County Hunter News OnLine

January 2023 Volume 19 Issue 1

Welcome to the On-Line County Hunter News, a monthly publication for those interested in ham radio county hunting, with an orientation toward CW operation. We also cover some park chasing activities these days. Contributions of articles, stories, letters, and pictures to the editor are welcomed, and may be included in future issues at the editor's discretion.

The County Hunter News will provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

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CW County Hunter Frequencies are 14.0565, 10.124.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, there is SSB activity now occasionally on 7188 KHz. The CW folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB. (21.336 and 28.336)

You can see live spots of county hunter activity at ch.W6RK.com

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

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

http://countyhunter.com/cq.htm

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

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

find information on these awards and the rules at:

http://marac.org/awards.pdf

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

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

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

Notes from the Editor

N4CD Rumblings

- 1) Sunspots We got them. 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 improving. Headed up in the sunspot cycle. At this point, we are ahead of predictions for the rise in sunspots. Who knows? This might be a record setting cycle!
- **2) COVID, etc.** Now we are back to the big 3 Covid, RSV, and flu. Of course, you can get the latest booster for COVID and the latest shot for flu this season. In 2022, COVID was the 3rd leading cause of death. The majority of those for folks older than 65. Children are filling hospital emergency rooms with RSV.

From what I can see around here, few are wearing masks. Millions back to eating out and restaurants back to normal business.

3) Mobile trips – With the winter season upon us, and things like the Siberian Express and 'bomb cyclone' affecting much of the USA, trips are way, way down. Up in MT, there have been blizzard conditions with 30 below and 50-60 below wind chills. Buffalo NY got five feet of snow with 60+ mph winds. The deep freeze covered 200 million US residents. Ed, K8ZZ up in MN is enjoying 30 below temps and worse

wind chills there. Plus snow.

4) The electric grid and temps

Even in north TX, temps hit near 10 degrees and tens of thousands of frozen water piles led to emergencies. At least the TX grid held up. Meanwhile, in TN, connected to the eastern grid, there were rolling blackouts. Hmm...so much for grid redundancy as every state was maxed out. What is almost hilarious is with the push for electrification of houses, moving from 'fossil fuel' gas furnaces to electric heat, twice as much natural gas was burned making electricity to inefficiently heat homes with electricity when they would have burned half that amount in gas if they had natural gas heating. So the TN grid cratered because most homes there now have electric heat. The winter season is jst starting, too.

New England and the mid-Atlantic states, with it's 'you won't build natural gas pipelines', also struggled to barely keep up. Seems you just don't order up imported natural gas from outside the country on instant demand and get it. Nothing like having a pipeline to US domestic natural gas.

5) Happy New Year!

Another year has gone by. If you're reading this, glad you are still with the county hunter community. Year 2022 was a fun year with lots of mobile activity and trips, a great Annual Convention in MT, a good MI Mini in MI. The Dayton Hamvention was back in business. Parks on the Air contributed to over 1,000 counties being 'activated' with loads of cw, FT-8 and SSB activity from all around the country. Even better, Karl, K4YT went to Kalawao for a desperately needed 'last county' for dozens of county hunters. Many finished up awards after that.

Others finished up USA-CA award with CQ Magazine. Which, by the way, managed to get most issues of CQ printed and is now up to date.

Inflation as eased a bit. Gas prices have dropped quite a bit. Gas is about \$2.40/gal in TX now.

AI5P Trip Report

My recent trip to my home state of Arkansas led me to a stop at the Fort Smith National Historic Site in Sebastian County. This is also a Parks on the Air location with the designation K-0822 for the fort and K-3791 for the Trail of Tears. A total of 51contacts were made - 27 on CW and 24 on SSB. (also KFF-0822 in WWFF system).

From the site brochure:

Shaped by a diverse cast of memorable characters - soldiers, Indians, outlaws, and lawmen - Fort Smith National Historic Site explores 80 years of turbulent history on the western frontier. Discover compelling stories of two frontier forts, the tragic Trail of Tears, and the historic jail and federal courthouse of Judge Isaac C. Parker.

The first fort (1817-1824) was built to keep peace in the Arkansas River Valley between the native Osage and newly arriving Cherokee. The second fort (1838-1871) saw activity during the U.S. - Mexican War, the California Gold Rush, surging western migration, and the Civil War. After the Civil War, the military closed the little-needed fort in 1871.

The fort became the site of the Federal Court for the Western District of Arkansas (1872-1896) which had jurisdiction over the Indian Territory.

The former enlisted men's barracks became the courtroom and the offices of the U.S. Marshal, U.S. Commissioner, and Court Clerk. Over the next 24 years, hundreds of U.S. Deputy Marshals rode out from the court into Indian Territory to maintain law and order.

Judge Isaac C. Parker, although called "the hanging judge," tried to create "the moral force of a strong court." He was an honest judge who opposed the death penalty and believed in rehabilitating prisoners whenever possible. His jurisdiction covered part of Arkansas and all of the Indian Territory. During his 21 years on the bench, Parker presided over 13,000 criminal cases; 344 for murder or rape - both carried a federal mandatory death sentence. Judge Parker sentenced 160 men to death, of those, 79 were actually hanged.



