County Hunter News OnLine

June 2025
Volume 21 Issue 6

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. There is SSB activity now occasionally on 7188, 14336., 18136, 21336, 28336 . The CW folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB . (21.336 and 28.336)

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

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

The USACA award was sponsored by CQ Magazine, which unfortunately has gone the way of the dinosaurs. However, like other CQ Awards, they are still available.

Rules and information are here:

http://countyhunter.com/cq.htm

The CQ Awards Chairman for this award is Brian, NX0X. The award is only available

at 'all counties' (now 3076). There are no 'levels' any longer

MARAC sponsors the US Counties Award which can be earned in increments of 500 counties. The rules for this award are at:

http://marac.org/documents/usa-ca-rules.pdf

This award requjires log data only to earn.

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

MARAC sponsors an award program for many other county hunting awards. You can find information on these awards and the rules at:

http://marac.org/awards.pdf

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

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

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

Notes from the Editor

1) Sunspots – Still have them. . Solar activity continues at a high level. 1 Conditions good on 15 at times but not there at all at times. Lots less QSOs being made. Lots of solar storms and geomagnetic disturbances. .

2) QSO Party Season is over with two to go in June – then a big lull till end of August .

3) Double Diamond – Mobiles out and running for Double Diamond counties. They need contacts on 2 bands to reach 500 counties. . Help them out. Otherwise, you just need a single contact after you get your Mobile Diamond.

4) Hawaii - KB6UF might be headed to HI to finish up running all 3077 counties in June. Stay tuned. Kalawao HI – who needs it?

FL QSO Party – More

Arriving too late for last issue but worth a read! Incredible 4000 QSOs in the QSO Party!!

AD4EB mobile 4011 QSO !!!!!

What a total Blast! It is impossible for me to put into words how much fun it was to be on the running end of those gigantic pileups. The FQP attracts the best of the best CW operators, and you guys and gals are super-fast and know how to help keep things ripping along. There were a few times, late on Sunday, that the 20m pileups got so big and out of hand that all I could do was QRT and move to 15m to get back into the rhythm.

There were 1,909 QSOs in the log at the end of Saturday night, and we thought 4,000 QSOs was possibly within reach. It was not looking likely with 3 hours to go in the contest, so we changed strategy and decided not to worry about making the last county of our planned route. That gave us a bit more time at 2 county line locations, which gave us the higher QSO counts we needed (230, 252, and 198). I'm not sure the 4,000 number will hold up after log checking, so we may have to practice up and try it again in the 2026 FQP.

Melody could not have done a better job driving and navigating the route this year. We never ran into any significant traffic issues, which was amazing. She did a great job properly parking right on top of the county line at the county line signs. She got startled once when a highway traffic emergency vehicle snuck up on us and tapped on her window. Fortunately, he did not make us leave that choice location. The weather was perfect, nice and sunny except for a brief surprise shower during the last hour of the contest. She enjoyed the

999-mile drive, and kept me very comfortable and safe in the back of our KIA Carnival MPV. There were a lot of totally crazy and fast cut-in-cut-out drivers on the Florida speedways, but she did not let them bother her.

We ended up with 2 fewer multipliers than last year. The radio is an Icom 7610, and I operate SO2V to find and work multipliers on the 2nd VFO when the rates on the main VFO slow down. Ended up working 28 countries, many of which were on the 2nd VFO. It is usually a slow process to get them to copy my call correctly and exchange the county and state. If I did not come back to your call quickly, this may be what I was doing. Missed ND, SD, DC, HI, AK and a whole bunch of provinces.

I could write a couple pages on all you folks, but want to keep this kind of short. Just need to give a special shout out to Chris Hurlbut, who surprised me as CR3Z. Each multiplier was worth 51 Q's by the end of the contest, so thanks Chris.

Thanks to everyone who took the time to track and work us this year. Also to the FCG, the Florida QSO Party Contest Committee, and especially to Dan K1TO who kept twisting my arm to give the FQP a shot years ago. And last but not least, thank you Melody for your never ending support in this crazy hobby. Can't wait for next year.

73 - Jim AD4EB and Melody KI4HVY

AA4TI County Expedition 2064 CW 1113 SSB
Operator(s): AA4TI K8DV

Murphy decided to send all of his illegitimate children to visit. Fortunately, we were able to handle them and adapt. On the positive side, the radios and antennas performed quite well. We had no RF issues and surprisingly little interstation interference due to effective bandpass filters, grounding and station bonding. One of our antennas was a home made Quick Deploy vertical for 10/15/20 which really cut down on station setup time when we changed counties. Travel time was our biggest enemy which we could not control. This was the best performance yet for AA4TI Expedition. Many, many thanks go out to Dave, K8DV for flying in to be the second operator. Dave and I have worked QSO parties together years ago, and it was great to get together this year for the FQP.

N4P - county expedition Gilchrest FL 822 cw 488 ssb
Operator(s): AA4NP K4NMR K5KG W4LT

At end of setup on Friday... EVERYTHING WORKED and continued to work for the duration. We had no equipment issues other than some RF into the mics which were fixed by our host provisioning our back up 40m wire as a ground wire and W4LT's private stash of ferrites!

Mediocre conditions on Saturday, improved across time to Sunday. 15 was especially productive in SSB. 10 was wide open on Sunday, but no takers to our calls.

Kudos to Danny Horvat - E73M/N4EXA, owner of My Antennas for the very high performance EFHW-8010 and EFHW-4010 we used as our main antennas, purchased specifically for use in this contest. They really played well with great SWR on all bands we used and, best of all, were very easy to hoist high into the surrounding trees.

Hat's off to our host John Greist at The Cottages of Suwanee River Preserve for a TERRIFIC facility and his TREMENDOUS help! We couldn't have done it without him! And, we MAY have a future Ham in a few months! If you're looking for an out of the way laid back but modern place to play radio, this place is it!

73 - W4LT for the Suwanee River Gilchrist County DXPedition Group

N4TO Mobile 3284 cw
Operator(s): K1TO K2UA

Huge, huge thanks to my longtime friend and mentor of nearly 40 years, Dan, K1TO. The last time we operated together was "forever ago." This was such a treat! Dan planned the route and all the in-state logistics. I flew into Sarasota and rented a car the Thursday evening before the contest. I brought the rig, antennas, and accessories with me. We fitted out the car on Friday morning. (Big props to Enterprise for giving us a

choice of vehicle, and the 2024 Altima did not disappoint--giving us zero RFI and 37.7 mi/gal over the 1100-mile drive.) We ran two Tarheel Designs antennas and a TS-480HX dialed back to 100 W. We ran the rig, computer, and accessories from a 200-Ah LFP battery behind the passenger's seat. That worked out very well indeed; we had something like 60% capacity remaining at the end of the contest.

One of the many highlights was a late dinner Saturday night, where we met up in the Jacksonville area with N4KM, W4WF, K4BAI, and KU8E. It was a short night, but what a great opportunity to see those guys and share a meal mid-contest!

We ran short of time due to a detour early in our route Saturday, losing two counties at the end of the day. Sunday, a closure on I-95 cost us dearly with a long detour, which cut out three counties and we spent a lot more time than expected in some of the counties we activated. However, all things considered, it was a fantastic 45-county adventure that ended well. We have a list of things to improve for next year (when is that ever NOT the case?) and have already started talking about that.

Big congrats to AD4EB on an astonishing QSO total and to all the mobile efforts in the 3000-QSO range. The incredible activity levels that FQP generates are unlike any that I have experienced in any of my mobile QSO party operations in the past (New York, Oklahoma, New England)--nothing is close to the pileups. This was legitimate DXpedition-grade chaos--and I loved every second! I'd love to run an amp next year so we can control the pileups better.

Thanks to all the chasers--there are so many who chased us hard and gave us MANY QSOs--but especially thanks to our top three: VE3NNT (58), N5TJ (56), and N5OT (50). You guys were incredibly dedicated! Many others were in the 40s. We loved having all of you call in so often!

I guess it's not such a quick update after all--but there's so much more I'd like to say. Once again, thanks to Dan for making it possible to spend four days together, operating the radio and tooling around and seeing Florida in much more detail than I ever have before (the good, the bad, and the ugly--mostly good), and experiencing the fabled FQP for the first time in-state. Really a fantastic experience!

--73, Rus, K2UA

N4FCG mobile 2602 cw
Operator(s): N4BP NX4N

Many_ years ago, I managed the Florida QSO Party for Andy Clarke and Florida Skip. When Andy, W4IYT passed away and Florida Skip went out of publication, the FQP was dropped. Later, a Miami club attempted to resurrect the contest, but after about two years gave it up. Fast forward to the formation of the Florida Contest Group. Under the leadership of K4OJ (then K1ZX), K1TO, WC4E and other founding members, FCG gave it a go. The format has always been basically the same as Florida Skip's version: Four bands and two ten hour periods. Under FCG, the Party took off and has eventually become one of the most successful QP's in North America. There are too many calls to mention all, but key guidance recently has been from K1TO, W4WF, NX4N, and many other club members - some even from out of state.

My 85th b-day was two weeks ahead of this year's FQP. Why Chris, NX4N would want this old fart as a partner in this year's running still baffles me, but I jumped at his invitation. I was with NX4N, K0LUZ, K4KM, and W4LT for Chris' first running of his M/M Mobile but that was several years ago. This year's running was to be one driver and one operator.

Saturday morning I arrived at the NX4N QTH at about 8:30. Lili, Chris' XYL fixed us a nice breakfast and then we took off for our start in BRO. When we hit the Tamiami Trail in DAD and started west, Chris spotted NK4O headed the other way! I was pleased to see AJ as just recently I had given him a mag mount, a mast, and several resonators which he put to good use in his first (on his own) mobile FQP. For us right from the start, we had never ending pile-ups. Murphy pretty well spared us, but we did have a couple of nagging issues for the entire 20 hours. For me, the laptop keyboard was a major issue - the keys were over-sensitive! The slightest bump in the road would add extra letter(s) to a call entered and the slightest side shift would cause touching the wrong key. I settled into mostly just allowing N1MM+ to send the error and then correcting it while copying the exchange - which didn't seem to upset the op at the other end. I submitted our log as "Assisted" although we never used any Telnet spots - and much of the time Chris' smart phone hot spot wouldn't function, probably because of changing cell towers as we traveled along. When we stopped for gas or brief rests, Chris took over operating while standing outside with the keyboard and paddle on the seat inside. We had one strange unexplained glitch. In DES while Chris was finishing up his quick session, somehow one of my old C6AKQ logs was brought up, but fortunately only one call was entered before fixing it (WB9HFK). I sorted this out when I arrived home and added one more QSO to the N4FCG log. I wasn't able to follow the route very well, actually a good thing since I was kept too busy to notice! I do know that we took a detour through PUT that first day and skipped PIN to keep on time. We arrived back at Chris' QTH promptly at 6PM and Lili had a rotisserie chicken dinner waiting for

us. Day one gave us 1212 QSO and I estimated we might double that after day two. Day two seemed even better, maybe by us becoming more experienced after the first ten hours. We started on 40M, but rather quickly shifted to 20 and 15 (10M only added two QSOs for the entire ride). Another day of never ending pile-ups and no new Murphy surprises. I mentioned to Chris several times how quiet his van was compared to my home station. His efforts with the M/M mobile setup over the years really paid off, plus the fact that there was no QRM from other transmitters in the van. And with Bose noise canceling headsets, it was almost like operating from home (but without the RF noise!). We added another 1400 QSOs on Sunday, even better than my expectations. At the end we pulled into Chris' driveway with ten minutes left. By that time, I had developed a horrendous headache. Chris took over and put us over the 2600 QSO mark while I went inside to crash. I was done - couldn't function and just remained in bed until the drive home the next morning. Chris and Lili were very understanding and took good care of me.

All in all an extremely successful operation in my opinion. At my age, perhaps my "last hurrah", but we'll see. :-)

Nebraska QSO Party – More

2025 Nebraska QSO Party by Bob Harder, W0BH

Nebraska was a very, very last minute decision, think 8pm on Friday night! I pulled out the aborted schedule from last year (we had to turn around with van problems), put the batteries and other backup equipment into the van, and posted my route on QRZ and the County Hunter's web site. XYL Lorna and I both needed a break from a busy week, so it felt good to get away. With much-needed rain forecast on Sunday, we decided to make it a one-day effort.

After the two-hour drive north to the border, we stopped to put on the Hustler antennas and we were off. Off to a slow start would be a better description. The bands were in rough shape with weak signals all around. That was the story for quite a while, and I really had to concentrate to pull signals out from the noise. It slowly got better as the day wore on, but it wasn't until later in the afternoon and evening when conditions improved. At least the weather was perfect; sunny but cool, and no wind for a change!

My favorite thing to do in QSO parties is to operate from three or four-county lines. In Nebraska and Kansas, there are a number of accessible ones. Looking back, it's obvious I had read the Rules in 2024 when I made the schedule, but I didn't take time to review them before going this time, or I would have noticed the two-county-line-only rule. When we got to the first two-county line stop, I looked at the map and said, "let's go a mile east and run four counties on SSB instead!" So that's what we did, and again later in the day at another four-county line. Great fun, and Lorna enjoyed giving out her call as well. A highlight of the trip.

Imagine my surprise, when, during an after-party phone call with John/N6MU, he mentioned the rule I'd missed. Oops. An honest but rookie mistake - always read the Rules, no matter how tired you are! What to do, so I emailed the QSO party coordinator. I calculated the scores of the other two mobiles based on their 3830 posts and we would clearly come in last place, so the coordinator said to turn in the log as is without removing any QSOs. Lesson learned!

On to our favorite moment which made the whole trip worthwhile. Avid county hunter, Don/W9DC, emailed me earlier in the week asking if I was going to Nebraska. Don needed Webster county for his very last #3077 USA county with a twist. He needed Webster county from someone with a K callsign, and he knew Lorna/K0WHY could do that for him. We were, in fact, going through Webster county later in the afternoon, so game on!

Don worked us along the way on both CW and SSB. We got to Franklin county, the county before Webster, and Don was booming in. I promised him he'd be my first call starting out on SSB when we got to Webster. I kept my promise: W9DC this is W0BH, Webster county, but no Don. There were lots of loud signals including a number of county hunters waiting to work Webster, so I let them know what was going on. They respotted us on County Hunters and several other spotting sites and I think gave Don a phone call because someone, wish I could remember who, said, "he's coming!"

The conversation went something like this. "W0BH this is W9DC." "W9DC, hi Don! I know this doesn't help, but, you're 59 Webster." Don laughed and asked for Lorna, so she pulled over, we hooked up a second headset, and Don had his K#3077. Congrats, Don! Lorna really enjoyed chatting with him for a few minutes and I'm sure there were lots of ops listening in. Don said he'd been waiting for two years for this one, so happy we could help! After

that, we ran out the route and crossed the border back into Kansas about 8:15pm for the 2 hour drive home.

