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# St. Paul Radio Club Ground Wave

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## KØAGF

www.stpaulradioclub.org  
Club Repeater: 145.310 MHz  
PO Box 9375  
North St. Paul, MN 55109

## NEWS AND NOTES FOR MAY 2013 — Volume 73, Issue 5

### May MEMBERSHIP MEETING

May 3, 2013  
UST OSS LL18  
7:30 PM

7:00 PM Socializing  
PROGRAM

### History of Receivers Jeff Iverson, WB9DAN

Jeff's talk will cover the history of receivers from Marconi's coherer to the superheterodyne. He will then spend some time on the evolution of superheterodyne design and how it affects the specifications of today's receivers and transceivers.

Jeff has been licensed since 1969 and currently holds the Amateur Extra Class license. He has been a member of the St. Paul Radio Club for 26 years in two stretches, from 1974 - 1988 and 2001 - present. He also has two sons who are members of the club: Trent, KCØKQJ, and Joel, KDØNUW.



### SPRC Banquet 2013 by Jay Maher, NJØM

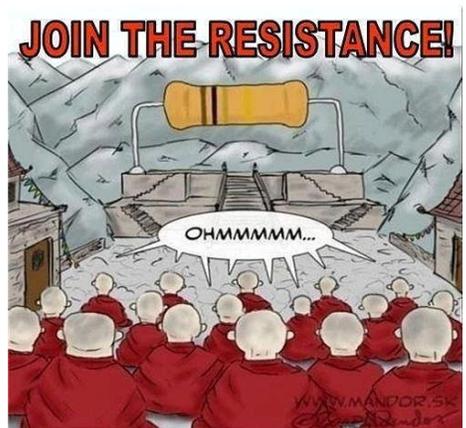
We had a great time again at the SPRC banquet Saturday, April 20<sup>th</sup>. The St. Thomas Catering staff is known for their excellent food and service and they did not disappoint. We had 47 people sign up for the event and I think everyone went home well fed and thoroughly entertained. Eric Frische gave a wonderful presentation on what it was like to start a company that brought an innovative solution to several underserved communications markets. At one point Eric referred to small towers as anything under 2000 feet. I guess you can say that when your repeater is on a balloon at 80,000 feet. Eric clearly enjoys his work and we really enjoyed hearing about it. Many thanks to Joe Clysdale, KDØJCE (Eric's uncle and our VP) for arrang-

ing the visit and presentation.

We finished the night with door prizes and recognition of a member. The Ham of the Year Award went to a very deserving Orcy Lyle, WØQT.



Orcy has held several club offices and has organized more club activities than I can remember. Orcy has also done sterling work as the chair of the Circuit Builders despite being unable to remember the correct name for the group (Circuit Breakers is the Orcy translation). Congratulations Orcy!



 Support the League  
[www.arrl.org/join](http://www.arrl.org/join)

The OSS building is located on the University of St. Thomas (UST) South Campus.

From I-94, take Cretin Ave south about a mile to Grand Ave. Turn right into the UST South Campus. Park in the ramp on your left or the surface lot ahead to the right. In general, on-campus parking re-

strictions are not enforced after 6:00 p.m. on Fridays, but do not park in spots with parking meters unless paying or displaying a handicapped placard.

Enter either building north of the parking ramp and take the elevator or stairs to the lower level. LL18 is at the north end of the main hallway.

For detailed maps, see [www.stthomas.edu/campusmaps](http://www.stthomas.edu/campusmaps).

OSS: O'Shaughnessy Science Hall  
Contact Kim Schumann in Disability Services at 651-962-6315 or [kjschumann@stthomas.edu](mailto:kjschumann@stthomas.edu) for any accessibility requests.

# Presidential Ponderings

## THINGS PAST

At the April meeting, Jay Maher (NJØM) presented several videos from our ARRL Section Coordinator Skip Jackson (KSØJ).

## THINGS PRESENT

The Technician Class through the St. Paul Schools Community Education program is done. It looks like we ushered 12 new hams through the licensing process, and even gained a few new members for the club. Kudos to the instructors: Allan Klein, Ted Kinnear, Mert Nellis, John Faughn, Jeff Iverson, and Ralph Bierbaum.

