# County Hunter News OnLine

March 2023 Volume 19 Issue 3

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). 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. Seriously! Some days great with 17, 15 and above active. Lots of DX from fixed stations, especially FT-8 being worked world wide, on upper bands. In general, higher bands good. Lots of technician licenses now on 10M SSB and FT-8 digital.

One day – March 11 – saw the sunspot number go to over 100! Lots of flares happening, too. Loads of solar activity. On March 17, the SFI hit 400! Major storm from glancing CME. HF blackout for an hour or two, then great DX on upper bands.

2) Morse Code Update - In 2004, the UN added the first new character to the International Morse Code since WW2. It's the "@" symbol and if you want to send your email, it is .\_\_. \_\_\_\_\_ or 'WR' sent together – no space. It's easier to send "AT" instead, but whatever you want. Like N4CD AT ARRL.NET

### 3) Daylight Saving Time

March is the month where we 'spring forward' on March 12 Sunday – in the middle of the night over the weekend. It will occur during the OK and ID QP's so beware. As always, your GMT clock won't need any attention

### 4) Michigan Mini 2023

MI Mini is on again. There was no Mini in 2021 due to COVID. Last year it was in Traverse City MI and this year, further south in Midland MI. New counties to run and a bunch of new parks (mostly game lands) to run in that area! Maybe a few will come over the top of 'upper' MI and down running those tough to get counties up there. It's a bit later this year so weather should be even better up that way.

## Michigan Mini 2023

The 2023 MARAC Michigan Mini is being announced. Mega thanks to Dorie, N8WTQ, for picking up the task on this excellent MARAC get-together.

The dates are April 20-22 at the Springhill Suites hotel in Midland, Michigan. Address is 800 Joe Mann Blvd, Midland, MI 48642. Good highways to get there.

The negotiated rate for each room is \$119 plus tax. Breakfast is included. There will be a conference room for us to gather in each day. Rate with tax about \$132.

The Banquet is Saturday night 6 pm with picture at 5 pm. If you attend the banquet, you probably want to plan to leave on Sunday April 23.

Registration is \$30 with \$15 for the cost of each additional badge for spouses. Banquet tickets include dinner the last night at \$40 per person.

Go to the marac.org website for a link to more info and to the Registration page and hotel page. You can register on line via the link.

Or go straight to the link of MI-Mini.marac.org Time is short, so get your plans made soon.!

SpringHill Suites Midland 800 Joe Mann Boulevard Midland, Michigan 48642 (989) 837-2700

# Minnesota QSO Party

Mobiles were out and running in subzero temps in Minnesota this year. It was 25 below zero in Minneapolis on the Thursday before the Saturday event. Lots of snow to contend with, too, from some good storms a while back. The road crews do a good job on keeping roads open.

Saw/heard lots of county hunters in there working the counties – KM4FO, NS2N, W5VS, K4AMC, NU0Q, N8II, etc. Only a few posted comments so didn't get listed below. Ones that did, are listed below. Always interested in which mobiles you worked during the test. (not all mobiles report scores and post comments).

Looks like 73 counties were worked by one chaster - NS2N. There are 87 counties in MN. N8II clocked in with 68 worked.

#### AE0EE mobile 1090 CW QSO

100 W, hamsticks, keyed mostly by F-keys (which is more difficult than it may seem when bouncing around on a county road or less-maintained state highway).

Matt (K0BBC, driving) and I visited 23 counties: Rock, Pipestone, Murray, Lyon, Lincoln, Yellow Medicine, Lac qui Parle, Chippewa, Kandiyohi, Renville, Redwood, Brown, Nicollet (~2 miles), Renville Part 2, Sibley, Nicollet Part 2, Blue Earth, Waseca, Steele, Freeborn, Faribault, Martin, Jackson, Cottonwood (bonus), Murray Part 2, and Nobles. We would have finished in Rock, but the batteries told us they were done with a little time still left on the clock.

Many thanks to the chasers who helped keep the pileups going all day! Although I had planned to switch bands or modes when the pileup was worked down, there were only two band changes (start on 40 m, moved to 20 m around 9:30 or 10:00, local, then back to 40 m around 5 PM local). I had the microphone hooked up but never felt the need to leave a productive run frequency on CW with a bunch of chasers watching for me.

Stops were few and far between. I swapped hamsticks from 40 to 20 m while we stopped to pick up pre-ordered lunch, which only was a few minutes. Lunch was on the go (at last we were running CW!). Our final stop was to swap back from 20 m to 40 m, again only being off the air for a couple minutes.

It was interesting to work the same stations repeatedly within a contest, and learn some of the callsigns and the quirks: the station that always calls right at the very edge of the receive audio bandpass (or on the slope), the station with the severe drift, and the station that is always weak but intelligible.

Top chasers: W4SIG: 20/23 K9CW: 19/23 N8II: 19/23 NS2N: 19/23 W8PI: 19/23 W0UC: 18/23 W5VS: 18/23 AF8A: 17/23 NU0Q: 17/23 N0AT: 16/23 W0BV: 16/23 WN4AFP: 15/23 LA8OM: 12/23

**K0M mobile 444 CW QSO** Operator(s): KB9VBR KZ9V

No comments

### K0PC Mobile 1129 CW QSO

This was my 20th mobile operation in the MN QSO Party. You would think one of these years everything would work correctly. My auto-tuner for the screwdriver antenna failed and I had to use manual tuning. Also, my navigation software on the phone went kerflooey, so navigation was a challenge.

Even so I had a good time driving 493 miles with one six minute gas/pit stop. The weather cooperated and the roads were in good shape.

I had 326 unique calls in the log with these top hitters:

25 - N8II 23 - WØBV 21 - WØPI 20 - NS2N 19 - WBØN, WB9HFK, K9CW, NUØQ

Thanks to everybody who called in and endured my "Mobile Fist".

73, Pat KØPC

### W0ZQ Mobile 794 CW 64 SSB QSO

My 19th year of running in the MnQP as a mobile or rover. This year I operated as a mobile, hamsticks on the roof, in order to better navigate the snow banks. The weather was excellent, about 5 degrees above with little wind and a setting full moon when I left in the AM, and got to see the full moon rise at sunset at the end of the contest. Bands were in great shape, and I did some phone while driving between stops where I would operate CW. If I enjoyed SSB I would have done a bit more operating on phone but these old ears just don't like SSB. Thanks everyone for all the Qs and maybe be seeing you in the WiQP in a few weeks.

73, Jon

### KB9S Mobile 312 CW QSO

Decided to try mobile this year. My driver/wife(K9KTT) called it " A little tour on the Minnesota Prairie". Crossed the Minnesota border into Wabasha County at 9:30am. Quickly learned that N1MM thought I was an out of state entry and would not allow me to enter out of state callers. Pulled off the road to create a new in-state log. No major logging problems after that. Road conditions and the weather were good on our seven-county route.

Thank you to all the stations that followed us along our route. Here are some of the top station QSO counts: 9 - W0BV 7 - K0TG, WA0MN 6 - K9QC, LY5W

5 - KOAD, KEOTT, WOELT, WBON

See you in WiQP in March. 73, Mark KB9S

### VE9VIC 62 CW QSO

Thanks to K0PC and AE0EE for many counties, very good ears, Here temps outside was minus 40F, even in the shack it was cold.

