

# County Hunter News OnLine

September 2024  
Volume 20 Issue 9

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

**1 ) Sunspots** – Lots of them Solar Activity – Lots of it. Some days absolutely horrible conditions for running counties. K index up to 9, quite often K=2 or K=3. We're at or approaching solar max for this cycle. Great DX on 10m, especially FT-8 when band cooperates and lots of contacts being worked on 6M FT-8 a couple times a month. Most of month above sunspots above 200. Up to over 300 at times but K index persistently 2 or 3 making the lower bands not so great. 40M really not great unless you are in the eastern part of the country with lots of population.

As typical, upper bands 17 to 10m 'good' but 20m only rated 'poor' or 'fair' many days – with better morning and evening performance. Yet, thousands of contacts being made with some superstations and expeditions to rare islands making 150 or more on 15m and several thousand on all bands combined in various contests. (especially DX).

Sunspots now up to over 300! Wow. But a=7 and K=2 for not great conditions on 20m. Dang.

Solar-Terrestrial Data - click to add to web site			
<b>08 Aug 2024 1443 GMT</b>	Condition	K-In A-In	Calculated Conditions
SFI: <b>303</b> SN: <b>322</b>	Quiet	0-2 0-7	<b>Band Day Night</b>
A-Index: <b>7</b>	Unsettled	3 8-15	<b>80n-40n: Poor Good</b>
K-Index: <b>2 / PIntry</b>	Active	4 16-29	<b>30n-20n: Poor Good</b>
X-Ray: <b>C9.4</b>	Minor storm	5 30-49	<b>17n-15n: Good Good</b>
304A: <b>177.3 @ SEM</b>	Major storm	6 50-99	<b>12n-10n: Good Poor</b>
	Severe storm	7-9 >100	<b>Sig Noise Lvl: S1-S2</b>
SFI>180 A<8 K<3=E-W open SFI>180 A<8 K>3=N-S open SFI>250 A>30 K>3=Aurora			
<a href="http://www.n0nbh.com">http://www.n0nbh.com</a> - Copyright Paul L Herrman 2023			

Most days you can still run counties and get contacts. The Geo storms last a few hours when they occur and when they do, the band drops dead for a while. Then recovers. Maybe 2 hours of absolutely miserable, high noise, poor propagation.

## **2 ) IOTA contest**

In the IOTA contest, a fair number of QSOs made on 15m (thousands), and a few on 10m but not all that many according to reports on the 3830 contest reflector. Some IOTA stations racked up over 1500 QSOs in the event. It clobbered the US MARAC Counties Contest by filling up band on East Coast. Many state QSO Party folks and even CH busy working IOTAs.

Interestingly, IOTA has gone to largely 'paperless' confirmation awards. You can use contacts confirmed in LoTW, the RGSB annual contest if both submit longs, or HamClub One Line for matching QSOs. QSL cards were the main thing 20 years ago, and are still accepted, but you can apply on line for the awards using those matching QSOs in the databases.

For IOTA, islands have to lie offshore a certain distance in sea water, cannot be in rivers or bays, have to be under this countries jurisdiction (or their own).

If you like chasing islands, there is also the US Island on the Air – for US based islands in inland water ways. They have to be at least 100 feet in any dimension, lie 50 feet offshore.

<https://usislands.org/rules-and-program-information/>

Some islands are also POTA and WWFF sites as well. A few are National Park sites like Cumberland Island, Isle Royale, etc.

## **3 ) QSO Parties**

Alabama QSO Party had good participation with over 100 reporting on the 3830 reflector. Full report later in this issue. MDC also fairly good but most activity moved quickly to 40 and 75m. Lots of QRM from big DX contest on 20m that weekend.

OK and OH QSO parties very busy. Full coverage next month as occurred last weekend just before press time.

#### 4) Gas prices

Gas prices are dropping a bit. Hit \$3.39 in TX and now down to \$2.98 here. At Costco 25c or so lower than that.

That probably indicates a slowing economy as demand drops. When that occurs, prices fall.

Many consumers are 'maxed out'. Others are buying higher mileage cars (hybrids) that get close to 50mpg combined. Get a new Prius and it is rated at 55 mpg. Most new SUVs get 10-20% better mileage than older ones. In 2025, many cars will be hybrids. EV sales have stalled and are growing at maybe 2% a year in the USA.

Thanks to Biden-flation – gas prices rose by more than \$1.50/gal from \$1.70 to \$3.20/gal in just a few years while Biden and Kamaha Harris ran the country.

What's more amazing is that Kamala Harris is now promising to 'fix' the problems on 'DAY 1) if elected - that she and Joe (and democrats) created in the first place! Duh! They are still in office for five more months. How about you and Joe fix the problems NOW! Blowout spending by this administration led to the highest inflation and price increases in 20 years. Groceries up 35%. Rent and home prices – well, out of sight – up and up. Car insurance and house insurance up 50%.

## AI5P Trip Report

### **Activation of Isle Royale National Park**

In July, I was able to get one of my "Bucket List" items done. That was to visit this unique park in Lake Superior. The park was established in 1940 and its boundaries are 45 miles long and 9 miles wide.

It is closed from the 1st of November to April 15th. The National Park Service says it is the least visited park in the contiguous United States. It is only accessible

by ferry, seaplane or private boat. It is very popular with backpackers, hikers, boaters, paddlers, divers and fishermen. County hunters can claim Keweenaw County, Michigan, and Parks on the Air US-0039/ WWFF KFF-0039 with a contact.

It's not an inexpensive trip if you plan to stay at the only lodge on the island - Rock Harbor. I made my reservations for the lodge and ferry back in December. And you have to also pay a daily fee to be on the island. The Rock Harbor area has the NPS visitor center, store, restaurant, guest house, four lodges, a lodge office, staff dormitories, and a small NPS auditorium. Sounds like a lot of stuff, but you can look on Google Maps and see this doesn't take up too much area at all.

I left from Copper Harbor, MI, on the ferry Isle Royale Queen on July 11 and returned on the 14th. The ferry ride takes 3 hours and 40 minutes. Fortunately for me it was smooth sailing to and from the island! Once you get to the island, you have to wait for 3 hrs or so while the rooms are cleaned for the new arrivals. I walked around checking possible sites to be able to set up my Wolf River Coil antenna and station. It didn't look too great because the area, as I said, isn't too open and there are always folks around doing various activities.

Then good fortune blessed me when I got the room assignment. The lodges are two stories with the bottom rooms having a small individual balcony. I got the end room of the building and this is the only room which also has no one above them. I was able to run my coax out of the balcony (which is only a few feet above the ground) and set up the WRC antenna just a few feet from the water. I ran the rig - my trusty Icom 706MKIIG with the tuner off a Bioenno 12V 20Ah battery. If I had brought my power supply, I could have used it also.

I operated between some hikes, a boat tour to a lighthouse and early commercial fishing site, and just visiting with folks. Very relaxing. There are no TVs in the rooms and the only place with reliable internet or cell service (which I didn't learn about until the last day) is in the small NPS auditorium. It's closed at night but if you stand on the porch you can still get a signal hi! I ended up with 450 contacts with 215 on CW and 235 on SSB. Amazing lack of noise on the radio too!

Very unique place - I didn't get to see any moose but did get a very quick glance at one of the famous grey wolves. If you like National Parks, this is definitely one to visit! 3  
Rick AI5P

Pictures:



Map of the Lake Superior and the U.P. of Michigan area  
Isle Royale at top



Isle Royale Queen ferry



Welcome Sign



WRC antenna

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Tidbit de N4CD – a while back, I wrote a book report on an interesting tale that took place on Isle Royale in the County Hunter News . Isle Royale Calling – by Helen Cloutier. 1957 pub date.

<https://chnewsonline.com/County%20Hunter%20News%20October%202017.pdf>

It was published in 1957 and the time frame is the 40s and 50s with amateur radio the main focus. Seems to have gotten 'scarcer' these days but likely to show up on on line digital databases or you can borrow as e-book perhaps. Passed on my copy after reading it back then. Only a few copies for sale these days. Good 'history' but not that relevant today.



It's a story of a family that lived on the island. The father was part of the coast guard. The family had ham radio to keep in touch with the world. No phone service on the island to the mainland. Very few visitors (it wasn't a National Park way back when).

## MARAC QSO PARTY

### MARAC QSO PARTY

Not all that many reporting on the 3830 contest reflector. About 10% of what was posted for the AL QSO Party held the same weekend.

Many stations were working the IOTA contest (Islands on the Air). Likely the east coast 20m band was full of stations working EU or EU stations working islands worldwide. You could be on 'Long Island' New York or dozens of other US Islands and many were. Not all that much activity heard in TX but without a beam up 60+ feet, you don't hear much from EU on 20m in the mobile. But it messes up the east half the country working US mobiles! 20M is full end to end up to 14.110 with strong signals. IOTA has specific rules of what constitutes an 'island'.

From the 3830 contest reflector:

**KM4FO - 13 CW QSO 10 counties**

no comments

**K4BAII - 40 CW 3 SSB 32 CW counties, 3 SSB counties**

Fair CW activity on Friday night. Not much activity at all thereafter. Only one mobile worked and that was on 20M SSB (although there were two ops and each caller got two QSOs, one from each call). Once the other contests started up, there was almost no activity in this once popular contest. I still need a few counties all time (LA, KY, NE, ND, ID, MT, SD), but didn't work any of them. Thanks for all QSOs. Haven't heard much CHN activity lately either. When mobile, it seems that no one is interested any more. Guess it is all being done on there internet by skeds these days. 73, John, K4BAI.

**NS2N 13 CW 2 SSB 10 CW counties, 2 SSB counties**

much less than reasonable conditions

**AC6ZM mobile 130 CW 103 counties**

I spent a lot more time on the road than operating. Not a lot of participation during the RSGB IOTA. CONDX were better Saturday and Sunday not so much. My goal was to log 100 counties and reached that goal on Day 2. Maybe next year I will go to an island and work the IOTA contest instead.

**KI5MM Mobile 317 CW QSO**

My first time trying this contest. I was needing to test out antennas for TXQP. Worked Sat with K5MEC. We hit 12 counties and 6 POTA parks.

Late start Sunday start with XYL. Hit about 6 more counties and 3 more POTA parks. WA6KHK was the top chaser with 15 counties I think. It was different working 2 guys in one mobile but enjoyed the contest. Thanks for the Q's.