Welcome to the new members. For our newest members (and a few older ones), a reminder that we have club members who have volunteered to assist other members with technical problems. Your new licenses are really tickets to learning more about radios, both the theory and the practical operations. If you have questions, bring them up at the meetings, or send an email to your club officers—we will try to connect you with someone who can help you.

Minnesota Winter--I will admit to getting tired of our endless wait for Spring weather. Hopefully, by the time this comment is published, suitable Spring weather will have arrived. I have hopes of putting an antenna up on my roof, but the thought of climbing a snow-covered slanted surface brings out a strong sense of self-preservation. The antenna can wait a bit.

While driving family to Illinois recently, the 2-meter FM radio in the car has proven to be useful on several occasions. Eavesdropping on local nets in southern Wisconsin provided notices of traffic problems, which gave us an excuse for stopping for sustenance and rest. As a sage once put it, "Any excuse in a storm . . ."

## THINGS FUTURE

There are several operating opportunities coming up in the next few months.

For Public Service, we have the Minneapolis Marathon on June 2, and a couple of MS Society events (the 150 ride on June 8-9 and the TRAM on July 14-19).

Of course, we have the 2013 Field Day, June 22-23, with our efforts coordinated with the Mining Club. We will be looking for members to help organize (chair) the usual stations: CW, SSB, VHF, GOTA and possibly a digital station. The chair person is Ed Jacobson (WBØVHF).

We're looking into one (or more) special events for later this summer—any interest in a foxhunt? Send an email to your club officers and let us know what you would like for an activity.

George, KØGCP

## Dale's Details

Another very enjoyable Banquet has passed. Great food and fellowship was the mode for the evening. Eric Frisch's outstanding program about High Altitude Balloon communications was amazing. The six-pound payload they put up is the handiest hardworking control and comms box anyone can imagine. The benefits that private industry, emergency services, the military and "other" government agencies have gained from this operation are well worth the effort.

Congratulations to our Ham of the Year, Orcy Lyle – WØQT. It was a surprise that she really enjoyed. Thank you for all the Club and hobby activities you have helped provide over the years.

With this extended winter weather on our hands, President George had a question for me at the last Board meeting. He asked if I had a contin-

gency plan for Field Day activities if this "global warming" continues through June! We all had a good laugh and moved on with the business meeting.

Later, it came back to me, and I asked myself the question again. What would we be able to do on short notice to accomplish our Field Day event? Take out the Field Day aspect and what we really have is a Ham radio emergency response! As far as I know, neither SPRC nor Mining Club has an outline to work from!

A few years back, we had a rainy windy cold FD weekend. Luckily we had most of the stations and antennas already up and running, so we continued to operate and just put up with the poor weather conditions. Having the RV's for stations is great, and we could have moved the GOTA and VHF tent stations into the cabs. The food service area was somewhat protected by a couple of tarps hung from the structure. The evening cleared enough to get the picnic in and then the rains came again, all night and into Sunday morning. So we proved that we usually have enough gear on hand to cover normal storms.

With a few more tarps and my big propane fired heater, we could enclose the pavilion and provide a warm and dry space for social activities. Easier yet, move into the building and use the shower areas. The generators don't notice the weather and we have them fueled for a good 24 hour run time. Food and beverages all come out at once, but the picnic itself may have to be postponed. The RVs have everything just like at home so no problem there. The antenna fields may be reduced to some verticals and slopers rather than the towers, but we would be on the air!

My answer to the question is that we have exercised FD many times and our current plan really incorporates contingencies for many aspects of the

(Continued from page 2)

weekend already! If we experienced a problem over the years, we are prepared if it happens again. So, let's see what Mother Nature has to offer on June 21-23, I think we can handle it.

Dale Maroushek, NØPEY

## How I Chose the St Paul Radio Club

by Orcy Lyle, WØQT

I am very honored to be recognized as SPRC's Member of the Year. I am very lucky to have found myself in the St. Paul Radio Club and have made it my primary radio club.

I became a ham while working in Brainerd for 10 years before I retired. I always planned to return to the Twin Cities after retiring, although I found the Twin Cities ham radio scene daunting, with about 20 clubs about which I knew nothing. I had some idea of getting to know all the clubs and then choosing one to join. This plan never got carried out.