73 DE VE9VIC.

### N8II - fixed WV 157 CW 98 SSB QSO 68 mults

Band conditions were considerably better than last year, even on the low bands. There still was almost a total fade out around 19-20Z on 40. Some of the mobiles stayed on 40, making chasing the mults difficult. Pat, K0PC favored 40. Luckily I worked his often very weak signal (and he heard my very weak signal) there through most of the day once missing him in 2 counties in a row due to other callers and me being quite weak. The BCQP was a distraction; I have trouble going off task when the QSO rate and new mults come slowly. About 35 BCQP Q's were logged during MNQP, mostly while searching for MN. I also never heard W9FZ/M on SSB until their last county missing 2-3 mults. I felt pretty loud on 20. AE0EE/M heard me on first call many times, great op! He reports working me in 19 counties with 23 Q's. Running on 20 SSB helped me with maybe 20-25 Q's, the rest were S&P on 20. 15M could have produced many more Q's; there was a fade out of southern MN around 1900-2100Z right about the time more MN ops went there for more Q's after working out 20. But the band was open well from around 1530-1900Z and again after 2100Z with very limited activity. Thanks to Pat K0PC, Jon W0ZO, and and Neo N0EO for roaming around the entire QP or close to it. Also made a few Q's with K0RC/M on CW and K0M/M on SSB. Last year 80 didn't really open until 2345Z; this year arriving at 2337Z was late as signals were already coming through well.

Many thanks for all of the calls, Q's and mults. It is not quite the same without N0HJZ/M, but Rich may do a mobile operation next year.

73, Jeff

### NS2N fixed NY 159 CW 52 SSB 73 Mults

Midway thru, Murphy visited. Wire in connector to antenna switch controller came loose. Teeny connector, teeny screw old man.

Good job by the MN gang, as always !

# N8KIE, Bob, Does Kauai

Bob, N8KIE, headed to Kauai, HI for a day trip from his winter home in Honolulu. Conditions were a bit different from what we are accustomed to for the past 10 years– but 'normal' in high sunspot years.

The SFI was sky high – well over 150 and sunspots near 100 but the A index was 18 and K of 2. The propagation banners listed 20M as poor, and Bob made no contacts on 20M. However, the good news is that the upper bands were rated 'good' and that's where Bob made his contacts.

He took is Outbacker antenna on the trip. Worked many to give last counties – and of course, those Double Diamond and other major awards.

Kauai is frequently on the air on FT-8 for Parks on the Air (along with all but Kalawao on FT-) but none of those folks are good for Master Gold, Platinum, Diamond, etc. Or even 'mobile' in most cases.

# Sunspot Activity/Prediction

The good news is that we are ahead of predicted solar activity and sunspot numbers! Ten meters has, usually, been very good. If this continues, 10m will be open at midnight before long and F2 skip will show up on 6m.

In 2019, that panel of experts reviewed the available models and predictions for the next solar cycle. In doing so, they recognized that physics-based scenarios were more successful than other prediction methods, such as those based on empirical data of the Sun's behavior. In particular, the most successful models incorporated the behavior of the Sun's magnetic fields, especially those at the poles, as well as an understanding energy flow within the turbulent solar interior.

As a result of these investigations, the panel came to a consensus: That the new solar cycle had started sometime between July 2019 and July 2020, and that activity would peak in 2025 with a maximum sunspot number between 105 and 125. The wiggle room in the prediction reflects that even the physics-based models are not in 100% agreement with one another.

Now, with two years of the cycle under our collective belt, the predictions are holding up well, albeit with numbers veering toward the earlier and higher end of the forecast. Understanding this slight shift will likely take a year or two more data, but Upton and Hathaway have a report coming out soon with preliminary findings (though you can read a summary of their findings here).

"I would say that the panel's forecast for solar cycle 25 is holding up very well," Upton adds. "I believe this will likely be the best forecast to come out of one of the NOAA/NASA Cycle prediction panels."

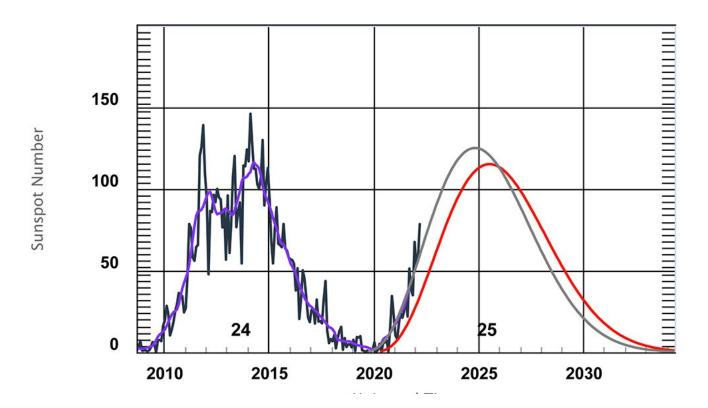
While scientists have a growing confidence in their ability to predict what the Sun will do next, that doesn't mean there isn't room for disagreement. Scott McIntosh (National Center for Atmospheric Research), for one, has gone against the consensus in predicting that this cycle will be one of the strongest on record.

Indeed, Scott McIntosh (National Center for Atmospheric Research) and colleagues know that they're going against the consensus when they write, "Sunspot Cycle 25 could

have a magnitude that rivals the top few since records began."

They arrive at this conclusion by analyzing 270 years of sunspot numbers. Using a mathematical technique, they realized that every 22-year Hale cycle terminates markedly and quite quickly, "in a quite astonishing time for a star," McIntosh says. They call these endings termination events.

What's more, the timing of the cycle's termination event seems to correlate with the magnitude of the next sunspot cycle. If that correlation holds, McIntosh and colleagues say that the previous cycle's brevity means a strong Cycle 25, surpassing 180 sunspots per month at peak. This prediction differs so much from the consensus that we won't have to wait years, just months to see which one is holding true.



source: <u>https://skyandtelescope.org/astronomy-news/the-sun-is-waking-up-right-on-schedule/</u>

# Vermont QSO Party

Weather not great in Vermont this year for the QP. . Subzero temps and wind chills down do 50 below zero in areas. Mt Washington in the next state over had wind chills of minus 104 - a record setter – all time low wind chill recorded. Actual temp was 40 below there. Much of Vermont was below zero but roads were open if any mobile were to venture out.

Looks like 8 counties worked on CW, 6 on SSB – not sure if they were the same or not – scores reported mults separately for CW and SSB. Unfortunately there is some confusion here as 'club stations' (2 of them) were 'multipliers' and I'm not sure where folks listed them in the results. Could have been only 6 worked on cw. Dunno?

There are 14 counties in VT. Plus there were at least two 'club' calls worth a multiplier each.

Digital was allowed this year, **including the WARC bands for digital.** FT-8 and FT-4 allowed but just one mode - digital. Additional multipliers to run up score if you ran all modes. Several reported making digital contacts.

From the 3830 contest reflector:

### K1IB fixed Windsor 485 CW QSO

I planned a mobile county-line operation for this event, as I have done in recent years, but Murphy interfered bigly. Friday night the temperature at K1IB dropped to -21F. My car battery wasn't up to the challenge of cranking the engine. Working in -19 degree temperatures I jumped from my wife's battery to get started.(Nothing works well in sub-zero temperatures. The car hood latch was frozen. The jumper cables were really stiff. Trying to manipulate things while wearing mittens is tough.)

After driving 25 miles to reach my first county-line spot my DC-to-AC inverter died when turned on (needed to power an old laptop which has a current battery capacity of about 2 minutes). That failure ended the mobile operating plan.

I returned home, fired up the FTdx10 and TL-922 amp and carried on representing only Windsor County instead of the half-dozen counties I had planned to cover. After that, Murphy apparently gave up. All went well. Worked 43 states, 5 provinces, 4 Vermont counties plus a few dx mults. I was looking for lots of activity on 10 and 15 meters but as usual 20 and 40 were the busy bands. Overall activity seemed very good this year; much better than some previous years I recall.

I hope to do a county-line operation in May for the New England QSO Party..

### KK1L fixed VT - 366 CW 802 SSB 535 digital

Note: Digital contacts allowed on WARC in this QSO Party.

Recently been getting more active in the Vermont QSO Party. There are a bunch of folks who comment that Vermont is not very well represented during its party. We do what we can to whip up the troops so to speak, but we are a small state with not much over 600k folks in it...not gonna have the QSO volume of an FQP, CQP, or TQP. That being said...nice job from the Minnesota hams for getting out and getting on as well.