On Sunday in Kansas, we got a wonderful one-inch rain as forecast. Conditions were great into Nebraska, and I enjoyed working K0AP/m, K0BBC/m and KN6VTC/p as well as some fixed station friends. Best signals were on 40m, but I was able to work the mobiles on 20m and 15m backscatter as well. Great fun!

Stats

Operated 8.5 hours, 918 Qs, 233 unique calls, 27 dupes, 343 NEQP miles (611 total miles).

States not worked (10) : AK DE HI IA ND NV RI SD VT WY
Canadian mults worked (4) : QC ON AB BC
NE worked (2) : DAKO KNOX
DX worked (2) : OM HA

Special thanks to my top scorers:

35:OM2VL
33:KA6BIM
31:K1RO
30:N8II
23:N6MU WN4AFP
22:W9DC
18:AA5JF
16:K0TRL K4DR
15:K4ZGB
14:K7REL
12:NU1O WA5DTK
11:N7AME
10:N2ZZ

NE Mobiles Worked: K0AP K0BBC

<u>Afterwards</u>

I'm glad we could get out and run this beautiful state again this year. We hope to see more of it by going to different parts next year, perhaps both days next time. Thanks to the sponsors and all partipants for a fun run!

The 2025 Kansas QSO Party is scheduled for August 30-31, the last (and fifth) weekend in August. With 105 counties, we need all the help we can get, so mobiles, head this way! I know K0AP will be there, and I invited K0BBC and KN6VTC as well. Everyone else, thanks for the Qs! We'll see you down the log in 2025 ..

73, Bob/w0bh and Lorna/k0why

K1RO fixed NH 64 cw 55 SSB Mults58

Mostly interested in filling in counties on CW and got 5 new ones thanks to K0AP and W0BH/K0WHY. Was fun to chase those mobiles and also K0BBC on phone. Good conditions all day on 20 and okay on 40 in the evening. 80 was noisy. Nothing heard on 15 except K0AP Sunday morning. Had things to do outside on Sunday but tried to keep checking for K0BBC and K0AP as they changed counties. Really like the 1-day QSO parties that don't kill the whole weekend...

KA6BIM fixed OR 80 cw 68 SSB Mults 60

Fun and active contest. Kept busy chasing the rovers and hunting for the fixed stations worked 9 new counties. Still need 8 more, all in the Northwest Corner Hopefully a rover will cover that sparse area next year. This is my highest score yet in this contest.

Thanks for the QSO's Dave ka6bim

K0WHY mobile 4 cw 285 SSB

Congratulations to Don/W9DC for Webster county number 3077 with a K call! We really enjoyed helping to complete that remarkable achievement.

See the W0BH post for more details on our run ..

73, Lorna/K0WHY

7th Area QSO Party

There are over 200 counties up for grabs in the 7th QP. Top scorers seemed to be the 60 range – meaning much of the counties were hard to get. Conditions were not great – almost no 10M QSOs and 15M wasn't great – usually it's full of stations.

N4CD was over in the local park. Caught 20 7QPs, bunch of IN QP stations. 15M was dead. Heard just a few stations calling CQ. S1 or S2. Tried calling – only managed to work one – in AZ. Rest just could not hear my mobile signal on 15M.

W7M county portable 284 CW 13 SSB 2 digi
Operator(s): KI3V KJ7KTD NN7M

Fun expedition from Grayland Beach SP. Operated from the campground. Good conditions on 20m. Used a 20m dipole, 15m moxon, and 40m dipole. FTDX10, KPA500.
Operated at 100w CW & SSB, 40w digital. Operators were Ryan, Dave & Leon.

K7C county portable - Operator(s): K6WS 1001 CW QSO

This was my seventh 7QP expedition, again this year in a rental house in Santa Cruz County, AZ. This was my first time in this house. Friday night after antenna setup and station assembly, I turned on the receiver to find 80 & 40 to be very noisy. I always wonder about power line noise in a new house. A quick check of the solar weather revealed A=39. I went to bed thinking this was not going to be fun. However, the noise was gone Saturday morning at the start of the 7QP, but that still present A=39 clouded my mental outlook. That outlook soon changed from cloudy to contest sunny after just a few minutes into the 7QP. Except for the absence of 10m, I found the bands to be in good shape, contrary to the prevailing popular sentiment. The lesson learned for me is to engage with the conditions at hand rather than be influenced by prior expectations.

The effort required to get my antennas up in the air and then take them down hours later is herculean. Each time I do it, I tell myself it's the last time. It takes about 11 hours to put up and 4 hours to take down. However, time has a way of lessening those memories

and the expedition addiction takes over again. As I write this, time seems to be working as I am looking forward to the next one. Too much fun.

Thanks to everyone involved with running the great 7QP!

Rig: FTdx10, KPA-500
Antennas:
1) Full size 80 & 40 fan dipole suspended on a 32 ft center & two 28 ft end masts
2) 20/15/10 fan dipole suspended below the 80/40 dipole

73, Bill / K6WSC
K7C in the 7QP, Santa Cruz County, AZ

W7AWE county portable 1197 SSB QSO

That a roller coaster ride on the bands! Sitting on county line in AZ (PMA/SCZ) all day with great weather conditions, except for the occasional dust devil. Set up on Friday and slept under the stars in the bed of the truck. Lots of shooting stars.

Best runs ranged from 140 to 249 Qs/hr. The 249 pace was all on 40m in the evening. Shut down early at 8:00pm local so I could take down the antennas and make it home by mid-night. Wish I could have worked the last 4 hours.

Thanks to everyone on the bands listening to me stumble with saying AZPMA/SCZ - LOL

WS7L County Expedition 577 CW QSO

With high bands in a bit of a slump (and maybe the op too) I scored quite a bit down from last year.

Worked all states except ND, plus KP4 and Canadians VE7 VE5 VE3 VE2 and VE9. Only a few "foreign" DX: DL, OM PY.

K3 + KPA500 + BuddiHex up about 20 ft, Inv-V for 40, Inv-L for 80.

73 & thanks for the Q's
Carl WS7L

N7UN county portable WAKLI/YAK 701 CW 4 SSB QSO

I did as a county-line /p entry, my 2nd year at this site. But 20m was only fair, 15m ONLY for the big guns, and nada on 10m. The surprise was 40 & 80 were super after 4pm. I was even working EU on 40, over the pole! It was windy here and was concerned I might get a blow-down with my newly-made ZS6BKW multiband dipole. I was able to find some 125' Ponderosa pines to get my feed point up at 70' which made a huge difference! And upper 20's Sat night...yikes!

KX7L county expedition 323 CW QSO

Another fun outing at Belfair State Park in Mason County. The weather cooperated, propagation wasn't too bad, and I managed to break 300 QSO's. As with last years Salmon Run at this spot, I posted the activation to the POTA website, and had quite a few POTA stations call. (honest RST's, and the tell-tale "dit-dit" at the end of the QSO.) The one problem that got a bit worse here was getting a county out of the 7-land POTA chasers. Many seemed confused when I asked "UR COUNTY?"

N7D - opr W6KC County Expedition 119 cw 16 SSB

Operated portable from Yakima county in the 7QP during a 5,000 mile road trip through the West and Midwest. Started Saturday morning from a POTA Park with room to put up an EFLW antenna in the trees. After spending an hour and only logging 11 QSOs, I decided to QRT and return to my hotel room, hoping for better conditions later. I restarted the 7QP Saturday afternoon from the parking lot of our hotel using just a 17ft whip on top of my SUV. It was good to finally pick up the rate, but it was never that great. I still I had lots of fun! See: https://www.qrz.com/db/N7D

73, Jim N7D (W6KC)

W7TR - op KH2TJ 104 CW 12 SSB

Set up on the county lines of Washoe and Storey at about 7400ft. Did a SOTA activation prior to setting up for the 7qp. After getting back to the truck to fire up for 7QP, had a visit from Murphy and took about an hour to sort out setting N1mm for county line and getting the CW keyer to work with the IC-7100. Once sorted out, everything worked

fine - except for the bands! ;-) Good shake down on getting the rig/batteries/confuzer all set up for upcoming June VHF event. There's actually a spot near this area that 4 counties intersect - plans for next year!

20M actually started sounding pretty good by late afternoon but had to QRT due to wind and rain and incoming T-storms.

Thanks for the contacts and look forward to another county line expedition next year.

73, Todd KH2TJ

Rig: Icom IC-7100
Keyer: Chicom dongle off of Amazon ($8)
Ant: Hustler whip/resonators
Batt: 100ah LiFePO4
Op: Cold and tired ;-)
WX: Cold/Windy/Raining/Muddy

W6US County Expedition - Nevada - 146 SSB QSO

Never saw an opening on 15 and 10, 20 was only fair and 40 was mostly the 6 & 7 call area... Had a couple of hour thunderstorm shutdown mid day with strikes within a mile...

N7XU mobile Opr K4XU W7AM 632 cw

Miserable HF conditions.... We started out in the rain with a Hustler pitchfork tribander and a magmounted 40m ham stick. Rain static quit before we reached the ORDES eastern border. Had I known how bad conditions were I'd have used my homebrew 20m resonator on the mag mount and a better 40m (10ft) on the fender. W7AM dropped me off at home at 5PM. I changed antennas and went off to the ORDES county borders where quiet and level places to park make for easier rates.

Weather was much improved on reaching the easternmost point in Harney county where we turn north and head for some of the least populated parts of Oregon. It's beautiful and varied scenery, but parts along our route are most suited for moon bounce. We stopped

for a sandwich and chocolate shake at a little 1950s diner in Condon (ORGIL). Then down into the John Day river valley and back up on the other side while trying to keep the paddle on the table ...and my lunch where it belongs.

As the Oregon manager for 7QP I try to have all 36 counties available. Those without active hams get a visit along my mobile route or by one of our club members.

In the end I made almost as many contacts in the last 5 hours on 40 and 80 as I did in the first 13 hours while mobile in motion on 40 20 and 15m. Every year is different!

73, Dick K4XU
Lots of emails and search time on QRZ.

K7TQ Mobile 57 CW QSO

Equipment failure caused Dink and me to QRT after only two and a half hours of operating. However, we did get to see a great sunrise and enjoy the scenery until the equipment problem.

K8TE county expedition 1106 CW 108 SSB

That was challenging! Between nearby lightning and blowing dust, I had to disconnect the antennas a couple of times. I also ran low power because of two cables left at home. An apparent drunk (really bad CW) bothered me on 40m CW a lot during the evening, even though he worked me once.

Others worked me many times. N6RO came in first with nine QSO's followed by K5CM, K6KM, KN7K, and WV4P with seven each. Thanks guys!

The DQRM and slower rates moved me to quit early and make some dinner in the RV. Everything got a good shakedown for my upcoming county and parks activations to and from HamVention. Thanks to everyone for working me and your patience when I had to copy through high noise levels! 73, Bill, K8TE

N8II fixed WV 124 cw 82 ssb Mults 83

Overall conditions were about the worst I have ever seen in my many 7QP entries. 20 was in reasonable shape at first, but signals were dropping by 15Z when the INQP started and 15 was completely dead. I checked out INQP on 40 and decided activity was high enough to put in an effort there. Rather than letting go of competing, I would take short visits to 20 and 15 (which opened well to AZ, but never well to the northern parts of the call area) throughout the day. 20 was in decent shape by 22Z but attempts to run on 20 SSB yielded fewer answers than normal. We also were hit by a hailstorm at 2105Z. At 2000Z the QRN from surrounding thunderstorms was terrible, then unbearable at 2030Z. I kept pushing on until 21Z. Undoubtedly static discharge on the yagis would have made operating impossible for the next 30 minutes, still a vestige of static at 2140Z and the storm static was better but still bad. That hour of QRN wore me down the rest of the evening. Not letting go probably cost me a win in INQP, lesson learned. The only 7 I worked on 80M was N7A, quite loud! The QRN on 40 was high and conditions were down just a little. FYI, I lost N7XU/M many hours due to the poor condx and only heard K7TQ once. Hopefully I will see you next year with better conditions and luck.

Thanks for the Q's and 73, Jeff

N7DX fixed WA Opr N7DX K7RL 924 CW 685 SSB QSO

The 7QP is a fun contest, being less intense and lengthy than major contests, but having enough activity as a region-wide QSO party to keep things interesting.

We entered in multi-single category this year, which turned out to be a good decision. It was much more bearable alternating 3-hour periods of lackluster conditions with intervening 3-hour breaks.

Ten meters was a complete no-show for us. Maybe we could have made a Q or two on 10, but it seemed unwise to incur 10 minutes in "band change jail" for one or two contacts. Same goes for 160m: the 5 contacts we made there were in the final 10 minutes of the contest. By then, jail seemed like a form of relief!

Despite the conditions, there was adequate activity and the

confluence of multiple QSO parties on the same weekend (e.g., NEQP) definitely helps.

We wound up with 67 multipliers (57 states/sections + 10 DX). Along the way, we contacted 91 of the 259 possible 7th-region counties. Always appreciate the effort which the mobiles put in to make hard-to-get counties available for those outside the call-region. (Also nice to get a double Q count when working one that is straddling a county line!)

Thanks to all those who were on that we managed to work, especially the over 100 stations from California who we contacted (over 6% of our total).

- 73, Tony (N7DX) with Mitch (K7RL)

W7EEE county Expedition 352 cw 132 SSB
Operator(s): AG7NR W6IA W7EEE

The three of us had a great time in the Cascades in Kittitas County, Washington. No QSOs on 10, very few on 15, but 20 was in play for enough of the day to make things interesting. We got on 80m in the evening for the first time in years! We missed Delaware, Louisiana, North Dakota and Iowa. And unlike last year, there was little DX this time around.
But we got quite a few POTA stations, especially on phone. They will be happy to see that they got a park from us, too.
An overall great time once again this year!

N7E county expedition NV-Lan//Nye 548 cw 130 SSB
N9DK NS8X

We were in a remote Nevada County Line worried about getting rained in by muddy roads. A big thunderstorm went through in the morning that created tons of noise. As the noise subsided we realized we had an antenna problem. While we still made contacts, we were having a heck of a time. By early afternoon the antenna was performing perfectly. We did not do as well as last year, sadly.

First Ever 630M Worked All States

630-Meter Band Worked All States Awards Issued

Eric Tichansky, NO3M, of Saegertown, Pennsylvania, has been issued the first ARRL Worked All States award for the 630-meter band. He picked up the award at ARRL Headquarters in Newington, Connecticut, on April 21, 2025. That was the culmination of years of study, work, and experimentation.

