

# County Hunter News OnLine

August 2023  
Volume 19 Issue 8

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](http://ch.W6RK.com)

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

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

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

For general information FAQ on County Hunting, check out:

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

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

find information on these awards and the rules at:

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

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

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

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

## Notes from the Editor

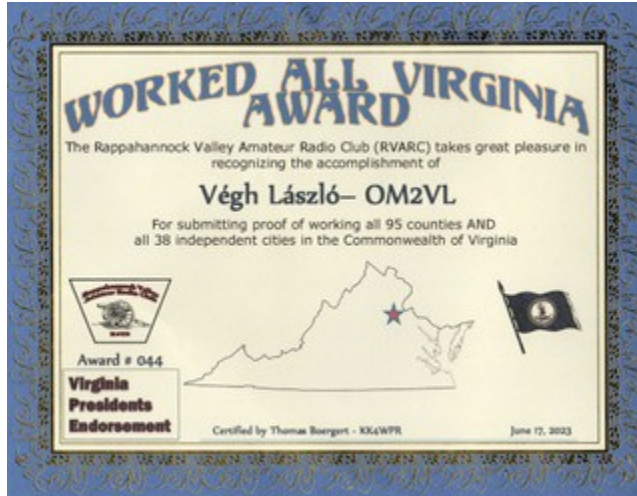
### **N4CD Rumblings**

**1) 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 generally good up to 15m and sometimes good on 12 and 10m depending upon the sunspot numbers and solar disturbances. 20M been lagging but 15 and 10m rated 'good' most days. SFI now over 200 at times. Sunspot numbers in the 100-200 range most days. Unfortunately lots of flares and disturbances. 20M often not great mid day but 17 and up good.

WB4EVH, Sandy, says 10M FT-8 great. You can work DXCC in one week.

### **2) Extra Miler Club Follow Up**

Last issue we noted the Extra Miler Club, which tracks people's progress to visit all the counties, boroughs and Independent Cities in the US states. County hunters just want to work the list of county hunter counties. Just saw this go by on Facebook . OM2VL has worked and confirmed all counties and Independent Cities in VA.



Most of them show up in the VA QSO party that counts them as multipliers. So if you work them all, you can get this nice certificate to add to your wall of awards. At times.

**3 ) Callsign Change** - WB8III is now K8II ! Scored a 1x2 call in the lottery for those rare 1x2s.

**4 ) Award Start Dates** – Most MARAC awards have no start dates, but some do. For example, the USA-SSB Award has a start date of Feb 5, 2015. While you might have hundreds/thousands of counties before that, they don't count toward this award. If you use Logger, it automatically knows. Probably hundreds of folks earned USA- CA and Nth time using only SSB. This award was incentive to keep working SSB mobiles now for the new awards. Otherwise, dozens could instantly apply for it. To date, 8 people have earned it including WA9DLB, KB6UF, N8KIE, AB7NK, K8ZZ, K7SEN, K4YT.

Self credit only started on 2/5/17 and only counts if you meet the requirements of the award you want to apply it to. For example, an OM can't claim self credit for YL mobile by transmitting from a county. Of course, many have 'start over' dates. You can't work on a repeat of an award till you finish it. Nth time,, Bingo, CW and CW nth time, etc.

## MARAC Annual Awards

There was no National Convention this year. The Annual Awards were announced at the annual meeting of MARAC on Monday, July 10<sup>th</sup>. The annual meeting is normally held at the Convention and Awards Announced there. Will there be a MARAC Annual meet in 2024?

2023 winners:

Mobile of the Year SSB: WY0A,

Mobile of the Year CW: W4SIG,

Mobile Team of the Year: AB7NK/K7SEN,

Mobile Assist of the Year SSB: K0DEQ,

Mobile Assist of the Year CW: K0DEQ,

CHOTY SSB: W4SIG

CHOTY CW: W4SIG.

## US County Contest 2023

### **MARAC 2023 United States Counties QSO Party**

Sponsored by Mobile Amateur Radio Awards Club

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

Dates/Times: 00:00Z July 29, 2023 to 23:59Z July 30, 2023

Objective: To establish radio contact with as many U.S. Counties as possible in all 50 U.S. states with the emphasis on maximum scoring of mobile entries. Contacts are good towards the various MARAC awards and CQ Magazine's "Worked All Counties Award."

USA Modes and Categories:

Eligible Modes: CW and Phone. No digital modes. All logs submitted shall be for Single Operators. Multiple operators can participate from one station, but each operator submits a log entry.

Fixed Categories:

CW- May be Home/Club or Portable

Phone- May be Home/Club or Portable

Mixed CW/Phone Fixed- May be Home or Portable

USA Mobile:

CW-Single Operator Mobile

Phone-Single Operator Mobile

Mixed CW/Phone Mobile

DX:

Mixed CW/Phone Overall Single Operator.

A qualified DX exchange shall be between USA and the DX station. No DX-to-DX contacts are allowed.

Contest Exchanges: USA stations send RS(T), State and County abbreviation. All logs shall indicate the proper abbreviations for scoring. Hawaii stations use state/county. Alaskan stations use Judicial Districts 1 through 4.

DX stations shall send RS(T) and "DX" for their exchange, and must indicate USA state/county abbreviations worked in their received log exchange.

A list of recognized abbreviations will be provided on the Contest section of the marac.org website soon. Credit to Larry, W0QE for formatting and sharing for use.  
Operational Guidelines:

Portable-Single Operator- If a portable station operates from more than one fixed location, multiple logs may be submitted. Portable stations are required to package equipment or stow antennas for travel. Portable stations shall be set-up less than 3 days before the QSO party starts, and removed within 5 days of the end of the qso

party. Portable stations may also setup and tear down during the QSO party.

Other stations are in the “Fixed-Home/Club” category.

Fixed-Single Operator- One individual performs all radio operating and logging functions from a single location. Some fixed stations’ footprint straddle a county line and must select one of the counties to exchange for the duration of the QSO Party.

See MARAC General Rules for details.

Portable and Fixed (Home/Club) stations are in a single category. Do not attach a “/” after fixed/portable callsigns or incorrect scoring will occur.

Mobile- A station which is either in motion, or capable of immediately being in motion. This includes transmitter, receiver, power source, antenna(s), and logging equipment. Mobile stations may be moving or, if safely stopped, be capable of drive-a-way without lowering antennas or loading equipment. Mobile class entrants shall use “Mobile” or “/M” appended to the call sign. Mobile entrants shall be Single Operator only. Drivers are allowed.

A Club callsign may be used for mobile operations provided only one mobile station uses it and it is not used by a Fixed Entry.

DX: Hawaii and Alaska are U.S. entries. Canada, Mexico and other North American entities are DX-Class. Stations outside the 50 United States are all DX-Class.

Bands: 160, 80, 40, 20, 15, 10, 6, and 2m are used in this contest. Phone qso’s only in the Phone sub bands, CW qso’s only in the CW sub bands. No cross mode, cross band, repeater, or satellite qso’s permitted.

Suggested Freq’s:

CW 50khz up from bottom of band

Phone 1850, 3850, 7250, 14341, 21341, 28341, 50135, 144.200 or 146.550 (FM) are suggested. Mobile windows: 5 khz down from the suggested freq. If you are a fixed station, please keep these freqs clear for mobile operations. Saturday’s contest period overlaps RSGB IOTA Contest, but their rules prohibit operation above 14.300 MHz on 20 Meters SSB.

Scoring: US Stations score 1 point for U.S. Fixed, 2 Points for DX, and 15 points for

U.S. Mobile.

DX stations score 1 point for U.S. Fixed, and 15 points for U.S. Mobile.

Multipliers: Total of U. S. Counties worked once per mode, regardless of band. A CW or Phone only station has a maximum of 3077 mults. A mixed mode station has a maximum of 6154 mults.

Spotting and Planning: Mobile Operators are encouraged to post their plans for operation on the K3IMC website, [www.countyhunterweb.org/displaytrips.php](http://www.countyhunterweb.org/displaytrips.php).

During the QSO Party one will find most county hunters follow the W6RK "Mobile Spot Page" at <http://ch.w6rk.com> When posting on W6RK, please include the entire county name and the state abbreviation as mobiles change counties, bands or modes.

Since mostly written and mailed QSLs are required by CQ Magazine for a first time Worked All Counties Award, please be courteous and return SASE QSLs and Mobile Reply Cards (MRC's).

Miscellaneous:

A. Connecticut has eliminated counties. For 2023 use the old county lines as guides using maps, gps, or remaining signs to determine location.

B. Self-spotting as a fixed station is not allowed. Self-spotting as a mobile is permitted.

C. Drivers for Single Operator Mobile stations are permitted, provided they do not assist in any way with the contest on-air operations. Two people may transmit from a single vehicle and both shall enter individual logs.

D. County Line operations: As defined by MARAC, a stationary mobile may operate from one county line, and contacts with that mobile shall count as one qso, and 2 counties worked. Some part of the vehicle must be in both counties for the duration of the QSO. Operation from more than a double county line is not allowed under MARAC General Rules. If a safe stopped position at a county line isn't possible, or if traffic is being slowed or blocked, operators should transmit from each county.

E. Independent city-a station must use only one county for use in the contest exchange, for the duration of the contest. If mobile in an independent city, the entrant may not use the adjoining county listed in the same independent city as a new county without actually moving to the new county.

