Hwy. 66, in central Creek County.

Oaks, elms and sycamores dominate the woodland canopy, with native grass meadows in woodland openings. Due to its varied soils and vegetation types, the area supports a
diversity of native and migratory wildlife. Heyburn Lake is a small COE flood control and water supply reservoir that is now very shallow in its upper reaches and no longer navigable by large boats. The average annual precipitation is 42 inches.

## Game Species of Interest:

Quail: Bobwhite quail are present in low numbers adjacent to agricultural areas.
Deer: White-tailed deer are present in good numbers but are highly sought after.
Turkey: Rio Grand turkeys are present in fair numbers but are highly sought after.
Rabbit: Cottontails are present in good numbers, very few swamp rabbits.
Furbearers: Bobcat, coyote and raccoon are abundant.
Dove: Dove are present in low numbers, area is not in a major flyway.
Waterfowl: Ducks are usually present in low numbers. Conditions usually heavily hunted, improve as shallow wetlands freeze in Dec. - Jan.

Hmmm..discovered after this is also a WWFF park - which takes 44Qs to get there to a 'full' activation. Only had 28. Might have stuck around a bit longer if I'd known. Oh well. I can still upload it. Someday I'll wander that way again!

## White Hair Memorial State Historic Site - K-8650 - Osage County OK


from the web site:
The White Hair Memorial learning center is located in the former home of Lillie Morrell

Burkhart, an Osage Indian and descendant of Chief Pawhuska (White Hair). A repository for Osage artifacts and documents, the collections include resources such as maps, annuity rolls, oral histories, and photographs.

In 1985 the White Hair Memorial initiated a microfilming project with the National Archives in Fort Worth, Texas. A wide range of record groups were filmed during the project including the correspondence of the Osage Agency, minutes and proceedings of the Osage Tribal Council, annuity rolls and censuses, records of the Osage Boarding Schools, and allotment rolls and maps. Other materials available for use include Catholic Mission documents from the Kansas Historical Society, manuscript notes from the National Anthropological Archives of the Smithsonian Institute, and transcripts of Congressional testimony by Osage tribal officials and representatives. Burns Osage Library

Books, periodicals, newspapers, maps and audio-visuals that contain information relating to the Osage are cataloged and can be retrieved by subject, title, author, or keyword. Fields of study represented are anthropology, archaeology, art, culture and folklore, genealogy, geography, history, Indian languages, Indian law, literature by and about Osage people, government relations, geology (including oil and gas mining in Osage County), philosophy, religion, ethnology, and various fields of natural and applied science used by the Osage people in their evolution."

Easy site to run - no problems - other than out in the boonies of OK. Lady attendant at the museum caught me on the way in as I driving in. She was going to a late lunch and would be back in 30-40 min. Then she would re-open the place. I put out the site and was gone by the time she returned - Not that I would have spent any time looking around inside anyway! Great place if you are into Osage Native American and early Oklahoma history.

## Birch State Fishing Lake K-8639 in Osage County

Still in Osage - most have got the county by now.


From the web:
Its area covers 1,137 acres. The lake is formed from Birch Creek, a tributary of Bird Creek. It eventually empties into the Arkansas River. It is twenty miles southwest of Bartlesville, Oklahoma.

The lake has largemouth bass, walleye, spotted bass, smallmouth bass, hybrid striped bass, black and white crappie, channel and flathead catfish, and different types of sunfish.

Candy Creek WMA OK k-8116 still Osage County


Candy Creek WMA is comprised of 605 acres in far eastern Osage County, just northeast of the town of Avant. In the 1970s, the US Army Corps of Engineers purchased lands along Candy Creek to be part of a flood control reservoir. After the land was condemned and purchased, problems arose that prevented reservoir construction. After many years of the land being idle, the federal government offered the original landowners or their heirs the opportunity to repurchase their land. Eighty percent of the land was repurchased by former landowners. The remaining two tracts were deeded to the Department via the National Park Service's Lands to Parks Program.

Candy Creek WMA has a great deal of vegetative diversity.

## Game Species of Interest:

Waterfowl: Low numbers present
Deer: White-tailed deer are present in good numbers but are highly sought after.
Rabbit: Cottontails are present and fair populations can be found at scattered locations in the upland habitats.

Dove: Dove are usually present in fair numbers around manipulated fields.
Quail: Bobwhites are present in low numbers at scattered locations in the upland habitats.

Squirrel: Both gray and fox squirrels are present in good numbers.
Turkey: Rio Grande wild turkeys are present at a very low density.
Furbearers: Coyote, bobcat, raccoon, and beaver are available.

25 Qs here before moving on to the next.

## Will Rogers Memorial State Historic Site K-8651 Rogers County



This was the last for the day. Nice site and easy to run. From the web:
"The Will Rogers Memorial Museum is a 19,052-square-foot museum in Claremore, Oklahoma that memorializes entertainer Will Rogers. The museum houses artifacts, memorabilia, photographs, and manuscripts pertaining to Rogers' life, and documentaries, speeches, and movies starring Rogers are shown in a theater."

William Penn Adair Rogers (November 4, 1879 - August 15, 1935) was an American stage and film actor, vaudeville performer, cowboy, humorist, newspaper columnist, and social commentator from Oklahoma. He was a Cherokee citizen born in the Cherokee Nation, Indian Territory.

Known as "Oklahoma's Favorite Son", as an entertainer and humorist, he traveled around the world three times, made 71 films ( 50 silent films and 21 "talkies"), and wrote more than 4,000 nationally syndicated newspaper columns.

By the mid-1930s, Rogers was hugely popular in the United States for his leading political wit and was the highest paid of Hollywood film stars. He died in 1935 with aviator Wiley Post when their small airplane crashed in northern Alaska.

Rogers's vaudeville rope act led to success in the Ziegfeld Follies, which in turn led to the first of his many movie contracts. His 1920s syndicated newspaper column and his radio appearances increased his visibility and popularity. Rogers crusaded for aviation expansion and provided Americans with first-hand accounts of his world travels. His earthy anecdotes and folksy style allowed him to poke fun at gangsters, prohibition, politicians, government programs, and a host of other controversial topics in a way that found general acclaim from a national audience with no one offended. His aphorisms, couched in humorous terms, were widely quoted: "I am not a member of an organized political party. I am a Democrat."

One of Rogers's most famous sayings was "I never met a man I didn't like"

It was late in the day, but propagation helped to put 43Q in the log. Other than convenience stores - most places in OK, like motels and restaurants, were covid conscious. At convenience stores, most running in/out were not wearing masks. At larger ones like truck stops - almost all were wearing masks on entry.

Headed next to the Claremore Super 8. Most of the motels I stayed at were probably $1 / 3^{\text {rd }}$ full. Maybe a dozen to two dozen cars in motel lot. Had dinner at a Tex-Mex place nearby.

Claremore is where the Green Country Hamfest is held each year - it's been canceled the past two years so maybe it will be held in 2022 again. Usually a couple thousand attend and the Collins Collector dinner is a high point for many including a couple county hunters who show up each year - like K5OH, AF5Q and some others.

The local Golden Corral is also shut down - I guess a victim of the pandemic. Noted that as I drove by on the way to the motel. Dang. I've eaten there half a dozen times while attending the hamfest. (My local Golden Corral also a victim of the pandemic, too)

On Thursday, did 395 miles hitting the parks - and getting to the motel. The trip continues tomorrow as I head to AR. Six parks run and logged.

## Friday May 7, 2021

There was breakfast the motel. Most of the motels this trip (Super 8s) were $\$ 75 /$ night with tax more or less. Breakfast here was half a waffle, an apple, oatmeal, 2 cups coffee and I was on the road by $6: 30$ headed to Oklahoma for more parks. 90 minutes to get there.

## Chesney Prairie State Natural Area - K-7161 in Benton, AR



This is a small SNA - and for many of those - you'd better have a quick deploy portable station. Fortunately, I had my quick deploy system. You follow the easement right up to the SNA - and you can park with the tail end of your vehicle 3 feet from the gate into the SNA - which is walk in only. Maybe 30 inches wide. Set up the small tripod which takes a hamstick or other mast with standard threads, unwrapped and connected with a push on connector the radials, threw out the 3 radials (one 20 , one 30 , one 40 m ), grabbed the radio from the car and sat on a tarp to make 2 dozen contacts. Use hamsticks for 40,20 and a Hustler 54 inch mast with 30 m resonator on top. If I get my 10 Q plus on 20 M , might only run that band. You have to walk all of 15 feet (or less) here to be inside the SNA. It was early in the day but had success. Ran about 50 w off a 30 AH LiPO4 battery which will run the radio for several hours at 50 w easily. You cannot run this 'mobile'. Well, maybe if you have a narrow motorcycle, but no motor vehicles 'allowed' on the SNA property in most cases.

