

 <p>www.arrl.org</p>		<p align="center">St. Paul Radio Club Ground Wave</p> <p align="center"><i>Dan Meyer, NØKFB, Editor</i> <i>Dale Maroushek, NØPEY, Publisher</i> http://www.magicrepeater.net/sprc.htm</p>	<p align="center">KØAGF</p> <p align="center">Club Repeaters: 145.310 MHz, 442.450 MHz Both use a 114.8 Hz tone</p> <p align="center">PO Box 9375 North St. Paul, MN 55109</p>
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Devoted to the future of Amateur Radio as a hobby and public necessity
SPRC Nets: Wednesday 7:30 PM 28.310 MHz USB; 8:30 PM 145.310 MHz FM 114.8 tone

NEWS AND NOTES FOR January 2024 – Volume 84, Issue 01

NEXT MEETING: FRIDAY January 5th, 2024

- 6:00 PM Board Meeting (all are welcome to attend and observe)
- 7:00 PM Membership meeting, refreshments and socializing

Entrance to CDH for our meeting

Meetings are held at Cretin-Derham Hall High School located at the intersection of Hamline and Randolph in St. Paul. Park in the lot off Hamline near the athletic field. Enter door 21 at the Ryan STEM Center addition. The meeting room is down the hallway on the right (the Commons). Door 21 will lock at 7:45 so if you arrive after that, please call 612-201-0818 to be let in. Br. Bob.

Program

Our meetings are hybrid meetings. That means there will be an in-person meeting at Cretin-Derham Hall (CDH) and a meeting on Zoom for those unable to attend in person. Zoom meeting information can be found at the end of the newsletter.

We don't have a formal program planned for the January meeting. We're looking forward to four or five members telling us about interesting amateur radio experiences. If you'd like to be part of the program, send a note to dk@donkelly.biz. If we don't have enough volunteers, you may be plucked from the audience on January 5th. If your experience involve pictures or other interesting stuff, bring a thumb drive and talk to Dan NØKFB before 7:30.

Dale's Details

by Dale Maroushek NØPEY

Goodness sakes, it's time to start practicing writing or typing 2024 already! But first let's cover what we did in December up till now. First is the lack of snow removal of most kinds. Snow fall says 1.3 inches, but it all melted away in a few days. The lakes are slowly freezing over with nice smooth and clear ice, but not ready to enjoy ourselves on them just yet. Wait for that 4 inch mark for foot traffic, more for ATV and a foot for cars and trucks. Clear ice allows the sun to penetrate letting the green plants continue to produce oxygen to keep the fish active and make fishing better.

The Holiday party was wonderful, with many cookers and trays of tasty goodies. Many dishes left clean and we all felt full and content. Until next year when we do it all over again.

Ron and Collen and the VE crew got four more hams licensed. We had to use the lower level which is crowded but we worked it out. With more practice and adjustments, we should have it perfect in a couple months. I also had to update my VE credentials and one quick phone call to the ARRL and it was completed. Sticker arrived yesterday, so I'm all set for January.

Breakfast continues to be a great Saturday adventure. I think we got to twelve this month, with a new guy Joe from Baltimore, who is here clearing his father's estate. It hasn't been a fun time for him. His sage advice is to avoid Probate any way you can. Denny's staff is greatly improved and the crowds are growing with it.

The Dec. board meeting listed a group to get the web site fixed up better. Unfortunately, I do not see much happening over there. We will hit it again in January!

This month's gripe bag is with MDMV, our beloved MN department of motor vehicles. Had to renew my plates. Looked on their bill and found the old 'click here' to renew button. I did, and we went to a site that would charge me 50 cents to use it, or \$12.50 for a year of them keeping track of all my alert dates for whatever I want listed. I fell for it and "thought" that would take care of paying the State. The Next day, bingo my credit card said stop, we don't think this guy is legit. I do more investigation and sure enough, all they do is track your stuff, they pay no one. So I cancel all that and go through the regular DMV site and find the right channel to pay my tags. Now we wait for the stickers for 2024. Got them too.