F. Parks-On-The-Air and other award program stations are encouraged to participate. The basic information for MARAC must be exchanged to count towards MARAC scoring. The station shall enter the appropriate Mobile or Fixed and Portable class. Stations shall indicate in “Comments” if they are operating POTA, IOTA, US Islands, or other award programs. Each Portable log file shall be for a single county with WARC band QSOs and mults removed from the log.

Awards: Certificates will be awarded to top scoring entrant in each Category. One certificate each for mobile, CW, SSB and Mixed. One certificate each for fixed or portable CW, SSB and Mixed. One certificate to the leading DX station.

Log submission: Please note that the contest committee will not score your log. Unscored logs will be considered check logs only. Please use the Summary Sheet, which can be found at [www.marac.org](http://www.marac.org) under the Contest Tab, and enclose a printed copy of it with the log copy only if you have a Mobile-Class paper log.

Fixed-Class logs and if possible, Mobile-Class logs, shall be emailed using Cabrillo (preferred), ADIF, pdf or MS Word/Excel.

Logs must be received by September 1, 2023 to qualify for awards. Logs may be sent via email or USPS if using a Mobile paper log. Email: [marac23@earthlink.net](mailto:marac23@earthlink.net). USPS via N7NU - Lee Hallin, 3413 Walton Ln., Eugene, OR 97408-4673.

Please watch the contest section of the MARAC website [www.marac.org/Contests](http://www.marac.org/Contests) for updated information. For rule questions, please email the Contest Manager [wa4ja@arrl.net](mailto:wa4ja@arrl.net) for a quick reply or ruling.

John Almon, WA4JA MARAC Contest

## WY0A's Trip to AK

From his Facebook page travelogue and posts.

Day 6 of my trip to Alaska. Spent most of the afternoon waiting on and riding ferries. Tomorrow I'll be in Canada in the morning. Good thing I remembered to take my pistol



out of my truck. Don't want any problems at the border..



WY0A – 4 wheel drive pickup

Day 7 of my trip to Alaska I crossed over into Canada and am spending the night in Prince George. Panhandlers and homeless people everywhere. Hardly got out of my truck and I was being "hit up" for money.... Sorry, I just use a card... Maybe it's just the area my hotel is in, I dunno.. Anyway.. Made it through the border crossing okay.. However, they went through my pick up thoroughly. Good thing I remembered to take my pistol out before I left home, or I'd probably still be sitting there.

Day 8 of my trip to Alaska.. Rained off and on most of the day. Even had a little pea sized hail. I'm staying in Dease Lake, British Columbia... A hotel, little grocery store and motel is about all there is.. Saw a couple bear cubs individually and then a momma with 3 cubs.. Also saw a wolf, or coyote, but he/she was gone before I could get a pic. Think it was a coyote.

Day 9 of my trip to Alaska.. I'm staying tonight in Destruction Bay, Yukon, Canada. Temperature was 37° when I left this morning. Did get up into the mid-50's.. Saw a few more bears today.. Didn't see any cubs, but I expect some of these were probably yearlings. Tomorrow I'll be in Alaska! I got on the Alaska Highway where BC-37 connects to it.. All paved, very nice and wide. At Haines Junction the road did narrow some and there was a section about 10 miles long that was gravel.

Day 10 of my trip to Alaska.. I left Destruction Bay at 5:00 AM local time. The

temperature was 47° with a slight drizzle. I continued my journey on the Alaska Highway. There was some road work occasionally where the road was being fixed due to winter frost heaves that buckled the pavement. When I crossed over into Alaska, it was nothing like coming into Canada. The fellow at the window looked to be a kid on his early 20's and seemed to be "pissed off" at the world. Probably because he was stuck out in the middle of nowhere. Anyway, all he did was ask if I had anything I wanted to declare that I'd bought in Canada. Nope! And the way I went, no vehicle search. Stopped in Palmer, AK for awhile to visit Robert Parker, an old childhood friend, before heading on to Anchorage. Made it to Anchorage in time to pick my wife up from the airport. Temperature in Anchorage was 77°.

Day 11 of my trip to Alaska. Started out this morning with breakfast at the world famous Gwennie's Old Alaska Restaurant. The special was Reindeer sausage, eggs, home fries and toast.. Not bad. The sausage was a little chewy, but definitely edible. From there Jamie and I headed south to Seward. Saw a few more bears. This time they were brown bears. What's the difference between brown bears and grizzlies?? Nothing! If the bears are inland, they are referred to as grizzlies.. If the bears are coastal, they are referred to as brown bears. Now you know! This afternoon I stopped in at the Yukon Bar for a beer and to watch a little baseball. Finished off the day with supper at Apollo's in downtown Seward.

Day 12 of my trip to Alaska. We spent the day on a whale/glacier viewing cruise. We chose to go with Kenai Fjords Tours out of Seward, Alaska. It rained all day and it was cold, but the tour was already booked and we left at 10:00AM local time. Before we got out of Resurrection Bay we saw some sea otters.. Not much farther out, we saw a humpback whale in the distance. Basically all I saw was the tail up out of the water as the whale took a dive. Later we saw lots of sea gulls nesting on rocks.. The more experienced gulls learned to nest higher on the ledges.. The gulls that didn't know any better nested lower.. Problem is, when the storms come in and the waves are higher, all the lower nest will be lost into the water. Live and learn.. Not much further on we saw some Stellar Sea Lions on a ledge.. From here we traveled on to view the Holgate Glacier. As we were leaving to go try to see some more whales, a distress call came in from a nearby vessel. Since we were the closest ship in the area, we proceeded in their direction to help. The other vessel was dead in the water as it's propeller had hit some ice and became disabled. The occupants of this vessel boarded ours and we headed back to port. We finally got in around 6:30 in the evening. Glad to get back to the hotel room and get warmed up.

Day 13 of my trip to Alaska. Drove from Seward, AK up to the Aurora Denali Lodge.

The lodge is a few miles outside the Denali National Park entrance. Rained most of the day. There was a north and south viewing area that turned off Alaska highway 3 to view Mt. Denali. It was so cloudy and rainy you couldn't see anything. Maybe we'll have better luck tomorrow. Did see a mountain goat and her kid on a ledge on the trip up here. Had supper at The Overlook at the Crow's Nest just outside the park entrance.

Day 14 of my trip to Alaska. We spent the day in Denali National Park. We barely got into the park when a Lynx strolled across the road in front of us. We were unprepared, so no pics. You can drive about 12 miles into the park, but if you take a shuttle bus, or a tour bus, you can go about 43 miles into the park. This takes you close to where there was a mud slide that wiped out a section of the road. By 2026, they expect to have the road fixed so travel further into the park will be allowed. For those of you thinking about going to Denali, just take the shuttle. It takes the exact same route as the tour buses. However, on the shuttles you can get off when ever you want, hike around and then catch another one by just waving one down that is going by. Jamie and I became members of the 30% Club. Only 30% of the people that visit actually get to see Mt. Denali due to weather conditions.



Further on down the road after seeing Mt. Denali, we saw a grizzly with three cubs. They were pretty far away and our binoculars came in handy. A little further down the road we saw a bull caribou on top of a ridge. At the 43 mile mark, Jamie and I decided to get off the shuttle and do a little hiking. We hiked along the road that we came down as much of that area was restricted to wildlife only. As we hiked along, Jamie saw some white dots up on a mountain side. Once again, the binoculars came in handy as those white dots turned out to be Dall sheep. We continued hiking up the road and while looking down in the valley we saw another bull caribou walking along and occasionally stopping to graze. After about 10 miles, we had enough hiking and waved down a shuttle. An hour later we were back at the bus depot. Time to go out for supper and return to the hotel. Tomorrow we head to Fairbanks and then a short drive to North Pole, Alaska.



Day 15 of my trip to Alaska. We left Denali and headed to Fairbanks. Got here way too early to check in to our hotel so we made a little jaunt over to the North Pole... North Pole, Alaska that is. Tomorrow we head up the Dalton Highway also known as the Ice Trucker's Road.

Day 16 of my trip to Alaska. Left Fairbanks around 8:00AM local time. Was mostly sunny all the way up here to Coldfoot. The road was a mixture of paved and hard packed dirt with gravel on it. Lots of potholes on the paved section, would just as soon drive on the hard packed dirt... It was 76° when we pulled into Coldfoot.



Day 17 of my trip to Alaska. I'm staying in Deadhorse tonight. I'm terribly disappointed. I thought the Dalton Highway was supposed to be quite the challenge to drive.... NOT!! No worse than driving on a country road in Kansas after a rain shower. Maybe in the winter it's wicked, but in the summer... no problem...Made several contacts with my amateur radio and made several county hunters happy.. Up here it is the 2nd District of Alaska.. The 2nd District of Alaska and Kalawao county in Hawaii are the two hardest places to get a contact from. The 2nd District because of it's remoteness and Kalawao because it's an old leper colony. You can just drive into the edge of the county in a parking lot. The county is basically prohibited to go into.



Day 20 of my trip to Alaska. Spent most of the day driving same roads I drove getting to Alaska. Went through Canada to Whitehorse and then turned off to come down to Skagway, Alaska. I finished up transmitting on my radio from all 4 judicial districts. Tomorrow will be back into Canada.

Day 21 of my trip to Alaska. Left Skagway at 6:00 local time. Got to the border crossing and found out it didn't open until 7:00. Geez... Drove same roads as I took to get to Alaska. Put in 784 miles today and am spending the night in New Hazelton, British Columbia. On the way here, I came across a young bear in distress. He was on the side of the road and had raised himself up on his front paws. He was panting lots. It appeared his hind legs weren't working. I'm thinking he had been hit by some type of vehicle. I told the cashier at a gas station about 22 kilometers away and she called wildlife management. Unfortunately, this happens far to often.

