



Saint Paul Radio Club, Inc.

www.stpaulradioclub.org

The Ground Wave

December 2007

Magnet School Project

Volunteers are needed for an exciting new club project. SPRC has entered into a partnership with Washington Technology Magnet Middle School to provide an after-school program for 8 students who are interested in wireless communication. The program will be offered one day each week between January 23 and May 29. It will include on-the-air sessions using equipment borrowed from the Club or members. There will also be some instruction and some construction projects. Volunteer Instructors would be responsible for one or two class sessions.

WTMMS is located near Rice and Maryland in the city's North End. It is an old "fortress style" building with a roof that is much higher than any surrounding trees or buildings. "It's an incredible site for an antenna" said **Allan Klein, WØNLY**, the Club's Education Coordinator. Klein and **Don**



Greenheck, NØJPG, have been putting in long hours refurbishing the Club's old Butter-

nut vertical that used to be on top of the Red Cross Building that will serve as the antenna for the school radio club.

The class sessions will follow a curriculum that the ARRL has developed for use in schools. The curriculum puts amateur radio into a broader context of wireless communication that teenagers use every day--remote controls, cell phones, etc. The students in the program are 7th and 8th graders. The proposal for the class came from **Renee Jensen, KCØVDA**, who is the school's Assistant Principal.

Persons interested in volunteering to be instructors should send an email to Klein at w0nly@arrl.net.

Saint Paul Radio Club Meeting and Holiday Party
Friday, December 7th, 2007, 7:30 p.m.
Socializing 7:00 - 7:30 p.m.
University of St. Thomas
Murray-Herrick Campus Center room 304

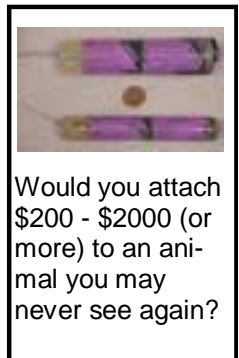
Come and enjoy our annual December meeting and Holiday Party with a short program to boot! The meeting will hold two surprises: The 2007 Member of the Year Award will be presented by the Prez, then a short presentation will be given by Brain McInerney, NØBM, on the SPRC VE Exam team, including recognition of those who have been VE Examiners in 100+ VE Exams. The meeting will be followed by a short program, then to the treats and sociability. Bring treats if you can; the club will provide a meat and cheese tray and coffee. Members and non-members are all welcome!

Finding Hidden Transmitters in the Animal World

Did you know that radio transmitters have been used to track rocks? Radio tracking is a useful technique that reaches across many types of research. It's not just for fox hunting anymore.



Jay Maher, NJØM, is a member of the St. Paul Radio Club and a staff scientist in the Department of Fisheries, Wildlife, and Conservation Biology at the University of Minnesota. He will give a brief overview of some of the techniques and equipment used for tracking fish and wildlife. Highlights of various projects and an opportunity for members to check out field equipment will follow.



Would you attach \$200 - \$2000 (or more) to an animal you may never see again?

Directions to Meeting: Take the Cretin-Vandalia exit from I94 and take Cretin Ave six blocks south to the St. Thomas campus. Murray-Herrick Campus Center (MHCC), the site of the meeting, is off of Cleveland Ave. South, which is two blocks east of Cretin. Enter the parking lot from Cleveland Ave South, between Ashland and Portland Ave. MHCC is the building at the end of the parking lot. Room 304 is in the old part of MHC, to the left (south end of the building). Take the sidewalk to the left from the parking lot and go in the back door of MHC (east side of bldg), go through two sets of double doors and turn right through more doors to the elevator. Take the elevator to Room 304. Be sure to take the elevator in the old part of the bldg; the elevator in the new part of the bldg does not go to Room 304.

Parking permits are not needed after 6 pm on Fridays in the red and yellow lots.

Maps are available at www.stthomas.edu/campusmaps/stpaul.asp. The color version is easier to read but takes longer to download than the black and white version. MHC is #5 on the map.