## On the Road with N4CD I

The MARAC Counties Contest was coming up. Propagation was not the greatest. On Friday eve, the A was 25 and the K index 3. Yuck. There had been an X.14 solar flare on the far side of the sun, the biggest flare so far this solar max cycle. It circled around and part of it headed to Earth to mess up propagation again. It came down a bit on Saturday with A 15+ and K2. Still not great.

### Saturday

Nuked an egg in microwave and made half sandwich on whole wheat – added bit of cheese, a slice of tomato, had cup of coffee then out the door at 7:15 local time. 2016 Chevy Malibu with 165,000 miles on it. Still running nicely.

Headed out for the Collin/Grayson line going north – about 35 miles. Zipping along at 70 mph on US75, and – no exit for County Line Road – construction. Only way to get there was to be on the right service road for five miles and no advance warning. Well,

plan A down the drain so headed further north. Nice spot to run at the Texas Welcome Center just south of the Red River before leaving Grayson County. Also a bit later in the morning. Stopped there. Made pit stop first. Then ran GRSN county.

Hnnn, Just 3 in log. Not off the great start. Looked around and found a few park stations and worked 7 of them in few minutes – but no county exchange for many of them. All they give is RST and state normally as the exchange. Hard to get county on CW from them. Spotted myself but few takers.

Headed on North, not optimistic at this point for high score.

Well, might as run parks as well so headed to Lake Texoma State Park. Headed on down to boat ramp and sat there for hour and 15 minutes Found a few park stations, then spotted myself on W6RK. Found 12 county testers, then spotted myself on Park site and quickly worked 20 of them Wheedled a few counties out of them. Went to 15m and found 5 more contest contacts including OM2VL. Lots of time spent calling CQ Counties Contest. Less than one QSO a minute. Should be better. Well, at least the park contacts made burning the gas worthwhile. IOTA contest likely filling up 20M back east. Not hearing any of them other than few weak ones. Caught a few later.

Well, would try another site – so headed to Fort Washita Historic Site in Bryan County OK 30 minutes away. Found two AL QSO Party stations, a couple park stations worked Search and Pounce, then spent 10 minutes calling CQ Counties test. Only got 3! Heard couple others but they didn't hear me. Band miserable.

AL QP stations didn't want to wait to get my county – just the state. Not aware of US Counties contest. All they wanted was state. Confused all of them. Well, all two of them I actually managed to work. Called several others for minutes but they just went on CQ ing. Probably high power and some local noise making my 100w signal below their noise level.

Then put out POTA/contest. Next hour worked mainly park stations but if I recognize CH call, gave the state/county to them. Mostly POTA folks 35 of them, with a few CH calling in – about 4 more. Caught a few more counties. Many POTA folks use 'code readers' to make contacts – maybe half of them – oh well. Work me and disappear before listening for 'Your county pse?'. Or 'county?' Lost about half of contacts with no counties exchanged. Went 15m and added in 3 CH. Guess if I were on SSB could have gotten counties for most of the POTA QSOs as well Didn't do. My hearing is not up to par for SSB QSOs.

I could hit a few more OK counties, but not worth it for a handful of contacts All the QSO Party folks either working IOTAs, or looking for AL QSO Party stations. Conditions not the greatest. Wasn't going to drive another 40-50 miles for six or 7 contacts, so headed to home. Grabbed slice of pizza for lunch at 'Hunt Brothers' pizza place Hunt Brothers has more 'outlets' than any other pizza chain now. Mostly in gas stations!

Stopped in my home county in local town park. Found 8 CH contesters, and about dozen POTAs search and pounce. Headed on home after, Disappointed. Almost none of the regular state QSO Party folks showed up – just K4BAI and WA6KHK, KE0TT and just a few others there. Over 100 entries reported on the AL QP.

Did 200 miles on Saturday and not even 1 QSO per mile.

The contest was noted on the ARRL weekly Newsletter. It was on the 3830 scores page as well. No big time mobile ops took place on CW other than AC6ZM/m. One SSB mobile quite active on SSB in TX. Never heard him. Too close for skip, too far for groundwave.

However, those in range picked up up to 22 counties in the Alabama QSO Party going on Saturday afternoon and evening. Some SSB, some cw. Two mobiles out there on CW it seems in AL and bad thunderstorms that way.. . Unaware of MARAC contest going on.

### **Sunday -**

Decided to try again and headed over to my local POTA park in Dallas County TX. 25 miles away and about 35-40 driving time minutes. Spotted both on POTA and W6RK. Just a few showed up for TXDLLS. Got a lot of POTA stations but few didn't give their counties so no joy for all on that. Did get some good mults. Most couldn't understand 'your county?' or were instantly gone once they got 599 TX DLLS'.... but persistence got a bunch of them finally. Decided not worth another 25 miles to get to next county (ROCK) for half dozen or less contacts for the real chasers. No park in Rockwall county. Headed home.

## Mobile Activity in August

There were many days in the month with no county hunter mobiles. Thanks N4RKK who spotted dozens of parks during the month on slow days

Not a whole lot of CW activity other than NF0N and the state QSO parties! Not many spots for them either.

At the beginning of the month:

KE4UP was still in MT putting out lots of counties there on SSB. Then into WY. After lots in WY, to NE Into KS, To OK, to MO, IN,

NU0Q left I and headed to MN to run lots of counties there.

N8HAM spotted in Saratoga, NY over to Ontario and Yates

K8ZZ popped up in IL in a few counties.

NF0N was in SD running dozens of counties

N1QY was spotted in MA

NU0Q headed to KS for the KS QSO Party -

## Alabama QSO Party

There were two mobiles out running I think. The weather was not the best in AL – with thunderstorms later in evening forcing many shutdowns for a while till they passed. Propagation was not the best either. However, over 100 reported scores on the 3830 contest reflector so there was decent activity.

Spots on W6RK – well.....if you watched the spots, you wouldn't even realize it was going on! Zilch.

As far as I can tell, top scorers out of state worked 22 of the Alabama 67 counties. Lots not covered or worked by most. Lots and lots of CW activity.

From the 3830 reflector:

**W4AN/mobile 133 CW 41 mults**

Opr: KU8E

Just a small effort this time to help activity. Only put one of the Hustler masts with antennas on my car this time and had to get out to change resonators. That was a challenge because it rained (some times a downpour) just about the whole time I was out. I maybe should of just packed it in and came home but stuck it out. I had intended to put on one more county - Macon - but made a wrong turn in the darkness, rain and fog. By then when I realized that it was too late to make it there. It also took me longer to get home after the end.

Jeff KU8E

**WA4JA Mobile reported 13 SSB QSO**

**KC4TEO fixed Madison AL 297 CW 57 multipliers**

The contest started off fast and ended fast. The middle part was so-so to the point where I skipped an hour and ran errands. I couldn't get any traction except on 40 and 20 and then both bands played out for a while. My plan was to run mixed but I opted out of phone to just do CW. (This after installing the DVR in my K3S!)

The loyal out of state participants in the contest were very tenacious, following band activity/strengths between 40 and 20 and later even 80 after 40 got very noisy. To my surprise, I worked 52 in 40 minutes on 80 before the clock ran out.

Like others in north Alabama, I pulled the plug when the rain came through around 1830 local time.

**W5TM - fixed OK - 53 CW 22 counties worked**

**N4NM fixed AL 281 CW 52 mults**

With rapid QSB and weak signals, especially early in the day, this was a lot of hard work. And when senior moments struck, it was downright embarrassing: apologies are due to those in-state folks who had to struggle to convince me that they should be sending their county (not state) in the exchange. I had a good laugh when fellow Alabama station N4MZ had to virtually hit me over the head to keep me from trying to turn MGY into some two-letter state abbreviation! Lots of great ops and good folks having a nice Saturday afternoon. Thanks!

Chuck, N4NM

**W2BJN fixed AL - 288 CW 52 multipliers**

AQP is one of my favorite annual CW contest events. Thanks to the current event committee for all their contributions to AQP2024! Off to a slow start at 1500Z in lower AL due to active tstorms over Mobile Bay. Prop was not initially helpful until around around 1800Z, as sferics diminished and prop improved at that point. 40m was the event "money band for me", but 80m "came alive" around 2300Z, and was strong right through the finish! Due to family commitments, my time was limited, but I enjoyed every minute. Thanks to stations I worked for their patience! 73 de W2BJN

**K4AB fixed AL - 335 CW 213 SSB**

Thanks for everyone who got on and made QSOs. Even if you made only 1 or 2, thank you!

Participation seemed excellent here.

W5TM, VE3HZ, K1BZ, KV0I, AC0W, AA3R, WB4HRL and others were worked on multiple bands.

Thanks also to WW5X and W4AN(KU8E) for braving the wet Alabama roads roving.

Had to QRT a couple of times for thunderstorms, but that is to be expected this time of year.

Hope everyone had a good time and we see you next year!

For info on the Alabama Contest Group visit <https://alabamacontestgroup.org/>

73,  
Larry K4AB

**KC4HW fixed AL 16 CW 111 SSB QSO**

Thanks for the QSOs! Been under the weather for most of this year, so no time or motivation to prepare for the AQP. It seemed that there was a good amount of activity. Congratulations to the organizers of the AQP.

Was thankful to work so many Alabama Counties.  
Take care and all the best!

73, Jim/KC4HW

## USA-CA /CQ Magazine

The MARAC board still working on this problem and logistics of taking over the USA-CA Award.

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Nothing has been heard from CQ Magazine/Cowan Publishing. Not a peep.

Ham Radio Magazines have come and gone.



Way back in the 40s, there was a magazine called Ham Radio that was around for several years. At hamfests like Dayton, you might see a few old issues.

QST goes back to the 1918 era.....and has been around ever since.

In the late 30s and early 40's there was magazine called 'Ham Radio' that lasted a few years

Let's see.....there were half a dozen 'electronic experimenter' magazines with Popular Electronics one of the better known. That ran for 30 years and had ham radio projects and shortwave articles. Was both for Shortwave Listeners and Hams.

If you were into Shortwave Listening, you'd probably buy World Radio News annual. U to date couple hundred page book of shortwave broadcasts, frequencies, schedules, etc.