Day 22 of my trip to Alaska. Not much of anything to report today. Just drove on same roads as I did coming up through Canada heading to Alaska. Tomorrow I'll be back in the states.

Day 23 (July 1) of my trip to Alaska.. Left Cache Creek, BC at 5:00 in the morning to head south. Just couldn't sleep.. Glad I left early because it took me almost 2 hrs waiting in line to get through the Border Crossing.. Seemed every Canadian that lived in Canada wanted to come to the US today. Not sure why. It's Canada Day today, you would have thought they would want to stay home and celebrate... no... Anyway, I made it into Seattle in time to take in the ballgame. The Mariners beat the Rays 8-3. It was also free hat day! Spending the night in Sultan, WA. Sounds like a war zone outside with all the fireworks going off.. Hope I can sleep tonight.

My Alaska trip totals. I drove 13204.7 miles. My truck averaged 17.3 mpg. This means I went through 763.3 gallons. Let's say gas on the average during the trip cost me \$5/gal (probably a little more), I spent \$3816.50 just on fuel. Oh, anyone care to guess the state I went through that had the cheapest gas?? If you guessed Kansas, you're right! Check out my before and after county map of the U.S. That's right, I've been through and transmitted from my ham radio in all the counties colored in red. I've actually talked to someone and received a signal report in all those counties. Thinking about saving Hawaii, 5 counties, for the end of my quest..



Before Trip



After Trip

Source: Text and pics from WY0A Facebook page.

## Kalawao News

Getting to Molokai - where Kalawao County is located.

Bob, N8KIE, posted on the K3IMC Forum an interesting link to news about transportation woes in getting to Molokai – you have to go there to get to Kalawao County.

Here's the link and the detailed article starts on page 16.

<https://kawaiola.news/wp-content/uploads/2023/06/KaWaiOla-July2023.pdf>

N4CD – summary

Once upon a time, there were 3 airlines serving Molokai. When the pandemic hit, and tourism to Hawaii took a nosedive, the three airlines wound up consolidating into just one carrier. It follows that Molokai, a seldom visited island, really got hit by the effect of covid restrictions. (testing ahead of time, testing when you got there, minimum 14 day stay, for each flight, etc). Not much to do there, and only a small airport using small aircraft. There is no deep water port for cruise ships to land, either. If you went there, you'd have to stay 14 days!

To make things worse, two long time physicians on the island, who served over 60% of the island's 7500 residents, passed away recently, which means that to get medical care, many residents have to fly elsewhere for care and return on the airline. The airline is swamped and provides not great service, with many canceled flights – not that there are that many to start- a few a day.

Long term, the airline is acquiring slightly larger aircraft to increase capacity, but if you are going to HI to run all the counties, take into consideration the fact you might get stranded a day or two or three waiting for a flight to get there and then back. Each way.

Years ago, there were two main attractions on the island – the Molokai Ranch and the Kalawao Mule Ride down to the lower part of Kalawao. The Molokai Ranch went bankrupt years and years ago.

Video of going down the Mule Ride here

<https://www.youtube.com/watch?v=B-ZcBIXs3Vo>

The web site for the ride is not working – so not sure that this attraction exists any longer either! Seems it went defunct during the pandemic. You may still be able to visit 'down below' via airplane ride from Oahu – and tour of facilities for hour, or two



but not time to set up portable station and operate. You are part of the group tour and can't wander off. Escorted everywhere. Could work a partner on 2M if that was your thing.

Otherwise, your choice is fly in, rent car, operate and either leave on later flight after few hours there mid day, or stay overnight or two. Then return.

## Kalawao Trip

Kalawao County Hawaii Trip Report (the hardest county in the US to visit)

by Dan Miller | Feb 25, 2023

If you're a long-time reader of the site(Extra Miler Club) , then you know that I am trying to visit every county in the United States (I'm about 70% of the way there). Recently, while my family and I were in Hawaii, my son and I took one day to visit every county in Hawaii. We decided to plan our trip to visit all 5 Hawaii counties in one day. There are only 5 counties in Hawaii, but it includes Kalawao County, which is quite possibly the most difficult county to visit of all 3,143 counties in the United States.

Why is Kalawao County so difficult to visit ?

Kalawao County mostly consists of the town of Kalaupapa, which is on the north shore of the island of Molokai. It's separated from the rest of the island of Molokai by huge cliffs, and there is no road access between Kalaupapa and the rest of Molokai. The only way to access Kalawao County is through a steep switchbacking hiking / mule trail, or of course by sea or boat. It's the smallest true county in the United States, and its population of 82 is the second-smallest of any county (behind Loving County, Texas)

That would make it difficult enough, but the whole reason that Kalawao County even exists as its own jurisdiction is that it was first created as an isolation spot for people with Hansen's Disease (leprosy). From 1866 to 1969, Hawaii exiled anyone with leprosy to this part of Molokai, and set it up as its own county and jurisdiction. After an antibiotic treatment for leprosy was developed in the 1950s, the quarantine was lifted, but many of the residents chose to remain on Kalaupapa.

Kalawao County is now coterminous with Kalaupapa National Historical Park, and you

have to have a permit to enter the county / park. Before COVID, there used to be helicopter tours as well as a 2 hour mule ride tour, but those went away during COVID and haven't come back. To my understanding, there is not currently a way to get a permit to visit Kalawao County for tourism.

## Planning to Visit Kalawao County

So, how was I planning to visit Kalawao County. Before my trip, I decided on a 3-pronged approach

Mokulele Airlines / Southern Airways flight 583 from Honolulu (HNL) to Molokai (MKK) that has a brief stopover at Kalaupapa (LUP). There was conflicting information from Flightaware about whether or not the flight actually stopped there, but it felt like a good shot

When I arrived in Molokai, I booked a taxi to take me to the trailhead of the trail down to Kalaupapa. Although the trail is blocked, I was told that shortly after the fence at the road there was a sign indicating the county border. While I didn't want to go down the trail all the way to Kalaupapa, I didn't see a problem with going to the county border and taking a picture of the sign

Intrepid county counters have identified the plot maps and determined that if you go to the Kalaupapa overlook (up on the top of Molokai), that the far northwestern portion of the overlook was actually in Kalawao County.

I figured between those 3 options, at least one of them would work for me.  
Kalawao County Trip Report 2023

The first part of our Kalawao County trip planning was the flight from HNL to LUP to MKK. We had a bit of a layover at the Honolulu Airport, which we spent in the HNL Plumeria Lounge.

When it was time for our flight to Molokai, we had to take the HNL "wiki wiki" shuttle over to Terminal 3 which handles Mokulele Airlines.

There had been some suggestions based on FlightAware flight tracking data that the flights did not actually stop in Kalaupapa and just went right to Molokai. I asked about this at the Mokulele gate at the commuter terminal, and the gate agent said that it did always stop there. I also asked the pilot about it, and he said that "this line" (I assume he meant the flight that was scheduled with the LUP stopover) always did. In my case, we

were actually picking up 2 passengers at LUP, but he said even if we were not, that they always stop at LUP before flying up to the “topside” (MKK). I will also say that my observations after tracking Mokulele flights on FlightAware all day yesterday are that FlightAware does not always capture the reality of Mokulele / Southern very well. For example, my 1/31 2:30pm flight from HNL-LUP-MKK does not even show up on FlightAware. Also to be clear, you are not able to exit the plane at Kalaupapa (though I suppose I didn’t actually ask if I could get out to take pictures – maybe they’d let you?)

So while I’m not sure I’d want to necessarily COUNT on flight stopping at Kalaupapa, I think it’s probably worth booking that particular flight if it fits your schedule. YMMV of course, and I will say that Mokulele definitely embodies the “island” spirit of laidbackness

### Arriving on Molokai

The 2nd prong of my Kalawao attack was renting a taxi at the MKK airport. I used the contact form for Hele Mai Taxi and someone got back to me within a day or two. They quoted me \$30 each way to the Kalaupapa trailhead / overlook and then back to the airport, plus 30 cents per minute waiting time. But when we got to the overlook after already stopping at the trailhead, the meter said \$32 and the driver said “how about we just call it \$32 plus \$32”, which was fine with me. So the total cost was \$64 plus I tipped \$15. There is an Alamo car rental office and a few car hire places. The one I contacted wanted to charge me the full day rate of \$150 even though I’d only have the car for an hour or two. I believe Hele Mai is a family-run / family-owned business, and my driver was super friendly and personable. They are closed on Sundays. He was impressed that I had even heard of Kalawao County and was impressed with how much I knew about the geography / topography of the overlook and trailhead. I told him that this was the “Super Bowl” of county collecting and that there were lots of people that would want to hear my report

I gave Hele Mai taxi my flight information, and they were waiting in a parking lot to the left when we arrived. I was a little unsure as to where to go, but someone at the airport noticed me wandering around and pointed out the taxi. It takes about 15 minutes to drive to the trailhead. There’s a spot to the side of the road that you can park at. I told the driver that we were going to go down the trail a bit to take pictures of the sign.

As you can see from the pictures, the trail is closed and says “permit required”. I did not have a permit nor do I think that you can currently even get one if you wanted to. My son and I hopped the fence and walked down the (somewhat muddy) trail. I did not see the pictures that others have posted that said “Welcome to Kalawao County”. We hiked

about a quarter of a mile to the Welcome to National Park sign pictured below, at approximately 21.174749,-156.9987991.





