



Saint Paul Radio Club, Inc. www.stpaulradioclub.org

The Ground Wave

December 2009

SK: Gregory Ferrey,
WØUYJ
by Joe Zwirn, WØXL



Gregory Ferrey, WØUYJ, died on November 22nd at the age of 85. He was an active member in SPRC in the late 40s to about the mid 60s. Greg again joined the club in early 2007—I believe it may have been in March; we talked about some of our mutual friends of yesteryear and so forth. Unfortunately, I never saw him again (I first became an SPRC member as a high school kid in 1958, but have no recollection of meeting Greg back in those early years).

The photo was taken in 1955 at the Gopher Electronics store on Minnesota Street in downtown St. Paul. I'm quite certain Greg is the first (but possibly second) gentleman on the left; fourth is Charles Compton (WØBUO SK) and last is Gopher's owner Gene Delonais (WØOOO SK). This picture was used in the SPRC 75th Anniversary presentation.

Help Wanted: Newsletter Editor

Our current editor, **Don Kelly, WA6ZMT**, doesn't have the time to get the newsletter out in a timely manner—this is his last newsletter. If you can step in and get 'er done, please contact president Dale (see page 7).

Saint Paul Radio Club Holiday Party
Friday, December 11th, 2009, 7:00 p.m.
University of St. Thomas
Murray-Herrick Campus Center, Room 155



St. Paul Radio Club Holiday Party

Our Annual Holiday Party takes the place of our normal meeting program. The club will provide coffee and soda along with a sandwich tray. Members often bring a treat to share but it isn't a requirement for attendance.

We'll do the normal set up and socializing from 7:00 to 7:30 PM and then inject some activities. The mystery bag swap from previous years is being brought back. Here is a chance to pass on those interesting items that you just know someone else will enjoy. Also, if you know anything about reflexology, you are certainly aware that the left foot is the nerve center for all CW activity. Come and demonstrate your CW prowess directly from the source! See Dale's Details for more information on both activities. Tie a bow around your toe today to remind you to come on the 11th.

Directions to Meeting: Take the Cretin-Vandalia exit from I94 and take Cretin Avenue six blocks south to the St. Thomas campus. Murray-Herrick Campus Center, site of the meeting, is off of Cleveland Ave. South, which is two blocks east of Cretin. Enter the parking lot from Cleveland Avenue South, between Ashland and Portland Avenues. Go in the door at the west end of the parking lot and turn right after the second set of double doors, then around through an open area to Room 155, on the 1st floor.

Parking permits are not needed after 6 p.m. 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; the most convenient parking is lot G.

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

SK: John (Jack) Hill, WØZWW by Joe Zwirn, WØXL

John (Jack) Hill, WØZWW, died on August 30th at the age of 99. He immigrated with his family from Canada to Minnesota in 1922, and worked at General Railway Signal, 3M and Northwest Airlines. He served in World War II as the Master Sergeant in charge of radio maintenance for military airfields in the Panama Canal Zone and throughout Central America. Upon return he joined Engineering Research Associates where he led the team that engineered and built the first American stored-program electronic computer, the ERA Atlas. In 1957, he became Director of Research and Development at Ramsey Engineering Co. In 1977, he began over 20 years of volunteer work for SCORE and Radio Talking Book. Known to his friends as "Jack," he was a positive man of good will, honesty and humor.

Apparently, Jack Hill was involved with the SPRC back in about the 1940s and 1950s, and his main field of interest was DX operating.

Dale's Details by Dale Maroushek, NØPEY

Repair and monitoring of the repeater is in progress. If you have a chance to use it, or hear someone on it, make a note if you notice any problems.

We didn't get anything going for JOTA this year—late start and not much interest. But **Jim Mohn, NØRQR**, is on board for next years planning and operation. It's a great way to get young people into radio.

Still looking for a couple of extra helping hands for the Auction in January. Just help the sellers and buyers get in, registered, set up and "gopher" anything that needs work.

Looking forward to the December Holiday Party meeting. It's a social evening with good food and fellowship, with some games and entertainment to keep

it interesting.

This is Radio Sport season, or contests by the old name. Mining Club Station is looking at the Sweepstakes and some others. ARRL and CQ run them; if you would like to work at a team event, let us know.

See you at the meeting.

Membership Meeting October 2, 2009

A meeting of the St. Paul Radio Club membership was called to order on October 2, 2009, at 9:14 PM by President Dale Maroushek, NØPEY. (The meeting this month was preceded by the presentation by Jim Nagle on Power Line Safety).

Signed in on Members sheet: 23

Signed in on Guests sheet: 5

Dale solicited club input for a review of the speaker's talk that his sponsors required,

Our "wearables" supplier is offering a free hat with orders through December 15.

Orcy Lyle, WØQT, gave a report on Circuit Builders; people say they are interested, but don't show; Tom has some unfinished kits that people may be interested in.

Dale introduced guests.

A motion was made to approve minutes as printed in *Ground Wave*. Moved, seconded, and carried.