There are several others similar SNAs in AR - and you can only run them 'portable' and you have to walk into them to run them. Didn't stick around long. No fun sitting on tarp on ground with radio propped up against leg. Antenna about 20 feet from me - who knows how much RF my way (if you're concerned about 'exposure'). Quick deploy antenna seems to work 1-2 S units below regular mobile setup on 20 m . Good on 20 m , not so good other bands. Only need 10Qs for an SNA. Threw everything back in the car - after wrapping radials around a boar I used to avoid tangles - two plastic clamps keeps them there. My radio is my regular IC-706 which is mounted on board and comes out every night at the motel as well. Just disconnect power lead, antenna and external speaker - key and mic stay connected. Plug in the short lead from battery, and that's it. I'll let others sit around and make more Qs.

From the web:
"Chesney Prairie Natural Area, Benton County, is one of the few tallgrass prairie remnants left on the Arkansas portion of the Springfield Plateau. Much of its flora and fauna is representative of the once extensive upland prairies and savannas of the western Ozark Mountains. Sager Creek runs through the prairie creating a wooded riparian corridor."

## On to Weddington WMA - K-7332 and KFF-5125 in Benton County AR

Put 31Q in the log quickly from here. Should have tried for 44 but just ran the bands and worked who showed up. Propagation only 'fair' with zero to a dozen sunspots, Solar Flux in the low 70s, and reasonable $A$ and $K$ index. We should be having better prop but so far the sunspot cycle is off to a very lazy start. Some days 20M is good - other times, not so great. Lots of storms about elsewhere, too, which you definitely hear on 40M!

From the web:
"Wedington WMA is just outside of the Fayetteville/Springdale area and is owned by the USDA Forest Service. It consists of beautiful hardwood timber forests that surround Lake Wedington. There are wildlife openings within the property that allow game to travel."

## Cave Springs SNA - K-7160 in Benton AR

Had a good run from here - still in Benton AR. Mostly 20m CW from here. Done in 20 m . Lots of parks to run today so didn't stick around long!

Most of the WMAs have nice parking lots - some have 'rifle ranges' and lake parking. Read the web carefully - some access points have no parking lots - just along side a road. Some have multiple areas scattered about - so pick the easiest one to get to with parking. Others might be at the end of a 10 mile gravel road which is 20 mph type speeds!

The worst ones are often where the directions read something like: One mile west on route 43 out of Boonie, AR, turn north at the directional sign and proceed up the gravel road to the boundary marker. Hmmm.....when they don't tell you HOW FAR it is up to the boundary marker, it might be 12 miles! When they do tell you 'proceed 2.7 miles to the boundary marker - you are set. Sometimes you have to go another couple miles just to find a place to park/turn around as it's a one lane road with no shoulder, mud ditches on both sides, etc. Or even underwater with lots of rain.

Next up - Hobbs State Conservation Area - K-7293
Not to be confused with Hobbs State Park - which I've run before. This is a separate area around the park itself.


From the web:
"The area is 12,055 acres in size and is typical Ozark Mountain terrain. The area is predominantly woodland consisting of stands of upland hardwoods and shortleaf pine/hardwood forest. Beaver lake lies on the northern boundary of the area and War Eagle Creek on the southern boundary."

31Qs in the $\log$ then gone. So many parks - so little time!

## Bear Hollow SNA 7157 in Madison AR

Easily reached - but long gravel/dirt road to get there. Made a quick run. It's adjacent to the next. Another portable type operation.

McIlroy Madison WMA in Madison County AR - finally escaped from Benton County! K-7304 and KFF-5105


Had a good run but didn't reach the magic 44Qs. Just 23Q. Didn't stick around. Propagation not all that great and so many parks to hit on this trip. Tomorrow would be the AR QP and I'd start from where ever I got to tonight. Headed east through the hills of AR where you don't make good time. If they stretched out the roads, you'd be in Atlanta GA before you know it - but otherwise, it's up, down, left, right and never straight for more than 300 feet.

## Baker Prairie SNA - K-7156 in Boone County AR

This is another portable only location. No parking in the SNA. You can park nearby
and have a 50 foot walk to the SNA. It's parking in a school lot. Luckily there was an empty close by spot. On weekends, you'd probably have the lot to yourself. There's a pavilion across the road handy for a portable setup if you want - 120 foot walk, , but I didn't even go that far - but you have a 75 foot haul of gear across the street. Just ran 20 m CW quickly. These take too much time and sitting on ground is no fun. I've got to figure out low weight chair setup and improve the N4CD portable configuration to just one trip for 'parks' like this - usually SNA - State Natural Areas. Some have nice parking. Others have zero parking.


Spent 10 minutes on air but it takes 5-10 min to set up, 5-10 min to take down and stow, so it's half an hour to do it. I'll let others set up and run it and make dozens/hundreds of Qs. The pavilion has a half dozen picnic tables so it will be easy for others. So many parks - so little time to reach the 'kilo'.

## Slippery Hollow SNA - Marion County - K-7187



From the web:
Slippery Hollow Natural Area, located in the Springfield and Salem Plateaus of the Ozark Mountains, consists of steep-sided stream valleys and intervening dry ridges. Upper slopes are forested with a mix of post oak, blackjack oak, and shortleaf pine with calcareous glades on south- and west-facing portions. On the lower slopes, a mesic (moderately moist) hardwood forest of red and white oak, basswood, and sugar maple transitions to rich riparian forests along spring-fed streams. The area provides critical habitat for the federally listed endangered Ozark big-eared bat (Corynorhinus townsendii ingens), federally listed endangered gray bat (Myotis grisescens), and the federally listed threatened northern long-eared bat (Myotis septentrionalis).

This SNA(State Natural Area) has a nice parking lot! Yeah!

## Bull Shoals White River SP - 1072 both POTA/WWFF in Marion County


from the web:
"Famous for its world-class trout fishing, Bull Shoals-White River State Park lies along the shores of both Bull Shoals Lake and the White River. The scope of the park can first be experienced from the 15,744 -square-foot visitor center set high above the Bull Shoals

Dam. Its state-of-the-art visitor exhibit hall and theater share the history of the area and tell the fishing stories from these waters. Venturing down into the park along the White River, visitors are greeted with 113 campsites ( 63 class AAA, 30 Class B, and 20 tent sites with no hook ups) plus three Rent-An-RV sites.

The riverside marina and store offer boat rentals, bait, tackle, and supplies. Besides being the state's premier park for trout fishing, the park also offers great hiking and mountain biking. Interpretive programs include campfire-cooking demonstrations, trout fishing workshops, and nature walks."

Just a quick run here. Getting tired and been through a lot of parks today. Nice visitor center parking lot and nice place to run it.

## Bull Shoals SRA K-7190

Another quick run here. 11Q in the log quickly then gone.

Headed to the Super 8 Motel in Mountain Home, AR - the 'big town' around with pop 12,000. Today I went through dozens of small towns - from pop 100 to 300 to really big places of pop 1000. Not too many motels along the way. Dinner at a nearby Mexican restaurant. It was a long day. Only 278 road miles but lots of stops and lots of twisty back roads in AR with a few stretches on decent roads! Miles and miles on dirt/gravel roads, too.

You travel through towns like South Lead Hill, AR - pop 102, half square mile town but a highway intersection place. It is, I guess, south of Lead Hill, AR - another small town I missed - and both named for nearby lead deposits still being mined today. Lead, zinc and manganese are the primary minerals found here.

Nine parks run today. Total 15 new parks run this trip so far.

## Saturday May 82021

Breakfast at the motel.
Today the Arkansas QSO Party would start at 1400 z ( 9 am ). First I could run a park
before that time and head to the next one for the 1400 z start time. The rain started right after breakfast and would continue for most of the day. Light drizzle and gloom. Temp at 60 F and not getting much warmer all day.

## Norfolk Lake WMA in Baxter County AR KFF-7310 KFF-5110

Got here fairly early in the morning - 7:15 AM. Managed to put 44 Qs in the log quickly on 20 and 30 m .

From the web:
"This area consists of five units, on Norfork Lake: Chapin Point, Indian Head, Seward Point, Bennets Creek and Fulton County. Mixed hardwood forest with scattered tracts to pine plantations, topography ranges from flat to moderately sloped."
"There are 10,000 acres of land managed by AGFC and US Army Corps of Engineers, for wildlife management purposes. Control burning on area is carried out on an average of 200 acres per year (this consists of old fields). Pine sites are burned on area to control hardwood competition and to stimulate early succession of browse. The area has food plots and old fields. Pine sites are burned on area to control hardwood competition and to stimulate early succession of browse. The area has food plots and old fields which consists of about 980 acres. These food plots are planted in winter wheat and clover in the fall for winter food for wildlife. Spring planting consists of Acres for Wildlife Food Plot mix and clover. Good for walking and observing wildlife. Numerous amount of birds.'

I went to the Bennet's Creek area - nice parking lot there. Easy to run.
Then the AR QSO Party would start- at the next park.

## Mammoth Springs State Park 1099 in both POTA and WWFF in Fulton County

I pulled in at 1350 z , ten minutes before the AR QP was going to start. Went to 30 M since they don't count toward the QP - only regular bands with no WARC. No sense getting duplicate contacts as folks would work me again for the QP if I was on 20M. Spent 17 minutes on 30 m , then switched to 20 Mcw . Wow - was I busy for the next hour with park hunters, AR QP folks.....and even more when I went to 40 m cw .