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Upcoming in January we have the normal meeting on the 5th, VE tests on the 6th and breakfast on the 20th, with the grand finale on the 27th, the annual SPRC Auction. The flyer and rules are attached this month for your reading and distribution to anyone anywhere that will have interest in bidding on good ham related gear and supporting the ARRL.

Always looking for more helpers and auctioneers. So far, other than our fabulous Board members, I have Andy Parent KF0MJQ, John Crabtree KCOG, Doug Lueck KF0MPG, Ben Primack W0KZD, Jay Bellows K0QB, Brian McInerney N0BM and hoping to gather others to help us out both Friday pm and all day Saturday.

General description is: we gather at CDH after 3 pm Friday Jan 26th. As workers arrive, we send them on tasks of retrieving gear from the storage area in the next building with Br Bob leading the way. Meanwhile at the room, we are setting up the tables we need in and out of the room. We cover many of them with felt so as not to damage displayed gear.

Some of the gear is from estates that we sell under their name and others are donations to the Club. It is critical that we do not mix these up.

Once positioned, we need to fill out and attach blue tags to each item, for each seller we have presold. This takes time and needs to be correctly done.

Some sellers with larger lots have been invited to bring their gear in Friday too. We must make sure they do things right too.

Meanwhile at the computer desk, the guys are building the network for check ins and payouts. Once they are active we can start the labeling of gear.

Geoff Mahoney, KD0UXK, contacted me about getting his boat anchor collection to the auction. Say he has about 25 of them, working and non-working. He is looking for some help in checking them out and getting them to the school. He lives near the school, 478 S Snelling, but is 68, and can't do it himself. If you would be able to work with him, let me know and I'll connect you.

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Next addition of life on Okinawa 1970, Torrii Station, Kadena Air Base, Fort Buckner Army Base, and hundreds of other bases for the Navy and the Marines holding down most of the northern part of the Island from Kin village on.

Let's talk about rifle qualification tests. I arrived in August and was issued an M-16 to care for monthly at risk of being drawn and quartered if I didn't show up to clean in. It stayed in the armory and the paper identification slip was in my wallet. Come late summer, the Company bulletin board has a list of everybody and a date/time to report to the armory, collect their weapon and get aboard the trucks heading out to the quantification ranges. As with any Military operation, you must first be sure you have all the personal GI stuff in order. Uniform needs to be a freshly starched model that we usually keep in our lockers and save money by not paying to have them starched. Make sure your insignia is properly positioned and attached to your lapels. Hat is as clean as it gets, again with insignia up front. Boots shined and pant legs tucked or bloused in. Just to remind us, that although we are doing Top Secret work, the Army still is in control of us.

The leadership for the event is the usual, one of the Company Commanding officers as CO, and a bunch of sergeants E-6, E-7 and E-8 standing around to get their tickets punched as having been involved...unless something bad happens, then it goes back to the NCO assigned. OK so all bases are covered but the NCO's pick a flunky to run the shoots. That being another of my buddies from the 175th in VN. Specialist Treany. He was another of those highly trained but poorly taught Analysts that just couldn't find a way to fit in. So, the Army, in its brilliant moves made him the NCO in charge of the rifle qualifications. Of course the higher up NCO's always made their rounds to point out deficiency and mistakes made by others just to leave another mark as to their position.

So Spec 4 Treany is in charge and we are shone to the usual style shooting position areas, standing, kneeling, sitting, with pit and prone. We are told to make things easier, we will only shoot from the pit position at 25, 50, 75, 100 and 200 meter pop up targets.

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To review, I qualified Sharpshooter in Basic training in 1967 with the M-14, firing 7.62 round from all positions, but have not had to shoot any gun assigned to me since then. So now I'm handed my refurbished M-16, firing 5.56 round that I had never shot before, or know of how it fires. So they give us the usual 3 rounds and 3 times to "sight" your new weapon. To make it short, after the 9 rounds, I had no idea where this gun was shooting, so I went with the old Kentucky windage routine. That being: first shot aim at dead center and watch where the shot hits. Then move the aiming point to the next shots accordingly. It worked enough to qualify Marksman which most of us did. Specialist Treany was commended for his efforts and we moved on. He made Spec 5 with no regard to his MOS and all the NCO's got another notch as they waited for retirement. This was the Army in 1970.

