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# St. Paul Radio Club Ground Wave

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## KØAGF

www.stpaulradioclub.org  
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North St. Paul, MN 55109

## NEWS AND NOTES FOR FEBRUARY 2015 — Volume 75, Issue 2

### Monthly Meeting

February 6, 2015

UST OWS LL54

7:00 pm Socializing

Membership Meeting 7:30 pm

PROGRAM

### Arduino for Hams

Mike Thompson, AEØMT

Mike will introduce us to Arduino microcontrollers, highlighting practical applications including his antenna rotator systems and CW keyers. Expect an active discussion of how you can use Arduino in your favorite project.

Mike is an Extra class licensee living on an antenna farm—a St Paul city lot with resonant antennas on every band from 160 through satellite except 30M. He's been an electronics hobbyist as long as he can remember.

### SPRC Auction 2015

Saturday January 31st

See you at the 2015 St Paul Radio Club Auction at Our Lady of Guadalupe church, 401 Concord St., St. Paul, MN 55107. 8:30 a.m. to 1:00 p.m.



### What's Here for Hams?

Allan Klein, WØNLY

Ham radio can be found in lots of places other than on the ham bands. YouTube, for example, is a treasure trove of videos about many aspects of our hobby. As I write this in January of 2015, if you type the words "Ham Radio" in the YouTube search bar, you get 282,000 results! Some are short, five-minute videos about one particular topic, while others are 30- or 40-minute in-depth presentations on a particular rig or emergency event. And some are a part of a large series of weekly or monthly presentations.

Looking for ideas for antennas? Just type in "Ham Radio Antenna" and you get 114,000 results. Here are some examples: "How to build two meter quarter wave vertical," "40/80/160 meter inverted V dipole," "How to Install Tilting CrankUp Tower." The list seems endless.

The words "How To" are often seen in YouTube titles. "How to Install a HF Antenna in a Honda Accord," "How to Use Ham Radio Deluxe in a Re-

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### Dale's Details

Dale Maroushek, NØPEY

What to write about this month, that is the question. The CW boys are out at the Mining Club shack at Tartan Park Friday night and Saturday (1/23-25) for the CQ CW 160 Contest. Hope they do well. I put out some good eats for them, chile, biscuits with sausage gravy, plus the American favorite hot dog. The phone side of the contest will be in late February (2/27-3/1); if you want to have some low band overnight fun, let us know.

The Auction is next Saturday, Jan 31st, you probably won't have read this GW by then so that's about it for that.

I can report that we are now at 123 of what we call members and that I finally got all the checks to Allan to deposit so you should see them clear your checking accounts soon. Thanks for being patient. I am also seeing more email bounces, so if your email changes please let me know so I can correct the system.

The SPRC Wednesday night 2 Meter net is growing...slowly. It is on our repeater, which is running very well and you don't have to wait for the tail to drop before you answer. We start at

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The OWS 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, then park in the ramp on your left or the surface lot on the right. In general, on-campus parking restrictions are not en-

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

Enter the building just north of the parking ramp and take the elevator (in the hallway to the right) or stairs to the lower level. LL54 is not far

from the stairs.

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

OWS: Owens 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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mote Station,” “How to Make a Satellite Contact with a Handheld Antenna,” and “How to Salvage Useable Components from a PC Power Supply” are typical titles. “How to” videos are especially informative because they combine both pictures and words. Reading in a book about how to solder a PL-259 is OK; if there are drawings, that is better—but watching it in a video is best of all.

Some of the most exciting offerings on YouTube are the full blown licensing classes for all levels. No more trekking to the Roseville Fire Station or to Highland Park High School in mid-winter. There are several different producers of videos, where good presenters take you through the material, topic by topic, just like a series of classes offered by a club. One of my favorites is a fellow named David Casler. His Technician class has 39 videos, most of them under 15 minutes. His General Class has 38 separate segments. His Extra Class has 27. And Casler is only one of many different presenters, so if you don’t learn easily from his particular style, try a different series. And, like all YouTube videos, they are free.

