

 <p>www.arrl.org</p>	 <h2 style="text-align: center;">Saint Paul Radio Club</h2> <h1 style="text-align: center;">Ground Wave</h1> <p style="text-align: center;"><i>Dan Meyer, NØKFB, Editor</i> <i>Dale Maroushek, NØPEY, Publisher</i> http://www.stpaulradioclub.org/</p>	<h2 style="text-align: center;">KØAGF</h2> <p style="text-align: center;">Club Repeaters: 145.310 MHz, 442.450 MHz Both use a 114.8 Hz tone</p> <p style="text-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 June 2024

Volume 84, Issue 06

NEXT MEETING: Field Day Planning FRIDAY June 18th, 2024

6:00 – 8:00 PM The Field Day planning meeting will be Friday June 18th at Davanni's, 1905 Donegal Drive, Woodbury. Show up around 5:30 if you want to buy some food or beverage and we will start the meeting at 6PM. We need to be out of the room by 8.

Field Day by Pete Guldán KDØSQJ

It's the wonderful month of June and the start of the Summer radio season. Just a few weeks ago the 'white fungus' was falling from the sky. It was in Harvey ND and fortunately not here. Field Day we are guaranteed to get some weather. It might not be the frozen kind but I will bring my jacket just in-case. The Mining Amateur Radio Club and the St. Paul Radio Club are once again joining forces from Benson Airport 5860 US 61 N, White Bear Lake MN. I would like you to join us. If you are not able please get on the air from your own station. If you use your own make sure you fill in the club affiliation when you submit your results so we can get the points for the aggregate club scoring. Either way the first big goal is to get on the air. If you use logging software make sure to use the current version. N3FJP Field Day Contest Log version 6.6.8 is current.

The second big goal is to show off our ham radio hobby and service to some new people who might not understand what we do. Last year we were able to get a better count and we will do the meal ticket thing again. No cost but make sure you get one so we can count participants again. This year I would like to get triple digits and get over 100 total participants. Last year we got 65 so 100 might be a stretch but if everyone brings a friend, family member, or just someone you know who might like to check out this ham stuff we just might do it.

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Here's the schedule for Field Day and Club activities:

Saturday June 15th SPRC breakfast. 9AM Denny's 1664 University Ave W. St. Paul MN

Saturday June 15th Final site recon. 12 Noon at Benson Airport.

Tuesday June 18th Final planning meeting. 6-8PM Davanni's 1905 Donegal Dr Woodbury

Friday June 21st Setup begins 3PM Benson Airport.

Saturday June 22nd 1PM local time we start getting contacts.

Sunday June 23rd 1PM local time we shut it all down, grab a quick bite and pack it all up.

Davanni's is letting us use their meeting room at no charge but they would like it if we average \$10/person to cover their costs. Show up anyways if you don't want food or beverages because some of us will spend more than that.

Field Day is the biggest on the air event in North America (maybe the world). The way we operate our temporary club station in an area with access to the public requires a lot of help to set up and run. Your help is very much appreciated.

Thanks and 73.

Pete KDØSQJ

Dale's Details Part I - Field Day June 21-24, 2024 **by Dale Maroushek NØPEY**

So I got thinking about what to tell you about FD that I haven't already told you in years past. After all, I have been to every FD since 1991, be they MARC or SPRC or both since about 2010 when we joined forces. So I went back in the files and found some oldies but goodies that are edited and attached.

Our three biggest challenges are:

Public Safety, keeping the people out of the gear area.

Generator noise and locating them.

Fellowship area away from operating area.

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A few of us have discussed a plan where the stations (RV's) would be parked in a line along the weed line with say a 10 foot stripe left for the cable and tech gear alley, along with tower placement.

The FOOD hut would be set out near the taxiway, looking back at the RV line, with a tent city in front of it with tables and chairs. One large Genset behind the Food truck, and rest in or behind the tech line.

I am making sure that we have both MARC and SPRC 12 gallon tanked gensets up and running. Each one USED TO power two stations each, usually one with A/C and one without. Think CW and GOTA, Phone and VHF, Digi and the Scamp, or VHF & Phone or CW alone. Any combination that works well.

We should have pictures and diagrams at the meeting or before.

Did you order or get ARRL FD gear on line? Wear it Saturday at the meal for sure, and a Name hat/tag or stitching would be helpful. It is hard to remember faces that only show up yearly.

Thought you might like the recap of FD 2014, the year of the flood! Hey, it's FD, anything can happen!

See you at the planning meeting at Davanni's in Woodbury on June 18th.

Dale Maroushek, President again, NØPEY, 73...soon to be 75.

FD 2014 recap by Dale Maroushek NØPEY

Highlights: Weather forecast was dismal, rain and wind going in and out all three days. We caught the end of the shower moving northeast on Friday 3 p.m. Breezy but we got the towers and antenna s up. The kitchen was ready and we had a nice supper for the set up squad. Some relaxation time around the campfire in a can, with the discovery of a networking problem which was soon resolved when Dan arrived with just what we needed and Kirk made all the links work happily together! Ed worked overtime getting the CW keying operation perfected after many problems.

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A quiet night in the air conditioned RV followed by the Saturday Continental Breakfast. Continued the setup of VHF and fine tuning of everything we have encountered over the years. We served a great lunch of dog/brats/burgers for the gang although we had to wait for the slow cookers to get the hot dishes up to temp. Ham based and turkey based this year. George can get a burger flipper job anytime! Kudos to the Tartan park staff again, we were well taken care of and watched over. They really pull out all the stops to make our weekend as comfortable as they can. Huge gas grill, bunkers of ice delivered, continuous contact to see how we are doing, and donations of other goodies.

At 1300 hours, the generators were tanked up for 24 hour operation, (we use 12 gallon tanks). We were on the air, on the network, GOTA had customers and the snack stand was open. The weather was 15 MPH breezy with rain in the line of fire. Radar showed a long front line moving north/northeast at 30 mph. We watched and waited, hoping it would slide by us.

The SPRC picnic is called at 1800 Saturday night, so members were arriving ready for a fantastic Spaghetti and meat balls dinner. At 1730, everything was there, we were ready! OOPS!

Mother Nature dealt us a gully washer that spun round and round, heavy rain-light rain-no rain and back again for 5 hours. So what do we do? Well George keep grilling stuff, people kept coming in the rain; we moved the serving line under cover and continued! Pretty soon, the spaghetti was up and these dedicated ham enthusiasts, mostly wet and cold, were making the best of the situation. This is what Hams normally do! Sorry to say, but from my vantage point, we all looked like a school of Salmon swimming up steam!