Bowling League: I had a friend Sargent E-6 that started a bowling team, I joined and had my own ball drilled and my own shoes. I'm looking for the pro circuit right? Guess again. We named the team the Inebriates, because we usually did just that. Half way through the season, we tried bowling straight and scored less than usual. No trophies here.

One more short one. During that second hurricane, when I was locked in to work at the building with no windows, I thought ahead and purchased a nice fresh sirloin steak to bring in with me. The snack bar cook was also on duty with us and everyone was eating burgers, dogs and fried egg sandwiches, or other vending machine fair. I had it well wrapped with my name on it, and had him store it in the fridge until it was time to eat and watch the envy on the other guys faces. So I go down and tell him to put the steak on his griddle and cook it. He does and as it is not something he is used to cooking, and it is taking a much longer time to cook, he flips it like a burger a few times. Then, he mutters something and suddenly grabs the rice cooker, puts my steak and some water in it, and tunes it on. He boiled my steak! When he pulled it out, it was the consistence of rubber, and tasted about the same!

It is now late Christmas Eve and the all the seafood dinner stuff is put away. The gifts have been passed and taken home with the young adults. I can only describe the cooking as a rerun of the Field Day under water at Tarten Park. If you recall, we had all gathered and then it started to rain, and rain more, with water-water everywhere. Same thing here! Why you ask? Well first it was very unusual for rain on Christmas Eve, and secondly because Deb sent out the invitations for dinner to be ready at 6 p.m. We thought 3 p.m. She and I are getting it all ready and about 1 p.m., my daughter texted to ask if all was ready for 6 p.m. Whaaaat???

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Phone and text contact went flying and we compromised it down to 5 p.m. since most of them had made plans for the afternoon. Not much for us to worry about, we just needed to start cooking a bit later. Except for the rib roast, which was an hour into its time in an air fryer. I turned down the temp and then turned it totally off, then back on again to finish it off by serving time.

However, we boil and griddle the rest on the outside deck. At 3, that was not a problem, at 5, it was raining. Keith and I could stand under the eave and be out of the rain, but when we needed to attend the griddle or boiler, we were right under the floor drip line and got pretty well soaked. It will be one to remember but it all worked out and we hope not to repeat it. Happy new year 2024.

Dale Maroushek NOPEY 73

Photos from our December potluck by Dawn Holmberg



Above: Members patiently waiting for Dale to finish the brief membership meeting.

Below: Members choosing from among the many goodies available at the potluck



Ramblings from the VP's Work Bench by Kevin Welna W5LNA

*Oh the weather outside is frightful
The furnace heat is so delightful
Now get on the radio and jam
You're a ham, You're a ham, You're a ham.*

Bet you did not know I was a poet. Well you could have figured it out by my feet because they're "Longfellows". HI HI

I'm starting this article on December 3rd 2023 because I have a bit of free time and I wanted to get down a few thoughts on paper before I forget them. First off, I attended the Xmas party and the food was great as usual thanks to Jay and others. The table was pretty full when we started and fairly decimated by the end. I doubt anyone went home hungry. I was surprised that my SPAM and Cheese ball was pretty well gone by the end of the night. For those of you that dislike spam but ate my cheese ball and liked it, HA got ya.! Big thanks to Tim for the Chili. Perfect amount of heat and great flavor. My only complaint was it went so fast that I barely got a cup full. Lot's of great conversations were to be had and the spirit of fellowship and friendliness of everyone was a great start to the Christmas holiday. Looks like about 40 people showed up for the shindig and it was a definite success. If you missed it, that's on you!

I received a few kudos for my articles from a couple members and again you are welcome! I am glad that my writings do not fall on "deaf eyes". I do find writing to be quite enjoyable and a bit cathartic. It actually gives my mind a chance to mull over ideas on\for projects that I am working on or may want to attempt and then write about. To that end having hobby ADHD, I figure it will be a while before I run out of things to write about. I do wish that others might try some of my projects or contact me on their own projects, but so far I have not has a single inquiry on any but the bench power supply made from a old computer power supply. (See earlier Ground Waves).