We had reserved the 7:30 flight back to Kahului / Maui (OGG) but because our trip only took about an hour or so, they were able to get us on a flight a few hours earlier. So I would say that we definitely visited Kalawao County from the plane trip as well as the overlook, and I'm 50/50 as to whether we went far enough on the trail to get into Kalawao County. But 2 out of 3 ain't bad, as Meatloaf might say...

### The Bottom Line

I get that whirlwind travel like this is not for everyone, and in fact even from county counters there was some pushback that I "should" take a few days to visit each of the islands. And while I do get that perspective as well, and I would like to go back to some of the other Hawaiian islands I didn't get to fully explore, I would also like for people to stop telling me how I "should" travel.

Source: <https://www.pointswithacrew.com/kalawao-county-hawaii-trip-report-the-hardest-county-in-the-us-to-visit/>

Note de N4CD – as detailed in previous issue of the CHNews, according to the NPS folks via email, about half the overlook parking lot is in Kalawao County. Go to the end of the road – the county line is at the edge of the road – extrapolate that across the parking lot, and park across that line.

Meanwhile, if you're going to HI and just working a partner on 2M, the plane flight might prove to be the least expensive option of getting there, followed by the taxi ride up to the overlook. We've published the maps of the overlook area and correspondence

from the NPS folks in previous issues. Otherwise, it's a car rental – setting up mobile in the parking lot, and operating. With the sunspot count, 17, 15 and 10m should work fine mid day from there. 20M likely not so good as the propagation charts show during the day until late in afternoon (US mainland time).

## Connecticut Counties

Here's an interesting article about Connecticut counties and what happened there. Looks like one big issue is with the Census Bureau which uses counties to figure out the population of the USA. Thus, changing from 8 counties to 9 regional planning areas involves the Federal Government. As of now, counties have zero functions there as the last remaining 'use', the census count, now goes by Regional Planning Area.

County governments have been extinct since 1960. The only county function after 1960 was for the sheriff. In 2000, those functions moved to the state level. Nothing is done by a county – other than it being used for census purposes. All the land in CT is either in a city or a municipality. There is no 'county land'.

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“Although Connecticut's eight counties have long provided stable geographic units for reporting statistical data, they have not served as functional governmental and administrative entities since county government in the state was abolished in 1960. The State's nine COGs (Council of Governments) function as regional planning organizations, coordinating activities for their constituent cities and towns (note, however, that in some instances the name of the planning region differs from that of its COG). As such, planning regions provide a more meaningful geographic unit for reporting data since the data would be aligned with the collection of municipalities (i.e., cities and towns) that constitute the governance framework for each COG. Each municipality within a designated planning region is entitled to membership in the region's COG upon adoption of an ordinance by its legislative body. The highest elected official of each member municipality is then provided a vote on all COG matters. By reporting statistical data for COGs, member municipalities will be in a better position to plan collaboratively and act strategically on the efficient delivery of services, bulk purchasing, and other matters of practical interest.

While COGs do not have the authority to levy taxes, they are authorized under State law to assess dues on their member municipalities, to accept other sources of public and private assistance for the purpose of providing regional and shared services, and to administer a regional property tax base revenue sharing system if approved by a unanimous vote of its member municipalities. In this regard, as well as the ability to provide the variety of services listed below, Connecticut's COGs and associated planning regions have the authority to carry out administrative functions that are typically found in county governments in other states. Section 8-31b(b) of the Connecticut General Statutes states that:

Regional services provided to member municipalities shall be determined by each regional council of governments . . . and may include, without limitation, the following services: (1) Engineering; (2) inspectional and planning; (3) economic development; (4) public safety; (5) emergency management; (6) animal control; (7) land use management; (8) tourism promotion; (9) social; (10) health; (11) education; (12) data management; (13) regional sewerage; (14) housing; (15) computerized mapping; (16) household hazardous waste collection; (17) recycling; (18) public facility siting; (19) coordination of master planning; (20) vocational training and development; (21) solid waste disposal; (22) fire protection; (23) regional resource protection; (24) regional impact studies; and (25) transportation.

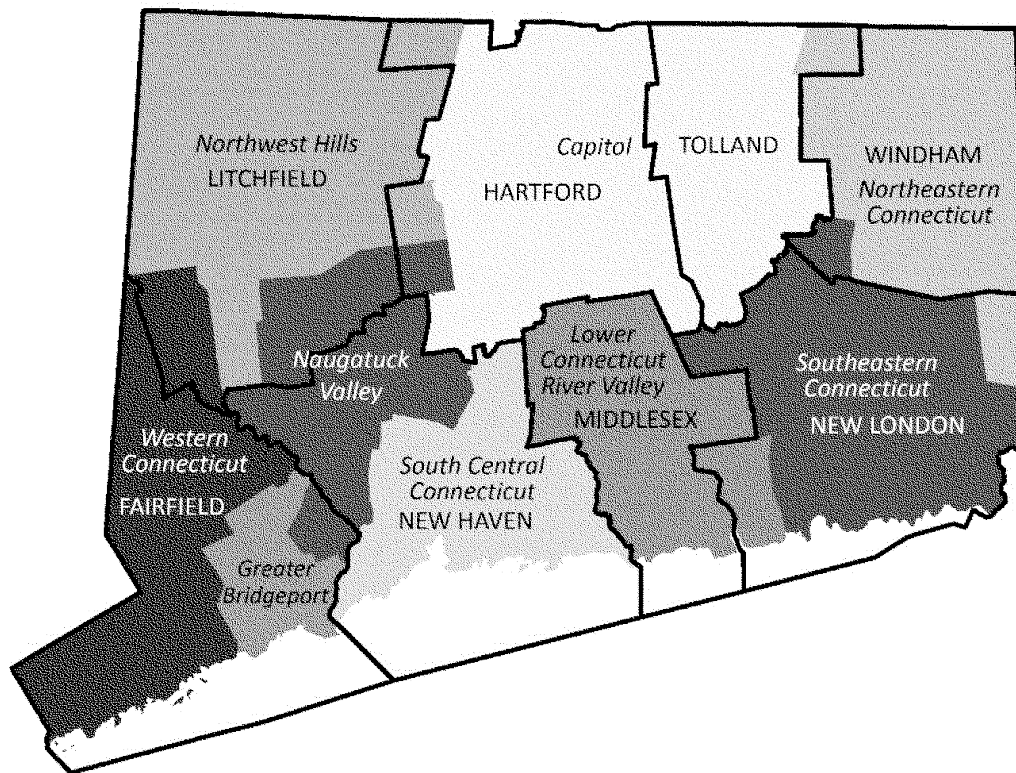
In the same section, the COGs are authorized to “accept or participate in any grant, donation, or program made available to counties by any other governmental or private entity.”

## **Transitioning From Counties to Planning Regions**

### **Relationship Between Counties and Planning Regions**

Although the planning regions and counties do not align, there is substantial overlap, to the extent that one can discern the relationships between individual planning regions and counties. Figure 1 depicts the relationship between Connecticut's eight counties and its nine planning regions.

Figure 1. Relationship between Counties and Planning Regions. County boundaries are shown as thick lines; names are labeled in standard font in all caps. The planning regions are shaded; names are in italics.



- Capitol Planning Region
- Greater Bridgeport Planning Region
- Lower Connecticut River Valley Planning Region0913002830246
- Naugatuck Valley Planning Region0914002830249
- Northeastern Connecticut Planning Region0915002830250
- Northwest Hills Planning Region0916002830251
- South Central Connecticut Planning Region0917002830252
- Southeastern Connecticut Planning Region0918002830253
- Western Connecticut Planning Region0919002830254



The closest relationship is between Middlesex County and Lower Connecticut River Valley Planning Region, with all 15 of the cities and towns within the county also located within the planning region (which also contains two towns located in New London County).

Cities and towns are the constituent governments within each COG/planning region. As such, data for cities and towns can be aggregated to planning regions, facilitating reconstruction of time series data and longitudinal analysis. Table 1 provides the 2020 Census population and housing for each planning region, based on aggregated data previously published for constituent cities and towns.

Officials with Connecticut's Office of Policy and Management contacted the Census Bureau in October 2017 regarding the process they should follow to adopt the State's nine planning regions as county-equivalents. At that time, Census Bureau staff advised that officials first obtain broad data user support throughout the State, including other State agencies, the State Data Center, as well as the planning regions. Table 5 below highlights important milestones of the process leading to the publication of this notice. Once broad support for the change was achieved, a formal request addressed to the Census Bureau's Director was needed for the Census Bureau to take formal steps toward adoption of the nine planning regions as county-equivalents. The State's initial formal request was received by the Census Bureau in August 2019. The State also submitted a letter of support from the Connecticut Data Collaborative/State Data Center attesting to the importance and value of data for planning regions to analysts, decision makers, and other data users throughout Connecticut as well as broad support for the change among data users throughout the State. In addition, members of Connecticut's Congressional delegation, chairs of each of the State's nine COGs, and officials from the Connecticut Conference of Municipalities, Council of Small Towns, and the Advisory Commission on Intergovernmental Relations were copied on the State's letter to the Census Bureau. The Census Bureau held a meeting with Connecticut State and local government officials, State agency staff, and COG chairs in April 2020 to provide an update on outreach regarding the proposed change where meeting participants reiterated the importance of, and support for, adoption of the State's nine planning regions as county-equivalents.

