



www.arrl.org



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 MARCH 2016 — Volume 76, Issue 3

Monthly Meeting

March 4, 2016

UST OWS LL54

7:00 pm Socializing

Membership Meeting 7:30 pm

PROGRAM

Cube Satellites

Janet Glenn, KE7SJO

Cube satellites have become an efficient way to collect data on space weather and the Van Allen Radiation belt. Because these birds are so small, they use ham radios for communication and data transmission. There is a worldwide effort to collect data from these projects and relay it back to the university of origin.

Janet is an engineer at Starkey Hearing, but her start was in building small satellites. She has degrees in Mechanical Engineering from Montana State University and Materials Science and Engineering from the University of Arizona.

Janet has worked at NASA Marshal, JPL, Lockheed Martin and Air Force Research Labs consulting on their small satellite projects. She got her technician license to track cube sats while at Montana State University.

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-



Ray Voss KGØDK, SK

Ray Voss died February 20th of kidney and heart disease at age 75. Ray's childhood fascination with

broadcasting led him to a Bachelor of Arts in Speech and Drama (with a concentration in Radio-TV-Film Production) and numerous jobs in broadcasting and audio/visual production and facilities. Ray was active in many local and national amateur radio organizations and in the Lions Club. He was an avid photographer. In retirement, he and his wife Lois enjoyed travelling by RV throughout North America.

Visitation will be held Friday (March 4), from 4-7pm at Edina Community Lutheran Church, 4113 West 54th Street, Edina. The memorial service will be held Saturday (March 5) at 11am at Lutheran Church of the Good Shepherd, 4801 France Avenue S., Minneapolis, with visitation 10am-11am, prior to the service.

For a complete obituary, visit <http://tinyurl.com/RayVoss>

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

Presidential Ponderings

I have heard that the pace of change is changing—it is going faster and faster and faster and faster and fast

I recently joined a breakfast discussion over the old time, reliable radio procedures (i.e., phone and CW and pieces of wire for antennas) and how they have served us well over the years. This is in contrast to newer, computer-driven radio procedures (digital transmission, various encoding of data over analog radio signals, etc.). These procedures require more resources (attention, electricity, working space) when used on our older radios and some new radios seem to exist only with a computer (i.e., the software defined radios). Some of the old practices, such as logging, have been converted to Log-book of the World. Most DX'ers are now tracking beacons on their computers, to test propagation around the world in the various bands. And, of course, there are many ways to connect our radios to the Internet, giving us easier worldwide communications.

But the downside to the newness is a somewhat less reliable communications outcome, and more time (and

(Continued on page 2)

from the stairs.

For detailed maps, see www.stthomas.edu/campusmaps.

OWS: Owens Science Hall

Contact Kim Schumann in Disability Services at 651-962-6315 or kjschumann@stthomas.edu for any accessibility requests.

(Continued from page 1)

energy) spent on tweaking the computer programs and getting the parts to run correctly than is spent communicating. Is this progress? Five out of the seven breakfast participants thought that the computer was a necessary part of radio now and couldn't imagine working without one.

Speaking of progress—as we look back at the auction process, the members of the SPRC who worked on registration and sales tracking are considering modifying the hardware and software used for tracking bidders and sellers. We are asking for your suggestions on how to make the auction run better from your perspectives as sellers and buyers. Given that the database is written in MS Access, and run on computers with multiple versions of Operating Systems and multiple versions of MS Access, the upgrades may become a bit challenging. Especially challenging is the linking of all of the computers so that we can share the data, and then getting older equipment (printers) to work with all of our PC's. But your suggestions can help us make a better system for all of us.

So, let us know what improvements you might like to see.

73,

George, KØGCP

UST Tobacco-Free

UST's St. Paul and Minneapolis campuses are tobacco free.