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Below is a pic of the power supply, it actually gets used quite a bit! It can deliver about 5 amps out of each set of terminals at the same time. Including printing the enclosure, I think I have all of \$15-\$20 into the whole project.

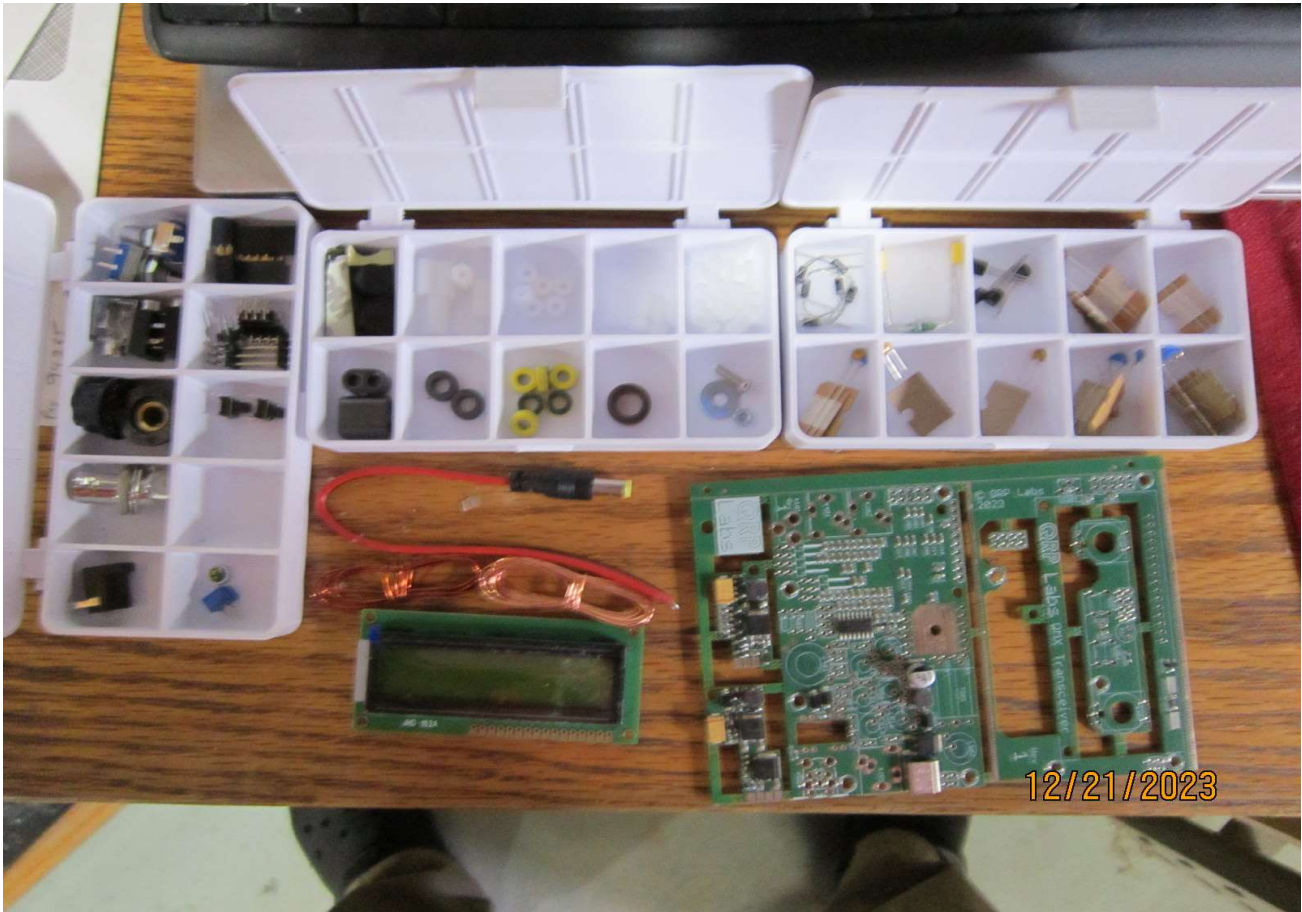


While I think of it, In last month's article, I talked about making a shack computer using a Raspberry PI 4. Ya know you can reduce the cost by over ½ by using an old monitor that you might have or a friend might want to get rid of. The PI has both USB and SVG outputs to drive a monitor. Just a thought.