140 Qs went in the log. 23 Q early Qs on 30 m which don't count toward the QP. Whew! Cranked up the speed a bit to 25 wpm for the contest. I usually run about 22-23 wpm for county hunting/park activations.

Caught W0BH/m in two counties - but other mobiles were scarce. Never heard K5CM, WW5X, or the other mobiles out there and I know they were busy!

Next up - Harold E Alexander WMA KFF-5099 and K-7291 in Sharp County AR


Another big pileup with 97 QSOs in the log from here. I'm getting a work out sorting out the callers. Have the keyer set a bit faster at 25 wpm but the real speed demons like W0BH and K5CM probably doing 30 wpm . Hi hi . Some of the signs don't
photograph well. Might have to use the better camera beside that in the tablet. The names of the park are often faded. Time to move on. I'm working my way southwest.

I run Lawrence County quick while stuck in stopped traffic for 15 minutes - and I'll be back later to finish it. One lane road ahead - and traffic backed up 3-4 miles on each side. What a mess! I'm on a few of the trails so give out some contacts for the trails the Cherokee Trail of tears while in Lawrence, and the Civil War Trail in another spot! You see the road signs along the routes - AR marks them well.

## Next Park was Shirey Brake Rainey WMA in Lawrence AR K-7325 KFF-5120

I don't run on the move for the QP - unlike the others with drivers. I suppose I could with a digital voice recorder but just not safe enough for this senior driver on the roads of AR that take much of your attention. Not going to happen unless I'm cruising the interstate and even then seldom for a QP with the giant pileups that take all your concentration to sort things out. Sometimes it's 10 seconds of just total S9 pileup where you can't make out any call. The guy calling 150 Hz low probably gets through.


I include lots of 'Percy Pics' along the way to show where I've been. I don't always remember to snap a pic so some get away with no pic. This is easy to run park.
"The area consists of 11,308 acres and is divided by the Black River. Approximately 3,000 is on the east side of the Black River adjacent to an oxbow named Shirey Bay, near the community of Portia, in Lawrence County. The remaining 7,000-plus acres are
directly across Black River to the west near the community of Lynn in Lawrence County. The western edge of the WMA is in the Ozark Foothills region, but most of the acreage is bottomland hardwood forest. More than 1,000 acres of old field systems add an open land component. These are maintained by a combination of prescribed fire, mechanical vegetation control and specialized farming and moist soil management. Over half the area is subject to overflow by the Black River with at least one flood event per year on the average."

Bands are not great at this hour- 2pm local. Manage to put 27Qs in the log before moving on. Don't dawdle for long.

I run down through Independence County - stop to put it out - run Jackson County stopped - then head for the next park in White County. Make motel reservation ahead in Searcy AR - headed southwest. So far, no problem getting a motel reservation at 23 pm for that evening. Might be different in the summer time if folks get back to normal travel - and at tourist destinations. It's hard to figure out time/distance in AR with all the hilly roads - and the time spent stopped in the ARQP- which can be an hour in a county or not depending upon radio conditions, rarity of county, etc.

## Henry Gray Hurricane Lake WMA 7432 KFF-5100 - White County AR

I'm getting worn out. Pass by several state parks and historic sites I've run before actually go through one of them on the route but don't stop. Too many parks, not enough time! I'm happy if there is just one easy to get to park in each county along the route for the QP!

From the web:
"The area consists of 11,308 acres and is divided by the Black River. Approximately 3,000 is on the east side of the Black River adjacent to an oxbow named Shirey Bay, near the community of Portia, in Lawrence County. The remaining 7,000-plus acres are directly across Black River to the west near the community of Lynn in Lawrence County. The western edge of the WMA is in the Ozark Foothills region, but most of the acreage is bottomland hardwood forest. More than 1,000 acres of old field systems add an open land component. These are maintained by a combination of prescribed fire, mechanical vegetation control and specialized farming and moist soil management. Over half the area is subject to overflow by the Black River with at least one flood event per year on the average.

Deer -- there is an increasing population and the opportunity to harvest a bragging size
buck is better than average. Gun and muzzleloader hunts are by permit only, but archery and crossbow seasons are the same as statewide. Waterfowl -- this area has several water control structures put in place to manage water for wintering waterfowl. Hunting is usually good if the right water conditions exist. Small Game -- Cottontail rabbit and squirrel populations tend to fluctuate somewhat. Generally there is a good population of each about every 3 years. Swamp rabbit hunting is better than average but also tends to be cyclical. Quail -It is classified as poor. The opportunity to do extensive quail management on this area just does not exist. Furbearers, raccoons and mink are the main furbearers sought after on this area."

Sometimes you have good runs. Sometimes maybe you're on a busy freq with QRM from a station you don't hear and have a short run. You never know. Hard to tell when it's hard to watch the spots, try and find a 'good frequency', and work pileups. A lot of stations also not spotted like loud fixed ones that have been on for hours but are S zero at my QTH.

Put 64 Qs in the log from here then head on in to the Super 8 motel in Searcy - about 15 miles away. It's been a very busy day. I don't have anywhere near the 'oomph' to keep going till the QSO party ends in another 4 hours. It's dinner time and I've had enough for the day! Hi hi. Meanwhile, W0BH, K5CM, and others still going strong. Likely to late evening ( 9 pm ).

Just ran six parks today - bringing the total to 21 new parks this trip. Lots of contacts from several of the parks, and a few county stops in there as well for the QP. Didn't get as far as I wanted, but those hour long stops in parks to give out the counties for the QP take time - and of course, they're not in a straight line so you do quite a bit of extra miles getting to them, and maybe some backtracking to get back on the main route headed southwest.

I head to a Chinese Buffet restaurant nearby for dinner. Hmmm...Masks to get in - wait people have masks but almost no one wears mask to serving area. (my local buffet requires plastic gloves you wear to the serving area along with masks - as to others I've seen). Not many other sit down places here other than the steak house - which is mobbed - not a space left in a huge parking lot. Or Pizza Hut or Mexican restaurant.

No breakfast at this motel either. Hmm.......but $\$ 75$ price tag.
Sunday May 9-72F and high humidity. Likely to drizzle all day, too!
Headed to the Waffle House for a two egg breakfast with sliced tomatoes and 'city ham'.

Comes with 2 slices of toast. Everyone wearing masks to enter and serve. Not many there at 6:30am.

Today I have to backtrack 20 miles to get to another park in White County. Fortunately it's right off the main 4 lane highway that is the future I-57 corridor and moves along at 70 mph . You get off at the exit and come down the service road for 2.5 miles to the WMA entrance. All should be this easy to get to and find!

## Departee Creek WMA K-7282 in White County AR


from the web:
"Once row crops, rice fields and fish ponds, Departee Creek WMA near Bradford is 577 acres of reforested hardwoods. Bottomland habitat covers 154 acres, with the rest being relatively open uplands suitable for small game and deer. Some waterfowl hunting opportunities emerge when Departee Creek floods. Several small ponds offer fishing opportunities and excellent wildlife watching sites. "

I got there at 7 am put still put 2 dozen chasers in the log. Tons of static on 40M from storms - S9 plus. Ouch! 20M not open yet so just 40 and 30 m from here.

Then I head south toward Little Rock - on the way home with few detours. Most parks are a short distance off the route.

## Cyprus Bayou WMA in Lonoke County AR - KFF-5453 and K-7278



I'm once again in a new county, so folks show up and I get 3 plus dozen Qs in the log quickly. Don't hang around too long. Easy to get to and find.

From the web:
"Cypress Bayou WMA encompasses 1,503 acres in northern Lonoke and southern White counties. The management area was acquired through the Farmers Home Administration program in 1989 and most of the area was reforested with mixed hardwood species in the early 1990s.

Hunting opportunities exist for deer, turkey and small game."

Next up is Holland Bottoms SNA K-7294 KFF-5101 Pulaski AR

"Bumping up against Jacksonville's city limits, Holland Bottoms Wildlife Management Area's 6,190 acres are a few minutes' drive from more than a quarter million people in the Little Rock area."

Have good run from here and move on to Holland Bottom SNA - K-7180
This one is a walk in only and you've got to look hard on the web to even find it! Or directions to it! Had them written down, of course, so just got there. Google Maps won't get you there.
"Holland Bottoms Willow Oak Forest Preserve, Lonoke County, is located in the Mississippi Alluvial Plain. Jacks Bayou, a tributary of Bayou Two Prairie, bisects the natural area. A bottomland hardwood forest containing mature stands of willow oak, mixed with various other bottomland hardwood species, largely characterize the natural area. Only $18 \%$ of the bottomland hardwood forests that formerly occurred across the Lower Mississippi Valley currently remain. The natural area falls within the Holland Bottoms Wildlife Management Area and is co-managed with the Arkansas Game and Fish Commission."

After a couple miles of gravel roads, you park at a WMA parking area and walk into the

SNA - a short distance. Had to use the portable set up so just made two dozen Qs and 20 and 40 m only.

## Gurdon Lake SRA - K-7438 in Clarke County AR



This is a nice site to operate. Pull in 1802 and quickly work the bands -20 m first, then 30 , then 40 m for a few dozen Qs. I'm out of there at 1840 z . New county so that always works well!