After all the visiting died down, and the group thinned out, the ops went back to work and I cleared the picnic area of trash and raccoon bait, and packed myself into the RV just before the news at 10. The VHF and GOTA stations had been shut down before the storms and stayed that way until Sunday morning. Our phone and CW ops worked on through the night and I popped up to get the Sunday food parade going about 0800. The wind had done a good job of drying things out and the sun warmed us up nicely.

GOTA and VHF ops were back up and ran with good contacts until closing. Mike Siegelman, KØBUD, anchored the 9 to 11 local shift, worked with Don Kelly, WA6ZMT, as logger and did 250 contacts on SSB. Don has never been in an HF contest or logged before and did a fantastic job with Mike. Mike spent his after time and lunch visiting with other ops and old friends. He has expressed to us that he had fun and enjoyed working and talking with our group. He wants to do more contesting with us. Welcome back Mike!

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We cooked up the rest of the grill food, had turkey soup/stew hot dish today, and leftover Spaghetti/meat balls, potatoes salad etc. Started the slow shut down, clean up and pack up procedure after that. You know, when you bring a trailer full of stuff out to FD, you have to get it all back into the trailer too. Thanks to all that helped us load the many bins and equipment back on board. Luckily, the group consumed large quantities of food so the weight was much less.

Over the 11+ years with MARC and SPRC FD operation we have done what HAMS do, solve problems that occur and get on the AIR.

Editor's note: As you can see, we had a heckuva fun time in 2014 and we hope to see you this year at Field Day!

Making Field Day Happen by Dale Maroushek NØPEY

Here is a sample list of possible Chairs that will help make Field Day a success. Small jobs that make up the whole, find one you like and sign up for the fun.

FD CHAIR is Pete Gulden, KDØSQJ, high commander of all that happens and submits reports that follow. Pete would love to have a helper, and now has Doug, KØDLX to share the top spot. They call the shots so be sure you coordinate with them.

SITE CHAIR, we have a home thanks to Pete, at Benson Airport, White Bear Lake.

PUBLICITY CHAIR, writes and submits news articles to publications, White Bears News

PUBLIC OFFICIAL CHAIR, write invites to public officials to attend. A police officer usually stops to say hello.

WELCOME TENT/VISITOR CHAIR/ ARRL TABLE CHAIR, provides flyers and brochures for visitors, guides tours of site. GET YOUR MEAL TICKET HEAR! I think John Crabtree has this one covered again this year.

KBØEAT FOOD CHAIR, Friday afternoon to Sunday afternoon you will have food. Kevin, W5LNA, will be making this happen. Others should join in, because this is important.

GENERATOR/GAS JOCKEY, set them up and keep them running. (are three generators enough or are six needed???)

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SETUP Committee, the FD chair needs big helpers here. With the new layout and strategy, we have a plan that starts around 1500 Friday to dark, get as much setup as possible.

NETWORK AND COMPUTER HARDWARE/SOFTWARE SUPERINTENDENT, Dan and Ralph eat this and make it work, just fine tune the system and keep it running.

CW Chair, John Warinsky, K9NJ, will be setting up a schedule.

PHONE CHAIR, who else want a job? They will make that time slots fill up.

VHF/UHF CHAIR, Eric Westgard, NY9D, will run this show.

DIGITAL Chair, It's the popular mode these days and we will have one. Dawn and crew play with it all at Field Day.

GOTA CHAIR, Ron, KØRJW has this covered, but anyone can help. Probably Ron's last year with us, so someone needs to pick it up.

QRP/SOLAR CHAIR, who wants to do this, five contacts and you make 100 points?

SATELLITE CHAIR, anyone doing this, another easy 100 points??

TAKEDOWN CHAIR, the FD chair needs a bigger helper here. We usually start about 1100 Sunday to take down unused gear and stage it for pick up after shutdown. Usually we are out of the area by 1500.

SAFETY Chair, Don Kelly will make sure we have prepared for problems before they exist. *If you see something that appears to be dangerous please speak up immediately!!*

MEDICAL CHAIR, Nurse Jan will be around, with EMT Ralph.

FD Phone Station Chair

This position seems to be the hardest one to get a volunteer to cover. Perhaps it is not understood and looks like a hard job to do. With the history we have, and the many volunteers we usually get, it is not.

The job is simply to fill in a schedule with operators and/or loggers to cover the event. With laptop networked logging, the operator is usually able to keep up alone, some actually prefer it.

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Time UTC(CDT)	Operator	Logger
1800-1900 Saturday (1:00 p.m.)		
1900-2000(2:00 p.m.)		
2000-2100(3:00 p.m.)		
2100-2200(4:00 p.m.)		
2200-2300(5:00p.m.)		
2300-2400(6:00 p.m.)		
0000-0100 (7:00 p.m.)		
0100-0200(8:00 p.m.)		
0200-0300(9:00 p.m.)		
0300-0400(10:00 p.m.)		
0400-0500(11:00 p.m.)		
0500-0600 Sunday (12:00 a.m.)		
0600-0700(1:00 a.m.)		
0700-0800(2:00 a.m.)		
0800-0900(3:00 a.m.)		
0900-1000(4:00 a.m.)		
1000-1100(5:00 a.m.)		
1100-1200(6:00 a.m.)		
1200-1300(7:00 a.m.)		
1300-1400(8:00 a.m.)		
1400-1500(9:00 a.m.)		
1500-1600(10:00 a.m.)		
1600-1700(11:00 a.m.)		
1700-1800(12:00 p.m.)		

Step one: do we have a volunteer to join the chair people list and get this done?

Step two: Are the operators from 2012 willing and available for the same slots or different slot this year?

Step three: Please send all responses to me, and I will make the connections as they develop.

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History: years ago, both clubs had waiting lists for these positions. Yes, we were younger then and gas was cheaper. We do not require a high rate of contacts; we just want to offer you the opportunity to have fun, with good working equipment and comfortable positions.

I don't know of another event that you can attend and be entertained, feed, learn new things, see old friends and operate radio for an hour or two, FREE!

Dale, NØPEY

Below: Jay Maher and his wife cutting the dessert cake.



Right: Dale presenting the Ham of the Year award to Leon Dill W0COE.

Both photos by Dawn Holmberg



Dale's Details Part II and final 1971

by Dale Maroushek NØPEY

OK, so I drove out to Ft. Meade which is stuck right between Baltimore and D.C. Since I had wheels, I was popular to all the guys that didn't have a car. Rides to get to places on Post or out in the suburbs were always needed. One time three of the old friends wanted to see Tora Tora Tora so we jumped in the car and headed to the theater. About half way there, the engine temperature started going up. We pulled in a gas station and they took it in, replaced the thermostat, refilled the system and we were on our way and still made the movie! That would probably never happen in today's world.

