County Hunter News

May 2021 Volume 17 Issue 5

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.

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

CW County Hunter 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/cq.htm

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

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

find information on these awards and the rules at:

http://marac.org/awards.pdf

There is a lot more information at <u>www.countyhunter.com</u>. Please check it out.

Back issues of the County Hunter News are available at <u>www.CHNewsonline.com</u>

De N4CD, Bob Voss, Editor (email: <u>telegraphy@verizon.net</u>)

Notes from the Editor

N4CD Rumblings

1) Sunspots – We got them...then we didn't, then they returned but not much action on the SFI number (solar flux) for a while then they kicked up to the 20s and up to 40 one day! Unfortunately, lots of 'solar wind' and high A index masked any benefit and propagation was poor to fair much of the month. However, the appearance of lots of sunspots is good news. The not so good news is that they are 'small' sunspots – and we need large sunspots and dozens of them. Right now the Earth orbit leads to increased solar winds. We should escape more of them in 2 months. Spring is a bad time for solar wind problems.

2) Data – it's been reported that 66% of all HF activity is now – FT-8/FT-4. Wow! No wonder the cw/ssb bands are quiet. Everyone is making contacts computer to computer.

From the ARRL Newsletter – early April:

"Since zooming to prominence after its debut in mid-2017, the popular FT8 digital protocol has become the mode of choice for some 60% of HF operators, according to Club Log's latest activity report compiled by Michael Wells, G7VJR. FT8 is one of the protocols in the WSJT-X suite of free programs. Wells says FT8 activity level sits at nearly 85% on 6 meters. The dramatic FT8 upswing has come at the expense of phone,

CW, RTTY, PSK, and other modes.

Over the same period, the number of FT8 contacts logged each year per active call sign has continued to climb to about 60% between 2015 and 2021, with the most dramatic increase being nearly 29% in the past year. The use of all other modes has continued to flutter downward since the advent of FT8, which occupies vastly less spectrum than the more traditional ham radio operating modes.

Between 2015 and 2020, the number of contacts logged per day by Club Log users has trended steadily upward, regardless of mode. The report draws on data of more than 84,000 logs uploaded to the Club Log site -- some 730 million contacts in all. Wells reported that in 2025, the "typical call sign" logged 620 cw contacts, 558 SSB contacts, and 372 data (digital) contacts. Five years later, the statistics were 500, 300, and 1,700, respectively.

ARRL's Logbook of The World (LoTW) does not typically report this level of detail as far as mode usage is concerned, but the statistics available certainly confirm FT8's increasing popularity. The rocketing usage of FT8 over the past few years may be demonstrated most dramatically by a comparison in contacts-by-mode statistics between March 2017 and March 2018, when FT8 contact numbers in the hundreds shot to some 2.6 million contacts by the following year -- an increase of nearly 1 million percent. From mid-2019 to mid-2020, FT8 usage appears to have slumped slightly to 50% before climbing back to 60%. FT8 usage peaked at just over 65% in late 2020 and has held steady at 60 - 65% since.

The same period saw SSB usage dip by 15%, cw activity by 10%, and RTTY by 29%. Introduced later, FT4, the contest mode of FT8, also showed an initial fast upward trajectory, before steadying at 5 - 8%.

Named after its developers, Steven Franke, K9AN, and Joe Taylor, K1JT, FT8 indicates the mode's eight-frequency shift-keying format. Tones are spaced at 6.25 Hz, and an FT8 signal occupies just 50 Hz."

3) Contesting Cliff

Frank Howell, K4FMH, followed up his two-part National Contest Journal (NCJ) series, "The Demographics of Contesting," with a post to his "Social Circuits" blog, called "Lemmings over a Demographic Cliff?" Howell points to data showing that radio contesters are older than the average ARRL member. Taking into account information from the Bureau of Labor and Statistics on Leisure Time Use, Howell opines that this should be expected.

"Leisure pursuits are highest during youth and young adulthood but dramatically taper off about ages 25 - 34 until age 55 and over," Howell said. "This hollowing out of leisure and sport time is a predictable outcome of competing and more important activities." According to Howell, the main competitor to radio amateurs engaging in onthe-air or workshop activities is television (now more broadly referred to as "screen time").

A Brookings Institution study on the topic using the 2005 - 2015 Time Use Survey documents how "free time became screen time." Around 2007, screen time (not just TV) surpassed other active leisure activities in the average time spent category. By 2015, the gap favoring screen time was more than 1 hour, reflecting an average of some 11 hours per week of activity. Howell argues that formats of major radio contests may serve the leisure interests of established contesters -- those on the far end of the demographic spectrum -- but may not offer the best experience for contesting newcomers. "Traditional radiosport is facing a demographic cliff of aging ham contesters," Howell asserts. "Those highly invested in the status quo won't be around to experience the diminishing [number of] participants, [but] they now have the political clout to direct strategic actions."

The ability for single operators to compete at a high level in a major contest requires time, equipment, and skill that are probably beyond many in the "caterpillar" stage, ARRL Contest Update Editor Brian Moran, N9ADG, recently observed. He suggests that most school-aged operators don't have the time to stay in the chair all weekend. "Those fortunate to be able to join seasoned teams of multioperators at well-equipped stations have a different contesting experience than those plugging away solo," Moran said. "With the opportunity for mentorship, camaraderie of a group effort, and a chance to be part of something bigger, they'll be more likely to emerge from their expected dormancy period as a contest butterfly."

Howell argues that demography does not have to be destiny. "It does require taking the blinders off tradition and evaluating it for what it is today and what it means for the future," he concluded. -- Thanks to The ARRL Contest Update



Above from the ARRL Newsletter 4-1-2021

4) Friedrichshaven Hamfest

The largest hamfest in Europe had been scheduled for June – in person. It's now officially canceled due to rampant infestation of COVID spiking again. Europe lags far behind the US in percent of people vaccinated. Here, 200 million plus have gotten at least one shot -and at a rate of 3-4 million a day, it will be a few months till everyone has had an option to get a shot. 25% will likely refuse and some of them will die early. Others will suffer life long degradation.

Most hamfests this year, other than a few 'swapmeets' have been virtual, with presentations on line. Dayton will be 'virtual' this year. Orlando was – back in Feb. Oh, and Tokyo Olympics will have no visitors this summer - just participants. Still the 'covid world'.

5) Hamfest Schedules

Finally, it looks like face to face hamfests are going to happen. Belton Hamfest now planned for Oct 2021, and Shreveport, LA and Huntsville, AL now planned in August 2021. Let's hope things are settled down by then! Just about everything before August has been axed. There likely will be some smaller gatherings/swapmeets around the country but few are listed on the ARRL Hamfest schedule at this point.

FCC 3.3 GHz Info

FCC Agrees with ARRL and Allows Partial Reprieve on 3.5 GHz

Pending future FCC action, amateur radio secondary use of the 3.3 - 3.45 GHz band segment may continue indefinitely. The FCC, as part of a lengthy Second Report and Order (R&O) for commercial licensing of 3.45 - 3.55 GHz adopted on March 17, agreed with ARRL that continued access by amateur radio to 3.3 - 3.45 GHz should be allowed until consideration of the 3.1 - 3.45 GHz spectrum in a later proceeding. The FCC action in WT Docket 19-348 represents a partial -- and temporary -- reprieve from the FCC's December 2019 proposal to remove amateur radio from the entire band, and it makes available an additional 50 MHz than an FCC proposal last fall to allow amateur temporary use of 3.3 - 3.4 GHz.

Amateur secondary operation in the 3.45 - 3.50 GHz band must cease 90 days after public notice that the spectrum auction has closed and licensing has begun. That is expected to happen early in 2022. The FCC announced the opening of 3.45 - 3.55 GHz for auction to commercial 5G interests on March 17.

The FCC stated that "While we adopt our proposal to bifurcate the band, we adjust our proposal and set 3450 MHz as the frequency at which the band will be split." It agreed "with the ARRL's assessment that the guard band is not necessary from a technical standpoint. We also recognize that the nature of amateur equipment realities makes the 50 MHz at 3400 - 3450 MHz particularly valuable to amateur operators because it means existing equipment can continue to operate in the band for the time being." This allows "amateur operations to continue in the lower portion of the band while the [FCC and federal government users] continue to analyze whether that spectrum can be reallocated for flexible use," the FCC said. The FCC had proposed splitting the band at 3.4 GHz, permitting amateur use in 100 MHz of spectrum "while also providing a buffer

to protect flexible-use operations at the lower edge of the 3.45 GHz band."

"We therefore allow secondary amateur operations to continue in the 3.4 - 3.45 GHz portion of the band," the FCC said. "We emphasize, however, that amateur licensees remain secondary users, and those that operate on frequencies close to the 3450 MHz band edge must do so with particular caution to avoid causing harmful interference to flexible-use licensees in the 3.45 GHz Service, which hold primary status. In light of these considerations, while amateur operations between 3450 MHz and 3500 MHz must cease within 90 days of the public notice announcing the close of the auction for the 3.45 GHz Service, as specified in the Report and Order; amateur operations may continue between 3300 MHz and 3450 MHz while the Commission, NTIA, and the DoD continue to analyze whether that spectrum can be reallocated for commercial wireless use."

"There is no expectation that such operations will be accommodated in future planning for commercial wireless operations in this spectrum, or that amateur operators will receive more than a short period of notice before their operations must cease," the FCC said.

Source: ARRL Weekly Newsletter 3/25/2021

Mississippi QSO Party

It looks like K4ZGB was the lone mobile for part of the day, but many fixed stations showed up to make it a decent QSO party. Many of the contest regulars were chasing the SP – Poland- DX contest – some making 200-300 contacts into Poland during the contest period. The contest messed up much of the 20M cw band from TX and must have been really loud back east in New England with both US stations calling CQ SP and SP stations with beams to the US. Heard the US stations loud – and the SP stations barely in there most of the time but keeping all the lower part of the band, up to 14.050 and sometimes above, full of activity.

From the 3830 contest reflector:

K4ZGB/m reported 369 QSOs - had no comments

N4OGW - Fixed - MS 410 cw 369 SSB 188 FT-4

Allowing FT8/FT4 qsos this year was an interesting choice. All of the qsos listed above under "RTTY" were on FT4. 142 unique grids on FT4.

Thanks for all the qsos, sorry if I couldn't hear you- I had some bad noise to my west on 20m this year.

73 Tor N4OGW

WQ5L - fixed MS - 278 cw 222 SSB

Amplifier stopped working 15 minutes in so it was all LP after that.

The addition of FT8/FT4 was an interesting change. I didn't work those modes, though; did try CQ on RTTY for a while but got no bites.

Skip was long on 40 all day so didn't work as many in-state as usual.

Mults were 42 states, 5 provinces, 12 MS counties, 9 DX (all EU).

Thanks for the Qs -- Ray WQ5L

WB8WKQ - fixed MI 30 cw 21 SSB 24 counties

51 Q's this year compared to 54 last year. So very similar, but more mults (24 vs 17)this year, so a higher score. Not a full time effort, went out to watch some of the Final Four. Got K4ZGB six times, fairly early in the contest, but then never heard him again. Thanks for his efforts making more mults available!

K1RO - Fixed - NH 30cw 24 SSB 27 counties

Nice activity. Was happy to work some new counties.

N8II- fixed WV 26 cw 20 SSB 21 counties

COVID vaccine won the day; I was not feeling like getting out of bed from 2015-0115Z

despite 3 Tylenol doses during the day. Sunday, I was fine. Last QSO was 2231Z; the NCAA tournament was nice to watch while resting. Signals were good on 20, but only for about 4 hours or so. 40 was a stretch during mid day.

Thanks to dependable Tom, K4ZGB/M for 4 QSO's. I only worked WW5X/M once on a county line. Activity was much better than neighboring LA, but some room for improvement, Hi! Thanks for the Q's.