CQ Magazine started and kept publishing to 2023. Hit the wall in 2024, although was often behind getting issues out to subscribers. Put out dozens of paperback books on just about every subject from RTTY to contesting, DX, FM, Antennas, beams, quads, etc. You see them at hamfests all the time.

Then there was 73 Magazine from Wayne Green, W2NSD(SK) . That lasted for 30 years or so.

There were several CB type magazines that came and went in a few years.

In the 70s and 80s, there was Ham Radio Magazine - lasted about 10 years.

For those into restoring old ham gear, there's still Electric Radio, with articles on upgrades/restoration to tube type gear.

For RTTY enthusiasts there was a monthly RTTY Magazine for a while.

There were various 'newsletters' for buying and selling stuff.....and catalogs from surplus places. Fair Radio was likely the biggest. There was no Ebay back then. Or Amazon, or AliExpres. It was newsletters for DX, 'for sale'/wanted, etc. New hams aren't interested in 'surplus'. If you go to Dayton hamfest or large hamfest, you'll see lots of old tube radios and not much interest and likely even less going forward.

The internet killed a lot of 'mail stuff'. Then the cost of publishing and mailing things did most of the rest in. Things went on line for the most part. You could even 'listen' to

many shortwave broadcasters' on line without having to worry about propagation or even having a receiver. After a while, many international shortwave broadcasters shut down. Back in the 50s and 60s there were likely 50+ of them from nearly every county – Sweden, Italy, Switzerland, Egypt, Japan, Bulgaria, Czechoslovakia, Russia, Germany, East Germany, France, South Africa, etc. Now you're challenged to find 3 or 4 major ones at all 'on the air' and half of them are religious broadcasters. There still are dozens of regional lower power ones (under 8 MHz) in Africa and other large area countries.

That's actually helped the ham bands. In the 50s and 60s, 40m was full of broadcasters from 7150 to 7300, and folks had to squeeze in between. While it wasn't 'legal' to broadcast to the US, the stations claimed they were broadcasting to the South Pacific via a path over the USA. Ha ha. Signals were 50 over S9 in the US and optimized for US reception on any type receiver. The 40M novice band was full of broadcasters in the evening. So was the phone band. Thank goodness they are gone for the most part.

Well, progress one way. Most of them gone. Most of their listeners on line, if at all. Who wants to listen to Russia with static crashes, fading, when you can go on line and get your propaganda that way if you want it.

So we're down to a handful of pubs. Most club newsletters now on line, too. MARAC among them. Same for my local clubs. QST and Electric Radio Magazines still around, but QST now going 'on line', with added cost for the print edition if you want it.. Life members and a few others get it in print if they want. Others pay extra for the print editions.

## 10-10 Summer SSB Contest

Not much happened! A CME on Saturday didn't help either.

Only 4 people reported scores. Two Super Stations worked 100+ Qs but only 4 stations reported scores on the 3830 contest reflector. Likely more reported directly to 10-10 International.

Listened for few minutes on Saturday and nothing but noise on 10M SSB at my mobile QTH. Probably was some E-skip somewhere and sometime but I wasn't enough of a fanatic to worry about it. Seems a long long time ago in VA, I managed to work near 1,000 stations on 10m in the 10m contest.....with a ground plane antenna and 100w.

Where are the great conditions of a high sunspot cycle. Missing in action! Even had fantastic F skip on 6m regularly working 6000 miles for months and months. Not this cycle although it is turning out to be very high in sunspot count. Maybe it will get better? Probably helps if you live on the coasts as skip is 1500 miles or more when band opens. Way back when, ten meters was good for 700 to 5000 mile skip at sunspot peaks. We even had great 6M F2 openings for six months back then. Not this cycle, or not 'yet' if it gets better. Keep fingers crossed.

## National Convention

Coming up this fall in October.

The 2024 MARAC National Convention is to be held on Oct 9-12 in Bridgeport, West Virginia!

Please thank AlanW8OP/Steve-K8II/Ed-N8OYY for volunteering to be co-hosts of this year's convention.

Details can be found on the MARAC.org website under Events.

Hotel reservations can be made now for the special rate. Convention registration is also now available. Mark your calendars to attend!

wow...Grand prize a nice FT-891 mobile transceiver. 100W HF and 6M unit. Nice. Over \$1000 new.

2nd Main Prize Dell Inspiron 15 (3520) Laptop-15.6" Touchscreen, Windows 11, 16GB Memory, 1TB Solid State Drive, 12th Generation Intel(R) Core(TM) I7-1255U, 4-Cell Battery, 54WHr (Integrated)

Two (2) \$50 BP/Amoco gift cards  
Two (2) 50 Exxon/Mobil gift cards  
Ladies prize(s)

Lots and lots of planned activities and things to do nearby.

The trip to the radio museum should be very interesting. Been there - one of the best

museums in the entire country.

The collection includes: Cathedral radios, console radios, table-top radios, transistor radios, old radios, antique radios, collectible radios, ham equipment, vintage amateur receivers and transmitters, broadcast collectibles, military communications equipment, test equipment, vintage computers, vintage hi-fi, and an awesome vinyl record collection. There is also a technical library.

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

## Will there be a “Turbo” in your Future?

The question for the day is 'will there be a turbo in your future car? The answer is probably yes.

Let's start with the definition of a turbo.

Turbochargers, or turbos, were originally designed for use in aircraft. They started to be fitted to cars in the 1960s, and really came into prominence in the 1980s. The majority of modern petrol and diesel engines are turbocharged today

Some history

Prior to the invention of the turbocharger, forced induction was only possible using mechanically-powered superchargers. Use of superchargers began in 1878, when several supercharged two-stroke gas engines were built using a design by Scottish engineer Dugald Clerk. Then in 1885, Gottlieb Daimler patented the technique of using a gear-driven pump to force air into an internal combustion engine.

The 1905 patent by Alfred Büchi, a Swiss engineer working at Sulzer is often considered the birth of the turbocharger. This patent was for a compound radial engine with an exhaust-driven axial flow turbine and compressor mounted on a common shaft. The first

prototype was finished in 1915 with the aim of overcoming the power loss experienced by aircraft engines due to the decreased density of air at high altitudes. However, the prototype was not reliable and did not reach production. Another early patent for turbochargers was applied for in 1916 by French steam turbine inventor Auguste Rateau, for their intended use on the Renault engines used by French fighter planes. Separately, testing in 1917 by the National Advisory Committee for Aeronautics (NACA) and Sanford Alexander Moss showed that a turbocharger could enable an engine to avoid any power loss (compared with the power produced at sea level) at an altitude of up to 14,000 ft)above sea level.The testing was conducted at Pikes Peak in the United States using the Liberty L-12 aircraft engine.[

The first commercial application of a turbocharger was in June 1924 when the first heavy duty turbocharger, model VT402, was delivered from the Baden works of Brown, Boveri & Cie, under the supervision of Alfred Büchi, to SLM, Swiss Locomotive and Machine Works in Winterthur. This was followed very closely in 1925, when Alfred Büchi successfully installed turbochargers on ten-cylinder diesel engines, increasing the power output from 1,750 to 2,500 hp). This engine was used by the German Ministry of Transport for two large passenger ships called the Preussen and Hansestadt Danzig. The design was licensed to several manufacturers and turbochargers began to be used in marine, railcar and large stationary applications.

Turbochargers were used on several aircraft engines during World War II, beginning with the Boeing B-17 Flying Fortress in 1938, which used turbochargers produced by General Electric.Other early turbocharged airplanes included the Consolidated B-24 Liberator, Lockheed P-38 Lightning, Republic P-47 Thunderbolt and experimental variants of the Focke-Wulf Fw 190.

The first practical application for trucks was realized by Swiss truck manufacturing company Saurer in the 1930s. BXD and BZD engines were manufactured with optional turbocharging from 1931 onwards. The Swiss industry played a pioneering role with turbocharging engines as witnessed by Sulzer, Saurer and Brown, Boveri & Cie.

Automobile manufacturers began research into turbocharged engines during the 1950s, however the problems of "turbo lag" and the bulky size of the turbocharger were not able to be solved at the time. The first turbocharged cars were the short-lived Chevrolet Corvair Monza and the Oldsmobile Jetfire, both introduced in 1962. Greater adoption of turbocharging in passenger cars began in the 1980s, as a way to increase the performance of smaller displacement engines.

Design

## Turbocharger components

Like other forced induction devices, a compressor in the turbocharger pressurizes the intake air before it enters the inlet manifold. In the case of a turbocharger, the compressor is powered by the kinetic energy of the engine's exhaust gases, which is extracted by the turbocharger's turbine.

The main components of the turbocharger are:

- Turbine – usually a radial turbine design
- Compressor – usually a centrifugal compressor
- Center housing hub rotating assembly

The turbine section (also called the "hot side" or "exhaust side" of the turbo) is where the rotational force is produced, in order to power the compressor (via a rotating shaft through the center of a turbo). After the exhaust has spun the turbine it continues into the exhaust piping and out of the vehicle.

The turbine uses a series of blades to convert kinetic energy from the flow of exhaust gases to mechanical energy of a rotating shaft (which is used to power the compressor section). The turbine housings direct the gas flow through the turbine section, and the turbine itself can spin at speeds of up to 250,000 rpm. Some turbocharger designs are available with multiple turbine housing options, allowing a housing to be selected to best suit the engine's characteristics and the performance requirements.

A turbocharger's performance is closely tied to its size, and the relative sizes of the turbine wheel and the compressor wheel. Large turbines typically require higher exhaust gas flow rates, therefore increasing turbo lag and increasing the boost threshold. Small turbines can produce boost quickly and at lower flow rates, since it has lower rotational inertia, but can be a limiting factor in the peak power produced by the engine

The compressor draws in outside air through the engine's intake system, pressurizes it, then feeds it into the combustion chambers (via the inlet manifold). The compressor section of the turbocharger consists of an impeller, a diffuser, and a volute housing.

In 2017, 27% of vehicles sold in the US were turbocharged. In Europe 67% of all vehicles were turbocharged in 2014. Historically, more than 90% of turbochargers were diesel, however, adoption in petrol engines is increasing. The companies which

manufacture the most turbochargers in Europe and the U.S. are Garrett Motion (formerly Honeywell), BorgWarner and Mitsubishi Turbocharger

Turbocharger failures and resultant high exhaust temperatures are among the causes of car fires

Well, the era of diesel engines in cars is slowly fading away. Once really popular in Europe due to favorable tax treatment, diesel sales have fallen off a cliff overseas. Now the push is to EVs and smaller engines in cars equipped with gas turbos.

