

# TENNESSEE CONTEST GROUP

Where Radio is a Contact Sport



## News and Events — April 2024

### TCG BRUNCH @ K4RO APRIL 20

Mark your calendars for a TCG brunch gathering at K4RO on Saturday April 20. Please RSVP directly to K4RO so that we may determine an accurate head count. A request for food items will go out this weekend. Similar to last year, we will keep track to avoid dupes. Stay tuned to the TCG reflector for details. Come enjoy some unique contest camaraderie with your fellow TCG members. *NOTE: there will NOT be a TCG Zoom session in April.*

### CQ WPX SSB CONTEST

The CQ WPX SSB Contest was the big event of the month, and once again, TCG put up some strong scores. Ron WV4P was at the top of the TCG heap, with Jim AD4EB also putting in the full 36 hours for a big score. WF7T's 10m LP score was #2 in the USA – not bad for a small city lot! AC6ZM and crew have the top position for M/2 LP, plus and a nice club score contribution. Nice to see some of the die-hard CW ops break out their microphones for some SSB contesting fun. In all, 19 TCG scores were submitted to the 3830scores.com web site, as listed below. We are grateful to WA7BNM for the 3830 resource, and for creating Club Scores view option.

#### M/2 HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">WM4Q</a>			87	84	2.5	16,128	TCG

#### M/2 LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">AC6ZM(@N4SS)</a>			2096	968	44	4,942,608	TCG

#### SOAB HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">WV4P</a>		x	2894	1212	36	9,034,248	TCG
<a href="#">AD4EB</a>			2712	1085	36	6,562,080	TCG
<a href="#">WR3O(K4RO)</a>	SO2R		1747	873	18:25	3,491,127	TCG
<a href="#">KM9P(KØEJ)</a>			1654	807	14.5	3,127,932	TCG
<a href="#">K3IE</a>			1007	582	20	1,517,856	TCG
<a href="#">NS4X</a>			618	405	11	560,520	TCG
<a href="#">W4KW</a>			555	374	12:40	548,658	TCG
<a href="#">K9QJS</a>			326	224	14	305,760	TCG
<a href="#">W4NZ</a>			300	293	08:26	225,317	TCG

<a href="#">WB5WAJ</a>	205	174	4	91,176	TCG
<a href="#">AI4DB</a>	210	179	10	87,173	TCG
<a href="#">W4SDX</a>	180	136		38,896	TCG

### SOAB Unassisted HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">KM9P(KØEJ)</a>			1654	807	14.5	3,127,932	TCG
<a href="#">K3IE</a>			1007	582	20	1,517,856	TCG
<a href="#">WB5WAJ</a>			205	174	4	91,176	TCG

### SOAB Classic HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">KM9P(KØEJ)</a>			1654	807	14.5	3,127,932	TCG
<a href="#">K3IE</a>			1007	582	20	1,517,856	TCG
<a href="#">W4KW</a>			555	374	12:40	548,658	TCG

### SOAB LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">N4MCC</a>			275	204	18	140,148	TCG
<a href="#">WA4JA</a>			280	197	9	129,429	TCG

### SOAB Unassisted LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">WA4JA</a>			280	197	9	129,429	TCG

### SOAB Classic LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">WA4JA</a>			280	197	9	129,429	TCG

### SOAB TB-Wires LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">N4MCC</a>			275	204	18	140,148	TCG

### SOSB10 LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">WF7T</a>			598	423	22.5	629,001	TCG
<a href="#">AC4G</a>			99	82	4.5	21,812	TCG

### SOSB10 Unassisted LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">AC4G</a>			99	82	4.5	21,812	TCG

### SOSB10 Classic LP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">AC4G</a>			99	82	4.5	21,812	TCG

### SOSB40 HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">AF4T</a>			12	12	1	624	TCG

### SOSB40 Unassisted HP

Call	OpMode	Remote	QSOs	Prefixes	Op Time	Score	Club
<a href="#">AF4T</a>			12	12	1	624	TCG

### RFI HUNTING ZOOM SESSION

The March TCG Zoom session featured an in-depth discussion on Radio Frequency Interference. The session featured presentations by K4RO, WV4P, AD4EB and WF7T on types, sources and approaches to solving RFI and ISI (inter-station interference.) You may view the Zoom session using the following link and Passcode: <https://tinyurl.com/yw8trwwe> Passcode:AC=S4gWA

AD4EB kindly wrote a summary of some recent RFI and ISI problems encountered at his station. We are grateful to print Jim's findings in this month's newsletter, below.