Last for the day is Little Missouri River Access SRA K-7437 in Nevada County. Luckily the put new parks in each of the counties along the interstate 30 headed southwest for me!

This is right along Highway 67 which parallels the interstate and is also a two-fer with the Civil War Trail! Just after the county line(the river) you find a nice parking area/canoe launch area. You can park within 50 feet of the road for a two-fer with the trail

Put two dozen in the $\log$ and head on south.


I'm trekking south - and next up is Big Timber WMA - KFF-5084 K-7440 in Clarke. This is a huge multi - section WMA spread out over tens of thousands of acres. You've got many spots to run it.

Be sure to print off map/directions on how to get there - not many signs in many locations where you can run it easily. Lots of private timber lands are 'in' the WMA but may restrict entry to logging vehicles only.
"The various tracts within the Big Timber Leased Lands WMA provide a diversity of habitat types, including upland pine, upland pine/hardwood mix, upland hardwood, bottomland pine/hardwood mix, and bottomland hardwood.

The Big Timber Wildlife Management Area is located in Clark County in Central Arkansas. The land comprising the Big Timber Wildlife Management Area is owned by various entities and individuals. These lands are managed for a variety of forest products. This is a working forest so please be aware of ongoing habitat management and timber harvest operations.

The boundaries of the Big Timber Wildlife Management Area are typically marked by an 18 -inch vertical painted yellow "blaze" on trees along all major roads paralleling or entering the area."

It's in 4 different counties - depending upon which of the multiple areas you run.

If you get to Upland Demonstration area - off 67, that's a good spot to run it. Otherwise, you've got to look for big stands of timber with the yellow paint slashes and find a road in as far as I can tell. Maybe there's a primitive camp area or two if you look hard, too.

There are two more to go today before I reach the motel. I'm getting worn out.
Dr Lester Stizes III Bois d'Arc Wildlife Management Area K-7267 KFF-5093 in Hempstead County AR


Pull in at 2049 z and have a quick run. Storms are about - S9 static on the radio on 40M and loud crashes. Done by $2116 z$. I'm worn out. I've run this before.

## Bois D'Arc Lake State Recreation Area - K-7439

As far as I can tell, this is the state fishing lake next to K-7267 or within it.
Put it in the $\log$ as a two-fer since I ran at the lake shore a few feet from the lake itself and head to the motel.

Super 8 in Hope AR for the night. \$65. My favorite Mexican restaurant closed early on a Sunday. Darn. Guess this is the first time I've hit here on a Sunday night. So when Plan A doesn't work - try plan B. It's pouring down rain. Visibility about 10 feet. Soft
hail hitting the car. I just sit for 15-20 minutes waiting for it to end. Then I wander down the main drag in Hope - looking for something other than Taco Bell, Burger King, or McD for dinner. Even the Pizza Hut is take out only at their drive through. Finally I find the Panda Chinese Buffet. Hmmm. I've eaten here before. It seems Chinese Buffets are always open on Sunday. Today was a special Mother's Day buffet probably just the same as usual but jacked up price by a dollar or two or three - hi hi. Good buffet. As long as you like broccoli and miserable green beans - you are set for veggies. Not much else veggie wise at most Chinese buffets other than 'rice'.

Time to unwind at the motel. It's three and half hours to home along I-30 for 200 plus miles in the morning. It's been 4 days on the road.

## Monday May 10, 2021

It's still drizzling outside at 60 F in the morning. I have breakfast at the Super 8 - which is limited to cereal (cold or make oatmeal using the hot water), and small bran muffins. Made a bowl of oatmeal, eat a muffin, have 2 cups coffee. Usually in normal times, there's a great breakfast there with eggs, sausage, bacon, fruit, OJ, etc. Not in the COVID world. Who knows when it will return?

It's time to get on home - but first I can run a few local parks - repeats - not new ones for me. Not far up the road -on a gravel road headed north to Historic Washington, you find Hope Upland WMA - K-7295 in Hempstead County AR.

There are two nice but small parking areas for this. You're surrounded by trees - and they are sopping wet, but still have a decent run. First time I've run Hempstead County this trip. Get there at 7 am but still have a decent run.

I head on up the road another five miles (gravel - 25 mph ) to Historic Washington. This town goes back 200+ years. They've reconstructed two dozen buildings from the eraand it's a 'state park' - the whole little town. There's a few original buildings there, too. It lies on 3 trails - the Cherokee Trail of Tears, the Southwest Trail, and the Civil War Trail. Folks like Davy Crockett used the Southwest trail which comes from Little Rock and heads to Texarkana and points southwest from there. The Cherokee Trail of Tears comes up from Shreveport and heads to OK.


Have a good run there - and then head on the fastest way - along the Southwest Trail toward Texarkana - which hits the interstate a few miles before you enter TX. You hit Miller County on Rt 67 - -and I stop to run it - and more contacts go toward the Southwest Trail. Nice. Then on to the interstate 30.

But wait -some folks requested Little River County. Well...dang....it's a detour - but it is even easier today. There's a short new bypass around Texarkana - and it connects to US-71 north which is going to turn into another interstate one of these days. 10 minute detour up the Little River boundary - and I pull over in the visitor center and put it out for the county hunters.

Now it's really time to head on home. I put the pedal to the metal and hit I-30 and put out the counties on the way home along the route. 3.5 hours to home and 70-75-80 mph speeds. The roads are damp, so I don't push it, cruising along at 77 mph . In dry weather, many folks are going near 85 .

Speed limit mostly 75 along I-30. Drizzling at times but traffic moving nicely on the Monday morning. Storms coming later in the day. Near home, I pass by my local park - 4433 - Spring Creek State Forest Preserve and just wave at it - a mile away. I'm tired and no need for another 'activation'. Done enough for the trip!

Home by $1: 30 \mathrm{pm}$ with 131,563 miles on the car. Time for an oil change. 1,424 miles driven on this trip plus 30+ hours of idling in the parks/counties. Car has an 'oil life'
sensor digital readout that tells you when you've run out of 'oil life' - usually 7500-8000 miles for me. When it gets below 20 , time for car service.

Thanks for riding along. Dozens of counties and parks put out. Hope you caught what you needed!

## AR QSO Party

## KV8Q - fixed -OH 82 CW 38 counties

What a fun time!!! Lots of activity chasing the mobiles and rovers around the state. They were all fantastic ops with some very good ears. Worked W0BH 17 times, WW5X 15, K5CM 14, K5RM 11, N5KW 8 and three times each for N4CD and WA5BDU. Without them, it would have been a boring contest. Thanks - 73 tom Rig $=$ TenTec Eagle @ 100 Watts Antenna = Mag Loop (40 thru 15) and an Isotron-80 in attic 12' above garage floor and an indoor 10 meter dipole.

## K8MFO - fixed - OH 135 CW 45 counties

Great mobile signals and operating by N4CD, K5CM/N5KW, W0BH, WA5BDU, WW5X, and K5RM

## N9NM - fixed - South TX = 67 CW 39 counties

I used my K3 at 100 w with a dipole up 14 ft . and 2 vertical antennas. This contest was so much fun. The bands were full of Arkansas ops, in so many different counties. Many thanks to all of the rovers who drove so many miles, all day, giving us so many contacts and new mults. They handled their big pileups so well, and were all easy to copy. Thanks very much to all who participated.
no report

## K5CM - mobile - 899 CW 428 SSB

no report

## NS2N - Fixed NY 117 CW 52 SSB 48 mults

healthy amount of mobile and rover activity. Wish I could have done the whole time period.

W0BH continues to amaze ... there were some 40M Q's that had to have a world record minimum number of electrons involved. I'm happy I was able to find my QRN source here.

Thanks to all for an enjoyable contest.
NS2N

## AA4TI - fixed - FL 75 CW 44 SSB 44 counties

Better score than last year, but I sure had to work hard to make the qsos. Conditions were not very good this year. Still, it was a fun QSO party with good activity.

## W0BH mobile - 1198 CW qso

Arkansas QSO Party by Bob Harder, W0BH
With the four deep-cycle batteries recharged from the Nebraska QSO Party, the Astro van was ready to head off on another adventure, this time to Arkansas. Lorna/k0why and I had run the ARQP once years ago. As I mentioned the weekend possibility to Lorna, I found out that Saturday was the "Global Big Day" birding event where birders see how many different species of birds they can find in one day. She showed me a map of birding hotspots in Arkansas and we had a plan!

The goal was just to get out and have fun in our respective hobbies. I knew

Connie/K5CM and Pam/N5KW often run Arkansas, so I emailed Connie with our plan and we found out we might cross paths at some point. Roads in Arkansas are subject to the hilly Ozarks, so there aren't nearly as many route options as in the plains states. From our first experience in the ARQP, we learned that it was best to stay on main roads because secondary roads were often really slow through the mountains. The final route was a big loop following the freeways with side excursions when needed. We arrived in Siloam Springs, AR about 9:30pm minus the forecast thunderstorms.