In the St. Thomas policy, "tobacco" is defined as any lighted cigarette, cigar, pipe, clove cigarette, hookah smoked products, electronic cigarettes and any other smoking product, as well as smokeless or spit tobacco, also known as kip, chew or snus. Promotion, sale and distribution of tobacco products and merchandise, including any items carrying tobacco logos, also are prohibited on the campuses or at any university-sponsored events.

Dale's Details Dale Maroushek, NØPEY

So how are you? The family has been invaded by this virus that is the worst I've had since 1998 when I woke up the second day in, and didn't know where I was for a few minutes. Much less what the guy on the phone wanted, turned out to be my work looking in on me. My wife and I, my son and his son so far have experienced this crud.

Radio related stuff this month has been interesting. We set up to work the MNQSO party on Feb. 6 here at the palatial NØPEY field station. As you know, Mining ARC lost the Tartan Park location last fall, so we are contesting here this winter. Original configuration was to be a pair of FT-1000md Mark Fives. One from WBØVFH on OCF dipole for CW and on SSB with my beam and/or vertical, finally used the SPRC one purchased about three years ago from an estate we sold. It has been sitting here holding my table down for that long. We kicked off at 0800 and got a pileup going on SSB on 20 Meters. CW was working hard but found the noise level to be way over S-9 and the filters had no effect. It was determined that the radio had an internal problem.

If you recall, we experienced a similar problem a week earlier on the CQ 160 CW contest. That Mark Five was switched out for this one, but it had not been repaired yet. So we installed my Icom IC-756 but, by then, we had no more CW ops that can copy over 20 WPM. So we ran it on 40 Meter SSB. Contesting was good and both stations were busy all day.

As with any contest day, when the air is full of RF, you can hear things you never have before. We picked up the USS Hornet Special Event station in CA. Back in 1968, I had a tour of her in Charleston ship yard after a night of camaraderie with a seaman off old number 9. Remember wooden flight

decks? Got a couple shots to Alaska winning the pileups both times. It was a fun and interesting day.

We intend to set a time to examine the SPRC Mark Five and probably have it looked at professionally at Electronix Servicing, Gary Grivna (KØGX), grivn001@umn.edu. He repaired Ed's #1 in a day and #2 in 2 days with modest bills. As my other email stated, ours needs filters and SPRC will be purchasing a group buy to get 20% off as soon as we get a minimum order of 10. We are 8 today, so 2 more and we can order. Check <https://www.inrad.net> for more information.

I squeezed in two unpaid commercials so it is time to close and get ready for the CQ 160 Phone contest next weekend



Tartan Park

Tartan Park, until recently the location of the Mining ARC's "shack," was established in 1959 as 3M's employee playground on 483 acres near Lake Elmo in Washington County.

The idea behind the 3M Club was to provide members with constructive outlets for their recreational, hobby and cultural interests. "In addition to the recreational advantages that the Club offers to employees, there is also the strong bond of fellowship which flourishes when people share mutual interests." More recently, 3M's bottom line trumped the 3M Club ideals, and 3M put the park up for sale. Current scuttlebutt is that H. C. Development (owned by Hollis Cavner) will purchase the Tartan Park Golf Course and that golf icons Arnold Palmer and Annika Sorenstam will be involved. Cavner operates the 3M Championship and developed the TPC course in Blaine.

Membership Meeting February 5, 2016

7:30 George Power (KØGCP) called the UST radio club to order. There was no business to discuss, so it was quickly adjourned. He then called the SPRC meeting to order.

During the self-introductions, we had 25 members, and 2 guests—1 prospective ham and our presenter, Skip Jackson (KSØJ).

Business meeting:

Minutes of the January 8th meeting were published in the Ground Wave by Don Kelly (WA6ZMT). There being no corrections noted, they are accepted as published.

Allan Klein (WØNLY) provided the treasurer's report. The club auction netted \$675, which will go to the ARRL Spectrum Defense Fund. Expenses paid in January included the auction costs, a check in support of the MN QSO party, \$500 for a second repeater to supplement our current one, leaving us with balances of \$5390 in the general fund, \$726 in the repeater fund and \$962 in the education fund.