Judge Parker



Judge Parker's Courtroom

The visitor center, movie theater, extensive exhibits, and the gift shop are in the former basement of the 1888 jail. It's well worth a visit if you are ever in Fort Smith, Arkansas.

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Visitor Center

You might not remember, but the beginning of the 1969 movie True Grit starring John Wayne, Glen Campbell (a native Arkansan) and Kim Darby is in Fort Smith with the plot tracking a murderer in the Indian Territory. Great movie!

Rick AI5P

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Note de N4CD - this site became 'popular' with ham radio operators in 2016 as the ARRL came up with the National Parks on the Air. It included historic sites like this one so many wandered here in 2016.

If you ever wind up there, there is a nice little trolley and transportation museum there — well, hope it is still around. Has some street cars from the day when many cities including Ft Smith had trolley systems back in the early 1900s — many which ran up till the 1950s when personal cars and gas powered buses , plus folks moving 'to the suburbs' , - ended the era of 'trolleys' in most cities.

"The Fort Smith Trolley Museum is a streetcar and railroad museum in Fort Smith, in

the U.S. state of Arkansas, which includes an operating heritage streetcar line. The museum opened in 1985, and operation of its streetcar line began in 1991"

You can take a short ride on an antique trolley around a local loop, too!

https://www.fstm.org/

K0BAK Trip Report

No Sand, Just Ham

In 2019, my wife and I enjoyed a mid-winter break by flying from our cold Philadelphia area home to warm Marco Island Florida. When we made our reservations in May 2021, we thought a return to Marco in January would occur well after acute Covid dangers had passed. We were wrong. The biggest Covid surge yet was raging when the time came to fly to our rental condo, but with thousands already spent, we reluctantly continued to press on with our plans.

Everyone enjoys a warm climate break away from cold, ice, and snow. But while my wife is in her favorite environment lounging on a beach all day, I am one of those oddballs who dislikes every part of the beach experience. My idea of a fun trip is to operate ham radio from parks as an "activator" in the popular and growing Parks On The Air program ("POTA", parksontheair.com). Just a couple of weeks before leaving for Florida, I decided to bring a ham station with me on an air travel trip for the first time.

Customizing my Portable Station for Air Travel

I already had a station that can be setup quickly and operated self-contained from a small car. My Hustler mobile antenna system consists of a 54-inch rigid mast and three band "resonators" (enclosed coils) with tunable whips. This is a center-loaded antenna that is more efficient than the typical base-loaded mobile or portable antenna. When parked at my operating location, I place a triple-magnet mount on the roof of my sedan and install the Hustler system on the mount with a twist of a quick-release mechanism. My radio is an Icom IC-7100, with a separate control head allowing me more choices

than a typical radio in placing the antenna coax and power cables independent of my operating position. An LDG IT-100 automatic transmatch ("tuner") integrates well with the Icom, and with a push of a button on the Icom control head, the transmatch allows me to operate on frequencies away from the natural bandwidth of the resonators. While I had a good car-portable station, several components needed to be swapped to be airplane worthy.

Right-Sizing my Battery

The number one concern was the station battery. I used a 20Ah LiFePO4 battery that can power hours of full barefoot SSB operations. Unfortunately, the reputation of lithium batteries motivated rules for carrying smaller batteries in aircraft cabins, even though a LiFePO4 battery with protection electronics is much safer than typical small consumer batteries. According to TSA rules, the maximum energy of a separate lithium battery is 160Wh. (Individual airlines can have stricter rules so be sure to check before you travel.) I bought a name-brand 12Ah LiFePO4 labeled 153Wh, which got me through TSA inspections.

Splitting a Hustler Mast

My Hustler mast was a single solid unit which was too long to fit into a standard large suitcase. It might have been possible to bring that 54" mast in a fishing rod case or other specialized carrier, but I didn't want the hassle and likely extra fee. Hustler makes fold-over masts too, so I bought the one with a center hinge. Until I got the new mast home, I did not understand that it would only fold over at most about 110°, even after removing a horizontal support. That wide "V" shape would not fit in my large suitcase. The mechanism for holding the two halves straight together during operation was just a friction collar. With only a hope that the mast would still work afterward, I cut the hinge into two separate halves. I was happy with the result—I could assemble the mast halves together as strongly as before my cut. If I had more time, I might have tried to find a screw-together mast solution, but I only had time for this literal hack.





Smaller Mount, Lesser Coupling

The last station component substitution wasn't strictly necessary. My triple-magnet mount is quite strong, such that high winds will not allow the ~7-foot-tall center-weighted Hustler antenna to move much. As you would expect, it is also quite heavy. I decided to get a single-magnet mount with integrated coax, and a less-robust quick-disconnect system to save space and weight. The first time I tried this mount at home, my radio would shut down soon after transmitting voice. After discounting a battery voltage sag problem by testing with a good AC power supply, I coiled my unneeded length of the coax through a large snap-together ferrite choke which fixed the problem. I'm guessing the single versus triple magnet coupled more poorly to the metal roof, so I had too much common mode current on the cable. Using wire counterpoise would have better improved the antenna "ground", but that would have taken time I didn't have to modify the mag mount and experiment with different wire lengths.