73, Jeff

73, Jeff

On the Trail of Regens

Not a whole lot of nifty stuff showed up on Ebay. You can tell it's Spring Cleaning time as some old homebuilt regens show up for sale – usually at ridiculous prices for home made stuff. How many are going to buy 40-50-60-70 year old stuff with old tubes – even if the 'work' for \$75 or \$90? There's a market out there for Knight Kits and Heathkits, a smaller market for Philmore and Lafayette stuff, and even less of a market for home made stuff that doesn't look great, has ancient parts, and sometimes works (or used to work) decent. Here's two recent examples from the web.

From the description on the web:

"Nice Homebrew Shortwave AM Regenerative Radio - It Works. Condition is "Used". Includes power supply, Speaker, and a set of Bud Senior coils 16 to 200 meters plus a BC coil. Uses 2 6D6 tubes, 76 tube and a 6X5 in the power supply. Radio measures 9" wide x 7" high x 7.5" deep. Power supply measures 6" wide x 6" deep x 5.5" high. Speaker measures 6" wide x 7" high x 3 3/4" deep. Schematic of radio and power supply included."



The circuit is of an untuned 6D6 pentode RF stage followed by a 6D6 pentode regen detector – followed by a triode audio output tube. A power supply with tube rectifier is included. From the components used, I'd guess this was built 30-40 years ago using older tubes and parts – but some newer caps – or they had been replaced. It's complete as far as power supply, coils.....but who wants a home built set at \$90 plus \$52 in shipping! Wow...this one sold for \$177 plus the \$52 in shipping. Crazy!



A second example also up for sale this month:

The Ebay description:

"HOME MADE VINTAGE REGEN TUBE RADIO RECEIVER with 5 PLUG IN COILS. 3 TUBES: 1A4, 1B4 AND #30

TWO ICA 4-PIN COILS 560 TO 1000 kc & 1000 to 1800 kc BROADCAST BAND and THREE -4 pin COILS ON HAMMARLUND COIL FORMS 1.75 TO 3.6 Mcs, 3.4 TO 7.1 Mcs, 6.7 TO 14 Mcs, SHORT WAVE BANDS

REQUIRES B+ POWER SUPPLY AT 22.5 AND 45 VOLTS DC AND FILIMENT A VOLTAGE (NOT SUPPLIED) JUST HOOK TO COLOR CODED WIRES AND PLUG IN EARPHONES (NOT SUPPLIED). ALSO LONG WIRE ANTENNA REQUIRED

INCLUDES HAND DRAWN SCHEMATIC





This set uses a 1A4 tetrode RF amp directly coupled to a 1B4 tetrode regen detector – followed by a type 30 triode audio amp. Not spectacular tubes to choose from the 1920s era. Regen control is via screen grid voltage. Drives a pair of headphones.

Seller commented it worked 'better than his Ocean Hopper' – but his Ocean Hopper might not be working well. Asking price \$75 starting – no power supply - \$14 shipping. At least one person bid on this. It sold.

Looking at the parts on the underside, I'd guess this was built in the 1950s with older parts from a junk box. Could have been earlier, and some parts replaced in the 1950s with 'newer ones'.

If, and only if, this was a 'kit radio' sold through a catalog, with some original documentation or other showing it was sold as a kit – it's not worth a whole lot to anyone. I'd probably pass it up for \$30 at a flea market. There's absolutely no resale value to anyone. Maybe if you took the time to look through loads of old magazines, like Short Wave Craft, old Lafayette Radio catalogs, and found it – then you'd have a collectible but still not much value.

Some of these were made during the early 1940s – when new parts were 'unobtainium' due to war time production going only to the military – so folks used old junk box parts to build things. Others during the 50s for 'nostalgia'. Or because they didn't have a lot of money to buy Knight Kits or similar.

Here's a third example. Repurposed front panel – single type 30 tube and probably 30s or 40s parts. Type 30 tube was a basic triode.



Would be a bare bones performer on Short Wave and would need a very decent antenna and ground. Took 2v for filament and probably 22.5v for the B+. Sold for \$83 plus 10

in shipping. Crazy! This old stuff sells - not working - but - who knows?

This is a 20 buck hamfest radio.....and you wouldn't get much more at an antique wireless auction. However, the magic of Ebay brings out some strange buyers.

On the Road with N4CD I

The first weekend of April was coming up. There were two QSO Parties scheduled – one in LA and one in MS. I looked at going over to LA to run in the QP – but there aren't too many parks that I haven't run close by - it's 200 miles there and miles and miles more to get to a 'new park' for me. Plus, you can't self spot in either QSO party so I skipped going mobile there. Didn't see much mobile activity in LA. There was a mobile or two in MS.

Saturday – April 3 2021

With ever increasing vaccinations around the country, I figured I could go out for a two or three day trip around OK to get some new parks that they've added in the last few months. They included 'state fishing lakes' and now state Historic Museum sites. So why not? Most of them were ATNO's, too, (All time new ones) for the park chasers. Conditions have not been to great with low sunspots – and sometimes no sunspots and the solar flux in the low to mid 70s. However, I figured with running some rarer OK counties and CW, I'd easily get 10 QSOs for an activation for POTA parks.

I was up at 5:40 am – and nuked an Egg McMuffin type deal in the microwave oven, made a cup of coffee, had a mandarin orange – and that was a quick 10 minute breakfast. Loaded up the car and hit the road at 6:15am. 62F outside. Still dark and not a fan of night time driving but well lit roads getting out of Plano TX to the interstates headed to Wichita Falls. Turned on the radio but no takers as I went through the counties – way too early. A couple hours later, stopped for gas in Wichita Falls as expected to be going through some sparsely populated areas in southwestern OK and didn't plan on bouncing on empty to find a gas station.

First park was reached at 1456z – Gist Wildlife Management Area k-8654 in Tillman County OK.

From the state website:

"At only 177 acres, Gist is a small WMA, located 6 miles northwest of Tipton in Tillman County. The area is primarily North Fork of the Red River bottomland and is vegetated with sand plum thickets, cottonwoods, and tall grass species.

Game Species of Interest:

Waterfowl: Small numbers may be present on the river during migration.Deer: White-tailed deer are present in low numbers.Dove: Doves may be present in small numbers during migration.Quail: Bobwhite quail are present in low numbers.Rabbit: Cottontails may be present in fair numbers.Furbearers: Coyote, bobcat and raccoon may be available. "

Nice parking area to run from – no problem. They like you to have your OK Conservation Permit (Peeper Pass) to enter/park at these WMAs in OK. You can get on line.

Ran the bands – and headed out. Of course, the OK QSO Party was not long ago and many counties were run in OK – but I could give out stars, MG, MP, MD, etc, so hoped a few would show up.

Next I headed to the Museum of the Western Prairie – in Jackson County OK – Park K-8642.

From the state web site:

"The Museum of the Western Prairie tells the story of southwest Oklahoma from the distant past to the present. The story begins with the Wichita Mountains—the low, granite peaks that formed almost 300 million years ago. At first the Wichitas towered above the landscape; later, they were islands in an ancient sea. Today the modest hills that remain serve as a connection between every era of southwest Oklahoma history.

During the last Ice Age, the region's climate supported animals that would later become extinct, such as the mammoth and mastodon. Their remains have been found throughout the area. Ancient forms of bison, the ancestors of what were later called "buffalo" in North America, have also been found. Archaeological evidence reveals that humans hunted these animals in southwest Oklahoma at least eleven thousand years ago.

By seven thousand years ago, Paleo-Indians were present in southwest Oklahoma. These people were hunters and gatherers who wandered on foot. Six thousand years later, permanent settlements were established in some areas, and farming began. One of the cultures connected with the period after European contact developed at this time: that of the Wichita.

Between the late 1550s and early 1700s, horses brought to North America by Europeans spread across the Great Plains. As a result, many Native groups transformed dramatically, becoming part of what are known broadly as the Plains Indians. Their highly mobile lifestyle, based upon hunting the herds of bison that migrated north and south across interior North America, is a cultural image that remains today.

The Civil War and Beyond

The American Civil War (1861–65) heralded a period of tremendous change in the United States. Although southwest Oklahoma played no significant role in the conflict, it was directly affected by the events that followed. In particular, Texas ranchers began herding longhorns overland to meet a southern branch of the Transcontinental Railroad. This route, the Western Trail, passed through the region. At its peak in 1881, approximately three hundred thousand cattle, seven thousand horses, and one thousand men moved up the trail. Altogether, more than 7 million cattle traveled the route during its operation.

The years following the war also marked a period of severe change for the Plains Indians. Expanding settlement on the Southern Plains led to removal and confinement in the Indian Territory. Texas, which had no reservations, claimed present-day southwest Oklahoma as its own Greer County until 1896, but the Comanche, Kiowa, and others continued to visit the area seasonally as they had for hundreds of years. The drama of their eventual confinement on nearby reservations in the Indian Territory, bordering Greer County, played out all across the western reaches of the Red River, including present-day western and southwestern Oklahoma, and in adjacent areas of Texas.

With the destruction of the buffalo herds, the removal of the Indians, an ever-expanding rail system, and the increasing pressure to settle unclaimed land, eyes soon turned toward southwest Oklahoma. The environment was forbidding; the area was remote, there were few trees and so very little lumber, and water was scarce. Even in the 1880s, southwest Oklahoma was a difficult frontier. But the people adapted, as can be seen in the half-dugout on the museum grounds. The area developed rapidly, and by the early 1900s the region had well-established communities.

Today the western range of the Wichita Mountains presides over a largely agricultural base in southwest Oklahoma, although the economy depends heavily on the presence of Altus Air Force Base, activated in 1953. In recent decades business has begun to diversify, with new industry and tourism adding to the development of the area."

https://www.okhistory.org/sites/westernprairie

Whoa - it's QRN central there. There's a nice big parking lot for 200 cars – but anywhere in the lot there is S7 QRN on cw – and didn't bother to check on SSB. Ouch! Well, I was hoping to work at least 10Qs through the din – and managed to eek out one more than 10 - but it was TOUGH going. Didn't go through museum – maybe another sightseeing trip but not today. Looks like big museum, too – likely a few hours to see.

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I kept heading west to Harmon County and **Hall State Fishing Lake**. Nice QUIET location and easy to find. K-8123.



Ed, K8ZZ was on the road in TN. Got him in the log, then went to work putting out park/county. A couple dozen went in the log from here. OKLA has a dozen 'state fishing lakes' just like KS. Most are nice and quiet, too and you can primitive camp at many of them overnight. No facilities other than maybe a porta-potty. Or outhouse.

Some you can 'primitive camp' at – others not.

From the state site:

"The lake has one boat ramps, five fishing jetties, a fishing dock, picnic tables, and latrines. Hollis is the nearest town in which to obtain picnic and fishing supplies. Hall anglers can pursue crappie, sunfish, and channel catfish. There is one boat ramp with a dock, 5 fishing jetties, renovated in 1985, and primitive camping.

Lake Hall was constructed by the Oklahoma Department of Wildlife Conservation in 1954 and renovated in 1985

Physical Description:

Fish Species of Interest: Largemouth Bass, Crappie, Channel Catfish, Saugeye, Bluegill, Redear Sunfish

You can also hunt there during hunting season. You probably don't want to try swimming in any of the OK 'fishing lakes'.

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Next up is Doc Hollis State Fishing Lake K-8119 in Greer County OK.

From the state web site:

"Doc Hollis Lake is located in Greer County, 18 miles northwest of Mangum Vegetation around the lake is shortgrass high plains type.

The lake has an entrance road and parking lot, no picnicking, restroom, or camping facilities. Anglers can expect fair bass, sunfish, and channel catfish fishing. There is a fishing dock, ADA parking, dam, and shoreline renovations were done in 2019, and primitive camping. The main entrance road with parking and ADA pad was

constructed in 2017.

Lake History: Doc Hollis Lake was purchased by the Oklahoma Department of Wildlife Conservation and opened to public in 2015.

Physical Description:

Fish Species of Interest: Largemouth bass, channel catfish, and sunfish.

Got two dozen Qs and left. Band conditions are not that great these days it seems. Solar flux in low 70s. Sometimes 20m is 'fair' – other times, especially around noon- it's barely alive.