- 5.5hrs from 19:00L Friday
- 14hrs from 07:50L 'til 21:50L Saturday with 30 min for dinner
- 5.75hrs from after Sunday Mass 13:15L until the end

My plan was to be as active on each of the HF modes as I could in the time I had to both maximize the opportunity for others to work VT and as well to maximize the score. I worked to get my two radio setup functioning again running low power. A K3s and a KX2 driving a Hardrock-50 50W amp. I am not fully capable of working any band on both radios. Currently I have a single feed tribander, 2el40m, and single feed 80m/160m Inv-V. The 40m loads up on 17m and 24m, but without bandpass filters I am limited which bands interfere with each other. I had to play that by ear this weekend. This was most important on FTx where I could run a true automated 2BSIQ. I found that 20m or 10m could coexist with 17m or 24m.

I started off right on time at 00Z on 40m near the announced "activity time" freq on 40m unfortunately chosen for 7.200. With Zippy and his pinhead friends there we scattered about the band. The first hour put 137 phone Qs in the log between 40m and 20m. I bopped around between phone, CW and Digi. By the time I stopped at 0530Z I had 468Qs logged.

I started slowly Saturday morning at 1250Z 20m phone, and quickly decided to try FTx. Great choice! I had a great run working 332 stations in 3hrs on FT4 with the first hour at a solid 130hr ... WHAT!?! I actually hung out a bit long with the last 30mins at "only" 40 QSOs. The rest of Saturday was not awesome bouncing around the modes until 2030Z. Then 20m blew up...200Qs in 1hr10min. There were a few fits and spurts of

short high rate, but just kinda steady until I quit for the night just before 2145L/0245Z with 1476Qs logged.

I knew Sunday I would be operating much less. Sunday Mass is a priority and my daughter and grandkids were here for the weekend. I had not spent much time Saturday with them, so did not get back on the air until after 1PM. Sunday was definitely NOT Saturday (but I did miss the morning). I wanted to focus on CW today. I am not awesome with Morse, but not terrible. I am enjoying it more and more. A contest like this is a good one since the piles are not THAT large. Typing fast and accurately matters more with CW...fat fingers and mild dyslexia and calls like WVRJTK go out instead of W4JTK (made up example). My Morse goes from ears to fingers THEN brain, so F5 is pressed before I correct the typing and suffer a flurry of folks calling because I was slow to the gate. Anyway that is more a comment than an excuse. Practice, practice, practice. I felt the best I have ever felt running CW. All y'all might not agree with that though if you were on the other side of the QSO :)

In the last few hours my K3s (new to me) developed the "ERR 12V" issue. Well known as a resistive power connection most likely because this older S/N does not have the gold contact pins. I ended up moving the KX2 to primary with the max of 60W from the Hardrock-50 solid state amp (which worked like a CHAMP even with the 15s/15s on/off cycle on FT4 for three hours...reached 60C though). I also had some weird issue where the KX2 would stick in TX mode when I was dual CQing on CW. Not sure what that was. I did not take the time to diagnose it much at all.

Bottom line by the end of Sunday I had added a meager 271Qs including dupes! Like I said Sunday was definitely not Saturday. Thanks for stopping by Vermont this weekend. We were happy to have you and hope we made you feel welcomed to the first QSO party of the year. Oh and thanks to those who might have joined me as I recited the 6PM Angelus Saturday and Sunday...a pause for the cause so to speak.

Special shout out to my top visitors (Qs assume unique FT4&FT8)..

- 14Qs(!) NX3A (missed 15m)
- 10Qs KK4BZ (no CW)
- 9Qs W9IZ
- 9Qs NF3R
- 8Qs AA1SU (no DIG)
- 7Qs WB9HFK (no DIG)
- 7Qs N8II (no DIG)

73 es God Bless de KK1L, Ron <><

#### WN4AFP - fixed - SC 27 CW 15 SSB mults - CW 8 SSB 6

I worked all the VT stations that I could here. Worked N1GVT and W1NVT bonus stations on two modes. Next year, I'll be running digital too... watch out. I worked many of the same station on multiple bands and modes. Sorry to hear the the mobile station had problems. Hope K1IB/m runs mobile next year. 73 Dave WN4AFP

# K5CM fixed OK - 30 CW 8 SSB 7 CW mults, 4 on SSB comments: None

### N8II- fixed – WV 25 CW 16 SSB 8 CW mults 6 SSB mults

Not much to say about this party, activity low, did not hear any mobiles. 20 was open well to VT at times and the 15M QSO's were all backscatter beaming west where the VT signals peaked. I focused on the other 2 parties.

73, Jeff

## K0BAK Rove in FL II

#### KOBAK southeast Florida rove report

My wife and I returned to Marco Island Jan. 28 for the third time in our becomingannual escape from Philly winter. The flight was free from drama, unlike last year when American Airlines stole our first day here. She loves the beach, I hate the beach, so ham radio and pickleball take up my time when not vegging with books from The Expanse series.

The flight-portable POTA station first debugged and used in Florida last year returned with one change: Since 40m doesn't work well down here in daylight compared to 20m, I would only need 20m and above. I decided to replace Hustler mobile antennas (center-loaded stinger-tuned verticals) with the 17-foot telescoping whip I use with my

screwdriver antenna. This gives me a near-resonant antenna on 20m and allows higher bands by adjusting the length of the whip. I use a small magnetic mount on the center of a rental sedan, so at home I built a guy rope system with quick disconnects. Two stub ropes are kept installed on the whip with a carefully tensioned hose clamp, and another two stubs tied to the rental car for the duration of my visit. The guys were only needed at a few windy sites when I connected a longer rope between the stubs.

Our first full day at Marco on Sunday was the second day of Winter Field Day, so after unpacking the station from its case and "installing" it in the rental car, I headed out to the closest POTA site Collier-Seminole SP (K-1847) to test the station by contacting WFD ops. Even though it wasn't particularly windy, I installed the guy system including adjusting the length of attachment loops to accommodate the rental car. My antenna analyzer showed the fully extended whip was resonant high and wide at about 17.5-18.5 MHz, probably due to the poor ground using only the mag mount capacitive coupling. Down at 20m the SWR was about 6, easily neutralized by my automatic transmatch. With the pileups on calling WFD stations I was OK with only contacting a little less than half of my inpatient attempts, and declared the station ready for POTA.

John KN4SWS is the king of Collier-Seminole, who helped me last year with my rove of nearby parks. John was activating Collier early on Monday as he does often, so I went out there again to meet him and activate the park. John was kind to wait for me after he packed up, and we had a nice conversation including discussing my intended rove of southeast Florida. He offered to look at my detailed plan when I had built it.

That night I created a spreadsheet rove plan to leave Wednesday and return Friday. The first day I'd arrive to a Fort Lauderdale park after a 2.5-hour drive for the most-northern activation. I'd then activate 5 more in the Miami region, then stay overnight in southwest Miami suburbs. The next day I'd drive to the Florida Keys, starting a string of activations from Key Largo mid-morning toward (but not reaching) Key West. My plan included more parks than I could reasonably accomplish, but better to plan for too many than scramble to find more during the rove day. After the last activation, I'd drive back to Key Largo to stay overnight then return to Marco the next morning.

My wife asked to come with me on the rove, which surprised me because I had often suggested it but she hadn't come with me before. Although we wouldn't have time to explore the parks in detail, we could at least get a sense of them and maybe come back to a few when we stay in the area on a future trip. Wednesday morning, we left Marco for Lauderdale later than planned but still arrived within an hour of plan.