Mobile Charging

With a smaller battery than I am used to using, I was worried about having sufficient battery energy for my typical all-day multi-park POTA roves. To mitigate that worry, I wanted to be able to partly top-off the battery charge when driving a significant distance between park activations. The lithium battery charger I used for years supplies less than one ampere; this was fine for my old battery, which I would recharge overnight at the end of an operation day. To top off between activations while driving, I wanted a charger to be closer to the 6-ampere maximum charge current spec for my new 12Ah battery. I happened to already have a "smart" NOCO battery charger I used for AGM batteries, which also had a selectable lithium mode that supported LiFePO4 batteries. Its max

charge current was 5 amps, so that was a good choice for fast charging of my new battery. To feed the charger, I'd also need an inverter to take the car's 12vdc accessory supply and produce 120vac for the charger. I found a cheap Harbor Freight "120w" inverter with a convenient cigarette lighter plug input, which had USB sockets in addition to the AC socket so I could keep my phone charged while charging the lithium battery. In theory, this charging system would give me confidence to operate all day driving around to as many parks as possible. In practice, I forgot something vital; more on that later.

Station Component Flight Case

Another inexpensive Harbor Freight purchase got me a customizable "Apache" padded case with wheels; the case was the maximum size allowed for carry-on luggage. I was able to pack most of my station into this case which ended up weighing a reasonable 30 pounds total. The exceptions were the long mast and whips that were packed diagonally in my large checked suitcase, the lithium battery that is only allowed in carry-on, and my laptop computer that I only carry-on for obvious reasons. A last-minute addition to my kit was my handheld Rig Expert antenna analyzer; I realized that I would want it for reassurance that my reassembly of the Hustler antenna system was tuned properly. This robust unit was packed in my suitcase.



components that were packed into the Apache case

Saturday: Long Travel Day

I was indecisive for a while about checking the equipment case versus carrying it on the

plane. I finally decided to check it because even at thirty pounds it would be inconvenient to deal with along with my "personal item" containing the battery, laptop, and other items. On American Airlines, this third bag cost \$40 each way. Our flight on Saturday Jan. 8 was nearly cancelled after we sat in the plane for two hours, de-planed, waited an hour, and had a plane change that required us to schlep to another terminal. Then our pilots timed-out and a long search for replacements followed. Our scheduled 1:30pm flight was airborne a little before 9pm, yet we were grateful the flight was not cancelled. With all that walking around in the airport, I was glad I decided to check the station equipment case.

Arriving exhausted at our car rental desk only a half-hour before it closed, we signed for the small SUV I had reserved, thinking it would be spacious and comfortable for my station and all-day park trips. We made the hour-long drive down to our Marco Island condo building, to be greeted by prominent signs warning the residents that due to a repair, we would have no running water in the morning. A "perfect" end to a difficult travel day.

Sunday: Station Validation Fail

Losing Saturday and part of Sunday meant I couldn't start unpacking, assembling, and testing the station till late Sunday afternoon. I did a connectivity test by precariously mounting the antenna on a shallow balcony cap. Everything seemed to work together, but I didn't spend much time testing because I neither wanted to drop the antenna off the balcony, nor to embarrass my wife on the beach. After verifying basic completeness and connectivity, I put the station components in a shopping cart and wheeled it down to the rental SUV to install the station. The complete ~7-foot antenna was able to be carried in one piece after I figured out how to lower one of the back seats to make room for the mast.

To completely verify and tune the system, I could have gone to any open area, but decided to drive a half-hour to the nearest POTA site, Collier-Seminole State Park, so I could make some POTA contacts as the final step of the station verification. I arrived near sunset, but the friendly ranger at the gatehouse let me in anyway and didn't charge me an entrance fee with so little sunlight left. I parked near a lake for openness, got out the magnet mount to place it on the center of the SUV roof and ... no magnetic attraction. Shining a light on the roof in the semi-darkness, I realized every square inch of the roof was covered with plastic covers and parts, apparently supporting a large sunroof. I did not notice this when I picked up the SUV bleary-eyed and exhausted the night before. Crestfallen, I packed up the station while being bitten enthusiastically by twilight mosquitoes.

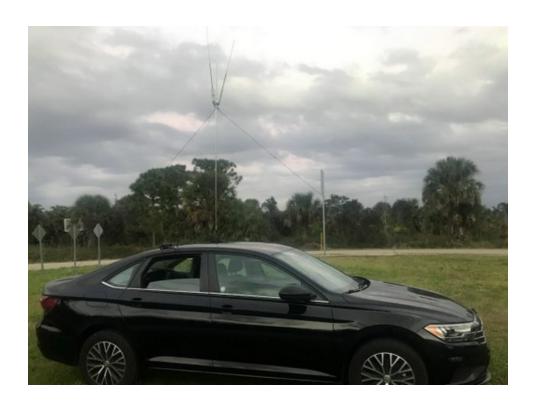
Back at the condo, I tried to find out how to get a different vehicle. With Covid staffing issues, it was impossible to get through to the airport car rental location to verify they had a vehicle with a plain metal roof I could swap into. I admit though that a requirement for a ferromagnetic roof is not a typical request from a customer. After almost an hour total on hold, including failed attempts by the central customer service center to contact the airport rental desk, I gave up trying on the phone and web to take a chance to drive the full hour to the airport after clearing out my station equipment. Luckily, the rental desk was not busy, as it had been the night before. I talked to a friendly and helpful Budget representative, and she directed me toward a sedan that she didn't think had a sunroof. I took my magnetic mount to the candidate car to be sure it stuck to the roof, and gratefully swapped my Ford Explorer for a VW Jetta. I didn't like the Explorer anyway, so I considered the Jetta an upgrade even though it was older and smaller. After the hour drive back to the condo, my energy was drained, so I planned to return to Collier-Seminole the next morning to do the same verification work I had hoped to do earlier that evening.