The guy across the aisle from my bunk was into model plane building and worked on them constantly. Which meant the whole bunk bay would smell of wing dope glue about once a week. At least that covered up a whole bunch of other smells produce by 30 guys in a confined space. No air conditioning in the barracks yet, but the new Air Force billet down the row was fully air conditioned.

Being 1971, The Pentagon Papers had just come out, and everybody was reading it and having great discussions about it. Sometime, fights would even break out, but since we were mostly non athletic guys, they never lasted long. At least Nixon resigned, but I think that was the point where I started to distrust the political system. Do you think I was right?

Sweating out one hot summer Maryland barracks weekend with the other nerds, enjoying a good book and some wine, I needed to use the men's room. My locker open, a gallon of \$4 wine sitting there, I hit the main isle toward the doors. On the other side of the swinging door, looking back at me was the Officer of the Day, or OD. A quick turn into the next locker cube, and back to my locker to close it and wait for hell to rain me. But no! No OD! He had turned around and left the halls of 2nd floor. Could have been bad!

Now if you take the time to go to Google Maps and search for Fort Meade or NSA you will find a ton of parking lots and roofs. The view is vastly different then 1971. On the right of your screen, you should see four white double roof buildings in a row, with one more dark roof to the right again. First building was the Marines cause they had to have a "ready standby" platoon to rush across the parking lots and react to any problem at the complex. It was fun watching this event in practice. I'm surprised no one was ever hit by traffic. The Navy had the next building because they had more money than the Army, which was the next building. My home on second floor east. The little dark roof in the middle is the mess hall. The food was not too bad there, worth getting up for breakfast. Followed by the Air Force and the last new building was also the A/C Air Force, built while I was there.

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I reported in March 1971, E-5/Specialist 5, as a radio traffic analyst. Now normal procedure would be me checking in and some clerk finding a space for me. Ahh, but remember as JSPC (Joint Serviced Processing Center) was closing down in Okinawa, all those jobs needed to be picked up back at NSA. Since my former leadership had been moved prior to my relocation, I simply looked him up and called my former Section Officer, CWO II Jerry Schneeberger from Iowa, and he "requested" me to work for him again. We also had the same Sgt. Pickney from Iowa too. So the section now had three of the top analysts that had been working the same problem back on Oki. I basically left my desk in Oki and sat down in it a month later at NSA. The funny part is, the leadership was military, but the workers were mostly civilians.

My one boo boo at NSA was when a paper file was missing and I spoke loudly to everyone in the section "everybody please open your drawers and search for it". I meant desk drawers but I got a lot of looks up front, but no one called HR! Long story short, and it doesn't make any difference anymore, I wrote a report about some action in a Chinese army system that could indicate trouble for someone and my OIC took me up to the Lt Col. and his civilian counterpart, one stop before it was presented to President Nixon. A medal was requested but not approved, so Dale worked his ass off for nothing! Nothing new here.

Now don't take this wrong but NSA employed thousands of young men and ladies. This was years before email or text messages, everything was still typewritten on 6 ply paper, and hand delivered to the individual person. NSA was known by all GI's as the "puxxx Palace". So it was not unusual to want to carry a message or spend your ten minute breaks standing in the hall way, just looking.

Another fun game at NSA concerned your ID badge. It was entrusted to you and you were responsible for it no matter what. You had to wear it visible, usually clipped to your shirt or on a lanyard, which weren't as popular back then. Occasionally, you would take it off and set it on your desk or in a drawer for some reason. Then, absentmindedly when someone asked you to go to the snack bar or lunch, off you went without a badge, into the hall ways of NSA. Now those Marine guards I mentioned before were stationed at all the gates and doors, plus being randomly placed throughout the hallways, to watch for "intruders". If they spotted and stopped you without a badge, they would take you to the security office, where you had to call your supervisor and have them come down to verify that you where you and usually bring your badge with them. Both of you were then scolded by the security officer and sent on your way but with a record on file. Second time was worse. Never happened to me, but I had friends that got caught.

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Another milestone that was achieved by our government back then was beer in vending machines for lunch time and after 1500. Follow the logic here. At lunch and shift break, thousands of government employees of all departments would leave work to get food and liquor. Sure, Uncle Sam would collect the liquor Tax dollars, but now they could get the retail profit too! I recall that the vending technology was available so you had to scan your badge and the machine system would only allow you four beers per day. To add to this, in 1971 this area of Maryland /D.C. existed to entertain, feed and booze up any and all that worked or visited in the area. I think On sale liquors had to stop at 0200 hours but reopen at 0400 hours, while Liquor stores had to close at 0400 hours until 0600 hours. Just enough time to clean and restock them.

I told this one on the Friendly Net last week, but it is worth repeating. First The Andromeda Strain book came out, followed shortly by the movie. Well I got the book and spent a sleepless night reading it just waiting for a catastrophic result, but satisfied with a world saving outcome. So the movie comes out and we are at the theater early, get the popcorn and milk duds, find a set of seats and watch a very good representation of what Top Secret Cryptologic Code Word Need to Know access really means without saying it. About two thirds through the movie, we hear rain and thunder and then 'blink' it is dark and the emergency lights come on. We wait, but the power is out base wide, so we are given rain checks and have to come back later to see the exciting conclusion! The bad guy was defeated by the good guy and we all went home. To fill in the details, watch the movie on your favorite source. Follow up, the other book I was struck with back then was Lucifer's Hammer. Still available cheap and a very good read especially for preppers.

I had the opportunity to drive down to Petersburg, Virginia to visit another one of the guys from Okinawa. Spec. 6 Ashley Cooper. His dad was a retired Lt. Col. and Coop was working in a training job at a local big box store and had no time off except Sunday. So his Dad treated me to a trip to visit Colonial Williamsburg/Jamestown, where you walk through America of the 1700's. Coop and I had a long Southern Comfort evening and a longer slow Sunday brunch, with many looks from the Colonel.

Another weekend with some friends found us visiting Fort Detrick, MD. Known as our Chemical and Biological experimental station. Since the car had a military sticker on it, we just drove right in, did a motor tour of the place and drove back out. From what we saw, we figured that no funding had ever been denied for what was requested. They had everything a spa would have!

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As I indicated before, the army now had hundreds, perhaps thousands of GI's just sitting around various stateside bases doing nothing they were trained for. There was no mission, so GI's just played Army for 6 to 12 months before they left service. I was lucky enough to get an early discharge order, of 30 days, whoopee. Well, in the Army's way to doing things, I had to "process out", of both my working area and company area, but also the entire Post area. So I had about three weeks to visit every entity that had been at my disposal but never used while I was there. They handed you a list of these places and luckily a map of where they were, and you had to visit them and obtain a signature clearance and ink stamp from them. Some were very busy places you had to wait for help and others a lonely Sgt. watching over the field gear I never even picked up. The gym, the library, the rec center, the gun range, the Jag office, the Club entertainment system, the E-6 liquor store, and on and on. I lined up about 2 or 3 a day and proceeded to work through the list, being sure it was done by my exit date.