Monitor the club repeater, KØAGF, for talk-in help. 145.31—no tone needed

NOOZ from the PREZ

The **SPRC website** is mostly updated, at least on the things that people are likely to look up. Every so often I start to work on something that I expect will be easy, and it ends up taking a lot of time and effort to figure out, impeding progress on getting everything caught up. The email addresses are updated for the Officers/Volunteers page. My goal is to have all of these email addresses in the stpaul-radioclub.org domain, so that no one's "real" email address is on display on the website or in the *Ground Wave*.

The **SPRC repeater**, 145.310--no PL tone, has been working off and on. The Repeater Committee is looking into updating the controller. **Joe Zwirn**, **WØXL**, has kept the repeater going most of the time, even though the repeater appears to have a mind of its own at times.

I cannot check, from here at home, whether the repeater is working, because at the moment I am antenna-less. My coaxes came into my radio room alongside a window air conditioner on the north wall of the room. I had to remove the AC unit because of window replacement. The AC was old and heavy and inefficient, so it was best to get rid of it. I opened the window and pushed it overboard. Later, I rolled the AC onto a toboggan and dragged it out to the curb, from where it disappeared within an hour or two. Was someone after the copper tubing in the AC, now that copper has tripled in price?

No longer do I have an excuse for not putting a hole into an outside wall of my house. That is what I will have to do if I want to have use of my antennas. (I doubt that Home Depot sells ACs at this time of year.) I have bought the 2" PVC pipe parts which are needed to use as fittings and hope to get to the project during this week, putting the hole in the outside back (west) wall, just above the single point ground rod that my house electrical service as well as my radials and ground wires are attached to. This is the second time that I have done a hole in an outside wall, having done this when I was working in Brainerd and was

a new ham. The outside wall here in Minneapolis looks like it might be easier to get through than the one in Brainerd was (famous last words?).

The method for doing the hole in the wall came from the 3rd Edition of the Now You're Talking! book, which was the Novice/Technician License Class book at the time that I took those tests, in December of 1999. A diagram shows a pipe through the wall, with a 90° elbow on the outside of the house. The elbow is tipped downward so rain won't get in. After running coaxes through the elbow and pipe, insulation is stuffed inside the pipe to keep out wx and insects.

I added a ring (union) on the pipe where it came into the house and snugged the ring up against the interior wall so it would look neat. I snugged the elbow up against the exterior wall. I will make improvements with the current assembly. Instead of snugging the elbow tight to the exterior wall, I'll have the pipe sticking out two or three inches, and I won't glue the elbow onto the pipe, making it easier to run coaxes through the assembly. With my Brainerd installation, it became difficult to thread coaxes through the elbow and pipe with the elbow glued on. Leaving the elbow unglued will make it easier to thread coaxes through, by pulling the elbow off (while holding on to the couple inches of pipe sticking out), running the coax (with connector) through the detached elbow, then straight through the pipe, then putting the elbow back on. Also, I'll keep the coaxes (and ground wire) bundled with tie wraps. Having them loose through the pipe means they spread out, taking up a lot of space inside the pipe, making it very difficult to get additional coaxes through.

In Brainerd, I had five coaxes and a ground going through the pipe. There was room for more. In Minneapolis, I have four coaxes and one ground wire. When I get my tower up, I'll remove the elbow and attach a box to the outside wall, over the pipe, so that I can put in polyphasers for lightning protection. Then the coaxes can somehow run from the polyphasers through the pipe into the house. (At least, that's how I envision it now. I've learned that things don't always work out like I think they will.)

If I ever run out of room for coaxes in the pipe, I can add another hole and pipe, or make the hole bigger and put in a larger diameter pipe.

The directions for putting the pipe in the wall appeared again in the 5th Edition of Now You're Talking!. After this, these directions disappeared. I could not find them in the latest (2006) Technician book, The ARRL Ham Radio License Manual. Likewise, instructions describing how to solder PL259s to coax, are not published in the latest book. I'm sorry to see that the ARRL has dropped these useful procedures for setting up a station from the Tech. book. I found them handy in setting up a station, particularly since they appeared in a beginner's book, which was encouraging for a new ham to try them. Without this information right at the start of my ham career, I may not have gotten my station set up for years, may never have thought of trying to solder PL259s onto coax, nor have gone on to build a copper cactus j-pole a week after getting my Tech. license, not to mention building electronic projects later on. Thus I would have missed out on a lot of the fun of ham radio.

