



St. Paul Radio Club **Ground Wave**

Dan Meyer, NØKFB, Editor Dale Maroushek, NØPEY, Publisher http://www.stpaulradioclub.org/

KØAGF

Club Repeaters: 145.310 MHz, 442.450 MHz Both use a 114.8 Hz tone

PO Box 9375 North St. Paul, MN 55109

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 February 2024 - Volume 84, Issue 02

NEXT MEETING: FRIDAY February 5nd, 2024

6:00 PM Board Meeting (all are welcome to attend and observe)

7:00 PM Membership meeting, refreshments and socializing

7:30 PM Membership Meeting Followed by Program

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; 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.

Our February program will be presented by Don Kelly, WA6ZMT, who will join us by Zoom to talk about his week at Quartzfest, the biggest ham gathering in the Southwest. Don, first licensed in 1962, has been a member of SPRC since 2005 when he moved to Saint Paul. A California native, he moved to Minnesota in 1972 and finally tired of winters here about ten years ago. Quartzsite, Arizona, is one of his usual winter stops.

St. Paul Radio Club Auction History By Dale Maroushek, NOPEY

This is a test drive for the article we intend to send to the ARRL for a QST article. If you see errors or have additional information that I may be able to fit in, please send it to me. This is far from finished and everyone is invited to help.

A long long time ago, in a meeting room somewhere in St. Paul, MN, the exact location forgotten for now, a Ham Radio Auction was held to raise money for the Club treasury. Our oldest active members remember this event in the 1950's and 1960's. As with any Club home, the venues changed over the years from one free place to another. The Auction became an annual January event. Members and others brought in gear to sell and bidders battled it out for the best deals or just collected junk boxes full of treasures to filter though later.

My first auction introduction was in 1991, just months after the Ham Radio Hobby hook had been set and the license obtained. I have been to auctions of many kinds over the years, and this one was in today's terms was "Outside the Box". Although the auctioneers were very knowledgeable and could describe the gear they were selling, they also added the beginnings of an improvisational comedy show with it. Not to be out done or belittled, the bidders quipped back with equally barbed comments. The bidding wars turned into verbal sporting events that drew everyone ones attention! In the Ham Club world, we now call that Fellowship.

The auction years flow by, with the auctioneers, attendees and rules changing. The Club membership has dropped from its prime 250 mark slowly down to our current 120 mark. Why, because other clubs with better offers or location started up and our members were facing transfers to other areas, or just getting to old to attend. We still have fun and make some money, but as our membership decreases, so does our leadership base.

In my years with the Club, we held our meetings on the first Friday of the month, unless there was a Holiday conflict, it moved to the second Friday. The meetings went from the Hamline Methodist Church to the St. Paul Vocational School to the Red Cross Building, to the University of St. Thomas, and now at Cretin Durham Hall High School. Each location had stairs to contend with and difficult unloading space. A proposal to the Board to make some rules changes, improve our logging software, move the date to the last Saturday of January and find a user friendly location with no stairs was approved. This also gave the bidders a month to pay off Christmas bills, so they had fresh dollars to spend at the Auction!

In January 2011 and 2012, we moved into the North St. Paul Community Center. That closed and became a school. Since 2013 our new home was the Our Lady of Guadalupe Catholic Church. That became unavailable, so we moved to the Roseville Lutheran Church, and currently at Cretin Durham Hall High School. Hopefully we will be able to stay there for a while. But with the Covid virus and no close contact allowed, we were looking for on line options.

The main reason to have the auction originally was to make money for the Club. During the late 1990's and into 2000, the treasury was close to rock bottom. By making some operational changes and the generosity of the membership a few years later the Club had a happy bank account again. But that is another story for another time.

Somewhere in those years, a motion from the membership was made, discussed and passed, that the net profits from the auction be donated to the ARRL Spectrum Defense Fund. So now every year, the ARRL gets a check from the Club to help protect our air waves.

Hope you can make it to the auction and have a fun and successful day!