There are series programs, like a TV series: “Adventures in Ham Radio” includes 60 videos and “Ham Radio Now” has 234 postings.

If you try YouTube you will likely be exposed to something you didn’t even know existed. For example, there are many videos on ham radio that are produced by survivalists. They talk about how to use ham radio when the whole world collapses. They use code words like “How to Communicate when the SHTF” (which I learned means Stuff Hits the Fan). There are videos about using 2-meter handhelds when the Zombies arrive. Now some of these are produced by folks who don’t know what a repeater is, or how a repeater works, but I was surprised

by how many postings there were by serious survivalists who plan on using two meters, license or not. Two meters will be interesting to monitor if the SHTF!

There are some downsides to YouTube. You have to be specific when typing in a topic, just like in Google. For example, typing in “Gordon West” gives you videos by the popular radio instructor. But you also find videos on Gordon West, an English professional football goalkeeper, and a promo advertisement for Dr. Gordon West, a dentist. Another downside is that a few videos are really stealth advertisements. “How to Get the Most out of your New Miracle Ear Receiver” might not be an unbiased review. Finally, there are a few “lids” who post videos mainly to hear themselves talking. But those are few and far between.

If you haven’t tried YouTube, you should give it a look. But be specific in your inquiries or you’ll be there all day!

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1900 and usually have six to eight ops on board. In comparison, the Mining 2 Meter net is Tuesday at 2030 and they get 10 to 15 ops and run for 45 to 60 minutes. Our Friendly net on 10 Meters is run by Marty KAØNAN, at 2000 on Wednesday and he does about the same. No one seems to like change, but I’m throwing this out for a meeting discussion: Would moving the 2 Meter net to a different day and time make it better for members to check in?

Reading the local paper tonight, I see that my city’s council is stepping into another public forum battle about city attorneys. Seems one is not enough, and we need to pay for more lawyers. This reminded me that we have somewhat the same problem in getting volunteer positions filled in the Club at this time. Meeting attendees will recall the canvas we took a while back, and found that almost all of them had a

volunteer position now, had done one before, or were doing one in other organizations. For 50 to 60 people, that is very commendable volunteer public or private service.

So, we are Hams and understand the Sine wave theory, everything from DC to light moves in this alternating wave from, very long waves to very short waves. Think of these waves as the number of volunteers that step forward and fill a club job that helps other club members. What Frequency is SPRC running at right now? I calculated this by dividing our membership number by the number of SPRC positions available. Came out about 5 units of something. So if we can get more of our membership to offer assistance by volunteering for helper jobs or hard core jobs that are coming up, hopefully we can get that number down to 2. I’m counting on ten people to rush forward and join us, we need your help!

The Board talked about it, and wants to play it cool, slowly and carefully. The results, if it comes to it, will be a reduction of services by the Club. At this time the major problems are in the Education chair, the Refreshment chair needs a helper, the Door Prize program could suffer an attendance problem. I have been the Past President and I will be for another year and half, then I want to be replaced by George, so that means a new President candidate is needed.



## Your email Bounced

Well, maybe yours didn’t—but some of them do. If you haven’t been receiving email every month from SPRC, make sure that we have your correct email address. Send it to:

NOPEY at comcast.net

# Presidential Ponderings

## THINGS PAST

In January, Mike Tabbert talked to us about Broadband-Hamnet and SEMARC's efforts to develop a mesh-network for the metro area. At the Washington County ARES drill last summer, he set up a network in the area we were using, to show how it would be a valuable tool for Emergency Communications. The ARES group saw the immediate benefits for temporary networking, both within the disaster area (or public service area) and as a connection to the outside world. How much any applications beyond EmComm drive the spread of the mesh-networking will remain to be seen.

Probably the time you read this issue of the Ground Wave our club auction (1/31) has ended. We'll provide a report at the February 6<sup>th</sup> meeting.

## THINGS PRESENT

I have been reminded that, in several of the Ground Wave issues last year, I rattled on about the computerization of radio. This year's programs have certainly proved my points, with topics covering remote control, mesh-networks, digital voice on HF so far, and Arduino micro-controllers and SDA dongles coming up this Spring.