#### 1) *Electric Fence in the Neighborhood*

During the 1990s there were days and weeks when I could not copy hardly anything on multiple HF bands due to a pulsating S3-S9 hash like noise. It pulsed on and off about every 2 seconds, leading me to think it may be an electric fence, but I could not find any in the neighborhood. It would come and go, and after searching for several months I pretty much gave up. I used my car radio on AM to try and locate it without success.

Then one evening while walking around the subdivision, I saw a small red light flashing inside of a neighbor's garage 500 ft. up the street. The red light seemed to pulsate at about the same rate as my RFI issue. Turns out he did have an electric fence after all, but it was not visible from the street because it was mounted onto the inside side of a wooden fence. It was used to keep his dogs from jumping thru the wooden fence.

We verified that it was indeed his fence causing the RFI. Without me even asking, he volunteered to turn it off indefinitely, saying his dogs would not know the difference. What a great neighbor and a big noise problem solved.



Red dot shows where the flashing light was seen inside his garage

## 2) *Power Line Noise Issue*

Around 20 years ago I began experiencing an arcing noise, and was pretty sure it was power line related. I had my 3 element beam at this point, and determined it was coming from the northeast. Using my car AM radio and a handheld Kenwood radio with HF I was able to find the power pole it was coming from, which was 500 ft. away to the NE in an adjacent subdivision.

I notified Middle TN Electric (MTE) of the offending pole, and they sent a team out but were unable to find anything. So they came back out the next day and called me over to the pole. Nothing detected again, but I politely told them it was very intermittent and worse when it was windy. One of the guy said aha, and went back up in the bucket truck with a fiberglass pole. He banged on the top of the pole and sure enough, it started buzzing and he could hear something arcing. Turned out to be a bad insulator which they replaced and solved the problem. I've dealt with MTE several times over the years, and had a positive experience each time.



Offending Power Pole



New Insulator

### 3) *Bad Power Strip*

Shortly after the Power Line Noise issue above, a terrible buzzing noise appeared which affected all HF bands. It was S3 to S5 and was constant 24/7. It pretty much stopped my ham radio activity at the time, and was worse beaming toward the south. Again, using my car AM radio and Kenwood handheld radio with HF, I was able to locate the source near the garage door of a neighbor 500 ft. down the street. I explained the situation to the owner who I did not know well at the time, and they were very willing to help. By having them flip switches on their breaker panel, we were able to narrow it down to something in their bonus room. After further investigation, it was found to be emanating from a multi-plug power strip. I suspect it was a failing MOV. It is amazing how good it feels when solving a bad RFI issue, and sometimes a great way to meet your neighbors.

### 4) *Digital TV (DTV) Antenna*



This RFI issue is one that showed up over a year ago, and I was finally able to locate the source a few months ago. It was a strange one, and took many hours of head scratching and direction finding to locate. If I did not operate SO2R, it would not have been an issue.

When transmitting on 20m, 15m would be totally wiped out ... but only when my transmitting antenna was pointing NE. It would not matter if I was operating low power or high power. It was wide banded and would overload the front end of my IC-7610s.

I was not able to locate the source using my car or handheld

AM radios. Based on a recommendation from Kirk K4RO, I purchased a DX Engineering Receive Portable Flag Antenna Kit (DXE-NOISELOOP) to use with one of my portable SW radios. This is a fantastic antenna functionally, and a real bargain for the price.