Dale Maroushek, NOPEY

Below: A few of the 'boat anchors' for sale and a 2 meter antenna

Right: A few of the attendees inspecting gear before the auction begins.





Both photos by Dawn Holmberg WX0Z

Dale's Details by Dale Maroushek NØPEY

Scuffing through files while working on this year's Auction, I stumbled across this little gem from 2016. It hasn't made it to QST yet, but it may someday, and you could then say you had some input to it. If you have an antidote, send it to me for possible inclusion. Since the timing is right, we can work this into a nice Detail column for Feb 2024. 2024 and February already too, hard to believe. WHERE is the snow? Record 90 inches last year and zilch this year so far. Great time to move the auction outside and make it a tailgater? Sure would save labor costs.

For starters, let's start with a question. Which is more difficult, the day of the Auction or the days/weeks/months planning the Auction? Easy answer you think, the planning! WRONG

The planning and coordination of each small part of the event is like misquote stings, one or two at a time over 120 to 90 days prior to the event. All I need to do in make sure I have the correct line of bites in the correct rows on the day.

Meanwhile, on Auction day I have to quickly and fairly manage the wills, whys and wherefores of the 80 to 100 Hams that crash upon me for 5 hours of a usually beautiful Sat morning! This must be done keeping in mind that actions today will reflect on the Club and next year's Auction. In simple terms, I try to keep everyone happy. Not an easy task sometimes.

So let's start this up, a stem to stern review of what it take to present this Auction. Preparations for the 2025 Auction begins at 1300 on January 27, 2024, when the auction ended. Thanks to the availability of CDH and the monstrous help of Bro. Bob Walsh, we have the facility which we feel is perfect for the event. We have some items left over for next year that get stored in the basement of the next building along with any other equipment we maintain for the Auction. (Hint#1, we should probably label this stuff up better so it in not confused with the other stuff down there.) The extra cardboard is put in the recycle bin, trash is out too. Electronic recycling is scooted away by another willing member. Good night Auction.

Spring, summer and fall, Hams have other outlets for their gear at Hamfests around the area. But we get calls from people handling gear and estates of SK's or anyone else they are helping. This year we confirmed the three rules for Estates, Please read and use them. We may get other donations, some large Estates, and some collections as the year progresses. We do our best to handle them with the Board members as needed. (Hint #2, more help in this area is needed).

SPRC meeting resume in September and that is when I start gentle recruiting of helpers for the next auction. Experienced people are confirmed and urged to their next niche job. Slowly and carefully, month by month of meetings, I work on getting volunteers to commit to be available for the auction.

Advertising: Return on comparable investment? Early on, when we had only a couple hundred items, I was pushed by others, to send out mailings and other costly ways to get the word out about the auction. I never bought the idea of mailings and the cost involved, would greatly increase our attendance. Multiple emails, local on the air net announcements and word of mouth seems to work for us.

By the January meeting, I usually have the auctioneers, computer network guys, sound guy, money man and refreshments confirmed and ready to go. The volunteer support team that does all the grunt work the Friday night before was up to 17 helpers this year. We were all set up in three hours, but note that means 34 man hours of work! Saturday happens and it's over. Now you know the rest of the story.

nember, we are in the holy presence of God. Let us love God and the dear neighbor without distinction

Dale Maroushek, NOPEY

Right: The assembled attendees bid on a power supply



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

Winter is in Full Spring, As I begin this months ground wave article, its 6 degrees Fahrenheit and the temps have been dropping below zero at night. So it is the perfect time to stay inside and play with my toys.

OK lets start with Ham Radio:

I've made a few contacts (POTA) via CW\Morse Code. I'm pretty happy with that. My speed is still lacking but maybe getting a bit better? The latest build project (QRP-Labs QMX) has stopped and I am switching to a different build project. More on this later.

I am a bit frustrated as I have been intermittently unable to get into the St. Paul Radio Club's (145.310) VHF repeater. Usually in the evening and especially on Wednesday. That is why you have not heard my dulcet tones during the Net.