Traffic getting to the park was worse than expected, and driving to each of the next three

parks were increasingly worse. Although I had used Google Maps to estimate drive times when creating my plan including setting an estimated time of day, times were over or on the high side of prediction ranges. By the time I left the fourth park, it was near peak rush hour so I decided to skip the last two parks on the plan and instead drive directly to the hotel. The final drive of the day was awful, and we arrived at the hotel exhausted. If I thought the driving situation would be as bad as it was, I wouldn't have attempted that day's rove. At least each of the four operations were successful on-air. Thursday morning, we drove to visit the Keys for the first time. Traffic on the (mostly) two-lane road was not a problem, and we arrived at my first site's visitors' center at midmorning. Cell coverage was marginal but I was able to spot myself and was surprised by the minor pileup at an early time—back home 9am activations usually take longer than average to complete. Hopping from park to park down through the Keys, we enjoyed seeing new sights along the famous Overseas Highway and the natural areas protected by the parks we visited. Traffic was sometimes slow but continued to flow; my biggest stressor was crossing the busy road when visiting parks on the south side of the highway, having to make a left turn against significant fast traffic.



After activating Curry Hammock SP (K-1851) and walking the area together, I realized that the next site was almost an hour drive and would probably have to be last with sunset soon after finishing. I decided to end a successful POTA day with eight new-to-me parks done. We returned to Key Largo to check into our hotel, feeling much better than the near-total exhaustion of the day before. A pizza and key lime pie slices at a place recommended by John capped off the day.

Friday started early enough to activate the two parks we had to skip on Wednesday. Biscayne NP (K-0007) is only the fourth full National Park I activated as they are considerably rarer in the East than the West. It's likely we will return to this unusual park to take a tour or rent a kayak when we have a full day there. John warned me of high noise at the final planned site below high voltage power lines, and he was certainly right. Despite the effective noise reduction features of my IC-7100, RF noise made each contact with any but 8-9 level chasers exhausting. I rarely leave chasers behind in a pileup intentionally, but I had to apologetically call QRT after 24 contacts. One of the major visitor centers of Everglades NP was 10 minutes away, so we drove there to learn a bit about the world-famous park. I took a break from SSB by activating it on FT8 even though I already operated from a small Everglades visitor's center much closer to Marco last year. It was a treat to visit two eastern National Parks in the same day no less activate them. Except for difficulty finding decent road food, our route back to Marco on the famous Tamiami Trail was uneventful, and allowed us to see new water management facilities and elevated roadway that are attempting to improve freshwater flow into the Everglades.

Thanks to everyone who contacted me or tried to. All you chasers make big efforts like this worth the time and expense. Stats (not including Collier):

15 sites activated: K-1882, K-1858, K-1908, K-1840, K-0236, K-1852, K-1886, K-1930, K-1897, K-3620, K-1899, K-1851, K-0007, K-8720, K-0024. 518 miles driven. 473 contacts: 13 FT8, the rest SSB; all on 20m.

## Mobile Activity in February

At the beginning of the month

N8HAM was out in VA and NC headed south through GA into FL running a bunch there.

WB8III and W8OP were busy in WV

KE4UP was in central TX headed east - down to SE TX then north again. On many, many days running everything in TX. Ran many in the NE corner then into the SE corner of OK for a few then back into the NE corner of TX. More days on the road headed NW along the Red River. Up into OK for a couple then back into TX. Up to northern OK – then planning on heading back to VA via I-40 in the next week pulling fifth wheel. Plans to run counties when he can.

KD8IE spotted in a park in WV

Quite a few parks/counties spotted on W6RK

There was the MN QP Feb 4with half a dozen mobiles out running – mostly CW but some on SSB.

No mobiles in VT QP but a dozen plus fixed stations on.

W1AW/p spotted in half dozen states as part of VOTA 'event'.

N8KIE took a plane over to Kauai to run it for the folks

K1YAG was out mobile in TX. Then popped up in LA and MS. Ran more around New Orleans then more in MS and into AL.

W4SIG was busy running MS counties – then into LA. Paused a day then more LA counties. A couple in AR then into LA again

N3MRA spotted in NC

KL5MH was spotted on 10m FT-8 in Second District AK. According to QRZ, his address is Elim, AK, which is 90 miles east of Nome and located on Norton Sound. (QRZ gives the county in GA). This might need further checking.

W4SIG headed through KY in MS. Down into LA later.

N8HAM spotted in GA running counties. Plans to run much on the west side of GA then head to home after winter in FL. Ran many counties while down there, too.

W5VS was out in southeast VA for a dozen there – then a few in MD.

## \$12 Ham Club Balloon Shot Down

A small, globe-trotting balloon declared "missing in action" by an Illinois-based hobbyist club on Feb. 15 has emerged as a candidate to explain one of the three mystery objects shot down by four heat-seeking missiles launched by U.S. Air Force fighters since Feb. 10.

The club—the Northern Illinois Bottlecap Balloon Brigade (NIBBB)—is not pointing fingers yet.

But the circumstantial evidence is at least intriguing. The club's silver-coated, partystyle, "pico balloon" reported its last position on Feb. 10 at 38,910 ft. off the west coast of Alaska, and a popular forecasting tool—the HYSPLIT model provided by the National Oceanic and Atmospheric Administration (NOAA)—projected the cylindrically shaped object would be floating high over the central part of the Yukon Territory on Feb. 11. That is the same day a Lockheed Martin F-22 shot down an unidentified object of a similar description and altitude in the same general area.

There are suspicions among other prominent members of the small, pico-ballooning enthusiasts' community, which combines ham radio and high-altitude ballooning into a single, relatively affordable hobby.

"I tried contacting our military and the FBI—and just got the runaround—to try to enlighten them on what a lot of these things probably are. And they're going to look not too intelligent to be shooting them down," says Ron Meadows, the founder of Scientific Balloon Solutions (SBS), a Silicon Valley company that

makes purpose-built pico balloons for hobbyists, educators and scientists. The descriptions of all three unidentified objects shot down Feb. 10-12 match the shapes, altitudes and payloads of the small pico balloons, which can usually be purchased for \$12-180 each, depending on the type.

"I'm guessing probably they were pico balloons," said Tom Medlin, a retired FedEx engineer and co-host of the Amateur Radio Roundtable show. Medlin has three pico balloons in flight in the Northern and Southern hemispheres. Aviation Week contacted a host of government agencies, including the FBI, North American Aerospace Defense Command (NORAD), the National Security Council (NSC) and the Office of the Secretary of Defense for comment about the possibility of pico balloons. The NSC did not respond to repeated requests. The FBI and OSD did not acknowledge that harmless pico balloons are being considered as possible identities for the mystery objects shot down by the Air Force.

"I have no update for you from NORAD on these objects," a NORAD spokesman says.

On Feb. 15, NSC spokesman John Kirby told reporters all three objects "could just be balloons tied to some commercial or benign purpose," but he did not mention the possibility of pico balloons.

Launching high-altitude, circumnavigational pico balloons has emerged only within the past decade. Meadows and his son Lee discovered it was possible to calculate the amount of helium gas necessary to make a common latex balloon neutrally buoyant at altitudes above 43,000 ft. The balloons carry an 11-gram tracker on a tether, along with HF and VHF/UHF antennas to update their positions to ham radio receivers around the world. At any given moment, several dozen such balloons are aloft, with some circling the globe several times before they malfunction or fail for other reasons. The launch teams seldom recover their balloons.

The balloons can come in several forms. Some enthusiasts still use common, Mylar party balloons, with a set of published calculations to determine the amount of gas to inject. But the round-shaped Mylar balloons often are unable to ascend higher than 20,000-30,000 ft., so some pico balloonists have upgraded to different materials. Medlin says he uses a foil balloon sold by Japanese company Yokohama for \$12. The material has proven to be resilient for long periods at high altitude, he says, even if the manufacturer never intended the balloon to be used for that purpose. An alternative is Meadows' SBS, which makes a series of balloons designed specially for circumnavigational flights.

The pico-ballooning community is nervous about the negative attention by some members of Congress and the White House, who have called the objects shot down at altitudes of 20,000-40,000 ft. dangerous to civil aviation.