One was the reenlistment officer, who happened to be my CO. Now to explain, the army figured they had spent thousands to get you a top secret code word clearance, train you to do an important job, dress, house and feed you. So they dreamed up the RB, reenlistment bonus, and the VRB, variable reenlistment bonus, to try and keep you. I vaguely recall the math, but in 1971 dollars, since I had four year service already, and a pay grade of E-5, if I had reenlisted for six more years, they would have paid me over \$10,000 to stay in. That was about 4 cars in 1971, my new 1972 Dodge Charger was less than \$2000! Some of my buddies had already done that and since we had non-combat jobs, they felt fairly safe and looked forward to Army retirement after 20 years and then pick up a second career before getting old. Vietnam was closing down so aside from some of the other isolated places in paradise that we had back then, life would have been good. It was the thing to do back then. Anyway, I showed up for the appointment, he looked at me and I looked at him, we saluted and stood there. He mumbled something like "I don't suppose the army is your career choice is it?" I said no Sir. We saluted and that was that.

Attention foodie's, it is our turn. Out east, as Deb tells me, "shaved ham" is a normal thing. You take a block of what we call "chopped ham" and slice it paper thin and pile it on. The guys got wind of a place just over the RR tracks that served one "through the garden". Big Kaiser bun, lots of mayo, layered and stacked so you didn't even see the vegetation as the thin ham covered it and the dab of liquored cheese held it together, for a while. It was soon sliding all over and you finished it with a fork.

Pizza Hut was growing, but boring. Another Italian place claimed "thin" crust pizza. We tried it with heavily loaded pizza toppings. In fact you had to let the cheese cool enough to hold the top onto the bottom before you could pick it up. We would drive for miles to get to that place. It was easy to take it home, just roll it up.

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Maryland and crab feeds, some were private but you can find a public one if you look. Crabs molt, change from soft to hard and back to soft shell as the seasons pass and they grow. Both are cooked similarly via steam or boiling. With soft crab you take it and make a sandwich with toppings of your choice on fresh rolls from the Gods. Hard shell is the traditional "Boil" you see on TV. Onions, potatoes, corn on the cob and Andouille or other sausage is boiled and then poured onto your table covered with yesterday's sports issue for you to pick the crab out of its shells and munch on the veg in-between. Beer is on tap and the bar is open. I enjoyed many of them thanks to that lady and daughter introduction from that 1st Sgt. from Ft. Devens, 2 years ago.

In my first trip to NYC, I had tried a corned beef or pastrami sandwich and was not impressed. Second time around, and a more refined palette, I found them fantastic, and still do. Try the one up east across from Maplewood Mall. Just a store front and back door operation, but great quality for the dollars.

Long skipping hop, but Corn Beef itself was new to me until Basic training. Field chow at the rifle range one day was the funny red meat chunks with soft grease edges. Maybe the chef was Irish but it was prepared wonderfully and since others did not like it, there was plenty it get rid of, to us hungry GI's that did like it. I should really do a program on how to prepare your corned beef for St. Patty's day festivities and more.

So I processed out of the Army and headed home after having the car's front end rebuilt at the local Firestone tire shop. With my turned in Leave and travel pay, I had stocked up on cheap PX goodies, record albums and tennis racket that I remember. Headed west to stop in Indianapolis to visit one old buddy Louis Sheek. Enjoyed a slow sightseeing trip through West Virginia back roads before getting bored and back on the freeway. Up the mountain and back down to the valley, repeat until you are tired.

Louie was the 7 year college none graduate I met at Ft. Devens back in 1968. Father was a Dentist, Mom a caretaker. He was the one that left his Germany tour going back to his 2nd Vietnam tour cause of too much Army BS in Europe. Louie was special to me. We had many talks. He was 24, slightly overweight with bad feet, as seen in my picture book sitting on the laundry tube facet soaking his feet. I was 18, he was 24. He saw me as an equal. We worked together at various jobs in VN then split as he went to Germany, and I went to Oki. His mail said, he was the Charge of Quarters Runner, (translation, he was the guy that would have been giving messages or instructions to give to other people on foot if, and only if, the Charge of Quarters NCO was not able to do it in any other way.) It was like two A.M. and the OD came around and found him on the prescribed cot, without his boots on (bad feet), and issued him an Article 15 for not being ready for combat. Combat, in Germany, in 1970 a million other troops along the border, and Louie has to have his boots on? Back at the 175th RRC, appropriate dress was cover your genitals and do not worry about the rest. Louis got back and completed his tours. Sad to say, he was in an auto accident, left with brain damage, cared for by Mom, then she died, and he followed shortly thereafter. I did have a chance to visit him before he died, but it wasn't much, another young man lost to the world.

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My how the years go by and things change, sometimes beyond belief. Just as I get done telling you how many GI's were stacked up waiting to get out of the service, once the draft was lifted and the war winding down, the Army Reserve units were short of members. So they dreamed up the "Try One" reenlist recruitment program. In case I have to explain, as Gomer Pyle did, all young men between 18 and 35 are required by Federal law to fulfill 6 years of Military Service Fulfillment, It can be accommodated by any combination of Active Military, Active Reserve and/or Inactive reserve duty. I had served four years active duty, had two to go, and was still under inactive reserve, the next thing to Active. Not wanting to be recalled to Active service because of my Priority MOS, although doubtful, I enlisted into the local Ft. Snelling Reserve ASA unit for the one year option. I kept my rank and was given another basic clothing issue, worth \$300 so they say. So we met once a month and two week at Ft. Ripley in the summer. I was surprised at how the "downhill" operation of the active military that I knew and was not susceptible to change. The reserves were still working under command and control. Army first and job second, rather than the other way around. It wasn't bad locally, we only did formations stuff monthly and cleaned and checked gear. For a top secret analyst that meant I had a sharp pencil, but was considered just another body.

Early 1970's still riots and protests, so MPLS PD suspects the protest leaders were listening to police calls. So they gave us a mission, monitor their frequencies overnight and see what we find. They set up a Fake radio call to see how the bad guys reacted and it failed. We found that there is not enough radio traffic in one night to determine anything. Maybe our news reporters should consider that in today's world. The trip to Ripley was fun, if you like riding in a duce-and-a half to camp for 4 hours. So check in and we draw our bedding, get our billet and as much as I could find out was wait for morning. Morning brought a 0500 roll call and directions to the chow hall. We stumbled to the chow hall and lived through it. Mustered in formation at 0730 and once accounted for, dismissed to piss the day away until further notice. This was repeated until Friday when the truck left for Snelling. I went home, spent the weekend with that wife and road the truck back. Considered changing to a cook's position with another local Company, but came to my senses and left the world of military service with all six years accounted for.