Tichansky had a draw to 160 meters early in his ham radio career and was active in contesting and DXing on top band. When he moved to his current home, he was able to experiments with LowFER operation. When 630 meters opened to amateur use, he got straight to work. “It seemed like an unreachable goal at the time, but patience and persistence as well as gaining more and more of an understanding of the capabilities of the band over the years proved otherwise,” said Tichansky.

His transmit antenna system has been a journey in trial, error, and fire – he’s a member of what he calls the “Hall of Flames.” He says he “definitely learned that good quality insulators do make a difference.” After years of work and refinement of matching and loading techniques, his 67-foot vertical with 8 sloping toploading wires as a wire skirt over a large radial field have proven to be the ticket to success. “For reception, I have always used dedicated receive antennas which have included phased Beverages, a full-sized 8-circle vertical array, and various others like a terminated loop,” said Tichansky.

As news of the award achievement spread in the amateur community, even many long-time hams with little or no experience on 630 meters wondered how it worked. Tichansky says Alaska and Hawaii proved especially challenging. “(The states) were certainly a challenge, Alaska perhaps moreso. However, both locations had excellent resident operators and stations and through persistent attempts and the right conditions, two-way QSOs were completed. I have a few CW QSOs with K9FD/KH6 (SK) which still stand as the distance record on 630 for CW. I also have the overall distance record for a QSO with VK4YB via JT9 which took a long time and many attempts, finally finding success on a morning (US side) near the equinox,” he said.

Tichansky says there are several other operators right behind him, with WAS almost

completed. In fact, ARRL Awards Branch Manager Sharon Taratula announced today that Edward Gray, WØSD, of Salem, South Dakota, has been awarded 630-meter WAS #2.

Most of the contacts on the band happen just like any other band, says Tichansky, from getting on and calling CQ or replying to one. Very few of his contacts on there were scheduled.

It takes an experimenter's mind and a lot of patience to be successful on the band, but like with any other operating specialty, there is a community ready to help. "The 630-meter community is very diverse, but there are a number of members that come from particular backgrounds including microwave operations, EME, topbanders and other weak signal communications. The thing we have in common is that we are experimenters and enjoy a bit of a challenge!" exclaimed Tichansky.

He currently has a DXCC total of 17 on the band. Tichansky plans to contribute technical articles about operating on 630-meters to QEX magazine in the coming months. All ARRL members have access to QEX and three other high-quality publications digitally.

Source: ARRL Newsletter

Car Radio Antenna History

If you look at a modern car, you might wonder where the antenna for the AM/FM radio went. And maybe where the antenna for GPS and Satellite radio is hidden. Let's go back in history a bit. In the beginning, cars didn't have radios – of any sort. Model T Fords didn't have a radio. In the era of the Model T Ford....there wasn't even AM broadcast radio to listen to!

While one probably tends to think that car radios were invented and developed in the United States during the early twenties, it was actually in Chelmsford, England, that the first mobile experiments took place. Designed by Guglielmo Marconi, the first mobile installation antenna on record goes back to 1897.

On the other side of the Atlantic, the experiments of Marconi were continued by the

Americans Lee Deforest and Edwin Armstrong, who set the foundations of radio early in the twentieth century. Lee DeForest had been one of the prime advocates of "automobiles as wireless stations." Early in 1903, and as told by a magazine of that era, "he fitted his instruments to automobiles so that the electricity which propels the automobile while in motion can be used for wireless telegraphy when the automobile is at a standstill".

In those pioneering days of radio broadcasting, antenna installation was one of the major stumbling blocks for the development of car radios, which were known as "motorized radios" then. For example, and to put things in perspective, AM home radios required over 100 feet of antenna wire up 35 or more feet to achieve passable reception.

For mobile installations, the wire was typically hung from vertical poles, or wrapped around a square or rhomboid-shaped wooden frame. The radio ran from separate low and high voltage batteries.

Pioneering efforts to market car radios didn't last long. Chevrolet offered a factory-installed Westinghouse radio for 1922, as a $200 option (about $3,075 in today's dollars). Philco introduced a mass-produced car radio, the Transitone, as an option for 1927 Chevrolet sedans.

Early radios had demanded constant, precise adjustment of three tuning knobs. Vehicle vibrations could send the carefully set tuning into chaos. Automobile ignition systems often produced dreadful static from ignition, tires, and generators.

Superheterodyne tuning, a vital tech breakthrough, was becoming standard by the late 1920s. Superhet radios featured single-knob tuning, along with improved sound and stability.

Just as the Great Depression was getting underway, in 1930, brothers Paul and Joseph Galvin developed the first commercially successful automobile radio. They named it the "Motorola." At $130 (equivalent to about $2,000 today), it was shockingly expensive. After all, a 1930 Ford Model A coupe or sedan cost around $495 to start.

Paul Galvin came up with the Motorola name, blending "motor" and "Victrola" (a brand name used to designate early phonographs).

Believe it or not, car antennas were once a luxury. Car antennas, introduced to the public as an option in the 1930s, were a high-class status symbol. Not only did you drive a

vehicle, but you also drove one in which you could listen to music.

Today, we hardly put a second thought (much less a first thought) into our car's antenna because more of us are streaming music than playing the radio, but still! While car antennas aren't as jaw-dropping today as they were 100 years ago, their history is important (and fascinating).

Early car radios, introduced in the 1920s and 1930s, relied on bulky, external antennas. These antennas were often strung between poles on the front and rear bumpers, or ran along the car's roof or undercarriage. As technology advanced and radio signals became stronger, antennas became smaller and more integrated into the vehicle.

Early Car Antennas (1920s-1930s):

:

Early antennas were large and cumbersome, often requiring extensive wiring and external support. They were essentially extensions of the car's metal structure, acting as a conductor for radio waves.

These early antennas struggled with signal reception, especially in areas with weak radio signals. Many broadcast stations were fairly low power - anywhere from 250w to 5000w. Many cities and towns only had a few 250w stations.

The Rise of the Whip Antenna (1930s-1960s):

In the 1930s, most radio stations used the AM band. Because of this, radios required an external antenna outside the vehicle.

The whip antenna, a vertical rod, became popular in the 1930s. It was simpler to install and easier to integrate into the car's body. Usually mounted on the driver side – front fender or rear fender. It was several feet high and fixed. However, there were many ways to lose your antenna – tree branches, vandalism, hits by birds or flying debris. Still, it was the standard for decades and decades.

Whip antennas improved signal reception compared to earlier designs.

For the next few decades, car radios followed the same basic configuration. They had a tuning knob, a mechanically operated tuning dial, and a volume knob. Inside was a grouping of vacuum tubes. Powered by the car's battery, the radio had to be connected to

a sizable antenna. At first, premium radios had 'push button tuning' which later became the standard.

Vacuum tubes were big and bulky. They also consumed considerable power from the car battery, while emitting plenty of heat.

However, a complication arose - Towards the 1940s, some radio stations transitioned to FM. Now, cars needed either a separate antenna, or one that could support both. Many early FM configurationsfor customers used a separate FM converter that went ahead of the AM radio. It tuned the FM band, and produced an AM output signal to the radio tuned to an unused channel. It took a while for manufacturers to ramp up to AM/FM car radios – often as an extra cost option.

By the end of the Depression, with World War II underway in Europe, about one in five American cars contained radios. All early radios were AM.

Blaupunkt introduced the first in-car FM radio in 1952. Becker launched its iconic “Mexico” AM/FM radio in 1953, promising premium sound quality. Operating through a higher frequency range (88 to 108 MHZ), FM radios produced better sound quality than AM. Plus FM was immune to the typical storm static of AM radio or the noise.

Some early police radio systems used AM transceivers. Some were one way only with

broadcasts to cars around 1800-1900 kilocycles per second. Just above the broadcast band. A few were two way with the transmit channel around 2100 Kcs. Often they used a regular car type antenna – tuned to their frequency band. If you find early console radios from the 30s, 40s, even 50s, , you'll often see 'police' listed around 1800 Kcs.

Most drivers stuck with AM, which occupied the lower end of radio's frequency band (540 to 1605 kHz). In the beginning, most FM stations featured classical music. Few ads. By the 1950s, a few stations ventured into jazz, rock and roll, and other formats. It would be another decade or two till FM sounded like early AM did – while AM went 24 hour sports, talk radio, religious broadcasters, etc.

Transistors, invented in 1948, finally arrived in car radios during the early 1960s. Dubbed "solid state," transistors were far smaller and more capable than vacuum tubes, drawing much less power and emitting little heat. At first, they were just used for audio output. That saved the need for a 'vibrator' which would provide the high voltage for tubes. The rest of the radio could operate with 12v on the plates of tubes. (A whole line of vacuum tubes for low plate voltage was developed for just this application, but getting any power from tubes with 12v on the plate was near impossible and you needed a couple watts of audio in the noisy car environment.).

The Evolution to Modern Antennas:

As radio technology advanced, antennas became smaller and more integrated into the car's design.

<u>Power Antennas:</u>

On many Cadillac models of the 1950s and '60s, the antenna could be raised and lowered by pulling out or pushing in on the radio's volume control knob. The Lincoln Continental of the late 1960s had push-button controls integrated into the factory radio. But most cars had a separate control that often was not even located near the car radio. And sometimes the control on early models was not even labeled, e.g., the late 1960s, early '70s Ford Thunderbird control was integrated into a courtesy light module on the dash panel.

Power antennas, which could be retracted automatically, became more common in the 1970s. This solved the problem of having the antenna visible when parked – hard to

vandalize an antenna that isn't there! Most of the installations had the power antenna on the rear fender. When off, the antenna disappeared.

Hidden Antennas:

Modern cars often feature hidden antennas, such as those integrated into the windshield or shark fin designs,

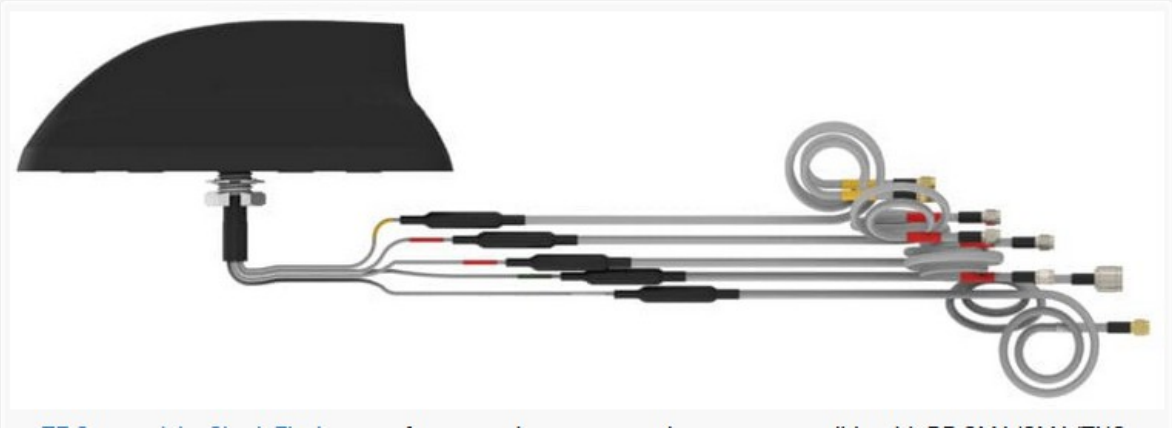
s years went by, automakers developed more ways to make their vehicle antennas more advanced and streamlined. General Motors (GM), for instance, developed windshield antennas in the 1970s. Small wires were incorporated into the windshield to provide radio reception. Although this idea was creative and innovative, its high repair costs made it unpopular. It provided both AM and FM reception.

But change was happening. Now – there was satellite radio. Frequencies up the the Gigahertz range. How to integrate all this into a small antenna.

At the same time, car makers were becoming very concerned about meeting mileage standards. What's the best way to reduce drag, yet provide functionality? Good question.

Well, the first antennas that appeared were short spikes – 10-12 inches, slanted back at a 30 or 45 degree angle. This could provide AM/FM reception – typical in the 1980s. It was harder to integrate other capability to it.

Enter the shark fin antenna …....the current car antenna on just about every car you'll see.



A shark fin antenna is a type of antenna for cars that's shaped like a shark fin. It is designed to be a sleek, modern, and aerodynamic addition to a vehicle's exterior. Shark fin antennas can have various functionalities, including AM/FM radio reception, GPS, cellular connectivity, and even Wi-Fi

BMW began to include the shark fin antenna on production vehicles in the early 2000s. They are now in widespread use by many automakers.

Shark fin antennas often support a range of frequencies, including AM/FM radio (88MHz-108MHz), GPS (1.2 GHz), and cellular bands (e.g., 698-960 MHz, 1710-2170 MHz, 2300-2700 MHz)

The type of connector depends on the specific application. Some common connectors include DIN male (for AM/FM), SMA, RP-SMA, or FAKRA

As the name implies, the shape resembles a shark's fin. Usually, this antenna is placed on the roof of the car. Of course, besides the excellent model, many functions of a car shark fin antenna are better than long antennas. Here are eight functions as well as advantages that are not widely known:

1. Generate High Performance

The shark fin antenna produces superior performance compared to the old model antenna. For example, when used for navigation, tracking, data transfer, and communication. Each shark fin antenna is designed to meet the needs of even the most demanding applications.

2. More Durable

The shark fin antenna design is sleeker and more modern than long antennas. Using an aerodynamic design, you no longer have to worry about the antenna being damaged if it hits a tree or other objects. The shark fin model prevents accidental damage.

The shark fin antenna is also designed to withstand extreme weather conditions and various obstacles when parked outdoors. Several shark fin antennas are IP67 certified, designed to be more durable and reliable in various fields. You no longer need to worry about bad weather, stiff tree branches, water, mud, and all kinds of other challenges on the road.

(somehow I don't think your 1950s AM stiff whip antenna would survive a modern car wash!)

3. Easy to Install

he function of the next shark fin antenna is that it can serve various protocols. Installation of this type of antenna is easier because it uses screws and is equipped with a cable assembly that makes it more flexible. This antenna can also be customized with cables and connectors as needed.

If you use a shark fin antenna, you no longer need to install many antennas. Just one antenna can do many things at once. It's more practical and less hassle to install.

4. More Cost-Effective

Because the shark fin antenna can be used for various needs, installing more than one antenna is unnecessary. The cost to purchase and install the antenna is reduced. For example, having to replace the antenna, just buy one, then it can be used for all.

In addition, you don't need to worry about maintenance costs because it is resistant to various kinds of weather, and no special care is needed. Of course, there is no need for the extra care that costs extra.

When the car is running, the shark fin antenna is designed to be more sturdy and resistant to all weather to overcome various air resistance. So there is no need to work hard to catch the signal, reducing fuel consumption. Another advantage is the shark fin

antenna is more cost-effective than the old model antenna.