"We did assess that their altitudes were considerably lower than the Chinese high-altitude balloon and did pose a threat to civilian commercial air traffic," Kirby says. "And while we have no specific reason to suspect that they were conducting surveillance of any kind, we couldn't rule that out."

In fact, the pico balloons weigh less than 6 lb. and therefore are exempt from most FAA airspace restrictions, Meadows and Medlin said. Three countries—North Korea, Yemen and the UK—restrict transmissions from balloons in their airspace, so the community has integrated geofencing software into the tracking devices. The balloons still overfly the countries, but do not transmit their positions over their airspace.

The community is also nervous that their balloons could be shot down next. Medlin says one of his balloons—call sign W5KUB-112—is projected by HYSPLIT to enter U.S. airspace on Feb. 17. It already circumnavigated the globe several times, but its trajectory last carried the object over China before it will enter either Mexican or U.S. airspace. "I hope," Medlin said, "that in the next few days when that happens we're not real trigger-happy and start shooting down everything."

Source: <u>https://aviationweek.com/defense-space/aircraft-propulsion/hobby-clubs-missing-balloon-feared-shot-down-usaf</u>

# Digital QSOs in State QSO Parties

Several of the state QSO Parties this month will accept 'digital' contacts. One specifically rules out FT-4 and FT-8 as a 'digital mode' and one other requires that a serial number and the county be sent by folks in the state, and a serial number and S/P/C back to folks in the state. Don't think that FT-8 can be set up to do that.

RTTY. Olivia, and PSK are good – you can send the info needed if you want to operate 'digital'. However, you only get to count one digital modes no matter how many you make QSOs with another party. (can't use multiple modes per station contacted).

Other State QSO Parties are just 'phone' and CW. Guess you could make FM (on VHF) and even NBFM if you wanted on 10m, or regular FM on 10M, 6M, etc. Even AM if you have an old boatanchor and can find people to talk to on AM. Most will be doing SSB of course, and CW. (there are one or two HF boatanchor rigs that were equipped for NBFM – which was 'pushed' back in the 1940s as an alternative to SSB.) Many of today's mobile rigs will do FM on 10M (29.6 MHz area). Of courses, you only get credit for making a 'phone contact' regardless of the type – so you can't work the same station on SSB, NBFM, FM, AM for additional contacts.

Some other QP's coming up might take FT-8/FT-4 so check the rules for each QP ahead of time. However, most FT-8 folks expect grid numbers, not anything else. Will be interesting to see how this works out.

One state QSO party even allows FT-8/FT-4 digital on WARC bands.

# On the Road with N4CD I

Jan 28, 2023

Headed up to Oklahoma from my QTH in Texas near Dallas for a park run and some Winter Field Day (WFD) contacts. 50F here and total clouds in morning. Nothing but real cloudy skies in OK but good driving weather.

Fired up the mobile (2016 Chevy Malibu with 149,900 miles on it - all from putting out parks) for a one or two day trip. This car has been in 37 states since bought in Jan 2016 running different parks and headed to County Hunter events.

Hmmm...lots of construction along US75/69 headed to OK. 20 miles of 2 lane cattle chutes while they work on improved 3 lanes each way.

Stopped at McD on the way for a quick breakfast then up to Oklahoma. First park up was Lake Texoma State Park KFF/K-2791 after hour and a half drive – in Marshall County, OK . Many park activation runs from here as you can camp here for days and

some have and made a gazillion contacts while here. Also one of closest OK parks to TX. There have been 57 previous activations from here for 2555 total QSOs. Put 80 QSOs in the log from here - nearly all CW. Marshall County has never seen so much radio activity. Used to be 'rare' – hi hi.

I run totally self contained mobile – so 'setting up' at picnic table or erecting 'end fed' wire like many park activators. Or sitting in mobile home or travel trailer using AC power in the campground. Now use IC-7100 and six foot mast on trunk deck with horizontal resonators for 40cw, 30, 20 and 17m. Old radio was ICOM 706 with half million miles and half million QSOs on it. Had a spare and never needed it. Power connector started giving me problems.

Worked county hunters in the first few parks till Winter Field Day started. This year they added a 'mobile category' for fully operational mobiles capable of operation while moving. This is the first year with that category. (heard half dozen 1-M 'mobiles' during the WFD and one 2 operator 2-M mobile).

(if you don't want your battery voltage on recent GM cars sitting at 12.3 to 12.6v, simply turn on your headlights. It will go up to 13.8v and sit there!). The IC-7100 is better than the 706 for voltage but still balks at 12.3v at the battery. 12.6 seems OK with a bit lower output.

Then north headed to Fort Washita Historic Site K-8142 in Bryan County OK . Old frontier fort - mostly a few rebuilt buildings as Confederate troops burned it to the ground before leaving in the Civil War. Put 50 Qs in the log from here. Not run that often. No camping there so is all by day visits and only Tuesday through Saturday. So far there have been 16 activations for 907 previous QSOs. Added 51 more. This is a POTA only park.

I was getting hungry so 30 minute trip to Tishomingo and a Subway there. Close to next park, too.

There you can run Tishomingo National Wildlife Refuge KFF/K-0491 in Johnston County OK. I've been here 8 times since 2016 when NPOTA started.

It was coming up on 1pm or 1900z- the start time for WFD so I'd make a few contacts. My phone went flakey so could not spot myself in new park or CH site. No problem. Put 86 Qs in the log - nearly all CW from WFD stations. Called CQ a while and did Search and Pounce (S&P) across 20m, 15m, and a few on 10M. K3Y/KL7 (special event - QRP guys) was booming in on 20M from AK but not any dx on 10m from OK.

Skip too long for most of country. There for 2 hours. This has had 27 'activations' with 1491 previous QSOs. It was a NPOTA site – one of just a few in OK. Later POTA added in state parks and Historic Sites. Moved on.

W8OP/WB8III were active in WV but didn't hear any other CH mobiles out. Worked them but you can only count them once in the log for WFD and once per park for POTA/WWFF.

Not far away, if you know where and how to get to it, you can easily run K-6378/K-5834 Texoma Washita Arm WMA. 10 miles away. I've been here 5 times before having made 235 of the total 290 QSOs ever made from here. Seems I'm the only one who has been here more than once. Not a frequently put out park!

If you head southwest on 377 from Tishomingo, it's the first named dirt road after the bridge. Maybe half mile to it. Go a half mile in past the rifle range then another quarter mile. You'll see the WMA sign.

I head that way around 3pm. First spot you can pull over is quarter mile from high power target shooting range (shooting the other way!) and there was one fellow there. A few loud pops with window down. Temp about 50F in OK all day. 20M had gone to sleep by 3:15 pm and you can only work WFD stations once per band. Not many new ones on and cellphone flakey and wouldn't come up with web pages. Hmmm....Only put 20 Q in log from here. Not run often. 15m dying as well. Checked 40m but not a signal over S3. Hmmm.... Looked at clock. Not having a lot of success. A few stragglers on 15 to work but slim pickings. Worse no check sheets on previous QSOs so didn't want to be working dupes so had to check through a hundred calls to see if I had worked them already. Don't run a computer in the car which would be very helpful for 'contests' like this to avoid dupes. You can work stations on different bands and modes.

Checked the GPS lady - said I could be home before dark in 2 hours or so if I left - so I did. Could have stayed overnight for morning fun nearby in Ardmore but didn't. 50 miles of two lane road, then 4 lanes – then major traffic after that. Home by 5:45pm after good 2 hour trip winding up on 6 and 8 lane highways as approached the QTH north of Dallas. 270 mile trip.

Sun came out as I entered TX. Had to break out the sun glasses.

PS... did a restart on phone at home and it seemed to fix the internet access problem. Darn .. should have done that earlier. Could have had more fun with POTA folks in OK. Didn't try SSB as 20M totally full of QRM here and my ears aren't up to SSB pileups.