So whats on the the bench? I'm starting on the QRP Labs QMX transceiver. I finally opened up the box and pulled out the kit. Honestly, there ain't much there! (See pics on next page). Next I down loaded the instructions. I gotta tell you when I saw it was 65 pages long I got a little scared. Well, it turns out it has a ton of pictures in it to help you build the radio plus excellent detailed written steps accompanying the pictures for winding the toroids. This is not going to be that difficult to build!! The only real PITA (Pain In The A\$\$) will be removing the enamel from the magnet wire so they can be soldered on to the board.. Anyone have any good ideas on the best way to do this?

Also, the instructions are in a PDF format, and my shack PI computer can display PDF documents so at least I do not have to print out 65 pages of instructions. Even better, you can zoom in on PDFs so I should be able to actually see what the arrows are pointing at in the pictures and it won't tie up my main computer! Crisis averted!! This is going to be fun. *(continued on next page)*

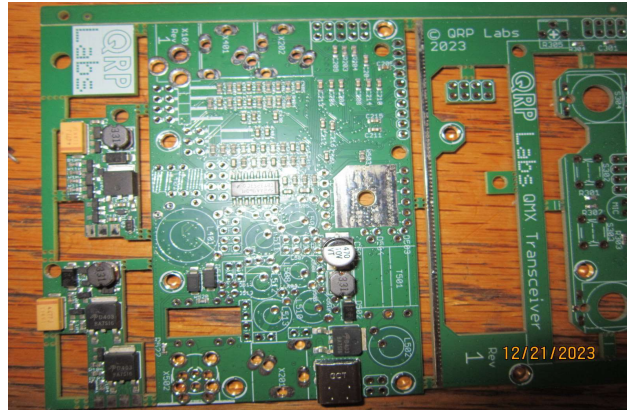
Here is a pic of all the parts; sorry for the shaky hand but you get the idea that really there is not much here to solder plus about 1/2 of what needs soldering is hardware not electronic components. This should be doable by most anyone, even me!



There are about 60 components in total and they are all through hole mounted and pretty easy to see when wearing 1.5x cheaters which I need to wear in any case when doing just about anything. The instructions give you a parts list and a picture of the parts and their quantities so you can confirm you have them all. Which is what I did as I placed them in my 3D printed parts boxes. I tell ya, for the \$1 of plastic it takes to make one of these storage boxes, it is well worth the expense as well as being about 1/5 the cost of buying them! My first step was to do just that, open the box, and check that all the part were there and accounted for. Next, I will actually read the entire build manual at least once before I start soldering. I also read that it is a good idea to test\ confirm\measure all resistors, caps and inductors before soldering them on the board. I actually have a handheld meter that will do this....now if only I could find it.....I guess I will have to clean my shop, that seems to be when I find most stuff!

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Onward and forward - Here you can see all the SMT parts are already installed!!! All locations are labeled and the holes for the toroids are actually enlarged to make them easier to solder.



(Update Jan 18, 2023) Turns out, I lied about the 1 Gig Pi 4 being usable. With with only 1 Gb of ram, displaying the PDF manual for the QMX is too much for the PI. It bogs down and takes too much time to render the pages. It works but is a bit slow....OK it's a lot slow! Go for at least 2 Gb on the Pi 4.

What else is going on in the shack and on the workbench?

Well, they had a great sale on 3D printers at Micro Center and I ended up buying a second filament printer with a larger build plate so I can print bigger objects or lots more small objects at the same time.

I even figured out how to print my own model airplane tires using a plastic called TPU. So instead of buying a set of lightweight tires. (About \$15 from the hobby shop) I can print my own for about \$1.25!