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Headed north and ran Beckham County - to the I-40 headed east. Could have stayed in Erick, OK – been there once before at the Days Inn, but elected to head past Elk City to Clinton, OK as had a few hours before dinner and dark. Ran through Washita County into Custer County for the next park in the city of Clinton, OK and the Oklahoma Route 66 Museum there, K-8644.

They have a nice parking lot there for the museum– and it was relatively quiet – at least on cw. Ran the bands and put a couple dozen in logs between 20, 30 and 40m cw. It's a nice museum to visit – and folks came and went.



From the web:

"For the ultimate Route 66 experience, visit the Oklahoma Route 66 Museum in Clinton. The museum offers visitors a personal journey through the history of the nation's most revered highway. Encounter the iconic ideas, images, and myths of the Mother Road. Learn about the dreams and the labor needed to make the road a reality. Experience the Dust Bowl as thousands streamed along the road, away from drought and despair, and towards the "land of promise." Listen to the sounds of the Big Band era, when the roar of the big trucks and the welcome home cries to returning soldiers dominated the road. Sit at the counter or a booth in the 1950s diner and feel the open road as America's families vacationed along the length of Route 66. You just might overhear the family's chatter as they eat their lunch. The museum also offers changing special exhibits focusing on the Route 66 experience."

7 for adults, 6 for seniors when you visit. I was staying in Clinton so had time for a visit. Saturday night I stayed at the Days Inn there. Nearby was the Picante Mexican Restaurant so ate there – a nice "green" salad and a chicken quesadilla. Filled the car up with gas. Back to the motel to rest up for Sunday and more parks.

Sunday April 4, 2021. Day 2 on trip

No breakfast at the motel but they give you a \$2 coupon for the restaurant which is attached to the motel. Had a nice 3 egg '3 meat' omelet and coffee, then headed out at 7:30am to the next park. 50F outside and headed for 70F.

American Horse State Fishing Lake – K-7685 is in Blaine County OK. Arrived at 1350z and got to work on 40m cw with a couple dozen on that band. Tried 30 and 20m but only caught 3cw and one SSB on 20M. Bands not open this early for the most part other than 40M which was good.



From the web:

"American Horse Lake is Located in Blaine County 10 miles west of Geary. Vegetation around the lake is post-oak-blackjack forest and mixed grass eroded plains types.

The lake has one concrete boat ramp, several picnic tables and one water well. Geary is the nearest town in which to obtain picnic and fishing supplies. The lake supports an abundant population of good-sized bluegill and catchable size largemouth bass.

Lake History: American Horse Lake was constructed by the Oklahoma Department of

Wildlife Conservation in 1966.

Physical Description:

Surface area..... 100.0 ac. Volume2,200.0 ac.ft Average depth......20.5 ft. Shoreline development...... 5.4 mi. Maximum depth 75.0 ft. Shoreline length 6.8 mi.

Fish Species of Interest: Largemouth Bass, Bluegill Sunfish, Redear Sunfish

Hunting with restrictions is allowed in hunting season.

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From there, I headed next to Lake Watonga State Fishing Lake K-8640 also in Blaine County. Sometimes there are multiple parks in the same county and you just have to run them. Still, have a good run and 20M is open well with 3 dozen Qs, and another 2 dozen on 30 and 40M. Relatively quiet site. This lake is half in Roman Nose State Park – and half outside it. I'm not sure you can access easily the part outside and I took the easy way of doing it inside the SP. Several spots to run it there sitting on the shore line with signs for Lake Watonga.



From the web:

"Lake Watonga is located in Blaine County adjoining Roman Nose State Park, 7 miles north of Watonga. Vegetation around the lake is exuded plains type.

The lake has excellent recreational facilities in connection with Roman Nose State Park. There is a lodge, restaurant, riding stables, cabins, picnic tables, grills, showers, electricity, and one boat ramp.

Lake Watonga was constructed by the Oklahoma Department of Wildlife Conservation in 1955.

Physical Description:

Fish Species of Interest: Largemouth Bass, Bluegill Sunfish,

If you head there, you can stay at the lodge or the dozens of camp sites in the State Park.

If you're going there after April 12, they're going to drain the lake for the next 4 months for repairs on the dam this spring/summer.

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Headed east, next up was Lake Elmer State Fishing Lake K-7686 in Kingfisher County OK. There's lots of noise along most of the highways but the lake was relatively quiet. You could get away from the noisy power lines that infest that county. Put a couple dozen in the log from here. Not much DX in the log today but the SP (Poland) QSO party was still raging in EU probably wiping out any chance for them to work US stations in parks. Did catch OH1XT – only DX worked today.



From the web:

"Lake Elmer is located in Kingfisher County, 4 miles northwest of Kingfisher . The vegetation around the lake is tallgrass prairie type.

The lake has one boat ramp, and two water wells. Good numbers of quality size bass and excellent opportunities to harvest big bluegill can be found at this lake.

Lake Elmer was constructed by the Oklahoma Department of Wildlife Conservation in 1962. The lake was completely drained in 1978 to facilitate shoreline deepening and the construction of berms or fishing jetties. The lake was re-impounded and restocked with fish in 1979 and again in 2011.

Physical Description:

Surface area..... 60.0 ac. Volume1,080.0 ac.ft Average depth......6.4 ft. Shoreline development...... 3.0 mi. Maximum depth 18.0 ft. Shoreline length 3.4 mi."

- -

Next up was a not so fun site to run. It's the Oklahoma Territorial Museum K-8645 in urban Guthrie, OK. It's a building site on a city lot with no separate parking area. You park on the street. If you listen on the ham radio in the car, it's S7-S9 noise on cw on all bands.

Well, I was prepared to run this portable. Had dug out the 30 AH LiOnP Battery from the NPOTA days and charged it up again. It weighs 3 or 4 lbs. They stay good unlike SLAB (gel cell type batteries that die after a year of non-use). Used a short power cord for the IC-706. I had a small tripod from a Super Antenna (crappy adjustable screwdriver antenna) but the tripod deal was OK. It had 3 short legs about 15 inches long, with a mount for a vertical antenna and coax connector below. It came with sets of radials – I used the standard set which had one full length radial for 20, one for 30 and one for 40m. Hamstick for 20m, 40m and a Hustler 54 inch mast with resonator on top for 30m.

My mobile radio comes out easy – mounted on a board that sits on the passenger seat at an angle – so I grabbed it and proceeded onto the lawn 20 feet from the car and set up quickly. The tripod stays together so it's a matter of grabbing the Hamsticks, putting one on the tripod mount – plugging in the battery cable to the radio and going from there. Unwind the radials and spread them out best as you can on the small lawn area. Museum closed on Sunday so no one around. You're on the south side of a 4 story granite building less than 30 feet from it – not a great situation.

You could 'possibly' run this mobile as there are maybe 3 parking spots behind the building in an alley way in a fenced off area (10 foot high chain link fence) where you'd sit between the building and the chain link fence with not much clearance – and a power line running right down the alley over the fence. "If" you could get permission to be there and have someone unlock the gate to let you in. It's in a narrow alleyway too – maybe a total of 50 feet wide between tall buildings. Wasn't an open day at the museum so didn't even bother to try. You're in a narrow alleyway, too, between buildings if you want to try that, and I suspect the noise situation is no better.

Dang. With the poor location, radio wise, and horrendous QRN, I did manage to eek out 11 QSOs from here in Logan County. This is not a fun site to run. Maybe if you got on

top of the building you'd at least have a clear radio shot – IF you could get permission to be there or put up an antenna there! Well, maybe some enterprising hams in the local area can investigate further. Not me. Got my 10 and I'm not planning on going back. Ten Qs is enough for an 'activation'. I'll let someone else rack up the Qs. Packed up quickly and got back on the road. No one around on Sunday but street busy.



Pic from web site – Note the lawn – that's only spot to operate Set up at far end of lawn near corner

From the web:

"Through artifacts, photographs, and paintings, the Oklahoma Territorial Museum and Carnegie Library tells the story of the determined people who laid the foundation for the state of Oklahoma. On the museum grounds stands the Carnegie Library, where the first state governor was sworn in. Preserved by the Oklahoma Historical Society, the library and the museum serve as a visible link between Oklahoma's turbulent territorial period and the present.

Oklahoma's territorial period lasted from 1890 to 1907. During that short time, Oklahoma was transformed from an unsettled home for sixty-five American Indian tribes to an area of prosperous farms and growing cities.

In 1889 Congress opened for settlement nearly 2 million acres of former Indian land located in central Oklahoma. At noon on April 22, 1889, the day of the opening, thousands of hopeful land-seekers rushed in to stake a claim. At the end of that first day,

laws were being established in the cities of Guthrie, Stillwater, Norman, and Oklahoma City.

A homesteader's first task was the construction of a suitable home. The typical post-run farm dwelling was usually a "soddy," constructed from bricks of prairie sod, or a dugout built into the side of a hill. The homesteader next turned his attention to the planting of crops. The run occurred too late in the season for a cash crop to be planted, so the new arrivals grew vegetables that they hoped would last through the winter. The following seasons brought only hard times in the form of drought and depression. It was not until 1897 that good crops brought territorial farmers a degree of prosperity.

Not everyone came to the area in search of farmland. Many came to establish businesses or ply trades in the towns that sprang into existence. Along with the merchants, tradesmen, and professionals came saloon keepers, gamblers, and prostitutes, lending a colorful element to the era. In 1890 most of western Oklahoma, including the Unassigned Lands, were accorded territorial status. Guthrie was named the territorial capital."

https://www.okhistory.org/sites/territorialmuseum

Some extra tidbits:

"The Organic Act of 1890 created the Oklahoma Territory with Guthrie, its most prominent city, as the Capital. Guthrie also acted as the county seat of County Number One, later called Logan County.

On November 16, 1907, Theodore Roosevelt declared Oklahoma a state. In a ceremony on the steps of the Carnegie Library, Mr. Oklahoma symbolically married Miss Indian Territory, forming the Forty-Sixth state in the Union. Guthrie remained the capital of the new state until a vote of the people on June 11, 1910 moved it to Oklahoma City.

Today, Guthrie is the largest contiguous urban historic district on the National Register of Historic Places.

- - ---

Headed out to the next which was Arcadia Conservation Area – K-7689 in Oklahoma County, OK. It's a nice spot to run – a small parking lot – but possibly some other spots you could run it as well along the way in. Nice and quiet, too! Put two dozen plus in the logs from here with 20,30 and 40m cw. It's been run a few times before by one local.

It was just added to the system a few months ago. It lies on the south shore of Arcadia Lake in Edmond, OK - and just a few miles off I-35.

From the web:

"The Arcadia Conservation Education Area is a unique management area for the Oklahoma Department of Wildlife Conservation. With a focus on education, and providing outdoor educational opportunities for the public and schools, the area is open by walk-in access from Jan. 16 – Sept. 30.

The area currently has a ³/₄ mile self-guided walking trail that provides educational information on Oklahoma's wildlife and habitat.

Schools looking for an outdoor education area to conduct outdoor classroom activities can gain access to the area by contacting the area manager o reserve the Outdoor Education Building, Pond, Wetland or Trail."

- -

One more to go today and that is the Oklahoma History Center in OK City. K-8643. Almost every park on this trip was a POTA only with two exceptions.

I didn't know what to expect for noise there at this museum. Turns out this is a very nice site to run - at least on a Sunday – in a parking lot for probably well over 200 cars. I was the only car there.

From the web:

"The Oklahoma History Center is an eighteen-acre, 215,000 square-foot learning center exploring Oklahoma's unique history of Native culture, pioneers, aviation, commerce, and more. The Oklahoma History Center is a Smithsonian Affiliate and is accredited by the American Alliance of Museums.

Located on eighteen acres across from the Oklahoma State Capitol, the Oklahoma History Center is a beautifully designed exploration of Oklahoma—past to present. Within our 215,000 square-foot learning center are five galleries and a Research Center.

Outside the museum, the Red River Journey offers visitors a walking tour of the Red River Valley featuring landforms, vegetation, and important historical locations. The grounds also include an outdoor oilfield exhibit with drilling derricks, a portable derrick, and machinery associated with Oklahoma oil explorations.