How do car turbos work?

A car's engine works on the principle of internal combustion, with lots of tiny controlled explosions taking place within each cylinder. These explosions need heat, fuel and air in order to occur, and by increasing one of these three elements, you can increase the size of the explosion, producing more power as a result.

A turbo works by forcing more air into the engine, with the amount of fuel being injected increasing correspondingly, increasing the strength of the combustion, and producing more power. The beauty of a turbocharger is it is not always on, generally only being activated above certain engine speeds, and increasing how hard it works as engine revs build.

This means if you're gentle with the accelerator the turbo will either not activate, or activate gently, making it easier to achieve good economy than you would find it in a large-capacity engine that was always drawing lots of fuel.

Another clever thing about turbos is that they do not require additional engine power to turn, being driven by exhaust gases that would otherwise go to waste. The waste gasses exit an engine at high pressure, and spin a turbos fan-like blades up to very high speed (280,000 revolutions per minute or so), with the turbo drawing in clean air which is then pushed into the engine.

Early turbos were rather crude devices that delivered the extra power in a single, huge lump. Saab and Porsche were two of the firms that did much to popularize turbochargers, and the word 'turbo' soon took on a cachet of its own, being applied to everything from hairdryers to vacuum cleaners.

Modern turbos contain complex systems that control how gases move through them to miniscule degrees of accuracy, giving more 'linear' power delivery and greater

efficiency.

Turbos operate at incredibly high pressures and massive temperatures, so they're usually accompanied by an intercooler and oil cooler. The intercooler cools the hot air coming out of the turbo and the oil cooler makes sure the turbo's lubricant doesn't overheat.

Why are so many engines now turbocharged?

As explained above, turbos are not always on full blast, they come on above certain revs, and increase the work they do the more the engine is pushed. This means that in light driving and during a car's official fuel economy testing, impressive efficiency figures can be achieved,

Diesel engines are particularly suited to turbocharging because they have simpler intake systems to mix the fuel and air and tougher engine blocks that can contain the immense air pressure turbos generate. In the last 15 years or so, manufacturers have perfected metallurgy that allows a lightweight, alloy petrol engine block to contain ultra-high turbo pressures. Earlier petrol turbo engine blocks were usually made from heavy iron or steel. A lighter engine means the whole car weighs less and is more efficient.

The result of all that is a petrol engine like Ford's 1.0-litre, 3-cylinder EcoBoost which can produce more power than Ford's old 1.6-litre, 4-cylinder naturally-aspirated petrol engine while returning better fuel economy and lower emissions.

As well as increasing power, turbos increase torque – an engine's strength – particularly at low revs. That's useful in small petrol engines which tend to produce not much torque at high revs without a turbo. Naturally-aspirated diesel engines, by contrast, produce a lot of torque at low revs. Adding a turbo amplifies the effect which is why turbo diesels feel so strong if you floor the throttle at, say, 50mph in top gear.

Turbocharged cars also have quieter exhaust pipes. The turbo effectively reduces the amount of gas coming out of the exhaust, so it's not as loud as a non-turbo car. You might hear a 'chuff' when you take your foot off the throttle, though. That's the 'wastegate' which expels excess gas from the turbo when it's not needed.

What are the drawbacks of a turbo?

You'll often come across the term 'turbo lag' which refers to the time delay between pressing the throttle and the turbo delivering its extra power. This is simply a function of the time it takes for the exhaust gases to reach the turbo and spin the turbine up to speed.



A big turbo often exaggerates the effect, as large turbine blades take longer to get up to speed.

Modern turbos have many ways of reducing lag. Some engines have two more turbos of increasing size that operate at different revs, while car makers have also developed electric motors that spin the turbine before gases even reach it. A certain amount of turbo lag is unavoidable, but many engines now have so little that it's almost impossible to detect.

Turbos are another thing to go wrong, as well. They can and do – some engines are particularly prone to turbo issues. Thick, white exhaust smoke and a loss of power are the clues. Neglect, abuse and high mileage are the usual causes but if the car is properly maintained, it shouldn't be a problem.

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If you go new car shopping, you'll find many new cars now have 'turbos'. Chevy Equinox and other GM cars come with 1.3 liter 3 cylinder engines now. Toyota will be putting 3 cylinder turbo engines in Corolla and RAV4 and other mainline production in 2025. Likely same for Honda. First, you'll find many small and mid size cars with 3 cylinder engines with turbos to get the extra HP out of them. Some can produce several hundred horsepower.

All this is necessary to improve gas mileage to meet ever increasing federal mandates on fuel efficiency. Of course, you'll get the benefit of typical 25 mpg around town and 35 mpg plus on the highway for the small and mid size cars. Down the road at 80,000 and 100,000 miles, you'll probably also be looking at a thousand or more to replace the turbo. Be sure to do your oil changes faithfully. This turbos operate at incredible speeds (200,000+ rpm) and need clean oil to keep going. 5000-6000 mile oil changes if you plan to keep the car long term.

Video here <https://www.youtube.com/watch?v=lrCwmpjR77U>

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Sources:

<https://www.carwow.co.uk/guides/glossary/how-turbos-work-superchargers-explained>

<https://en.wikipedia.org/wiki/Turbocharger>

## On the Road with N4CD II

Jack, K0MAF, needed Baylor County TX for a LC. Actually a LC WBOW. Wow....you seldom hear of a WBOW in TX and if a rare rare one comes along, it is usually Presideo, Webb, or some other 800 mile away county about as far away as you can be from my QTH. Baylor is 170 or so miles away by the way a crow flies and about 200 miles the way you drive. Couple hour trip each way. Mapquest recommended going to Wichita Falls then SW to Baylor – no 'construction zones'. OK...went that way. Not the shortest but the fastest.

Propagation was horrible for days on end. Days of CMEs hitting the Earth sending the A index to 50 or higher and the K index to 6 and 7 – major major severe geomagnetic storms. Days with S7 noise across the band on 40m and near zilch propagation on 20m most of the day....and weak signals.

Jack, K0MAF, lives in MO, so it is 40m and maybe 30m distance. I watched the indexes. No way 40m was going to work for days on end.

On Wednesday August 13, K index was 2-3, with A in the 20 area. I usually go to the local POTA park 4423 for the weekly CW Test (CWT) from 1900 to 2000z, arriving an hour or so before to chase POTA stations on CW first. Had a sked with K0MAF. We connected with 22/33 QSO. Not great but doable, so on Thursday I would head west.

20M signals in the CWT not great but I managed to put 30 in log in 40 minutes. Also half dozen POTA stations.

### **Thursday August 15**

Up at 6am. Took out frozen Egg McMuffin type deal and nuked in microwave. Cup of decaf coffee, quick scan of WSJ, then out the door by 6:30am. Headed west to the 121 Tollroad hoping to avoid most of rush hour.

It was going to be one of the 'hottest' days of the year – headed to 105F with 'feels like' temps of 109-110F. Weather service issued 'heat alert'. Yuck. Glad modern cars have nice a/c. Sun beating down all day, too.

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Now some factoids. The county I live in, Collin TX, 25 miles north of Dallas, has over 1 million residents. Denton County about 980,000 in 2022.

Wise County – 75,000 folks

Montague – 21,000 folks

Clay County 10,500 folks

Wichita County 130,000 folks - good size 'city'

Archer County – 8,899

Baylor County 3466 and dropping every year – year after year

Hmmm...only 3466 folks in Baylor and probably not one active ham. QRZ lists 14 – with 2 advanced, 3 generals, and the rest Techs, but all have very few 'look ups' meaning not much HF activity. If they are really there. Activity? Most use PO Boxes for address. Hard to get a sked if you need it. Few county hunters wander that way as it is off most frequently traveled routes and nothing there to see. However, the lack of population makes for good high speed roads (60, 65 and 70 mph) between 'towns' out that way. Many small towns have clusters of 2m ops, but not much else, and in many cases the hams have moved on to jobs elsewhere.

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Took 121 business 'shortcut' at Lewisville. Note to self. Don't do at rush hour. Stopped at every traffic light and there are a dozen of them. Lines and lines of traffic. Got on I-35 north – 35 miles or so to 380 going west. 60-65 mph. Traffic thins out fast. Hit 380 west and after a few traffic lights, it's 70 mph for the next 35 miles to the turn for Wichita Falls. Hit Wise, Montague, Clay, Wichita County. 55 miles to Wichita. From Wichita Falls through Archer - you take 82 to get to Seymour in Baylor County – another 50 miles. Stopped to run a few of the counties. Mostly 4 lane highways with shoulders..... but in Archer, some 4 lane roads no shoulders, and some 2 lane roads – 65 mph, no shoulders either. Half a dozen of the counties have nice 'picnic' areas to stop – but no shade unless you go under one of the rare shelters over a table by walking.

Using only the 4 magnet mount on rooftop with hamstick antennas and have to stop to change bands this trip. Beats the rear mounted array with 4 bands – on a 3 magnet mount on the truck deck by about 2 S units. So when signals might be weak, the top mount works very well. Downside is only one band at a time.

Reached the Baylor/Archer line at 1430z (9:30am) and had 599 contact with K0MAF. What a difference a day makes in propagation – and K going from 2 to 0. Ran a couple bands and then it was chow time.



Baylor/Archer County Line TX  
Almost missed sign – hmmm.....smart phone pic  
Note wind turbine in pic

Lots of wind turbines out this way – and fair amount of solar panels on roof tops (thanks to TX state subsidies now in the federal give away programs pushing up inflation even more).

Headed toward Jack County – via Archer City. Stopped at Mum's cafe in the small town

of Archer City for nice veggie omelet, toast and coffee. Skipped the hash browns. Very good. Good prices too - \$11.95 plus tip.

Once upon a time Archer City was known for a gigantic book store with 500,000 books for sale. Made a trip out that way to see if any interesting telegraph or radio books there. Very very few, not cheap, and tons of other history and fiction books. The bookstore took four large buildings and two smaller ones - but went out of business 5 years ago. Not much reason to go there now other than is county seat.

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from the TX Monthly Magazine:

“From the Texas Monthly

Larry McMurtry’s Bookstore Was Legendary. It Still Exceeded My Expectations.