Maybe in six months will do the park run again. Bad weather (ice) moving in this week - there and maybe here. Hunkered down after tomorrow noon for 2-3 days. Weather forecast here is 'DON''T DRIVE – STAY HOME''. OK with me as long as power stays on!

- - --

Many run POTA parks – and there are 9,800 plus of them. Others run only the WWFF (KFF) sites and only upload to WWFF. I do both uploading to both systems.

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Update – the ice storm hit. This area was 'shut down' for a few days with only a handful venturing out – those that really had to get to work. Lost a few branches in one tree out front but otherwise, no problems. Power stayed on other than few local outages due to falling trees on lines. Now, down around Austin – days and days of power outage. Seems they like their trees a whole lot and don't do a good job of trimming them back from the power lines. 250,000 in Austin without power for days as mile after mile of roads covered in broken branches and on the power lines and the feed lines to the houses.

Front tree lost a few branches to the ice storm. Had to call in tree service to get them removed from 30-40 feet up. Otherwise, OK. There were local videos of folks ice skating on streets and sidewalks after the ice hit.

Later a cold front moved through a few days later. Hours of lightning and t-storms and one crash within 300 feet. Not even storm season here in TX. Then 70s then 30s again. North wind- cold. South wind warm. Back and forth in TX this year but better than inches/feet of snow and 20 below!

Rest of month just headed over to local park (25 miles away) for an occasional weekend and for Wednesday CWT test at 1900z. Catch a few parks and work CW for an hour at 25+ WPM to keep the brain cells working. Hi hi. On the 19<sup>th</sup> of Feb, ran over to the local park on the Sunday and worked 90 stations on 10M in the ARRL CW Contest in a two hour period. Lots of EU, two SA, two Caribbean, on HI. 10M was full from 28000 to 28220! Absolutely amazing activity on 10M CW!

# Fairfield Lake State Park K-3007

Located about 90 minutes south of Dallas, the 2500 acre lake was created in 1969 when the Texas Power and Light Company constructed a dam on on Big Brown Creek to serve as a cooling reservoir for the coal fired power plant.

The lake is stocked with redfish, striper, catfish, large mouth bass, and even blue tilapia, which thrived in the year around warm waters from the power plant. Fairfield Lake has been open to the public since 1976, but the property is actually owned by Vistra Energy, which leased the land to the state at no cost.

The power plant was closed in 2018 and the the property has been for sale for about \$110M dollars. A private developer has plans to purchase the land and turn the park into a high end residential golf community. According to many newspaper articles the state never followed thru on opportunities to purchase the property which would have preserved the park.

As of 2/28/2023, it will no longer be a state park. Hope you snagged it if you are chasing parks. Over 5000 QSOs made from here – 98% on SSB or digital. While there are now nearly 10,000 state parks, wildlife areas, national monuments, state historic sites, etc, there are about several hundred that have been eliminated as duplicates or no longer 'state parks', or were listed in error (not run by state or national entity). Each state has a designated 'mapping person' who decides which entities qualify for POTA listing, and gives the coordinates so it shows up on the POTA map and in the listings for the state.

N4CD made it there to Fairfield Lake State Park a few times. There are about 90 'state parks' in TX and 200 POTA sites in TX alone. Not all counties have a park – but maybe 50% of them do. Some day I'll figure out what the percentage is. Sadly, it's the only park in that county – so you'll have to work a mobile there if you want that county after the end of this month.

Some states like DE have 100+ parks and only 3 counties. In Vermont, there are 104 parks so likely at least one in a county! New Hampshire has 193 parks! Likely at least one per county. New Jersey? 100 parks there! So much of the east coast is covered with a park in every county. Some folks have worked 8000 different parks. (US,

Canada, DX). When you get to NE and IA, not all counties have a parks. Many of the parks are bunched around major cities or rivers and many counties have no parks at all.

Once a park gets 'de-listed' you can no longer run it – but if you ran it before, or worked it before it became 'extinct' you'll get credit for doing that.

# Solar Activity

If you check the propagation banner – this one off the County Hunter K3IMC web site – you'll see we have lots of solar flux – and sunspots often well over 100. Along with the great numbers come increasing flares and solar wind and geomagnetic storms.

X.2 level flare alert!

From the Feb 15 banner:

Solar-Terrestr	ial Data -	clic	k to a	dd to web	site	
16 Feb 2023 2126 GMT	Condition	K-In	i A-In	Calculate	ed Con	ditions
SFI:174 SN: 101	Quiet	0-2	0-7	Band	Day	Night
A-Index: 29	JUNSETTIEd	3	8-13	000-400:	FUUI	Latt.
K Index, 20	Active	4	16-29			
K-Index:4/Plntry	Minor storm	5	30-49	17n-15n:		
X-Ray: C4.8	Maior_storm_	6	50-99	12n-10n:	Fair	Poor
304A: 154.9@ SEM	Severe storm	7-9	>100	Sig Nois	e Lvl:	S3-S4
SFI>180 A<8 K<3=E-W open SFI>180 A<8 K>3=N-S open SFI>250 A>30 K>3=Aurora						
http://www.nOnbh.com - Copyright Paul L Herrman 2023						

Arrgh! A index of 29 and K of 4. The K was up at 5 earlier. That doesn't mean the bands are 'dead' but it means there might not be a whole lot of SSB and CW signals. The digital frequencies (FT-8) will be full of activity. Took a few hours to recover some. Two days later, K back to 1.

Propagation 'good' on 17m and up.

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The planetary or Kp index has values that range between 0 and 9. The values of the kp index give a good indication of geomagnetic activity: values between 0 and 1 indicate quiet magnetic conditions and would give rise to virtually no degradation in HF band radio communications conditions. Values for the kp index between 2 and 4 provide an indication of unsettled magnetic conditions that indicate the possibility of some degradation on the HF bands for radio communications. A value of 5 signifies a minor storm and 6 a larger one. Values through to 9 indicate steadily worsening conditions with 9 representing a major storm that is likely to result in a blackout in HF ionospheric propagation for several hours.

#### A Index

The A index is a linear measure of the Earth's field. As a result of this, its values extend over a much wider range. It is derived from the K index by scaling it to give a linear value which is termed the "a" index. This is then averaged over the period of a day to give the A index. Like the K index, values are averaged around the globe to give the planetary Ap index.

Values for the A index range up to 100 during a storm and may rise as far as 400 in a severe geomagnetic storm.

A index & Kp index relationship

Although the A index and K index are different values it is possible to relate these indices together. A summary of this relationship is given int he table below. Relationship between Kp index and a Index

Ap Ir	ndex	Kp Index	Description
0	0	Quiet	
4	1	Quiet	
7	2	Unsettled	
15	3	Unsettled	
27	4	Active	
48	5	Minor storn	ı
80	6	Major storm	ı
132	7	Severe storr	n
208	8	Very major	storm
400	9	Very major	storm

Geomagnetic and ionospheric storms are very closely related. However they are separate effects. Geomagnetic storms relate to disturbances of the Earth's magnetic field, and ionospheric storms relate to disturbances of the ionosphere. However it is found that geomagnetic storms often lead to ionospheric ones, but not on every occasion. Interpreting the figures

The easiest way to use these figures for radio propagation prediction is to enter them into radio propagation prediction software. This will provide the most accurate prediction of what might be happening. These programs will take into account factors such as signal paths because some will cross the poles and they will be far more affected by storms that will those across the equator.

However it is still possible to gain a good insight into what the figures mean in terms of radio propagation for all forms of radio communications using ionospheric propagation purely by assessing them mentally. Obviously high levels of solar flux are needed for good radio communications propagation. Generally the higher the flux the better the conditions will be. However the levels need to be maintained for some days. In this way the overall level of ionization in the F2 layer will build up. Typically values of 150 and more will ensure good HF propagation conditions, although levels of 200 and more will ensure they are at their peak. In this way the maximum usable frequencies will rise, thereby providing good conditions for HF band radio communications.