The Oklahoma History Center is a division of the Oklahoma Historical Society. The museum fulfills the Oklahoma Historical Society's mission through the application of the highest standards of collections care, the presentation of diverse exhibits, and multi-disciplinary educational programs.

The Oklahoma History Center is also Smithsonian Affiliate. Through Smithsonian Affiliations, young people, families, and students are able to experience a piece of the Smithsonian—their national museum—through their own hometown museums.

An architectural masterpiece, a decade in the making, the Oklahoma History Center was designed by the firm of Beck Associates of Oklahoma City in collaboration with the firm Helmuth, Obata, and Kassabaum of St. Louis, Missouri. Haley Sharpe Design Limited of Washington, DC, and Leicester, Great Britain, designed the original exhibits



This is a Smithsonian quality museum – probably well worth a couple hours visit and the building is recognized as a famous site.

Did the radio bit, put two dozen contacts in the log, and left. I was now 200 miles or so from home. Should I head home, or stop somewhere along the road? Hmmm.

I put gas in the car, grabbed a large slice of pizza – and decided to make a speed run to

home. Down I-35....more I-35....and more I-35 to TX. 200 miles to home in less than 3 hours arriving 7:10pm. Whew! The speed limits on I-35 are mostly 75 and traffic moves a bit faster. I-35 in TX starts at 75mph and as you reach the Metroplex slows to 70, then 65, then 60. Last few miles on local streets at 40 mph with 7 traffic lights to home. 762 miles of driving in 2 days and 11 new parks activated. I'd just run all the counties along the way in the OK QP so didn't even bother to run them today on the last leg home. Focused on driving at 80+ mph for much of the way with a fair amount of Easter weekend traffic to get back home.

Thanks for riding along. Lots of country side went by – lots of large wind machines in some areas of TX and OK – hundreds of them, along with hundreds of 'pump jacks' pumping oil in some locations along the way. OK still produces lots of oil. Some day maybe I'll spend some time at the museums. The one in OK City looks like it's really worth a visit – Smithsonian quality.

There are another half dozen museum sites in OK – some look OK to run – some are just a building on a city lot with street parking apparently. I'll see what can be done on them! More to come.....more trips on the quest to reach 1000 parks activated.

Louisiana QSO Party

On the same weekend as the MS QSO Party – the LA QP was held. I thought about heading that way, but only a few new parks for me without heading all the way to New Orleans area – so I didn't. The other factor is self spotting is not allowed – which for park chasers is not good news – in either this or the MS QP. I think that MOBILES should be able to self spot in the QP's.

Not one report of a mobile out rnning lots of counties. KA3QLF was in a few counties mobile. Chuck, NO5W, is sidelined with health issues and not going mobile these days. Norm, W3DYA, who often headed that way, is no longer running mobile. There aren't too many home grown mobiles out there in LA but in previous years, one or two have shown up.

Most people reported less than 10 QSOs and a handful of parishes. There were lots of data contacts made by LA fixed stations – maybe 300 total on data.

Not many filed comments – either. Many of the contest regulars were chasing the SP – Poland- DX contest – some making 200-300 contacts into Poland during the contest period.

From the 3830 reflector:

KZ5D - fixed - LA 420 cw 133 data

Lots of fun and seemed like good activity. My time limited with family house guests. glad to get on and work so many of the familiar gang. 73 and Happy Easter to all.

DL3DXX - fixed - 14 cw 13 counties worked

N8II- fixed WV 10 cw 6 SSB 10 counties on cw 6 on SSB

I got my 2nd COVID vaccination Friday; at first, I felt just a bit tired Saturday morning, but the lethargy and weakness increased during the day. No matter, activity was really low! I went over a half hour several times finding no new Q's while also working MS. Thanks to Scott KA3QLF for 3 mobile Q's and mults.

73, Jeff

Solar Flare of 1582

TERRIFYING accounts of a major solar storm that lit up the sky "like a great fire" in 1582 have been uncovered by researchers. In a recent study, experts at Cornell University described two records of the cosmic bedlam made by Portuguese observers at the time. The event illuminated the sky in violent red light for three consecutive nights, according to one of the sources.

A second source recounts that part of the sky "appeared burning in fire flames" sparking "dread and fear" among eye-witnesses.

The depictions match similar accounts of strange night time lights reported in Japan, Germany and dozens of other cities across Europe and Asia.

Researchers have previously attributed the great space weather event of March 1582 to a major solar storm that battered Earth. Solar storms are bursts of highly charged particles that, if powerful enough, can cause havoc on Earth by sending electronic equipment into disarray.

One storm in 1859, for instance, is widely believed to be the most extreme space weather event on record. Eye-witness accounts of what is now called the Carrington event describe sparks exploding from pylons across the United States, while telegraph operators reported suffering severe electric shocks.

Another well-documented storm triggered a a blackout that plunged large parts of the northeastern United States into darkness in 1921.

Solar events are also responsible for the Earth's auroras. They charge particles in the atmosphere, causing the sky to glow red, white and green. While the auroras are typically only visible near the Earth's poles, a major solar storm can send them closer to the equator. One such event – what the Cornell team calls a "severe storm" – sparked a great aurora in March 1852, according to climate records.

The Northern Lights swept as far down as Portugal, according to accounts published by the researchers last month in the pre-print journal Arxiv.

The first report is preserved at the District Archive of Évora, Portugal. A translation of the text reads: "[Lisbon] In 1582, on 6 March, a great fire appeared in the sky at the north and lasted three nights." Other records of this aurora can be found in a manuscript penned by Pero Ruiz Soares, an eyewitness in Lisbon, and the author of a 16th-century Portuguese chronicle. A translation reads: "... in March 1582, at 8 p.m. on Tuesday [6th March], something started in the north band of the sky. "All that part of the sky appeared burning in fire flames; it seemed that the sky was burning [...] and nobody remembered having seen something like that."

It continues: "At midnight, great fire rays arose above the castle which were dreadful and fearful. "The following day, it happened the same at the same hour but it was not so great and terrifying. "Everybody went to the countryside to see this great sign."

Sightings of auroras were not unheard of at the time, with people living at higher latitudes well aware of the great space events. However, the fiery lights were extremely rare as far south as Portugal, resulting in what must have felt like an apocalyptic reckoning.

During the 1859 storm, auroras are thought to have erupted to latitudes as low as 28 degrees – in line with Florida, Egypt, and southern Japan). Lisbon would represent the southernmost European location where this aurora was recorded, according to historical data. Fortunately, the people of 16th Century Portugal were living simple lives without electricity – telegraph poles wouldn't come along for 200 years.

They might have been given an awful fright, but the effect of the storm was little more than a vibrant night time light display.

A similar event today, however, would have far more costly consequences.

In a 2019 study, scientists warned that our planet is due a major solar storm within the next century. They showed that the Sun is capable of producing volleys of solar radiation dubbed "superflares". A single superflare could take out all technology on Earth, potentially causing trillions in damage and sending the planet into chaos.

"Our study shows that superflares are rare events," said lead expert Dr Yuta Notsu, from the University of Colorado Boulder, USA. "But there is some possibility that we could experience such an event in the next 100 years or so."

https://www.thesun.co.uk/tech/14518247/1582-solar-storm-great-fire-sky-happen-again/

Nebraska QSO Party

Mobiles were out and running – W0BH, N0AC on cw. Two other QSO Parties were going on Saturday as well (NM and ND) with GA starting up later. WY7AA was one of the SSB mobiles.

WY7AA mobile - 1100 SSB QSO

A beautiful weekend for a drive through western NE. 18 counties in all at 9 locations. Thanks for a fun contest.

W0BH mobile - 1038 cw 813 ssb

The red Oklahoma dust from the OKQP still coated the wheels of our trusty Chevy Astro van as Lorna/k0why and I headed north on I-135 towards the Nebraska border. The cold front and rain had just moved out with the promise of some sunshine, but we were left with the wind.

The goal of this trip was to put out some Nebraska counties during the day and catch the famous Sandhill crane migration along the Platte River near Kearney. I planned a parttime 27 county effort that looped us north of Kearney on Saturday with a southern county return. We planned to stop early on Saturday and head to the river to see the cranes fly in from their daytime feeding in the fields, then start later on Sunday morning after heading back to the river to see them depart. The motel in Kearney would be our first overnight since last summer and since we were both vaccinated. It feels like progress is finally being made.

Same setup in the van as the OKQP, so you can read that post if you want more equipment information. I had some intermittent power issues with the IC-7000 in Oklahoma, so before this trip, I installed my second operating position in the middle seat of the van. The whole setup is in a milk crate including the IC-706Mk2G just in case I needed to switch radios or any other piece of primary equipment quits working. I went through the whole power chain on the IC-7000 and couldn't find anything wrong, so we'll see.

A few miles short of the border, we topped off the gas tank, connected the batteries and put antennas on the roof in the morning sunshine. I have separate battery systems for the radio and the other electronics. When I flipped the switch for the electronics, the keyer didn't send it's usual --- -.- [period] That happens sometimes, so I tried several more times with no luck. The other electronics were on (voice keyer, band decoder, logging computer). I pulled out the meter and it showed 12v to the the keyer. I unplugged and plugged it back in a few times and still no "OK", so I decided to swap it out with my spare keyer. One last try and suddenly it worked. Good to go.

We crossed the border into Thayer county a few minutes later. K5CM, KV8Q and N5KW were there after my first CQ on 7037, and we were off. Not much action yet, so I tried 20M which seemed a bit better. My first two contacts on 14037 were K7JQ and VE3YT. With 17 QSOs in the log, I worked N6KR and suddenly the "N" wouldn't work on my computer keyboard! Looking back a few contacts, it worked fine for N9NM, N5RZ and N6DE, then it just quit working. Murphy was riding along for sure. I tried hitting the "N" a bit harder and I tried rebooting the computer twice, but no luck. One spare logging computer later and we were off once again.

I used a FunSpots page on the NEQP home page to post my county and band changes. A few other Nebraska stations found it as well and that got things going. Rates quickly picked up and never really slowed down. Before my runs, I get emails from you all with your county wish lists and I have them in front of me when I operate. We were successful more often than not this time. I even gave out two last counties, one on cw and a different one on SSB!

Perhaps Murphy was done for the day? Not so fast. After working fine for a few hours, the radio suddenly went dark .. the same problem I'd had in Oklahoma. It really felt like a power-chain problem. In Oklahoma, I got it working by wiggling the power connector on the back of the radio. It would work for a few minutes, then quit again. Same scenario this time. Lorna eventually stopped the van and I went back through the cables and considered using my backup milk crate. During that process, I noticed the power cable was stretched pretty tight as it went into the radio, so I pushed the radio back a half inch to relieve the stress. That seemed to work. No more problems the rest of the run.

Our only other real issue was the wind blowing 40+ mph from the north. Much of our run was east-west on both days, so Lorna drove with both hands on the wheel and did a great job keeping the van on the road. It's lucky we didn't have a long route planned, because the driving was more tiring than usual. But there were rewards. We were far enough west to get into the beautiful rolling sandhill prairie country which can only be experienced. You can easily imagine the wagon trains, the bison and the Native Americans.

The State QSO Party Challenge has really helped boost QSO party activity and I've had fun participating by trying to make contacts in each of the 45 QSO parties and by turning in a log (46 last year). This weekend included the New Mexico QSO Party, the North Dakota QSO Party and the Georgia QSO Party. NM and GA were easy to find, but ND had me worried. It turned out to be a non-issue as a loud ND station, K0JP/m found me in Greeley county. A few hours later he found me again at the Dawson/Buffalo line. Only one of those counties would count for ND since the other would be a DUPE in my ND log, but we were set. Shortly afterwards, I found AC0W/m and N0HJZ/m also having fun in the NDQP. I especially appreciated working ND4K/Dave in the GQP. He reminded me of the great times we had roving the GQP with Paul/N4PN (SK) and John/N6MU (61 counties and a few years later 73 counties). Great memories!