The earlier book had other practical diagrams and instructions, such as for making a station grounding bar using a half-inch copper pipe. I did that project also. Dropping the practical and useful instructions involved in setting up a station, appears to be part of the trend toward less and less technical involvement by hams. Although the latest Tech. book is an excellent and well-organized book, I'm sorry to see that practical information for setting up a station is absent, since it could provide a boost to interested new hams, by showing what is possible in setting up a station.

I'm looking forward to the **SPRC meeting and Holiday Party December 4th** and to **Jay Maher's (NJØM) program on Finding Hidden Transmitters in the Animal World**. Plan for an interesting and relaxing evening, with surprises such as the **2007 Member of the Year Award** and a **Grand Prize** in the door prize drawing! CU there!

Renewal Reminder

If you received a Membership Data form with this Ground Wave, our records indicate that your membership is not current. The membership year is September through August, so we've already started 2008.

Please complete the form and return it as soon as possible.

FOR SALE

Hy-Gain Ham M Rotator

Wind load rating - 15 sq feet

Vertical load rating - 800 lbs

98 ball bearings

8 wire hook up

The rotator and control box both have been completely reconditioned.

The rotator reconditioning included:

Cleaning, inspection and testing all internal parts, relubricating with low-temp grease, replacing the potentiometer and a new upgraded terminal board with S.S. hardware

The control box has a new motor capacitor, control switch, dial lamps and power cord.

The rotator has not been used since reconditioning and is ready for action.

Late season special \$170

Contact Don @ 651-483-1214 or n0jpg@arrl.net



December Door Prize

The drawing for door prizes at the December SPRC Meeting and Holiday Party will include a Holiday Special Grand Prize. Thanks to everyone for buying tickets and keeping our door prizes going.

Calling all Circuit Builders!

by Jake Jacobson, NØIEZ

A reminder that we have access to the lab Wednesday nights and Saturday mornings. I'm sure we can also get it Friday nights, if we want to. All you need to do is contact **Don Kelly, WA6ZMT, Orcy Lyle, WØQT, or Allen Klein, WØNLY**, to see if they are available to unlock the lab for you to use.

Those of you on the SPRCCB Yahoo! Group will also get messages confirming nights when the lab will be open.

I'm betting that some of the Sof-trock builders have some work to complete. I know I still have some finishing touches to put on mine (plus another to start!). Remember that the lab is there for you and we have three members who are willing to open it and help out when they can. Thanks to them, and Tom, the lab is there for us, so hats off to them!



From The Best of Beasley by Robert Beasley, K6BJH



Photo by Dawn Holmberg, WXØZ

The November VE Exam

Dave Buending, AD2B, VE Coordinator reports that, at the November exam session, we had twenty-six participants--the largest number for an exam session since March of this year when the new FCC rule on the code requirement went into effect. This is because two radio clubs had classes this fall, SPRC and a club from Hutchinson.

There were 16 people who tested for and passed the technician exam, 2 who passed both the technician and general class exams, 4 general class only, 1 general and extra class, and 2 extras.

Upcoming exam sessions are Saturdays December 1st and January 5th at 9:00AM in the Willow Room at the Roseville City Hall.

Thanks to **Lou Sica, ACØX**; **Dave Buending, AD2B**; **Jay Bel-lows, KØQB**; **Greg Merth, KCØRET**; **Ray Voss, KGØDK**; **Brian McInerney, NØBM**; **Orcy Lyle, WØQT**; and **Ed Van Cleave, WØVC**.



Photo by Dawn Holmberg, WXØZ



Janet, now **KDØBZZ**,
taking the tech. exam

Ralph's Surprise

Ralph Bierbaum, NØAWN, sent this email on Monday, November 26, 2007, to members of the St. Paul Radio Club VE team:

I would like to personally thank you for helping my wife Janet present me with the surprise gift of a lifetime. For my 30th wedding anniversary, Janet, in total secrecy, took the Technician class from SPRC, successfully passing her test and completely pulling the wool over my eyes. I am upgrading my ARRL membership to family status as we are now NØAWN & KDØBZZ.