5. Multifunction Antenna

In the past, car antennas were usually used to capture AM and FM radio signals, but this antenna's function is far from that. Of course, according to technological developments, its function is also adapted to the needs of today's car drivers.

Shark fin antennas are now used to capture other signals, namely cellular, GPS, and satellite radio signals.

6. Provides Smoother Sound - no wind noise

Because it uses an aerodynamic design, the antenna can reduce noise effectively and reduce airflow, making noise so that it makes the driver more focused on driving.

7. Able to Capture Very Good Internet Signals

The shark fin antenna also has an internet signal catcher, usually 4G LTE. The ability to capture cellular signals is usually better than the receiver on your cell phone. This is what makes navigation and entertainment needs in the car run smoothly.

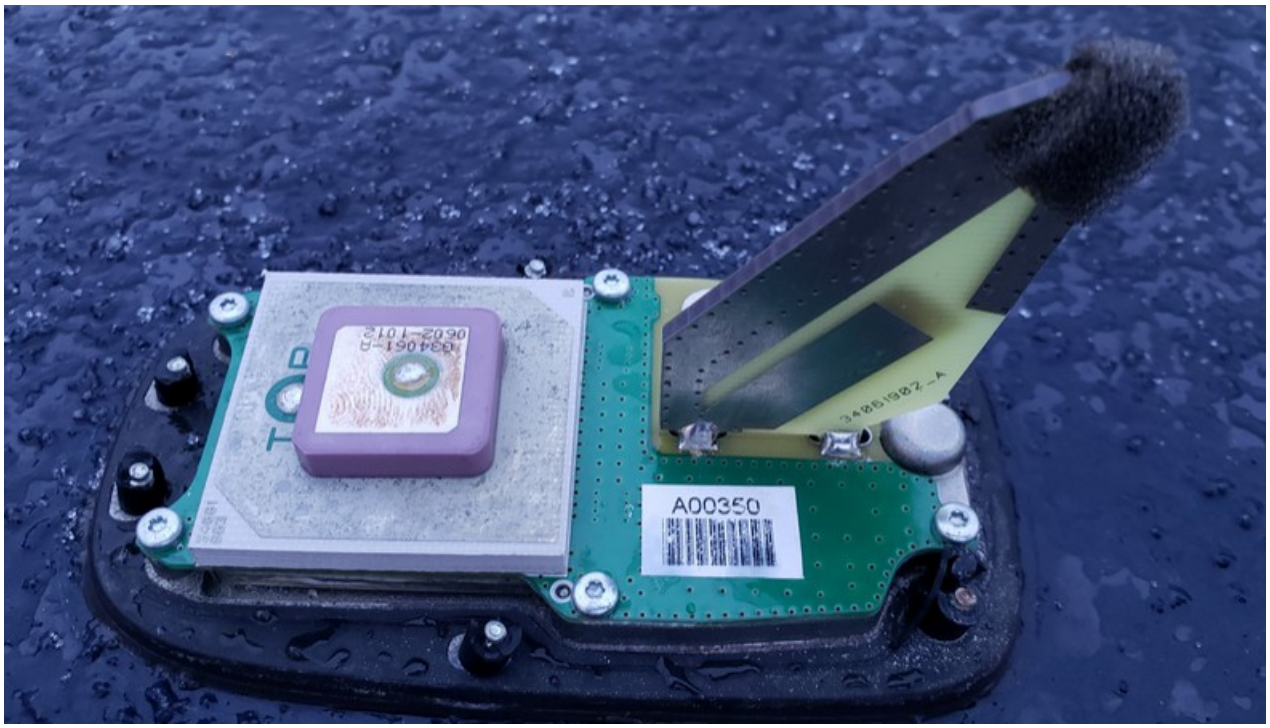
Even for receiving calls, the sound and smoothness can be better than most cell phones. So if you make a phone call in the car, the connection will be better than talking on a regular cell phone. This is what makes shark fin signals so reliable.

8. Attractive Display

Finally, the function of the shark fin antenna can be seen from its appearance. The shark fin antenna looks much more modern than the long old car antenna. The choice of black and white colors is suitable to be combined with various car colors on the market. The model is like one with the car body, so it doesn't look like an antenna.Often, it matches the color of the vehicle itself.

This antenna is usually placed on the roof of the car because it is the most obstacle-free area to receive signals. There are no other elements of the car above it. Besides being stylish, the design can also fulfill security goals because it is safe from snagging.

Given the upside of the shark fin antenna above, no wonder that the latest cars use this type of antenna.



Excellent video here – explains it all – worth a watch

https://www.youtube.com/watch?v=3_AgG6GUr0w

Indiana QSO Party

There are 92 counties in IN. A few mobiles, rovers, and portable stations were out. Looks like top scorers worked 44 counties or so on SSB, a lot less on CW in the mid to upper 20s, other than KD2KW with 85!

Conditions were not great. At t he same time, other QP's were going on – 7QP, Delaware QP, later New England QP.

From the 3830 contest reflector:

K9KJ mobile 336 CW 30 SSB

Had great fun this year running mobile. Got to check out a bunch of new counties, but I underestimated the time commitment for going to all of the counties I planned, so I missed one of the counties. I also didn't read the rules thoroughly and activated a three-county border, which was not allowed.

I was going to do CW only, but tried some SSB when I was at one of the National Parks. Speaking of which, I think I was able to activate 4 parks on this trip also.

KJ9C mobile 156 cw 23 SSB

Murphy had a ball this year. Decided to try mobile one last time... and it IS the last time. That was confirmed. Too much pain operating solo while trying to navigate

K9ABR one county portable 408 cw 211 SSB

Operated portable with EFRW in Newton County.

N9TTK one county portable 194 cw 47 SSB

Rare county portable in morgan monroe state forest, bands were not great, didn't feel like many could hear me. Did manage to break the county record that was from 2013.

N0AC rover 29 CW QSO

The QP was a bust for me. Maybe conditions and some my own problems.

We where headed to a photography shoot near Columbus, IN when I realized Saturday was the InQP. With limited resources I put together a plan to activate Clinton, Morgan, Shelby, Brown and maybe Bartholomew counties since the shoot didn't start until Sunday. After arriving at INCLI I found a spot that I could include INBOO. Great, off to the races so I thought. After about 30 minutes I had only four stations in the log on 20 and 40m. We packed up and headed to INMOR finding about the same results. Frustration drove me to quit and we headed to our motel. So, I'm not sure what the deal was.

My operating conditions were a KX3 to an EFHW. I suppose the QRP hurt but this setup generates pile ups when used for POTA or SOTA.

Bill, N0AC

KD2KW fixed TX 172 CW 85 mults

Thanks for the QSOP

N8II Fixed WV 50 cw 70 SSB CW Mults 30 Ph Mults 47

I had plenty of high QRN issues, it was terrible 2000-2030Z and nearly unbearable 2030-2100Z. I didn't put quite enough time in on INQP to win, but enjoyed especially the first 2 hours. 20M never opened for a single direct hop QSO, very unusual, usually get a bit of Es. Activity was good on 40 the first 2 hours. At 18Z signals had dropped to the point where most IN QSO's were difficult to impossible, but I heard IN activity spanning 7170-7280 KHz, pretty impressive. But most of QSO;s were IN to IN or nearby. I spent a lot of time working 7QP, trying to check 40 every so often, but only made 5 Q's 19-22Z. The storm QRN was hurting my Rx and Rx on the IN side as well. 40 was open well after a dinner/hailstorm break ending 2040Z, but the activity all evening was way down from the afternoon surge. I did get some IN answers to 40M SSB CQ's. Thanks to WN9O and KJ9C for roaming around. The number of IN counties active seemed to improve over the past 2 years. 75M as in most other QP's was very underutilized, QRN did not help. It works out fairly well to work NEQP and INQP

together from here, mainly a 40M QP for both of them, but trying to work 7QP as well does not bode for a good INQP result. Next time, I will put more effort into IN if I am going to really compete.

Many thanks for the calls and QSO's. And thanks to Mark, WB9CIF and other INQP organizers for trying to increase the activity.

73, Jeff

Delaware QSO Party

Several fixed DE stations gave out the counties. All 3 counties were present. Most out of state contesters reported 3,4,5 or 6 QSOs.

Gleissburg Cycle

Gleissberg minimum study suggests shift to stronger solar cycles through mid-century
ByReet Kaur
Wednesday, April 9, 2025

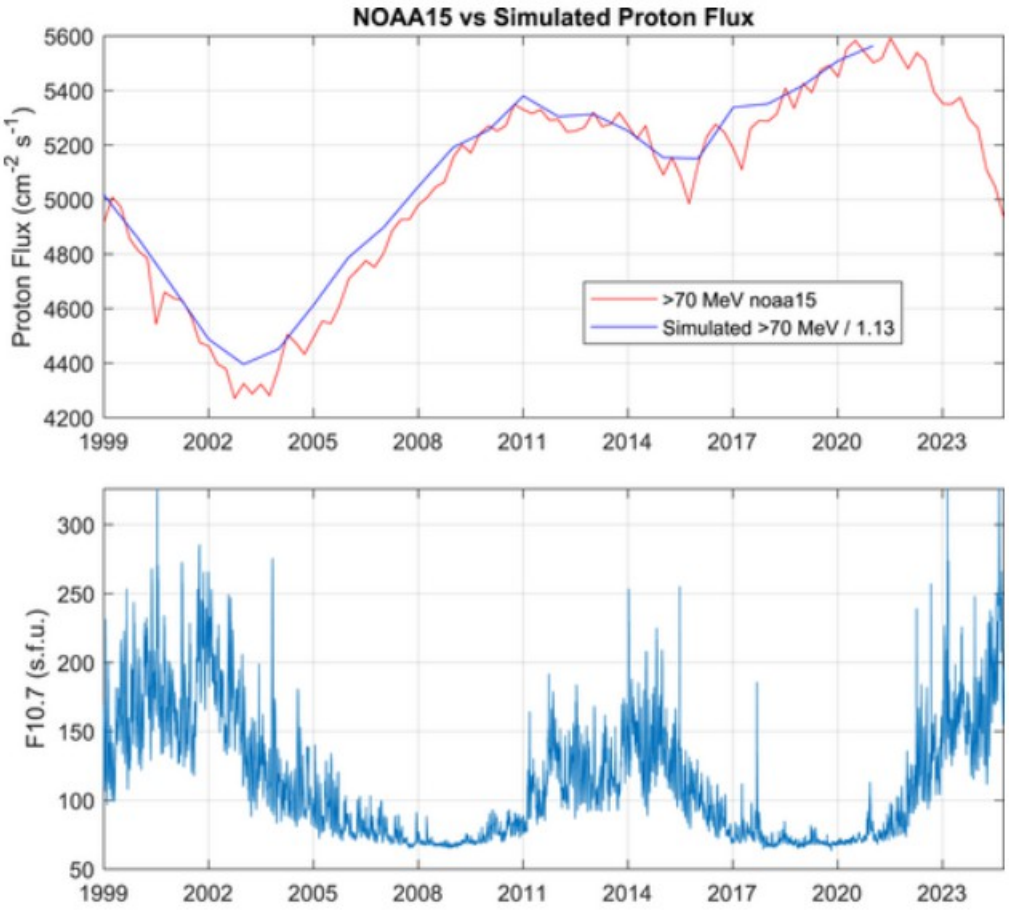
A 2025 study published in the journal Space Weather suggests the minimum of the Centennial Gleissberg Cycle (CGC) has recently ended, marking a transition toward stronger solar cycles and rising solar irradiance that may persist through the mid-21st century.

A study published on March 2, 2025, by Kalvyn Adams and colleagues presents evidence that the minimum of the Centennial Gleissberg Cycle (CGC) has ended, marking the onset of a more active solar phase expected to continue into the coming decades. The CGC is an 80–100-year modulation of the Sun's 11-year sunspot cycle.

The researchers identified the most recent CGC minimum as spanning Solar Cycles 24

and the early portion of 25. A sharp reversal in proton flux and rising solar irradiance during Solar Cycle 25 signals the end of the minimum and the onset of a more active solar phase.

Using data from NOAA POES satellites—NOAA-15 and NOAA-19—the team examined inner zone proton flux over the South Atlantic Anomaly (SAA). Between 1980 and 2021, proton flux increased significantly during a period of declining solar activity. From 2022 to 2024, the trend reversed sharply, suggesting a possible turning point in the CGC.



A correlation was observed between proton flux and F10.7 flux, an indicator of solar Extreme Ultraviolet (EUV) irradiance. F10.7 levels declined gradually over several decades while proton flux increased, reaching a peak in 2022. A sharp rise in F10.7 during Solar Cycle 25 coincided with a rapid decline in proton flux, aligning with increased solar activity.

The reduction in proton flux is attributed to atmospheric expansion driven by increased EUV radiation. A denser upper atmosphere increases collisions with neutral particles, resulting in proton loss. This trend was observed consistently across multiple proton energy channels (>35 MeV, >70 MeV, >140 MeV).

Building on previous research by Bregou et al. (2022), the researchers incorporated three additional years of data through September 2024. They averaged data over three-month intervals and excluded Solar Energetic Proton events to minimize short-term variability and better analyze long-term trends.

The team calculated a 550–650-day lag between the solar minimum and the peak in proton flux, consistent with earlier estimates. This delay reflects the time required for atmospheric changes to influence proton populations and supports the identification of a 2022 proton peak following the 2019 solar minimum.

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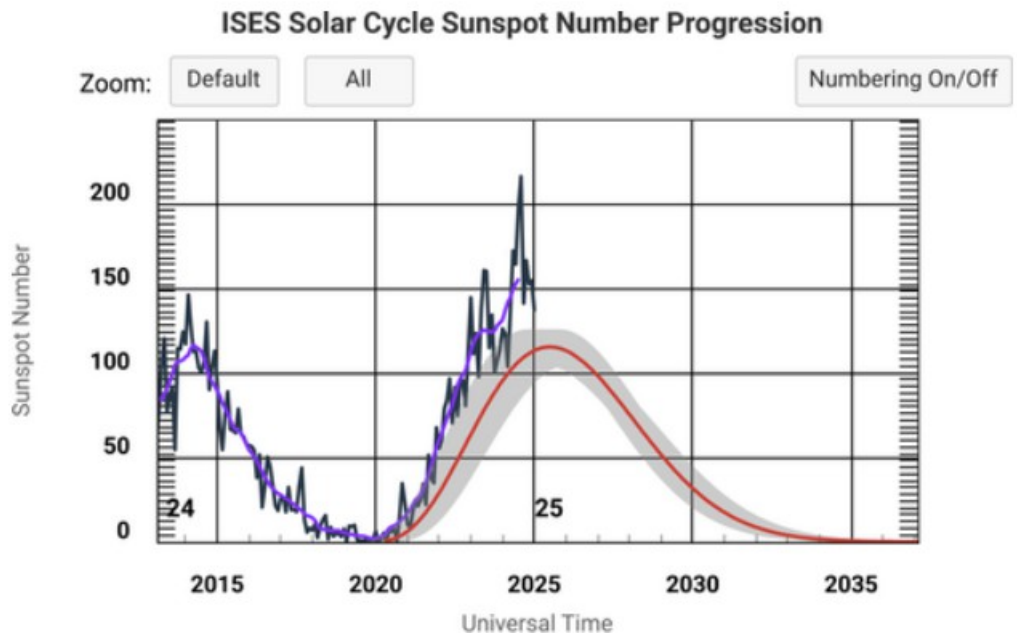

Observational data was compared with a theoretical model by Selesnick et al. (2007), updated in 2019. The model includes proton sources such as Cosmic Ray Albedo Neutron Decay (CRAND) and loss mechanisms like atmospheric drag. Simulations closely matched the observations after a minor adjustment.