Worth Star-Telegram via Getty

Welcome to Indie Bookstore Week, Texas Monthly’s salute to the bookshops that have shaped the lives of our readers and writers.

By 2002, when I first visited Larry McMurtry’s enormous bookstore, Booked Up, it was already legend. Its used, rare, and collectible books took up 30 percent of Archer City’s 66,518-square-feet of commercial space with rows upon rows of shelves. You couldn’t miss it. As an added attraction, I was told, the Pulitzer winner was often spotted working there, unboxing new acquisitions, weeding out any junk reads, and writing prices on the top right-hand corner of the first blank page in light pencil.

Since I was driving down Highway 281 from Wichita Falls to Brownsville for a story for this magazine, I would be skirting right past it. Archer City, then, was where I’d spend the first night of my drive. While I did love the smell of fresh-cut paper that hit me whenever I walked inside new bookstores, the musty smell of used bookstores held deeper memories of a childhood puttering around libraries. It was there that I formed my idea of the ideal book room: tall stacks where you can find interesting, weird stuff.

Booked Up exceeded my expectations. Driving up to the town square, I realized Booked Up had opened its doors in not one but multiple storefronts. For hours, I bounced from one building to the other, winding through the sections on twentieth-century English and American fiction, biographies, Western Americana, rare books, and poetry. I finally selected the out-of-print 1932 volume of *The Circus From Rome to Ringling*, by Earl

Chapin May, that held the colorful, well-documented history I wanted for a story I was writing on circuses. It was 25 bucks—not bad for a book I’d never find anywhere else.

Once I’d checked in at the Lonesome Dove Inn, a sprawling house with bedrooms for visitors, another guest I’d met must have mentioned the arrival of a Texas Monthly writer to McMurtry, because in the late afternoon, McMurtry knocked on my door and asked me to go out to dinner with them. Of course, I said yes. Upon learning that I was driving a road and writing about it—something he had just done in his great book *Roads*—he talked, on the way to the restaurant, about travel literature, a genre he collected for his personal library to the tune of three thousand books. Many of the authors whose works he’d acquired were women travel writers whose high adventures included riding a dogsled off to a leper colony and roughing it in the Canadian bush. I was only driving six hundred miles via state highway by car; nonetheless he strongly recommended Eric Newby’s *Slowly Down the Ganges*. Absorbing that or any great travel story, he implied, would change how I’d see even a well-worn path. He seemed to have at least one book recommendation on any topic, though without much pressing, he could probably give ten off the top of his head.

“Book selling was mainly a way to finance my reading,” he wrote in his 2008 memoir about book-dealing, *Books*. While he started out as a book scout in Houston, acquiring inventory for the Bookman, it wasn’t until 1971 that he opened *Booked Up*, with his friend Marcia Carter, in Georgetown, in Washington, D.C., and by the mid-seventies, he seemed to get more of a thrill out of the store than the typewriter. “I began to view myself as essentially a bookseller—or maybe just a book scout,” he wrote. “The hunt for books was what absorbed me most. Writing was my vocation, but I had written a lot, and it wasn’t exactly a passion.” Writers, he suggested, get worse with age; booksellers, on the other hand, get better.

Eventually, with rent skyrocketing and book stock ballooning, Georgetown was no longer the best location, so he moved all 300,000 volumes in *Booked Up* to a place where he knew rent would be affordable: his own hometown, Archer City, population 1,500. It was there that he created his own version of a book town, with inspiration from Hay-on-Wye, in Wales, where more than thirty bookstores grace a city of 2,000.

In Archer City, the inventory grew further still, and he claimed to have gleaned at least a few pages of each of the 450,000 volumes that eventually graced the shelves. (For comparison, the typical Barnes & Noble stocks between 60,000 and 200,000 books.) As a reader and a dealer, his enthusiasm ranged wide, whether the book was Isaac Newton’s *Principia Mathematica*, Goya’s *Los Desastres de la Guerra*, or a French book on an early trans-Saharan auto rally (“it’s a wonderful book, but it isn’t modern literature”). After a

few decades in the business, he even started seeing some books from his personal collection, which he'd sold over the years, come back into his possession. Some pristine paperbacks he once sold to this magazine's former editor Gregory Curtis wound up in a stash he bought from Wichita Falls. About sixty books he'd inscribed with his name and sold to book dealers, who tried to sand the then unknown writer's name off the interior pages, landed back in Booked Up—more valuable with McMurtry's fame, and a story, attached.

Over time, he noticed that the internet was disrupting the rare book trade, and the downturn in the economy in 2001 diminished the number of tourists beating the path to his store. Stranger still, he began to notice that “what consumers want now is information, and information increasingly comes from computers. That's a preference I can't grasp, much less share.” He hung on until 2012, when he sold off, at auction, 300,000 volumes. The shop eventually shrunk down to two storefronts.

Upon his death, in 2021, he left the store to his longtime work partner Khristal Merklin, who sold the buildings and remaining inventory but kept the name Booked Up for an online store of rare books about everything from art to western fiction. And the buyer of the storefronts and inventory? Magnolia's Chip Gaines, who spent summers in Archer City, bought them, and though nosy types all over town (along with this reporter) have asked repeatedly, the current plans for reopening remain under wraps. To be fair, he has a few books to assess.”

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The internet and the ability to find rare titles at various bookstores worldwide changed the used bookstore model. Book-Up never went on the internet. Personally, I collected telecom history books. Started finding them on line – but also visited dozens of used bookstores around the country. Had much more success on line. (Even went to Hay on Wales in the UK – found two interesting books there. Soon, you'd find things on like with ABE Book search. Accumulated several hundred books that way. As new 'used book stores' came on line, the 'rare ones' disappeared quickly.

Later, you could print books on demand. Need a copy of a 1860 rare telegraph book? For \$25 or \$30, they would print you a copy from a digital library print. Online providers were using digitized books from large libraries, university libraries, etc, and you could read them on line or get a 'on demand' printed copy. The 'value' of 'rare' telecom history books plummeted. Yeah, fun to own 30 pre-1870 telegraph books, but the value was dropping to the floor. What was once a fun collecting hobby and sharing with other fellow collectors turned into 'anybody could get the info' or the book on line.

You could read it on line or get a copy printed. Just about every rare book showed up on line (if the copyright had expired – usually about 90 years these days.

Back to the trip report

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Then, refreshed with full stomach, headed to Fort Richardson State Park in Jacksboro TX. Took a while to get there. Construction zones and one way roads with pilot cars. 15 minute or more waits. 10 mile one way road sections. Not the way to make time. Mapquest had indicated fastest way to Baylor was the way I went (more miles but faster) and noted other routes had construction delays. I found them on the way home – hi hi.

Finally got there to FT Richardson State Park – US-3011/KFF-30111 and used my state park pass to get in, otherwise 4 buck day pass. Not many there – temp 104F and blistering down sun. Found place with little bit of shade from nearby tree and parked there for hour or so. Ran 20, 15, 15m - half dozen county hunters and 5 or so park hunters. Chased a few POTA stations on cw. Hot hot hot! Over 100F. Blistering sun. Just a tiny bit of shade on car. Stayed over an hour.

Headed back east on 380. More one lane construction zones with pilot cars. Sitting and wait for 15 minutes at a time. No fun. Stopped in Runaway Bay for gas. 11.8 gal. . Seems every building in town had solar panels on roof. Not many trees out this way shading rooftops.

Getting 28 mpg even with hour stops and county line stops. (2016 Malibu LTD with 165,000 miles). Last of the good ones. Newer ones have CVT transmissions – not going to last 100,000 miles.

Route takes you to I-35 – south – then to Lewisville. Just before business 121, there's a Cracker Barrel. Thursday is Turkey Day special so at 3pm, pulled in for turkey dinner with stuffing, sweet potato casserole, and side salad. Enjoyed meal then headed rest of way home. School zones back in action – 20 mph as kids already back in school on way home.

Total trip miles – 424 miles. Home at 4:15. Long day and hot day. 105 at home.



Mission accomplished.

Some tidbits about Fort Richardson State Park and Historic site: from the web:

## **FORT RICHARDSON TODAY**

Arrival at Fort Richardson today involves considerable confusion and discomfort. The turn from highways 380, 199, and 281 is not well marked, and the signs are nearly obscured by competing signs for various business establishments. Once within the gate the large two-storied stone hospital building commands attention. It has been reroofed and reporched and is now a very satisfying building aesthetically and architecturally. It is not yet however refinished on the interior or refurnished and is therefore not open to visitors.

The only other fort buildings to be seen are the commanding officers house, the morgue, the bakery, the guardhouse, and the magazine--all in ruinous condition. The commissary storehouse also exists in part but is across the railroad tracks outside of the park fence and is apt to be overlooked. In any case it is in such a state of decay that entering or even approaching it closely is not advisable. In all there is nothing now present which suggests the layout or original appearance of the fort.

The remains of most of the original buildings are buried under the sod awaiting excavation and reconstruction. Besides the railroad, some modern buildings and a roofed pavilion further obscure the appearance of the fort as do the existing roads which cut indiscriminately through the parade ground and over buildings.

Clearly a great deal needs to be done to make Fort Richardson the tourist attraction it deserves to be. Properly developed it should attract large numbers of people since it is close to many major populations centers--more so than any of the other four forts presently owned by the State.

## **FORT RICHARDSON YESTERDAY**

Fort Richardson was established in 1867 as a cavalry post--one of the outer line of forts placed on the West Texas frontier to protect the settlers from Indian raids. It was abandoned in 1878 after the Indians were defeated and confined to reservations.

Like most, if not all, the western forts, the original construction plan was abandoned and the fort just grew, with new buildings added when and wherever needed and constructed of materials at hand by whatever craftsmen were available at the time. It did of course maintain some semblance of orderliness and military precision. The dominant feature was the large rectangular parade ground with its long dimension east-west: the hospital building at the west edge, the quartermasters complex of buildings along the east edge, the barracks in a row along the north side, and the officers quarters lined up on the south, all facing the parade ground. Beyond that, however, the auxiliary buildings, bakery, jail, magazine, sutlers store, workshops, etc. were all placed to the north of the barracks overweighing the fort plan on that side. Most of the buildings continued to be "temporary" picket type structures, adequate for shelter but not particularly comfortable.