It maybe time for a better VHF\UHF base antenna.

OK time for the QMX saga:

In short I ruined the board. How?, you might ask. Well it was a combination of a couple things.

- 1. A lack of skill in soldering.
- 2. The solder itself
- 3. Not recognizing the first two.

Now, to make a long story even longer, I started assembling the board by installing the through hole capacitors first, just like the directions said. When soldering, I noticed that the solder was not really flowing like it should and some of my joints ended up being cold soldered. OK this happens, no problem so I reheated the joints and it still did not seem to flow like it should but the joints tested good. So I kept going with the capacitors and the same issue occurred, So turned up the heat on my soldering iron to 850. Yea that should have been an indication that there was an issue but see 1-3 above! HI HI

Anyway, In the process of trying to get the solder to flow and work, I ended up bridging a few of the capacitors to a few of the surface mount components. Then proceeded to either melt off\remove the surface mount components trying to get rid of the solder bridges. I tried a solder sucker and solder wick, but neither was able to pull off the bad solder. Needless to say, there is no way on god's green earth that I could\can solder\ replace surface mount parts so

Here is what I learned from the experience:

- 1. I need a lot more practice soldering, especially if the parts are closely packed together.
- 2. NEVER use cheap solder (I have now ordered a 1lb spool of Kester 60\40 lead solder thanks Amazon!
- 3. If it ain't right or working as expected, STOP and figure out the issue, don't "soldier" on!!

I will try and contact QRP Labs and see if I can get a replacement board and some of the components (Mostly capacitors) for a reduced price....I will report on whether or not I am successful.

Whats next? Well, I pulled out one of my other kits (QCX 20 Meter Kit). The PC board is twice the size and the solder pads are further apart! I think I should have started here instead of the QMX. Again live and learn.

In the mean time, I was able to design and order a set of boards for a low power digital power meter for HF QRP radios. The circuit design was in a book I have mentions before (<u>Microcontroller Projects for Ham Radio</u> by Jack Purdum) Its a great book a with lots of circuits you can build. Plus the software\firmware is already written and down loadable from the Groups.io website. If you go to this Group

(https://groups.io/g/SoftwareControlledHamRadio or http://tinyurl.com/bdzhy5zn) and ask a question, Jack will answer you! Back to the project; it took about 2 hours to layout and order the circuit board(s). They are coming from China and should be here in about a week. The boards cost \$2 each to have made so I ordered 5 of them and alas \$18 to ship from China. Really the way to do this is to work up a number of different boards and order them all at one time as it basically costs the same to ship 5 boards as it does 20. Another lesson learned? Once the boards get here I will add their construction from laying out the boards with their free software to building the device to the next news letter.

Other Ham stuff:

The Raspberry PI shack computer is working great. No real latency when running FT8 or viewing PDF documents. It really is a neat little device. The shack is staying nice and warm during this latest cold snap which means I can stay in here all day if need be. I keep it at 70-71 degrees when I am in the shack. I refuse to be cold in my own house!

I actually got up the nerve and updated the firmware on my Yaesu FTDX 101D. It was quite easy and truly a non event to do this. Although I am not sure as I see any difference in the radios operation or displays, I am still glad to have everything up to date in the radio. Also, A friend of mine Paul (KE0QXV) found a great you tube channel that walks you through setting and adjusting the 101D for better audio both in coming and outgoing! Watching the video and making the changes he suggests is also on my list of stuff to accomplish this winter.

By the time you get this, the club auction will have passed. I do hope you attended and maybe added a toy or two your shack. I'm of the opinion that you should never reduce your toy count, only alter what it is composed of. If you sell something you need to replace it with something else, that's the rule and a mighty fine one at that. I do plan on attending and looking for a better VHF\UHF antenna as well as ???!!!

