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# St. Paul Radio Club Ground Wave

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## KØAGF

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Club Repeater: 145.310 MHz  
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## NEWS AND NOTES FOR FEBRUARY 2013 — Volume 73, Issue 2

### February MEMBERSHIP MEETING

February 1, 2013

UST OSS LL18

7:30 PM

7:00 PM Socializing

**Radio with Movement**

**Ed Jacobson, WBØVHF**

Ed Jacobson, WBØVHF, will share experiences on communications and other support aspects of bike events with the MS Society in the Upper Midwest.

Ed has been involved in ham radio on and off since he was first licensed as WNØVHF in 1976. He has done event support since 1998 and has worked with the Twin Cities Marathon, Performance Car Rallies, and various fundraisers in addition to the MS Society. Since 2008, he has ridden three TRAMs, two MS150s, and two TC60s. Along with biking, Ed keeps himself busy with Taekwondo, R/C helicopters and numerous other activities. He is active in the Mining Amateur Radio Club, SPRC, Amateur Radio Association of Bloomington, Minnesota Wireless Association, and the Northern Lights Radio Society. Ed and his wife Linda, KCØIJB, live in Bloomington, Minnesota.

### SPRC Tech Class

With a New Twist

The Club will be sponsoring a technician licensing class in February and March, but at least six students must pre-register with St. Paul Community Education, or else they will cancel the class.

Classes will be held on six Tuesday evenings, beginning on February 12. They will run from 6:00 until 8:30. They will be in the Highland Park Junior High School, on the corner of Snelling and Montreal.

There is a \$10 fee for the class. Students must have a copy of the ARRL Ham Radio License Manual, 2nd ed., which is available at Radio City in Mounds View, or at many Barnes & Noble stores. There will also be copies available for sale on the first night of class.

"The need to pre-register is new this year" said Allan Klein, WØNLY, the Club's Education Coordinator. "In the past, students could just show up on the first night. But this year, we need at least six people to pre-register." Students can pre-register at [www.commed.spps.org](http://www.commed.spps.org). The

*(Continued on page 2)*

### Presidential Ponderings

THINGS PAST

At our January meeting, the topic of the evening was Oscilloscopes 101, presented by Gary Meyer. He did a great job blending theory with a demonstration of types of oscilloscopes, and a number of members stated that they enjoyed the presentation very much. I was struck by the number of members who use oscilloscopes (obviously, I don't with my FM work), and am glad that we had Gary do the presentation.

The Auction should be over by the time you read this note. I can thank all of the members who have helped out with the running of the auctions, and hope that we have done well. A report will be given at the 2/1/2013 general meeting.

THINGS PRESENT

Allan Klein, WØNLY, has the "go" for the Technician Class through the St. Paul Schools Community Education program. It will be on Tuesdays from 6:00 -8:30 PM at Highland Jr. High School, Montreal & Snelling Avenues, from February 12 – March 19. Signing up to help teach can be simply

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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 PM on Fridays, but do not park in spots with parking meters unless paying or displaying a handicapped placard.

Enter either of the buildings 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.

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"Ham Radio Licensing Class" is class # 3072. Klein is optimistic that there will be more than six people who sign up, and several more who end up taking the class.

Instructors have been volunteering to teach one night, but one or two more are still needed, said Klein. "It's fun, and it's only one night."

Potential instructors should contact Klein at [allankmn@cs.com](mailto:allankmn@cs.com) or by phone at 612 720-1324.

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sharing a night on a topic with another teacher, or helping with more than one night. You are not being asked to teach all of the sessions. If you are interested, contact Allan at [allankmn@cs.com](mailto:allankmn@cs.com) or 612 720-1324.

The February General Member meeting is on Friday, February 1.

The Washington Technical Magnet School project is on indefinite hold. In a meeting with the teacher, it was agreed that the current situation (earlier class sessions, few club members available mid-day, etc. did not lend itself to a club-style program. There is some hope of re-vamping the program as part of the Navy Junior ROTC program.

If you have topics that you would like to see included in our programs, and especially if you know of speakers for those topics, please let Jay Maher, NJØM, know about them at [jay@umn.edu](mailto:jay@umn.edu). (Or contact any of the club officers with your topics and speakers.)