Using this portable flag antenna, I was eventually able to locate the source of interference which was coming from a house in an adjacent subdivision. I noticed that this house, which was about 250 ft. NE of my QTH, had a DTV antenna mounted on a mast at about 35 feet AGL.

Triangulating with the flag antenna, I was pretty confident the noise on 15m was emanating from this DTV antenna when I transmitted on 20m.

Not knowing this homeowner at all, I did not think I would be successful in explaining my predicament. Let's see, when I transmit on MY ham radio, YOUR DTV system re-transmits MY signal on a different frequency that messes up MY ham radio. I'm pretty sure he would say it sounds like your problem, not mine. Even though I have had great success working with neighbors in my neighborhood, I did not want to open up a potential can of worms in an adjacent neighborhood. So I decided to just live with the RFI issue, and not operate 20m/15m SO2R while pointing to Europe or the NE.

I discussed this with K4RO, and he suspected the culprit was probably a cheap switching wall wart with their DTV unit. We wondered if there is that much RF being generated from his DTV antenna, could it also be affecting his reception?



About a month ago, during a Wednesday morning CWT contest, we had a major storm with nearby lightning strikes pass thru and I had to pull the plug. During the afternoon session, I could not believe my ears, the 20m/15m RFI was completely gone. I could hear a pin drop on 15m when transmitting on 20m! I am not sure if the storm had anything to do with it, I suspect the homeowner unplugged the unit for the time being for some reason. Anyway, I've been a happy camper for the past 4 or 5 weeks.

##### 5) *Cable TV Modem*

Several years ago my immediate neighbor had their 3 Spectrum cable/internet boxes upgraded to the latest and greatest. Immediately they began having dropouts and asked me if it was possibly a ham radio related issue. It did not happen very often, so I had them keep track, exactly to the minute, when it was happening.

After several weeks we figured out it was a 160m only issue initiated by me. In fact, I could repeatedly cause the dropout of all boxes just by transmitting a few watts into my inverted L antenna. Spectrum sent out several technicians who were not able to resolve the issue.

Spectrum eventually sent out their top technicians, and he ran various tests as I would transmit. There was never any mention from any of the serviceman that it was my fault, which I appreciated. After quite a while, this technician decided to do the same testing with one an older cable box he had in his truck. Turned out it was immune from my 160m RF (better shielding?). He came the next day with all new (older version) cable boxes and the problem was resolved. The old boxes did not have as many features as the new one, but my neighbor was fine with it.

### **HOW IT ALL STARTED – W0AG, Mike Murray**

Like many hams, my interest in electronics was triggered at age 14 by a Christmas present - an experimenter's kit that happened to include a QRP transmitter. It was very low power, but a transmitter none-the-less. A friend, who also happened to be a novice ham, agreed to help me test it and it reached a whopping 50 feet or so! I was hooked as he was reeling me in to get my license.

My novice license soon followed along with a Knight kit T-60 and Hallicrafters S-120, all paid for by bagging groceries at the local BX for 10¢/bag. Checking back thru my first log there were over 150 calls (remember when you had to log **every** transmission?) before making a contact outside of our neighborhood. A note in the log indicates the antenna was a light bulb for the first 20 or so tries before a real antenna was installed - a horizontal, 45° V dipole at 12' cut for who knows what. That beauty, along with help from the T-60, earned me two notices of harmonic radiation in short order. Didn't give up though and tried the Novice Roundup for a hefty 4 QSOs.

The next step was a trip to the smoke-filled FCC offices in downtown Detroit for a General exam. Passed first try with flying colors, but still remember the grumpy old examiner who hated his job and everyone who showed up for testing, at least it sure seemed that way to me.

Shortly thereafter, my Dad (USAF pilot) was transferred to that rare DX location /VO1. I had no clue that I was in an uncommon location so didn't make good use of it-mostly phone on 10M since that was the only antenna I had and conditions were fair then. Did join Air Force MARS there, but sort of an outsider since I was the only kid in the group. Wound up getting some nice surplus stuff though, SP600JX17 and a brand new TCS13 combo. Wish I still had them.....