Other Stuff:

While not a new years resolution, (I refuse to to make them.) I am trying to get out more and become a bit more active in my retirement. To that end, I am trying to go to at least 2 indoor pistol shooting events each month and attend more club meetings\ breakfasts both Ham and RC plane related. This summer I am hoping to get back out and do a little fly fishing for trout and skeet shooting as well. All this requires joining various groups and clubs. (Its killing my hobby budget!!!) Fortunately my wife appreciates that I am not under foot all the time so she is all for my forays into the world. I think her exact words were "Get the hell out of here!!" HI HI.

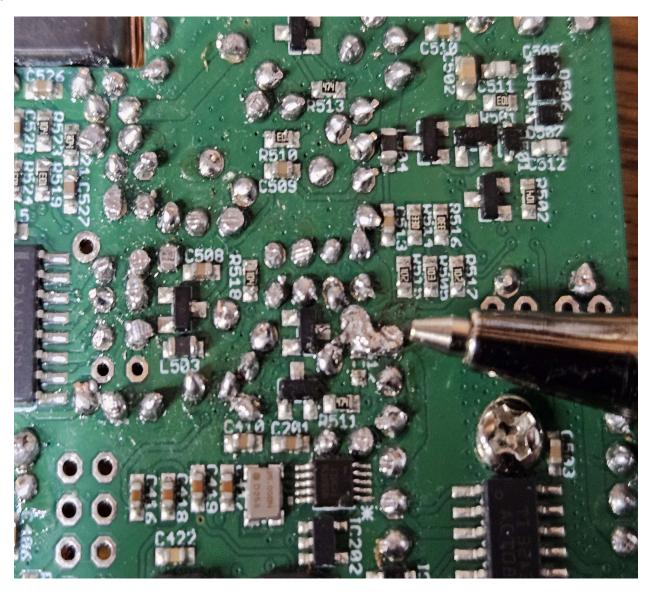
The laser and the 3D printers have been running quite a bit the last few weeks, I have been cutting glider parts for a couple of the RC Glider club members and myself.

I do have a new wild hare up my butt! After talking to a few of the glider club members, it came about that it would be nice to have a smaller (36" to 48" wing span) glider with swap-able wings (Different shapes, airfoils, ailerons, flaps etc.) So in my "spare time" I have been designing, printing and refining a pod and boom arrangement for a glider with a movable\removable pylon mount for the wings. The trick here is to make it light enough to ride a thermal but strong enough to face the abuse of slope soaring and rough landings. Plus it needs to use readily available inexpensive components like a carbon fiber arrow shaft as the fuselage. Like everything else, there are trade offs and "happily" obstacles that need to be overcome. It's all good!

Actually thinking about it, I think I have yet a second wild hare! Due to my hobby ADHD, I am playing with the idea of starting a new net on one of the repeaters, it will be a hobby net. I figure most Hams have at least 2-3 hobbies like trains, planes, photography etc. It might be fun to have a net where we can talk about these hobbies as well as ham radio. It would also give hobbyists a way to connect with others in these hobbies that they may otherwise never meet and allow those that do not want to join a club to still connect with others that share similar interests. This is still in the thought stage. What do yo think? Have any ideas or opinions?

Now a few pictures for your entertainment:

QMX Failure: You can see the glob of solder and just below it the missing SMT components.



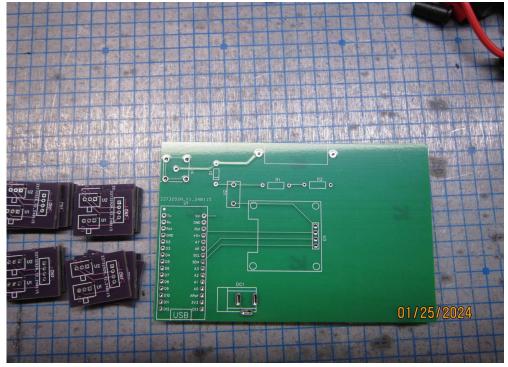
QCX in process of being built and a close up of board. It's very easy to build, but you need to follow the instructions and read ahead before you solder!:



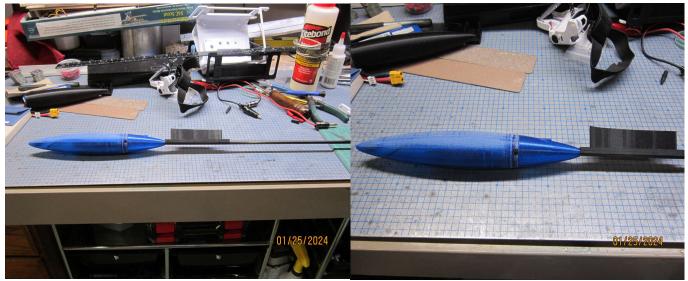


The circuit boards came from China. I received them 1 week for the order date. They look great!!

The green boards are for the power meter, the purple boards are for splitting servos in RC planes.



Here are some pics of the pod and boom glider I am designing: This is the pod and wing pylon. The black curved thing behind the pod is the Pylon. This will be glued to the wing and is detachable from the boom so you can switch wings to accommodate different flying conditions in the field.



Close up of the pod and servos:



(continued on next page)

Finally, here is the enclosure I printed for the QCX radio: Notice one of the handles broke during printing. It is no big deal as they were quite flimsy. I am planning on cutting them off of the print and adding much stronger guards at a later date.



That's about it for now.

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

73 Kevin Welna W5LNA

Ham Radio Test Session News by VE Coordinator Ron Lundeen KOKWN

The monthly test sessions have been going quite well and increasing in size from two in December to eight in February. We need one examiner to process the paperwork, three to score exams and always three examiners in each room. With larger groups of test-takers an increased number of examiners is required.

If you can help with ham radio exams, or would like to take an exam, please contact Volunteer Exam coordinator Ronald Lundeen at ronald@lundeen.net or 320-321-2744

Examiners are not paid for any work or expenses. No one receives any fees, wages, mileage nor any other benefit as a volunteer examiner.

Extra Extra Read all about it! SPRC Training update, by Pete Guldan KDØSQJ

The current question pool for the Extra license is valid through June 30th 2024. The next question pool that takes effect July 1st was reported to have many changes. If you have ever wanted to upgrade to Extra you might want to do so under the current pool. Good news, we are here to help you achieve the top license available. The SPRC is facilitating a study group to help you upgrade to Extra Class Amateur Radio Operator. The group will meet online over Zoom Sunday afternoons at 2:00 Central Time beginning February 11th. We will schedule eleven weeks one per chapter if they are needed. When we have done this before we haven't needed all eleven because our students passed their test before the final scheduled time. The ARRL Extra Class License Manual (Twelfth Edition) will be used so you should get a copy. The club might have one you could borrow. For any of you that already have the Extra and you want to brush up on some of the topics you are also welcome to join us. The cost to join the study group is FREE but all the normal testing fees may be required when you take the test. To join the study group hit my email. kd0sqj@arrl.net

73 Pete

Save the Date! SPRC Banquet 2024.

Mark your calendars for the 2024 SPRC Banquet. We'll be returning to Jameson's on Saturday, April 20th, 2024. The setup and the great food options will be the same as last year. Our speaker will be Pat Gearty, WØYES, who will tell us about his travels with his wife Dianne and how they activated more than six hundred parks in their RV. Registration information and more details will come in the March GW.

St. Paul Radio Club Breakfast

Saturday February 17th, 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)

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

BoD Meeting Minutes – by Art Thell, NØIWQ

Saint Paul Radio Club
Hereinafter referred to as "SPRC"
Board Meeting Minutes
01-05-2024

Board members present: (If * or E or R)

Dale Maroushek (Pres.)-NØPEY * Kevin Welna (V. Pres.)-W5LNA *

Art Thell (Secy.)-NØIWQ * George Power- (Treas.)-KØGCP *

Br. Bob Walsh-WCØJ * Don Kelly-WA6ZMT E

Ralph Bierbaum-(P. Pres.)-NØAWN *

Also present (If * or R):

Jay Maher-NJØM * Jeff Iverson-WB9DAN Dan Meyer-NØKFB *
Pete Guldan-KDØSQJ * John Crabtree-KCØG * Ben Otto-KEØRFZ

Janet Bierbaum KDØBZZ * Dawn Holmberg WXØZ

6:00 Pres. Dale called the meeting to order.