A large envelope arrived last week from the ARRL and as I reached to open it, Janet asked if I was opening her mail. Aghast, I looked at the address and sure enough it was addressed to her. Lots of things going to change around here, I can see that. We're shopping for radios, buying new frames to hold both station licenses, etc.

Thank you for your part in making this the best gift a guy could ever get.

73's

It Was a Dark and Stormy Night

by Lou Sica, ACØX

In the middle of a dark night, I was awakened by heavy breathing in my ear. Turning towards it, I realized it was my ninety-pound Golden Retriever, Hudson. Hudson's internal barometer had been triggered, and Hudson was deathly afraid of storms. The fact that it was four a.m. didn't matter to him. To calm him, I was going to go through the ritual that had become pretty common lately with the string of late summer storms we had been going through. Take him outside, let him run around a little, give him his dog biscuit, pat him on the head, and let him sleep in the tub in the bathroom in the master bedroom.

I took him outside and was letting him run around in the yard. I was standing near my tower; trying to rush him some so I'd get back to bed early enough to get a little more sleep before work in a few hours. But tonight was different. Hudson's reactions to the seemingly-distant lightning rumbles wasn't his usual panting; he gave each a short bark as if he was answering each one with a "you don't scare me" that often comes from someone who's actually very afraid.

After a while, we came inside. Having given up hope of going back to sleep, I headed down to my office to check email and do a little web surfing. The antennas were all disconnected, so I didn't worry much about the approaching storm that still seemed quite far away.

But then it hit.



It wasn't the distant flash followed shortly by a slow rumble that we usually equate with lightning. It wasn't even the crash that comes right after the whole sky lights up with a closer strike. This was more like an explosion, and it was an explosion where the whole experience--sound,

light, even smell happened exactly at the same instant. It was an explosion bright enough that the flash could be seen inside an already-lit room with all the shades down. It triggered all the smoke alarms in the house, making sure no one in the house would go back to sleep even if they could after the blast. The computer in the shack was down. The monitors were dark. The radio (although disconnected from antennas) wasn't responding to its power switch. The shack was dead. Daylight let me survey the exterior damage--besides a whole set of coaxial cables being compromised and a set of lighting arrestors being now questionable, the Diamond vertical that used to be on top of the tower was now hanging in shredded pieces.

After resetting the smoke alarms, calming both the six year old and the now forever lightning-tormented dog, and bringing my wife out of her half-awake attempt to quiet the smoke alarm with a broom, I took a look at whatever interior damage was in the house. Luckily, the lightning arrestors took the bulk of the charge and kept any structural or fire damage from happening. But several pieces of electronic equipment were quietly damaged: An IC-761 transceiver, the shack computer, the whole WØTDX cluster node (computer, data engine, and Micor transceiver), plus some equipment not even in the shack—a big screen TV and a second computer connected to the TV.

It could have been much worse, for sure; the arrestors took the bulk of the charge. They kept the damage limited to some electronic equipment instead of a house fire. But with a direct hit, without a well-distributed broadcast-station-style discharge field of ground rods, and with the extreme voltage and current just inducing charges in everything, some damage did inevitably occur. And it did all leave me with some ideas of how to re-do the station grounding, an even DEEPER respect for lightning, and a knowledge that the internal barometers of ninety-pound Golden Retrievers can be quite reliable.

New Members

A hearty welcome to our
new members

Lowell Ackerman, KDØBZX, Oakdale

Mike Bates, KAØKCQ, Inver Grove Heights

Tim Bleed, (no call), St. Paul

Gretel Keene, KDØBLB, Falcon Heights

Paul Street, (no call), St. Paul

Bob Tinney, NØOIB, Shoreview

EMCOMM Level 1 Course

SPRC will offer an EMMCOMM Level 1 course on Friday evenings from January 17th through February 25th, 2008, from 7:00 to 9:00 p.m. The course will acquaint new and experienced hams with voluntary emergency communication service; successful completion of the course and examination will result in ARRL level 1 EMMCOMM certification.

The course will be led by Brian McInerney, NØBM, and held in the Hickory Room, Roseville Fire Hall, 2701 Lexington Avenue North, 1 block north of County Road C on Lexington Ave.

