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St. Paul Radio Club Ground Wave

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KØAGF

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NEWS AND NOTES FOR APRIL 2013 — Volume 73, Issue 4

April MEMBERSHIP MEETING

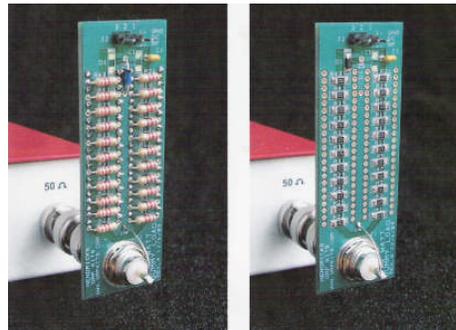
April 5, 2013
UST OSS LL18
7:30 PM

7:00 PM Socializing
PROGRAM

Surface Mount Soldering Techniques Jay Maher, NJØM

Many builders who, in the past, avoided kits containing surface mount devices have taken the plunge and found out that they really aren't that bad. Come and see some techniques for dealing with soldering these tiny components so that you can join the fun. Surface mount parts are the standard now and, for many new devices, they are the only package on the table. You might even get a hint on how to find them if they fall off the table and into your carpet.

Jay Maher, NJØM, was licensed in 2007 and promptly fell in with a bad crowd at the St Paul Radio Club. He is happiest working at his bench in the basement workshop (when he can find the bench). Jay lives in South Minneapolis with his very tolerant wife, Rachel.



An Easy - or Difficult Dummy Load Project by Orcy Lyle, WØQT

This is an easy project--a kit for building a 10w dummy load, suitable for beginners to kit building. It has four parts to be soldered to the circuit board, plus 44 resistors. Most people could complete the project in the one hour stated in the assembly instructions. That is, if they built it using the included hole-through resistors.

An alternative to an easy build is to use the included surface-mount resistors instead of the hole-through resistors. These surface-mount resistors are 1/8 inch long narrow rectangles which are very thin, light weight, and slippery. A light breeze could blow unattached ones away. I have done a project using larger surface-

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SPRC Annual Banquet

April 22, 2013

PROGRAM

Up in the Air

Eric Frische, KF5FFI

Eric Frische, KF5FFI, will share his experience with high-altitude ballooning as well as radio propagation from high places. We may even get him to talk about making his own balloons. Eric's talk will be interesting to both radio folks and non-radio folks.

Eric is a grad of MIT and followed up his Air Force flying experience with over 15 years' experience designing space and stratospheric systems. In 1998, he co-founded Space Data Corporation, the largest operator of ballooncraft outside of the National Weather Service with over 20,000 system launches to date. Space Data now has active contracts supplying stratospheric telecommunications systems to the Marines, Air Force, and government intelligence agencies worldwide. The small ballooncraft are used for both military and commercial telecommunications, imaging, intelligence gathering, and research. He will share with us some of the "ups and

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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.

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

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mount technology (SMT) resistors and it was not difficult. I find these smaller SMT resistors difficult to install, even when using the tack and solder method. Even when I use good tweezers to hold a resistor in place, it slips away. Touching a soldering iron to it pushes the resistor out of place, no matter how hard I hold the resistor down. To add to the difficulty, the top of the resistors is the same color green as the circuit board, requiring a very close look to see when the resistors are in place. But I'm hoping that if I keep at it, I'll gain proficiency in installing small SMT parts.

I installed almost half of the little SMT resistors, which took hours to do. I was holding the resistors in place with tweezers while soldering, and have tried to find better ways to do it. I tried putting tape with the sticky side up to hold one end of the resistors in place. That didn't work. The thickness of the tape held the resistors up too high off the board and also, they slid out of place in spite of the stickiness which was supposed to hold them in place.

I tried putting a little glue under the middle of a resistor, using two types of modern glue that I had. Modern glue is too thick for tiny applications. I tried Duco Cement, which is thinner and sets up faster. The Duco Cement made it easier to set the resistors in place and to hold them in place while soldering them, but the installation looked awfully messy. The glue seemed to combine with the solder to turn the solder black and lumpy, although the resistors ohmed correctly once in place. The ones that I laboriously installed using only tweezers, looked much better. I'll go back to the laborious method, hoping that practice will shorten the installation time spent per resistor.

