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## St. Paul Radio Club Ground Wave

*Jeff Iverson, WB9DAN, Editor*  
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**KØAGF**

[www.stpaulradioclub.org](http://www.stpaulradioclub.org)  
Club Repeater: 145.310 MHz  
114.8 kHz Tone  
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### NEWS AND NOTES FOR SEPTEMBER 2020 — Volume 80, Issue 9

#### **NEXT (ON-LINE) MEETING: FRIDAY SEPTEMBER 4, 2020**

6:00 PM Board Meeting (all are welcome to watch)

7:00 PM Fellowship and (your own) Refreshments

7:30 PM Short Business Meeting with Program Following

#### **Program**

Our September program will feature SPRC club member, Ralph Bierbaum, N0AWN, discussing "The Emergency Response to the Northern Metals Recycling Fire in Becker, MN." Ralph is member of the Minnesota All-Hazards Incident Management Team as a Technical Specialist and COMT (Incident Communications Technician) — think "Disaster Geek Squad."

**Dale will send a link and instructions on how to participate in the on-line meeting. Please follow carefully.**

**This is renewal month. Since we won't be meeting in person, please fill out the attached form and mail it to Dale.**

#### **Dale's Details — by Dale Maroushek NØPEY**

What did you do last summer they ask? That would be since the May meeting.

May, I stayed at home with maybe 2 trips out to stores for necessities per week. I think that was about the time I started working with Lou WD8NLV to get him on the air from home. Eventually, we got him radioed up both at home in in his SUV. I would say the biggest thing we learned was that sticking with the main brands of gear is the better choice. Covid-19 carried on.

Leon, W0COE and our VE team completed a test session in a church parking lot, which was very well attended and fulfilling for the applicants. Under pop up shelters, 6 foot spacing, masks and sanitizer, we got it done. So, I started a landscaping job in the front yard, made a mess and pulled a shoulder that hasn't healed yet. Time to see the medical world again. (Yup, torn rotator cuff, MRI and plans next week). Covid-19 continued.

July, the fun month with Independence Day, my birthday, mother's birthday (97) and vacation. Rather than going to one location to see 20 minutes of fireworks, we sat at home and watched and listened to hours of them for many days. Burned some meat on the grill for my birthday and slipped a card under the door for mother at the home.

*(Continued on page 2)*

*(Continued from page 1)*

I “squeezed in” a Colonoscopy on the 16<sup>th</sup>, he gave me three years until we dance again. Did you see in today’s paper, colon clinic door sign said “Sorry, we’re open.”

Vacation was at North Star Lake north of Grand Rapids. When our kids were pre-teen, we rented a cabin on this lake for about 4 or 5 years. The campground had everything for kids to do and real fish in the lake. In 2012, my son and family returned to the other campground on the lake which is smaller and has RV sites. His kids were elementary age and we got them catching sunfish very well. I got one nice Small Mouth and Kirk got one good Northern Pike ... after many hours of actual fishing. Eight years later, the camp has new (younger) owners and rules to the better. But the fish are gone. Try as we did, with every presentation we could, Kirk finally got a 2 pound Large Mouth Bass on the last day we fished. I got the trifecta, three species in 90 seconds on one small worm. Small sunny, perch and bass, for a total of 12 inches. Nice drive up and back, crops were tall and green, traffic was light and pleasant. Covid-19 slows but grows.

August, the Derecho rolls over the mid states. If it was green and tall, it’s now flat and browning. Shiny grain bins crumpled and smashed or just rolled away. Roofs and building shattered, trees uprooted and branches broken completely off. Electric power out for days. Cell service was ok, so not much Ham activity needed. Luckily, it missed my relative’s area by 80 miles, but a farm I watch on U-Tube, Cole the corn star, had much damage.

The wind that came through here took down my OCF dipole, wore the wires out from branch movement. My Chinese Elms grow tall and really whip in the wind, I’ve seen them with 6 to 8 foot travel up high. So I mentioned that on the SPRC and MARC nets, and Ron, K0RJW, says he will bring the Sling Shot over and we can put it back up. We did that on Aug. 22<sup>nd</sup> and will be covered under a separate story.

