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# St. Paul Radio Club Ground Wave

Don Kelly, WA6ZMT, Editor  
Dale Maroushek, NØPEY, Interim Publisher

## KØAGF

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

### NEWS AND NOTES FOR FEBRUARY 2012 — Volume 72, Issue 2



Looking from the transmitter building with the top of the Ch. 9 standby antenna at the bottom.

#### FEBRUARY MEMBERSHIP MEETING

February 3, 2012

UST MHC 155

7:00 PM

1270 Feet and 500.2 KW

Chris Petersen, K9EQ

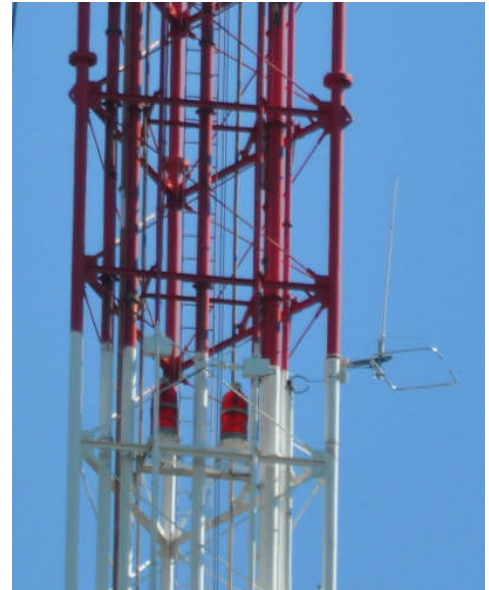
The transition from analog to digital television broadcasting created an opportunity—surplus broadcast antennas. Would it be possible to use a television broadcast antenna for amateur radio? What would it be like operating from 1270 feet? Would 300,000 watts of RF just a few feet away be a problem? What could go wrong?

Since access to the transmitter site was restricted, a station controlled over the Internet was installed at the TPT broadcast facility in Shoreview. Not wanting to waste a resource, a UHF repeater was also connected to the antenna. Chris will report on what it was like to have the "tallest stick" in the state.

The station operated for about nine months until the Channel 2 antenna was scheduled to come down. Could we continue to operate from the tower? And where would we get 800 feet of feedline?

Chris will give a photographic tour of the broadcast facility prior to analog

*(Continued on page 2)*



Viewed from 1/4 mile away, 1.2 GHz/440/144 vertical and 6 meter loop installed at 600' on the tower

#### Straight Key Night

By John Hunt, KGØJD

I only worked three stations, located in NY, FL, and ND, for the ARRL's Straight Key Night (SKN) on January 1st. It was great hearing wall-to-wall Morse code on 40 meters.

SKN is fun. This year I was inspired to operate by a telegraph key that a neighbor had given me; it's mounted on a board as part of a home-made code practice buzzer set. The set came from a junk collection that had belonged to his grandfather. The grandfather (1906-1985), who never became a ham, lived in Mankato and enjoyed going to farm auctions. Can anyone recognize either the key or the buzzer so as to estimate its vintage?



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

The University of St. Thomas (UST) is located at the intersection of Cretin & Summit Avenues, about 1 mile south of the Cretin Exit on I-94 in St. Paul. In general, on-campus parking restrictions 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.

For detailed maps, see [www.stthomas.edu/campusmaps](http://www.stthomas.edu/campusmaps).  
MHC: Murray-Herrick Campus Center  
OSS: O'Shaughnessy Science Hall  
Please contact Kim Schumann in Disability Services at 651-962-6315 or [kjschumann@stthomas.edu](mailto:kjschumann@stthomas.edu) for any accessibility requests.

FACEBOOK USER?  
Look for our group:  
"St. Paul Radio Club"

(Continued from page 1)

shutdown. See photos of 500 kW transmitters and how nine FM transmitters feed one antenna. We'll compare the classic (antique) channel 9 transmitter with that of TPT's 28 kW state-of-the-art solid state Harris.

Both the 6 meter station and UHF repeater are now connected to the Internet and will be demonstrated.

We'll conclude with a virtual tour of the tower as it is today. Come to the meeting and find out what it is like to make contacts from 1270 feet.

Chris Petersen, K9EQ, began life as WN6MSC in the sleepy, sea-side town of Santa Barbara California where he quickly migrated from "pounding brass" on 40 meters to poking around mountain tops visiting radio sites, and working on repeaters and remote bases. Several call signs and call districts later, the Ham Radio "bug" continues to infect Chris as he is still working with remotely controlled stations but is now connecting them to the Internet. His latest affliction? Bringing old tube AM radios back to life. Go figure!

### Classified Ads

Have something of interest to your fellow hams? Highlight it in the Ground Wave for free.

This space is NOT intentionally left blank. It's available for your input to the Ground Wave—and you haven't submitted anything to fill it!

## THE SPRC MINI-HAMFEST

To add some "pizzazz" to our meeting nights, we offer a "mini-hamfest" to the amateur community during our social meeting time from 7:00 to 7:30 PM. This will not be the place to bring in tons of boat anchors or thousands of parts and magazines, but if you have one or two things you would like to sell, this may be the place for you.