Class size is limited; enroll with **Allan Klein, WØNLY**, via email at WØNLY@arrl.net.

Membership Meeting Minutes Friday, October 5th, 2007

President, Orcy Lyle, WØQT in the Owens Science Hall, 3M Auditorium at the University of St. Thomas in St. Paul called a meeting of the St. Paul Radio Club Membership to order on Friday, October 5th, 2007 at 7:43 p.m.

Current announcements were made. Introductions were made.

James Klassen will be the Program Coordinator.

The Circuit Builders SDR project continues with testing and troubleshooting.

Due to a lengthy program, the meeting was abbreviated and adjourned at 8:03p.m.

Membership Meeting Minutes Friday, November 2nd, 2007

President, Orcy Lyle, WØQT, in Room 304 at the University of St. Thomas in St. Paul called a meeting of the St. Paul Radio Club Member-

ship to order on Friday, November 2nd, 2007 at 7:40 p.m.

Current announcements were made. Introductions were made.

The Ground Wave will be late due to computer problems, emailed by Saturday, mailed on Tuesday.

The SPRC Auction will be held in Room 304 January 4th, 2008.

Members that have not renewed will be contacted.

The Club will continue to work with the Scouts and expand activities for next year.

Allen gave an introduction on the Clubs invitation from a St. Paul School to provide after school project workers for wireless communications. Twelve members indicated they would be willing to act as mentors. Allen and the Board will confirm the requirements and schedule this for 2008.

After a short discussion, a Motion was made by Brian and seconded by Tom to reelect Skip and Don as Board Member at Large for this two year term. Passed.

Due to a lengthy program, the meeting was abbreviated and adjourned at 8:00 p.m.

Motorola Buys Yaesu

From ARLX007

Motorola USA has announced its intention to launch a tender offer to acquire a controlling interest in Vertex Standard Co, Ltd. Vertex Standard is the parent company of Yaesu. Motorola will own 80 percent of Vertex Standard; Tokogiken, a privately held Japanese company, controlled by current president and CEO of Vertex Standard

Jun Hasegawa, will retain 20 percent, forming a joint venture. The total purchase price for 80 percent of the outstanding shares on a fully diluted basis will be approximately US \$108 million.

Board Meeting Minutes Friday, November 9th, 2007

President Orcy Lyle, WØQT, called a meeting of the St. Paul Radio Club Board of Directors to order on Friday, November 9th, 2007 at 7:00 p.m. The meeting was held at the University of St. Thomas in St. Paul.

Board Members Present:

Orcy Lyle, WØQT, President; Dale Maroushek, N0PEY, Secretary; Skip Jackson, KS0J, Jeff Iverson, WB9DAN; James Klassen, KB0UAZ; Don Greenheck, N0JPG and Allen Klein, WØNLY.

Don Kelly, WA6ZMT Ground Wave editor, also attended.

Old Business:

James will continue to organize the programs with lists from Skip and Orcy.

Door prize committee will have a large prize in December and continue to try new ideas.

Nominees for Member of the Year were discussed and a Certificate will be presented to the winner in December. A second Special award will also be presented.

Orcy, Brian and Steve will call non-renewing members.

New Business:

The Auction will be January 4th, 2008 Room 304. Orcy will print flyers, Dallas will prep bookkeeping computers, Jeff will do talk in, extra food and drinks will be ordered, Tom will be contacted about extra Carts. Main announcement will be December meeting, no rule changes noted.

Allen will coordinate with the magnet school for a Pilot Program from January to May using the ARRL curriculum and working toward being part of the Big Project. A station with Club equipment will be set up at the school, and volunteer members will be assigned mentoring days and times. Liability issues will be resolved with the school before we proceed. Motion to proceed with project by Allen, second by James. Passed.

The Holiday Meeting will be in Room 304 on December 7th, STU food service will provide the mains and members are to bring other Holiday treats.

The St. Paul Radio Club, Inc., has served the amateurs of this area since 1931 except between 1941-45 when most of the members were in the military service. The first issue of *The Ground Wave* was published in November 1938, under editor Frank Fowles, W9BBL. The club call is KØAGF issued in 1956.