But, there is always room for the proven modes of CW and USB phone. The majority of hams (my opinion) prefer the simplicity of un-computerized communications. Computers are often used for logging and other functions, but the actual communications tend to be CW or phone.

If you want to have some fun soon, the MN QSO Party is coming on Febru-

ary 7<sup>th</sup>. Details at the MN Wireless Assn website: <http://www.w0aa.org/index.php/mn-qso-party>.

## THINGS FUTURE

Mike Thompson (AEØMT) will be doing the February program, with a brief introduction to arduino micro-controllers, and some practical applications of them in ham radio.

We still are looking for a program for our April 10<sup>th</sup> meeting. (Yes, April 10<sup>th</sup> rather than April 3<sup>rd</sup>, as UST will

be closed for Easter break.)

We are always looking for interesting programs for our members. If you have a source for a program that you think might interest the club, please contact Jay Maher <jay@umn.edu> with the contact information. If you would like to present a program (or co-present a program) of your own interests, please contact Jay about it.

See you at the next meeting, February 6th.

George, KØGC

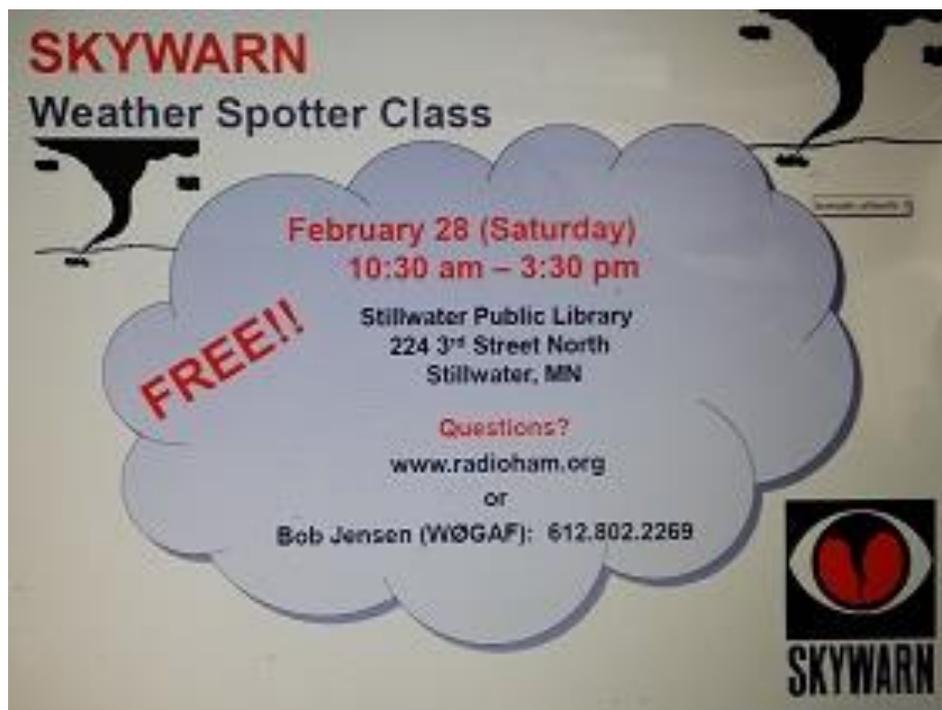
## Spring Tech Class

The Stillwater Amateur Radio Association will be hosting a Technician Licensing Class on Thursday evenings March 5<sup>th</sup> through April 23<sup>rd</sup>. All class sessions will be at the Stillwater Public Library, 224 Third Street North, Stillwater, Minnesota 55082-4806. There is no charge for the class. Preregistration is not required.

Students will need the Ham Radio License Manual 3rd Edition. A limited number of books will be available to purchase for \$29.95 at the first session. Students may also purchase the book online or at Radio City in Mounds View.

There is an exam session scheduled on April 30th, the Thursday following the last class session, at Boutwells Landing in Stillwater. The testing fee is \$15.00.