After a quick detour to pick up Dawson county and a nice run, we connected with I-80 and headed back east to Kearney to see the Sandhill cranes. We knew from a previous trip that the Ft. Kearny State Recreation Area had a old railroad bridge converted to a

hike and bike trail across the Platte River, an ideal spot for crane watching. As soon as she parked in the parking area, Lorna grabbed her binoculars and disappeared up the trail to the bridge! By the way, Ft. Kearny is spelled correctly and spelled differently than the nearby town of Kearney.

The cranes were already flying and the wind had stopped, so their calls were everywhere. As I was removing an antenna for the night, a flight of ten or so cranes flew directly overhead maybe 50 feet up. Cranes are LOUD talkers that close and beautiful, graceful aviators! I found Lorna up the trail. We watched flight after flight of cranes come in off the fields and land on the sandbars where they found a safe place to overnight. At one point, a herd of deer came down to the river and scared some of the cranes, causing a great wave of airborne excitement and noise which slowly died down. As sunrise, we were back out watching the cranes depart. Truly an amazing site as they migrate north from northern Mexico, Texas and Oklahoma to the northern plains and Canada. We headed back to Kearney quite pleased with the day with 1017 contacts in the log.

The next morning after crane-watching, we headed west to pick up several rare counties before heading east and south on the return to Kansas. I drove back through Buffalo and Dawson counties without operating and gave Lorna an early break from driving in the wind. Conditions were terrific when I fired up in Gosper county. A short detour took us to the Frontier/Gosper county line for a nice run. I found out later that WY7AA/m (RJ) was sitting on the Frontier/Red Willow line at the same time!

In Oklahoma, I made zero DX contacts, a first I think. In Nebraska, I worked eight DX countries and was really surprised to put JO7WXN in the mobile log twice! DX conditions weren't great, but at least I worked a few. 15M never opened.

The strangest experience happened when I glanced up on the outskirts of a town (can't remember the county) and saw a pickup heading down the highway in the opposite direction at a pretty good speed dragging a deer by a rope around it's head. I assume the driver must have hit the deer and killed it, but beyond that I can't imagine. Still shaking my head on that one.

With the big pileups, I decided to keep working them rather than drive back across Thayer county (where we started on Saturday) to get to Jefferson county. We had six minutes left when we arrived back in Thayer. Twenty SSB contacts later, the clock ran out!

Stats
Operated 14.7 hours, 1885 Qs, 514 unique calls, 34 dupes, 574 OKQP miles (865 total miles).

Thanks to Fred/KB0LF for the web site updates and to Nebraska ARRL Section Manager Matt/KA0BOJ for managing the NEQP in 2021. Nebraska is such a beautiful state to mobile in, and it felt especially good this year. Of course the rest of you made it all worthwhile!

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 Nebraska, and see you down the log in 2021 ..

73, Bob/w0bh and Lorna/k0why

KA6BIM- fixed - OR 50 cw 60 SSB 54 counties

Lots of activity this year. I worked 24 new counties, leaving just 23 left to find. Thanks for the activations and mobile operations! Dave ka6bim

N8II - fixed WV 26 cw 36 SSB 41 counties

My plan was to operate the GAQP seriously and just catch what I could in the other 3 QP's, but that went out the window when two groups of family members wanted to visit Saturday resulting in 4 hours off the air starting 1530Z Saturday. Needless to say, my enthusiasm decreased after that interruption and I was feeling tired too. It is a bit too much to keep up with 4 QP's running at the same time. Some shuffling of the dates seems to be the best solution to me; many summer weekends are open. I could have worked W0BH more if I had checked the NEQP site and used CWFUN spots.

Conditions were okay to NE on 40 the first hour, surprising signal strength. 20 was wide open with strong signals from 14Z to 23Z Saturday and again starting 14Z Sunday. KV0I and I tried 15M Sunday when I was working GA on 20M to no avail. The skip distance to NE from here on 20 is optimal, unlike to NM just slightly farther away.

There were a lot of counties active thanks mainly to the mobiles, probably the most ever. I lost track of N0TO/M for a few long stretches, but he activated a lot of rare counties (7 Q's with him), an A for effort! WY7AA was loud every time I heard him, but didn't hear

him that often (4 encounters with 8 Q's). Bob, W0BH was his usual reliable self on 20, pretty weak on 40; thanks for 20 QSO's (nearly 1/3 of total)!

Thanks for the QSO's and congrats for the good activity.

73, Jeff

Mobile Activity in April

A the beginning of the month, Jerry, W0GXQ was zipping around in OK for a couple days. Headed over to panhandle of TX then back home

Kerry, W4SIG was in MS for several days

N9AC was out in CA running counties.

Ed, K8ZZ, was putting them out in TN – then over to AR – up into MO - up to KS.

N4CD was up in OK for a day. Later another 2 day trip there – and at month's end a trip to west TX for a LC or two.

K7TQ, Randy, was putting them out in WA and ID

WB4KZW, Gene, ran counties in MS

KC3X, Hollis, ran counties in SC for 3 days

KB0BA, Lowell, and N0XYL, Sandra, were out and about in IA.

Ron, KB6UF, noted in AL, TN, VA, WV, MD, DE, PA, NJ, on his way north to ME on a 10 day trip. Out to Nantucket and Dukes, MA, too.

K7SEN, Neil, and AB7NK, Mary, headed east from AZ through NM to TX. Stopped at a park or two along the way.

K7TQ, Randy, out again in ID

New Mexico QSO Party

Mobiles were out and running – KK6MC/m spotted on cw in 7 counties. Many fixed stations were on including county hunter K8TE, Bill. It looks like 25 counties were on the air out of the 33 from the scores submitted. Maybe more did get on.

Last year, the rules forbid mobile operation or portable operation from anything other than your own property (like a summer house). NM was under lockdown orders.

Seth, N3MRA/m spotted on SSB in 4 counties

From 3830 contest reflector:

AA5B multi-op mobile (AA5B, K5TQ) 571 cw 41 SSB

Our club (New Mexico Big River Contesters) wanted to do something special last year -- activate all NM counties during the QSO party -- but the Covid lockdown prevented us from traveling. Most of us were vaccinated this time, so we set our sights high again. New Mexico is a big state, over 120,000 square miles, with a lot of empty space and lonely roads. Our 4 mobile stations and several fixed stations operated from 30 of the 33 counties, and would have hit the other three if Murphy hadn't struck N2GJ's mobile antennas. Still, a great effort by all.

Gary (K5TQ) and I drove 812 miles in a very full minivan and activated 10 western and south-central counties, operating mostly CW. Temperatures ranged from 27 at dawn in the NW corner of the state to over 80 in the afternoon in the SW corner. We drove through places neither of us had seen before, despite having lived here for more than 40 years. As I said, it's a big place. And very interesting.

Elecraft K2-100 and Kenwood TS590. Mag-mounted hamsticks for 20 and 40 meters. Deep-cycle batteries for the radios, inverters for laptops.

We had done lots of experimenting in the weeks before the contest, trying out various inverters, antenna configurations, etc. Even operated mobile in a couple cw OPS events to check things out. All in all, we were happy how things worked out.

73, Bruce/AA5B and Gary/K5TQ

KK6MC mobile 499 cw 35 SSB - multi op

This was a good contest with good conditions. The New Mexico Big Rivers Contest club planned to put all 33 NM counties on the air this year. I put twelve of them on as part of this effort. We fell three short due to one of the mobiles having antenna problems.

Virginia drove 619 miles on this expedition, so I could operate more or less the entire time. This was the first time out in an HF contest for the Subaru and other than a few issues in getting the antenna set up, it performed well.

TS-2000X to an 11ft antenna with 20M/40M Hustler resonators mounted on top.

Thanks to all the fixed stations that followed me around, particularly N6MU, K8MFO and VE6CV.

NM5DX rover (K5TA op) - 124 cw qso

Nice to get back on the road. 1.5 hours operating; 10.5 hours driving! Thanks for all the Qs.

-Scott K5TA

KA6BIM - fixed - OR 35 cw 32 SSB 28 counties

There was either much more activity or much better conditions or both this year. I worked 6 of the 7 counties I was missing. Now I only need De Baca. Thanks for activating all those counties and the qso's! Dave ka6bim

K1RO - fixed - NH - 34 cw 11 SSB 25 counties worked

Nice to see all the mobiles and so many counties active. It was way too nice to stay inside all day, but I checked the radio periodically and always found someone to work.

WB8WKQ - fixed MI 26 cw 19 SSB 19 counties

Mixed in a few Q's here and there amongst the four QSO parties. Some very good propagation between here and NM on 20M.

K7IA – fixed NM - 304 cw

I wanted to participate in my state's QP and wondered how keyboard entry of callsigns and exchanges would be. A session with Morse Runner gave me some confidence that I wouldn't flub too many QSOs, but MR is pretty relaxed compared to the Real Thing.

My apologies to the many who no doubt wondered if K7IA was a newbie or a lid, as he fumbled in more than a few pileups! Thanks for your patience and persistence!

Cast to be removed in three more weeks, negating any chance to do the 7QP from Arizona in our camper, but glad to do this one...

And, no, the 30 meter loop is still on the ground, waiting...

Thanks for the fun es 73,

Dan k7ia

N8II- fixed WV 24 cw 18 SSB 23 counties

Family visiting and dog walk cut out 4 hours of operating starting 1530Z. There were several mobiles/portables active, good to see! Thanks to mobiles N3MRA, KK6MC, and AA5B. Most of the NM counties were on the air. Propagation from 1930Z when I got back until 2030Z was poor on 20, then it improved. It was nice to hear readable, some even strong, signals on 40 as well. A few NM stations answered my CQ NE/ND/NM, too many parties spoil some of the fun, Hi!

Thanks for the Q's/counties, 73, Jeff

AI5P Trip Report

From Rick, AI5P:

Colorado's newest State Park - Fisher's Peak - was opened in 2020. It's just south of Trinidad in Las Animas County. It's entrance is just a stone's throw from Interstate 25 in the famous Raton Pass area. Raton Pass is a 7,834-foot pass on the Colorado-New Mexico border on the eastern side of the Sangre de Cristo Mountains. The Santa Fe Trail was laid through the pass in 1821, followed later by the Santa Fe Railway and eventually I-25.



The defining feature of the park is Fisher's Peak - a 9,633-foot flat-topped mesa standing 3,500 feet above Trinidad. Just a small piece of the 19,200 acre park - about 250 acres - is open to the public. The property connects grasslands to the east with foothills and mountains to the west, serving as an important corridor for wildlife movement. Providing habitat for large native species like elk, mule deer, whitetailed deer, mountain lion and black bear, the park helps maintain important connections between these species' population in the mountains and those in the prairies.



This was the first cw activation of the park. Conditions weren't the best but 12 SSB and 47 cw made it into the log. 73 Rick AI5P

North Dakota QSO Party

At least two mobiles were out and about – K0JP and AC0W with N0HJZ on cw / SSB. Two on SSB only. Looks like nearly all of the ND on the air this year! Exceptional!

Looks like the top scorers worked 28 counties and several in the 20s. Most in the teens, so many counties were on the air this year. Likely over 30.

From the 3830 contest reflector:

K0JP mobile - 206 cw 32 SSB qso

Saturday was a tough day. I tried to operate from the back seat of our 2002 Chevy Blazer and have never been so uncomfortable. Apologies for the many QLFs but sending manually was very difficult. Sunday I switched to the passenger front seat and things went much more smoothly. This was a far better result than my last attempt at NDQP mobile!

I never got any traction on SSB and found I couldn't maintain a run frequency. As a result I operated mostly cw and had several very nice runs on 20. At least seven stations were worked in all three counties activated (CAV, PBA, and WLH) with quite a few more worked in two counties. Some DX was worked including DL3DXX twice and OM2VL twice. I think I missed an opportunity to work OM2VL Saturday thinking I was being called by W7OM when it was actually Laci. Sorry about that. I also worked DK2OY. The weirdest DX was an EA QSO. I thought I was called by W1VE and waa excited to get the VT mult but it turned out Gerry was operating remote from EA! After I finally got his full call we made the Q.