Club Meetings are held monthly (except June, July and August), generally on the First Friday at 7:30 p.m. Consult current Ground Wave or club website for meeting location. Social time 7-7:30 p.m. If you have any interest in radio communications, whether you are licensed or not, please accept this cordial invitation to join us as a member or come visit us at one of our meetings or events. All are welcome!

Individual or family dues are \$20.00 per year payable on September 1; new members joining in mid-year are prorated. Student dues are \$10.00 per year. Children 18 and under are free.

The St. Paul Radio Club's "Friendly Net", an informal get acquainted net, meets at 8:00 p.m. every Wednesday on 28.310 MHz.

Want Ads... *The Ground Wave* solicits your want ads...free to club members, \$1.00 to others.

Free Classes... SPRC conducts free classes in Code and Theory between September and May for Technician and General licenses.

The Mission of *The Ground Wave* is to bring a good blend of local, national and world news affecting amateurs in addition to technical knowledge, club events and humor. The editor solicits your letters, knowledge and first-hand experiences and stories for future articles.

The St. Paul Radio Club is affiliated with the ARRL.



VHF NETS

145.17 MAGIC Repeater Net Saturday 7:00 p.m.
 146.76 Saturday Swap Shop Saturday 9:30 a.m.
 146.85 MARA Bulletin Board Sunday 7:00 p.m.
 145.31 SPRC 2 meter Net Wednesday 7:00 p.m.

HF NETS

28.310 SPRC Friendly Net Wednesday 8:00 p.m.
 3.860 Minnesota State Phone Net Noon and 5:30 p.m. daily
 3.860 Minnesota ARES Net 6:00 p.m.
 3.710 Minnesota Slow Speed CW Net 6:00 p.m. daily
 3.605 MN State CW Traffic Net 6:30 p.m. and 9:50 p.m. daily
 3.925 MN PICO Net 9-Noon Mon-Sat, 3-5 p.m. Mon-Fri

ST PAUL RADIO CLUB REPEATER KØAGF 145.31 – 600 Open access no tone

ST. PAUL RADIO CLUB VOLUNTEERS

President	Orcena (Orcy) Lyle	WØQT	612 827-2707	president@stpaulradioclub.org
Vice President	James Klassen	KBØUAZ	651 451-8612	vp@stpaulradioclub.org
Treasurer	Allan Klein	WØNLY	651 291-8815	treasurer@stpaulradioclub.org
Secretary	Dale Maroushek	NØPEY	651 777-5309	secretary@stpaulradioclub.org
Board of Directors	Don Greenheck Skip Jackson Jeff Iverson	NØJPG KSØJ WB9DAN	651 483-1214 651 451-2313 763 560-4458	n0jpg@stpaulradioclub.org ks0j@stpaulradioclub.org wb9dan@stpaulradioclub.org
Membership Chair	Steve Huntsman	AAØP	952 894-3341	membership@stpaulradioclub.org
Membership Registrar	Skip Jackson	KSØJ	651 451-2313	registrar@stpaulradioclub.org
Call Trustee	Tom Sturm	NØBGO	651 699-4270	trustee@stpaulradioclub.org
Education Coordinator	Allan Klein	WØNLY	651 291-8815	education@stpaulradioclub.org
VE Exams	David Buending	AD2B	952 486-0836	ve@stpaulradioclub.org
Ground Wave Editor	Don Kelly	WA6ZMT	952 474-2766	editor@stpaulradioclub.org
Club Historian	Joe Zwirn James Klassen	WØXL KBØUAZ	651 483-4784 651 451-8612	historian@stpaulradioclub.org vp@stpaulradioclub.org
Field Day	Ed Jacobson	WBØVHF	952 884-2335	fieldday@stpaulradioclub.org
Parliamentarian	Tom Sturm	NØBGO	651 699-4270	parliamentarian@stpaulradioclub.org
Annual Banquet/Picnic Coordinator	OPEN			
January Auction	Coordinated by the board			
Refreshment Coordinator	OPEN			
Skywarn	Dallas Fogg	NØLKD	651 644-2361	skywarn@stpaulradioclub.org
Door Prizes/Drawings	John Hunt, Chair	KGØJD	651 647-1341	doorprizes@stpaulradioclub.org
Technical Liaison	Brian McInerney	NØBM	651 738-5932	technical@stpaulradioclub.org
Circuit Builders Chair	Jake Jacobson	NØIEZ	651 554-0441	circuitbuilders@stpaulradioclub.org
Friendly Net	Marty Gammel	KAØNAN	651 646-5428	friendlynet@stpaulradioclub.org
2 Meter Net	Andy Lokken	KCØTUD	651 224-5553	2mnet@stpaulradioclub.org
Repeater Committee	Joe Zwirn, Chair Tom Sturm Skip Jackson Keith Miller Joe Kreitzer Jeff Iverson	WØXL NØBGO KSØJ AGØH KCØJK WB9DAN	651 483-4784 651 699-4270 651 451-2313 651 777-0109 651 785-9402 763 560-4458	repeater@stpaulradioclub.org trustee@stpaulradioclub.org ks0j@stpaulradioclub.org ag0h@stpaulradioclub.org kc0jk@stpaulradioclub.org wb9dan@stpaulradioclub.org
University of St Thomas Liason	Tom Sturm	NØBGO	651 699-4270	ustliason@stpaulradioclub.org
Webmaster	Orcena (Orcy) Lyle	WØQT	612 827-2707	webmaster@stpaulradioclub.org