I continue to be contacted by relatives of SK’s with gear to find homes for. I did run down to Burnsville and picked up one old receiver from one. Now I have another that will need until October to get started with take down and collection. Just forecasting here, but with the list of things we have or will be coming in, the Jan. 2021 Auction will probably be one of our finest. Covid-19 keeps spreading so I don’t know how that will shake out, but the Board has talked about other possibilities.

Election of officers is due after the postponement from last May. Our general membership is that of the well-aged Ham. All but one of our Board are over 60, many with years of service in various positions. I have been on the Board since 1998, minus 2 years when I just coached from the sidelines. At this point, I will highly encourage any younger Ham enthusiast to jump at the opportunity to become one of the leaders for this fine Club. We are growing, we probably will have an actual station at CDH soon. We have a great financial base; our repeaters are current and the nets are growing. New digital technologies are there to be implemented and concurred. Stepping stone job chairs are open for those that want to try.

With that, let’s see what September brings. Covid-19 increases its devastating records.

*(Continued on page 3)*

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## **Summer's End Round Up — by Scott Holisky NØAR**

We are about to wrap up what has to be one of the longest warm weather seasons I can remember. Thought I'd share a few of the Summer highlights other than outdoor VE Testing and Field Day.

About mid-May my next door neighbor got on the colored LED lighting strip bandwagon. He tells me they run around the ceiling...well enough said. I just know it is major QRN. The switching power supply that came with his setup generated hash about every 10 kHz throughout the HF spectrum. On my SDR radio it looked like one big comb of interference. He's kind of a technical guy so I instructed him on how to hunt it down using my portable radio receiver. It didn't take long for him to show up with the offending power supply in hand. Adding a bunch of ferrite toroids on the power leads tamed that down to background levels again. Having eliminated that crud made me wonder if I might improve my system by adding a few "common mode chokes" on my antenna lines as they enter the house. A couple of trips to Menards for electrical boxes and PVC end caps moved the project right along. I now have CMC devices on all the lines and a couple have them on both the shack end and the antenna end. I don't expect to report 5BDXCC by next month but at least I put that time to good use.

On the operating front I'm still pounding out QRP (low power) contacts and have been showing up for a few of the two-hour "Sprints" that run each month. There are quite a few different flavors of these mini contests, some are geared towards the weight of your gear, others focus on your power and what you use to send CW, key, keyboard, etc. In the end it's all good fun and gives everyone a chance to get on the air for a bit. Most of the sprints are listed in the contest calendars and they have links back to the group that is putting it on. With a lot of the sprints don't have to be a member of any club to join in the fun, just show up. Last month I had a guy call me wondering what was going on during a sprint. I explained the gathering and asked him if he could turn his radio to qrp power for a contact. He told me his 100 watt radio wouldn't reduce to 5 watts. I directed him to the power control and he dropped down and asked (ready...) "Can you hear me now?". Yes another QRP operator was started on his way.

## **May Board Minutes— by George Power WØGCP, Secretary**

President Don Kelly called the meeting to order at 6:05 p.m. as a quorum was present.

Officers attending: President Don Kelly (WA6ZMT), Vice-President Dale Maroushek (NØPEY), George Power (KØGCP), Secretary; Allan Klein (WØONLY), Treasurer; Ben Otto (KEØRFZ), board member-at-large, Br. Bob Walsh (WCØJ), board member-at-large.

Visiting: Jeff Iverson (WB9DAN), Pete Guldán (KDØSQJ), Ron Walkinshaw (KØRJW), James Mitchell (KØWYW), John Crabtree (KCØG), Jay Maher (NJØM), Ben Premack (WØKXD), others dropping in as meeting progressed.

### **Minutes of April Meetings**

The minutes were published in the May Ground Wave and no corrections were sent to

*(Continued on page 4)*

the secretary.

#### Membership

Membership is at 142 (including some from earlier VE sessions).

#### Treasurer

The accounts are in good order. Balances are: Education fund, \$1162; Repeater fund, \$702; General fund, \$7212. There are no outstanding bills.