Aside from two Qs on 2-meter FM I never even heard another ND station primarily because when I was on I found no activity on 80-meters and 40 and 20 were both way too long. There was good activity from GA but NE and NM Qs were hard to find. I thought I would never work KS with W0BH mobile in NE but I'm glad Bob was there to hand out four Qs and four mults! I chanced onto a loud AK station who was S&P. When he finished his QSO I threw out "Will the Alaska station go up 5, please"! He did and we made the contact.

All in all it was fun but, like I said before, I am embarrassed by my poor cw performance Saturday. If able to participate I will do better next year. Thanks for all the Qs!

K0BBC - 570 SSB QSO

Great day for a 600 mile drive. Thank you to K0VAL for driving.

ICOM-7300 with a hamstick on top of the Subaru Outback.

The new addition to the rover station was a SOTABEAMS ContestConsole switching unit for ICOM radios. This provided easy access to the voice keyer and could move the VFO without touching the giant knob. Very useful when bouncing down gravel roads. Thank you to the stations who followed me and helped ward off stations calling CQ on top of me. Give me a week to parse the log and upload to LOTW. QSL direct OK too.

K0VG rover 100 SSB qso

First try at Rover operation.

N0HJZ 224 cw 1443 SSB

Thanks to everyone that followed me around! What a blast! The pile-ups were endless and it was fun to give out rare counties. I even made a quick jaunt into MT to give out Sheridan County. Drove 1,217 miles and hit 25 counties. Thanks again for the QSO's! Where to next?!

ACOW mobile 415 cw 578 SSB

Thanks for all the Q's and for following me around ND. Sorry for numerous repeats at times. I was dealing with S9 or greater noise most of the time.

Rich I accomplished my goals. - 1,000 Q's, activate most needed counties. Assist MWA to get all counties activated (except 1). I also had to balance radio with some time with XYL. Saturday night took her to a wonderful restaurant in Minot, 10 Main North. A little on the spendy side but for and service great. A nice way to thank XYL for driving me around for 2 days (which she hates to do).

I do have some advice for those looking to work mobiles. You'd be surprised how quickly someone can go from 20 over to being gone in 1/2 move down the road. I had several take too long on sending their exchange that they disappeared on me. The other thing is DO NOT Send anything after you sent your exchange. Had one person who I

finally got the call and he was so happy of that he sent the exchange followed up TU. As soon as the pile up heard his TU they went nuts. Well I never copied his state and once the pile up started again he lost the Q.

XYL enjoyed the drive and said the country side was very pretty. Of course I agreed with that growing up in SE ND.

Thanks again and I have ND QP penciled in for next year.

73,

Bill AC0W

AE0EE - portable RLD ND - 109 cw qso

5 W, dipoles up 5-7 m for 40 and 20 m, FM handheld for 2 m.

With the pandemic, I was up for an adventure so long as it didn't involve getting close to other people. The forecast looked dry (also chilly: highs around 60 F/15 C, lows around 31 F/-1 C) and skies clear. With a forecast like that in mid-April, there would likely be space in the campground.

Given the solar conditions, 20, 40, and 80 m were likely the places to be. With a very limited power situation (10 Ah battery, 20 W solar panel), I decided this was a great opportunity for the QRP cw radio (PFR-3B) and a straight key, which would simplify my choices of bands/modes. With a handheld, I could also work 2 m FM, using a separate battery.

Logging would be a little tricky: the laptop battery while good, isn't good enough to fit in a whole 24-hour contest, even with a break for sleep. So paper logging it was, with a small field notebook (3x5"). Sorry I was slow to come back sometimes---writing is hard, particularly after a page turn!

After a pre-contest lunch (outside and appropriately distanced) with K0VAL and K0BBC, I settled in to the contest despite the gorgeous weather and warm temperatures in the tent. I had a couple good runs on 20 m in the afternoon, then a nice run on 40 m through much of the evening.

During the evening, operation got a bit more complicated as the temperature dropped

and it got dark. After a few unanswered CQ calls, I would turn the headlamp off and CQ in the dark to conserve battery, which also slowed down the response as I had to turn that back on before writing the callsign. Thin gloves were good enough to still key okay and write, which was great. Future self: get a red headlamp and a non-metal-gripped pen.

A warm sleeping bag, warm clothes, and perfectly still conditions made things actually quite comfortable. By about 10:30 PM local (0330z) the rate had really dropped, so it was time to get some sleep.

In the middle of the night, the conditions at Fargo were 31 F (-1 C). I didn't have a thermometer on me, but it was pretty brisk. The water bottles all stayed completely liquid, thankfully.

After the sun came up and I was motivated enough to leave the warm sleeping bag, I got back to it. Signals were very weak, and I wasn't being heard, so I went out and walked around a bit, listening to the sounds of the turkeys, grackles, robins, and occasional sandhill cranes.

The band improved later in the morning, so I ran a little more on 20 m, but with lots of fading the rates weren't spectacular and I was getting bumped around a bit.

All told, I was quite happy with how things went: 110 contacts QRP with low dipoles and paper logging from a single county is pretty good. Best DX was OM2VL, who had a good signal on 20 m. Thanks to everyone who pulled my signal out of the noise!

The Covid World

One in three people who overcome COVID-19 suffer from a neurological or psychiatric diagnosis six months on, according to the largest study so far published on the mental toll that long-COVID takes on survivors.

Authors said the research, printed Wednesday in The Lancet Psychiatry journal, proved that COVID-19 patients were significantly more likely to develop brain conditions than those suffering from other respiratory tract infections.

Studying the health records of more than 230,000 patients who had recovered from COVID-19, they found that 34 percent were diagnosed with a neurological or psychiatric condition within six months.

The most common conditions were anxiety (17 percent of patients) and mood disorders (14 percent).

For 13 percent of patients the disorders were their first diagnosis of a mental health issue.

The authors also examined data from more than 100,000 patients diagnosed with influenza and more than 236,000 diagnosed with any respiratory tract infection.

They found there was overall a 44 percent greater risk of neurological and mental health diagnoses after COVID-19 than after flu, and a 16 percent higher risk than with respiratory tract infections.

Paul Harrison, lead author from the University of Oxford, said that while the individual risk of neurological and psychiatric orders from COVID-19 was small, the overall effect across the global population could prove to be "substantial".

"Many of these conditions are chronic," he said.

"As a result, health care systems need to be resourced to deal with the anticipated need, both within primary and secondary care services."

Patients hospitalized with severe COVID-19 were at great risk of developing long-term conditions, according to the analysis.

For example, 46 percent of patients who needed intensive care were diagnosed with neurological or psychiatric conditions within six months of recovery.

And nearly 7 percent of those needing ICU care suffered a stroke, compared with 1.3 percent of patients who didn't.

Writing in a linked comment article, Jonathan Rogers from University College London, said further research was needed on the long-term neurological and psychiatric outcomes among COVID-19 patients.

"Sadly, many of the disorders identified in this study tend to be chronic or recurrent, so we can anticipate that the impact of COVID-19 could be with us for many years," said Rogers, who was not involved in the study.

"It is clear from this study that the impact COVID-19 is having on individuals mental health can be severe," said Lea Milligan, CEO of the MQ Mental Health research group.

https://www.sciencealert.com/study-suggests-1-in-3-covid-19-survivors-suffer-mentalor-neurological-problems? fbclid=IwAR0btR0VtmPIi_O7qefw677BZ7QCfen3v6sKTQk_yDRA5Jao9XUweZu6Q P4

note de N4CD – you really really should get your COVID vaccine. Otherwise, you might wind up like above -

COVID on CAMPUS

An interesting read this month in my alumni magazine, with some interesting perspective on life on campus.

Before COVID-18 - A look at past pandemics

In 1918, the Spanish flue arrived at Rensselaer. Also known as the 1918 flu pandemic, the Spanish flu was an unusually deadly influenza paddemic caused by the N1N1 influenza virus. Looking from February 1918 to April 1920, it infected 500 million people – about a third of the world's population – in four successive waves.

To aid in the war effort, the US War Department created the Student Army Training Corps (SATC) to encourage young men to receive a college education while training for the military. A unit was established at Rensselaer and in October 1918, 650 students in the Rensselaer SATC were about to move into temporary barracks set up in the'87 Gym, Student clubhouse and new dorms. However, the flue was rampant in the SATC and forced the students into the infirmary and other places on campus. By the end of October, six students had died.

Thirty-nine years later, in October 1957, nearly 20% of the 4,000 students were suffering from the Asiatic flue, a pandemic of influenza A virus subtype H2N2 that originated in

southern China and killed an estimated one to four million worldwide.

Man of the affected students were freshmen. The infirmary was filled to capacity and additional beds were set up to house the ill in the 15th street Lounge. Large events scheduled or canceled to avoid a further outbreak.

In 1968, the Hong Kong flue followed nearly a decade later. Caused by a virus known as influenza A subtype N32N2, the disease was highly contagious. Thirty-five students were confined at the infirmary the week prior to Dec 18, 1968 and the dining room was set up for overflow. Worldwide, the Hong Kong flu killed an estimated one to four million people.

In recent years, the 2009 swine flu was caused by the same H1N1 influenza virus as the Spanish flue It lasted approximately 19 months and a total of 64 cases were reported on campus. It was the first time Rensselaer instituted a symptom-tracker for the campus community.

College pandemics have been around for centuries. In 1665, social distancing orders emptied campuses throughout England, as the bubonic plague raged. A 24-year old student named Isaac Newton from trinity College in Cambridge was among those forced to return indefinitely to his childhood home. There, Newton's creativity flourished. During his time away from school, he made major progress in his research on gravitation, light, and mathematics. The year plus he spent away was later referred to his '*annus mirabilis'* – the 'year of wonders'.

End article I

- ----

from article II - paraphrased and edited......

So how does an engineering college handle the pandemic?

As colleges and universities across the country reopened last fall, many quickly experienced COVID-18 outbreaks and had to shift to remote learning. Meanwhile, at Rensselaer, an in-person living and learning experience continued throughout the fall semester, thanks to a return-to-campus plan informed by science and technology.

By relying on its roots of scientific and technological prowess, the university developed a strategy to protect the health and safety of its community members and prevent the spread of COVID-19 on campus, as it continued to engulf the nation and the world.

"We started talking about how we were going to return last March" says Dr Leslie

Lawrence, executive director of the Student Health center. "We asked 'How are we going to keep everybody safe?"

According to Dr Lawrence, at this time, scientists were seeking to determine the "Ro" (pronounced 'R naught'_, a mathematical term that indicates how contagious and infectious disease is. It's also referred to as the 'reproduction number' because an infection reproduces itself as it is transmitted to new people. Ro calculates the number of susceptible people, who a single person infects with a defined timeline.

Scientists predicted that COVID-19 would have an Ro of 2.5, meaning that with no precautions in place, an infected person would pass the disease on to 2.5 to 3 other people.

"Using 2.5,epidemiologists, as well as some of our own professors, created mathematical models to predict what would happen with the spread and how you would control it based on the number of tests you could apply', Dr Lawrence says.

Malik Magdon-Ismail, professor of computer science, created several robust machine learning models, including COVID War Room, which analyzes reopening strategies, and COVID Back-to-School, an app designed to help schools reopen. It allows users to plug in a number of different circumstances – such as location, the number of people on campus, and the number of meals served – to predict how many individuals could become infected with COVID-19 over time.

Users can also see how face masks, the size and duration of classes, and labs, and the frequency of testing could impact a school's infection rate. "That's the key value of COVID back-to-School, Magdon-ISmail says. "It allows you to tryout various strategies, figure out what works and what doesn't work, and then, once you settle on a strategy,, it allows you so see how the disease will evolve.

COVID Back-to-School helped inform the return-to-campus plan implemented at Rensselaer last fall and is now publicly available for other schools and universities to use to quantitatively analyze their own reopening strategies.

As they sought to develop an effective return-to-campus strategy, leaders at Rensselaer also examined various models and approaches being developed around the country. A consistent theme became evident – testing members of a college population twice a week, or every three days, and critically returning resuts within 24 hours, would allow Rensselaer to keep the infection rate below 1%.

When patients can administer a test themselves, without the aid of a nurse, anterior nasal swabs also allow for greater number of tests to be conducted per day. "Our goal was to do 2,000 samples a day," Dr Lawrence says.