DAKOTA DIVISION ARRL OFFICERS

Director	Jay Bellows	KØQB	651 222-7253	k0qb@arrl.org
Vice Director	Greg Widin	KØGW	651 436-8811	k0gw@arrl.org
Asst. Directors	Michael Siegelman Brian McInerney	KØBUD NØBM	612 542-8450 651 738-5932	n0oel@aol.com briann0bm@aol.com
MN Section Manager	Richard (Skip) Jackson	KSØJ	651 451-2313	ks0j@arrl.org

St. Paul Radio Club - Summary Calendar of Events

Sat Dec 1 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b@arrl.net for info
Sat Dec 1 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Fri Dec 7 7pm St. Paul Radio Club Meeting and Holiday Party (see page 1)
Sat Dec 8 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Fri Dec 14 7pm St. Paul Radio Club Board Meeting. University of St Thomas OSS 435 (4th floor lounge, across from elevators)
Sat Dec 15 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling
Sat Dec 15 10:30am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Sat Dec 22 9am SPRC Circuit Builders. University of St. Thomas OSS 415 See note below
Sat Dec 29 9am SPRC Circuit Builders. University of St. Thomas OSS 415 See note below
Fri Jan 4 7pm St. Paul Radio Club Meeting and Annual Auction UST MHC 304.
Sat Jan 5 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b@arrl.net for info
Sat Jan 5 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Fri Jan 11 7pm St. Paul Radio Club Board Meeting. University of St Thomas OSS 435 (4th floor lounge, across from elevators)
Sat Jan 12 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Sat Jan 19 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling
Sat Jan 19 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Sat Jan 26 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Fri Feb 1 7pm St. Paul Radio Club Meeting—Pat Tice, WAØTDA: Radials, Grounds, Hx of Butternut
Sat Feb 2 9am SPRC Circuit Builders. University of St. Thomas OSS 415. See note below
Sat Feb 2 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b@arrl.net for info

Check the SPRCCB Yahoo group or contact Jake at circuitbuilders@stpaulradioclub.org to confirm schedule.

NOTE: The dates listed above for VE exams are the usual session dates for each VE team; occasionally sessions are canceled or changed. We urge our readers to call the contact number to confirm the test time, place and space.

The calendar is provided as a service to our readers; the St. Paul Radio Club is not responsible for errors or omissions.

To list your general interest amateur event in the calendar, contact the editor. Priority given to SPRC events, area events and national/international events in that order, space permitting.

**St. Paul Radio Club Meeting and Holiday Party
Friday December 7th — Room MHC 304 (see page 1)**

ADDRESS CORRECTION REQUESTED

St. Paul Radio Club, Inc.
P. O. Box 9375
North St. Paul MN 55109