President: Call for added agenda items: Extra Class requested by Pete.

Old Business:

Secretary's Report:

Art moved to accept Minutes as published in the Ground Wave

Second: George Passed

Treasurer's report: George

General Fund: \$7064.23, Repeater Fund: \$1244.25, Education Fund: \$1470.38,

Total Cash on Hand: \$9778.86.

Upon post-meeting correction, the General Fund was adjusted -\$20 and the Repeater and Education Funds

were each adjusted +\$10 with the Total unchanged

So noted and filed: Secretary

Auction: Dale: Date January 27. Rules are finalized and presented in the GW.

Setup and auctioneers are in place. Can still use more help both with day-before & auction.

Advertising by George on ARES Net and by others on other nets.

CDH ARC Report: Br. Bob

Nothing new. Working on getting teachers involved.

Repeater Report: Dale:

System works.

Membership Report: Dale,

106 paid members.

Website report: (stpaulradioclub.org)

No progress from last month. Still in process.

VE Report:

Tested 4 candidates. All passed.

New Business:

Training Report: Pete

Noted that Extra Class question pool is changing in June.

Is requesting candidates for an Extra Class upgrade group to run in the spring.

Needs 6 candidates to be effective and recognizant of instructors' time.

Banquet: Tentative date April 20.

Jay & committee are working on details.

Presenter is arranged.

Club Breakfast: January 20 at 9:00 AM. (Normally third Saturday) Place—Denny's at 1664 University Ave. W.—Across from the AxMan

Dale reported excellent recent attendance of 12+.

Adjourn:

Move: George Second: Ralph Passed

6:55 Adjourn.

Membership Meeting Minutes - by Art Thell, NØIWQ

Saint Paul Radio Club Hereinafter referred to as "SPRC" Member Meeting Minutes 01-05-2024 7:30 pm

7:30 Call to order by Pres. Dale

27 Members present plus Remote.

Old Business:

Treasurer's report: George

General Fund: \$7064.23, Repeater Fund: \$1244.25, Education Fund: \$1470.38,

Total Cash on Hand: \$9778.86.

Upon post-meeting correction, the General Fund was adjusted -\$20 and the Repeater and Education Funds

were each adjusted +\$10 with the Total unchanged.

Auction: Dale:

Date: January 27. Have volunteers. Can use more on setup day and Auction day.

Membership report, Dale: 106 paid members.

Repeater Report, Dale: Works with some intermittent access reports.

Website: No progress since last month. Still in process

VE Report: Tested 4 candidates. All passed.

Training Report, Pete:

Has plans for an Extra Class session in spring. Encouraged recruitment.

Needs minimum of 6 candidates to be effective.

Open volunteer positions report:

Don Kelly: No report.

New Business:

Banquet. Target date is April 20. Jay & committee are working on it.

Club Breakfast: January 20 at 9:00 AM. (Normally Third Saturday)

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

Adjourn: 8:00 Program to 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 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
- Fri Mar 1 6PM SPRC Board meeting, Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School. *
- Fri Mar 1 7PM Socializing followed by 7:30 PM SPRC Membership meeting. Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School.
- Sat Mar 2 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 Mar 16 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling.
- Sat Mar 23 8AM-Noon Midwinter Madness Hamfest. Buffalo Civic Center. 1306 County Rd 134, Buffalo MN 55313 https://k0ltc.org/midwinter-madness/
- * 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 audioonly 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: February 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 February 1^{st.}

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