Dale Maroushek (NØPEY) reported our membership for 2015-2016 is up to 121 members, including some from the January VE session (with 5 people passing a level).

Orcy Lyle (WØQT) said there would be a Circuit Builders session tomorrow (2/6) in OSS 415, and that several people were working on projects.

Dale Maroushek (NØPEY) commented that the Auction had 91 bidders, and issued 229 auction item tickets. This included a large batch of equipment from the Stillwater Area Radio Association, which was selling equipment on behalf of the HandiHams program.

The SPRC Banquet is scheduled for Saturday, April 23, with a program on a DXpedition to Navassa Island, by Ralph Fedor (KØIR). The banquet

will be at 6:00 pm in the Anderson Student Center (Rogge-Leyden Room, third floor) on the University of St. Thomas campus.

Dale Maroushek (NØPEY) reminded all that the MN QSO party is this weekend, and Mining is holding it at Dale's house. Ed Jacobson, WBØVHF, 2015 field day coordinator, is looking for suggestions for a site for the 2016 Field Day event, to be held the weekend of June 24-26. Since Mining lost the Tartan Park site last December, they are looking for a workable site. Ed also mentioned that there are two new categories for Field Day points, Social Media Advertising and having a full-time Safety Officer, so we may be recruiting people for help in those areas.

Program:

Skip Jackson (KØSJ) brought some equipment and samples, and talked about best practices in low voltage wiring. He covered connectors, wire selections, proper tools, and practices on how to connect up a safe and efficient station.

Adjourn: The meeting adjourned around 8:45 pm.

Respectfully submitted, George Power

Board Meeting February 12, 2016

President George called the meeting to order at 7:07 p.m. in room OSS 105

BOARD MEMBERS PRESENT:

George Power (KØGCP) President
John Faughn (KDØCAC) Vice Pres.
Don Kelly (WA6ZMT) Secretary (by telephone)
Allan Klein (WØNLY) Treasurer
Dale Maroushek (NØPEY) Past Pres.
Orcy Lyle (WØQT) Member at Large
Mike Thompson (AEØMT) Member at Large

COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:

Jay Maher (NJØM)

Meetings: The status of room reservations was discussed. Jay looked at reservation confirmation information, March and April are reserved, but he didn't see anything for May.

Programs: Janet Glenn (KE7SJO) will provide the March program, talking about her experience with Cube Satellites. Ralph Birbaum (NØAWN) will cover April or May, talking about setting up a go kit and preparing for emergency activities. Dick Roberts would like to do a program on MARS—Orcy will follow up with him.

Fusion Presentation: Yaesu has offered to do a Fusion presentation. It was decided that this would be a good area-wide activity inviting participation from all clubs. Mike will follow up with Chris Peterson at Medtronic as he has a relationship with Yaesu.

Auction: Net profit was around \$700; Allan will send a check to the ARRL Spectrum Defense Fund. The auction was well attended and went well, but fewer than expected treats were sold.

Keeping up with checkout is a challenge when people want to check out early—it might help to have someone with the auctioneers entering bids. The bid ticket will be revised so the portion for data entry has specific spaces for bidder and dollar amount. We still need to devise a way to close the silent auction.

George is writing a checklist for next year.

Banquet: The room and speaker (Ralph Fedor) are confirmed. Jay will determine if the same menu is available.

Ham of the Year: George will print the certificate.

Club Equipment: Dale suggested we get filters for the club's FT1000. He is going to email SPRC and Mining

(Continued on page 4)

(Continued from page 3)

members inviting them to place orders through us to Inrad to take advantage of their 20% discount for orders of 10 or more filters.

Finance: Allan will look into a club credit or debit card to simplify purchase for the club and will look into PayPal for payment of member dues.

Repeater: Only Terry and Jo have the control codes, phone access and knowledge to control our Motorola equipment.