The study found that proton flux declined more rapidly in NOAA-19 data, which operates at 870 km (540 miles) compared to NOAA-15 at 820 km (510 miles).

Solar Cycle 24, which was the weakest cycle in over a century and peaked around 2014, coincided with the minimum phase of the Centennial Gleissberg Cycle. This aligns with historical patterns identified by Feynman and Ruzmaikin (2014), who studied earlier minima in 1810–1830 and 1900–1910. The observed changes suggest the beginning of a transition into a more active solar phase.

Researchers suggest that solar activity may continue to increase over the next 40–50 years. This could lower the average proton flux in Earth's inner radiation belt, reducing radiation risks to low Earth orbit satellites. However, it may also result in more intense geomagnetic storms and increased atmospheric drag on spacecraft.

The team applied filters to exclude high-latitude proton counts and used Gaussian fitting to estimate peak flux levels in the SAA, reducing noise and improving data clarity.

First proposed by Gleissberg in 1939 based on sunspot records, the CGC is supported by long-term evidence from ice cores and auroral observations. The study links historical cycles with current satellite data to provide a broader perspective on solar variability.

By late 2024, proton flux fell below the 2016 minimum in both satellite datasets, particularly in NOAA-19. This decrease preceded the predicted peak of Solar Cycle 25 and was consistent with increasing sunspot numbers in 2023, supporting the hypothesis of a CGC phase transition.

The rapid increase in F10.7 during Solar Cycle 25 exceeded previous projections, including those in a 2024 NOAA report. This change is consistent with the influence of the CGC, suggesting that Solar Cycle 25 marks the end of the recent minimum period.

The findings may contribute to satellite design and mission planning. Lower proton flux could reduce the degradation of electronics and solar panels, while increased solar radiation may accelerate orbital decay.

While focused on solar and radiation belt dynamics, the study notes that previous CGC minima coincided with periods of reduced global temperatures and changes in atmospheric circulation. The authors recommend incorporating long-term solar cycles like the CGC into space weather forecasting and propose further research into potential links between solar variability and climate.

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3 Long-term study of inner zone proton flux – Emily Bregou et al. – Space Weather – June 26, 2022 – https://doi.org/10.1029/2022sw00307 – OPEN ACCESS

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De N4CD: What does this mean for hams? It means fun times. Continued high levels of sunspots and great propagation going forward. Long peak this cycle – maybe even better peaks going forward. Let's hope this is really happening!

New England QSO Party

There are 68 possible counties in the NE QP. Looks like many had in the mid 60s for multipliers. Conditions weren't great with K reaching 4 on Sunday.

From the 3830 contest reflector:

NZ1U/M 1368 CW QSO
Operator(s): W1UJ
Station: N1WK

Thank you for all of the QSOs, you make it worth it!

N1WK Station - F-150 Truck, 2 High-Sierra 'Screwdriver' antennas mounted to the back-rack with band-specific radials wrapped around inside the truck bed.

K3 Rig, N1MM+, Mortty v5 keyer, 150AH Lifepo4 Battery, Lenovo T480 with aftermarket back-lit keyboard hook-and-loop'd to a lap desk with an old home-brew paddle secured to the desk.

Driven/rode > 950 Miles (>1500KM)
Consumed > 50 Gallons (~190L) of fuel
21 hours of driving (17 of those in the contest)
25 counties covered
1350 QSOs
All CW

All Running (Not a single S&P!)
Truck was in motion the entire time with very few stops.

Thanks to N1WK for his effort driving the poor road and WX conditions, keeping us safe and on-track. MELIN was unpaved for many miles.

Conditions for driving and radio conditions were similarly poor, somehow with these poor conditions we were able to put up our second best effort in the NewEQP.

This year had the least amount of planning and preparation- we used the 2024 route maps and went with it. Started setting up N1WK/m truck for battle only a couple of hours before the start.

K1EP mobile 624 CW QSO

I had not made plans for this mobile outing as the weather was going to make an impact. I ended up doing a few hours Saturday afternoon and evening, as the weather held up for a while. Due to the ridiculous hours of the contest, I skipped the last 3 hours on Saturday, as it is not fun driving around with an 80M antenna late on a Saturday night on back roads avoiding drunks in the rain. This contest should align with the other contests, such as the FQP and end at a reasonable hour on Saturday night. Ending at 1AM local is not reasonable for a mobile. Sunday I headed to Maine and hit a few counties with overcast skies and occasional downpours. The station worked well, hardly any issues, and any issues were minor, solvable, and usually self-inflicted. Running off of a large Li battery makes it easier on your car. Just remember to turn off your lights when parked. Since I was single op without a driver, I could only operate half the time, but still had some great runs. Unlike the FQP, there is only one mobile category. Again,

time to get with the times. Due to the time constraints, I only hit 11 counties. I need to plan a more efficient single op route next time. Thanks to all the stations that followed me, especially the DX: DL3DXX, DL5AXX, and OM2VL. I had a few stations send me QSOB4 without copying my exchange. If you are going to participate in a QSO party with mobile ops, just work them. Stop with this useless QSOB4 nonsense. Conditions on 15M turned out to be a dud, compared to last weekend. I didn't even try 10M. I also apologize to some ops, as my computer had a small keyboard and I sometimes hit the wrong keys or two at once. It is not optimum operating from a car!! Tnx for the Qs.

N1QY mobile 533 CW QSO

I'm almost completely retrained to two finger typing and N1MM. My only gripe is the 110VAC converter for the car generates too much noise to allow it on while I'm operating. With a fair amount of driving involved, I worked around that limitation reasonably well. But a low noise pc supply is still needed. The rest of the stuff worked great. Even got across the pond on 80.

K1NZ mobile 262 CW 27 SSB QSO

First of all, thank you to everyone who put up with my lousy CW and your patience with repeats and fills. It's definitely not my forte, but I'm trying to improve. Also, thank you again to my friend Matt who agreed to be my driver.

Having done VTQP back in February, I thought I had chased the gremlins out of the mobile setup, however that wasn't the case. 20m CW still caused a couple of winkeyer freakouts, but they were much more manageable to deal with. The contest started off pretty well. I had some good success on 20 CW and SSB during most of the afternoon and early evening.

The problems started when I switched to 40m. When things worked, they worked great! Other times, it seemed as if the ATAS suddenly detuned. The SWR would jump and I couldn't figure out how to fix it. Sometimes, manually tuning it up/down a little would help. Other times, reaching back and wiggling the coax/tapping the radio would help. Often, it was just hosed. I pushed through until we stopped for dinner around 8PM in Stowe.

After dinner I tried to do some quick troubleshooting, but apparently made it

worse. I made a couple more Qs, but had a real bear of a time getting the rig/antenna to be happy. I had Matt pull over and tried some more troubleshooting. No luck. That being said, I thought I'd try 80 and hopefully limp along the rest of the night. I got the 80m antenna on the car but when I tried to send a test carrier, the radio shut off. Tried it again, same outcome. At this point, I decided that it wasn't practical to rip the car apart at 9:45 PM on the side of route 100 in northern Vermont, so I decided to cut the night short, skip VTWAS and VTORA and head back to the airbnb.

On Sunday morning, I ripped the car apart and replaced the FT-100D with the FT-857D I had purchased about a month ago. Besides a little bit of a learning curve on how to operate the radio (this m0r0n didn't read the manual), things went much more smoothly. The winkeyer stopped blowing up. The ATAS operated as expected. Unfortunately, 20 didn't seem as open as it was on Saturday, but 15 produced some good runs. After a great dinner at Shain's of Maine, I hopped on 40m for the rest of the trip home.

It was a fun time and hopefully next year we can keep Murphy at bay.

Miles driven: 845
Counties activated: 17
Breweries visited: 6
Rig: FT-100D & FT-857D, ATAS-120, and 2018 Camry

K1JB mobile 390 CW QSO

no comments

WN4AFP fixed SC 190 cw 78 SSB Mults62

At 2000z, it was time to move my attention to the NewEngQP because the prop between New Eng and SC is very good on 20m with the hopes of 40m joining in later in the contest. 20m remained good on Saturday and finally I could hear and work NE stations on 40m around 2330z. There were several mobile ops that really helped my score, these included NZ1U, K1JB, K1NZ, N1QY and K1IB. I worked 62 of the of the 68 counties. I missed MADUK, MAHMP, MEPIS, MESAG, VTORA and VTRUT. How could I have missed the populated county of VTRUT?

My contest goal was to equal or exceed my 2024 score of 38,676 with 66 mults and

hopefully a repeat win. Things were looking good until a massive thunderstorm forced me to QRT around 0130z for the rest of the contest. I was only able to operate from 1630z until 2330z on Sunday. I did my best with limited time and poor 40/80m propagation. It was nice to work many of my NE friends during the contest including W1WBB.

Dave WN4AFP

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Note de N4CD – thanks Dave for mentioning the mobiles. They're what make or break the QSO Parties – beside county expeditions as well.

K1RO Fixed NH 923 cw 220 SSB

Back to Low Power this year after a couple of years of QRP. I was hoping for good conditions to try to improve on my QRP score from last year, but decided on Low Power since the K index was high and the bands seemed disturbed.

I wouldn't say conditions were all that band, but I sure was hoping for more from 10 and 15 meters at this point in the sunspot cycle. Still, I worked OM2VL on all the bands/modes I was on (9 QSOs). NX6T was extremely loud on 10 meters on Sunday afternoon, but hardly anyone was on the band.

Had a lot of fun Saturday, but Sunday was a long day - again. I would prefer Saturday hours that coincide with 7QP and INQP, and this could be a 1-day event.

Thanks to the sponsors and especially Tom, K1KI, for all the work that goes on behind the scenes to pull this off.

On the Road with N4CD - I

This time I made sure I had the dates correct. The route would be fairly short – as there were few new parks to visit along any possible route from Texas to Dayton, OH. I'd

either have to make big loops in OH or other states to get to new ones. Only 3 new ones had been added to the system. 992 miles without detours.

So the route was direct with a few places where I could find a newly added to the system park – one I hadn't visited yet.

Tuesday – May 13, 6:30 AM. Backed the 2025 Malibu out of the garage. Closed the door and entered "DD" in the log. Door down. More than once I've wondered if I had closed the door after a 100 miles, so I write it in log, write current mileage (3516) and time, and head out. No problem getting to the big highway in 5 miles – where the next traffic light would be essentially in Dayton – unless I got off the Interstates. First traffic jam hit was on I-30 a hour from home. Sat for 30 minutes creeping at 5 mph – grrrrr! Fortunately, after that – no problems the rest of the way. Zipped up I-30 to Little Rock. Stopped and got gas after 343 miles. Car getting 39.4 mpg! Amazing. It's not a hybrid, but 4 cylinder (turbo) engine with CVT transmission. Had the 20m Hamstick on the roof, working a few parks when I could hear them and putting out oa few counties as I drove along when safe.

I still have the mast assembly I used that has 40/30/20, 17 but I'm not sure it would fit the back trunk deck – it's small and not 'flat'. . Maybe will try it next trip. Don't know where new county hunters will get antenna supplies. Hustler was a division of MFJ. MFJ not willing to spin off Hustler and other product lines, and MFJ not defunct. So no one makes masts or resonators any longer. OF course, many now use screwdriver type antennas – but they come with reliability issues.

Looked for 20m Hustler resonator at Dayton, didn't see any but they are around. Probably missed seeing them – didn't speed too much time in flea market – just 3-4 hours and it's huge....but back to the story – got to get there first!

First park up was near Brinkley AR – **Greenlee Lake State Recreation Area, UN-11070 in Monroe County, AR.**

From the web: "Marion McCollum Greenlee Lake is located in Brinkley and offers good fishing for bream and catfish. Combined with its easy access and multiple fishing piers, this makes it a great lake for anglers of any kind. In the early 2000s water from the nearby Piney Ditch backed up into the lake, introducing a variety of other species including green sunfish and crappie. Largemouth bass have been stocked in the lake annually since 2001 in hopes of producing a naturally reproducing population. There is no limit on channel catfish, so this is a good opportunity for anglers looking to fill their freezers."

There are many places to run this park. Nice.

Hopped on 14.0565 and logged a bunch, then put it out for the park chasers off net frequency. Put 30 in log and moved on.

First night spent in West Memphis, AR at the Days Inn. Been here before. Mexican restaurant next to it. Filled up gas tank with a few more gallons. 38.2 mpg indicated. Truly amazing. The last Malibu got 31 mpg on the highway.

Wednesday May 14

Up early after a bowl of Raisin Bran and small apple, coffee. On the road before 7am. Weather good. First park in TN

Middle Fork Bottoms State Park – US-11858 – Gibson County TN

from the state web: "Nestled in the heart of West Tennessee, Middle Fork Bottoms State Park offers a unique blend of rich history and natural beauty. Spanning approximately 860 acres, this park transformed from a floodplain restoration project in 2018 into a thriving habitat. Originally managed by the West Tennessee River Basin Authority, the park boasts 250,000 newly planted hardwood trees, over 200 acres of restored wetlands, and two miles of revitalized streams.

Visitors can immerse themselves in the park's diverse landscapes, which include fishing areas, paddle craft access on Middle Fork Lake, and four miles of scenic walking trails. The park features multiple wetland areas, five lakes (four of which are fishable), and native grassland habitat. Visitors will also find a newly planted bald cypress grove covering five acres, various waterfowl habitats, and vast areas of sycamore and cottonwood trees.

The park is a hotspot for wildlife, including waterfowl during winter months, Wild Turkey, white-tailed deer, small mammals, and predators like coyotes and bobcats. Birdwatchers can spot shorebirds like Killdeer and wading birds such as Great Egret and Great Blue Heron. Anglers will enjoy fishable lakes stocked with bluegill, catfish, and bass. Reptiles, amphibians, and six species of naturally occurring mussels help improve water quality and add to the park's ecological diversity."