The morning was cloudy and cool as we headed out early for a birding stop at the Charlie Craig Fish Hatchery in Benton county, the furthest northwest county in Arkansas. Sprinkles were a possibility until about 10:00am, and sprinkles it was as I attached the Hustler vertical stacks to the triple mag-mounts. Lorna wandered the fish hatchery grounds in what turned out to be one of her two best stops of the day for birds. As 9:00am rolled around, I tried some CQs on 80 m then on 40 m with zero success. The bands seemed to be totally dead. Radio problems? It didn't seem like it because power and SWR were good. I spotted myself on FunSpots and finally at 9:16 after we headed down the road a bit, K9RS, K8MFO and NS2N found me in quick succession and we had our first contacts in the log, the first of many for these three excellent ops.

The first hour was felt slow, but things improved as 20 m opened and we got on the freeway. The next birding stop was Woolsey Wet Prairie in Washington county, but it wasn't where GPS said it should be and Lorna said to keep going since she had stayed longer than scheduled at the fish hatchery. I was fine with the flexible schedule but we did need to keep moving. Of course I was making contacts all along including a couple of contacts with $\mathrm{N} 4 \mathrm{CD} / \mathrm{Bob}$, also mobile in the ARQP (who found me).

I-40 follows north of the Arkansas River in northwestern Arkansas. We had a nice river stop scheduled to finish working Johnson county. Lorna found the first of several colorful summer tanagers which we don't have in our part of Kansas. After crossing the river, we stopped at the Logan/Yell county line and it was fun working Connie across the river at his 4 -county line stop. Next up was Holla Bend National Wildlife Refuge which sits on a nice two-county line with good radio and birding action combined. Lorna was really pleased to see flocks of bob-o-links.

After staying lots longer than scheduled at Holla Bend, we continued on to Toad Suck Park near Conway. We often saw the sign for the park as we headed east or west on I-40, but this time we wanted to stop. We found a really nice spot on the river and I had a great run while Lorna took a nap. On the turnaround, a still sleepy Lorna didn't give the "opposite of a speed bump" the credit it deserved. Suddenly the van was rocking violently back and forth, the radio cut out, and there were big clanks on the roof of the
van. When the proverbial dust settled, I saw part of my Hustler vertical out the side window which was probably not a good thing! It turned out that one triple mag-mount had let go (quite the feat) and tipped on it's side as had my VHF mag-mount. No real damage (except to Lorna's ego) as I was able to put everything back in place, guy wires and all. The radio sometimes cuts out going over bumps due to a loose connection I have yet to find, but it came back up as well and we continued on our way.

The only other Murphy moment came when I switched batteries. My deep-cycle batteries usually run 6-7 hours before the power booster tells me they're getting too low. This time I switched out early since I had two spares along besides the one that runs the electronics and logging computer all day. The fresh battery worked fine for a few contacts, but suddenly it couldn't handle the current and went to 8 V during transmit. I thought perhaps my connection was bad, so I reconnected it and tried again with the same result. The battery was about 5 years old, so it just picked now to quit. I connected my other spare battery and we were back in business. Worse case scenario would have been to use the van battery, but that puts more noise in the system with the van running which I avoid with the external batteries. Spares are good. I also had my complete spare radio setup along, but didn't need it this time around.

After leaving Toad Suck Park, we headed back to the freeway to make up some time (now two hours behind). I warned everyone on FunSpots of short time in the counties, but we were still able to make lots of contacts on both CW and SSB. I left some pileups as I crossed lines, but that just created new pileups, so some really fun operating the last few hours. I want to thank you all for helping me out by just making one or two quick calls and then listening. Really well done, everyone! Usually I can pick out a complete call or catch a few call letters and we can go from there. On CW, the off-center callers have a big advantage in a pileup even if they aren't as strong, so give that a try and see if it works for you.

We had planned a detour to Pike and Clark counties, but took the shortcut back through the mountains instead. Signals were up and down like we were and travel was slow, so we didn't make it to our last county, fortunately not a rare one. I try really hard to complete my planned route, but Arkansas is a curvy place with good birds :- ) Stop time came with 60 dark miles still to go to get back to our hotel in Ft. Smith. It felt really good to arrive about 10:30 .. tired, but safe and sound.

Stats
Operated 10.1 hours, 1192 Qs, 305 unique calls, 12 dupes, 495 ARQP miles ( 1156 total miles).

DX worked (7) : OM UA HA JA YT HP OK
Mobiles Worked: N4CD K5CM

W0BH Award Winners
----------------- First Place --- Very Honorable Mention ---
Most overall Qs - NS2N/39 ------- K9RS/38 ---- OM2VL/36
Most CW Qs ------ K8MFO/27 ------ NS2N/25 ---- W0PI/22
Most PH Qs ------ K9RS/17 ------- OM2VL/15 --- NS2N/14
Most counties --- NS2N/17 ------- K8MFO K9RS OM2VL W0PI / 16

## Afterwards

I know Don, K5DB, ran this QSO party for years. He stepped down this year but I still wanted to thank him for all his hard work. Thanks to the new Arkansas QSO Party Team for filling the void and special thanks to Kevin/K5KVN for putting the FunSpots link on the ARQP home page after I emailed him with the suggestion. It was well used and really helped out!

The 2021 Kansas QSO Party is scheduled for August 28-29, the last weekend in August. With 105 counties, we need all the help we can get, so mobiles, head this way! Everyone else, thanks for the Qs in Arkansas, and see you down the log in 2021 ..

73, Bob/w0bh and Lorna/k0why

## N4CD mobile - 378 CW QSO

Main purpose of trip ( $41 / 2$ days) was putting out parks for Parks on the Air and WWFF (World Wide Flora and Fauna) while having some fun in the AR QP. I started out in Fulton County and there in the park for over an hour with massive pileup of AR QP folks and park chasers - oh, and some county hunters. Headed southwest from there through Sharp, Randolph, Lawrence, Independence, Jackson, to White. Park stops in most counties that took lots of extra miles but parks had first priority. It would take an extra half hour most times off the main route to get to/from the park. The first park was
at the top of Fulton so lots of miles just to 'escape' the county.
$90 \%$ of Qs were in parks. Caught only W0BH mobile and half dozen other AR stations. Missed states like ND, SD, MT, UT, WY, VT, and only five provinces in Canada in the log. Half dozen DX countries including JA, HA, F, G, SM, OH, OM, No driver so stopped for each run.

Noted very very few runs by others spotted on the county hunter site. Most I guess using CWFUN spot site. Other mobiles running 2 and 3 way lines, but they don't occur in parks.

I usually do the TX, AR, OK QSO parties and sometimes wander further to places like KS for theirs. We'll see what comes up this year.

## AI5P Trip Report

May 142021
A recap of my visit to Spinney Mountain SP (K-1240) and Eleven Mile SP (K-1217) in Colorado May 13. Condx much better with 129 in the log, including several EU. Spinney is basically a dam and fishing lake, while Eleven Mile offers a variety of outdoor activities. Beautiful day too - enjoy the pictures! 73 Rick AI5P



## The Next Big Solar Storm

May 14, 2021 11:00 AM ET
Lessons from the solar storm of May 1921.

One hundred years ago, on the fifteenth of May 1921, random telegraph and telephone offices in the United States and around the world suddenly burst into flames. Fuses were blown, equipment damaged, connections severed. Undersea telegraph cable service was interrupted. Aurora - as in "the northern lights"-appeared in Pasadena, California. The night sky in Boston was so bright you could read a newspaper.

A railroad office and switching system in New York were also destroyed. The event came to be known as the "New York Railroad Solar Storm of 1921."

Earth had been slapped, and hard, by the sun. Three successive coronal mass ejections, or CMEs, had first weakened and then penetrated the planet's natural defenses.

When this happens again, and it will, the after-effects will make the COVID-19 pandemic look like a warm-up act. Unless we are ready.

If we continue to move at the normal pace of government, we probably won't be.

## GPS Especially Vulnerable

The last hundred years have seen an explosion of interconnected electronic and electrical systems that are both necessary to modern life and vulnerable to the effects of a powerful CME. While electrical grids and other systems are at risk, none are as vulnerable, impossible to protect, and critically important to daily life as the Global Positioning System.

Flying 12,000 miles above the Earth and circling twice a day, GPS satellites are exceptionally difficult to protect from an angry sun. Warnings that can allow equipment on the ground to be shut down or shielded are of minimal use in space. While temporarily taking satellites off-line might provide some protection, sensitive electrical equipment onboard can still be easily damaged or destroyed by a powerful solar event.

Highly precise GPS signals are not just essential for the safety and efficiency of every form of transportation; they have also been incorporated into virtually every networked technology, including telecommunications, the internet, ATMs and credit card transactions. A damaged GPS constellation would cause profound long-term damage to our economy and security. Some government officials have called GPS "a single point of failure" for America.

Yet, despite vulnerability to severe solar activity, a variety of other threats, and its importance to the nation's economy and security, the U.S. has no backup or alternative plan if GPS is not available.

## Looming Danger

Especially powerful CMEs are rare but recurring phenomena. Scientific research has uncovered one in 1770. The first recorded was the famous 1859 Carrington Event that set early telegraph offices on fire and lit the night skies with aurora far into the tropics.