While still working in Brainerd, I happened to read somewhere about the SPRC Auction. I looked on the SPRC website for more information about the Auction. Webmaster Kathi Hilton, NØFKI, offered to answer questions for website viewers and we exchanged several emails while she told me how to get to the Auction and answered other questions about it. The Auction was my first contact with SPRC (I bought a Rigblaster) and I was favorably impressed with the club.

I began reading the Ground Wave, which appeared on the SPRC website.

I had gotten my VE certification and wanted to gain VE experience, so when I saw a notice in the GW by VE Coordinator, Ed Van Cleave, WØVC, recruiting VE examiners, I signed up and began helping out at SPRC VE

sessions, driving down to Minneapolis from Brainerd to do so.

I noticed that SPRC meetings were on Friday nights. This enabled me to attend SPRC meetings, by leaving work early on those Fridays and driving from Brainerd to the Cities and across the Cities in rush hour traffic. I enjoyed the meetings and liked the club members. I remember sitting in the back of the room, and I remember Jay Bellows, KØQB, (who I had chatted with at hamfests), introducing me to people and making sure I had a place to sit.

After one of the meetings, perhaps the first meeting that I attended, Fred McCormick, KBØNVC, recruited me to be Vice-President of SPRC. I accepted the nomination and decided that I had better join the SPRC.

Thus I became involved with the club and later became President as well as becoming involved in many club activities. I didn't know any other Twin Cities radio clubs at the time. When I got to know other clubs, I realized that SPRC is second to none. I am happy that I become involved in SPRC and I have learned a lot, as well as meeting many helpful, kind, and wonderful hams. I look forward to many more happy years in the SPRC.



## Field Day News

by Ed Jacobson, WBØVHF

Field Day, June 22-23, 2013, is ramping up. We have chairs for most main areas:

John, K9NJ [k9nj@arrl.net](mailto:k9nj@arrl.net) for CW

Ron, KØRJW [k0rjw@arrl.net](mailto:k0rjw@arrl.net) for GO-TA

Ray, WBØEBG [johnsorj@aol.com](mailto:johnsorj@aol.com) for VHF

Dale, NØPEY [n0pey@arrl.net](mailto:n0pey@arrl.net) for FOOD

Ralph, NØAWN [n0awn@arrl.net](mailto:n0awn@arrl.net) for MERCHANDISE

Still looking for an SSB chair, and always looking for volunteers for any other activities.

Back to the current chairs—for Field Day merchandise, Ralph, NOAWN, has agreed to pick up your FD goods from the ARRL at Dayton this year. As in prior years, please email your order to [n0awn@arrl.net](mailto:n0awn@arrl.net) (best if it is sent before Wednesday, May 15, but if it is still Dayton weekend, give it a shot—Ralph will have email while down there, but time to check messages might be scarce). Payment will be done when the merchandise is delivered.

For the complete list: [www.arrl.org/shop/Field-Day-Shirt-2013](http://www.arrl.org/shop/Field-Day-Shirt-2013)



## Minneapolis Marathon

Race Day Communications

Sunday, June 2—need radio communications specialists, general race day help and course marshals too! The registration site is:

<https://2013mm.theregistration.com/en/1644>

2000 bonus bones for registering prior to May 1!

## Need Tower Advice

Robert Wolfe, KØJMJ, is looking for **information about dismantling his 72**-foot free-standing tower (60 pieces at 80 pounds each) in St. Louis Park.

Contact his daughter, Laurie Grimm at [grimm1029@earthlink.net](mailto:grimm1029@earthlink.net) if you're interested in buying the tower or other ham equipment or can **help him find someone to dismantle** it.

An Easy - or Difficult

## Dummy Load Project

Part II

by Orcy Lyle, WØQT

This is a sequel to the dummy load article which appeared in the April Ground Wave. In that article, I described the difficulty I was having installing tiny surface mount technology (SMT) resistors onto the circuit board. I also had tried methods I had heard of people using to hold the mounts down while soldering them, such as by gluing them to the board. None of these methods worked for me and I suspect they did not work well for the other builders.

I predicted that my installation of the tiny SMT mounts would improve with practice. This turned out to be the case—beyond my expectations. Not only did I do better with repetition of the installations, I figured out better ways of doing the work as well as noticing things which were helpful. These are listed below.