The dummy load kit is made by Hendricks and costs \$15. The Minnesota

Amateur Radio Technical Society (MN-ARTS, formerly the QRP Society) chose it as one of the club projects for this year's annual February Build-A-Thon. The meeting room is reserved for most of the day for this event. Club members could go in on a group order for these kit(s) or bring their own projects to work on.

MN-ARTS was founded a year ago and is affiliated with ARRL. It grew out of the QRP Society and no longer deals strictly with QRP. Two St. Paul Radio Club members were MN-ARTS' officers the first year: Chuck Stroud, KA8HE, President and Paul Bushouse, NØTYE, Treasurer. At least 13 St. Paul Radio Club members are members of MN-ARTS. MN-ARTS invites members from other radio clubs who are interested in the technical aspects of radio to join MN-ARTS as an additional club. MN-ARTS website is www.mn-arts.org. The website for the Hendricks dummy load kit is www.qrpkits.com/dummyload.html.

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downs" he experienced in small ballooncraft development and operations.

Currently, Eric provides technical consulting as well as in-house product development and rapid prototyping for medical, consumer, space and near-space products.

See the registration form for event details. Registration must be completed by April 5th.

Dale's Details

This issue of the GW will be handled differently so we can use it at Midwinter Madness as a recruiting and informative handout. The regular USPS and E-mail issues will be out the same weekend, which is still two weeks before the meeting on April 5th. Please don't forget about the April 5th meeting.

Along with that use of the GW, we have more plans that hopefully will increase our membership and get more people at the Banquet and Field Day.

Tech Class at Good Ending

This winter's Tech licensing class is almost over, and it has been a success. There have been five sessions since February 12th. The last session will be on April 2nd.

"This was the first time we got into the Community Ed newspaper, and it definitely brought us some new students," said Allan Klein, WØNLY, the Club's Education Coordinator. "A couple of them are still in high school, which is great," said Klein. Klein also credited Ralph Bierbaum, NØAWN, who recruited several students from MS Ride/Walk communications volunteers.

The class started out with 22 students, and 15 or 16 are expected to take the exam. "I'm happy with that number," said Klein. "It's to be expected that some will drop out when you advertise to the general public. But getting 15 new hams out of a class is great—a lot better than most years."

The classes were taught by Klein, Mert Nellis, WØUFO, John Faughn, KDØCAC, Ted Kinnear, KDØNPJ, and Jeff Iverson, WB9DAN. The last class will be taught by Ralph Bierbaum, NØAWN. "The teachers all did a great job. Most of us came for more than just our one night, and we all helped out each other when a student asked a hard question or someone overlooked a point. It was more like a team of teachers, and that was fun."

There will be another Tech Class next fall, and then a General class next spring.

Here are some interesting details:

The current membership data base has 157 entries that paid dues sometime over the past four years. To date, only 89 of them have paid this year's dues. That leaves 68 orphans out there without a radio club home in St. Paul. Most of the orphans are still on the E-mail list, so they will get this GW. On our membership application, it is noted that new members joining after April 1st will be considered members through the 2013-2014 membership year. Call it a two for one, or an 18 for 12 deal—but it has

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other valuable advantages!

Elsewhere in this issue is the April 20th Banquet invitation that tells you about a fantastic program that no one else in the metro will ever get to see unless they are SPRC members. Then look at the menu on the registration form--it is the usual fare and Oh so good. St. Thomas food service does a great job with presentation and service. The club subsidizes the meal, so your cost is just ten bucks a head; try to find that elsewhere for a dinner and a show! Parking is a buck an hour in the heated basement, four to five bucks max. Dress code is business casual, but we see suits to street clothes and all members are welcome. Note the April 5th meeting is the last day to reserve a Banquet seat and the limit is 70 people. This show may top out early, so respond accordingly!