Fort, located just outside Jacksboro, served as home to soldiers who maintained the post, helped local law officers to keep the peace, pursued criminals and deserters, escorted wagon trains, oversaw elections, protected cattle herds, and patrolled for possibly-hostile Native Americans. The Fort also provided the major staging base for the final defensive effort against the Comanche and the Kiowas in the early 1870s. The military's success in this operation ended Anglo/Native American confrontation in the region permanently and, as a consequence, the military abandoned the post in 1878. Almost one hundred years later Fort Richardson received National Historic Landmark status. Seven of the original 55 structures have been restored, including the imposing post hospital, a handsome construction featuring 18-inch thick sandstone walls and a wood frame veranda completely encircling the first floor. The hospital contains a kitchen, dining rooms, washrooms, a dispensary, surgeon's office, and two large wards for patients. Although designed to patch up soldiers wounded in battle, records show that hospital staff treated more illnesses and saw more deaths caused by bad water, spoiled food, alcoholism, and venereal diseases than battle wounds. Today, visitors can enjoy a tour of the hospital and grounds among the restored structures, including the somewhat macabre pairing of the hospital with its only out-building — the morgue, complete with wooden coffin.

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Fort Richardson was designated as a National Historic Landmark in 1963. Folks got serious in 1971 about surveying and then restoring what remained.

Today, you can swim in a nice lake with sand beach, camp, fish, take a 2.5 mile hike to see many more building foundations and restored buildings, etc.

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K0MAF noted he had '22 counties out for confirmation'. Let's hope they all come back. Too often there winds up being a 'rework or two' to complete USACA.

## MDC QSO Party

Held during very very popular WAE (Worked all Europe) DX contest with a thousand stations on the air. 20M CW filled end to end with testers.

There are 23 counties in MD plus DC as a multiplier in this contest. Baltimore City County is one of them, separate from Baltimore County.

Spots on W6RK.....ho ho.....you wouldn't know this was going on from the spots.

Top out of state folks for the most part had about 10 counties worked in MDC. Active stations like K5CM and N5KW (xyl of K5CM) caught 19 counties, but few had over 10. Nearly all entrants had under 10 counties worked from out of state.

### **W4GO Rover 159 CW**

I didn't expect much, and I wasn't disappointed.

Just went into this for some low-key mobile fun with an antenna for 20 m through 10 m on the vehicle. Left the 40/80 m antenna and SSB stuff home to keep things simple. Managed to activate the remaining MD counties (all on the Eastern Shore) that I hadn't been to in previous mobile runs in this contest, plus a few more counties along I-95 as I made my way home.

20 m went short enough for a few QSOs as close as KY, MI, CT and N. GA. States at the optimal distance for both 20 m and 15 m were OK, TX and MN. Heard little life on 10 m and didn't operate there.

Thanks for the QSOs, especially to the hard-core who found me when few others did.

Top five chasers: N5KW and K5CM with 19 QSOs each, followed by W5TM, K9CW and WB9HFK with 8 QSOs each.

Much time was spent CQing into the wind, even as the Reverse Beacon Network was showing I had a good signal to the midwest and west coast. More participants would have gotten more rare counties had they watched the RBN, not just the DX cluster, where I was spotted very few times. Or better still, if they had configured the HamAlert app to notify them when W4GO/M was heard by the RBN.

Like I said, expectations were low going in. I enjoyed the drive and chipped a few contacts into a contest that could use a little help.

Stats:

Maryland-DC mults (counties) activated: 14, in order of activation:

SMR, WRC, WIC, DRC, TAL, CLN, QAN, KEN, CEC, HFD, BCT, HWD, PGE, MON.

Driving distance, first QSO to last: 235 mi

QSOs: 159

Call signs worked: 63

Maryland-DC mults worked: 0

States and provinces worked: 19

DXCC entities worked: 3

**W5VS mobile     13 CW QSO**

no comments

**N3QE fixed - 164 CW 598 SSB QSO**

Simplified exchange does help a little.

CW is still difficult to impossible whenever band is open to EU, because I get clobbered with gobs of WAE callers. HOWEVER by planning my CW times to be when there's no good opening to EU, was able to do better on CW this year than many previous years.

Biggest improvement suggested by my callers who want MDC QSO party to be better: hold it on a different weekend not overlapping a DX test. Maybe combine with other state QSO party weekends.

## 902-928 Frequency Grab

From ARRL Weekly Newsletter:

The Federal Communications Commission (FCC) accepted for public comment a Petition for Rulemaking filed by NextNav Inc., a licensee in the 900-MHz Location and Monitoring Service (LMS), to completely reconfigure the 902-928 MHz band and replace the LMS with high-powered 5G cellular and related location services.

The FCC Notice requested comment on the effects that NextNav's proposals would have on amateur radio operations in the band. ARRL® is preparing comments urging protection of existing and future amateur uses in this band and urges all amateurs to file their own comments describing their activities in this band and the expected effect of the proposed changes. [Click here for a guide to filing comments.](#)

NextNav currently holds licenses in the 900-MHz band that authorize it to provide services limited to determining the location and status of mobile radio units. NextNav ties its request to provide high-power broadband, cellular and location services to the vulnerabilities of the current satellite-based GPS system and argues that implementation of its proposal would complement GPS by providing an alternative nationwide terrestrial location system in addition to cellular and broadband services. Under its proposal, NextNav would be designated the sole nationwide licensee for this spectrum in exchange for its more limited licenses.

The new nationwide license would authorize NextNav to provide much higher-powered traditional broadband and 5G cellular services as well as the related location service occupying 15 of the total 26 megahertz available in the band. The reconfiguration proposed by NextNav would create a 5-megahertz-wide uplink subband at 902-907 MHz paired with a 10-megahertz downlink subband at 918-928 MHz. The 5-megahertz uplink subband would be limited to use by mobiles with a maximum of 3 watts ERP. On the 10-megahertz downlink subband, up to 2000 watts ERP would be permitted in rural areas and 1000 watts ERP in urban and suburban areas, radiating from tower structures that could reach 1000 or more feet above average terrain. These configurations reflect the FCC's rules for standard cellular configurations that have been adopted to govern a number of other bands used for similar 5G and like services.

Although uses by the Amateur Radio Service in this band are secondary to LMS, NextNav is proposing substantial technical and use changes that would completely alter the foundation upon which the current rules and spectrum sharing arrangements rely and undercut shared use of the band by amateurs as well as a variety of other users. In addition, NextNav proposes deletion of a specific interference provision in the Commission's rules that was adopted to encourage and protect continued sharing with amateurs and other secondary users.

NextNav, in its petition, argues without evidence that the changes that it proposes to the 902-928 MHz band "will not impede amateur operations." In an 8-page description of NextNav's proposal released by the FCC's Wireless Telecommunications Bureau, the FCC staff asks a series of questions that would clarify the proposal and help the Commission ascertain the likely effect of the proposed changes on existing users if the requested changes were adopted. Comment was specifically requested on the extent of amateur operations in the band, the potential impact of the proposed changes, any other spectrum options that may exist, and the costs for relocations if other options exist.

ARRL is preparing comments urging protection of existing and future amateur uses in this band. ARRL urges all amateurs to study the proposal and file their own comments describing their activities in this band and the expected effect of the proposed changes. The filing deadline is September 5, 2024. Replies to comments are due by September 20, 2024. Click here for a guide to filing comments.

[https://www.arrl.org/arrl-guide-to-filing-comments-with-fcc?\\_zs=WNe1m&\\_zl=Xfr33](https://www.arrl.org/arrl-guide-to-filing-comments-with-fcc?_zs=WNe1m&_zl=Xfr33)

Note de N4CD – commercial users are nibbling away at ham bands. We lost 27 MHz (11 meters\_ to the CB's band first in the 1950s. Then lost 220 to 222 to seldom used commercial users – that is slowly fading away. But they got it. The 222 ham band not that full either. Most ham radios don't cover it. Others looking for space in 144-148 2m band and of course,, 420 to 450 band. Others trying to grab 1296 band and 2300 MHz band.

Worldwide, there are a BILLION plus cellphone users! Outnumber hams by 100,000 times!

## Solar Cycle 25

from ARRL weekly Newsletter:

### **Solar Cycle 25 Impressing Propagation Experts**

By: Frank Donovan, W3LPL

Editor's note: This article was written earlier in the week. The latest measurements show even higher numbers. See K7RA Solar Report, below.

Record High Solar Cycle 25 Solar Maximum Sunspot Numbers Have Improved HF Propagation Since Mid-July and Possibly Bringing Worldwide 6 Meter F2 Propagation This Fall

### **ARRL Cycle 25**

According to the NOAA Space Weather Prediction Center (SWPC), Solar Cycle 25 likely reached its highest sunspot number yet of at least 299 on August 8th.

[www.swpc.noaa.gov/news/solar-cycle-25-likely-reached-highest-sunspot-number-over-20-years](http://www.swpc.noaa.gov/news/solar-cycle-25-likely-reached-highest-sunspot-number-over-20-years)

The World Data Center - Sunspot Index and Long-Term Solar Observations (SILSO) publishes near-real-time Estimated International Sunspot Number (EISN) reports based on its global network of reporting stations. Daily EISN reports during Solar Cycle 25 were consistently well below 200 until suddenly rising to 218 on July 14th and reaching 289 on July 18th, but then declining to 178 on July 22nd.

While occasional brief daily EISN increases are not unusual during solar maximum, after only five days, the daily EISN suddenly rose to 212 on July 27th, reaching a Solar Cycle 25 record high 297 on August 8th and remaining mostly well above 200 through this writing on August 11th. Daily EISN reports are likely to remain well above 200 during most days through late September and possibly much longer.

Since February 2002, worldwide 6-meter propagation has been mostly limited to sporadic occurrences of trans-equatorial propagation (TEP) near the equinox months and occasional sporadic-E propagation reaching many thousands of miles during June and July. Worldwide 6-meter F2 propagation may again occur -- perhaps very frequently -- starting in late October 2024 if daily EISN reports consistently remain well above 200. See [www.sidc.be/SILSO/eisnplot](http://www.sidc.be/SILSO/eisnplot).

## SST Operating Event

CW operators and contesters from around the world are invited to celebrate the fourth anniversary of the weekly K1USN Slow Speed Contest (SST) by participating in a new event, the K1USN SST OPEN (SSO), which will be held on Friday, September 13, 2024, from 2000 - 2359Z. Moving forward, the SSO will be held annually on the second Friday in September.