So let us recap this mess. I approached enlistment in the Army because I had glasses and the Air Force/Navy wouldn't let me apply as a pilot. I didn't like the thought of being at sea for months in the Navy. Coast Guard was not an option since the waiting line was too long as was the National Guard and Army Reserves. Caught between a rock (the draft with unknown placement) and a hard place (Army placement without direction). Those wonderful manipulating recruiters that make it all sound so good with absolutely no truth behind the words.

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The goal was find an attainable military job that would hopefully keep you out of the combat zone. I figured radio electronics repair was a good bet and was willing to sign up for a three year stint to get that education. I had all the great test scores and the preliminary papers ready to do that. I could have gone from Basic training at Fort Wood to Fort Gordon GA or Fort Monmouth NJ for training, without the four months of casual status grunt work I had to do for the ASA.

The ASA recruiter mentions nothing about the lag to obtain your Security clearance thereby slowing your schooling date. Language students didn't have that lag, nor did the Diddy Bopers, as Morse code can be taught to anyone, anytime, anywhere. But how these talents were used to serve the ASA are still Top Secret BS.

Just enough of the page left for a quiet ending. It was not a great time in history, and we now know that it lead to major changes in the military as well as civilian jobs and lives. Problems continue to arise and changes are made to address them. Get used to it, that's how it works. The world is very close to a point right now that could leave it in a huge mess that will take years to rectify. Being friends is easier!

Dale Maroushek, NØPEY, President Saint Paul Radio Club. 73!

Below: Attendees at our annual banquet.



Right: Our guest speaker Pat Gearty W0YES Presenting his experience with Parks on the Air (POTA).



Both photos
by Dawn Holmberg

Ramblings from the VP's Work Bench

by Kevin Welna W5LNA

Oh my goodness, where to start! It been a busy month to say the least. I guess I will start with Hamvention. I had the pleasure of riding down to Xenia with Evelyn (WBØVHF). Let me first say that she is a most gracious hostess and a hell of a driver..... (More on that later). The accommodations were top notch in her RV. It was a comfortable and quiet inside while traveling since the engine is mounted in the rear. Additionally, with the dual slides it is also VERY spacious when parked and set up for the evening. The ride down was uneventful, alas the ride home was not. We were almost side swiped by some idiot trying to come around our inside. At another point, some moron was looking at their phone and almost ran into us while trying to merge onto the highway and finally, while driving through a rain storm, I'm pretty sure the cross wind (It had to have been a micro burst of straight line winds) threw us into a sideways drift on the highway that Evelyn was able to steer through and correct before any thing bad happened. Now she may claim that we were never sideways.....but I was there!!! Anyway, we went down early so we could spend a day at the Wright Patterson Air Force Museum and so I could attend the FDIM (Four Days In May) QRP convention that started on Thursday. We then wrapped up the trip with 3 days at Hamvention.

If you are an airplane nerd like me, it is worth spending a day at the museum. But, do be ready to walk a lot. I averaged 7000 steps everyday once we got to Xenia. The planes are beautiful and abundant representing aviation from before WW1 through present day military aviation. I believe we were there for 5-6 hours and we saw a good portion of the museum but certainly not all of it. It would take another day or two to "See it all" and it's free!

Now on to FDIM. What a great convention! Thursday was all seminars. These were delivered back to back in the same large convention room. With bathroom \ water breaks between each speaker and lunch was provided. The audio system was clear and loud enough to hear each speaker without being deafening. Awesome! The first evening was the vendor show where you could talk with the vendors and purchase new toys!!! Most at a slight discount. I was actually able to meet and converse with owners \ designers Han Summer (QRP Labs), Ashhar Farhan (uBitX / sBitX) and Jack Pardum (Author of Microcontrollers for Amateur Radio and designer of the T41 EP radio). To a person, they were quite friendly and actually seemed interested in what I was saying and asking. Ashhar Farhan gave out a "Pi Hat" for his sBitX radio... Free ! While its not a complete radio, it is the heart and soul of his design and he just asked that we try and build our own radio using his design and he is willing to work with any one that tries. Wow!

(continued on next page)

Hans (QRP Labs) brought like 500 kits of his new QMX+ (160 - 6 meter QRP CW only) radios and almost ran out by the end of the night.....I may have bought 2 myself.....HI HI

Jack Pardum talked about the design and building this newest radio. I think he said he brought 50 lbs of PC boards for his new complete radio and he did sell out.

It is interesting to note that after Thursday, all other FDIM events were held after 5PM so you could attend Hamvention during the day and then go to FDIM events in the evening. When I go back, (Next year?) I plan on spending a little less time at Hamvention and attend the evening events at FDIM one of which was a build-a-thon. Damn, am I going to be tired by the end of that road trip!

On to Hamvention! I believe there were 33,000 attendees, at least that is the number I heard. The first day it was a bit crowded in the buildings as everyone was trying to avoid the rain. But, by day two, the clouds parted, the sun came out and the crowds thinned out in the buildings and it was a much more pleasant experience. Even when crowded, it was not that bad. Even the old farts on scooters seemed to understand that they needed to make way for faster people.....usually.....While I never felt claustrophobic in the buildings, I was a bit overwhelmed at the amount of things to see, touch and feel and trying to remember where I saw something that I wanted to buy once I moved on and then decided to go back to get what ever it was. The fair food offered on the fairgrounds was good, plentiful and cheaper than at the MN state fair. (Mind you it was still a bit expensive.) There was ample seating out doors for eating and taking a rest from all the walking with a number of the tables sporting umbrellas to shade you from the sun. The other hams were all friendly and chatty and would draw you into a conversation when you sat at a table where you basically knew no one. It was all quite welcoming. I did see a few people from the St. Paul club while wandering which was nice and I was able to pick up some odd ball parts I needed to mount an antenna on the RV. I found a unique piece of bench equipment (PhaseDock - Workbench) that I have yet to use. But, I will report on it once it is assembled and tried. My one "big" purchase was a Vibroplex Iambic paddle that was 20% off on the last day Hamvention. It uses magnets instead of springs for returning the paddles. This is something I actually did want and so it came home with me. Lastly, I broke down and purchased a 60watt -12v folding solar panel and charge controller from Bioenno. Both were on sale. It was more of a spur of the moment\impulse purchase. (I did not go to Hamvention to save money!) I'm thinking this will be a really good addition to my Go Box\POTA set up. Of course afterwards while driving home, I thought maybe I should have purchased the 40 watt folding kit as it would have actually fit in my Go Box. I guess I will have to wait till they go on sale again and get one. (P.S. It was actually more expensive than the 60 watt.....go figure)

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As for the flea market, it was huge!! Alas I had no interest in the bulk of what was being sold, but I was able to pick up a high impedance Shure desk microphone for \$20 (I hope it works) to use on my Heath Kit SB401. I was looking for and I still am looking for a ElectroVoice 619 for this radio...anyone out there have one they no longer need? Call me!