Following that is good old Field Day on June 22-23, where we incorporate our SPRC Membership Picnic into the Saturday night Gala. If you haven't been out at Tartan Park for one before, this is your chance to again cash in on those membership dues returns. Hopefully we will have our new Yaesu Mark 5 working at a station. FD is not a contest so whatever operating capabilities you have will be welcomed to put on the air. The menu has not been selected yet, but usual fare is spaghetti and meat balls with all the sides.

So here is the Big Deal, if you haven't figured it out already. Call it the March Madness SPRC Membership Special. Fill out a new application, attach the \$20 dues payment for one or a family and hand it in at the Midwinter Madness table, send it in by mail or bring it to the April 5th meeting. You will be a SPRC member paid in full until August 31st 2014, and be able to attend TWO Banquets and Picnics, plus any other Club activities that occur during that time.

Best deal in town!

Have You Renewed Your Membership?

Each fall, we renew our membership in SPRC. Please complete a membership application and bring it to the meeting or mail it to the PO Box.

Presidential Ponderings

THINGS PAST

Lou Sica (ACØX) shared his tips on competitive DXing as he continues to add new bands to his collection of DXCC awards. He works low power (but not QRP) and still gets 'round the world. Tip Number 1: Learn to work CW, as you can hear and be heard much more easily than phone. Darn it! Now, I'll have to learn a new language . . . Tip Number 2: Patience and perseverance. Oh well, I think I'll stick to 2m FM for a while. But, speaking for the vast majority of members who attended and who do DXing, THANK YOU Lou for sharing your experience with us.

THINGS PRESENT

The Technician Class through the St. Paul Schools Community Education program is running a week behind schedule due to a snow day. The class will extend one week, with the last session on March 26. This really seems to have worked well as we will have a VE session on April 6. We owe our volunteer teachers and our organizer, Allan Klein (WØNLY), a heartfelt THANK YOU! We have at least one new member from the class already.

The April General Member meeting is on Friday, April 5. We're scrambling to put together a program on surface mount soldering techniques.

[Mounting soapbox] That said, again I am asking you to tell me what topics you would like to hear more about in our programming. Jay, and others on the board, are trying to offer interesting programs for you--but we don't know what you want. Please email me at: georgecpower@gmail.com with your comments (or send them to the other SPRC board members). The two other questions that I would like your input on: 1)What makes SPRC different than other radio clubs in the Twin Cities area, and 2) What would you

like to see in raffle prizes? [Falling off soapbox]

THINGS FUTURE

Spring Banquet, April 20, 2013, in the new Student Union. A Reservation form is with this Ground Wave and is available on the club website (www.stpaulradioclub.org). Please get your completed Reservation and payment to Jay Maher (NJØM) by April 5.

2013 Field Day, June 22-23, 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).

George, KØGCP

Membership Meeting March 1, 2013

A meeting of the St. Paul Radio Club membership was called to order on March 1, 2013, at 7:30 PM by President George Power, KØGCP.

Signed in on Members sheet: 34

Signed in on Guests sheet: 3

Visitors 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.

Committee Reports:

Education (Allan Klein, WØNLY) Tech class in Continuing Ed system The Tech class is going very well -- much better than usual. We just finished week three, with three more to go. There are still 17 students. The teachers so far have been myself, Mert Nellis and John Faughn. We all get along well, and also with Ralph Bierbaum, who has been with us each

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week. We all feel free to jump in and rescue each other when needed, and we provide a good mix of the theoretical and the practical. I feel like we are giving the students a great time -- at least the instructors are having a good time! Next week is Ralph's turn, followed by Ted Kinnear and Jeff Iverson.

Circuit Builders (Orcy Lyle, WØQT)

The lab will be open tomorrow at 9:00 AM.

Website (Tom Bredemus, KCØINP)
Nothing much new on the website. As you know, it was down for a day or so (Feb 18-19) but thanks to my fellow members Orcy Lyle and Don Kelly, it was restored to an active state in quick order. The domain issue is a problem solved. We continue to get many visitors to our site and hope to attract more. I recently added the Reverse Beacon Network link located towards the bottom of the SPRC Home Page. Members should try it out when they are calling CQ. Do a search on your call to show where it is being copied and the signal strength reported. Pretty cool tool to use!