#### Field Day

Our discussions of Field Day options were strongly influenced by the uncertainty of mass gatherings under the COVID-19 rules. Under ARRL guidelines, as a club, we can operate multiple stations within a circle of 1000 foot radius. Club members might plug into a common antenna and operate their shifts from their cars. We could possibly establish a remote station for club use (in Don's motorhome) and operate from our homes (requires good internet bandwidth at site). We could even forget that Field Day existed and operate as individuals using our own callsigns, from home or elsewhere as they choose.

The board's general agreement is that we will not have large groups and we will not be cooking for members at the site. We are still interested in using the airport as our club site, and finding some way of operating as a club. Ron and Don will continue the discussion on June 1<sup>st</sup>.

#### CDH ARC

Br. Bob said that, because of financial problem with no school, CDH needed to decide on the roof repair timing (this summer or next summer). If the school postpones the roof repairs, Bob would like to get a bid on installing the antenna this summer. Allan reminded us that we have a strong education fund, which we could use to help put up the school's antenna. Bob is working on the CDH club bylaws, using several examples from other clubs.

#### SPRC Radio Trustee

Dale agreed to be the SPRC club radio station trustee – a motion to accept his appointment as trustee was moved by George, seconded by Allan, and unanimously passed.

#### VE Testing

Leon Dill (W0COE) reported on remote testing possibilities. The FCC would allow remote testing but the ARRL will not accept it (yet).

#### Programs

Dale reported that we have several programs lined up for next fall, suitable for Zoom meetings.

#### Zoom Report

Don has purchased a one-month subscription to Zoom, for our testing with tonight's meeting. If we like it, we will purchase the full one-year subscription.

#### Club Equipment Inventory

Charged with developing an inventory of club owned equipment, Ben has been combining responses about aa club equipment survey from 7 members and will present the list to the board in the future.

The meeting was closed around 6:50 p.m.

## **May Meeting Minutes— by George Power WØGCP, Secretary**

Our meeting was held via internet. President Don Kelly (WA6ZMT) called the meeting to order at 7:34 PM.

Items carried forward from board meeting:

The treasury is in good shape.

Our membership is a 142 for the 2019-2020 membership year.

Our plans for Field Day are fluid due to the COVID-19 restrictions. Several options were discussed (see the Board meeting minutes). These options will be refined at a meeting between the two clubs (SPRC and Mining) with Don and Ron Walkinshaw (KØRJW), and probably a few others, scheduled for June 1<sup>st</sup>.

Our presenter tonight was Ben Otto (KEØRFZ), a relatively new member to the club and a Board Member-at-Large. The title was "Digital Modes: On air with any SSB rig (home brew hot-to)."

Ben started with a discussion on the software used to use our PC's sound cards to convert digital signals into analog signals. He mentioned PSK31, SSTV, WSJT-X, RTTY and several others. He moved on to the hardware side to cover how to set up the Push-to-talk and audio signals between the PC and the radio, complete with PTT circuit diagram for homebuilding. He offered suggestions on how to adjust the hardware power levels (power "way down" and audio at 50%) and testing (transmit into a dummy load). He finished with a live demonstration from his shack, of WISPR and FT-8 using his home-build PTT circuits.

After several questions and discussions of other equipment, the meeting wound down, finishing around 8:30 p.m.

We had 37 folks attending this meeting via our Zoom account.

## **September (8/19) Board Minutes— by George Power, Secretary**

President Don called the meeting to order at 6:00 PM. (This is the September board meeting.)

A full quorum was present: President Don Kelly, Vice President Dale Maroushek, Treasurer Allan Klein, Secretary George Power, Past President John Faughn, Board Members-at-Large Ben Otto and Bob Walsh. Also attending were Jeff Iverson and Pete Guldán.

OLD BUSINESS

Reports presented:

Membership – Dale reported the 2019-2020 year membership total was 143, and effective Sept 1<sup>st</sup>, we have 0 members for 2020-2021. He will make sure that the Ground-Wave has a copy of the 2020-2021 membership application form included.

Secretary -- George reported receiving an updated State registration for the club, valid through 12/31/2021.

Treasurer -- Allan reported the current account balances, with the General Fund at \$6782, the Education Fund at \$1167 and the Repeater Fund at \$702. Adjustments pending include expenses for reimbursements [for Field Day expenses \$100 to Benson's airport, \$50 gas and \$118.11 for portable toilet rental] and income from the Mining Club for their share of costs.