I did better working directly on the table surface than on the cookie sheet I usually use, which has a Styrofoam insert which is helpful as a base for some projects. At home I work on a marble-top table, perfect for soldering projects.

Laying my arms and bracing my hands on the tabletop made it easier to steady the work.

I thought I could see my work well with just my reading glasses, but found it a lot easier to see when using my head band visor which holds magnifying eye glasses.

For awhile, I did better switching to my left hand for soldering and my right hand for holding the mount in place with tweezers. Eventually, I did as well one way as the other (I'm ambidextrous).

I found that my solder sucker sucks up surface mounts as well as solder. I may have lost a couple of the surface mounts before I figured this out.

It worked better to turn the soldering temperature down to 650 degrees F rather than using 700 or 750 degrees like I usually do. Tiny things apparently do not need as high a temperature as bigger things.

The dummy load instructions recommended using a pointed tip for soldering the SMT resistors. I believe that most people do this. I read an article in which someone said he preferred a spade tip. I tried both and found that I did better with the spade tip, which is the small spade tip which comes with soldering irons. The spade tip is the same width as the ends of these SMT resistors, making it easier for me to apply the solder.

I used the assembly line method, in which I applied solder to the pads along one side of the resistor sites for a number of resistors, then went along the resistors on those sides and followed with the other sides.

I suppose every builder figures out, while going along with the work, the best ways to do the job. Some of these ways look pretty obvious as I read through them. Yet I had never used SMT resistors as small as these, and what I figured out, as well as practice, enabled me to go from spending an hour to install five resistors, to spending fifteen minutes to do five resistors. Some of them went on like magic, very smoothly, while others

not so smoothly. With more practice, I expect that the process will speed up, even though I don't try for speed.

I made a mistake in the first article when I said that I had done almost half of the 22 resistors. I had overlooked the fact that there were two sides to the circuit board, meaning that there are a total of 44 resistors. This gave me more practice than I had counted on.

I went from being discouraged and wondering if I could ever finish this project, to feeling that it isn't so difficult after all, and being very heartened that I can easily increase my skills.

## Membership Meeting

April 5, 2013

A meeting of the St. Paul Radio Club membership was called to order on April 5, 2013, at 7:30 PM by President George Power, KØGCP.

Signed in on Members sheet: 32  
Signed in on Guests sheet: 2

Visitors and new members were introduced and welcomed.

Secretary's Report: (Jeff Iverson, WB9DAN) The minutes were approved as printed in the *Ground Wave*.

Treasurer's Report: (Allan Klein, WØNLY) All funds are solvent. Members may request details from Allan. \$250 was donated to the ARRL Spectrum Defense Fund.

### Committee Reports:

Education (Allan Klein, WØNLY): Tech class in Continuing Ed system is over. 22 started the class and 12 completed it. VE exams are tomorrow. Thanks to members who help teach. Allan will be picking up radio equipment from Washington Middle School to be kept in safe storage until they need it again.

Circuit Builders (Orcy Lyle, WØQT): The lab will not be open tomorrow at 9:00 AM.

Membership (Dale Maroushek, NØPEY): We have 89 members on record tonight plus 8 new members tonight.

Website (Tom Bredemus, KCØINP): Directions to club meeting need to be updated.

Repeater: Working fine. Man with tower would like income if it is kept at his site – might still be free if we move it.

Old Business:

Club Events – April 20 Banquet details in *Ground Wave*. Tonight is the last night to register.

Field Day with Mining. June 22-23 Ed Jacobson is chair of the event and will be seeking committee chairs.

We did have a table at Mid-Winter Madness thanks to Allan, WØNLY.

New Business:

A man named Dennis Danisch contacted us requesting help with a railroad telegraph demo. See George if you are interested.

The business meeting was adjourned at 7:55 PM.

Respectfully submitted,  
Jeffrey A. Iverson, WB9DAN, Secretary

## Board Meeting April 12, 2013

A meeting of the St. Paul Radio Club Board of Directors was called to order on April 12, 2013, at 7:09 PM by President George Power.