Old Business:

We donated \$250 to the ARRL Spectrum Defense Fund.

We are sponsoring the Multi-Operator plaque at the MN QSO party (Feb 1st). I've not heard who won in the various categories.

Club Events -- April 20 buffet details in GW. We will go with the Grand Buffet (beef tips in wine sauce or herb chicken in Sauce Béarnaise) \$15.25 to the Club, tickets will be \$10.

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

New Business:

March 9 – Eau Claire Auction.

March 23 – Mid-Winter Madness Hamfest in Buffalo, MN. No volunteers to head up table effort at this time.

March 23 – MNVOAD conference at Hennepin Technical College, Eden Prairie.

April 20 – Brainerd Hamfest (same day as our banquet).

VE Exams tomorrow in Roseville.

Tonight's program will be Lou Sica, ACØX, on 5 Band DXCC.

The business meeting was adjourned at 7:52 PM.

Respectfully submitted,
Jeffrey A. Iverson, WB9DAN, Secretary

Board Meeting March 8, 2013

A meeting of the St. Paul Radio Club Board of Directors was called to order on March 8, 2013, at 7:16 PM by President George Power.

BOARD MEMBERS PRESENT:

George Power, KØGCP, President
Dale Maroushek, NØPEY, Past President

Allan Klein, WØNLY, Treasurer
Jeff Iverson, WB9DAN, Secretary
John Faughn, KDØCAC, At-large Board Member

COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:

Don Kelly, WA6ZMT, *Ground Wave* Editor

Treasurer's report – Allan – OLG church and MN-QSO party have been paid. Need to send \$250 to ARRL Spectrum Defense Fund. There was a discussion about whether we might want write an article about how our auction proceeds go to the ARRL, for pickup by *QST*, the section or club newsletters.

Membership report – Dale – There are 89 members in the paid database. Complete database has 157 names in

it, including former members. We will make an effort to recruit them back.

Education – Allan – Technician License class in St. Paul Community Education program – 4 sessions down, 2 to go. We will not offer a General License class this spring.

Spring banquet – April 20, 2013 Menu will be Grand Buffet (beef tips in wine sauce or herb chicken in Sauce Béarnaise) at \$15.25. John pointed out that we subsidize members so that they only pay \$10.00. Banquet Reservation Form needs to go to Tom for website, and to Dale (for emailing to members).

Website domain provider – Don recommends a change to a provider that will be more diligent about renewal notifications.

No volunteers for club table at Mid-Winter Madness Hamfest from the last meeting. Allan will organize it.

We currently have no program for April. We will keep checking. Videos are a possibility. May will be Jeff, on the History of Receivers.

Raffle prizes – guidelines for quantity and quality. Members need to know that they can donate items they no longer want, but they remain responsible for taking home unwanted items.

Newsletter – *Ground Wave* deadline for next issue is March 15.

Radio tower – still pending

Field Day preparations – Ed Jacobson, WBØVHF, is Chair. Need committee chairs. Do we want to explore having a digital mode station?

Allan thought we might be interested in looking at the Ham Radio Promotion Project (www.neoham.org).

The meeting was adjourned at 8:23 PM.

Respectfully submitted,
Jeffrey A. Iverson, WB9DAN, Secretary



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 Apr 5	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OSS LL-18. See page 1.
Sat Apr 6	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat Apr 6	9AM Circuit Builders. OSS 415 UST Campus*
Fri Apr 12	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415)
Sat Apr 13	9AM Circuit Builders. OSS 415 UST Campus*
Sat Apr 20	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Apr 20	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Apr 20	6PM SPRC Annual Banquet. Rogge-Leyden Room, UST Student Center
Sat Apr 27	9AM Circuit Builders. OSS 415 UST Campus*
Fri May 3	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OSS LL-18.
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.

*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.