The goals for the new contest are:

Work as many stations as possible during the four hours on multiple HF bands (160, 80, 40, 20, 15, 10 meters)

Exchange name and state/province (Non US - VE = DX)

Score total points x CW speed multiplier x total state/province/DX multipliers



Post log summary on [www.3830scores.com](http://www.3830scores.com) but Do NOT mail logs to K1USN Stations may be worked once per band and there is a 50-point bonus for working K1USN once per band. From its inception in September 2020, the twice-weekly SST has encouraged CW newcomers to join with experienced ops in a relaxed contest at speeds less than 20 words per minute (WPM). Contest sponsors strongly urge all participants to operate at 12 WPM or less to provide new CW ops with a comfortable “on-ramp” to CW operating and contesting. The same speed rules will apply in the Slow Speed Open with the hope that every station that wishes to jump in will be welcome at a pace comfortable for them. A CW speed multiplier has been added to the score calculation as an incentive to go slow, (via the [3830scores.com](http://3830scores.com) submittal form). This speed multiplier is based on your fastest sending speed used during the contest. Certificates with score and claimed maximum operating speed (using the honor system) will be available to all entrants.

For complete SSO information, including rules and FAQs, visit

[www.k1usn.com/SST.html](http://www.k1usn.com/SST.html)

note de N4CD.....the SST (slow speed test – 20 wpm or slower) is on Friday each week.

On Wednesdays – there are 3 one hour segments of the CW Open Test – with expected speeds of minimum of 25 wpm.

See <https://www.contestcalendar.com/weeklycont.php?mode=custom&week=current>

weekly contest guide for times and events each week – including of course, state QSO Parties!

## ARRL Report on IT Systems

### **ARRL IT Security Incident - Report to Members**

Sometime in early May 2024, ARRL’s systems network was compromised by threat actors (TAs) using information they had purchased on the dark web. The TAs accessed headquarters on-site systems and most cloud-based systems. They used a wide variety of

payloads affecting everything from desktops and laptops to Windows-based and Linux-based servers. Despite the wide variety of target configurations, the TAs seemed to have a payload that would host and execute encryption or deletion of network-based IT assets, as well as launch demands for a ransom payment, for every system.

This serious incident was an act of organized crime. The highly coordinated and executed attack took place during the early morning hours of May 15. That morning, as staff arrived, it was immediately apparent that ARRL had become the victim of an extensive and sophisticated ransomware attack. The FBI categorized the attack as “unique” as they had not seen this level of sophistication among the many other attacks, they have experience with. Within 3 hours a crisis management team had been constructed of ARRL management, an outside vendor with extensive resources and experience in the ransomware recovery space, attorneys experienced with managing the legal aspects of the attack including interfacing with the authorities, and our insurance carrier. The authorities were contacted immediately as was the ARRL President.

The ransom demands by the TAs, in exchange for access to their decryption tools, were exorbitant. It was clear they didn’t know, and didn’t care, that they had attacked a small 501(c)(3) organization with limited resources. Their ransom demands were dramatically weakened by the fact that they did not have access to any compromising data. It was also clear that they believed ARRL had extensive insurance coverage that would cover a multi-million-dollar ransom payment. After days of tense negotiation and brinkmanship, ARRL agreed to pay a \$1 million ransom. That payment, along with the cost of restoration, has been largely covered by our insurance policy.

From the start of the incident, the ARRL board met weekly using a continuing special board meeting for full progress reports and to offer assistance. In the first few meetings there were significant details to cover, and the board was thoughtfully engaged, asked important questions, and was fully supportive of the team at HQ to keep the restoration efforts moving. Member updates were posted to a single page on the website and were posted across the internet in many forums and groups. ARRL worked closely with professionals deeply experienced in ransomware matters on every post. It is important to understand that the TAs had ARRL under a magnifying glass while we were negotiating. Based on the expert advice we were being given, we could not publicly communicate

anything informative, useful, or potentially antagonistic to the TAs during this time frame.

Today, most systems have been restored or are waiting for interfaces to come back online to interconnect them. While we have been in restoration mode, we have also been working to simplify the infrastructure to the extent possible. We anticipate that it may take another month or two to complete restoration under the new infrastructure guidelines and new standards.

Most ARRL member benefits remained operational during the attack. One that wasn't was Logbook of The World (LoTW), which is one of our most popular member benefits. LoTW data was not impacted by the attack and once the environment was ready to again permit public access to ARRL network-based servers, we returned LoTW into service. The fact that LoTW took less than 4 days to get through a backlog that at times exceeded over 60,000 logs was outstanding.

The board at the ARRL Second Board Meeting in July voted to approve a new committee, the Information Technology Advisory Committee. This will be comprised of ARRL staff, board members with demonstrated experience in IT, and additional members from the IT industry who are currently employed as subject matter experts in a few areas. They will help analyze and advise on future steps to take with ARRL IT within the financial means available to the organization.

We thank you for your patience as we navigated our way through this. The emails of moral support and offers of IT expertise were well received by the team. Although we are not entirely out of the woods yet and are still working to restore minor servers that serve internal needs (such as various email services like bulk mail and some internal reflectors), we are happy with the progress that has been made and for the incredible dedication of staff and consultants who continue to work together to bring this incident to a successful conclusion

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Source: ARRL Newsletter for August 21, 2024

## PSST – Wanna buy an EV?

EV prices are falling. If you are determined to go green.....slackening demand for EV's is resulting in dropping prices for EV's, even though they still come at a premium over gas models and even many 'hybrids'.

Detroit is really suffering. The Chevy Blazer EV was so bad, they stopped production to iron out some problems. Constant recalls to fix this and that. It still doesn't work with Android Auto and Apple Car Play – two important features for most buyers these days.

The Bolt battery was so bad, they told people to charge them OUTSIDE they didn't burn your house down if they caught on fire while charging.

Mercedes is getting a reputation for car fires. Seems they spontaneously catch on fire, whether charging or not.

Tesla mainline products doing OK but the CyberTruck was a total mess. Half died within 10 miles, others than constant mechanical and electrical problems and sat at dealers for weeks or months.

The bad news is resale value is dropping like a rock. Tesla chopped prices twice in a year.....coming down 40%. Now, the value for used EV's drops twice as fast as a regular IC car. After 5 or 7 years.....you can buy one 'cheap' but might face \$20,000 repair if the battery gives out.

The charging network is way behind. Joe Biden and Kamala promised 100,000 new 'charge points'. About a thousand have been built with the trillions of 'infrastructure dollars'. Hmmm.....idiotic requirements to start. One of them is the charge point must be within ¼ mile of the interstate exit and no more than 50 miles from the last one. Duh.

In west TX, when you get off the interstate, it is usually a few miles into the town for a gas station. There is NOTHING near the exits. No houses, buildings or power lines. Not only that, folks aren't going to want to sit way out in the boondocks with no store or restaurant nearby, waiting a hour, maybe more if a busy weekend, for their car to charge,

or their turn at a charge point. Thus.....zero charge points built in west TX along the interstate from the trillion dollar infrastructure deal. No entity wants to build charge points if there are few EV's to use them, and many folks in TX won't buy EV's if there aren't enough charge points. In the big cities, you have a fair number of them, but most EV buyers charge at home.

With a 220v charger, it takes overnight to charge up. With a 120v ac charger, it can take DAYS to fully charge.

Less than 2% of cars are EV's in TX. California is the opposite, with giant fed and state rebates, and of course, \$6/gal gas there!

EV's are sitting on dealers lots. Tens of thousands of unsold EV's. Worse, each new generation of EV is more efficient, with better batteries, so the 'old ones' are even less desirable to own and maintain.

If you buy an EV, your car insurance likely will be 30% higher each year. Yes! Seems anything other than a very minor fender bender, often results in 'battery damage' which totals the car. Insurance companies won't fix a car with damaged battery, and the battery is under most of the frame of the car.

Today, you can buy hybrid cars like the Toyota Corolla which gets over 40mpg combined. Close to 50mpg. The RAV4 hybrid gets mid 40s. Or regular cars in the 35 mpg range. New Camry hybrid – 50 mpg. If you buy an EV and only drive 10-15 thousand miles a year, the payback may never occur. With resale value dropping like a stone, and regular cars getting 50mpg, and higher insurance rates by 30% or more on EV's, the break even point might be 'forever'.

## Kansas QSO Party

Happened last weekend of year. Not many reporting by press time. Full coverage next month. All counties scheduled to be on the air. Most on cw, and almost all on SSB. Six or seven mobiles out including county hunter NU0Q and big time operators like K5CM, W0BH, etc.

There are 105 counties in KS. Likely all on the air. N5RZ worked 100 on CW.

Lots more next month!

- - -

FROM K3IMC COUNTY HUNTER FORUM:

**N1API: KS QSO Party - 15 Meter Contacts**

Just got me to 2000 counties on 15 meters! Also got the 6th time needs under 800.

- - -

**NR0P as W0W/M      732 SSB QSO**

no comments

**N5RZ fixed TX      406 cw              Mults100**

W0BH and the crew always put on a great party. Thanks Bob! Noticed the N0Q mobile team disappeared late Saturday afternoon, never to return. Hope is all OK with them. Thanks to all the KS stations and mobiles to keep us hopping.

Thanks for the QSOs.

73, Gator

## HI QSO Party

Held last weekend of year. More report next month.

Threat of bad weather may have reduced operating there a bit. Busy weekend with OH and KS QSO Parties going on and many focusing on those. As usual, CA stations enjoyed better conditions to HI with beams pointed west. East coast stations worked under 10 QSO for the most part with reports so far.

**K6KM - fixed CA 15 CW 5 SSB 16 mults**

Boy, that was slow. Need more stations. Maybe next time invite me to operate in Hawaii. Or stuff stations with K4's and let remote operators mainland to operate. Never heard a station on 40m and lower. Not sure how to find a digital station calling CQ for HQP. In any rate, glad to support our friends in HI.