Monday: First Operation Day

Station Validation on Second Try

I had left the shopping cart with my ham station components in the condo's main room, so first thing Monday morning I wheeled the cart to the Jetta to arrange my equipment again. The smaller car did not support keeping the antenna mast together. I transported the antenna with the resonators attached to the top half of the mast with the bottom half of the mast separate, the parts to be assembled at each operation location. Arriving back at Collier-Seminole I stopped at the gate to buy a statewide park pass, which might not have been a good value for me during this trip but it would show my appreciation for Florida's extensive park system. At the same lakeside parking spot as the night before, I assembled the antenna on the magnetic mount, and measured a reasonable resonance point in the voice portion of the three bands supported by the three resonators. While I could have adjusted the whips to get resonance closer to the middle of my typical operation frequencies, that process involves tuning iterations I didn't want to spend time on, so I declared the tuning "good enough" in combination with my transmatch.

Operating in Mid-Atlantic parks, I was used to making most of my daytime contacts on 40m; down in Florida I naturally started on 40, but after struggling to make two contacts, I switched to 20m to make 31 QSOs. When I later posted this experience on the Facebook group, prolific Mid-Atlantic POTA activator Kerri KB3WAV remarked that she had the same experience, so I stuck with 20m during my time in Florida with reliable results.



Three More Quick Activations

The next three parks on my plan were along the famous Tamiami Trail (U.S. Route 41 through the Everglades). I took advantage of KN4SWS's suggestions to operate in park lots just off the road at the first three sites, where I made around 20 contacts each. Those three were reasonably close together, so I wasn't worried about my freshly charged battery enough to justify trying to charge it between stops. My next location was a bit farther away at the northernmost official visitor center of Everglades National Park, so I wanted to give my battery a quick charge while driving there.

Charging Failure due to Rule #1 Violation

At home, I had built adapters to allow me to easily connect and disconnect the battery from my radio, and to connect the battery to the charger I would use in the car. Anderson Powerpole connectors were the obvious choice for having good electrical and mechanical connections while being easy to connect and disconnect in the field. The

battery had F2 Faston tab terminals common for batteries of that size; I found that standard blue (14-16 AWG) female quick disconnect crimp terminals worked well. My NOCO battery charger uses a proprietary battery connector with standard adapters available, one of which is an SAE Quick Disconnect that I bought. I already had SAE to Powerpole adapters from another project available, so I should be good to go for battery charging: Battery terminals to blue tab connectors to a short pair of wires to a Powerpole pair, mated to one my existing Powerpole to SAE adapters, mated to my new SAE to NOCO adapter. Everything in that chain of adapters connected successfully. But I did not try charging the battery with that system, I only charged the battery at home with my original NOCO spring clamps. This is a violation of rule #1 of portable ham operations: test everything together just before you pack the kit. I know this rule, I have advised many new POTA operators of this rule, I generally live by this rule. But not this time.

Before I left for the Everglades visitors center, with the car running I connected the DC-to-AC inverter to the car cigarette lighter, the NOCO charger to the AC output of the inverter, and lastly the chain of adapters from the charger ending in a Powerpole pair to the Powerpole pair on the battery adapter. Instead of the reassuring blue light indicating a lithium battery charging operation, the charger had one of its several red symbol lights on that I hadn't seen lit before. It took me a few moments to realize that the plus and minus signs with a circular arrow around them meant reversed polarity. Taking apart my chain of adapters I realized that my SAE to Powerpole adapter connected the red positive Powerpole to the female half of the SAE connector. This was correct if the SAE connector was coming from a battery, but wrong if the SAE connector was coming from a battery charger—the recessed female side was meant to protect against shorting a vehicle battery positive terminal against vehicle chassis ground. I was livid with myself, because if I had either compared the SAE connector to my old charger, or verified charging at home, I would have caught and easily fixed this problem before packing for Florida.

One out of Three Ain't Good

Resigned now to wondering when my battery would be exhausted, I continued to the Everglades National Park Gulf Coast Visitors Center in Everglades City. I set up in the modest parking lot, began calling CQ using the 7100's convenient built-in repeating voice keyer, and looked for a cell phone signal to get my laptop on the Internet to spot myself on the POTA web site. (Self-spotting is encouraged in POTA and instantly attracts park "hunters.") Though I had a minimal cell connection indicated on my phone, the data connection was not dependable. Without a spot, making a contact willing and able to spot me on POTA takes considerably longer. After about 10 minutes, I began to worry about the battery energy draining from the repeated transmitting, and reluctantly

gave up in favor of saving the battery for two more POTA sites on my plan.