All in all it was a great time. If you have never been to FIDM\Hamvention, GO!! If you are going and want to ride in comfort and style, ride with Evelyn! Before we left Evelyn stated that going down as a group in the RV decreases the cost numerically and increases the fun exponentially. This is true. I had a great time with it being just she and I. BUT, had we had a couple more on board it would have been even better. Everyone experiences different things and sees different things while there. Trading notes and stories at the end of each day would have been icing on the cake. When I go again (Next year!??) I will definitely ride down with Evelyn if there is an open spot. You should too. Its the only way to travel!!

Was there any down side to the trip\adventure? Just one minor annoyance. I found the pod casters running around with their selfie stick phone cameras a bit annoying especially when they would sort of bump you out of the way or interrupt a conversation you were having with a vendor. It only happened a couple of times to me and thankfully the "Citalopram" kicked in and no altercation was initiated ;-)

P.S. Thank you Evelyn for a great adventure!!

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Below: Jay Maher drawing tickets for the door prizes.



Right: The winner of the coveted 'Canned Ham' was the wife of Steve Scott, WA7HPK



Both photos by Dawn Holmberg, WX0Z

All right, on to the workbench!

Xiegu x6200 update:

Well its finally available (Well, sort of, you can pre-order it for \$800.....). Here is my dilemma; I bought a QRP Labs QMX+ that covers the same bands (160m – 6m) for \$125. Granted it is CW only and has no pan-adapter. But is the addition of voice\phone and a nifty looking water fall display and an ATU worth \$675? Well, I bought a manual QRP antenna tuner kit for \$12 off Amazon and it works great. I also bought an Automatic Tuner (ATU) kit (ATU-100) off of amazon for \$36. Due to the efficiencies of CW over Phone, I really do not see a need for voice communications when working QRP\ POTA. Besides, I really want to get better at Morse Code. Finally, While I have not found a kit or design for a standalone pan-adapter, when talking with both Hans Summers and Jack Pardum, they both said it would be quite doable and would be willing to make suggestions should I want to try.....While this is WAY out of my wheel house it might be a fun long term adventure to try. This coming fall? Additionally, Hans is working on upgrading the QMX+ software and radio to an all mode transceiver. With the intent that you will be able to upgrade any older existing QMX+ transceivers to all mode as well. That being said, I think the Xiegu x6100 and x6200 have now lost their luster and unless they go on sale for a lot less money and I mean a lot less. I think they are now relegated to the very bottom of my wild hare\gotta have list.

While at Hamvention, I ran across a vendor named Buddy Pole. They made the mistake of having either an older model or a newer model of their product that utilized a 3D printed octagonal box with 2 collapsible whips attached and pointing out a 45 degrees from vertical, plus they had the cover removed so I could see inside.....New Wild Hare!!!!!!! I am now in the process of 3D printing the same box and I will be trying to make my own Buddy Pole(ish) portable antenna! I am thinking the octagonal box with holes will cost a whopping \$1 to print and I think the entire thing could be built for around \$50 to \$75 complete. Including adding a 1:1 common mode balun good for up 100 watts. Anyone else interested in building one? Oh yea, combining two hobbies in one project. Does it get any better?

On the shooting front, I still have yet to make it out to the range for USPSA shooting events but I am hopeful to start once the rain stops... Same holds true with Skeet and Sporting Clays shooting.

My latest pod and boom glider project is almost complete. I have the aircraft balanced and 99% assembled with radio gear and control linkages installed. I just need to charge up the batteries, program the airplane into my radio and give it its maiden flight. I will try and get a short video of the maiden flight that I can hopefully add to my next months article.

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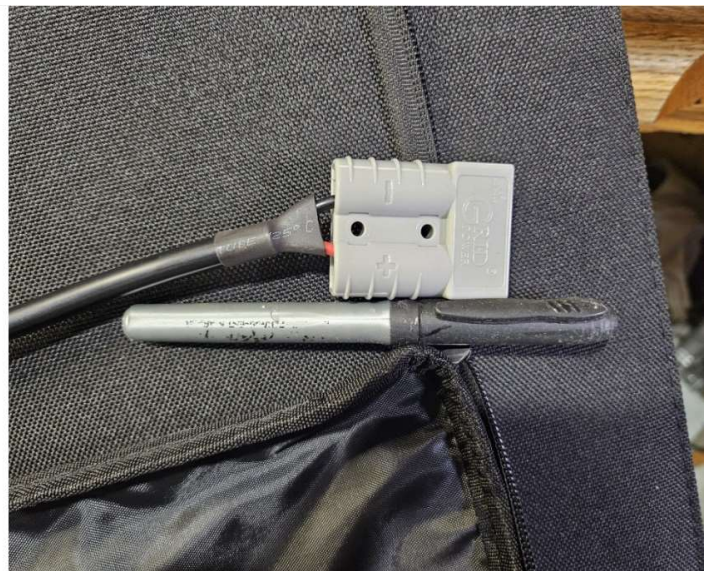
The Hobby ADHD Net still is doing well. Thank you Paul (KE0QXV) for running the net in my absence. We are still averaging about 10+ check-ins each week. Do stop in and say hi!

The memory keyer is still where I left it. I have not had time to ferret out the correct libraries so it can be programmed. Since it takes about 3 hours to print the Octal box for Buddy Pole(ish) antenna, I should have some down time between prints to get the memory keyer programmed up and running.

Same thing with my QMX (Not to be confused with the new QMX+ radios I just bought). So I guess its time for me to brush up on my programming skills and using the Arduino IDE not to mention my Morse Code skills!

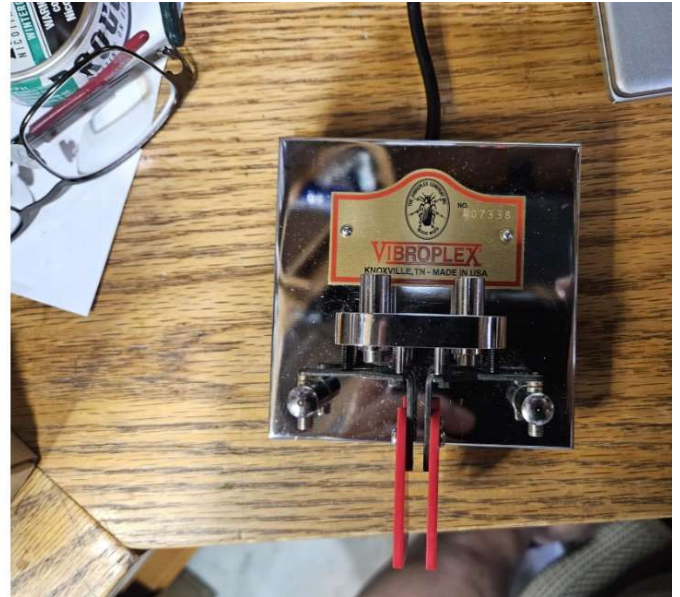
As usual I have included a few pictures for your amusement:

My new folding solar panel. Check out the battery connector, its huge!