The Q-Tee is complete and ready to fly. So I am starting on a classic sport pattern plane that I have reduced by about 45%. The original full sized plane was called the Dirty Birdie and was very popular in the 1970's. It took a .60 cubic inch engine. This small version is\was called a Baby Birdie and was designed for a .049 to .15 engine. I'm going to use a 200-250 watt brush-less motor that should deliver the same performance as the .15 engine maybe be a a bit more? Pics coming in later issues of the Ground Wave. Alas, till no super deals on the Xiegu x6100, nor is their new radio on the marker as of yet. I'm still waiting for the extra crappy weather to hit so I can finally get back to Morse Code Practice and hunting CW POTA activations.

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Here is the completed Q-Tee trainer plane. The tires and hubs and motor mount were all printed on the 3D printer. Radio has been installed and it's ready to go. With the winter we are currently having, I may even get it out this winter!! You can see a bit of the new project (Baby Birdie) as the Q Tee is sitting on the plans when I took the pic.



I'm pretty excited, I received a Pi 5 and a bunch of different filament for my B-day. Thankfully we now celebrate my B-Day separate from Christmas. My B-day and X-mas are 5 days apart which I might add sucks when you are a kid. My parents tended to combine X Mas and B-Day gifts to be given in a single day...and that was always X Mas. Anyone else out there suffer this "trauma" growing up? If so you have my sympathy. Alas I digress...Anyway I need to turn this in before Christmas, so hopefully I will have more to talk about in the next Ground Wave gift wise. I should even have actually started on the QMX by then.

Again do not be afraid to email me or call me if you want to talk about any of the stuff I write about. I'm always willing to chat. Maybe over coffee or a nice breakfast\lunch some where?

That's about it for now.

May your hearts be filled with joy from the holiday spirits.

May your signals be strong and your antennas have extra gain.

Merry Christmas and a Happy New Year!

73 Kevin Welna W5LNA

Club Wearables

Some folks have been asking about our Club Wearables. Many different items may be ordered at: <https://www.hamthreads.com/> It's the same website with a new owner. Dale spoke with Diane and she assured him they still have our logo in three sizes, hat/chest/back, so you can have it positioned on your favorite item wherever you like. You can shop on line, pick the clothing piece you want, list the logo, name and callsign and pay. Sit back and it comes to your house. If you have questions, give them a call 817.602.1834

St. Paul Radio Club Breakfast

Saturday January 20th, 2024 9:00 am

(Third Saturday of each month)



Denny's Restaurant
1664 University Ave. W.
One block West of Snelling Ave.
(Across from Ax Man)

What the heck is Winter Field Day by Pete Guldan KDØSQJ

There's this on-the-air event January 27th and 28th, 2024 called Winter Field Day. In a nutshell it's kinda like the regular Field Day only newer and cooler. It's newer because it started in 2007 and it's cooler because, well, it's in January. It starts at 1900 UTC so if I did the math right I should be able to load up my treasures from the auction and get to my shack in time to participate. It is NOT organized by the ARRL but instead is sponsored by the Winter Field Day Association. winterfieldday.org is the URL with all the rules/details. They have Home, Mobile, Indoor and Outdoor categories so to each his own. Working that outdoor station from a picnic table in Miami is quite different than from Maplewood. I think my shack will a comfortable 72 degrees. 73

BoD Meeting Minutes – by Art Thell, NØIWQ

**Saint Paul Radio Club
Hereinafter referred to as “SPRC”
Board Meeting Minutes
12-01-2023**

On 11/28/23, Don Kelly initiated an email discussion regarding cancelling the Board Meeting preceding the Holiday Party. He posted a motion to that effect.

This was seconded by Art and George.

Some discussion followed.

On 11/29, Dale called the question.

Motion passed and the Board meeting was cancelled.

Membership Meeting Minutes – by Art Thell, NØIWQ

Saint Paul Radio Club

Hereinafter referred to as “SPRC”

Member Meeting Minutes

12-01-2023

7:15 Call to order by Pres. Dale

38 Members present.

President call for other agenda items_____

Old Business:

Secretary’s Report.

Move by George to accept the Minutes as published in the GW.

Second by Ron W. Passed.

Treasurer’s Report,

General Fund: \$7325.86, Repeater Fund, \$1234.25, Education Fund: \$1460.38

Total Cash on hand: \$10,020.49.