Started on 14.0565, then moved off freq for the park chasers. County Hunters typically

run 22-24 wpm. Park chasers are a bit slower at 20wpm. There are many new CW ops there – just getting their feet wet on CW – and many still using code readers on their computers to make the contact. Maybe half are experienced CW ops. Put 30 or so in log.

Next park not too far away. 30 minute drive. Make sure you write down the directions for your trip. These smaller areas sometimes challenging to find but this one OK. This one said head west from town of Spring Creek on highway 152 for 1.5 miles. Look for WMA signs.

Spring Creek Wildlife Management Area – US-7621. Madison County TN

from the state site:"The WMA consists of 439 acres of mostly wetlands and bottomland forests. These areas provide excellent habitats for wetland animal species such as Wood Ducks and other migratory birds."

No problem finding it. Sign not there but pole for it was. Had quick run of 20 – half county hunters, half park chasers. Went quarter mile each way to be sure this was it. It was despite no sign. Pull off before bridge on dirt/gravel road for 100 feet. . Small lot.

Now it was a LONG way to the next park – hours and hours along I-40 to Nashville, then north on I-65 toward Louisville KY.

Stopped for night in Elizabethtown KY. Filled up gas tank. 274 miles. 39 mpg. Love this 'gas sipper'. Nice highway car, too. Easy to drive. Fairly decent ride quality. Super 8 Motel. Cracker Barrel nearby – delicious broccoli chicken dinner.

I had run all the parks along the route before – including some hour detours to get to them previously. Now – just a few stragglers and newly added parks along the entire route. Same for the alternate routes, too – up through OK, MO across IL, IN. Been there – done that.

Thursday May 16 – on to Dayton

Just north of Elizabethtown lies **Knob State Forest – US-4690 in Bullitt County KY**.

From the state site:

“ Knobs State Forest and Wildlife Management Area was added to the state forest system in 2006. The division purchased a 1,110-acre tract in July, 429 acres in November 2006 and 496 acres in October 2018 making the total acreage 2,035. It is the first Forest Legacy project in Kentucky.

Knobs State Forest and Wildlife Management Area is located 28 miles south of Louisville near Bernheim Arboretum and Research Forest and the Camp Crooked Creek Boy Scout Camp.

Knobs State Forest and Wildlife Management Area is managed using the principles of ecosystem management. These principles allow the forest to be managed for sustainable timber production while ensuring the protection of water quality and the enhancement and/or protection of biological diversity.

The forest is open for day use only unless hunting regulations specify extended hours. Hiking, wildlife viewing and regulated hunting are permitted”

Easy to find and nice lot to run mobile. Put 20+ in log.

Up near Louisville not far away is the next park

Blackacre State Nature Preserve US-7954 in Jefferson County KY

Dedicated on March 19, 1979, Blackacre State Nature Preserve is the oldest state nature preserve in the KNP system. It is approximately 175 acres and located in Jefferson County near Jeffersontown. The preserve is used as an environmental education center by the Jefferson County Public School System and the Blackacre Conservancy. Indiana University Southeast operates their Urban Ecology Field Station at the preserve. Since it is located adjacent to a large metropolitan area, it offers a unique outdoor laboratory for environmental education and historic agricultural experiences to a large number of urban children who otherwise might not have the opportunity.

Bands sound 'dead'. Early in morning – on 40M - managed to put dozen in log. Radio conditions have not been great on this trip – all over the map. Then again it was early in the morn. One more to go.

Stephens Creek Wildlife Management Area – US-10166 in Gallatin County KY

Bands horrible! Managed to work 11 folks on 20m CW – not easy. On to Dayton!

Arrived Dayton well after lunch – Microtel Motel in Dayton/Riverside just off Route 35.

Checked in – not many there yet. Hauled stuff to room, then went looking for Beaver Creek Wildlife Area U-9446. Hmmm...Google Maps took me to middle of subdivision. Not right! Tired out. Headed back to motel. Have to nav this one by GPS, I guess.

Thursday night had dinner invitation for ARRL Donor Dinner. I send them a few bucks a year and they invite me to the Annual Donor Dinner. It was held at the Dayton Aviation Museum. Giant place – you can walk for miles. Well, they had some handicap scooters and I took advantage of it. Turns out the dinner location was in the far back – a quarter mile – so that worked out OK. Had dinner at the foot of Air Force One – well, the older ones. Prop jobs – hi hi. Would you believe the current Air Force One planes are from the 1960s and still in service? Boeing is working on new ones under contract – but behind schedule and likely to arrive in 2027. (Meanwhile Trump is accepting newer jet from Oman – which will take 6 months to add communications and security devices like anti-missile systems) before being used. Interesting. Didn't wander too far. Museum 'closed' at this point.

Home after dark. Tomorrow the hamfest would start. Tens of thousands would descent. I had a few bucks saved for goodies but wasn't eager to buy anything really. No urgent needs – other than looking for a Hustler 20m resonator.

Friday – Hamvention Day

Up early – had breakfast at motel – bowl raisin bran with cut up apple, two cups decaf.

From the motel to the Greene County Expo Grounds is about a 15 mile drive and 20-25 minutes depending upon traffic. Left at 7:45 and got there just after 8am. In the past, I've parked in the flea market with flea market pass, parking pass, etc, not far from the main area. This year was different. I had rented a scooter for two days. Legs just can't handle walking, and for sure, not walking miles in flea market. If you are hunting this, you need to continually walk the large market – things change – new cars arrive with more goodies. Things are swapped early – as soon as cars arrive. Been there – done that – and not looking for much to buy. So....the easy way this year.

I've had a handicap permit for 2 years. Seldom use it most of the time.

This was new to me. Found the handicap parking area inside Gate 4 (general parking) – where the scooter rental place was supposed to be. Stood in long, long, long, line for 30 min – until someone noted the line for the scooter rental was different. The regular line was over 1000 feet long – bending around. At 8am, must be well over 1000 people in line a the main gate. The scooter rental place is 100 feet from the main gate and had a short line but didn't know that. Found out later. Still had to stand in line – but found place to sit for while. This was new to me The scooter rental place had maybe 100 scooters for rent – you reserve ahead of time. You can bring your own as some did.

By the time I got squared away with the rental (you leave your driver license as security), the line was pretty well down to nothing – so 'scooted in' the main gate at 9:15am.

By now I was getting hungry and thirsty. One place was selling egg/sausage biscuit sandwiches. Bought one ($7). Coffee too ($2). Didn't see any forums of interest yet – there was a full schedule for five or six rooms going simultaneously.

Stopped by the MARAC booth for a bit. At the booth, KJ8F and W8OP was there along with others - K8II, N9OYY, KA9JAC and KB9YVT, who spent time there explaining county hunting and MARAC to the passer by folks as they streamed on down the isles. MARAC had the large map where you could put a pin in your county. Over two days, there must have been over 200 pins in it. 90% were from within 300 miles of Dayton! The map was a good way to talk to folks – first asking them to put a pin in their county.....then having the county hunting info right there to pick up. There was a sign up sheet for regular county hunters so sign. Probably spent 6 or 7 hours there over the next two days.

In between, visited the main buildings – where the hundred plus vendors were – ICOM, YAESU, Kenwood, Elecraft, antenna folks, logging program folks, Amplifier folks.....everyone shows up. Three main buildings that will take you hours to examine.

Saw the Elecraft KH-1 handheld CW transceiver – very nice. However, the basic model is $599 but by the time you add antenna, antenna tuner, battery, and other options you are hitting $1000. Ouch. Great for mountain topping – and those parks you have to walk into. Some WMAs in the system need a mile or 3 or 5 hike to get to – the middle of nowhere, literally. Have a KX-2 so that will do for me. Seldom use it but great for those parks you can't run mobile.

Handheld Elecraft KH-1

You can litterally hold this in your hand. Top folds out for a logging sheet. Paddles at bottom (Option). Long antenna – which will cover 5 bands.

40-15 m ham bands; 6-22 MHz SWL
CW mode; 5 watts, all bands
ATU includes whip & high-Q inductor for 20/17/15 m
2.5 AH Li-Ion battery & internal charger
CW decode & 32K TX log
Scan/mini-pan feature
Real-Time Clock
Full remote control

Speaker
RIT, XIT, & VFO lock
Light gray case stays cool even in bright sunlight
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Maybe someday Elecraft will make a mobile radio - that would be nice.

Yaesu has new radios. One is a unit designed for portable low power – The FTX-1 Field Radio. Full coverage including VHF/UHF. Battery operated.

The other is the FTX-1 Optima – base station and portable – high power.

Yaesu FTX-1 Optima: 100W Base & Portable Multi-Mode Transceiver

Operate HF/6m/2m/70cm from the comfort of your own home, or anywhere in the world

The Yaesu FTX-1 Optima is a versatile and powerful transceiver designed for both 100W base station operation (with an external DC power supply) and portable field use (with the included Li-ion battery). Its innovative "Field Head" design forms the core of both configurations.

For base station operation, the FTX-1 Optima comes supplied with the detachable 100W RF power amplifier - SPA-1. In the field, simply attach the included SBR-52LI Li-ion battery to the rear of the Field Head for 6W (5W QRP) stand-alone operation across HF through V/UHF bands in all modes: SSB, CW, AM, FM, and C4FM digital. Enjoy approximately 9 hours of operation on HF (SSB) and 8 hours on V/UHF (FM) with a 6-6-48 duty cycle on battery power. The SBR-52LI battery can be conveniently recharged using a third-party USB Type-C PD cable (45W or greater/ 15V 2A). When connected to an external 13.8V DC power supply, the FTX-1 Optima offers up to 10W output and automatically charges the SBR-52LI.

The FTX-1 Optima boasts continuous wide-range receiver coverage from 30kHz to 174MHz and 400MHz to 470MHz, ideal for SWL, FM broadcast, and Air-band listening.

Useful Features for HF through UHF:

Excellent Proximity Two-Signal Characteristics: Achieved through a powerful RF Front-End design with a 10-divided BPF in amateur bands and a low NF RF amplifier

with excellent intermodulation characteristics. A high-purity 110.592MHz oscillator ensures a high-quality sampling clock signal for the A/D converter.

SDR Circuit Configuration: Adopts the same high-resolution A/D converter and FPGA used in the FTDX10 for excellent fundamental receiving performance.

Effective QRM Rejection: Features a 32-bit High-Speed DSP with SHIFT/ WIDTH/ NOTCH/ CONTOUR/ APF/ DNR/ NB.

True Dual-Band Operation: Includes C4FM/C4FM Simultaneous Receive (HF/V, HF/U, V/U, U/V, V/V, U/U)*. (*HF/HF not available)

3DSS (3-Dimensional Spectrum Scope): High-Resolution 4.3-inch TFT Color Touch Panel Display.

Intuitive Front Panel Design: Features Dual LED indicators for MAIN/SUB band status, a VMI LED for operation mode, and a FUNC dial for quick menu selection and setting changes.

Super-DX: Expands communication range (available in all bands and modes except C4FM).

“PRESET” Mode: Optimized for FT8 operation.

2 Large Front Speakers: Ensures high-quality and powerful audio.

Aluminum Die-Cast Chassis: Equipped with multiple slits for high heat dissipation, ensuring stable high-power output.

Other Practical Features:

1200/9600bps APRS® Data Communication
Compatible with WiRES-X (available in August 2025)
Micro SD card slot
Comprehensive CW operation features
USB ports for CAT operation, audio input/output, and TX control
Versatile FM mode functions (DCS, CTCSS encoder/decoder, ARS, DTMF)
AGC (Automatic Gain Control)
Connectable with YAESU Automatic Active Tuning Antennas (ATAS-120A, ATAS-25) and the FC-40 External Auto Antenna Tuner for 100W HF/50MHz and 50W V/UHF operation.

New Optional Accessories for Field Head:

SCF-1 Cooling Fan
FC-80 Automatic Antenna Tuner (10W HF/50MHz)
FC-90 Automatic Antenna Tuner (10W HF/50MHz, Long Wire/50Ω)
SPG-1 Protection Guard

FGPS-5 GPS Antenna Unit
BU-6 Bluetooth Unit

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It seems optimized for both portable and base unit operation – but I guess could be used mobile. Yaesu also makes mobile units – the FT-891 HF/50MHz 100w transceiver. It interfaces nicely with the ATAS screwdriver antennas. .

It's selling for around $629. The ICOM 7100 is now on sale for $995. Both good radios. Yaesu seems to be concentrating on high end HF transceivers and VHF/UHF units.

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You could spend hours and hours at the exhibits. Keys, paddles, coax, parts, more parts, every vendor there – and of course, big crowds.

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Grabbed a sub sandwich for lunch. Learned where you could refill your water bottles rather than buying new ones a $2 or $3 a pop. Busy day between the MARAC booth, dropping by the POTA tent, and doing the nearby flea market. Probably a half mile or more of stuff in the flea market by the buildings. Scooter went OK on the grass – a bit rocky but quickly learned to adapt.

After about 3:30, I had enough for the day. Returned the scooter and headed out. Headed back to motel. A bit later, wandered to the nearby Bob Evans restaurant for a nice turkey dinner. Nothing going on Saturday night, but lots of activities if you're a DX'er with hospitality suites, QRP get togethers, Contesters, etc.

Saturday – up early – had usual breakfast there – Raisin Brain with sliced apple. Coffee. Skipped the waffle, sugar buns, etc. Knew the routine for the scooter rental so just headed over to the line for it (short). Still had to wait to 9am until they opened to get a scooter. Headed in about 9:15. Wandered into another building – all sorts of goodies. Checked the schedule for forums. Two POTA ones, ARRL updates, etc. Well, POTA was the basic stuff so skipped it but stuck my head in – wow – must have been 300 there. Stopped by the POTA booth but not much going on – a few POTA folks there including legendary Kerry, KB3WAV with 1500 different parks put out – top of the leader board.

A bit later, spent 2 hours wandering in the main flea market – up and down the aisles. Wow – there were hundreds of tube radio classics for sale. Hammurlunds, Halliicrafters, National, RME, Johnson, you name it – other than recent Collins gear. Older Collins receivers. Every 3rd or 4th table had a dozen classic radios. I guess everyone was trying to sell, not many buying.

There's something known as the “collector curve”. It applies to many things. Folks who grew up in the 1950s and 60s, later in life after getting started on a career, and maybe after the kids are gown, have nostalgia for the classics of the times. 57 Chevy, V8 Fords. GTOs, Mustangs – Firebird. OH, thos 400 cubic inch engines roaring. Well, folks collect for a while....then it hits a peak. Folks retire – decide to downsize. Suddenly there's a lot less interest. It has peaked. Now your on the downside of the 50s and 60s collectors. The values decline. Only the pristine, restored ones have any interest.