The drive north to the next site included seeing my first "Panther Crossing" road signs as I drove through the large Florida Panther National Wildlife Refuge to the only area within the Refuge with public trail parking. I picked a gravel area close by the entrance for its openness for RF, and to be close to the highway for a better cell signal than the previous stop. While this meant I parked directly underneath high voltage power lines, the modest RF noise was mitigated by the 7100's noise blanker. With spotting I made 21 SSB contacts in 11 minutes on 20m, a typical result during my trip. (The minimum number of contacts for a successful POTA activation is 10 within a UTC day.) Continuing my rove, I disconnected the battery and packed up for the next site about 20 minutes east on Interstate Highway 75.

Florida's Alligator Alley, now I-75, features direct exits and stops for recreational use. One of those is a large parking area connected to separate highway rest stops on the huge Big Cyprus National Preserve and is also on the 1500-mile Florida Scenic Trail. This makes that parking area a two-for-one ("2-fer") POTA site because activators and hunters get credit for both sites on each contact. I kept the two windows facing the loud highway up and parked the car with the intense sun at the rear to lessen heating and glare. Although it was moderately breezy, I set up the antenna without guy ropes and connected the radio to the battery. The radio would not turn on even after checking connections. I installed a Powerpole-terminated volt-amp meter inline at the battery, but the meter did not turn on. The battery was giving zero volts, or at least below the minimum needed by the volt-amp meter. I was especially disappointed because this site was a 2-fer and was more than hour away from our condo so I now didn't know if I'd be able to activate it all on this trip.

Charging my Dead Battery is Harder than Expected

To charge the battery with the equipment I brought to Florida, I had to change the polarity of one of the adapters in the chain of connections needed for charging. Although I could have easily swapped the Faston connectors on the battery terminals just during charging, I thought that was dangerous because during a long fatiguing park rove I could forget to swap them back before connecting my radio, with a possibility of radio or battery damage due to wrong polarity. Instead, I decided to do a proper fix by swapping the short wires on the SAE-to-Powerpole adapter. At home, this would have taken five minutes because I already had the cutter, wire stripper, splice terminals, and terminal crimper. Although I didn't bring any of that with me to Florida, I was pretty sure I could

find a cheap crimp tool and crimp terminal set at a Harbor Freight Tools store. I found one in Naples 45 minutes away; when I got there I was grateful to find not only a crimper/stripper/cutter combo, but the tool was packaged with a small set of crimp terminals including the butt splices I needed. After a 30-minute drive to the rental condo, I was quite tired but ready to reverse the polarity of my adapter and charge my empty battery.

The wires between the SAE connector and Powerpoles were short, so I was happy my butt splice installation on the swapped wires was successful the first time. Connecting the battery to the charger, and the charger to AC, I expected a blinking blue charging indicator light. Instead, I got ... nothing. Did I discharge the battery so badly it was damaged? Was the charger defective? I had used other lithium batteries on portable ham operations for more than five years, and never had this happen before. I first suspected I got a dud battery. As I dug into the Web, I relearned some lithium battery basics I had forgotten: Even though the battery continued delivering current right to the end of my previous activation, apparently the battery management system ("BMS") was now protecting the lithium cells by cutting off terminal voltage. It would not turn on again until it got enough of a charge. But my "smart" charger was so smart it refused to charge because it couldn't see any voltage from the battery. What I thought I needed was a "dumb" charger specifically for 12v (nominal) LiFePO4 batteries that would deliver the initial 14.4 charging volts even though the charger didn't see any voltage from the battery.

Amazon offered plenty of simple lithium chargers that should have worked. None of them could be delivered any earlier than Thursday, leaving only one day of ham operations before we returned to Philly on Saturday. Frustratingly, I could have gotten one delivered to my home the next day Tuesday, but not to this area of Florida. Next, I called my new Florida ham buddy John KN4SWS, asking if he had a lithium charger I could borrow or if I could leave my battery overnight at his house to get charged. While he had a charger and was willing to let me use it, his charger had a barrel connector for Bioenno batteries. I jokingly said I could make that work by cutting off the barrel connector and crimping on Faston connectors using my new crimp tool set. John then suggested a battery specialty store in Naples that could have a simple lithium charger. I planned to drive to the store at their opening time the next day.

On Tuesday morning, we drove the 40 minutes to the Naples battery store. While the storekeeper was trying to be helpful, his lithium selection was surprisingly limited, and he had no simple lithium charger in stock. He suggested a simple charger that looked like it was meant for SLA batteries, but I was desperate and bought the charger with assurances I could return it. Our 50-minute drive back to the condo was followed by an

unsurprising disappointment that this new charger did not work with my battery. I am embarrassed to admit that it was only after this failure that I started looking for a solution using the charger I brought from home. The single-sheet glossy user guide from NOCO only described typical usage for batteries that were not severely discharged. Deeper sleuthing uncovered a more detailed manual that documented a "force mode" that could be tried if the battery voltage was too low to be detected. With the NOCO charger now connected to my battery, I mashed the battery-type button for more than the 5 seconds required to enter "force mode". The four red error condition lights were continuously lit in sequence, which I assumed meant there was a problem. Still, it was some sign of life, so I left it alone to do other things in the condo. Every few minutes, I checked but saw no change in the light display. After around 20 minutes, I came back to see that the normal blue lithium charging indicator was blinking. I was surprised and happy, and let the charger continue to work until I got to a 90% done indication. While this was only a bulk charge, and I really should have left it alone to be sure the BMS was done with cell balancing, I was excited to get back out on the road to activate more parks on my list.