For additional information, see [www.radioham.org](http://www.radioham.org) or call Bob Jensen (WØGAF) 612 802-2269.



## Membership Meeting January, 2014

7:30 **UST Radio Club:** Henry (KC9IMC) reported on work on remote station, with Orcy (WØQT) and Tom (NØBGO), which is in the planning stage. We hope to put the radio in the equipment room, next to the repeater.

7:35 **George called the SPRC general meeting to order and called for introductions.**

He counted 33 people attending, including 3 guests.

**Secretary's Report:** Posted in Ground Wave. Corrections were noted regarding board meeting minutes attributed to Orcy regarding dual membership in the UST and SPRC clubs, and level of interest in the remote station.

**Treasurer's Report:** General funds increased with membership renewals. Repeater and Education funds are unchanged.

### Committee Reports:

**Membership:** Dale reports we are up to 120 paid members. Unfortunately, we also lost two members who became silent keys.

**Circuit Builders:** Orcy Lyle reports by

email that CB would meet this Saturday, for a presentation on Raspberry Pi computers by Clayton Hampton.

**Public Service/Emergency Communications:** Ralph Bierbaum was not present.

**VE Exams:** Leon Dill reported that the January 3<sup>rd</sup> session had 8 candidates, with 7 passing their elements. This included 1 reinstatement candidate. The next VE Exams will be February 7.

**Old Business:** Auction preparations continue. People with items to sell can bring them to OLG on Friday night after 6:00PM to setup if they want to avoid the Saturday morning rush. This is a change—we are trying to avoid some of the Saturday crush (and the related complaints).

**New Business:** None

**George adjourned the Business meeting at 7:48.**

**Program:** Mike Tabbert talked about SEMARC's efforts to develop a Broadband-Hamnet. He set up two working nodes and showed some of the activities you can accomplish over a mesh network. They would eventually like to build a metro-wide network and are very willing to help any hams who might like to set up a node.

Mike said that his power-point presentation is available as a PDF file on SEMARC's website ([http://www.semarc.org/\\_files/Broadband-Hamnet12-WEB.pdf](http://www.semarc.org/_files/Broadband-Hamnet12-WEB.pdf)).

After the raffle, the meeting was adjourned, about 8:30 PM.

## Board Meeting

No board meeting was held in January as preparations for the Auction and the February meeting were going well.

One issue at hand is whether or not to have a Spring class for General class licenses. If we chose to do so, it will not be through the Community Education program at Highland school. The issue is twofold: Recruiting teachers with someone to coordinate them; and recruiting students. We will continue to work on these issues.

In other "state of the club" issues, Allan has renewed our liability insurance policy, and our corporate registration as a non-profit with the State of Minnesota. He has also sent our supporting check to AI (KØAD) for the 2015 Minnesota QSO Party (as we have done in the past).

We have handled auction issues (such as they were) on the Wednesday night 2-meter net.

Fri Feb 6	7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OWS LL-54. See Page 1.
Sat Feb 7	9AM VE testing. Roseville City Hall. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
Sat Feb 7	9AM Circuit Builders. OSS 415 UST Campus*
Fri Feb 13	7PM SPRC Board meeting. OSS 121 UST campus (Alternate location is OSS 415) **
Sat Feb 14	9AM – 1PM Cabin Fever Reliever Hamfest, St Cloud Armory, St. Cloud, MN
Sat Feb 14	9AM Circuit Builders. OSS 415 UST Campus*
Sat Feb 21	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Feb 21	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Feb 28	9AM Circuit Builders. OSS 415 UST Campus*
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Sat Mar 14	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 14	8AM – 2PM 28 <sup>th</sup> Annual Eau Claire ARC Auction, Saving Grace Lutheran Church, Eau Claire, WI
Sat Mar 21	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Mar 21	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Mar 28	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 28	8 AM – 1 PM Midwinter Madness Hamfest, Buffalo Civic Center, Buffalo, 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.

\*\* Depending on business to be considered, Board Meetings are sometimes held electronically. Check with an officer or board member to confirm that the meeting will be at UST.