The level of geomagnetic activity has an adverse affect, depressing the maximum useable frequencies. The higher the level of activity and hence the higher the Ap and Kp indices the greater the depression of the MUFs. The actual amount of depression will depend not only on the severity of the storm, but also its duration.

Having an understanding of the solar indices is of great help when using HF radio communications, be it two way radio communications, mobile radio communications, radio broadcasting or any form of point to point radio communications using ionospheric or HF propagation. It helps with radio propagation prediction and enables a quick assessment to be made of the possibility of communications being disrupted. Also having a general understanding enables any errors in entering data into the programs to be quickly noted and corrected. In this way it enables the best to be made of the radio communications equipment and the most reliable communications to be obtained.

Source: <u>https://www.electronics-notes.com/articles/antennas-propagation/ionospheric/solar-indices-flux-a-ap-k-kp.php</u>

# chatGPT and POTA

You may or may not have heard of chatGPT. It's an AI program that allows you to ask questions or write short (or long) synopsis of just about anything. Available on the web. Sometimes the answers make sense. Sometimes not so much. Kids love it as it will do their homework assignments, write essays, book reports, etc. Over 100 'novels' written by/with help of chatGPT, are for sale on Amazon. So...

One fellow (John D Tate) posted on Facebook two questions he posed to chatGPT:

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So I asked the Great Oz (chatGPT) to perform a task.

# Write me a brief synopsis of why Parks on the Air is good for the Amateur Radio community.

Parks on the Air (POTA) is a popular radio activity that involves contacting amateur radio operators who are operating from designated parks and protected areas around the world. POTA is good for the amateur radio community in several ways.

First, POTA encourages hams to explore and appreciate the natural environment while enjoying their hobby. Participants can visit parks, wildlife refuges, and other protected areas, learn about local flora and fauna, and operate their radios from beautiful locations.

Second, POTA provides an opportunity for hams to work new stations and earn awards and recognition for their accomplishments. This motivates operators to improve their skills and equipment, which benefits the entire amateur radio community.

Third, POTA helps to promote and preserve the natural environment by raising awareness of protected areas and encouraging conservation efforts. Many POTA operators use environmentally-friendly equipment and practices to minimize their impact on the ecosystem. Finally, POTA is a social activity that fosters community and camaraderie among amateur radio operators. Participants can share their experiences, tips, and stories, and connect with fellow hams from around the world.

Overall, Parks on the Air is a positive and beneficial activity for the amateur radio community that promotes the enjoyment of nature, encourages skill development, supports conservation efforts, and builds a sense of community among operators.

And - next task:

### Is ARRL field day a contest?

Yes, the ARRL Field Day is a contest in the United States and Canada that takes place annually on the fourth full weekend in June. The contest is sponsored by the American Radio Relay League (ARRL) and its purpose is to promote emergency communications preparedness and to test the capabilities of amateur radio operators.

During Field Day, amateur radio operators set up temporary stations in remote locations, such as parks or wilderness areas, and try to contact as many other amateur radio operators as possible over a 24-hour period. The event emphasizes the use of emergency power sources and the ability to operate in a simulated emergency situation.

While the event is primarily focused on emergency preparedness, it is also a contest, with participants competing to make the most contacts and score the highest number of points. The contest element adds to the excitement and fun of the event, and encourages participants to test their skills and equipment under challenging conditions.

Next question:

### Is Parks on the Air a contest?

Answer: Parks on the Air (POTA) is not a contest, but rather a radio operating activity and a way for amateur radio operators to enjoy the outdoors and promote amateur radio. POTA is a program that encourages amateur radio operators to set up portable radio stations in state and national parks, forests, and other protected areas, and make contacts with other operators around the world. The goal is to promote amateur radio and showcase the natural beauty of these areas.

While POTA is not a contest, there is an element of friendly competition among participants to make as many contacts as possible from different parks, and to collect

awards and recognition for their achievements. However, the focus is on participation and enjoyment, rather than competition.

POTA has become a popular activity among amateur radio operators, particularly during the COVID-19 pandemic, as it allows them to safely and responsibly enjoy the outdoors while practicing their hobby.

- -

So I set up an account and asked chatGPT the following question:

### What is ham radio county hunting?

Answer: Ham radio county hunting is a popular activity among amateur radio operators, also known as "hams," in which they attempt to contact and communicate with other hams located in each of the counties of a particular region or state. The goal is to contact as many counties as possible, with the ultimate goal being to contact all of them within a particular state or region.

Hams use their radios to transmit and receive signals over the airwaves, and they exchange information such as their call signs, signal strength, and location. In county hunting, hams will often use special software or tools to track which counties they have contacted and which ones they still need to reach.

County hunting can be a fun way for hams to challenge themselves and explore different parts of their state or region, while also connecting with other hams and building relationships within the amateur radio community. Some hams even make a competition out of county hunting, with awards and recognition given to those who are able to contact the most counties within a particular area.

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Not too bad for a 'computer'. AI (Artificial Intelligence) is going to work it's way into everything! Microsoft is incorporating into it's search engine BING. You'll see traces of it everywhere.

- - --

Then I asked it 'Who sponsors the ham radio county hunting awards? '

this was the answer:

"The sponsors of the ham radio county hunting awards may vary depending on the specific award program. However, some organizations that commonly sponsor these types of awards include amateur radio clubs, county hunting associations, and radio equipment manufacturers. For example, the National County Award program in the United States is sponsored by the Mobile Amateur Radio Awards Club (MARAC), while the International County Hunters Club (ICH) sponsors the County Hunter Awards. Other sponsors may include state or regional amateur radio organizations, ham radio retailers, or individual donors."

Well, that's quite a bit confused by at least it mentioned MARAC!.

- - -

### Then I asked it 'What is the best ham radio mobile unit? '

answer:

There are many good ham radio mobile units available on the market, and the best one for you will depend on your specific needs and preferences. Some popular and highly rated options include:

Yaesu FT-857D: This is a versatile and portable unit that is suitable for both mobile and base station use. It covers HF, VHF, and UHF frequencies and has a maximum output power of 100 watts.

Icom IC-7100: This is another all-mode, all-band transceiver that is designed for mobile use. It features a large touch screen display and has a maximum output power of 100 watts.

Kenwood TM-D710G: This dual-band mobile unit is designed for use on VHF and UHF frequencies and includes a GPS receiver and APRS functionality. It has a maximum output power of 50 watts.

AnyTone AT-D578UV Pro: This dual-band mobile unit is designed for use on VHF and UHF frequencies and includes DMR and analog modes. It has a maximum output power of 50 watts.

Yaesu FTM-400XDR: This dual-band mobile unit is designed for use on VHF and

UHF frequencies and includes APRS and GPS functionality. It has a maximum output power of 50 watts.

Ultimately, the best ham radio mobile unit for you will depend on your specific needs and preferences, such as the frequency bands you want to operate on, the features you need, and your budget. It's important to do your research and consider all your options before making a purchase.

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#### Next question: What is the shortest route to visit all State Parks in Texas?

Determining the shortest route to visit all state parks in Texas is a complex problem known as the "traveling salesman problem" (TSP). It involves finding the shortest possible route that visits a set of locations (in this case, state parks) exactly once and returns to the starting location. The number of possible routes increases exponentially as the number of locations increases, making it difficult to find an optimal solution for larger sets of locations.

However, there are several algorithms and software programs available that can generate approximate solutions to the TSP. One popular algorithm is the "nearest neighbor" algorithm, which starts at a random location and then selects the nearest unvisited location until all locations have been visited. Another popular algorithm is the "simulated annealing" algorithm, which involves iteratively swapping locations and accepting swaps that decrease the total distance traveled.