Repeater – Dale reported that the club's VHF repeater had some glitches during the Wednesday night net two weeks ago, but they cleared up without intervention.

Inventory – Ben said the inventory of off-site club-owned equipment is complete, but the inventory of the CDH storeroom is pending. A new batch of gear from a Silent Key's estate has filled the shelves and needs listing/organizing.

CDH Antenna system – Brother Bob reported that the antenna components have been lifted to the building roof, but the base plate is not yet installed. He has talked to CDH about a student radio club and they seem interested, but no commitments have been

promised. Don pointed out that we did not need space for a club yet, and that there is a lot of preparation work to be done before we can request space from CDH.

HRO – Dale mentioned that HRO posted a survey for hams to complete, to determine the market demand for stores in additional locations such as the Twin Cities area. The survey results have not been released to the ham world yet as far as we know.

GroundWave – Jeff is preparing a September issue with a submissions deadline of August 24, so that it can go out August 31. He is looking for articles for the issue.

George said he had emailed the May 2019 minutes to Jeff early in the summer.

Website – The club's website is available through the MAGIC website link and also directly ([www.stpaulradioclub.org](http://www.stpaulradioclub.org)). George Lavallee has been keeping it up to date as information is fed to him.

#### NEW BUSINESS

The upcoming September 4<sup>th</sup> meeting will be held via Zoom. Dale has agreed to contact Randy Gawtry for a program (backup might be Ralph Bierbaum for a program on the big fire in northern MN).

Election of new officers – scheduled for October meeting. Don will write up a request for nominations for the September GroundWave, with a September 20 deadline for nominations. Depending on the slate, voting could be by ballot or by Zoom.

Erv Grossman's estate – the equipment is already in CDH storage, but needs inventorying. Don will craft a letter to Arliss Grossman about how we handle the equipment at auction (she will need to value it for tax purposes) and that a portion of the net proceeds will likely go to fund a student radio club at CDH.

Auction – It is tentatively agreed that the club's annual auction will not be held due to COVID-19, but will be held 2 months after the virus restrictions are relaxed enough for people to gather in enclosed spaces.

New club-owned equipment – a follow-up discussion to Field Day shows interest in having the club get an antenna analyzer and a large (beach size) slingshot (for launching wire antennas). After we discussed potential liability issues, John made a motion to approve the expenditure of approximately \$250, for Dale to acquire the parts for a slingshot kit (and presumably assemble it). Allan seconded the motion. The motion passed unanimously. Several members will research the best string/cord/rope for use with the slingshot.

Lake Elmo Hamfest – Our sponsorship of Bob's Lake Elmo Hamfest was cancelled for 2020 due to COVID-19. Despite being an open-air event, proper distancing would be hard to maintain when it is also a social event, and selling is done in a face-to-face environment.

Next board meeting will be on October 2 at 6:00 PM via Zoom.

Adjournment – The meeting was formally adjourned at 7:07 PM, with several members staying on the Zoom meeting for informal discussions.

Respectfully submitted: Version 2 George Power

### Editor's Notes — by Jeff Iverson, WB9DAN

Still staying home like we are supposed to. I venture out occasionally to the grocery store, with a mask, of course. Now all I need to do is get out and take more pictures.

Not much on the ham radio front. I started cleaning the shack and things are in disarray until I finish. I am still looking for a local 75 meter sked.

A final note: submissions to the *Ground Wave* are always welcome, but *please* type them in a Word document, single column, (no matter how short) and send them as an attachment. Cutting and pasting from email texts does not work and I basically end up re-typing everything.