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This is the Phase Dock Work Bench and my new paddle

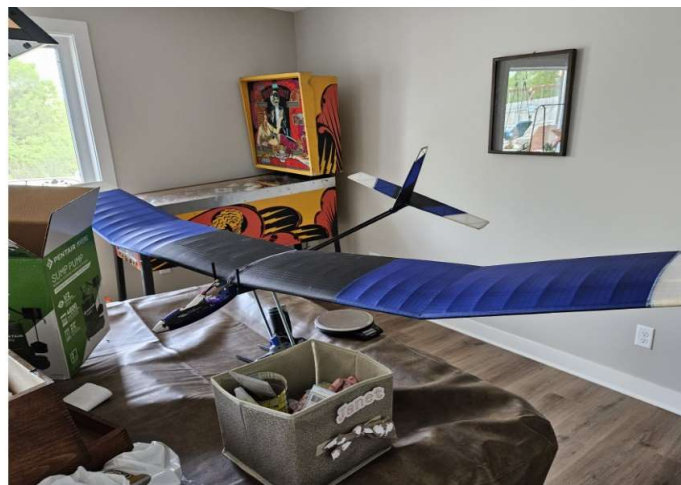


While standing in one spot I spun and took a couple pictures of the "Midway" area.



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Here is the glider on the CG finder. For a reference, the wings are a little over 6 ft tip to tip. Yes the surfaces are twisted. This is because they are not glued up yet. My system allows you to slide the parts (Pod, Wing and Tail back and forth along the booms to assist in achieving the correct (CG) Center of Gravity without using additional weight in either the nose or tail. Lighter flies better!



Well, that's about it for now, If you have any interest in any of things I talk about, let me know and I will see what I can do to help get you set up.

Got any pictures of your latest project or passion? Why not send in a couple pics and a few words so we can see what you are up to? Enquiring minds want to know!!

Remember to check in to the Hobby ADHD Net every Tuesday night at 8 pm on the 146.850 repeater!

Do consider going out to Hamvention, it is well worth the trip \ expense. Car pool with friends if possible as the hotels know its a big deal and charge accordingly....

That's about it for now.

May your signals be strong and your antennas have extra gain. 73

Kevin Welna W5LNA

Field Day 2024 Thoughts

by Scott NØAR

It's about that time of year when the Field Day plans are put to paper. Every year we often do the setup of the stations the same way. Maybe it's time to look at our routine and find a way to mix it up a bit. We are not about setting new goals for the most contacts made or the most stations on the air at once. If someone asked me I'd say it's more like a real nice camping weekend with great food, lots of shade and cold beverages. Oh and radios to make contacts too. Over the last year propagation has improved on the HF bands. If we don't get blasted by a CME I can see a weekend of easy operating with plenty of strong signals on all bands.

What if we treated our HF operation like a POTA (Parks on the Air) event. Set things up with basic antennas like you would use for a park activation. Simple wire antennas, dipoles, slopers, verticals. Something that isn't elaborate and could be duplicated in your back yard without much expense or effort. The portable towers would make excellent wire supports since our operating area is free of trees.

We have always used multi-element beams. The down side is they are only good in the direction they are pointed in. Calls often come from many different areas and directions. Being off the antennas main lobe means the signal is reduced. If you are not "riding the rotor control" you are sending out a signal that is less than what a broad beam wire would deliver. Field Day contact exchange is so quick and short you don't have the time to turn the antenna. Also having an antenna that doesn't require constant turning one less thing the operator has to do. So the yagi is not your friend in this type of operation.

Whats a good alternative? The simple sloper or dipole tilted down will deliver a broad signal with a minor null towards the backside. This reduction in the antenna pattern can be used to reduce interference between our SSB and CW stations. It also can be used to reduce power towards the north where there are few contacts that are made. The ARRL Handbook is good reference source or you might just want to watch a couple of YouTube videos that pretty much cover the sloper/dipole performance. The links are:

https://www.youtube.com/watch?v=Z7gD6_sHpVI and

<https://www.youtube.com/watch?v=tliSyzRgX6Y>

Let's take advantage of the improved band condition and lower our transmitter power. What if we dropped our signal at the other end by an S-unit. Instead of having an S-9 + 20 dB signal, we now have a S-9 + 14 dB one. Think of it as going from an S-7 signal to S-6. Is it going to matter to any contact we make? Nope. Well you've turned the power down from 100 watts to 25 watts. Normal band conditions will have fading that is much more than this power level change. Remember we have been operating with our antenna pointed in an unknown direction and doing fine. This change will also help with the stations overloading each other.

If the sun cooperates, the thunderstorms stay away, and the bugs don't team up I see a pretty good chance that it will be a great Field Day year! See you there and don't forget the sunscreen.

Public Service Events

By George Power KØGCP

If you have never participated in a public service event, please consider doing so. It helps to keep the participants and public safe, and for you it allows you to practice your amateur radio skills, have a lot of fun and you will meet many like-minded people. This is by no means an exhaustive list; some of the public service events in the area this year are listed below.

For more information on any of the activities please do a web search on the activity name or email georgecpower@gmail.com.

2024-06-22 FIELD DAY (setup 21, FD 22-23)

2024-06-26 Prairie Island Nuclear drill (Fed graded)

2024-07-06 Afton Trail Run (Rocksteady Running)

2024-07-13 MAGIC Tailgater (St. Paul)

2024-07-21 Tour of Saints ride (St. Joseph)

2024-07-22 MS-TRAM (22-26)

2024-07-27 Richfield Urban Wildland marathon

2024-08-03 Tour de Tonka (Orono)

2024-08-10 Gaylord Eggstravaganza

2024-08-23 Ojibwe Forests Rally (Park Rapids) (2324)

2024-09-?? Lake Elmo hamfest (K0IKV)

2024-09-15 River Falls Autumn Trek

2024-10-05 Northstar Radio Convention

2024-10-06 Twin Cities Marathon (Mpls)

2024-10-12 Belle Plaine half marathon (Don Burgess)

2024-12-07 Nemadji Forest Rally (Kerrick)

Ham Radio Test Session News

by VE Coordinator Ron Lundeen KØKWN

The big news is that all of the new Hams who passed in May just received their FCC licenses in early June! It appears that the ARRL is recovering.