The final return -to -campus plan ultimately required effort from every member of the Rensselaer community. It relied on strict social distancing, the wearing of masks, and included Rensselaer Testing, tracing, tracking, Surveillance, and Quarantine and Isolation protocol (TSQL/I), a comprehensive, integrated plan that requires all students, staff, and faculty who are on campus to be tested regularly.

Institute administrators spent two months planning for and creating a COVID-19 testing facility. "When we first started we were only able to collect 60 specimens per day, and then we kept improving our process and now do 200 to 300 samples per hour.

With a robust plan in place, the key to its success was collaboration from all community members. Knowledge in data science informed the TSQ?I protocol that was implement on the Institute's campus last fall. "Combined with epidemiological modeling, it also allows a data-based approach to the tracking community spread, so we can eliminate factors that seem to be contributing to it' Says President Jackson.

While frequent testing is essential, it is onl part of the equation. Contact tracing is a vital step in mitigating the spread of SARS-CoV-2, the virus that causes COFVID-19 ad preventing an outbreak o campus. Contact tracing is conducted for close contacts – any individual who has been within 6 feet of an infected person for a total of 15 minutes or more. Contact tracers interview an infected person to learn who they have been in close contact with, counting back two days before they started feeling symptoms or from the date of their positive COVID-18 test, if they are asymptomatic.

To aid in rapid and effective contact tracing, Rensselaer also developed a Daily Interactions and Activity Log (DIAL) app, which everyone on campus during the Fall semester was required to fill out daily, in addition to a health and wellness check in form.

When a residential student tests positive they are placed in a isolation room on campus for a minimum of 10 days. "If you test twice a week, you catch people early rough in the course of the disease that you can contact trace. You can see in other universities that aren't testing nearly as frequently – the contact tracing isn't working ' says Dr Lawrence. A major factor in the success Rensselaer had prevening an outbreak during the fall semester is the fact that the university is able to conduct its own sample testing.

Work began in April to convert a section of the Heparin Applied Research Cener (HARC) into a ACVID-19 testing facility – performing the RT-qPCR tests. That's a reverse transciptase polymerase chain reaction that can detect the RNA from SARS-CoV-2. It took 3 months to obtain ad install the necessary equipment and supplies, and to develop standard operating procedures for the diagnostic testing, which was approved by the NY State Dept of Health.

As a result of this painstaking plan – at significant expense – and the laboratory resources, thus far, we have succeeded in minimizing the risk of our coming together to live, to earn, and to change the world' says President Jackson.

End article II paraphrase- editing

Roughly 75% of students are 'on-campus' these days. Winter Break, etc. Out of 10,000 people on campus, there have been only a dozen cases tracked and stopped. The fall semester saw an infection rate of 22 cases the entire term.

However, with the start of Spring 2021, cases have spiked to 100 - still a 1% infection rate but requiring total lockdown for 10 days, then another 10 days. Other colleges experienced the same spike or more. (Some of the new variants spread easier). Plus 'covid fatigue' is setting in and folks are less enthusiastic about 'social distancing'.

Let's hope that by fall, 100% of the students get the vaccine and it tends more 'back to normal' college life. It was a reasonable normal fall 2020 – with in person classes and labs. Spring 2021 is now more challenging but being controlled. By fall, there will be more than enough vaccine for everyone to get it.

GA QSO Party

N4I mobile

Another contest is in the books. Noise on SSB was unreal.

Used call N4I. WB4EVH Sandy & KW4M Dave with Rhonda driving. 485 miles, 500

cw contacts, 64 SSB contacts.

Power lines in GA are getting noisier every year, Not just normal power-line noise but all kinds of other crap coming down the line. 40 meter SSB was blessed with what sounded like the woodpecker, RTTY, and high powered shortwave broadcast. Of course Dave running cw wasn't hearing 99% of this. This noise was peaking at 40 - 60 over in places. As you know the bands act like a rubber band. Worked some DX on 40 SSB thru the noise.

In years past, always worked New Mexico stations on SSB on 20. This year they had pile-ups I just couldn't crack. They faded early. Worked Stations in the other contests. I believe we need to push for rule changes for state parties. A mobile, not in the state of the contest is a new station in each county. Several of the other states after their contest ended rode along and gave me contacts. But, by then band conditions were changing and the number worked, in no way reflected the number that was on. Heard POTA and A couple of other groups on 40. They were struggling just like I was.

Sandy WB4EVH

W4AN mobile 2407 cw

What a great weekend and unbelievable pileups for us. We set a new record of counties we went thru - 48 Georgia counties. We actually drove thru 49 counties but didn't make any QSO's in MUSC because conditions weren't so good at the start. I'm always amazed that OM2VL and DL3DXX can hear us so early on 40 meters and that they even hear us at all on 80 meters!

We will be doing an encore in the Florida QSO Party in a couple weekends. We will be doubling back on Sunday and hit some of the rarer North Florida counties again on Sunday. So if you miss us on Saturday you will have a 2nd chance on Sunday.

Jeff KU8E and John K4BAI

N4FP - mobile 65 cw qso

Roved in 21 counties, best county was Colquitt with 52 contacts on 20 in 50 minutes, worst was Ware with 1 contact in 1 hour on 20. 20 had closed out for us Saturday around 2130Z although I was still seeing other stations on the spectrum and kept trying. Had 1

more contact on 20 then switched to 40 after rebooting the rig in case there was a problem with the SDR software running the 6400. Lanier was best county on 40 with 40 contacts in 25 minutes. My xyl Marty, N4GL, was my driver and I promised her no night driving, so we intentionally limited our time. Thanks to the Georgia QSO Party for the opportunity to test our equipment in preparation for the Florida QSO Party in 2 weeks. N4FP will be multi-single cw with Pete, K2PS as the other operator.

N4N multi-op rover 2136 cw 93 SSB Operator(s): KX4MZ N5ZZ W5JR WK4U

WOW, what a GQP!!

First, we want to thank all of you that contacted us as we traversed GA. This is the 7th year of the N4N RM effort using a pair of Flex SDR radios, operated as a Multi-2 Rover in motion. Our pair of Hi-Q antennas are only 6 feet apart. This makes it possible for many of you to more easily work us on multiple bands while in each county, depending on propagation. Pictures of the Rovermobile are posted on the NFARL Facebook page. We keep one Flex on 40 the whole 20 hours, while the other one follows propagation, 80/75/20/15. Waiting for 10m to become productive again. Glad to have made a few contacts on 15 this year.

40m remains the money band, as it is always open to somewhere as we change counties. The 75/80 Hi-Q continues to impress. Our late Saturday route takes us close to the GA coast. We manage to put OM2VL and DL3DXX in the 80m log in *every* county when on 80 CW. Those guys are operating some fabulous stations. OM2VL, DL3DXX and K9CT are logged on almost every county, on at least 2 bands, sometime 3.

We adjusted our routes this year to help maximize the number of counties that W4AN/M and N4N covered. The number of counties for N4N was only going to be possible if everything went smoothly. Many of the eastern GA counties are *HUGE*. The Saturday storms slowed the driving occasionally and kept us from touching the final 2 counties. Maybe next year.

Like any complex station operation, a few gremlins find their way in. An antenna combination that worked great on Saturday didn't on Sunday. The Baby Tarheel on the roof rack, used on 20/15, kept knocking the 40m Flex off line when used on 20m (OK on 15). So, switched to plan B and run the 75/80m Hi-Q back and forth between 20m and 75/80m. That's takes away from precious operating time. Technical issues and coupled with heavy traffic in a few counties, we were unable get to the final handful of

planned counties. An opportunity to tweak the route for next year.

All in all, after over 1000 miles (amazingly without missing a turn), it was a great weekend, good friends cooped up in the Yukon (19 years old with 270,000 miles!), lots of contacts made, and incredibly ----

*** AN ALL TIME BEST SCORE FOR THE N4N ROVERMOBILE ***

Thanks again for all of you contacting us.

See you next year.

K4ZGB mobile - 242 cw QSO

Limited time and Sunday only. I covered a few of the inactive counties in the west side of Ga. Thanks for following me around.

K9CT - fixed IL 328 cw 117 counties worked!

Thanks for the mobiles and portable stations for the fun!

K4ZGB 10 QSOs N4FD 9 N4FP 13 N4I 20 N4N 79 W4AN 57 WW5X 12

Rainy weekend here and this was a fun way to enjoy!

73, Craig K9CT

WB8WKQ - fixed - MI 101 cw 64 SSB 60 counties worked

Long contest. Score-wise it was my best GAQP, but maybe because it's a two day

marathon now. Or, did I follow the mobiles better? Hats off to all of them! I took Saturday night off, to go out, so missed all of 80/75M this year. 40M was my money band. All S&P, but some GA stations were booming in so loud on 40M, I did put out a call or two and only had a VA station come back. Good activity and fun QP.

DL3DXX - fixed - DX 251 cw qso - 122 counties worked

wonderful to have the mobiles back ! (none allowed last year)

last year 23 counties - this year 122 counties.

mobiles/rover worked : N4N(53) W4AN(49) N4I(17) N4FP(17) WW5X(9) K4ZGB(6) N4FD(4)(W4MY(4) K4M(3)

Updated FCC Exposure Limits

Updated Radio Frequency Exposure Rules Become Effective on May 3

04/12/2021

The FCC has announced that rule changes detailed in a lengthy 2019 Report and Order governing RF exposure standards go into effect on May 3, 2021. The new rules do not change existing RF exposure (RFE) limits but do require that stations in all services, including amateur radio, be evaluated against existing limits, unless they are exempted. For stations already in place, that evaluation must be completed by May 3, 2023. After May 3 of this year, any new station, or any existing station modified in a way that's likely to change its RFE profile — such as different antenna or placement or greater power — will need to conduct an evaluation by the date of activation or change.

"In the RF Report and Order, the Commission anticipated that few parties would have to conduct reevaluations under the new rules and that such evaluations will be relatively straightforward," the FCC said in an April 2 Public Notice. "It nevertheless adopted a 2-year period for parties to verify and ensure compliance under the new rules."

The Amateur Service is no longer categorically excluded from certain aspects of the rules, as amended, and licensees can no longer avoid performing an exposure assessment simply because they are transmitting below a given power level.

"For most amateurs, the major difference is the removal of the categorical exclusion for amateur radio, which means that ham station owners must determine if they either qualify for an exemption or must perform a routine environmental evaluation," said Greg Lapin, N9GL, chair of the ARRL RF Safety Committee and a member of the FCC Technological Advisory Council (TAC).

"Ham stations previously excluded from performing environmental evaluations will have until May 3, 2023, to perform these. After May 3, 2021, any new stations or those modified in a way that affects RF exposure must comply before being put into service," Lapin said.

The December 2019 RF Report and Order changes the methods that many radio services use to determine and achieve compliance with FCC limits on human exposure to RF electromagnetic fields. The FCC also modified the process for determining whether a particular device or deployment is exempt from a more thorough analysis by replacing a service-specific list of transmitters, facilities, and operations for which evaluation is required with new streamlined formula-based criteria. The R&O also addressed how to perform evaluations where the exemption does not apply, and how to mitigate exposure.

Amateur radio licensees will have to determine whether any existing facilities previously excluded under the old rules now qualify for an exemption under the new rules. Most will, but some may not.

"For amateurs, the major difference is the removal of the categorical exclusion," Lapin said, "which means that every ham will be required to perform some sort of calculation, either to determine if they qualify for an exemption or must perform a full-fledged exposure assessment. For hams who previously performed exposure assessments on their stations, there is nothing more to do."

The ARRL Laboratory staff is available to help amateurs to make these determinations and, if needed, perform the necessary calculations to ensure their stations comply. ARRL Laboratory Manager Ed Hare, W1RFI, who helped prepare ARRL's RF Exposure and You book, explained it this way. "The FCC did not change any of the underlying rules applicable to amateur station evaluations," he said. "The sections of the book on how to perform routine station evaluations are still valid and usable, especially the many charts of common antennas at different heights." Hare said ARRL Lab staff also would be available to help amateurs understand the rules and evaluate their stations."