The Census Bureau began outreach to other federal agencies and data users regarding this change in October 2019, following Connecticut's formal request to begin the process

of replacing its eight counties with the nine planning regions. The Census Bureau published a notice in the

Federal Register

on December 14, 2020 (85 FR 80766) requesting comments on the proposed program change. The Census Bureau has held seven briefings for staff of federal agencies: one for the Interagency Council on Statistical Policy; two organized by the Federal Committee on Statistical Methodology—Geospatial Interest Group; two specifically for Department of Housing and Urban Development staff, including staff managing the Community Development Block Grant and other funding allocation programs; one specifically for Bureau of Labor Statistics staff; and one organized by the U.S. Department of Transportation attended by federal, State, and local transportation planners.

Following completion of the formal period of comment associated with the proposal in the December 14, 2020

Federal Register

Notice (85 FR 80766), the Census Bureau, in consultation with Connecticut government officials, reviewed the comments received to determine if there were valid reasons to revisit the proposed plan. With none being noted, Connecticut reached the final decision in December 2021 to move forward with the implementation of the nine planning regions as county-equivalents in Census Bureau publications. This Notice serves as the Census Bureau's final formal announcement of intent to immediately implement the changes detailed herein.

Source: “<https://www.federalregister.gov/documents/2022/06/06/2022-12063/change-to-county-equivalents-in-the-state-of-connecticut>”

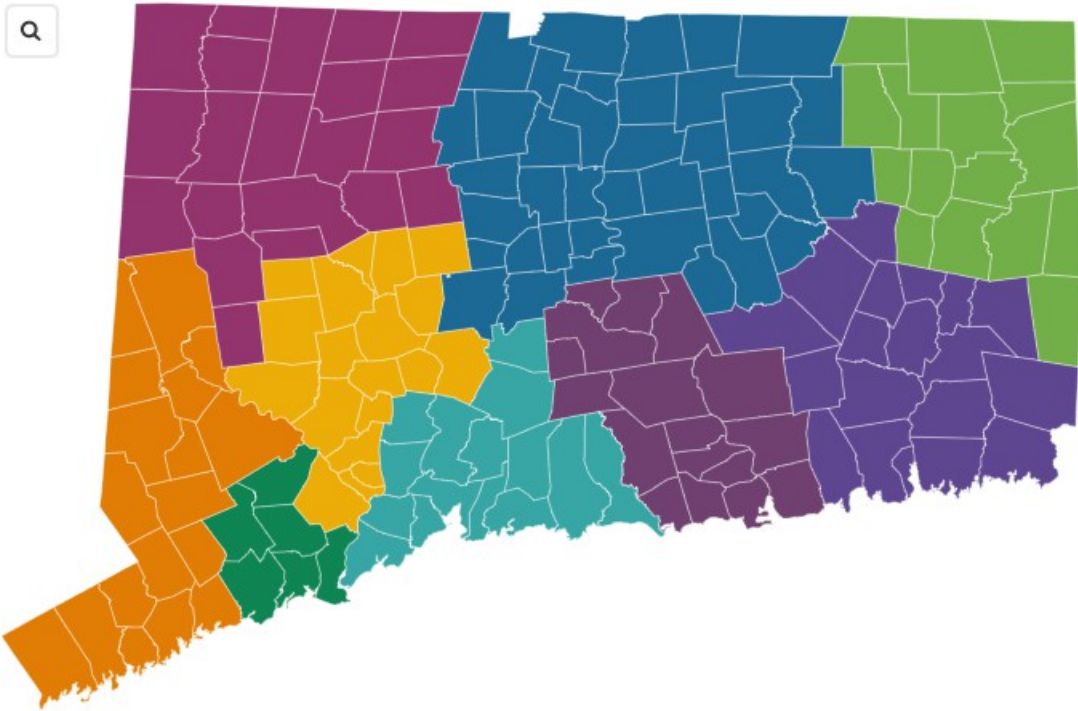
de N4CD – looks like it is official now. 8 counties gone. 9 new entities in the state.

Here's another map

# CT Regional Planning Zones

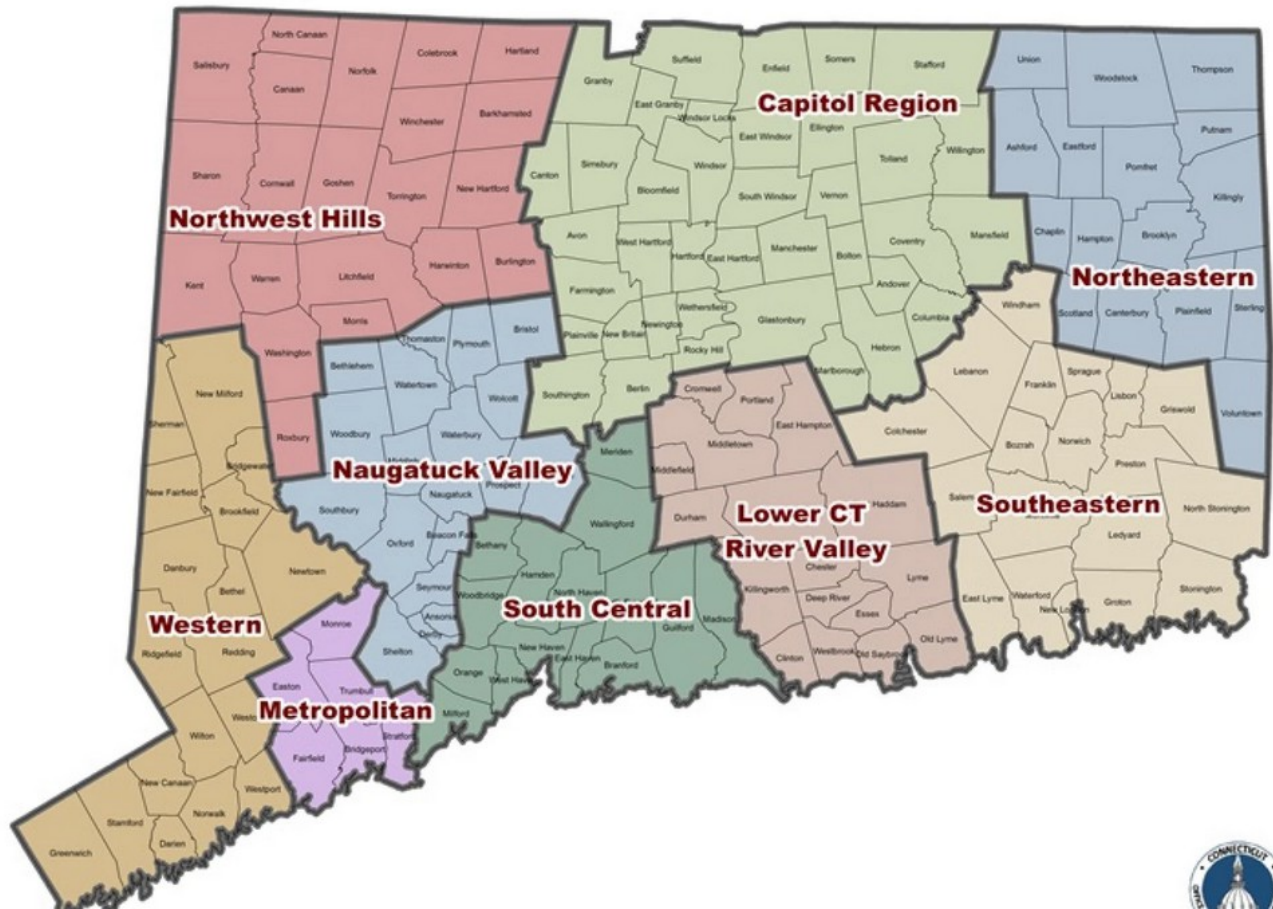
Regional planning zones in Connecticut, which will become county equivalent for U.S. Census purposes.

- Capitol
- Naugatuck Valley
- Northeast CT
- Northwest Hills
- South Central
- Western CT
- Southeastern CT
- Greater Bridgeport
- Lower CT River Valley



And another

## Regional Councils of Governments in Connecticut



Source: <https://www.ctpublic.org/news/2022-06-16/u-s-census-approves-connecticut-request-for-nine-planning-regions-but-opinions-differ-on-the-impact>

So - bottom line – when do county hunters start counting the Regional Planning Areas? Does any ham in CT have a clue as to what Regional Planning Area there are in – to be able to put on QSL card or MRC, or respond to MRC with a 'regional planning area' instead of the normal county? Will CT hams now put their regional planning area on their QSL cards instead of county? Not likely.

For MARAC, it is a simple change in the database – but.....it won't make folks happy. . Yeah.....those 8 counties go away. For a mobile contact, who knows what area they were in - Did your contact count for one of the areas, or if it was a county line – well, not a planning area line. Do you make it work the new ones? Hmmm.....or not? QSO party contact? Same deal. You might figure out where fixed stations are.

I've run CT. Headed there again one of these days. What do I run? Both counties and planning areas? Are the folks trying to run all 3077 now going to have to go to CT to pick up the 3078<sup>th</sup> "county"?

Besides MARAC, some other programs count counties. Oh, right....those overlays for QSO Parties. What will happen to them for NEQP?

For mobiles you need to get some detailed maps so you can figure out where the Areas are. Wonder if the New England QSO Party will adopt them instead of Connecticut's 'former' counties?

What will CQ Magazine do? They require confirmations for USACA.

If you've run all the counties – and want to be up to date – maybe a trip to CT to get that 9<sup>th</sup> entity? Had to go back to get Broomfield CO when they created that one.

Questions, questions. OK....I've stirred up a hornets nest. Or do we do nothing and pretend that those former counties still exist?