Tuesday Afternoon Activations

My list of candidate POTA sites and their locations I had prepared at home on a spreadsheet allowed me to quickly plan a trip that would take me first to the Naples battery store to return the charger I bought there, then to three or possibly four parks near the Gulf shore. After the battery store, Delnor-Wiggins Pass was a short drive; there I used my Florida Parks Pass for the second time and parked at a boat launch parking area near the entrance. RF noise that came and went periodically made some contacts difficult, but I was happy making any contacts after my battery debacle. Further north along the shore was the romantically named Lovers Key, where instead of my planned location I noticed a large open signed field on the other side of the state road. Driving slowly over the sandy potholed park road, I stopped just before I drove in front of a golfer practicing his short game from behind his car, aiming for the field as I was. We had a short conversation about golf and ham radio before I set up behind his hitting area, getting 18 contacts on 20m, including NL7V in Alaska.

The next leg of my rove was long enough to justify charging the battery enroute. I connected everything as I had on Monday, but this time, I saw the expected blinking blue lithium charging light because the battery was still charged enough to present a voltage to the smart charger. With about 100w output, my cheap "120w" inverter whined and had a faint electrical smell, but continued to do its job for the rest of the week

without dying or catching fire. After all my miscues, the charging-while-driving system I had built finally worked to keep the battery fresh.

Continuing my shore drive north, I realized too late that there was a significant slowdown along my route, with no alternatives because of limited access to the barrier island. After a crawl through town, instead of an accident or road work, I saw that the slowdown was due to throngs of people enjoying themselves in the beach town of Ft. Myers Beach. Crossing to the mainland and then back over a long toll bridge to Sanibel Island, I slowly reached J.N. Ding Darling National Wildlife Refuge a full hour past my schedule and after its visitor center's closing time. An empty overflow parking lot for the visitor center provided an open area to operate. I was glad to contact 3 other activators in parks as well as several on-air POTA friends. Alaska, Nova Scotia, and the Dominican Rep. added DX fun to the twilight-enhanced 28 contacts here.

The day had been long, so I asked Google Maps to show me the way back to our Macro Island condo, more than 2 hours away. A little less than an hour later I noticed, as POTA activators tend to do, a brown direction sign along that route back. It indicated that the next right would take me to one of my secondary operating locations for Estero Bay Preserve. I could not resist the temptation to activate a fourth park that day, so 10 minutes later I parked in the grassy center of a cul-de-sac that serves as official trailhead parking for the Preserve. The wind was much stronger now, so I needed to use guy ropes from the antenna resonator mounting plate on top of the rigid mast to keep the antenna secure. On my own vehicles finding holes of one kind or another on the front and rear through which to tie off the other end of the ropes is easy, but I had difficulty finding such places on the Jetta. All I could find on the rear was a little spare space on one of the license plate's mounting holes. The space wasn't as big as I thought in the rapidly diminishing sunset light, and I managed to pull the plate off the screw holding the plate down. At least now I had a good hole for my rope, and I would see whether I damaged anything in the full light of the next morning. (That next morning, with the help of my Philips head screwdriver, I was able to replace the plate and there was no damage.) After finally getting the antenna set up, I got on the air and got my first contact exactly one hour after my last contact at Ding Darling. While not knowingly leaving anyone behind in the pileup, I quickly ended the activation after one unanswered QRZ because of coming darkness and rapidly increasing mosquito bites. In my rush in the poor light I lost one of the rope tighteners, but luckily I did not need guys or their tighteners for the rest of the week.

Sudden Illness, Sudden Recovery

After just a few minutes on my drive back, I suddenly felt joint and body aches. The pains became progressively worse on my drive back to the condo, and by the time I reached Marco, I began shaking with chills and had difficulty climbing the few stairs to the building lobby. After getting into bed, my wife found two blankets we didn't use before, and even after I was cocooned in them, my legs continued to shake violently. In my 64 years, I don't remember ever getting substantial fever symptoms and aches so quickly. When the rigors died down in a couple hours, I asked Facebook friends for advice because with Covid raging everywhere, seeking medical help as I would in normal times seemed like a last resort. I was grateful to get several suggestions and expressions of concern, but answers from patient care nurses said they were seeing symptoms like mine in their Omicron patients. That led me to be overly concerned, not because I thought I was in grave danger (having been vaccinated and boosted), but because it was easy to imagine having to miss my flight home in four days either because of symptoms or because of travel rules. It didn't help that home test kits were unobtainable then. I did my best to quarantine from my wife, and we both wore good masks whenever we had to be in the same room within the small condo.