RF Exposure and You is available for free download from ARRL. ARRL also has an RF Safety page on its website.

The ARRL RF Safety Committee is working with the FCC to update the FCC's aids for following human exposure rules — OET Bulletin 65 and OET Bulletin 65 Supplement B for Radio Amateurs. In addition, ARRL is developing tools that all hams can use to perform exposure assessments.

Michigan QSO Party

On Apr 17, the MI QSO Party happened – this year with mobiles again. However, the bands didn't exactly cooperate with Saturday morning A index of 5 settling down to 3 later in the day. Friday night the A=21, K=5, band noise S4-6 and everything 'poor'. Got better a bit Sat morning and as the day went on, a little better. The good news is the sunspot number was 44. Flux was 78, but the K stayed elevated making not so great propagation. Mobiles were out and running – NE9U, NF8M,

Toward evening 40 and 80m seem to improve. DX had a hard time working MI. DL3DXX only caught a few counties. N4CD headed to local town park and worked a dozen or so MI stations on 20M but barely heard NE9U mobile and no others.

from the 3830 contest reflector:

NF8M mobile - 189 cw 14 SSB qso

Mobile operation in INGHam, BARRy, EATOn and OAKLand counties.

K3WJV - fixed PA 109 cw 89 SSB 45 cw counties 38 SSB counties

Managed to get one guy to hear me on 20 as propagation was not working for the distance involved. Copied a few signals but only one came back to me. Serial number would have been tough anyway. Not sure why but missed a lot of the counties that the mobiles advertised but I never heard. Only had 10 Q's with NE9U and even worse was

W8UE with only 3 Q's. As always with going mixed mode is enjoying bumping into a few of the regular cw guys on ssb.

W8JJ - portable 181 cw 169 SSB qso

I was operating portable from my cottage in Clare county. The station worked great and I was able to operate for 11 hours. I spent very little time on S&P and opted to run with frequent band/mode changes as the rates declined.

WB8WKQ - fixed - MI 259 cw 278 SSB

Interesting conditions. 40M was not the big winner I thought it would be, or has been in previous contests. I didn't go full time and was able to nap, eat and walk around a bit. Had some nice runs on 80 and 75 in the evening.

NE9U mobile with N9CBA - - MI - 510 cw 16 SSB

Its never a good sign for an HF contest when you have pretty aurora the night before the contest....

Just horrible conditions all day long from the U.P. K index never dropped under 4. Everyone was weak and QSB was terrible!

Amazingly, was able to put OM2VL in the log 15 times anyway!

My driver, KK9K drove so fast during the entire contest that we ended up at the Gogebic, Michigan - Vilas, Wisconsin county line with an hour left in the contest. Some years in the past we have struggled to get all our counties in! We were having so much fun, that we went QRT with an hour to go and hit the local saloon. :-)

73

Scott NE9U Ron KK9K

Picture from N9CBA - who rode along

Conditions for the Michigan QSO party were as horrible as they can get, but we sure had some pretty views along Lakes Michigan and Superior!



Florida QSO Party

Held end of April but will have full report next month. Loads of mobiles and fixed stations on...... likely every county at least with one station/mobile and likely several. Some 1x1s in there too. Must be six or eight mobiles zipping around in the QP.

One FQP report from Jeff, N8II:

20 was not that great Saturday, only a few really loud signals from NFL and they were gone by 1930Z. 40 was a "hot mess" from here Saturday. The noise was high, and signals levels were low. Even at 01Z, 2 mobiles were weak. Around 21Z, stations who were well above my QRN had trouble hearing me. Mid day was a near total nil both days on 40. K7SV made about double the 40M Q's I did and he is only about 85-90 miles to my SE. I made the mistake of trying 40 phone near the end and despite some good signals getting through was rough (2-3 ops were not good at sorting out calls). 20 opened rather slowly Sunday to central/north FL, but there were about 3 hours of time when all of FL was loud. The 20Z hour was bad on both bands both days. Right in the last half hour 20 reopened to even NFL and W4AN gave me county 65 in Holmes,

always a toughie from here. One of my last 20M CQ answers was a casual op from Santa Rosa for a new one. I wish the test had lasted another half hour or so, because this was the only time 40 and 20 were open well at once. As usual, the casual ops were plentiful on 20 phone, made about 210 Q's there.

I was so tired, I quit right after 01Z Saturday. The mobile pile ups on 40 were rough as was 20 at many times to NFL. I broke a few huge piles first try, had to wait a long time on some, especially Sunday and on 40 I wasted a lot of time calling mobiles and phone stations. My total Q's were 585, 65 mults CW, 47 phone, over 210K, but don't remember exact score. There were several ops who called intentionally out of turn in the mobile pile ups from PVRC and elsewhere. K7SV dumped in his call when someone did not hear their call in the melee.

I was surprised N4CW/M went all the way down to near south tip of FL, he may have some family down there. All of the serious mobile ops did very well keeping their cool and keeping up the rate! It has to be exhausting sorting out callers and having callers during QSO's. I worked K4OJ and AD4EB the most I would guess. K8MR/M was easy and loud compared to others, but not heard as much.

73, Jeff N8II

On the Road with N4CD II

It turned out that Hollis needed 2 to finish up for CW-V – one being Somerset NJ and the other Stonewall, TX. Ron, KB6UF, was headed north with a route through many needed counties in WV, into PA, then NJ – headed for Nantucket and Dukes – then to ME. He hit Somerset NJ and Hollis caught him there. So all that remained was Stonewall.

There's not much to say about Stonewall County -200 plus miles west of the DFW Metroplex in the middle of nowhere. Total population of the county is 1500. For comparison, my home county- Collin TX - has 1.3 million people! So - it's really really open -

There aren't a whole lot of 'parks out that way either - it's devoid of natural wonders, historic sites and not near 'anything'. Other than being named for Stonewall Jackson - a Confederate General. I could, with short detours, hit 2 parks along the way for a

quickie activation. I wasn't going to sit around in a park for long as there was miles to go - and go.

Sunday – April 25 - I was up at 5:15. Didn't sleep well that night for some reason but not to worry. Nuked an Egg McMuffin type deal for breakfast and had cup of coffee and two mandarin oranges. Out the door at 5:45 and antennas on car and ready to go by 6am headed west – up to route 380 in Denton County – and then west, west, west on 380 through Wise, Jack, Young, Throckmorton, Haskell, and finally to Stonewall 4.5 hours later at 75 to 80 mph most of the way. Speed limits once you get west if I-35 go from 55 to 65 to 75 mph.....decent roads and weather good starting at 53F, peaking at 82F out west and was 77F in driveway at 3pm.

Along the way, you can take a short detour in Wise TX to LBJ Grasslands Park – and do a quickie. Wow...at midnight – the bands were 'poor' from 80 through 10m. A=10. K=5. Hard to see how anything gets heard. Hope things would improve. That's really still bad news with K=5 – but the good news, if there is any, was the Sunspot number was 62. Most of them, however, are 'small spots' and fade very fast. Not what we need with LARGE sunspots and dozens and dozens of them! Arrived here just before 7am at the park and the FQP started up then so bagged half a dozen FQP stations on 40M CW, then put out Wise County. 20 minutes later I was headed west again. No time to stick around. Only 40M working at this point at 7am local time.

Heading west, when you get to Jack County – you can take a ½ mile detour to Fort Richardson State Park and Historic Site. This was one of the Frontier Forts build after the Civil War – some of the others are preserved – Ft Griffin, Ft Davis, Ft McKavitt, Fort Sill, Ft Lancaster – or at least the towns have the name if the ruins of the park are totally gone. At this site, you can tour reconstructed buildings from that period. After the Indian Wars ended in the 1870s, the forts were no longer needed – most simply abandoned. Stayed 20 minutes and then quickly back on the road. Two dozen Qs in log including a dozen FQP stations on 20cw. 40M to FL was 'gone' for the day.



Bands a bit better but not great. Usually tried to run 30 and 20m most places. Headed west running counties for another 2 hours to get to Stonewall. Hollis, KC3X, was working me in each one as I headed west.

During the day, KB6UF reached Nantucket. Big pileups on 20M cw – and he was there most of the day so hopefully all got through. Ran off freq most of time once I noted he was there. Conditions not all that great on the radio. Many got through to Ron on Nantucket using CW - 20/30/40/80m.

Finally got to Stonewall after a quick stop in Haskell to add gas to the tank. Driving at 80 mph sucks a bit more gas – probably get 25-26 mpg at those speeds. Sometimes it inched up to 85 mph. Gas \$2.59/gal out that way – same as home. Population density there is 2 people per square mile of county - and probably half live in the county seat of Aspermont.



LC WBOW CW-V for KC3X

Reached Stonewall and KC3X was first in the log. Yeah! Made a loop through that county and headed out going SE. The next 'target' for the GPS Lady was 'Strawn TX' where the next park is located. Hmmm.....GPS lady took me on lots and lots of back roads to get there – and I don't think I've been on most of them before. Did 80 miles on Hwy 180 but over 80 miles on two lane back roads with no towns. Wow....didn't see a car, house, or anything all across Stephens County – it's got rough terrain there not conducive to farming – no flat spaces!

Got to Strawn TX (pop 653) in Palo Pinto County – and headed west on 'the road' to the park. Whoa – sign 'park closed ahead' – road closed ahead. Hmm......what to do. Well, turns out from previous experience there are at least two 'indented gates' you can run atand this time, being Sunday – headed for the park ranger station. Gates naturally locked up tight, but there's an indented gate 30 feet deep and 25 feet wide – so you can pull in there and be 'on park property'. Electronic key gate there to operate. No one is going in/out on Sunday. The regular spot is the old town park – a small loop road with half dozen picnic tables – but it was signed over to the state for the new park 'yet to open'. But you can run it there according to the ranger I met previously. So ran at the indented gates – made two dozen Qs and headed out from Palo Pinto County. The 'park' and road to it was closed due to construction. You might not want to park blocking the ranger station during the week. Don't know when the construction will be done. I get out that way about once a year it seems – a 10 mile detour off I-30.

Ran the counties going east till I reached the Ft Worth side of the Metroplex, then just

turned off the radio for the next 70 miles across 6 and 8 lanes of heavy traffic. Home by 3pm. Whew. 471 miles of driving. We county hunters have to be half nuts I think to do trips like that.

Thanks for riding along.

Awards Issued

For those who would like county lines displayed on your Garmin Nuvi- from W4YDY:

I have put the Garmin Nuvi GPS county line file back on my web site for downloading at

https://www.qsl.net/w4ydy/hamlinks.html#County

It works fine and is virus free.

Dave, W4YDY

Awards Issued

Ran All Oklahoma #30	Jerry, W0GXQ	4 April 2021.
USA-CW-I #161	Carl, W9OO	5 April 2021.
Mobile Diamond #8	Hollis, KC3X	4/12/2021
Ran All CT #46	Paige, W0FLZ	1/15/1993
Ran All NH #41	Paige, W0FLZ	10/24/1993
Ran All RI #50	Paige, W0FLZ	12/19/1990
Roadrunner - 225 LC #100	Jim, KZ2P	1/2/2017

Roadrunner -1325 LC #4	Jerry, W0GXQ	4.5.2021
Master Gold #73	Pete, NN9K	23 April 2021

Events for County Hunters

This is nearly the end of the spring QSO party season – so enjoy while you can. QSO parties are coming in the fall – KS and TX and other big ones.

May 1 0001z to 2 2359z **Ten Ten cw Contest** Name, mbr or "0," SPC <u>www.ten-ten.org</u>

May 1 1500z ti 2 0300 Indiana QSO Party cw Ph RS(T), county or SPC hdxcc.org/inqp/rules.html

May 1 1700z to 2 2359 **Delaware QSO Party** cw Ph RS(T), county or SPC <u>www.fsarc.org/qsoparty</u>

May 8 1400z to 9 0200 Arkansas QSO Party cw Ph RS(T), AR county or SPC www.arkqp.com

May 21 1200z to 21 2359 3.5-28 Hamvention QSO Party cw Ph RS(T), first year attended Hamvention wwrof.org