The rules are simple:

There is no fee for selling or buying – this is a service to the amateur community.

Each seller will be allowed a maximum of two linear feet of table space.

There will be absolutely no selling during the program or business meeting.

If your item does not sell, you are welcome to donate it as a door prize.

If your item does not sell and no one wants it as a door prize, you are obligated to take it home with you (it is now illegal in Minnesota to put electronic equipment in the trash – it must be recycled properly – which often means you must pay someone to do it).

## Dale's Details

by NØPEY

I'll take a break from Auction Preparation to put the Details together. The New Year is moving forward fast-- beautiful weather until today when an inch of snow contributes to over 549 crashes in 11 hours!

Al Dewey, KØAD, told us all about Log Book of the World last month. I have to set aside some time to get logged in on that real soon. Very worthwhile program for easy QSL's at little cost.

This month, Chris Peterson will fascinate us with pictures and stories about his activities at the Shoreview tower. Read his intro on the front page.

February 4<sup>th</sup> will be the MN QSO Party. You can participate as an individual or group your contacts with a Club. Or join a Club station, Mining ARC for one, for a fun day in the shack.

Future programs are on deck, but not confirmed at this time. Same with the Banquet preparation. One step at a time and we will get it all together.

Officer elections return in May and we have some candidates but the more the merrier. New people, new ideas, new adventures means more fun in the coming years.

Heading back to find more Auction items now, so we can send the ARRL another gift this year.

Dale, NOPEY, President

## Amateur Radio Finally Jumps on the Maker Bandwagon

by Dan Romanchik, KB6NU

Over three years ago, I wrote that amateur radio should do more to associate itself with the Maker, or "do it yourself" (DIY) movement ([www.kb6nu.com/lets-get-on-the-maker-bandwagon/](http://www.kb6nu.com/lets-get-on-the-maker-bandwagon/)). Well, it finally looks like it is going to do just that.

Just before the first of the year, the ARRL unveiled its DIY campaign ([www.arrl.org/news/arrl-launches-new-diy-campaign](http://www.arrl.org/news/arrl-launches-new-diy-campaign)). The most visible part of the campaign is a video ([www.youtube.com/ARRLHQ](http://www.youtube.com/ARRLHQ)), but there are also some other bits, including:

- a flier to be handed out to interested persons,
- buttons that say "Ask Why I DIY with Ham Radio," and
- a PowerPoint presentation and speaker's notes that you can use to give a presentation to an amateur radio club or other non-ham group.

These items are available from the ARRL website, [www.arrl.org/DIY](http://www.arrl.org/DIY).

CQ also on board

CQ magazine is also jumping on the bandwagon. They recently announced that they will run a quarterly "Maker" column, written by Matt Stultz, KB3TAN. Stultz is the founder of HackPittsburgh, a "hackerspace" or community workshop for makers in Pittsburgh, Pennsylvania. He has been a ham since 2009 and has integrated amateur radio into many of HackPittsburgh's activities.

Stultz's first column, titled "We Are Makers," will appear in the March issue of CQ. It provides a general introduction to the maker/hacker community for hams, as well as a description of a high-altitude balloon project that brought the two groups together in Pittsburgh.

Hams at the Maker Faire

In 2006, Make: magazine hosted the first Maker Faire ([www.makerfaire.com](http://www.makerfaire.com)) in San Mateo, CA. Since then, Maker

(Continued on page 3)

(Continued from page 2)

Faires have also been held in Austin TX, New York NY, and Detroit MI. Maker Faires are showcases for all kinds of crazy projects that people are working on.

Hams usually have a presence at these events. This year, the theme for one of the amateur radio groups participating in the California Maker Faire, which is the flagship event, is Arduino ([www.arduino.cc](http://www.arduino.cc)) applications in amateur radio. Michael, NE6RD, who is organizing this group has lined up several very cool projects. One of them is an Arduino-controlled satellite antenna system.

A project I proposed is an Arduino-controlled keyer. On the face of it, this is not a really exciting project, but my twist on this is that instead of directly keying a transmitter, I plan to have the Arduino actuate a solenoid that will press a straight key. That should make the project a little more visual.

Hams sometimes like to claim that we were the original makers and hackers. We certainly have a long tradition of DIYing. Let's show these upstarts exactly what ham radio is capable of. Perhaps, in the process, we'll even entice a few of them to join us.

*When he's not "making" things, Dan, KB6NU, teaches ham radio classes and works a lot of CW. You can contact him about some of the things you're making by e-mailing [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).*

## Membership Meeting

January 6, 2012

A meeting of the St. Paul Radio Club membership was called to order on January 6, 2012, at 7:30 PM by President Dale Maroushek, NØPEY.

Signed in on Members sheet: 40

Signed in on Guests sheet: 3

Those present introduced themselves.

The business meeting was put on hold for the presentation by Al Dewey, KØAD, on Logbook of the World (LoTW).

The meeting reconvened at 8:46 PM.

Dale passed on the Treasurer's report: all funds in good shape (note: details are not published, but members can ask the

Treasurer, Allan Klein, WØNLY, for a report).