The same goes for radios. Those that grew up in the 50s, 60. 70s....loved those tube radios – glowing in the dark. Perhaps along the way collected ones they wish they had 'way back when. Heathkits, Hammarulund, Hallicrafters, Collins, Eldico, etc. Those folks are now in their late 60s and 70s and 80s. Some don't want to leave 100 radios to their next of kin – so they downsize and sell off collections. Few new folks want to bother with 'tube equipment". Most of it won't transceiver and just about all of it is useless for FT-8. No digital displays, No waterfalls. Poor noise blankers and no DSP. Basic solid heavy radio. Almost no one is going to run a tube radio mobile, either, these days. So maybe that's why there must have been 1,000 classics for sale at Dayton.

The Collins radios other than a few old 75A2, A3, etc, were not there. Either sold already (likely) or sold privately. Collins is about the only thing that commands decent money. There are serious US and Japanese collectors willing to pay big bucks for recent Collins gear. There must have been 2 dozen SB series amps for sale, too. A bit surprising as they are still decent, but tubes for them are getting up there in price. A single 3-500 tube sells for $349 on DX Engineering. $250 supposedly New Old Stock on Ebay. Ouch. You want to see the amp working before you buy it - not at a hamfest!

I'd bet by Saturday afternoon, you could pick up many classic radios for 20 or 30 each – ones that sold for $400 back in the 50s and 60s – (about $4000 each today's money). But why? You could spend 20-30 hours fixing them up, replacing parts, tubes, degunking controls, switches, etc. Replacing dial cords. Half the problems are corrosion. On many Hallicrafter receivers, the IF cans go bad. The 'mica insulator' and holder corrodes – no more contact. Hard to fix – hope you have a donor radio to borrow a good one. Buy two, fix one up – other is a parts unit.

Saw tons of early FM gear. Not selling. Hundreds of commercial handhelds. Not many takers. Lots of misc. You could spend hours really digging through the stuff. I wandered by – on the scooter. Lots of memories of gear wished for back then – but not desired any longer. Just didn't need or want it!

Saw a bunch of Clegg Labs stuff. They were the leaders in the 1960s for AM VHF. Great 6 and 2M gear. 100W type plate modulated transmitters. Excellent receivers. Built some lower power transceivers like the 99er. Then SSB happened and they were bypassed quickly. Failed to move quickly and units like the Heathkit SB-110 and Drake TR-6 left them in the dust. Don't forget to mention the 'transverters' from Heathkit, Collins, and others, either. The amp to own was the Johnson 6 and 2 Thunderbolt.

After a bit, back to the MARAC booth. Urged folks to put a pin the map – for their county. Maybe 1 in 10 picked up a county hunting info sheet. A few were 'old time' county hunters – who had finished up once and went on to other things.

Grabbed a sub sandwich. Spent a lot of time at the MARAC booth. Had seen enough. Did buy a IC7000 power cord somewhere along the line inside of the buildings. That's about it for spending other than food.

Got tired about 3:30 to headed out. Glad I rented the scooter. Turned it in, headed back to motel. Dinner at Bob Evans restaurant. Turkey dinner. Rested up.

Sunday

992 miles to home according to Google Maps. New car has Android Auto. It synchs to my phone – you see map on big display on car. Not only that, but it warns of speed traps, routes you around detours/constructions, etc.

Headed out 6:30 am. Drove...drove....drove....all day. Caught a few parks along the way. Ran a few counties but they were the same ones on way up. No parks. Wound up in Brinkley AR at Super 8 - that I've stayed at before. 600+ miles the first day. Did gain an hour going from EDST to CDST. Dinner at Cracker Barrel.

Monday.

Up early.. Raisin Bran. Head out 7am 4 ½ hours to home. Home by noon.

Total trip – 2132 miles. Car averaged 38.4 mpg. Incredible. Good trip. Now to do logs for the parks I ran.

Thanks to county hunters who kept me busy on way up – makes the trip go faster even if mostly 'green stamp' counties (ie, interstate ones). One or two new county hunters in there most of the time. , W4QI is club call for W4YDY local club.

Mobile Activity in May

At the start of the month:

AB7RW was running counties in CO. Then into UT

N8OYY was down in TN. It was a busy weekend with 7QP, IN QP, and NE QP going on. Lots of spots

N8OYY then into KY for counties there.

It was very quiet for a few days. The KB6UF ran counties in LA for a couple days.

K8TE was in CO and NE

Mobiles headed to Dayton Hamvention - N4CD – KA9JAC/KB9YVT, N8OYY, W8OP, NA8W, K8II, KA4RRU, WA4PGM,

AB7NK/K7SEN headed to a many in AZ/NV to CA, UT. For many days.

NU0Q was in IL and IN, to IA. To MI, OH, TN, KY – trip well over 10 days. TP GA

W0FLZ popped up in park in ID

N9JF noted in park in IL

K5GE headed east from TX – LA MS, FL to run a bunch there. For days. Then GA.

After Dayton Hamventon, mobiles headed home.

KB6UF active again in MS, LA

W4SIG took trip to TN. Rented car – then discovered it was hybrid with tiny 12v. Drove 100 miles, then returned it for regular gas car with decent size battery. Had some radio problems later as well.

Note de N4CD – most of the hybrid cars have healthy DC to DC converters that provide 50+ plus of 13.4 volts – but the attachment points are not easy to access. On my 2007 Prius, it had 100 amps of 13.4v – but the only access point was in the spare tire well. It ran the lights, ac/ fans, radio, headlights, etc, when the engine was 'on'. With the engine off, you had a small 12v 4 ah gel-cell battery. It's purpose was to run the door entry system (smart key) and to provide the voltage to fire up the computers when turned on – so they could tell the main battery to start the engine. I have no idea where you could tap off on a different hybrid.

NU0Q still busy in TN.....

End date 5/25

Arkansas QSO Party

There are 75 counties in AR. Looks like top scorers worked less than half of tthem.

Held during Dayton Hamvention weekend. Many many contesters in Dayton that Saturday. A few actually made some QSOs from Dayton – on their mobile or portable stations or via remote! (you get credit for making at least 2 QSOs in the State QSO Party Challenge each year) .

From the 3830 contest reflector:

K5CM mobile - 1055 CW 277 SSB

As mentioned by others, condition, especially at the start of the party were poor. To add insult to injury we had to cut the last half hour short because of lighting, which was just to close to safely operate. Despite bad space weather and bad ground weather it was still a fun day of operating.

39 W0BH
38 N8II
30 KA6BIM
26 N0HJZ
23 W0PI
22 OM2VL
21 N4NTO W0ELT
20 AA5JF AC0W K1RO W5RZ
19 KD4S W0ZQ
17 KE0TT WA5DTK
16 K9OM N6MU WB8ASI
15 K0TC KR4AE
14 W5XG WQ6X
13 K2MN
12 K2YG W9DC WA0MHJ WC4E
11 AA0AW W1WBB
10 W8PI WA2JQK
9 AA3R K9CW N7EPD W1SSN WA3RHW WA5SOG WB9HFK

73, Connie / K5CM

N5KW (rides along with K5CM) 351 CW 86 SSB

Always a fun time operating mobile in the QP's and working the friends we've made along the way. Thanks to everyone that follows us along through the process and a HUGE thank you to K5CM for keeping my computer and log going. He teases I only have the habit (operating) and he's not to far from the truth...that and driving him to all those counties:)

My favorite part of this one was picnic lunch with K5CM!...it's only one day (the operating position gets tiring when you cant jump up and down HI HI)...and it's not too far a drive back home since we live in the eastern part of OK!

See you all soon!
Pam N5KW

24 KA6BIM
23 W0BH
22 OM2VL
20 N0HJZ
19 K1RO N8II
12 N6MU
11 W0ELT W8PI WA5DTK
9 AA5JF

See you all soon!
Pam N5KW

KI5MM rover 281 SSB QSO

Late start after 5 HR drive to get to AR. First location conditions were terrible. Hoping it was due to RR tracks and power lines. No. Second stop was worse. Set up at 4 county stop for most of the time but got beat up by the poor conditions, wasps, biting flies, fire ants, poison ivy and 100+ heat index. Checked into hotel for a break then found a parking lot for some final QSO's until RF killed the laptop program with about an hour to go.

Thanks to those who managed to fight through the noise for the Q's.
N8II, OM2VL, KA6BIM and my only AR contact (set up at the same 4 county) W5NX.
Hopefully helped a few get AR for the Sweepstakes numbers.

73
KI5MM

KA6BIM fixed OR 64 cw 73 SSB Mults37

Conditions stunk for most of the day, but improved towards the end.
The rovers contributed a lot to the activity level, and many stations came out of the woodwork to answer my CQ's. I found 1 of the 5 counties I still need for Arkansas. Still looking for Clay, Fulton, Searcy & Woodruff. Thanks for the QSO's

Dave Ka6bim

K1RO fixed NH 57 cw 50 ssb Mults35

Got a late start and operated here and there as time permitted. Wow, conditions were rough except the last few hours. Started with low power like I have most QPs this year but quickly switched to high power and that was barely good enough at times.

Thanks to the AR stations and especially the mobiles for hanging in there.

OM2VL - fixed DX 58 cw 26 ssb Mults 34

Very poor condx. 15m was dead. On 20m SSB I called several resident stations, with no luck or It tooks so many time.
Connie and Pam had excellent ears! Every QSO on CW + SSB in my first call! Amazing!

W5YO, KI5MM also FB ears, thanks for the many QSOs + multipliers.

The most called station was WR5P BONUS station. On 20m SSB I called him more than 3 hours! But it was same also on CW.

Most QSOs:

K5CM 24/12
N5KW 22/12
W5YO 17/15
KI5MM 5/5
W5DGH/M 2/2
WR5P 3

73, Laci

N8II fixed WV 73 CW 88 ssb Mults41

161 more QSO's than I made last year when I missed the ARQP attending daughter's wedding in Blackwater Falls SP, WV. Conditions were poor for several hours until about 1930Z. 15M never opened, checked often. Score includes 4 x 200 bonus points with WR5P on 40 and 20M (they tried all bands). There were more casual ops on 20M SSB than expected by far. I had two 20M SSB runs at 1430Z with 11 Q's in 15 minutes and at 1937Z with 10 Q's. I had line noise about as bad as it ever gets the whole QP, but thankfully didn't miss hearing/working that much. When things got slow, I took a break from the noise. I spent 40 minutes cleaning up branches/twigs from recent storms/winds. Mature red oaks shed a lot of dead branches and poplars are even worse.

Many thanks to mobiles Con, K5CM (37 QSO's!) with XYL Pam, N5KW for many QSO's and mults. Don, K5DB operating W5YO/M gave me 33 QSO's and many mults as well.

I thought I had missed catching K5ZZR/M but got one Q from Franklin Co. and I see he made just 23 QSO's. Jim, KN6VTC made another QP trip and was active from Cross the entire QP.

It looks like an easy cruise to high out of state score. Some ops were in Dayton, but I heard many of the QP regulars. We seem well past the peak of Cycle 25 now, solar flux below 120.

Thanks for the QSO's and 73, Jeff

Solar Forecast

From ARRL Propagation Bulletin:

Compared to previous months, there was a significant decrease in solar activity in May. For example, on May 2, there were only two groups of spots on the entire solar disk observed. After that, spot activity in the northern half of the solar disk increased slightly, but solar flux dropped significantly during the second third of the month. Additionally, a large coronal hole appeared in the southern hemisphere of the sun. Although this coronal hole was observed during previous rotations in March and April, it is much larger this time.

Consistent with this observation, after geomagnetic activity quieted down at the end of April, we experienced several days of strong geomagnetic disturbances in the first third of May. Starting in the second third of May, the solar flux dropped significantly, reaching values not seen since October 2024.

The combination of low solar activity and high geomagnetic activity resulted in a significant deterioration of ionospheric shortwave propagation conditions, manifested by a drop in the critical frequencies of the F2 layer and an increase in attenuation and scattering. This occurred especially on May 7-12 and May 14-18, and is likely to continue in the coming days.

The latest attempts to forecast further developments suggest that conditions should improve by the end of May. The summer ionosphere of the northern hemisphere of Earth is characterized by lower maximal frequencies and higher lows, not counting the sporadic layer E surprises.

Geomagnetic field activity is likely to be elevated above quiet levels for most of the next 27 days due to multiple, recurrent, coronal hole features. G2 (moderate) conditions are likely on May 29 and June 13; G1 (minor) conditions likely on May 19, May 28, and June 14; active conditions are likely on May 30 - June 01, and June 10; unsettled levels are likely on May 20-23, May 27, June 02-07, and June 11-12. Quiet conditions are expected for the few remaining days of the outlook period.

Awards Issued

Ran All State:

K8II completed West Virginia for the 2nd time. He received #8
K8MD completed Michigan. He received #42

N8OYY completed Tennessee, He received #32

Roadrunner Award:

AB7NK attained 1450 last counties. She received #4
AB7NK attained 1475 last counties and received #5

K7SEN attained 400 last counties and received #58

AB7RW attained 350 last counties. He received $69

K3IMC attained 700 last counties and received #29

USA-SSB II Award:

AJ5ZX completed SSBII and received #6

USA-PA K Award:

W9DC completed all calls beginning with a "K" and received #38

Events for County Hunters

This is the end of QSO Party time till the end of August. Just two this month but many rare counties. Let's hope for lots of mobile and portable activity. QSO Party resumes late August.

June 21 is also ARRL Field Day weekend! Go mobile – join your local club – set up in a park. Have fun.

June 7
1300z to 8 0100z 1.8-28,50,144
Kentucky QSO Party CW Ph Dig
RS(T), KY county or SPC
www.kyqsoparty.org

June 21
1600z to 22 0400 3.5-28
West Virginia QSO Party CW Ph Dig
RS(T), WV county or SPC
www.qsl.net/wvqp

Some Extra Reading – Hamvention

From ARRL: Report by W2VU

Thursday

ARRL Awards Phil Karn, KA9Q, with Mary Hobart, K1MMH, Medal of Distinction
05/15/2025

ARRL The National Association for Amateur Radio® has honored Phil Karn, KA9Q,

with the Mary Hobart, K1MMH, Medal of Distinction. He was presented the honor at the ARRL donor reception on May 15, 2025, at the National Museum of the United States Air Force on Wright-Patterson Air Force Base near Dayton, Ohio. The annual event — in the museum's Presidential Gallery, surrounded by retired Air Force One aircraft — kicks off ARRL's activities around Dayton Hamvention®

Karn is a graduate of Cornell University and Carnegie Mellon University with degrees in Electrical and Computer Engineering and has retired from a technology career including Bell Labs, Bellcore, and Qualcomm. He is co-founder of AMPRnet, is founder and past-President of Amateur Radio Digital Communications (ARDC), a private foundation that exists to support amateur radio and digital communication science and technology through grants and scholarships, and the management of 44Net. Karn continues to serve on the ARDC Board of Directors. The work of ARDC has contributed approximately $30 million to amateur radio since 2020.