A powerful CME passed through Earth's orbit in 2012. According to NASA, if it had happened several days earlier "we would still be picking up the pieces."

The most recent science tells us these events are not as rare as once thought.
Dr. Scott McIntosh, deputy director of the National Center for Atmospheric Research, is one of the nation's leading authority on solar activity. He warns that the next decade or so will be a particularly dangerous time.
"We have every reason to believe that the current solar cycle which began in December 2019 could be the most active since the 1970s," McIntosh said. "This is a particular concern for the GPS. Strong solar storms can charge the atmosphere and prevent signals from getting through for days. The strongest can damage or even destroy satellites."

He estimates that in the next 10 years there is a $35 \%$ to $45 \%$ chance a CME will disrupt GPS service for up to several days. The cost to our nation and economy will be measured in the billions of dollars.

Perhaps even more concerning, scientists estimate the chance of a Carrington-level CME in the next 10 years to be from $4 \%$ to $12 \%$. To some, this might seem like a too low a chance to worry about. Yet, in the absence of an alternate capability for GPS the damage to America will be incalculable. Transportation, telecommunications, consumer financial systems and other critical functions will be crippled. The entire economy will be in disarray.

And America will be reduced to permanently second-rate status in the world. Because others, including Russia, China, Iran, South Korea and Saudi Arabia will not suffer nearly as much. Unlike us, they already have terrestrial systems that can take over when GPS signals from space are not available.

## Protecting Users and America

Government leaders have known about this near-existential risk to America for years. They have even promised to act, but haven't.

In 2004 President George W. Bush ordered a backup capability be established to serve the nation's economic and security needs when GPS wasn't available. After much study, in 2008 a technology was selected and a plan announced. But nothing was ever done.

Responding to Congress' concerns in 2015 the Obama administration pledged to establish the same technology as the previous administration. Again, nothing was ever done.

Increasingly concerned and frustrated by executive branch repeated failures, Congress passed the National Timing Resilience and Security Act in 2018. It required the Department of Transportation establish a terrestrial backup for essential GPS timing signals by December 2020. Other than a public warning from the Trump administration that GPS signals might not always be reliable or even available-you guessed it-
nothing was ever done.
Fortunately, the Biden administration seems well attuned to the threat and agrees with the need to address it. In both private conversations and public testimony, Department of Transportation officials have acknowledged the need for action.

Still, no project has begun. No money has been appropriated, and the most recent government report on the topic recommends "more study."

## Time Is of the Essence

Establishing one or more GPS alternative technologies will not be enough to make the nation safer. They must also be widely available, adopted and used. This means, even with the most concerted government efforts, five or six years will be needed to establish systems and encourage, or where needed, require, users to protect themselves and vital services.

Such a timeline will take us well into the coming solar danger zone.
America's game of solar Russian roulette is becoming more and more dangerous. Every day that goes by without a GPS alternative increases the chance the gun will go off and America will be permanently crippled.

We must act, and quickly, before it is too late.

Dana A. Goward is President of the Resilient Navigation and Timing Foundation.
Source: https://www.nextgov.com/ideas/2021/05/racing-sun-protect-america/174029/

## Working on their USACA

Each month, CQ Magazine publishes a column (or two months) for Awards and the latest USACA totals for 500 and up increments. Some folks just go on and get the basic 500 county certificate - while others work toward all.

Some send in for multiple levels at one time.
From the latest issue:
500 county level:
WB8III
JA6BZI
WQ7F
UR7FM
G6GCP
1000 level:
JU8DEN
WB8III
F6GCP
1500 County Level:
JO7WXN
WB8III
F6GCP
3000 County Level
OM2VL

OM2VL closing in. Here's his need list as of early May per his QRZ page.
AL Conecuh
AR Greene
CO Hinsdale
CO Saguache
CO San Juan
ID Gooding
IN Newton

IN Owen
KY Ballard
KY Breckenridge
KY Carlisle
KY Carroll
KY Clay
KY Elliott
KY Hancock
KY Jackson
KY Magoffin
KY Meade
KY Mercer
KY Owen
KY Powell
KY Rockcastle
KY Trimble
KY Union
KY Wolfe
MD Caroline
MS Alcorn
MS Benton
MS Bolivar
MS Calhoun
MS Claiborne
MS Marshall
MT Beaverhead
MT Big Horn
MT Sheridan
MT Silver Bow
ND Adams
ND Bowman
ND Kidder
ND Slope
NE Garden
NE Nemaha
NE Pawnee
NE Richardson
NE Sioux
NM Harding
NM Sierra
OH Hardin
TN Johnson
TN Lake

TN Lauderdale
TX Atascosa
TX Calhoun
TX Cochran
TX Culberson
TX Falls
TX Goliad
TX Hudspeth
TX Live Oak
TX Loving
TX McMullen
TX Mitchell
TX Willacy
VA Highland
VA Lancaster
VA Lee
VA Rappahannock
VA Russell
WV Fayette
note de N4CD - with the recent trips by NF0N, WB4KZW, and W0GXQ/K8ZZ, hopefully he narrowed down the list by a good bunch! It's tough to be working mobiles from EU these days. Even more amazing is JO7WXN is catching mobiles at times from Japan. If I recall, only one JA station completed USACA.

## On the Road with N4CD II

The N4CD mobile was itching to go and reach the ' 1000 ' level - that is - one thousand unique parks activated. I was at 994 so far. No one had gotten to that point - nearest 'competitor' was just over 630 unique parks activated. Someone had to be first and it was going to be N4CD - hi hi. The best spot to hit a lot of new parks for me was in southwest MO. There are 300 parks in that state and most of them are "State Conservation Areas" recently added. There are an easy 20 within a 30 by 150 mile strip. Hmmm...well, I'd find out what they were like. In some places, getting to 'wildlife management areas' and especially 'state natural areas' in AR can be a problem as some have limited or no auto access. It seemed like most of the MO SCA's listed 'parking
areas'. The adventure would begin. I'd find out as I had 20 State Conservation Areas (SCAs) on the agenda.

## Sunday May 23

I'll just put the first part of the trip and last day in this issue - and leave a lot of parks for the next issue- running out of bandwidth for pictures - and time - got to get this off the press shortly (hi hi).

The COVID problem seems to have been reduced significantly - and very good among fully vaccinated people. Out of over 100 million people, now approaching 150 million, have gotten their shots. A few 'breakthrough cases' - 3300 or so out of that group, have come down with COVID symptoms - and most of them were 'immune compromised' with 'underlying conditions' or taking immune system suppressor drugs for transplants, etc. The trend was steeply down. So.....one could reasonably travel and feel 'fairly safe' these days. Just avoid giant crowds, bars, etc. Restaurants are the biggest issue if you are 'worried'. The Wyndham chain of hotels is very covid conscious. (well, almost too much at this point - over half still have 'no breakfast').


So....after the local weather cleared and the route looked good, it was leaving here on a Sunday - headed up route 75 to OK then 69 toward Joplin MO. Same boring route I've been on many, many times before. I've got to go miles and miles to get to a 'new park'. Left at 6 am - sun barely trying to show up.

It's spring time in this neck of the woods and that means the possibility of severe thunderstorms and tornadoes. There were two small ones here just before I left, and OK and KS are right in 'tornado alley'. Five just out in west TX. You always keep one eye on the weather and weather forecast here if you want to avoid trouble!

A quick stop was made at Atoka Wildlife Management Area - 2 hours up the road. It's less than $1 / 2$ mile off the route and a good place for a quick pit-stop. Ran the county ATOKA and put a dozen in log then scooted out of there in 15 minutes. Been there a few times before. K-6339 and WWFF Park KFF- 4794

Headed further north to two parks I'd somehow missed up by Muskogee, OK.
McClellan Kerr- WMA - K-6359 in several counties with several different 'units'.
From the web
McClellan-Kerr WMA covers 7,905 acres in Wagoner, Muskogee, Haskell and Sequoyah counties.

Located along the McClellen-Kerr navigation system the area is mainly river and bottom land habitat with scattered agricultural fields.

Game Species of Interest:
Deer: White-tailed deer are present in fair numbers.
Turkey: Very few Rio Grande turkeys are present.
Quail: Bobwhite quail are present.
Rabbit: Cottontail are present in fair numbers and Swamp rabbits can be found in some areas.
Furbearers: Coyote, bobcat and raccoon are present.
Dove: The area offers agricultural fields that attract dove.

Squirrel: Fox and Gray squirrels are present.
Waterfowl: Usually good duck and goose numbers on and around the area.
Nongame Species of Interest:
Bald Eagle: Eagles winter on the McClellan-Kerr Navigation system.
Description of Fish and Wildlife Management Practices:
Approximately 1,000 acres are planted to row crops on the area, annually. Controlled burns are utilized to manage parts of the area. A 250 acre waterfowl refuge, near Braggs, is managed for waterfowl with a 100 acre wetland unit and fields planted to corn and soybeans, annually.

Fishing Opportunities:
The McClellan-Kerr navigation system offers good fishing opportunities for catfish species (flathead, blue and channel) as well as black bass.