We're looking for articles (by you budding writers out there) for our Ground Wave. If you would like to provide an article on your favorite aspect of amateur radio, please contact Don Kelly (WA6ZMT), our newsletter editor, about writing a short article for the Ground Wave. Email [dk@donkelly.biz](mailto:dk@donkelly.biz) or call 651 842-1000.

## THINGS FUTURE

Upcoming programs will include Lou Sica talking about the 5BDXCC adventure. Ed Jacobson and others will talk about Public Service radio communications, as they have done for the Multiple Sclerosis "The Ride Across Minnesota" (a.k.a. TRAM). We are always looking for speakers and topics that will interest you (see #4 above).

Spring Banquet, April 20, 2013, in the UST Student Center.

2013 Field Day, June 22-23, with the Mining Club.

George, KØGCP

## Dale's Details

The Auction was declared a success! We all had a good time, got some great deals and were well feed. The new location is very spacious and easy to work with. It has lots of parking and is fairly easy to get too. Final details and profit will be announced soon, but looking at a couple hundred bucks going to the ARRL Spectrum Defense Fund.

The Mining Club hosted the CQ 160 CW contest last weekend and will be ready for the SSB portion on February 22-23. As always, anyone can join the fun out at Tartan Park--with more good food and fun. It's a great station and equipment with 3 antennas to work from this year.

Make your plans to work the MN QSO party on Saturday Feb 2<sup>nd</sup> either at home, mobile or with a group somewhere. It is better to be the top of the pile than in the pile up!

See you Friday night.

Dale, NOPEY

## An End-Fed Half-Wave Antenna Dan Romanchik, KB6NU

I've always been interested in end-fed, half-wave antennas, but until recently,

I'd never built one. One reason is that most designs are for QRP and not made to handle more than 5 – 10 W of power.

A couple months ago, though, I ran across a design rated at 100 W ([earchi.org/proj\\_homebrew.html](http://earchi.org/proj_homebrew.html)). The design seemed relatively simple, requiring only a single toroid and a capacitor made with a short length of RG-174 coax. Well, it just so happens that I bought 100-ft. of RG-174 at Dayton this year, and I found the cores online from the "Toroid King" so I decided it was high time to build one.

All told, the parts cost about \$10, the biggest part of that being a 4-in. x 4-in. x 2-in. plastic junction box (Carlton E989NNJ-CAR) I got from Lowe's for \$6.41. Compare that with the \$60 that LNR wants for their end-fed antenna.

I put up the antenna about three weeks ago, running 34 feet of wire up a trellis, then out to a tree near the back of my lot. With more than a little anticipation, I put the antenna analyzer on it, only to be somewhat disappointed with the readings. The SWR was 2.6:1 at 14.000 MHz, dropping to about 1.5:1 at 14.900 MHz.

I e-mailed the guy who published the design and asked why he thought the resonant frequency was so high, and he said that all I had to do was add a couple feet of wire to the antenna. I also did some more reading about end-feds and several websites suggested that adding a counterpoise might be a good idea, too.

A week later, I finally got back to playing with the antenna. I added 24-in. of wire to it, and it did indeed bring down the SWR of the antenna to below 2:1 in the CW portion of 20m. I'm happier with this. I made a couple of contacts, with both stations giving me good reports.

I still do plan to try a counterpoise. Not so much to improve the SWR, but to see if it makes the antenna a little more efficient.

Overall, this has been a fun project. I learned something about end-fed, half-wave antennas and saved a bunch of money by rolling my own. Isn't that what ham radio is all about?

When he's not messing with antennas, Dan, KB6NU publishes the "No-Nonsense" series of amateur radio license study guides. The latest in this series is the No-Nonsense Extra Class License Study Guide. For more information, go to KB6NU.Com or e-mail [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

## Membership Meeting January 11, 2013

A meeting of the St. Paul Radio Club membership was called to order on January 11, 2013, at 7:30 PM by President George Power, KØGCP.

Signed in on Members sheet: 25

Signed in on Guests sheet: 2

Visitors were introduced and welcomed.

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

Treasurer's Report: (George for Allan Klein, WØNLY) All funds are solvent. Members may request details from Allan.