At the National Convention in Bozeman in 2022, this was briefly discussed with the conclusion being MARAC will wait to see what CQ Magazine does first.

Tolland County, home of K1BV, former CQ Magazine Awards Chairman, is wallowed up by it's neighbor – doesn't exist in the new regime. Fairfield is split into two entities – maybe a bit into a third.

Additional

The census bureau has already started to use Regional Planning Areas for population estimates.

<https://www.ctdata.org/blog/census-bureau-releases-first-population-estimates-for-connecticuts-county-equivalent-planning-regions>

Good interactive map at that link.

March 29

Today, the Census Bureau released the first postcensal population estimates for

Connecticut's nine planning regions. These nine planning regions are the new [county-equivalent geographic units](#) that the Census Bureau will be using for Connecticut .

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There is now zero use for counties in CT. They are now defunct. Relics of the past.

## Quantum Computer News

The latest and greatest new innovation in computing, besides Generational AI, is quantum computing. From the web:

June 28, 2023

### **Rensselaer Polytechnic Institute Plans to Deploy First IBM Quantum System One on a University Campus**

The exploration of quantum computing will expand longstanding IBM and RPI partnership and seeks to accelerate New York's growth as a next-generation computing epicenter

Today, it was announced that Rensselaer Polytechnic Institute will become the first university in the world to house an IBM Quantum System One. The IBM quantum computer, intended to be operational by January of 2024, will serve as the foundation of a new IBM Quantum Computational Center in partnership with Rensselaer Polytechnic Institute (RPI). By partnering, RPI's vision is to greatly enhance the educational experiences and research capabilities of students and researchers at RPI and other institutions, propel the Capital Region into a top location for talent, and accelerate New York's growth as a technology epicenter.

RPI's advance into research of applications for quantum computing will represent a more than \$150 million investment once fully realized, aided by philanthropic support from Curtis R. Priem '82, vice chair of RPI's Board of Trustees. The new quantum computer will be part of RPI's new Curtis Priem Quantum Constellation, a faculty endowed center for collaborative research, which will prioritize the hiring of additional faculty leaders who will leverage the quantum computing system.

"We are grateful for Curtis Priem's support. RPI is building upon our longstanding collaboration with IBM to harness state-of-the-art computing to find solutions to global challenges, while training the next-gen workforce in quantum," said Marty A. Schmidt '81, Ph.D., President of RPI. "Our new quantum computational center will benefit the Capital Region and the State of New York by dramatically enhancing our area's research capabilities. We look forward to working with our partners in the region to transform the Hudson River Valley into 'Quantum Valley.'"

"I am extremely excited to support RPI as it moves into this important realm," said Priem. "This investment will keep RPI at the forefront of technology and innovation, as well as lead the country in leveraging this powerful technology for the good of our nation."

Priem co-founded NVIDIA Corp. in 1993. Since its founding, NVIDIA has been a pioneer in accelerated computing. "Our invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics, ignited the era of modern AI, and is fueling the creation of the metaverse. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry." Priem's past support of RPI includes an historic \$40 million unrestricted gift that led to the naming of the Experimental Media and Performing Arts Center (EMPAC).

Quantum computers harness the laws of quantum mechanics to process information and may solve problems that are too complex for classical supercomputers such as advancements in computational science research, artificial intelligence, and materials. The IBM Quantum System One to be deployed at RPI will be powered by the 127-qubit IBM Quantum Eagle processor, with which the company has recently demonstrated the capability to perform utility-scale calculations. IBM defines utility-scale as the point at which quantum computers could serve as scientific tools to explore a new scale of problems that remain intractable for classical methods. The agreement with IBM includes a commitment to provide an upgrade to the system installed at RPI in 2026.

"Today's quantum computers are novel, scientific tools that can be used to model problems that are extremely difficult, and perhaps impossible, for classical systems,

signaling that we are now entering a new phase of utility for quantum computing,” said Darío Gil, Senior Vice President and Director of IBM Research. “We expect this collaboration to continue to have tremendous impact for the area’s growth as a corridor of innovation, from New York City to the Capital Region. We are thrilled to collaborate with RPI as we continue to nurture the global quantum ecosystem of tomorrow.”

RPI has a storied history in advanced technology and is already home to one of the most powerful supercomputers in the world, the Artificial Intelligence Multiprocessing Optimized System (AiMOS). AiMOS, at a top peak processing speed of 11.03 petaFLOPS, is currently the most powerful private university-based supercomputer in the United States. The IBM POWER9 CPU and NVIDIA GPU-equipped supercomputer enables users to explore new AI applications.

“The Capital Region is a major center of global semiconductor R&D and manufacturing and key to other emerging industries like quantum computing,” said U.S. Senator Charles Schumer. “The region is home to one of the most advanced R&D facilities at the Albany Nanotech Complex, where cutting-edge research is happening like IBM’s development of the world’s smallest semiconductor chip. The region is also home to premier research institutions like RPI, and under the leadership of President Marty Schmidt, RPI is continuing its 200-year legacy as one of the top technological universities. What a great new feather for the region’s cap to have the first IBM Quantum System One placed on a university campus! This sets the Capital Region and Upstate New York apart and will be an asset to recruit and retain talent locally, and help train students in high-value careers.”

“RPI’s quantum computational center will be installed as we begin to celebrate our 200-year history of innovation. From a pedagogical and research standpoint, the potential exists to accelerate breakthroughs that could benefit the New York region and the world,” said John E. Kelly, ’78G, ’80Ph.D., D.H.L. (Hon.), Chair of the Rensselaer Board of Trustees.”

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I remember seeing the first large IBM 360 in the world there in 1964 as a freshman student. All Electrical Engineers had to take at least one course in 'computer programming'. . The computer was all hybrid modules – thousands of them – in a large installation in air conditioned facility behind glass. Hybrid modules with silk screened on resistors, transistors tack soldered on,, were the basic building blocks. ICs were just in the formative stages but not in production or reliable at this point. Tape Drives or Disk drives on larger versions.



. You could program it in half dozen compilers including COBOL, ALGOL, to FORTRAN, assembly language, machine language. Punch card input. The beginnings of computer science.

The largest IBM 360 would do 133K ops per second. Had up to 512K of memory. (now your desktop computer does 100x speed that with up to 8 gigabytes of memory. ). Your handheld is not far behind).

Only half a dozen students then studied that field as a major. Not many more elsewhere either. More interest in semi-conductor design back then, another new field.

That was well before 'integrated circuits' with all discrete transistors and parts crammed onto circuit boards.

Now, 1/3<sup>rd</sup> the students are in computer science fields. There's a course in Quantum Computing available and well attended.

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Detailed article on Quantum Computing (as of 2017)

<https://wrfranklin.org/nikola/pages/quantum-summary/>

## Mobile Activity in July

At the beginning of the month:

K2HVN ran DE counties several times during the month.

K8ZZ out in California running county after county. Then into AZ. K5GE popped up in AZ in Cochise AZ. Then both noted in one CO county while K8ZZ zipping all over the state. Both noted in Gray TX. Into KS and OK. Next noted in SD. Then to home state MN. Long trip.

WY0A out in WA and OR zipping around completing that part of the country. Then ID into CO.

AB4WL/NN4JM noted in ME counties. YL/OM team contacts. Ran a bunch of parks along the way. Ran one in WV, then headed home to AL.

N4RKK was spotting park activators with their counties to help out the folks. Some days there was only park activity – no mobiles running.

K8II was noted in SC (formerly WB8III)

W8OP noted in NC and then WV.

KE4UP noted in VA counties then into KY on his way west. Into IN, IL, IA, MN, WI -

NA8W noted in OH counties.

N9JF headed out – ran several parks in Canada on his way to AK to put out the districts. Conditions not to great but did manage to work contacts on many bands. Ran FT-8 for the digital folks. Made it to second and spotted many bands. Headed back to Fourth, then into 3<sup>rd</sup> District. Spent several days running parks there.

Team AB7NK/K7SEN headed east from AZ – through NM, TX, OK, MO, IL, IN along the interstates.

## IBM and Quantum Computing

HIROSHIMA, Japan, May 21, 2023 /PRNewswire/ -- At the G7 Summit in Japan, IBM (NYSE: IBM) announced a 10-year, \$100 million initiative with the University of Tokyo and the University of Chicago to develop a quantum-centric supercomputer powered by 100,000 qubits.

Quantum-centric supercomputing is an entirely new, and as of now, unrealized, era of high-performance computing. A 100,000-qubit system would serve as a foundation to address some of the world's most pressing problems that even the most advanced supercomputers of today may never be able to solve.

For example, such a powerful quantum system could unlock entirely new

understandings of chemical reactions and the dynamics of molecular processes. In turn, this could enable researchers to help study climate change through modeling better methods to capture carbon; discover materials to build batteries for electric vehicles and energy grids towards the goal of being cleaner and more sustainable; and uncover more effective and energy-efficient fertilizers.

To usher in this powerful new paradigm, a global collaboration and an activation of talent and resources across industries and research institutions is being initiated. By partnering with the University of Chicago, the University of Tokyo, and IBM's broader global ecosystem, IBM will work over the next decade to advance the underlying technologies for this system, as well as to design and build the necessary components at scale.

Moving forward, IBM intends to expand these partnerships to include Argonne National Laboratory and Fermilab National Accelerator Laboratory, both of which are members of the Chicago Quantum Exchange and home to two respective Department of Energy quantum hubs. Importantly, the two laboratories offer capabilities and expertise that can facilitate delivering the technologies envisaged in the race to build a quantum-centric supercomputer.