**KH6LC - fixed HI (big contest station)**

Band	CW	sssb	dig	mults
40:	90	0	0	10
20:	355	0	0	44
15:	451	0	0	21
10:	314	0		12
Total:	1213	0	0	87

I'd say this was one of the more challenging weekends we've had in years. Between Hurricane/Tropical Storm Hone hammering us, having a gremlin at one operating position we never did solve, the wind blowing down our 80 meter antenna and the real Show Stopper, the power going out, it was Beer time!!! Still, we had fun, ate enchiladas and basically enjoyed the weekend. Of note, and of questionable sanity, was Heather AH7RF and her husband making the 2 hour drive from the other side of the island to join us. With this storm and road conditions, I'm not sure I would have made that drive myself. Thank you for your contacts and your patience with the fills. Rain static is never fun. We hope you enjoyed the 2024 Hawaii QSO Party.

See you all next time and WORK MORE CW!

Vy 73 and Aloha,

Heather AH7RF, Ken N6KB and Lloyd KH6LC

**N6RO - fixed CA 31 cw 14 ssb 7 digi mults 32**

Comments from Ken/N6RO: This contest is a tradition at Radio Oakley, and we enjoy

the mini-surfboard trophies, earned in both Single op and multi, in past years. In this one, WU6P did the heavy lifting on the high bands and all FT, and RO handled low bands, and a few misc high band analog Qs. Activity from the islands seemed down from last year, probably from the bad WX from approaching hurricane. We again suggest that the hours in HQP be reduced, as Sunday is a frustrating drag. How about 30 hours, ending at 10z Sunday? This will allow two nights for low band activity, which is sometimes futile, esp. 80/160. I spent most of the weekend VNC to the shack radios from my TV room while watching the Little League baseball championship games. CU next year.

Comments from Nian/WU6P: It is a fun(easy) and slow contest. We made our 62 QSOs spread into 24 different hours, so rate is not good for a contester. We see a few stations (LC, AQ, TU ...) are constantly calling CQ over the whole period, and we also worked a few occasion players (like POTA station). On FT8, we turned the Amp off, and the power is still very high for HI stations, judging from signal reports. The noise/static level on 2nd day seems higher, that may due to the storm over Hawaii.

N1mm HQP module integration with the WSJT-X has some issue and can not recognize the points correctly on the fly. So we do an ADIF export, modify the field (<STATE:3>ERR to <STATE:2>HI) and re-import the ADIF, that seems do the trick. And from the log submit web page, it can support separate log submission on FT8, so next time we may save some effort here. (On the other hand, we also really want the ContestOnlineScoreBoard number reflect the real situation, on real time).

We appreciate all the QSOs, especially those who take a risk in the Hawaii Tropical Storm and still fight in the HIQP game.

## OH QSO Party

Held last weekend of year before press time. Full report next month. Dozens reporting but no detailed mobile reports yet at press time

At least 60 counties on the air on cw. Many dozens on SSB

There are 88 counties in OH.



**KV8Q mobile 1252 CW 30 ssb**  
Operator(s): AD4EB KV8Q

write up coming soon.....

**NW8S fixed OH 475 533 CW Mults 85 Ph Mults 108 T**

Operator(s): AB8M KB8O NQ8O

This weekend kind of snuck up on us. We had the two stations running for about 11 hours but lacked the third multi hunting station. Conditions were about average for us and we enjoyed not having to pulled the plug for the passing storms that seem to sit over head normally on this weekend. The lower bands were very quiet this time around which is not common for us usually. We had a great time and stayed busy throughout the whole 12 hours. Glad to hear all the activity and thanks to all who made it into our log.

Jay KB8O  
Doug AB8M  
Tom NQ8O

Black River Radio Ops

**KU8E fixed GA 183 77 CW Mults 75 Ph Mults 48**

Nice rover activity this year

K8MR - 38 QSOs  
KV8Q - 33 QSOs  
K8O - 10 QSOs  
K8RYU - 9 QSOs  
K8MFO - 7 QSOs

Thanks to Jim, K8MR for all the QSY's to SSB. Wish there was more activity on 20 meters. Lots of loud OH stations here in GA but not much activity. See you in the next one.

Jeff KU8E

**K8O mobile (W8CAR op) 444 cw 61 SSB QSO**

Great activity, great condx, and great driving day. TNX to all ops who got to work Ohio stations!

73 Dan W8CAR (K8O)

**WN4AFP fixed SC 120 cw 46 SSB CW Mults 66 Ph Mults 35**

This contest was a 2 band 80/40m contest from SC, so it worked out well. Activity was high on these two bands in the evening/night, so QSO rates were high. Managed 30+ per hour with an hour segment of 40. Thanks to all the OH stations, but special thanks goes to some amazing mobile ops out there... KV8Q - 17 Qs, K8MR 15 Qs, K8O 7 Qs, K8RYU 7 Qs, and K8MFO 5 Qs. Near the end the mults got harder to find and the competition increased too. I enjoyed working KV8Q and K8MR at 50+ wpm speeds. I love QRQ in state QPs. I also enjoyed watching the online scoreboard - racing with some great ops.

73 Dave WN4AFP

## Geomagnetic Storms

From the Washington Post, Sunday Aug 25 - bits and pieces - reprinted in Dallas Morning News.

Northern Lights Continue Mid-Latitude Displays

**Geomagnetic storms bringing auroras to US may only get bigger, scientists say**

The aurora extravaganza is just the beginning, scientists say. If you haven't seen the

aurora or are bouncing like an excited electron to see more, bigger events may be on the way over the next few years.

“The next three or four years, we should see some fine displays of aurora” said Bob Leamon, a solar physicist at the University of Maryland Baltimore County and NASA. The displays so far have been quite the warm-up. On May 10, Earth was hit by the biggest geomagnetic storm in two decades with the most wide spread aurora in probably 500 years. The storm level was reached a severity level of 5 on the scale of 5. But at least seven other storms have reached level 4 since 2019.

Scientists won't confirm when the peak month of solar activity is until a few months after it's passed – like waiting for all contestants in a race to finish before declaring a winner. But they know we're getting close.

On Aug 8, at least 299 sunspot groups were visible – the highest number since 2002. when the sunspots peaked... and when we reach the max number - .that's the solar maximum. In July, scientists announced that the next solar cycle is moving in. Both co-exist for a while before the new one takes over. At max, the polarity of the sunspots flip.

When the cycle reaches the other side of the maximum, it will be a good sign for aurora chasers. The biggest geomagnetic storms ten to occur in the year or two after the maximum, a phenomenon know as the Gnevyshev gap. “The real fun of the solar cycle is not now. It's what comes in the next five years, 'he McIntosh – VP of space operations at Lynker. Coming off the solar max, the sun becomes a complex, muddy mess. The coming cycle and existing cycle mix, making a tangle between the two. Enormous amounts of energy can be released, maybe bigger than the storm of May 10.

- ----

de N4CD

Well, unless you live up north and like to make aurora contacts on 6m, it's not necessarily good news for hams. We prosper with nice stable conditions, high sunspot numbers, no 'geomagnetic storms' and maybe some nice F2 propagation this winter on 10 and 6m.

Way back when, it was fun making occasional contacts on 6m bouncing signals off the aurora from my former QTH in VA. More frequent aurora propagation up north. CW signals come back as just 'noise'. SSB is tough to understand but some use it. Typically

you could work stations plus or minus 15 degrees from north - or so left and right off the aurora a few degrees (most of New England), NY, PA, WV, etc and on rare occasions further south.

Back in the 1970/80s, there was openings on F2 on 6M to the Pacific and AK at sunspot max for a couple months and country wide skip on 10M with thousands of contacts. DXCC on 10M easy in a few months. We are not there yet. Will we get there? Best possibilities are this fall after the equinox. Maybe F2? No one knows when the 'peak' occurs and is only known after it happens and sunspots decline. Indications are that we are 'close' but no one knows just how close. Just like nearly all models for Cycle 25 were wrong (most pessimistic), you can pick your model out of the 25 or so....and it's a guessing game right now as which one best predicts the maximum sunspot count and when!

Last cycle, when skip dropped to 300-400 miles on 20m, check 10m and 6m immediately.

## Awards Issued

### USA-CA

Axel, DK6KVA # 1274

Donna AG5V # 1275

### Single Band Award:

NF0N attained Level 3000 on 40 meters. He received #4

### County Challenge Award:

K5GE attained Level 27000.

## **Roadrunner Award:**

KE4UP attained 400 last counties. He received #57

N8HAM attained 225 last counties. He received #115

## **Events for County Hunters**

from the ARRL Monthly contest corral at

<http://www.arrl.org/files/file/Contest%20Corral/2024/September%202024%20Corral.pdf>

Lots of activity this month – over 500 counties up for grab! Many allow digital for the digital hunters. Ohio State Parks on Air is SSB only (maybe someday they'll get smart and allow cw!) The Parks on the Air events require you use their state designated 'park number' which is totally confusing with POTA and WWFF park system. Oh well. However, with a google search you can find out the county the parks are in most times.

### **September 7**

7 1400z to 7 2200z

3.5-28

#### **Ohio State Parks on the Air Ph**

OH park abbreviation or SPC

[ospota.or](http://ospota.or)

7 2000z to 7 2359z

1.8-28

#### **CWops CW Open CW**

serial number, name

[cwops.org](http://cwops.org)

## **September 21**

21 1400z to 22 0159z

3.5-28

### **New Jersey QSO Party CW Ph Dig**

RS(T), NJ county or SPC

[www.k2td-bcrc.org](http://www.k2td-bcrc.org)

21 1400z to 22 0200 z

All, no WARC or 60

### **Iowa QSO Party CW Ph Dig**

RS(T), IA county or SPC

[www.w0yl.com](http://www.w0yl.com)

21 1400z to 22 2000 z

All, no WARC

### **Texas QSO Party CW Ph Dig**

RS(T), TX county or SPC

[www.txqp.net](http://www.txqp.net)

21 1600z to 21 2300z

All, no WARC

### **Wisconsin Parks on the Air CW Ph Dig**

WI park number or SPC

[wipota.com](http://wipota.com)

21 1600z to 22 2200 z

3.5-28

### **New Hampshire QSO Party CW Ph Dig**

RS(T), NH county or SPC

[www.w1wqm.org](http://www.w1wqm.org)

21 1600z to 22 2359z

1.8-28,50

### **Washington State Salmon Run CW Ph**

RS(T), WA county or SPC

[salmonrun.wwdxc.org](http://salmonrun.wwdxc.org)

## **September 28**

28 1200z to 29 1200z

1.8-28

**Maine QSO Party CW Ph**

RS(T), ME county or SPC

[www.wslsm.com](http://www.wslsm.com)

That's all folks!