After Tuesday's night continued flu-like symptoms, on Wednesday morning I didn't feel great, but felt far better than I had. By the afternoon I was mostly better, and thought I had a miraculous recovery in such a short time. With my other symptoms no longer distracting me, I finally noticed a red, warm, raised area on the back of my left calf that was painful to the touch; it looked and felt much like a severe sunburn. I also noticed what might have been two puncture marks near the center of the red area. Based on that, and the sudden rise and fall of my symptoms, I guessed that I didn't have a transmissible disease, but rather I experienced a reaction from venom. The timing of the onset of symptoms, right after I was walking around wearing shorts in uncut grass in near darkness, would be consistent with a moderately venomous bite, perhaps from a spider because I would think I would have felt a snake bite and it would have left a more obvious mark. (I saw my regular doctor after I returned home, and he thought this was a good guess too.) This was all conjecture from someone with no medical or first aid training whatsoever, but I functioned as if it were true.

Thursday: Make-Up Day

By Thursday morning, I felt mostly normal albeit a little weak and decided to continue my POTA activations, though with a limited rove plan in case I was wrong and the symptoms returned with modest activity. I decided to make Thursday a make-up day, returning to POTA sites I failed to activate on Monday because of my battery problems. The first stop was the Everglades visitors center, where I made a point to keep my phone elevated in the hope of keeping a good enough cell signal for Internet. I was surprised when this worked so well that I could reliably spot myself and get the pileup we activators usually get. 33 contacts made this the top park of the week, including the Azores, Nova Scotia, and Arizona. The next site, which was not on my original set of candidate parks, was suggested Monday by John KN4SWS. A full hour drive led me to boat launch parking for Francis S. Taylor Wildlife Management Area directly off I-75. I made only 14 contacts but that was good enough to count as an activation. Westward for 30 minutes on I-75 brought me back to the double site of Big Cyprus and Florida Trail where I had discovered my battery was dead Monday. I was more popular here than the previous park with 28 contacts. After packing up at mid-afternoon due to my conservative plan, I felt fine with only normal fatigue, so I declared myself fully recovered and Covid-free.

Friday: Last Chance for Six More Parks

Friday was our last day before our Saturday travel day back home, so I planned an aggressive early-start rove of up to six POTA sites. The first site was 1.5 hours north, and I would make my way southward toward Marco, activating parks only a few miles from I-75. Except for the last site of the six, these were conservation and wildlife areas with primitive parking. Azores again and multiple Finland stations were DX highlights, along with a good mix of distances around the country. 133 contacts on Friday was consistent with the rest of the week typically getting a little over twenty contacts per park. With my rove completed ahead of schedule, I was able to spend time at the last site, Koreshan State Park. I learned about the Koreshan Unity, a religious sect whose former community compound was donated to the state to create this State Park after the last Koreshan died. They had unusual world views, and I was fascinated to learn about them.

Back to Philadelphia

Packing up the station that night in preparation for our return to cold Philadelphia was easy. Unlike our trip down, our Saturday flight left and arrived on time. The trip back to Philly was marred though when my hard-shell Apache case arrived in baggage claim with a big concave indentation on the front, and the retracted pull-behind handle broken

off completely. A TSA inspection note was inside. It's easy to imagine someone pushing down on the case with their knee to close it after not putting items back in the foam holes where they were originally packed, but I'll never know for sure.

That negative trip ending notwithstanding, this Florida ham adventure was memorable for all the problems and solutions along the way, as well as the excitement of activating 19 new-to-me POTA sites in a new state with 411 contacts. Thanks again to John Martin for meeting me, to my wife for her tolerance of my hobby, and to everyone who contacted me or tried to during this challenging and rewarding trip.

ARRL 10 M Contest

Many county hunters participated and added band counties for 10M to their total saw results - from KM4FO and NS2N at 3830 contest reflector scores to others commenting on the County Hunter Forum.

N4CD filled in a log page in an hour mobile from the local park Heard 25 states and worked 18. Lots of DX but not easy to snag the EU over the big pileups from the east coast.

Top mutli op stations made over 4,000 contacts in the 48 hour period. Many made 3000+.

from 3830 scores:

N8II - fixed - WV - mixed modes 1368 QSO

No big surprise, since early October 10 meters is back as a reliable band for DX and the USA/VE! I was a bit worried early last week when the solar flux was just above 100 (even then EU was workable); thankfully we have returned to the 130's-140's.

It was a busy week; I have had an intermittent in the 10M feedline since summer which had worsened in recent days (SWR 4:1). So Wednesday I climbed the tower to investigate (60 F, no wind!). I found a water logged barrel connector (tape had weathered) and maybe a short at a splice; I patched both using flexible rubber tape to

seal and all was fine again. Then Thursday I cleaned up leaves and burned brush. By Friday evening, I was feeling tired. Of course, right from the opening gun there was Es with TE links to SA and ZL. The band was open well from FL across the Gulf Coast to a few TX/OK/KS and then across W0 to a hoard of MN ops Thanks MWA!). IN and IL were easy for a while, but no WI/MI. By 02Z, I had worked most of what was there and the Es footprint had shrunk to mostly the west (a few CA stations also), so I took a break for an hour and still managed 36 Q's after 03Z to bring the total up to 170 for the night. Running on CW and SSB was disappointing most of the evening, 56 Q's total SSB.