Had a decent run from here - only need 10 Qs for POTA but do a full run to give it out and the county- Muskogee.

Not far away you find Fort Gibson WMA - right along highway 69 K-6333 KFF4807 - ran it in Wagoner County. Many of these span multiple counties so you have your choice of where and which county. It's right along the highway 69. If you're a county hunter, want to run ones in different counties if possible.

From the web:
"Fort Gibson WMA covers 21,798 acres in Wagoner and Cherokee Counties. Located north and east of Wagoner, Oklahoma.

Fort Gibson WMA is a mixture of upland and bottomland habitats. Upland areas consist of tall grass prairie mixed with farm fields and brushy thickets. Bottomland areas consist of Crosstimbers oak forest with cottonwood and sycamores in and around Fort Gibson lake.

## Game Species of Interest:

Deer: White-tailed deer are present in fair numbers. Quail: Bobwhite are present in fair numbers.
Rabbit: Cottontail are present in fair to good numbers.
Furbearers: Coyote, bobcat and raccoon are present.
Dove: The area has small grain agricultural fields that provide fair to good dove hunting. Squirrel: Fox squirrels are present in fair numbers.
Waterfowl: There are usually good duck and goose hunting opportunities on and around Fort Gibson lake.
Nongame Species of Interest:
Bald Eagle: Eagles winter on Fort Gibson lake. Description of Fish and Wildlife Management Practices:

Approximately 2,700 acres are planted to row crops, annually. Controlled burns are utilized to manage upland habitats. A 3,500 acre waterfowl refuge, in the Jackson Bay area, is managed for waterfowl with 9 wetland units and numerous fields planted to wheat, sunflower, milo and millet.

A rifle range can be found on the south side of Toppers road east of Wagoner. The range offers two shooting benches and a 100 yard range.

Fishing opportunities exist in numerous ponds on the area. Fort Gibson lake offers good fishing for white bass, catfish, crappie and black bass.

I"m zipping north - headed to Joplin MO and then north to the motel in MO - but first one park in OK off the beaten path and then a few parks in MO along the way.

Looks like Hollis, KC3X, is real busy working on next time around. He needs EVERYTHING now that he just started over. AC7GG, in OR, is now a busy county hunter racking them up left and right. The DX was on - probably listening for those rare counties by W0GXQ, NF0N, K8ZZ crew running all over.

Neosho WMA - POTA only - was up next. A quick hit and run with 15Qs in log. K8130 in Ottawa County OK


The Neosho Wildlife Management Area encompasses 726.36 acres located about 6.5 miles northwest of Welch, Oklahoma in the eastern part of Craig and western part of Ottawa counties. Area consists of a rock bluff, bottomland hardwoods, WRP/wetland units, several small ponds, mud creek, prairie lake, pecan trees, several oak species, cottonwood and other timber with diversified terrain from mostly level to gently sloping bluff. It is primarily managed for moist soil species along the Neosho river corridor.

That's enough for OK and it finishes off that corner of the state. Now I've got to head to MO for virgin territory. Back to the interstate via some KS counties headed east - and into MO and then up the interstate past Joplin , past Carthage and headed north to the motel in Lamar, MO.

Dorris Creek K-8247 in - a State Conservation Area - in Barton County MO. Most of these SCAs have good directions on the web but a few will not! This was easy to find.


From the web:

Dorris Creek Prairie Conservation Area was purchased in 1984 by The Nature Conservancy. The Department purchased the area from The Nature Conservancy in 1985 as part of the prairie chicken restoration project. The area is named after the Dorris Creek School, which used to be located north of the area. This native prairie has many showy wildflowers during late spring/early summer. Deer hunting is allowed by Archery Method Only (antlerless permits are allowed). Trapping is allowed by Special Use Permit. Firearms that fire a single projectiles are PROHIBITED on this area.

This is typical driving directions:
"From I-49/Highway 71 exit 70 south of Lamar, take Highway 126 east 4 miles, and SE 40 Lane (gravel) south 1 mile."

You WILL do lots of miles on gravel roads (and some mostly dirt). Some are very good ( 30 mph types) and others are new gravel ( 20 mph ) and some are 15 mph bone shaker ones that go on and on and on. Let's see - 3 miles at 15 mph takes forever! And you got to go back the same way usually! I probably did 150 miles on gravel roads in MO. This is the land of alphabet highways. Highway B. Highway DD, Highway W, TT.

You'll see lots of this sign too!


You'd be advised to not travel to many of the SCAs during heavy rain! There are many low lying areas and roads along rivers that can easily overflow. Many roads had water in the ditches along side the road and just 20 feet wide ditch to ditch.

Two other park activators ( AB 0 O and K 0 BWR ) had been here so just a 15 Q run. Getting later in day - and got more parks to squeeze in today. They had 200Qs between them.

On to Pa Sole Prairie SCA - same county. I'd be 'stuck' in the same county for another 10 parks! 240 acres. From the web:

Pa Sole Prairie Conservation Area is named after the Osage term meaning "settlers on the hilltops". This area is made up of native prairie, old field, cropland, and warm season grass plantings that can be very showy with wildflowers from late spring through summer. Conservation grazing is implemented on the area during some summers to enhance the habitat structure to benefit many prairie nesting bird species such as quail and grasshopper sparrows. Deer hunting is by Archery or Muzzle loader Method Only (antlerless permits are allowed).

On to Treaty Line Prairie SCA K-8263 - still in Barton MO. 168 acres. From the web:

The MissouriDepartment of Conservation purchased this prairie in 1988. This native prairie has rich plant diversity. Wildflowers are typically abundant and showy during late spring throughout early summer.

Deer hunting is allowed by Archery Only Methods (antlerless permits are allowed). Trapping is allowed by Special Use Permit.

OK..enough for the first day and lots of miles sitting in the car. Hit Lamar, MO and the Super 8 motel there. It had been mostly heavy cloudy day with drizzle, and later a bit of rain. Cleared up a bit once I got to MO. The wipers had seen lots of use. So far all the MO SCAs had nice parking areas.

Dinner at Tractors BBQ - looks like a very popular spot. Six kinds of BBQ sauce on every table. Had the two meat dinner with green beans and BBQ beans. Good! Time to rest up for a few more days of hitting lots of SCAs and lots of miles on gravel/dirt roads.

There were more days of lots of parks but that will be continued in next month's CHN. I'll skip 2 days here.

However, I'll include the trip home.

## May 26, 2021 Wednesday

After dinner and a busy day on Tuesday, I pulled up the latest Tamitha Skov Space Weather forecast on YouTube. Hope you've stopped by this once or twice.

## https://www.youtube.com/watch?v=qCtYMVjdMwM\&t=427s

She presents a weekly forecast of solar activity - and often good. Usually shows up late Tuesdays. Well, dang. As she noted - it was POW POW POW with a very active solar region spitting out flare after flare after flare and many of them would impact the Earth. Predictions were for K index to rise up to maybe 6 by Wed afternoon/evening for a day or so. Thursday would be a wipe until bands recovered later. It's Tuesday night.
Hmmm. (K was 5 by Wed eve - bands 'poor')

Then I tune in the weather forecast. Holey Mackerel. It's even worse. Predictions are for major possibilities of severe storms and TORNADOES in 'tornado alley' which encompasses most of OK up to ....where I was in the KC MO area! Not so bad on Wednesday but the afternoon and evening would be 'tornado watch' over much of the area. Time to be gone.

I had two possible routes from here - one more was headed northeast for another dozen parks along the river and then heading home. Nope- that wasn't going to work! That would put me right in the red zone. No no no. The other was to scoot on home if I was 'parked out' for a bit. I decided I'd had enough.

Since I don't like severe storms and hate tornadoes, it was simple to head on home. Why risk it? There were two parks in the KC area that needed to be run - and since only POTA parks, anything over 10 would work. I'd hit them early Wednesday morning - 15 miles away.

No breakfast at the motel - still hanging on to the COVID excuse -but no real need at this point. Breakfast at the Perkins right next door - you can walk - 3 min walk. They open at 6 am and I was there then. Great breakfast. On the road by 6:45am headed to the first park.

## Bruce Lee Watkins Cultural Heritage Center - K-5706 in Jackson County MO


from the web:

The Center is named in honor of Bruce R. Watkins, a political and social activist. Watkins was fueled by the need to recognize and preserve the varied contributions African-Americans made to the development of Kansas City. The center opened in December 1989 as the outgrowth of Watkins' efforts. Construction of the Center was made possible through the work and contributions of the Bruce R. Watkins Fountain Inc., the Kansas City Parks and Recreation Department, and the State of Missouri.

The facility is located on one of Kansas City's major thoroughfares. It is part of the Cultural Mall complex, which includes the Spirit of Freedom Foundation, the Satchel Paige Stadium, an amphitheater and a hillside garden, which greets visitors with thousands of multi-colored irises.

The center also serves as a showcase for the talents of local, regional and renowned visual and performing artists. It provides visitors with culturally rich entertainment and educational experiences in the form of exhibits and displays, films, classes and workshops, stage performances and special ceremonies."