"Over the past several years, IBM has been at the forefront of introducing quantum technology to the world," said Arvind Krishna, Chairman and CEO, IBM. "We have achieved significant progress along our roadmap and mission to globally establish useful quantum technology, so much so that we can now, with our partners, truly begin to explore and develop a new class of supercomputing anchored by quantum."

"Achieving breakthroughs at scale in quantum technology requires deeply rooted and productive collaboration around the world and across a broad range of industry, academic, and government partners," said Paul Alivisatos, President of the University of Chicago. "Quantum information science and technology is at a crossroad where foundational discovery and technical innovation will combine to create real breakthroughs. The University of Chicago is thrilled to partner in this endeavor."

"We expect our partnership will lead to scientific breakthroughs, acceleration of the adoption of quantum computing for the coming era, and active engagement into the critical societal challenges of humanity. We also aim to contribute to the realization of a better future society by nurturing diverse talents," said Dr. Teruo Fujii, the President of the University of Tokyo.

Building the Blocks of Quantum-Centric Supercomputing

The plans for this quantum-centric supercomputer are expected to involve innovations at all levels of the computing stack, and encompass the convergence of the fields of quantum computing and quantum communication, as well as the seamless integration of quantum and classical workflows via the hybrid cloud.

Because such a computer has never been made before, the first step will be to lay out a blueprint. The design will have to integrate classical computers and quantum computers – a challenging task to date – as well as break new ground in quantum communication and computing technology.

The foundation of this system will include milestones IBM has already outlined on its Quantum Development Roadmap. This includes the ability to scale and connect growing numbers of quantum processors through quantum interconnects, as well as technology to mitigate errors to fully harness noisy yet powerful quantum processors.

By the end of 2023, IBM intends to debut three cornerstones of its necessary architecture for quantum-centric supercomputers. One is the new 133-qubit 'IBM Heron' processor. This processor is a complete redesign of IBM's previous generations of quantum processors, with a new two-qubit gate to allow higher performance. It will also be compatible with future extensions to enable modular connected processors to grow the size of the computer.

The second is the introduction of IBM Quantum System Two. The new flagship system is designed to be modular and flexible to introduce elements of scaling in its underlying components, including classical control electronics and high-density cryogenic wiring infrastructure. This system is targeted to be online by the end of 2023.

The third is the introduction of middleware for quantum, a set of tools to run workloads on both classical and quantum processors. This includes tools for decomposing, parallel execution, and reconstructing workloads to enable efficient solutions at scale.

Over the next decade, IBM plans to work with university partners and its worldwide quantum ecosystem to evolve how its quantum processors can be connected via quantum interconnects. This work will aim to enable high-efficiency, high-fidelity inter-processor quantum operations and a reliable, flexible, and affordable system component infrastructure to allow scaling to 100,000 qubits.

IBM's collaboration with the University of Chicago will build upon the Chicago area's strengths in quantum research. The University of Chicago seeded the region's quantum

ecosystem more than a decade ago with the decision to make quantum technology a focus of what is now the Pritzker School of Molecular Engineering. Chicago has arguably become one of the leading global hubs for research in quantum technology and home to one of the largest quantum networks in the country. Scientists from the University of Chicago-headquartered Chicago Quantum Exchange, which includes Argonne National Laboratory and Fermilab National Accelerator Laboratory, four universities, more than 40 industry partners, and researchers at other world-class academic institutions in the region will continue to expand the understanding and utilization of quantum technology.

In conjunction with IBM, researchers at the University of Tokyo have been pushing forward on topics such as the detailed analysis of noise deep inside quantum processors, the development of efficient computation for quantum artificial intelligence, and quantum chemistry simulation with classical-quantum hybrid computations.

For more about the path to a 100,000-qubit quantum-centric supercomputer, read the IBM Research blog.

Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.

## About IBM

IBM is a leading provider of global hybrid cloud and AI, and consulting expertise. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. More than 4,000 government and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and consulting deliver open and flexible options to our clients. All of this is backed by IBM's legendary commitment to trust, transparency, responsibility, inclusivity and service.

Source: <https://newsroom.ibm.com/2023-05-21-IBM-Launches-100-Million-Partnership-with-Global-Universities-to-Develop-Novel-Technologies-Towards-a-100,000-Qubit-Quantum-Centric-Supercomputer#:~:text=HIROSHIMA%2C%20Japan%2C%20May%2021%2C,supercomputer%20powered%20by%20100%2C000%20qubits.>

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Note de N4CD – a Quantum Computer works nothing like a conventional computer. No standard programming languages are available. Q bits are weird things with unusual logic states all at the same time. Coming up with applications and finding ways to use the computational power is a challenge.

“Quantum computers are elegant machines, smaller and requiring less energy than supercomputers. An IBM Quantum processor is a wafer not much bigger than the one found in a laptop. And a quantum hardware system is about the size of a car, made up mostly of cooling systems to keep the superconducting processor at its ultra-cold operational temperature.

A classical processor uses bits to perform its operations. A quantum computer uses qubits (CUE-bits) to run multidimensional quantum algorithms.

## Superfluids

Your desktop computer likely uses a fan to get cold enough to work. Our quantum processors need to be very cold – about a hundredth of a degree above absolute zero. To achieve this, we use super-cooled superfluids to create superconductors.

## Superconductors

At those ultra-low temperatures certain materials in our processors exhibit another important quantum mechanical effect: electrons move through them without resistance. This makes them "superconductors."

When electrons pass through superconductors they match up, forming "Cooper pairs." These pairs can carry a charge across barriers, or insulators, through a process known as quantum tunneling. Two superconductors placed on either side of an insulator form a Josephson junction.

## Control

Our quantum computers use Josephson junctions as superconducting qubits. By firing microwave photons at these qubits, we can control their behavior and get them to hold, change, and read out individual units of quantum information.

## Superposition

A qubit itself isn't very useful. But it can perform an important trick: placing the quantum information it holds into a state of superposition, which represents a combination of all possible configurations of the qubit. Groups of qubits in superposition can create complex, multidimensional computational spaces. Complex problems can be represented in new ways in these spaces.

## Entanglement

Entanglement is a quantum mechanical effect that correlates the behavior of two separate things. When two qubits are entangled, changes to one qubit directly impact the other. Quantum algorithms leverage those relationships to find solutions to complex problems.

Right now, IBM Quantum leads the world in quantum computing hardware and software. Our roadmap is a clear, detailed plan to scale quantum processors, overcome the scaling problem, and build the hardware necessary for quantum advantage.

Quantum advantage will not be achieved with hardware alone. IBM has also spent years advancing the software that will be necessary to do useful work using quantum computers. We developed the Qiskit quantum SDK. It is open-source, python-based, and by far the most widely-used quantum SDK in the world. We also developed Qiskit Runtime, the most powerful quantum programming model in the world.

Achieving quantum advantage will require new methods of suppressing errors, increasing speed, and orchestrating quantum and classical resources. The foundations of that work are being laid today in Qiskit Runtime.”

Source: <https://www.ibm.com/topics/quantum-computing>

# KA2LHO Article

We've had a couple articles in past issues on KA2LHO's travel around Florida parks and Counties. From his Facebook page:

“Many friends and family have heard or read about our "radio road trips" putting counties and parks "on the air" with my ham radio hobby. One aspect of this hobby in which I have been involved since the early 1980's is trying to make contact with other operators in all 3,077 counties of the United States.

CQ Magazine, a national ham radio publication, offers an award for all hams that achieve this goal with confirmed contacts. What is a confirmed contact? We are required to have written confirmation for each of the 3,000+ contacts as we work toward that goal.

Written confirmations are usually done by exchanges of postcard type documents (called QSL cards) verifying the radio communication. I have many such cards from all over the world. I also track those from different counties throughout the United States. Today I received my ribbon and seal to place on my original 500 county award certificate. This ribbon is for achieving the 2,500 confirmed county contacts level. This isn't just because I said so.





A list of all contacts and related information is submitted for approval. The reviewer has the right to request any confirmation documents for any contacts in the list.

The next level is 3,000 counties, then completing all 3,077. I am working on getting them all with cards currently in the mail that, when returned, will put me over the 2,600 county mark.

Hopefully it won't take me another 40 years to achieve that goal!!!! Thanks for following our travels-KA2LHO

## Radio Museums

N1API posted a link to the Connecticut Vintage Radio & Communications Museum in Windsor CT. He visited there for a few hours and posted a YouTube video of some of the equipment including a spark gap transmitter. Here's the Museum site

<https://www.vrcmct.org/>

Here's Al's video link <https://youtu.be/pf9Eq5x65qs>

He suggested combining this with a visit to ARRL HQ. It also has a small museum area, and you can visit the various departments, and/or operate W1AW as a guest operator.

There are a number of good radio museums around the country. Be sure to check their operating hours. Some are only open on Saturdays.

Here's a few suggestions

Museum of Radio Technology – Huntington WV (very nice)

<https://www.mrtwv.org/>

National Capital Radio and Television Museum - Bowie MD

<https://www.cityofbowie.org/292/National-Capital-Radio-Television-Museum>

Spark Museum of Electrical Invention - Bellingham WA

<https://www.sparkmuseum.org/>

American Museum of Radio – Bellingham WA

<https://www.myscenicdrives.com/places/washington/american-museum-of-radio>

Asheville Radio Museum - Asheville NC

<https://www.avlradiomuseum.org/>

Texas Broadcast Museum – Kilgore TX

<https://texasbroadcastmuseum.com/>

Antique Wireless Museum – Bloomfield NY (out by Rochester area) - this is an excellent Museum with tons of early BC, spark gap transmitters, tons of ham radio equipment, a recreation of the Titanic Radio room with original Marconi equipment, a 50KW VOA shortwave transmitter and consoles, etc Highly recommended.