It is important to note that even with these algorithms, finding the optimal route for visiting all state parks in Texas may still be challenging due to the large number of parks and the vastness of the state. Additionally, factors such as park hours, road closures, and other travel logistics may affect the feasibility of visiting all parks in a single trip.

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Didn't provide an answer – but the answer is complex.

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### Question: What is the best mobile antenna for high frequency operation?

Answer: The choice of the best mobile antenna for high frequency (HF) operation

depends on various factors such as the frequency range, power output, installation requirements, and user preferences. However, some of the commonly used mobile antennas for HF operation include:

High-Quality Screwdriver Antennas: These are variable-tuned antennas that are easy to install and offer excellent performance across a wide frequency range. They can be adjusted while driving, making them ideal for mobile operations.

Magnetic Loop Antennas: These antennas are compact and can be easily installed on a vehicle's roof or trunk. They are highly directional and offer good performance in urban and noisy environments.

Hustler HF Antennas: These antennas are designed for high-performance HF mobile operation and can handle high power outputs. They are made of high-quality materials and are easy to install.

Tarheel HF Antennas: These antennas are popular among mobile operators and can be adjusted from inside the vehicle. They are designed for use on vehicles with limited ground planes.

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OK...enough. You can ask it all sorts of questions. Like what is quantum computing..or what was the War of the Roses.

## ARRL CW DX Contest

Is 10M back? It's been a long long time since 10M was 'great'. A small sample of the current situation. Normally in DX contests, 20M is the band to be on. Now? Here's a few stats from the 3830 reflector of bands/QSOs. Look at how many QSO's made on 10M!

#### Call: W2FU

Operator(s): KØSM K2UA N2MG N2PP N2ZN Station: W2FU

Class: M/2 HP

QTH: WNY Operating Time (hrs): 48 Location: USA Summary: Compare Scores Band QSOs Mults 160: 61 37 80: 469 68 40: 1159 100 20: 1372 106 15: 2027 117 10: 2068 113 Total: 7156 541

#### Call: K9CT

Operator(s): AA9H K9CT KB9OWD N9CK N9CO WT2P Station: K9CT

Class: M/2 HP QTH: IL Operating Time (hrs): 48 Location: USA Summary: Compare Scores Band QSOs Mults 160: 34 25 80: 384 70 40: 1398 99 20: 1285 109 15: 1808 114 10: 1843 114 Total: 6752 531

### Call: K3LR Operator(s): K3LR K3UA K4RO KG5HVO N2NC N2NL N2NT N3GJ N3SD N8AMY VE3RA W2RQ WF7T Station: K3LR

Class: M/M HP QTH: PA Operating Time (hrs): 48 Location: USA Summary: Compare Scores Band QSOs Mults 160: 135 47 80: 747 80 40: 1811 112 20: 2179 123 15: 2348 126 10: 2294 118 Total: 9514 606

Note: They worked DXCC on 4 bands, with 118 countries on 10 and 126 on 15m.

Note the ratio of Qs on 10M vs 20M. Above stations -

Call: NS2N Operator(s): NS2N Station: NS2N

Class: SOAB HP QTH: WNY Operating Time (hrs): 22 Location: USA

10M was hot. Band filled for the lower 200 KHz on CW at times. Stations on top of stations calling CQ. It's going to get even better!

Technician Licensees are having a ball on 10M SSB and FT-8. Now for county hunting – the skip is usually 1500 miles – so you won't work all that many counties if you live in

the middle part of the country much of the time. HI and AK? No sweat! Want to work 10M counties? Head to the coasts – or run with a partner and work each other on 10M and other bands to fill in lots of band-counties! (or as some do, use a remote station).

# Michigan Mini 2023

The 2023 MARAC Michigan Mini is being announced. Mega thanks to Dorie, N8WTQ, for picking up the task on this excellent MARAC get-together.

The dates are April 20-22 at the Springhill Suites hotel in Midland, Michigan. Address is 800 Joe Mann Blvd, Midland, MI 48642. Good highways to get there.

The negotiated rate for each room is \$119 plus tax. Breakfast is included. There will be a conference room for us to gather in each day. Rate with tax about \$132.

The Banquet is Saturday night 6 pm with picture at 5 pm. If you attend the banquet, you probably want to plan to leave on Sunday April 23.

Registration is \$30 with \$15 for the cost of each additional badge for spouses. Banquet tickets include dinner the last night at \$40 per person.

Go to the marac.org website for a link to more info and to the Registration page and hotel page. You can register on line via the link.

Or go straight to the link of MI-Mini.marac.org Time is short, so get your plans made soon.!

SpringHill Suites Midland 800 Joe Mann Boulevard Midland, Michigan 48642 (989) 837-2700

You can register on line – send in payment via Paypal or by sending in check. Do it now! Time is getting short!

## Awards Issued

### **Roadrunner Award**

N0KV attained 975 last counties on 5 May 2017. He was assigned #15 WB8III attained 50 last counties on 1 February 2023. He received #364 N5MLP attained 375 last counties on 24 October 2022, He received #57 N8KIE attained 1300 last counties on 7 February 2023. He received #7 W4SIG attained 975 last counties on 16 February 2023. He received #16

#### **Single Band Award**

N1API attained Level 1000 on 12 meters on 17 January 2023. He Received #2

#### Master Gold Award

N1API attained Master Gold on 27 May 2021. He received #74

#### **Bingo Awards**

K5GE attained Bingo III on 7 February 2023. He received #46 N8KIE attained Bingo V on 7 February 2023. He received #9 N5MLP completed Bingo IV on 11 November 2022. He received #14

#### Ran all State

WB8III completed West Virginia on 28 January 2023. He received #28

KE4UP completed Texas on 17 February 2023. He received #36
KE4UP completed California on 5 January 2022. He received #30
KE4UP completed Nevada on 3 November 2021. He received #36
KE4UP completed New Mexico on 13 January 2022. He received #35
KE4UP completed Arizona on 9 January 2022. He received #45

N5MLP completed Arizona on 16 September 2022. He received #46 N5MLP completed California on 17 October 2022. He received #31 N5MLP completed Oregon on 18 October 2022. He received #30 N5MLP Completed Washington on 13 October 2022. He received #34 N5MLP completed Nevada on 19 October 2022. He received #37 N5MLP completed Utah on 22 October 2022. He received #32

#### **US Presidents Award:**

N5MLP completed the award on 4 April 2008. He received #61

#### Native American Award:

N5MLP completed the award on 6 July 2008. He received #66

### **Events for County Hunters**

Several good QSO Parties this month - likely all of OK on the air – from mobiles and fixed stations. Even a 10M contest where skip should be great from NA to South America. Could be lots of fun.

The following from the ARRL March Contest Corral – events for County Hunters.

Mar 11 1200z to Mar 12 1200z 28 MHz South America 10m Contest CW Ph RS(T), CQ zone sa10m.com.ar/wp/rule

Mar 11 1500 - 0200 UTC on Saturday, 1500 - 2100 UTC Sunday 3.5-28, 50 Oklahoma QSO Party CW Ph RST, OK county or SPC www.k5cm.com/okqp.htm (Warning – this is the weekend for change to Daylight Saving Time!)

Mar 11 1900z to Mar 12 1900z 1.8-28 Idaho QSO Party CW Ph RS(T), ID county or SPC www.pocatelloarc.org/idahoqsoparty

Mar 12 1800z to Mar 13 0100z All Wisconsin QSO Party CW Ph CW, Phone and Digital (RTTY, PSK, Olivia, Feld-Hell). FT8/FT4 QSO's are not accepted 1.8 MHz to gigahertz – no WARC

WI county or SPC www.warac.org/wqp

Mar 18 1400z to Mar 19 2359z All but No WARC

### Virginia QSO Party CW Ph Dig

Serial, VA county or SPC www.qsl.net/sterling/VA\_QSO\_Party

Lots of other smaller contests/events listed at:

http://www.arrl.org/files/file/Contest%20Corral/2023/March%202023%20Corral.pdf