Mike recommends that we use tone for the new repeater; as well as other advantages, it will interact better with the digital users with transceivers set for tone decode. This would be consistent with other Twin Cities repeaters.

Mike recommends an amplifier so we can use the repeater at less than 100%. He has found an old Micor

amplifier for \$100.

If we are going to have two repeaters, we would leave the vhf repeater as is, but add tone. Put an announcement on the repeater advising of tone and saying that we're adding the UHF repeater.

We'll need a duplexer and antenna if we go to UHF. Plan on another \$1,000.

Mike pointed out that we should increase the use of the repeater. Can use WIRES-X (like echolink, but better). Can join "chat rooms." Might be best to do it on VHF.

UST will be working on the roof to repair leaks; we may want to coordinate antenna work with their work.

The Yaesu repeater can be controlled from front panel and remotely by telephone or ethernet using a homebrew Arduino interface as well as a Fusion transceiver.

Mike will submit the Trustee paperwork tomorrow.

If Joe and Terry will support the VHF repeater, we will use the Fusion repeater on UHF.

Bank Account: Orcy asked if she has been removed from the account. Allan will check.

Unused Antenna: John inquired about the unused fiberglass antenna that is on the OSS roof. Dale says it will not go down through the stairway. Perhaps we could have the roof repair people bring it down.

Website: George will make sure Tom has copies of Dawn's pictures and Janet's program to update the website

Ground Wave: Deadline 2/19/2016.

Adjourned: 8:36 p.m.

- | | |
|------------|---|
| Fri Mar 4 | 7PM Socializing followed by 7:30 PM SPRC Membership meeting, UST classroom OWS LL-54. See Page 1. |
| Sat Mar 5 | 10AM VE testing, Ramsey Cty Library, 3025 Southlawn Dr., Maplewood. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964 |
| Sat Mar 5 | 9AM Circuit Builders. OSS 415 UST Campus* |
| Sat Mar 5 | 8AM – 2PM 29th Annual Eau Claire ARC Auction, Saving Grace Lutheran Church, Eau Claire, WI |
| Fri Mar 11 | 7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415) ** |
| Sat Mar 12 | 8 AM – 1 PM Midwinter Madness Hamfest, Buffalo Civic Center, Buffalo, MN. |
| Sat Mar 19 | 9AM SPRC Breakfast. Midway Perkins on University Ave east of Snelling. |
| Sat Mar 19 | After Breakfast. Circuit Builders. OSS 415 UST Campus* |
| Sat Mar 26 | 9AM Circuit Builders. OSS 415 UST Campus* |
| Fri Apr 1 | 7PM Socializing followed by 7:30 PM SPRC Membership meeting, UST classroom OWS LL-54. |
| Sat Apr 2 | 10AM VE testing, Ramsey Cty Library, 3025 Southlawn Dr., Maplewood. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964 |
| Sat Apr 2 | 9AM Circuit Builders. OSS 415 UST Campus* |
| Fri Apr 8 | 7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415) ** |
| Sat Apr 9 | 9AM Circuit Builders. OSS 415 UST Campus* |
| Sat Apr 16 | 9AM SPRC Breakfast. Midway Perkins on University Ave east of Snelling. |
| Sat Apr 16 | After Breakfast. Circuit Builders. OSS 415 UST Campus* |
| Sat Apr 16 | 9AM – 1PM Brainerd Area Hamfest, Brainerd National Guard Armory, 1115 Wright St., Brainerd, MN |
| Sat Apr 23 | 9AM Circuit Builders. OSS 415 UST Campus* |
| Sat Apr 23 | 9AM-5PM Northern Lights Radio Society Aurora Conference. First Lutheran Church, 4000 Linden St. White Bear Lake, MN |
| Sat Apr 23 | 6PM SPRC Banquet. Rogge-Leyden Room, UST Anderson Student Center. Doors open at 5PM, dinner at 6PM |
| Sat Apr 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.

** 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.