### Committee Reports:

Education (George for Allan Klein, WØNLY): Our Tech class will be part of the St. Paul Community Ed program. It will be held Tuesdays from 6:00 -8:30 PM at Highland Jr. High School from February 12 – March 19. Allan is looking for volunteers to be teachers.

Circuit Builders (Orcy Lyle, WØQT): Orcy will open the lab when she is available upon request.

Upcoming events: The January auction will be 1/26 at Our Lady of Guadalupe, Hwy. 52 & Concord. Dallas has pre-printed tickets. The April banquet will be April 20 in the UST Student Center. Field Day is June 22-23. Details are in the *Ground Wave*.

### Old Business:

The Mining Radio Club will be operating the 160 meter contests in January and February and the MN QSO Party on February 2. SPRC members are encouraged to participate.

The Maple Grove Radio Club and the Association of Emergency Radio Organizations are hosting Basic Emergency Operator Communications classes on February 9<sup>th</sup> and 16. For more information or to register contact Dan Peitso NØPIY at [n0piy@arrl.net](mailto:n0piy@arrl.net).

### New Business:

Ed Jacobson has purchased a brick for the ARRL Diamond Terrace and has donated the inscription to the club. A replica was passed around.

Tonight's program will be Gary Meyer, WØDYD, talking about oscilloscopes.

The business meeting was adjourned at 7:46 PM.

Respectfully submitted,  
Jeffrey A. Iverson, WB9DAN, Secretary

## Board Meeting January 18, 2013

A meeting of the St. Paul Radio Club Board of Directors was called to order on January 18, 2013, at 7:16 PM by President George Power.

### BOARD MEMBERS PRESENT:

George Power, KØGCP, President  
Allan Klein, WØNLY, Treasurer  
Dale Maroushek, NØPEY, Past President

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

COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:

None

Auction updates – 1/26/2013. We have arranged to get in for set-up at 7:00 PM on Friday evening; Dale will see about getting in at 6:00 PM. Gordy will bring audio equipment. Dallas has computers ready. Finish set-up on Saturday at 8:00 AM. Open doors for sellers at 8:30 AM. Dale will bring food.

Programs – February TRAM with Ed and Ralph; March 5 band DXCC with Lou Sica. Need programs for April and May. One possibility is the presenter that TCFMC had on buying and selling amateur gear.

Treasurer's report – Allan. All funds are solvent. Members may request details from Allan.

Education – Technician License class in St. Paul Community Education program. One person registered so far, but Allan is hoping to get at least 6. The fee for the manual is \$25. Possible avenues for publicity include the local "Maker" groups and Craigslist.

Education – Washington School project status – Allan and George have a meeting scheduled with Denise on 1/23. The school wants it to be a succession of classes, not an ongoing club, which does not fit our perception of the proper way to go.

Membership report – Dale: we are up to 67 members.

Newsletter – *Ground Wave* deadline for next issue is Jan 25.

Spring banquet – April 20, 2013 In Student Union. Room has been confirmed. Speaker is Joe Clysdale's nephew Eric Frische.

Need a February Board Meeting convener as George will be in Boston. Perhaps the meeting can be skipped if no business is pressing.

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 Feb 1	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OSS LL-18. See page 1.
Sat Feb 2	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat Feb 2	9AM Circuit Builders. OSS 415 UST Campus*
Fri Feb 8	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415)
Sat Feb 9	9AM Circuit Builders. OSS 415 UST Campus*
Sat Feb 16	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Feb 16	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Feb 16	9AM – 1PM St. Cloud ARC Cabin Fever Reliever Hamfest. National Guard Armory, St. Cloud, MN
Sat Feb 23	9AM Circuit Builders. OSS 415 UST Campus*
Fri Mar 1	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OSS LL-18.
Sat Mar 2	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat Mar 2	9AM Circuit Builders. OSS 415 UST Campus*
Fri Mar 8	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415)
Sat Mar 9	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 9	8 AM – 2 PM 26 <sup>th</sup> Annual Eau Claire Amateur Equipment Auction, Grace Lutheran Church, Eau Claire, WI
Sat Mar 16	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Mar 16	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Mar 23	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 23	8AM – 1PM Midwinter Madness Hamfest, Buffalo Civic Center, Buffalo, MN.
Sat Mar 30	9AM Circuit Builders. OSS 415 UST Campus*

\*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.