We had 4 test takers on June 1st, three Techs and one new Extra. Everyone passed!

It's no secret that my Parkinson's is progressing and getting around is problematic. However, Steve Scott stepped up to the plate and will be taking over as the VE Liaison in July, 2024.

If you can help with exams, or would like to take an exam, please contact our new Volunteer Exam coordinator Steve Scott at pipemajor2@gmail.com or 651-503-7441.

Club Wearables

Many different items with the Saint Paul Radio Club logo may be ordered at: <https://www.hamthreads.com/> Dale spoke with the owner 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

Request for Assistance

By Richard Weil KWØU

I recently bought an entire portable station centered around a Yaesu-FT710. While it does work the radio could use some tweaking and a review of how the antenna and other components are set up. I am not sure it is being efficiently used. If anyone is familiar with modern transmitters and/or portable operations some advice would really be appreciated. Please let me know if I can bring the system to your QTH and set it up outside to show how it is operating. Contact at 651-210-5059 or email at docrhw@gmail.com

Thanks very much!
Richard KWØU

St. Paul Radio Club Breakfast

Saturday June 15th, 2024 9:00 am
Saturday July 20th, 2024 9:00 am
Saturday August 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)

BoD Meeting Minutes – by Art Thell, NØIWQ

Saint Paul Radio Club
Hereinafter referred to as “SPRC”
Board Meeting Minutes
05-03-2024

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

Dale Maroushek (Pres.)-NØPEY *

Art Thell (Secy.)-NØIWQ *

Br. Bob Walsh-WCØJ *

Ralph Bierbaum-(P. Pres.)-NØAWN *

Kevin Welna (V. Pres.)-W5LNA *

George Power- (Treas.)-KØGCP *

Don Kelly-WA6ZMT R

Also present (If *):

Jay Maher-NJØM *

Pete Guldán-KDØSQJ *

Janet Bierbaum KDØBZZ *

Andy Parent-KFØMJQ *

Jeff Iverson-WB9DAN *

John Crabtree-KCØG *

Dawn Holmberg KØWC *

Doug Lueck KØDLX *

Dan Meyer-NØKFB *

Ben Otto-KEØRFZ

Steven Scott-WA7HPK *

6:07 Pres. Dale called the meeting to order.

President: Call for added agenda items: _____

Old Business:

Secretary's Report:

Move to accept April Minutes as published in the Ground Wave:

Motion: Art Second: Kevin

Don noted the (6) in open positions should be (4). Adjustment applied.

Don noted the Field Day Co-chair should be changed to Asst. Chair. Adjustment applied

Passed

Treasurer's report: George

General Fund: \$5888.09, Repeater Fund: \$1001.61, Education Fund: \$1395.38

Total Cash on Hand: \$8285.08.

So noted and filed: Secretary

CDH ARC Report: Br. Bob

Waiting for staff response to request for WØCDH leadership.

Repeater Report: Dale:

Function is fine.

(continued on next page)

Membership Report: Dale,
131 paid members to date. Short of goal of 150

Website report: (stpaulradioclub.org)
Works well per W5LNA.
Unidentified report that it could use more information.

VE Report:
Dale is working on a possible volunteer.

Training Report: Pete
All (3) upgrade candidates in the class were successful.
Plus (1) other upgrade who tested.

New Business:

Pay Pal Account: George and Dale are working out the details of securing an account for SPRC.

I.D. Cards: Discussion centered on cost and type.
Discussion of types of cards were offered possibly logo, name, and callsign on both sides.
Comment was also made that this is not a security/access card.
Art moved to table the discussion. Seconded by Kevin. Approved.

Advertising Flags:
Pete is working on vertical "Ham Radio" flags, possibly (3), for SPRC events.
After discussion George offered the motion: Approval for SPRC to spend up to \$250 for (3) flags. Seconded by Art. Approved.

Club Breakfast: May 18 at 9:00 AM. (Normally third Saturday)
Place—Denny's at 1664 University Ave. W.—Across from the AxMan

Adjourn:
Move: Kevin Second: George Passed

6:52: Adjourn.

Membership Meeting Minutes – by Art Thell, NØIWQ

Saint Paul Radio Club
Hereinafter referred to as “SPRC”
Member Meeting Minutes
05-03-2024

7:30 Call to order by Pres. Dale

(37) Members present plus (7) Remote.

President call for other agenda items

Old Business:

Treasurer’s Report,

General Fund: \$5888.09, Repeater Fund: \$1001.61, Education Fund: \$1395.38

Total Cash on Hand: \$8285.08.

So noted and filed: Secretary

Membership report, Dale:

131 paid members. Short of goal of 150.

Repeater Report, Dale:

Ok.

VE Report:

Test Sched. Sat. 5/4

Training Report, Pete:

(4) Upgrades. (3) From the most recent class of (3).

Field Day:

Details in GW.

Election:

Pres. Dale requested nominations from the floor.

The (4) officers below affirmed their commitment to another term.

Move by John K0UVA to approve by acclamation. Second by Dawn K0WC. Passed.

President	Dale Maroushek
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V. President	Kevin Welna
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Secretary	Art Thell
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Treasurer	George Power
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New Business:

Other operating events: (Need not be Board-initiated)

Club Breakfast: Normally Third Saturday---May 18 at 9:00 AM.

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

Comment: Dale commented that these have been well attended. Service is good.

Followed by an interesting and very useful presentation of utilities underlying Windows 10 & 11 by Bob Parnell, NØKLC

Adjourn: 8:00

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	rbierbaum@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

Sat Jun 15 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling.

Tue Jun 18 Field Day Planning Meeting Davanni's Woodbury 6 -8 pm

Jun 22-23 Field Day Weekend, Benson Airport, White Bear Lake.

Sat Jul 13 Noon-3 pm Hams in the Park, Long Lake Park, New Brighton
<https://www.minnesotahamradio.com/hams-in-the-park/>

Sat Jul 20 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling.

Sat Aug 10 Noon-3 pm Hams in the Park, Long Lake Park, New Brighton
<https://www.minnesotahamradio.com/hams-in-the-park/>

Sat Aug 17 9AM SPRC Breakfast. Denny's, 1664 University Ave, west of Snelling

Fri Sep 6 6 PM SPRC Board meeting, Commons Meeting Room,
 John R. Albers Center, Cretin-Derham Hall High School. *

Fri Sep 6 7 PM Socializing followed by 7:30 PM SPRC Membership meeting.
 Commons Meeting Room, John R. Albers Center, Cretin-Derham Hall High School.

Sat Oct 5 North Star Radio Convention Brooklyn Park MN <http://mnconvention.org/>

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