## ***Dateline August 22<sup>nd</sup>, 2020: Big Shot hangs wire back in trees!***

***By Dale Maroushk***

After the winds of August came through and took down my Off Center Feed Dipole (OCF) by wearing the copper weld wires one by one until it failed, it needed to be replaced. The wire repair was fairly easy, I had the old remains of my first one, so we simply replace the faulty section. The current wire is copper weld, copper plated steel, and the old one is flex string, like 90 small woven strands, both are hard to solder, so we went with a modified Western Union splice, shrink wrapped and tape coated. So, who or what is this Big Shot that we use to get wires into tree or anything else that is up high and hard to get at? The photos have probably shown you already. The Big Shot was designed for arborists, tree trimmers and fun! Trimmers need to get a big heavy line up over a tall tree branch to base their climb and work position. This system allows one to shoot a smaller lite line, with a weight from 8 to 16 ounces, up into a tree, over the chosen branch, and back down to ground. Once that pull line is established, we can pull up subsequent larger lines until we have the desired results. Depending on all the factors that can influence the passage of any of these lines, such as tree limb branch chokes, wire joint nodes, or line strength and wear, many times repeated tries are needed. Don't get frustrated, just plan extra time, and enjoy the fun and education.

Now comes the shooting part. To review, the last time we did this, it was snow on the ground so no leaves. Much easier to see up the canopy and back to the target area, and less resistance to the weight and line. We did it in one shot back then. Add the leaves and vision lose, it's not so easy.

Let me add this, Since LouthephotoGuy.com WD8NOV, was handy, he photographed this event with us. Check out his web site and see some fantastic photos from years back. Credit him accordingly.

I'm sure by now, many of you are Googling or looking on Amazon or U-Tube for more info. You will find it. Read it carefully because the Club now has one that will be available to people that need it. It takes some training and more practice with one or two-person operation. Could be an outdoor program for this fall!



*First assemble the crew, Ron, Dale and Lou behind the lens.*

Ron, K0RJW, has plenty of experience shooting the line up in the trees, and he also stores the Big Shot. I'll need to find a carrying case for ours. The four foot poles can be strapped on the side, but the head is wide, so I'll need something big enough for that and the rest of the gear.

Masks and gloves were optional.

The old line was stuck between some branches, so we tossed the weight and line over it and pulled it down. I'll bring the failed line to a show and tell. It is interesting to look at and see just how the branches wore away one strand at a time, then pushed it back along the wire in a funny pattern.

We replaced about thirty feet of broken copper weld wire with flex weave from my first OCF Dipole. Exact length is not critical since a tuner is usually required for this wire antenna. It will have a few resonant frequencies, but not right where we need them. It was hot that day, so refreshments and chairs made life easier.





Ron is a Scout leader so he knows his knots! Use the smallest insulator you can find, pointed if possible. Once again, this was long shot, so the white rope on the left has to be long enough to lead the whole thing through the trees from the firing point and back down to the tie off point.



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The weights come in assorted sizes, 8 to 16 ozs. Getting the correct combination of line size, weight and velocity, and a good aim will contribute to the end result. Also good to have a spotter to watch for the weight to come down. Use bright colored weights and lines, mono is hard to find, like a spider web.



Up it goes, with a snap of the line and the crash of the weight through the trees. In our case, we were trying for a long high shot, so we started by using our monofilament line at first. When we finally got that to land close to the target, we tied the slick line to the mono and pulled it **back** to the sling. Then tie on the end rope with the wire and pull it back again to the target site.



Once again, Photo credit goes to Lou Michaels, WD8NLV, for the shots. His history of life as a photographer is long and highly interesting. His list of volunteer organizations that he works with is remarkable. Check out his site, and get to know him one piece at a time.  
<https://louthephotoguy.com>





The mono needs to be replaced on this reel. It has lived its useful life and is kinked, over wound and pitted. We will get a big reel and load it with 20 lb or better line to eliminate breaks to start with. Truth be told, we had one great shot early on, but the mono broke at the slick line joint and hung just out of reach and our ability to latch on to it. So we had to pull it all back and reshot, about four more times before we settled for the end result.

I did some initial testing and tuning. I found the SARA group on 160M again, heard a bunch on 40M and the great southern drawl from four land on 80M. I would even say it tunes easier than before it failed. Next we put the NanoVNA on it and see first, just where it is resonant as is, then, how the tuner adjustments affect it.



St. Paul Radio Club, Inc.  
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ADDRESS CORRECTION REQUESTED

## SPRC Calendar

Fri September 4	6PM SPRC Virtual Board meeting, see Page 1.
Fri September 4	7PM SPRC Virtual Membership meeting followed by program. See Page 1.
Sat September 5	10 AM VE exam at Galilee Lutheran Church in Roseville