The annual auction will be on January 28, 2012, at the North St. Paul Community Center, the same as last year. Sellers may sign up tonight to save time at the door. Details in the *Ground Wave*.

Dale reported that our Education Chair, Allan Klein, WØNLY, is working with the city of St. Paul to have our license classes listed in their community education catalog.

The SPRC Board meeting will be next Friday, January 13, 2012.

VE Exams are tomorrow.

Food Chairman Jay Maher, NJØM, reported that we need to reserve a room for the Banquet.

John Huntsman is still trying to get a project going at the Washington school. The previous project languished, but the NROTC teacher is showing some renewed interest.

Ed Jacobson, WBØVHF, announced some upcoming contests that our members are invited to participate with the Mining club at their station.

The meeting was adjourned at 9:04 PM.

Respectfully submitted,  
Jeffrey A. Iverson, WB9DAN, Secretary

## Board Meeting

January 13, 2012

A meeting of the St. Paul Radio Club Board of Directors was called to order on January 13, 2012, at 7:00 pm by President Dale Maroushek

BOARD MEMBERS PRESENT:

Dale Maroushek, NØPEY, President  
Orcy Lyle, WØQT, Past-President  
Jeff Iverson, WB9DAN, Secretary  
George Power, KØGCP, At-large Board Member

COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:

Jay Maher, NJØM, Food Committee Chair  
Don Kelly, WA6ZMT, *Ground Wave* Editor

Dale will call Joe Kreitzer about room scheduling. There may be some disruptions due to University of St. Thomas construction and remodeling.

Auction publicity: e-mailed to all members and others; flyer at Radio City; on the local nets. Allen will check on who can sign SPRC checks.

Two SPRC members have articles in the February issue of *QST*: Mert Nellis, WØUFO, and Lou Sica, ACØX. Congratulations!

John Huntsman is still trying to get a project going at the Washington school. The previous project languished, but the NROTC teacher, Bill Pletzer, is showing some renewed interest.

Upcoming programs:

Feb. – Chris Peterson, K9EQ, on the 6 meter repeater on Shoreview tower.

Other possibilities:

Jay Bellows, KØQB, on International Amateur Radio.

Skip Jackson, KSØJ, on FLDigi.

Lou Sica, ACØX, on his *QST* article.

Field Day preparations

We likely will have to change our April meeting date because of Good Friday.

There will be many upcoming contesting opportunities with the Mining Amateur Radio Club. Check with Ed Jacobson, WBØVHF, for details.

Several members have expressed interest in becoming new officers in May. We will continue to encourage these and others to run and bring new ideas to the Board.

We began working on updates to the Worked All Minnesota (WAM) rules. Dale will summarize and bring to next Board meeting.

Banquet: We need to confirm a room before arranging a speaker. Jay will check on the last three Saturdays in April or the first three Saturdays in May.

Orcy Lyle, WØQT, reported that a new amateur radio club may be forming in the Twin Cities with a technical bent: building projects, etc. It will likely meet in the Minnetonka area. More details will follow as they become available.

The meeting was adjourned at 8:53 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.

Sat Jan 28	No Circuit Builders
Sat Jan 28	SPRC Auction. Seller setup at 8:30 AM. Auction begins at 9:30AM. North St. Paul Community Center.
Fri Feb 3	7PM Socializing, 7:30 PM SPRC Membership mtg. See Page 1 for program info. Rm 155 MHC, UST campus
Sat Feb 4	9AM Circuit Builders. OSS 415 UST Campus*
Sat Feb 4	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, W0COE, at 651-688-9964 or W0COE@arrl.net
Fri Feb 10	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is 2 <sup>nd</sup> floor lounge or OSS 415).
Sat Feb 11	9AM Circuit Builders. OSS 415 UST Campus*
Sat Feb 18	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling.
Sat Feb 18	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Feb 18	9AM - 1PM Cabin Fever Reliever Hamfest, St. Cloud Armory, 1710 8 <sup>th</sup> St. N, St. Cloud MN
Sat Feb 25	9AM Circuit Builders. OSS 415 UST Campus*
Fri Mar 2	7PM Socializing followed by 7:30 PM SPRC Membership meeting. Rm 155 MHC, UST campus
Sat Mar 3	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 3	9AM VE testing followed by EC exams. Roseville City Hall. Contact Leon Dill, W0COE, at 651-688-9964 or W0COE@arrl.net
Fri Mar 9	7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is 2 <sup>nd</sup> floor lounge or OSS 415).
Sat Mar 10	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 10	8AM 25 <sup>th</sup> Annual Eau Claire Amateur Radio Club Auction, Grace Lutheran Church, 202 W. Grand Ave, Eau Claire, WI
Sat Mar 17	9AM SPRC breakfast. Midway Perkins on University Ave east of Snelling. (wear green)
Sat Mar 17	After Breakfast. Circuit Builders. OSS 415 UST Campus*
Sat Mar 24	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 31	9AM Circuit Builders. OSS 415 UST Campus*
Sat Mar 31	8AM - 1PM 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.