BOARD MEMBERS PRESENT:

George Power, KØGCP, President  
Joe Clysdale, KDOJCC, Vice-President  
Dale Maroushek, NØPEY, Past President

Jeff Iverson, WB9DAN, Secretary  
Jay Maher, At-large Board Member  
John Faughn, KDØCAC, At-large Board Member

COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:  
None

Treasurer's Report (Allan WØNLY) - All funds are solvent. Members may request details from Allan. \$250 was donated to the ARRL Spectrum Defense Fund. \$20 was spent on a table for Midwinter Madness. \$20 was spent for an educational video.

Education (Allan WØNLY) – Class is over. Thanks to the instructors. Plan for a Tech class next Fall and a General class after that in the Spring.

Membership Report (Dale, NØPEY) – We currently have 97 members.

Program for May – Jeff on the History of Receivers

Newsletter – May *Ground Wave* deadline is April 19.

Banquet – 43 registered as of today; SPRC "Ham of the Year" will be awarded; Motion to buy \$50 gift card for presenter – MSC

Field Day – Ed is Chair; we have CW, GOTA, Generator, and Picnic Chairs; need Phone, Publicity, and Visitor Chairs; those who want to save postage on Field Day gear should get their order to Ed – Ralph will pick up in Dayton

Raffle Prizes – Sources of good raffle prizes were discussed; need to remind members that they can donate items

Members have expressed interest in Fox Hunting. It was suggested that perhaps we could have an "on foot" Fox Hunt on campus coinciding with a demonstration HF station to increase visibility and interest among students.

## W8P Spreads the Word

by Dan Romanchik, KB6NU

On Saturday and Sunday, February 23-24, 2013, amateur radio operators gathered at WA2HOM, the amateur radio station at the Ann Arbor Hands-On Museum to operate special event station W8P to commemorating the founding of the first Rotary Club on February 23, 1905 and spread the word about Rotary International's End Polio Now Campaign ([www.endpolio.org](http://www.endpolio.org)).

Rotary International launched this program in 1985 and, with the aid of UNICEF, the World Health Organization and the Bill and Melinda Gates Foundation, has cut the number of cases by more than 99.9%. In 1988, polio was endemic in 125 countries. In 2012, polio is endemic in only two regions.

Stations all over the world took part in this unique event. Rotary is an international organization, and its amateur radio fellowship, Rotarians on Amateur Radio (ROAR), includes members all over the world. In Australia, a group operated the special event station VI4POLIO. In Europe, Pertti Kause, past president of ROAR, operated his station, EA7GSU. .

We made a total of 137 contacts, mostly US stations, including hams that had direct experience with polio. One was a polio survivor himself. Another's wife was a polio survivor. A third was a physician who had been to Africa and had treated polio victims there.

It was a real treat to combine two activities that I enjoy so much—amateur radio and Rotary—and it felt good to know that in some small way I was furthering the work of the End Polio Now campaign. I hope that next year we will once again operate this special event and get even more Rotarians and amateur radio operators to participate.



St. Paul Radio Club, Inc.  
PO Box 9375  
North St. Paul, MN 55109

## ADDRESS CORRECTION REQUESTED

Meeting locations at UST are subject to change due to changes on The University of St Thomas campus.

Fri May 3	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OSS LL-18. See Page 1.
Sat May 4	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat May 4	9AM Circuit Builders. OSS 415 UST Campus*
Fri May 10	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415)
Sat May 11	9AM Circuit Builders. OSS 415 UST Campus*
Sat May 11	9AM – 5PM Northern Lights Radio Society Aurora 2013, First Lutheran Church, White Bear Lake, MN.
Sat May 18	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat May 18	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat May 25	9AM Circuit Builders. OSS 415 UST Campus*
Sat Jun 1	7AM – 1PM TwinsLAN and Mining Amateur Radio Club Tailgate Swapfest, 3M Center, Maplewood, MN.
Sat Jun 1	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat Jun 8	9AM Circuit Builders. OSS 415 UST Campus*
Sat Jun 15	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Jun 15	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Tues Jun 18	7 PM Field Day Planning meeting with Mining Club at Tartan Park
June 22-23	Field Day 2013, Tartan Park
Sat Jun 22	6 PM SPRC Field Day Picnic, Tartan Park

\*Circuit Builders is each Saturday morning if someone is available to open the lab and there is no conflicting activity. Check the SPRCCB Google Group to confirm that the lab will be open.