<https://www.antiquewireless.org/homepage/museum/>

Western Radio Museum – Nevada – not sure if open yet but very interesting web stir at

<https://www.radioblvd.com/>

Early Television Musuem - Hillard OH - good website. Was open to public but not sure of hours these days.

<https://www.earlytelevision.org/foundation.html>

There are many smaller radio and TV museums also scattered around the country for your enjoyment. Don't forget the Smithsonian Museum in DC, too.

If you wind up in Branson MO – there's the Titanic Attraction. Has a recreated radio room with authentic Marconi equipment (We are talking about \$150,000 of Marconi units these days – very scare items). Otherwise just enjoy the tour.

<https://www.explorebranson.com/article/titanic-museum-attraction-branson>

## Cruise Ships Prohibit “Walkie Talkies”

Norwegian Cruise Line Adds Another Item to Prohibited List

Walkie-Talkies Now Banned (FRS walkie talkie type radios)

Norwegian Cruise Line recently updated its Prohibited Items List to include walkie-talkies. This makes 32 items now explicitly banned by the cruise line, and follows another recent update, when fans were banned in March 2023.

There is no explanation or clarification of why walkie-talkies are now prohibited, but there could be several reasons. The frequencies of certain walkie-talkies could possibly interfere with other onboard signals, including radios used by crew members or frequencies that need to be kept clear for emergencies. Some walkie-talkies might even interfere with onboard wi-fi service, though this is unlikely.

The ban could also be a result of unruly behavior, such as young cruisers playing rowdy games involving walkie-talkies, or possibly throwing the small, hand-held radios and creating disturbances, though no reports of such behaviors have been made public.

### Walkie-Talkies Cruise

Unlike the ban on small fans earlier this year that was later clarified with some exceptions, the prohibition on walkie-talkies appears to be absolute, regardless of the size, style, manufacturer, or strength of the small radios.

Some cruise travelers use walkie-talkies as an inexpensive, convenient way to keep in touch with family or group members, especially on larger ships when different individuals want to join in different activities or when parents may be relaxing in an adults-only area while children are at the pool, waterpark, or arcade.

A walkie-talkie can be a quick way to check in or locate someone without needing to rely on sometimes intermittent internet service, especially if guests are not staying in the same cabins or perhaps even on the same decks.

Walkie-talkies are especially favored by families who prefer to unplug and put away cell phones while on vacation, or if not everyone in the family has a cell phone to stay in touch onboard.

### Similar Banned Items

While Norwegian Cruise Line has not offered an explanation about why, specifically, walkie-talkies are now prohibited, there are several other items on the prohibited list that are similar.

For example, number 20 on the list is “large batteries” and walkie-talkies and their charging bases may use batteries that aren’t approved. While “large” would typically refer to marine batteries for boats, scooters, and similar items, this could be one interpretation that relates to walkie-talkies.

Numbers 25 and 26 relate even more closely to walkie-talkies. Prohibited item number 25 lists “Emergency Position Indicating Radio Beacons (EPIRB), ham radios, satellite phones, transformers, lasers and laser pointers,” and while most inexpensive walkie-talkies do not have emergency beacons or lasers, they may use similar frequencies that could be problematic.

Prohibited item number 26, “Any form of radio/ telephone signal jamming equipment,”

is also related. While walkie-talkies are not intended as jamming devices, using them in close proximity with other equipment could potentially create a localized jamming effect.

Cruise lines regularly update their prohibited items list as new items become a concern, or they may remove items that are no longer seen as troublesome. Just 18 months ago in January 2021, for example, Norwegian Cruise Line's prohibited items list only contained 28 items, whereas the addition of walkie-talkies brings the list to 32.

At this time, no other major cruise line has banned walkie-talkies.

Source: <https://www.cruisehive.com/norwegian-cruise-line-adds-another-item-to-prohibited-list/106471>

Likely the proliferation of FRS walkie talkies – low power (2w) on 26 UHF channels – (0.1w on six others) caused this. But you probably can't sneak a 2M handheld on either if you go Norwegian Cruise line to AK.

The other problem is that while you are at sea in international waters, you are operating under the laws of the country of registration of the ship. Likely or Panama, Bahama, or some other country of convenience.

Some things you can't take on a cruise

<https://www.cruisehive.com/things-you-cant-take-on-a-cruise/16610>

note de N4CD: FRS (Family Radio Service) is an unlicensed band using very low power at UHF(FRS/GMRS allocation) . Radios are inexpensive – you can get a pair for \$20 or 4 for \$50 from multiple suppliers on Amazon. Range up to 0.3 to 1 mile under most circumstances. Power output of 2 watts now on most channels. Mountain top to mountain top might be 30 miles. Radios are equipped with CTCSS/DCS.

You can buy a Baefeng type 3 band ham radio (2m, 1.25m, UHF) now for about \$33. Inexpensive Chinese radio or a clone. Or spend more on a Yaesu or other manufacturer for higher quality. (>\$100).

You cannot legally buy a radio that does both ham radio UHF and FRS.

# Commercial Interests on HF Bands

Commercial Interests Petition FCC for High Power Allocation on Shortwave Spectrum

[Updated 7/18/2023]

7/11/2023

The ad hoc group “Shortwave Modernization Coalition” petitioned the Federal Communications Commission (FCC) to allow data communications on multiple bands within the HF 2 – 25 MHz range with up to 20 KW, including in bands immediately adjacent to spectrum allocated to the Amateur Radio Service. This group appears to represent high-speed stock trading interests.

ARRL The National Association for Amateur Radio® is treating the petition as a subject of concern for its members and the greater Amateur Radio Service. ARRL Laboratory staff are studying the matter from a technical standpoint, including analysis of transmitted signals potentially interfering with Amateur Radio communications on Amateur Radio spectrum. The results from this expert review are being finalized and will inform ARRL’s filed comments on the matter.

The FCC has assigned the petition RM-11953. Comments are due by July 31, 2023, and reply comments by August 15. While the petitioners exclude the amateur bands, high power operations on immediately adjacent bands are proposed.

A copy of the petition is at: <https://www.fcc.gov/ecfs/document/1042840187330/1> (PDF).

Source: [http://arrl.org/news/commercial-interests-petition-fcc-for-high-power-allocation-on-shortwave-spectrum?fbclid=IwAR2fGlxxq36\\_hV1RYiLpJ1g1t-viYvRvF1dCkatUkmLHrZDljgjq0eDvvSQ](http://arrl.org/news/commercial-interests-petition-fcc-for-high-power-allocation-on-shortwave-spectrum?fbclid=IwAR2fGlxxq36_hV1RYiLpJ1g1t-viYvRvF1dCkatUkmLHrZDljgjq0eDvvSQ)

# Awards Issued

## Master Gold:

NU0Q met the requirements for MG on 29 June 2023. He received #76

W0FP completed MG on 29 June 2023. He received #77

## Master Platinum:

WD4OIN met the requirements for MP on 20 June 2023. He received #33

## Bingo Award

W0GXQ completed Bingo IV on 14 June 2023. He received #17

## Worked All Counties

W0GXQ completed USA-CA 8, on 30 June 2023. He received #20

K2HVN completed 5th time on 24 June 2023. Number #125

## USA-PA Award

W0GXQ completed all "K" on 30 June 2023. He received #37

## Single Band

K8ZZ completed 40 meters on 25 June 2023. He received #6

K3IMC completed level 1000 on 20 meters on 22 October 2010. He received #3

**USA-SSB:**

WA9DLB completed all SSB on 28 September 2022. He received #8

**USA Digital Award**

K3IMC completed level 1000 on 11 July 2023. He received #22

**Roadrunner Awards:** (Last Counties Given Out)

K8ZZ #3 1700 ON 20 JUNE 2023

K8ZZ #3 1725 ON 30 JUNE 2023

K8ZZ #3 1750 15 July 2023.

K5GE #24 750 ON 22 JUNE 2023

K5GE #22 775 ON 2 JULY 2023

K4YT #44 475 ON 24 JUNE 2023

K4YT #43 500 ON 24 JUNE 2023

WY0A #89 300 ON 26 JUNE 2023

WY0A #73 325 ON 29 JUNE 2023

WY0A #65 350 ON 3 JULY 2023

N9JF #37 525 ON 20 July 2023

**Ran All State:**

K4YT Completed all Alaska on 24 June 2023. He received #26



# Events for County Hunters

MARAC Counties Party – see above July 29-30

Back to State QSO Parties. The fun times have returned. Note all state QSO parties this month include digital.

Aug 5 0001 to Aug 6 2359Z

**Ten Ten SSB contest**

[www.ten-ten.org](http://www.ten-ten.org)

Aug 12 1400-2200Z

**Ky Parks on the Air**

CW Phone Dig

[www.k4msu.com/kypota](http://www.k4msu.com/kypota)

Aug 12 1400 to 13 0400 1.8 to 432 MHz!

**Maryland DC QSO Party**

cw Phone digital

[www.w3vpr.org/mdcqsop](http://www.w3vpr.org/mdcqsop)

Aug 26 0400z to Aug 28 0400z

**HI QSO Party**

CW Phone Digital

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

Aug 26- 1400- to 27 2000 z

**Kansas QSO Party**

cw phone dig

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

That's all folks ! See you next month.