So noted and filed.

Membership report, 114

Repeater Report, Dale:

Works. Some interference of the 2-M side. Appears to be grayline-related.

VE Report:

4 exams scheduled on 12/2

Auction:

Have some new volunteer helpers. Still need a few more.

Banquet: Jay reported that a speaker is set.

Club Breakfast: December 16 at 9:00 AM. (Normally Third Saturday)

Place: Denny’s at 1664 University Ave. Across from the AxMan.

Move to adjourn by Don. Seconded. Passed.

Adjourn: 7:44

Holiday Party of follow.

SPRC Contact Information

President	Maroushek, Dale NØPEY	n0pey@comcast.net	651-238-5720
Vice President	Welna, Kevin W5LNA	kwelna@gmail.com	651-354-5515
Past President	Bierbaum, Ralph NØAWN	rwbierbaum@comcast.net	612-201-9510
Treasurer	Power, George KØGCP	georgecpower@gmail.com	651-233-3215
Secretary	Thell, Art NØIWQ	thellaj@comcast.net	651-492-0254
Member At-Large	Kelly, Don WA6ZMT	dk@donkelly.biz	651-276-4838
Member At-Large	Walsh, Bob WCØJ	brw.fsc@gmail.com	612-201-0818
Ground Wave Editor	Meyer, Daniel NØKFB	dan@meyer-family.net	763-238-8239

SPRC Calendar

- Fri Jan 5 6PM SPRC Board meeting, Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School. *
- Fri Jan 5 7PM Socializing followed by 7:30 PM SPRC Membership meeting. Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School.
- Sat Jan 6 9:30 AM Amateur Radio testing administered by Saint Paul Radio Club volunteer examiner team. Galilee Lutheran Church, 145 N McCarrons Blvd, Roseville, MN. Reservations required; Contact Ron Lundeen, KØKWN, Telephone 320-321-2744 or e-mail Ronald@lundeen.net
- Sat Jan 20 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling.
- Sat Jan 27 8:30 AM – Noonish. SPRC Auction. Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School. *
- Fri Feb 2 6PM SPRC Board meeting, Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School. *
- Fri Feb 2 7PM Socializing followed by 7:30 PM SPRC Membership meeting. Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School.
- Sat Feb 3 9:30 AM Amateur Radio testing administered by Saint Paul Radio Club volunteer examiner team. Galilee Lutheran Church, 145 N McCarrons Blvd, Roseville, MN. Reservations required; Contact Ron Lundeen, KØKWN, Telephone 320-321-2744 or e-mail Ronald@lundeen.net
- Sat Feb 17 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling.
- Sat Feb 17 9AM-1PM St. Cloud ARC Cabin Fever Reliever Hamfest 2024. St. Cloud Armory, 1710 Veteran's Drive, St. Cloud, MN 56303

* Depending on business to be considered, Board Meetings are sometimes held electronically. Check with a Board member beforehand to confirm a meeting.

Zoom Meeting Information

Simply click the link below (or copy and paste link into your browser if that doesn't work) or for audio-only call in from any phone; dial 507-473-4847 and follow the prompts.

If you are not familiar with Zoom and would like to arrange to practice, text Don at (651) 276-4838 or email dk@donkelly.biz.

SPRC Monthly Meeting

Time: January 5, 2024 06:00 PM Central Time (US and Canada)

If you would like to join either the Board of Directors meeting or the membership meeting via Zoom, please contact Don Kelly at dk@donkelly.biz by Thursday November 30th.

To Join the Zoom Meeting use **Meeting ID: 651 842 1000** and **Passcode: 6512764838**

Or this link:

<https://us02web.zoom.us/j/6518421000?pwd=djluU3dha0FBN1hERIRoUVA0RVNUQT09>

Or

<https://tinyurl.com/ys4efevx>

One-tap mobile:

+13462487799,,6518421000#,,,,*6512764838# US

+12532050468,,6518421000#,,,,*6512764838# US

For audio-only, dial 507-473-4847

To find other dial-in numbers, see: <https://us02web.zoom.us/u/kuWkJhGiz>