Both days the band opened to EU before I got started, Sunday there were loud EU at 1240Z 15 minutes past sunrise and Saturday one of the first stations I heard was Russian. It was a rocky start on CW, not long after I had a good run going a broad clicking station was below me and another loud signal above. Eastern EU was loud, so I held on until the rate went low and then searched for another spot while S&P'ing a few ending up above 28050. That didn't work well for long. 13Z rate was 110. At 1403Z,

I was happy to go to SSB and catch some Q's and mults there with a 103 hour, running was easier. EU signal levels started to drop at 15Z and by 1530Z the band was closing with only a few western EU left. Back to CW at 1527Z, a mixture of run/S&P. At 1608Z two mults called in, MI5I and 3B8HH. Last EA and Europe of day was at 1628Z. There were loud signals to the west by 16Z, but as is often the case I had the "curse of the west coast bambino" and very few NV/CA/OR/WA stations were workable through the afternoon. The F2 was good into NM, AZ and as close as CO/NE/SD/ND and all of the Rockies and parts of TX as well as SK/AB. Thank goodness for great SA activity as most of my Q's in the 20Z hour were from there on SSB. 21Z was mostly S&P picking up a few backscatter Q's on CW. Scatter was poor most all of the day. My sunset is 2147Z; finally about 2212Z, the condx to the west coast improved until closing around 23Z. Only HP and a few SA stations were found after that.

Sunday was a smoother day with a 117 hour at 13Z and a good easier run on CW with fewer Eastern EU, but many callers. SSB running was slower and then there must have been a flare as a very crowded phone band became a hollow shell about 1445Z, only a few F/EA/CT stations were left around 1455Z with a good recovery by 1510Z with a CW EU run and a 61 hour. I kept mainly looking for EU as long as I could with with last EA worked at 1659Z. The afternoon condx were better than Saturday with some loud and many workable backscatter signals. The west coast was better but still difficult especially from 2030-2200Z. I had a good CW/SSB runs of the Rockies and west coast with a 58 hour. I looked for JA on CW, heard 2 too weak to be heard by them.

I managed a WAS on CW thanks to NL7V who called on SSB through a lot of QRM from an extremely wide VE6 (almost didn't hear him) and moved to CW, many thanks! Also thanks to KH7Q who moved to SSB from CW. There were a few other moves like OH1F to SSB. I missed Eastern Canada, nothing worked east of VE2, only heard VE9HF and stations working VO1HP who was in the noise. Also, never found CO8NMN who was very active, but heard CO8RH calling others on CW. The EU mults were good on CW, missed several eastern EU on SSB. HZ0YL called me on SSB. Not much was heard from AF, no ZS or V5. I did work VK on both modes.

Many thanks for all of the calls and QSO's. Conditions should be even better next year. Congrats to K7SV and NO6T (3400+ Q's!) for some amazing efforts.

73, Jeff

Way Back When

On Christmas Eve, 1906, Canadian inventor, experimenter, and entrepreneur Reginald Fessenden claimed to have made his first voice -- and music -- broadcast from Brant Rock, Massachusetts, although his account of the event over the years has been disputed. Nonetheless,

Brian Justin, WA1ZMS, of Forest, Virginia, will make his annual program recreation on 486 kHz to commemorate Fessenden's accomplishments. Justin will broadcast for 24 hours beginning at 1800 UTC on December 24, with a repeat transmission on New Year's Eve, beginning at 1800 UTC, as Fessenden was reported to have done on both nights in 1906. Justin will transmit on 486 kHz, under authority of his FCC Part 5 Experimental License WI2XLQ, using equipment substantially more modern than Fessenden's gear.

Justin will use a home-brew setup to achieve Heising modulation similar to what was used in amplitude modulation (AM) transmissions during World War I. Justin explained that Fessenden's transmitter was a high-speed alternator, a predecessor to the Alexanderson Alternator still in use today at the historic Grimeton Radio Station in Sweden. Modulation then was achieved using a carbon microphone, but Justin will use a laptop computer for his audio broadcast. Justin said there is a cult-like following of amateur radio and shortwave listeners who tune in for the annual broadcast.

Justin has been licensed since 1976 and is an ARRL Life Member.

source: ARRL Weekly Newsletter – Dec 22, 2022

Awards

<u>USA--SSB</u>

AB7NK completed all SSB on 10/20/2022. She received #5

USA-PA Awards

W4SIG attained Level 3000/3074 on 8/25/2018. He received #4

W4SIG attained Level 2000/2801 on 12/5/2022. He received #6

W4SIG attained Level 2000/2937 on 11/11/2022. He received #5

W4SIG attained Level 2000/2361 ON 10/7/2022. He received #7

YL Mobile Award:

W4SIG attained Level 2000/2690 on 12/1/2022. He received #11

W4SIG attained Level 2000/2607 on 12/13/2022. He received #16

County Challenge:

W4SIG attained Level 15/15142 on 12/20/2022. He received #4

Single Band Award:

W4SIG attained Level 2000 on 80 meters on 10/8/2022. He received #3 W4SIG attained Level 2000 on 17 meters on 12/20/22022. He received #7

That's all folks! See you in 2023!