College was next followed by marriage, kids and job. Radio took a back seat for a number of years, but did manage to get interested in DXing during the late 80s. Also briefly toyed with contesting and upgraded to Extra Class. I guess that's when I really developed an interest in CW and it's been my favorite mode ever since.

Lots of moves, new jobs and fulltime RVing in the intervening years until we finally retired to TN and decided to settle down for a while. I somehow came across the TCG web site and ham radio interest sparked again along with CW contesting. Even though I have trouble keeping my BIC and don't make big scores, it's heaps of fun and I really enjoy rubbing shoulders with some of the best testers in the country!



*L-R: N9TF and W0AG at a TCG meeting in 2023*

### **TENNESSEE QSO PARTY 2024 RULES**

Thanks to the hard work by W0AG, AD4EB, WF7T and others, the TN QSO Party rules have been revamped for 2024. The contest is now ten hours long, and a new Rover category has been added. Now is a good time to review the TQP rules for 2024, and start planning our operations. The sunspots should provide a boost this year. Let's hope for some good short skip. Here is a direct link to the 2024 TQP rules:

<https://tnqp.org/rules/>

### **HAMVENTION 2024**

There has already been some good discussion on the TCG email reflector about the upcoming Dayton Hamvention. If you have not already booked your hotel room and Contest University registration, now is the time. Dayton has a little bit of something for everyone. I highly recommend that every avid contest operator check out The Hamvention at least once. There's nothing quite like being among a bunch of testers. Nobody really understands testers except other testers. The Dayton Hamvention provides the ultimate opportunity for such encounters to take place.

### **TCG APRIL ZOOM SESSION**

There will be no April TCG Zoom session.



## NEW MEMBERS

No new members to report this month.

## TCG DUES RENEWAL REMINDER

TCG dues renewal notices are arriving via the Ham Club Online system. The easiest and most efficient way to renew your membership dues is use the PayPal link provided. Other methods include sending a check to our treasurer, K0EJ, or sending dues directly to the TCG PayPal address, available directly from K0EJ. It takes considerable time to keep up with the edge cases. We appreciate our members paying dues promptly, thus keeping your TCG membership current.

## UPCOMING CONTESTS

The following table is a list of the upcoming contests which qualify for the TCG Most Radioactive Award. For more information on the MRA, please refer to K4TCG.ORG under the TCG INFO section. Thanks to AD4EB for this list, and to Ted W4NZ for administering the TCG Most Radioactive Award.

April 6, 2024 EA RTTY Contest  
April 6, 2024 SP DX Contest  
April 6, 2024 Louisiana QSO Party  
April 6, 2024 Missouri QSO Party  
April 6, 2024 Mississippi QSO Party  
April 13, 2024 Georgia QSO Party  
April 13, 2024 New Mexico QSO Party  
April 13, 2024 IG-RY World Wide RTTY Contest  
April 13, 2024 North Dakota QSO Party  
April 19, 2024 Holy Land DX Contest  
April 20, 2024 CQMM DX Contest  
April 20, 2024 Michigan QSO Party  
April 20, 2024 Nebraska QSO Party  
April 20, 2024 Ontario QSO Party  
April 27, 2024 SP DX RTTY Contest  
April 27, 2024 Florida QSO Party  
April 27, 2024 Helvetia Contest  
April 28, 2024 BARTG Sprint 75

May 4, 2024 7th Call Area QSO Party  
May 4, 2024 ARI International DX Contest  
May 4, 2024 Delaware QSO Party  
May 4, 2024 Indiana QSO Party  
May 4, 2024 New England QSO Party  
May 11, 2024 Canadian Prairies QSO Party  
May 11, 2024 CQ-M International DX Contest  
May 11, 2024 Volta WW RTTY  
May 18, 2024 Arkansas QSO Party  
May 25, 2024 CQ WW WPX Contest, CW

Don't forget to mark your calendar for the TCG brunch gathering **April 20**. 73, —Kirk K4RO