Big parking lot with plenty of space to run it! Done in 20 minutes.
Nearby is the Anita B Gorman Center K-6474 - same County.
From the web:
The Gorman Discovery Center offers eight acres of natural areas with short paved and natural trails through forest, woodland, wetland, and prairie habitats. The area has demonstration beds showcasing how native plants can be used for home landscaping and Sycamore Station, a children's natural play area. Nature exhibits are available for viewing inside the building, and free nature programs are offered regularly. Additional Building Hours: until 7PM - 1st and 3rd Tuesday evenings Free nature programs each Saturday. Free nature programs for Missouri schools by reservation.


Have a good run and scoot on down the interstate with just two more to hit quickly along the way without major detours. The goal is to be GONE from this area by afternoon. Excellent parking lot and empty at 8 am in the morning. The weekly CWT started at 8 after I put a dozen in the log, so worked a few more CWT stations and bugged out of there after another 5 minutes. Time to scoot.

Off to Lyon State Fishing Lake in Lyon County, KS - 100 miles away down the interstate. KFF-7403 in, surprise - Lyon County KS. Ran the counties along the way.


Out in the middle of nowhere but nice parking area - after, of course, the obligatory 1.5 mile long gravel road to it. Have a nice run and scoot on down the road. Occasionally catch Jerry, W0GXQ and Ed, K8ZZ but miss most of their counties. I don't spend much time on 40 M and usually that's the only band that works but occasionally shorter skip on 20 M . I'm putting out the counties as I zip through them as well.

From the web:
"Lyon County State Fishing Lake is situated on the eastern edge of the Flint Hills region in Kansas. The lake is located 13 miles north of Emporia on Kansas Highway 99 then two miles east on County Road 270. The 135 acre lake is surrounded by 442 acres of state owned public wildlife area. Fourteen hundred acres of native tall grass prairie
comprise most of the lake's drainage basin and contribute greatly to its average 39 inches of water clarity.

Kansas acquired the lake property in 1931. The Works Progress Administration and Civilian Conservation Corps were responsible for much of the construction. Their craftsmanship is still visible in the native limestone guard posts and inlaid rip-rap on the face of the dam and spillway. The limestone shelter house was constructed in 1951. Other improvements at the lake include a concrete boat ramp, boat loading dock, seven rip-rapped fishing piers, three rip-raped islands, two outhouses, picnic tables and camping sites. The lake was renovated in 2000 to restore a desirable fish population."

One more to go today. It's Eldorado State Park K/KFF-2336 - and a two fer with K7925. I'm there at 1630 z and am done in 30 minutes. Time to get out of KS. For some reason, every time I go to KS, it's not long before tornado warnings are issued! Mother Nature is telling me something - don't stay long in KS! It's in Butler County so it works well Back to the interstate and then head home.


Filled up gas tank - and with that, can drive the hours and hours to home - about 370 miles and six hours from here. It's down I-35 for another 70 miles to OK, then down I35 for hours and hours and hours, then into TX on I-35, taking I-35E at Denton - then
hit the 121 Bush Turnpike. Last six miles have traffic lights but it's 'rush hour' and the lights are set for 'the green lite express' so make all of them on green! Good traffic engineering in Plano to manage traffic on the major routes. The 'green' express going north and going east out of the industrial park works as long as you are going those directions. Home at 6:02pm after a long, long day of driving. Heavy clouds developing and the temperature is now 93F. It's been very warm since OK City. Over 670 miles driven today.

1338 miles driven on the trip in 4 days. Could have been longer but between weather and propagation - it was better to be 'out of KS and MO'. Also hit 20 parks during those middle two days - so most of the miles were Day 1 and Day 4. Whew.

Watched the weather news. Last night - baseball size hail in mid western KS. Tornado watch over entire east part including KC area - RED! On Wednesday/ Wednesday Eve, into Thursday. All of OK likely severe storms and possible tornadoes from panhandle of TX up through OK City to KC- on Wed eve through Thursday. Whew! Made it home in time. Really nasty storms in NE OK, and OK City area Wednesday. Line moving southward. KC area got clobbered, too. Spring time in the 'plains'.

Now to do lots of paperwork on the logs.
Thursday's weather had OK right in the RED ZONE with tornado watches, severe storms, large hail across most of the state....and those storms headed my way late tonight. Then another week of daily storms it seems in Dallas - a 'wet pattern'. Soon it will be hurricanes in the Atlantic as Hurricane Season starts June 1.

Heck, even good storms all the way up to MI and MN these days, too. Stay safe!

Will resume the trip report on the 'middle days' next month.

## AI5P Trip Report II

Sand Creek Massacre National Historic Site

As a history buff, I had always wanted to visit this site. It's in rural Kiowa County, Colorado, and its Parks on the Air designation is K-0861. After a 8 mile drive on a dirt and gravel road, you arrive at the site among the vast eastern Colorado plains.


Most folks don't know the sad history of this historic site, so I'll quote the NPS brochure as it tells it the best.
"The Central Plains, which stretch from the Missouri River to the Rockies, were home to thousands of Plains Indians Cheyenne, Arapaho, Comanche, Lakota, and others. They adopted the horse for hunting buffalo - the main source for their material culture and food. In winter, certain locales along creeks and rivers offered firewood, shelter from bitter winds, and drinking water. Big Sandy Creek was one such place.

The 1851 Fort Laramie Treaty defined the Plains tribes' territory. It promised them protection and annuities (provisions) in return for safe passage by travelers through Indian lands. The treaty did not achieve lasting peace. In the late 1850s prospectors struck gold in the Rocky Mountains. Realizing that Indian lands might include rich mineral resources, the US government reneged on the 1851 treaty. A new Fort Wise Treaty (1861) required the Cheyenne and Arapaho to cede all their previously agreed territory except a small reservation. Six Cheyenne and four Arapaho
chiefs signed. Many more refused. Despite the discord, Congress created Colorado Territory in 1861.

Only a few months later, the Civil War began. The US Army withdrew most of its regulars from the frontier for service back east. Colonel John Chivington commanded the troops of the Colorado Military District. Chivington, who had political aspirations, reportedly said, "It is right or honorable to use any means under God's heaven to kill Indians..." In spring 1864 he ordered attacks on four Cheyenne villages. When his regiment killed Peace Chief Lean Bear, Plains warriors retaliated. Some Indian leaders appealed for peace in a conference at Camp Weld, near Denver, with Territorial Governor John Evans and Chivington. Those Indians desiring peace were told to report to Fort Lyon. Many did, and then encamped at Sand Creek.


On November 29, 1864, Chivington led the attack at Sand Creek. This is no ordinary village; it is a chiefs' village, with over 750 people and at least 33 chiefs and headmen of the Cheyenne and Arapaho. When the firing stops, over 230 Indians, including 13 Council and four Soldier chiefs, lie murdered. Soldiers loot, scalp, and mutilate the dead.

The US Army ordered an immediate investigation; Congress would order
two more. In the 1865 Little Arkansas Treaty, the US government took responsibility for the massacre and promised reparations to survivors. The promised reparations have never been fulfilled. Although an Army judge condemned the "cowardly cold-blooded slaughter," the colonel was never formally charged nor tried."


43 stations made it into the log. Rick AI5P

## Awards Issued

| USA-CW V \#9 | KC3X, Hollis | 25 April 2021. |
| :--- | :--- | :--- |
| Roadrunner 1700 LC \#2 | KB6UF, Ron | 20 April 2021 |
| Roadrunner 1725 LC \#2 | KB6UF,Ron | 27 April 2021 |
| Roadrunner 1025 LC \#12 | AB7NK, Mary | $5 / 1 / 2021$ |


| USA-CA II \#445 | K0DEQ, Bill | $5 / 1 / 2021$ |
| :--- | :--- | :--- |
| USA-PA - K \#35 | Ron, KB6UF | $4 / 22 / 2021$ |
| $12^{\text {th }}$ Time \#5 | KC3X, Hollis | May 21, 2021 |
| Roadrunner \#13 1000 LC | Ed, K8ZZ | 15 May 2021 |
| Roadrunner \#96 250 LC | Ed, N8OYY | 20 May 2021. |
| RAS TN \#28 | Mary, AB7NK | 5 May 2021. |
| RAS TN \#29 | Neil, K7SEN | 5 May 2021. |
| RAS MS \#28 | Mary, AB7NK | 7 May 2021 |
| RAS MS \#29 | Neil, K7SEN 7 May 2021. |  |

## Upcoming Events for County Hunters

It's the last of the spring QSO Parties. They resume end of August with KS, then TX and a bunch of others.

June 51400 z to 60200 z
Kentucky QSO Party CW Ph Dig
RS(T), KY county or SPC
http://www.kyqsoparty.org/rules
June 19 1600z to 0400 z
3.5-28West Virginia QSO Party CW Ph Dig

RS(T), WV county or SPC
www.qsl.net/wvsarc
There's also the June VHF contest, Field Day - for snagging some 'band counties' as well if you can track down the location of the station. Fixed stations in FD likely operating at 'home location' although some will be remote. The rules allow "1D" stations to work each other for credit.

That's all folks.