Karn has been licensed since he was 15. "It's been a major factor in my life, directly and indirectly," he said. Karn views amateur radio as a creative outlet. "I'm an engineer, so I need an outlet for my technical ideas. I'm retired, so amateur radio now fulfills that need. It's very gratifying to see others using your ideas and works," said Karn.

Karn's technical contributions to advance the Amateur Radio Service drive his dedication to the future of education through ham radio. He envisions education having a greater role in amateur radio in decades to come. "Ham radio has always excelled at individual self-learning, but it could do so much more. I'd really like to see the many technical tinkerers outside ham radio join us. I'd like to see much more amateur radio in formal education. HamSCI and the many university small satellite groups are good examples but there could be so much more. Hams will continue to create new technology, usually by working in academia and industry but also as individuals," he said.

Mary Hobart, K1MMH, was ARRL's first Chief Development Officer. She passed away in 2021. The medal named in her honor is given to those individuals or couples who have inspired our small community to reach higher with their own philanthropic support of ARRL and amateur radio. In 2023, ARRL honored Michael "Mike" D. Valentine, W8MM (Silent Key), and his wife Margaret "Peg" Valentine with the inaugural Hobart Medal.

Karn hopes others follow his lead in contributing to the future of amateur radio. He says there's no real secret to being a leader – just participate. "The world is easier to change than you might think, but it takes time and persistence. When I was young, I often got

frustrated by what seemed like sluggish change, but it will happen. Even if you don't have much time for ham radio when you are busy with your career, try to stay connected with other hams. Encourage your friends and family to become hams. Attend club meetings and dinners. It will pay dividends."

Attendees at the reception also heard a keynote address from Dr. Ed Snyder, W1YSM, about his ARDC-funded "Marconi" program, which promotes strengthening of amateur radio clubs by encouraging very active clubs to mentor, or "Elmer," less active clubs. Marconi, in this case, is an acronym for Motivating Amateur Radio Clubs to Open New Initiatives. More information is available at www.arrl.org/marconi.

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It was a flurry of activity around the exhibit space for ARRL The National Association for Amateur Radio® and beyond. Trucks being unloaded, tables being arranged, boxes being opened and even tablecloths being ironed were among the sights and sounds Thursday at Ohio's Greene County Fairgrounds as hundreds of ham radio manufacturers, retailers, clubs, and organizations prepared for Friday's opening of the 2025 Dayton Hamvention®. To the eye, it was organized chaos, but the word we heard most frequently among vendors and visitors was "anticipation."

VIDEO: See the exhibits being setup [YouTube]

https://www.youtube.com/watch?v=Vi0Pe11UxMQ

Inside Exhibits volunteer Rob Lindsay, W5MRL, drew a mental picture for us. "Early in the day," he said, "there's a flurry of activity from hundreds of vendors setting up their booths in anticipation of all the visitors they'll see on Friday, Saturday, and Sunday. We're already seeing visitors from around the world, including Japan, the UK, Germany and Italy. As a volunteer, it's interesting and great to give back to the hobby, but the most important part is interacting with the visitors and vendors, and making their visit enjoyable."

ARRL Great Lakes Division Director Scott Yonally, N8SY, said some of the chaos is internal. "You know in your mind how you want it to set up but then you get here and say 'I can do this' or 'I can do that.' You have to be flexible to make changes while staying true to your basic plan. It's utter chaos."

But for major exhibitors, it's all part of a well-oiled process. Ham Radio Outlet President Robert Ferrero, W6RJ, said that setup day is "the culmination or a 2-to-3-month process

of planning and hard work. This is just 5-to-6 hours of finalizing all that hard work. We're fortunate that we have a great team to make it all happen."

Lori Hicks of FlexRadio noted that "We come in as early as Tuesday. We look forward to setup time, which leads up to the excitement of the opening of the show. It's more than just setting up our booth, it's thinking of how our customers will interact with us. There are always weeks of preparation before the event." She added, "Dayton, for us, is THE venue to do new product announcements. We hope to come out with a successful new product launch. Also, the opportunity to meet with customers. It's all about relationships."

New products were also on the mind of Icom America National Sales Manager Ray Novak, N9JA. "The biggest thing at the show for us is having the IC-7760 functional for the first time," he said. "We're demonstrating it with the PW-2 amplifier with remote software so you can run a kilowatt from anywhere in the world where you have an internet connection."

Finally, DX Engineering Sales Manager Scott Jones, N3RA, was also focused on new additions to their lineup, along with something much bigger. "Setup has gone really well," he said, "with lots of new products ... We're also pleased to have the 'Roamin' Gladiator' with us, fully equipped and on display." He's referring to a customized Jeep with radios for various services but focusing on amateur gear.

Doors open at 9 o'clock Friday morning.

Friday

Friday was opening day at 2025 Dayton Hamvention® and it was a day of superlatives — huge crowds coming through the gates, standing room only at "Salty Walt" Hudson's portable antenna forum, and more as hams from across the country and around the world descended on the Greene County Fairgrounds in Xenia, Ohio for the first of three days of total immersion in all things ham radio.

At the many booths that make up the ARRL Expo area, crowds were constant, and sentiments were similar among the employees, board members, and volunteers who staffed them. ARRL CEO David Minster, NA2AA, was in the meet and greet area and talked with ARRL members nearly non-stop the whole day.

At the Amateur Radio Emergency Service (ARES®) booth, ARRL Director of Emergency Management Josh Johnston, KE5MHV, said "It's busy. I love it!

Hamvention is an awesome opportunity to talk to hams, find out what's going on in the field, and share ideas," adding, "It's a unique opportunity to hear about problems and successes and try to help get issues resolved." He also noted that informal conversations with influential visitors can often have far-reaching benefits.

Across the aisle at the ARRL Foundation booth, Development Operations Manager Christine Lessard, KC1TDM, said she "enjoyed connecting with clubs that have received club grants and answering questions about scholarship programs." Lessard added that "It's exciting to talk about all the good that the Foundation does for the amateur radio community."

Development Director Kevin Beal, K8EAL, noted that the Diamond Club has been especially exciting this year because of the ARRL Sweepstakes for an Icom dream station and that a Diamond Club donation results in an automatic sweepstakes entry. He also pointed out that donors to the ARRL Spectrum Defense Fund receive a special mug and pin, adding that "It's never been more important to protect our spectrum."

The ARRL Lab booth had a steady stream of visitors who wanted to see if their handheld radios were up to FCC specs on spurious signal suppression. Engineers Rick Ciervo, W1CIE; John McAuliffe, W1DRF, and Matthias Zapatka, AJ4BB, had tested nearly four dozen radios by midday. Their favorite test radio today was an Icom ID-50 that had been accidentally dropped 14,000 feet and not only survived the fall in working condition but still passed the spectral purity test. Overall, noted McAuliffe, "It was nice to have one-to-one with members who don't normally have direct contact with the lab."

The ARRL Youth Lounge was busy all day, and "the kids were loving it," according to Education and Learning Manager Steve Goodgame, K5ATA, who pointed out that the young visitors were building code keys from 3D-printed kits and testing them out by sending messages. Saturday will feature a Youth Rally with multiple activities. There is also a raffle for young hams, sponsored by DX Engineering, Gigaparts, Chatt Radio, Zumspot, and Begali Keys.

There were also meet-ups with book authors, including Repeater Book's Garrett Dew, KD6KPC, whose data now "powers" the ARRL Repeater Directory, and Salty Walt's Portable Antenna Sketchbook author "Salty Walt" Hudson, K4OGO, whose book-based forum earlier in the day had drawn a standing-room-only crowd.

"What you saw in that forum," said Hudson, "is where hams are today. What I try to do is simplify things. Go out, try, do, make mistakes. That's what my YouTube channel is all about."

https://www.youtube.com/watch?v=eAhra9pb8kA

Saturday

What do the Dayton Hamvention® flea market and Xenia, Ohio, weather have in common? They each offer a little bit of everything! Friday's hot and humid afternoon was followed by thunderstorms at night and cool, windy, weather on Saturday. The Hamvention itself, though, provided consistently positive experiences for just about everyone. ARRL activities were highlighted by the member forum in the morning and the Youth Rally in the afternoon.

WATCH: Video from Saturday at Hamvention [YouTube]

At the member forum, ARRL leadership was represented by Great Lakes Division Director Scott Yonally, N8SY; First Vice President Kristen McIntyre, K6WX, and CEO David Minster, NA2AA, as well as Director of Marketing and Innovation Bob Inderbitzen, NQ1R.

Minster's topics included the very successful ARRL Ham Radio Open House program, the growing interest among many amateurs in remote operating, and the current threat to our HF bands from stock trading businesses that are experimenting with using HF for high-speed data transmissions. He said ARRL might need to call on members down the road to contact their Congressional representatives to help protect amateur frequencies. On a more positive note, Minster also discussed the DXCC Trident, which he described as an extension of the DXCC program to offer a new award for working at least 100 DX entities on voice, CW and digital modes.

Inderbitzen's comments focused on young hams, pointing out the free youth membership approved by the ARRL Board of Directors in 2024, and the need to increase the visibility of young people in amateur radio. "The next generation of amateur radio is already here and active," he said, but is often unseen by the broader ham radio community.

A highlight of the ARRL member forum was the presentation by Director Yonally of the Great Lakes Division's George S. Wilson, III, W4OYI, Lifetime Achievement Award to former Division Director Dale Williams, WA8EFK. According to Yonally, Williams worked his way up the ranks of the ARRL Field Organization from Assistant Emergency Coordinator in his hometown of Dundee, Michigan, to Section Manager before being elected Division Vice Director and then Director in 2014. As Director, he was one of the

guiding lights behind the establishment of the Board's third standing committee, the Emergency Communications and Field Services Committee. Yonally says Williams continues to be very active on the air, in local ham radio organizations and in his community. The award is named for former
ARRL President George Wilson, W4OYI (Silent Key), who came from the Great Lakes Division.

Back at the ARRL Expo area, ARRL VEC Manager Maria Somma, AB1FM, reported a steady flow of ARRL Volunteer Examiners and prospective VEs wanting to learn more about the transition to an all-digital exam system; members renewing their licenses, and getting information on the ARRL Youth Licensing Program, which covers the $35 FCC licensing fee for new licenses and license upgrades for young people under age 18.

ARRL Field Services Manager Mike Walters, W8ZY, and "Marconi" program founder Ed Snyder, W1YSM, said the Hamvention was providing a "soft launch" of the Marconi program, which encourages very active clubs to mentor less-active clubs on ways to build up both activities and membership. In addition, said Walters, "there was considerable interest in club activity programs and in helping members become more radio-active."

There was quite a bit of radio activity at the ARRL Youth Rally, with some two dozen young people learning about parachuting with a ham radio handheld, going on a foxhunt to find a hidden transmitter and trying to make contacts via amateur satellites.

ARRL author Glen Popiel, KW5GP, had a full house for his forum on the basics of using microcontrollers in amateur radio projects, and a steady line of readers later on, looking for his autograph on one of his two recent books, Best of Arduino Projects for Ham Radio and More Arduino for Ham Radio.

There was similar interest in different activities outside the ARRL Expo area. Amateur Radio Digital Communications (ARDC) President Bdale Garbee, KBØG, said "It's been at least 15 years since I've been to Hamvention and I'm really pleased to see how much enthusiasm is still here." He continued, "There are so many people wanting to talk to me about what they've done and what we're doing and where they might intersect. I'm really enthusiastic."

ARDC Executive Director Rosy Schechter, KJ7RYV, said she was pleased that more people seem to recognize ARDC and know what it is than at past Hamventions, and that she was "getting the community vibe" from attendees.

HamSCI Coordinator Nathaniel Frissell, W2NAF, said this year's show was great and that people are quite interested in the group's projects, such as the Personal Space Weather Station and HamSCI's new Meteor Scatter QSO Party coming up later this year. "It's very lively," he said. "I've gotten to talk with people from all over... I want visitors to know they can use amateur radio to explore the world around us, and I want them to know that what we're doing as scientists can enhance the amateur radio hobby."

Two University of Scranton students who were part of the HamSCI team reflected on their impressions as first-time visitors to Hamvention. "I am fairly new to amateur radio," said senior and physics major Rebecca Potter, KE2EBI, "and this is a good opportunity to walk around and see everything," noting that she was looking for her first handheld." The people, she added, "are all very nice. They're all interested in talking about their hobby and passing it along to younger people."

Computer science sophomore Owen Ruzanski, KD3ALD, agreed. "Everybody is super nice," he said, "always willing to share their knowledge and help you get into the journey of ham radio."

The final day of Hamvention is Sunday, from 9 AM to 1 PM.

Sunday

Closing day at 2025 Dayton Hamvention® is a half-day on the clock, but for the team from ARRL The National Association for Amateur Radio®, it was a full day of activities packed into a shorter period of time. There were four forums to lead — the "ARRL FCC Update" with Monitoring Program Director and former FCC Special Counsel Riley Hollingsworth, K4ZDH; "ARRL Youth Outreach Through STEM," anchored by Education and Learning Manager Steve Goodgame, K5ATA; the "ARRL Radiosport Forum — Level Up!", led by Radiosport and Field Services Manager Bart Jahnke, W9JJ; and Director of Emergency Management Josh Johnston, KF5MHV, moderated "ARES – Building Relationships in Public Service."

Johnston noted as examples of these relationships the fact that the heads of both Army and Air Force MARS were in the audience, while Hollingsworth urged amateurs to operate with courtesy and respect, and to "stay off the radar screen" of those who don't understand amateur radio but may have influence over frequency allocations. He also reminded his audience that "there is no one representing amateur radio before the FCC except ARRL."

Outside the forum rooms, about half of the two dozen young hams who had participated

in Saturday's Youth Rally returned to make brief 2-meter contacts with skydiver Carlos Ortiz, K9OL, as he parachuted to the ground from an altitude of 14,000 feet; and then to launch an APRS-equipped micro-balloon — transmitting as W1AW-11 — on a hopefully long-distance flight. (At the time of this writing on Sunday afternoon, it was making its way eastward across Virginia.)

Finally, when all the forums, jumps, and launches were over, it was time for the entire ARRL team to pack up the dozen or so booths in the ARRL Expo and say goodbye to Hamvention until next year.

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Crowds were expected at the 35,000 level – same as last year. Figures not in yet.

Some videos

Dayton Hamvention 2025 Day 1 is Done! Let's take a look!

Lots more videos on YouTube – search Dayton Hamvention 2025 for more videos – tons of them there.

That's all folks

73 de N4CD