The Scouts are looking for help with the Jamboree on the Air (JOTA) on October 14 in North St. Paul.

Dan Anderson, new state SEC will be Ramsey Co. Public Works at Hwy 96 & Hamline on Sat. October 14 to meet as many hams as possible; State ARES web page is greatly improved.

Jay, Maher, NJØM, reported that Washington Middle School project is off to a slow start. Will officially begin with the second term on November 9th.

Fred McCormick, KBØNVC, Nominations: the club will elect its two At-Large Board Members at the November Meeting. He placed in nomination Skip Jackson, KSØJ, and Jay Maher, NJØM. They were seconded. Further nominations can be made tonight or on election night in November.

Door prizes were awarded.

Board Meeting October 9, 2009

A meeting of the St. Paul Radio Club Board of Directors was called to order on October 9, 2009, at 7:00 PM by President Dale Maroushek. **BOARD MEMBERS PRESENT:** Dale Maroushek, NØPEY, President; Orcy Lyle, WØQT, Past-president; James Klassen, KBØUAZ, Vice-President; Allan Klein, WØNLY, Treasurer; Jeff Iverson, WB9DAN, Secretary; Don Greenheck, NØJPG, At-large Board Member; Skip Jackson, KØSJ, At-large Board Member. **COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:** Dan Meyer, NØFKB; Dawn Holmberg, WXØZ; Dallas Fogg, NØLKD; Jay Maher, NJØM

Skip announced that Stillwater (SARA) will be giving a program on their ICOM repeater tomorrow at 9:00 AM.

Dale read the letter he wrote to Xcel praising Jim Nagle's presentation to our club.

Upcoming programs: November – Electric Car. December – Entertainment type program for holiday meeting. January – Auction.

Repeater: Has been down two of last three weeks, but is back up now. Loose cable may be problem, Needs an activity log on site for work. Need a Saturday work Party.

501c3 Status for IRS tax-exempt status is progressing.

Discussion of auction rules: Club will continue to donate proceeds after expenses to ARRL Spectrum Defense Fund. We will introduce the concept of a "reserve price" which is higher than the minimum bid used to start bidding. Orcy has electronic copy of auction rules; will distribute to

(Continued on page 3)

Board before next meeting for review.

Club will send "Thank you's" to those who donate extra with their dues.

Skip announced that club member John Thomas, W3FAF, is quite ill; club will send get-well card.

We are still exploring options for a new generator.

Membership Meeting November 6, 2009

A meeting of the St. Paul Radio Club membership was called to order on November 6, 2009, at 7:35 PM by President Dale Maroushek, NØPEY.

Signed in on Members sheet: 29
Signed in on Guests sheet: 5

Dale noted that a *Ground Wave* was not published this month. He solicited volunteers to help with the publication.

Dale introduced guests.

Dale solicited for Elmers to help with the Extra Class we will offer in the Spring.

December meeting will be holiday social meeting, December 11, Room 155. Club will provide snack trays and beverages; members may bring treats and other things to share.

The January meeting will be the auction, January 15 in Room 304. Proceeds to ARRL Spectrum Defense Fund.

The February meeting will be Brad Peters, WD9GNJ, who will speak on the on-air Friday night technical exchange.

Dale announced that the club will elect its two At-Large Board Members tonight. Skip Jackson, KSØJ, and Jay Maher, NJØM, have been placed in nomination. Nominations from the floor were sought. Hearing none, a motion for a unanimous ballot was en-

tertained: Moved, seconded, and carried.

Retiring At-Large Board Member, Don Greenheck, NØJPG, was thanked for his service.

Membership Secretary Skip Jackson, KSØJ, reported that the club has 71 members, plus two new applications tonight.

The Circuit Builders lab will be open tomorrow.

We need one more "wearable" request to place an order.

Board Meeting November 13, 2009

A meeting of the St. Paul Radio Club Board of Directors was called to order on November 11, 2009, at 7:10 PM by President Dale Maroushek. **BOARD MEMBERS PRESENT:** Dale Maroushek, NØPEY, President; James Klassen, KBØUAZ, Vice-President; Allan Klein, WØNLY, Treasurer; Jeff Iverson, WB9DAN, Secretary; Jay Maher, NJØM, At-large Board Member. **COMMITTEE CHAIRS AND OTHER INTERESTED MEMBERS PRESENT:** Don Kelly, WA6ZMT, *Ground Wave* Editor.

Dale reviewed the minutes from the last membership and board meetings.

December Meeting will be holiday party; December 11, Room 155; go with same food as last year; for entertainment we will go with bag swap (bring one to get one) and "Left Foot Key"; see if we can get a photo slide show to run in the background.

Auction Rules: allow seller to set "reserve" (different from minimum bid); enforce bid increments \$0-\$50 (\$1), \$51-\$100 (\$5), \$100 and up (\$10).

Repeater: being evaluated and fixed; has not been working well the last two weeks.

Non-profit status: Allan questioned whether or not we might more properly be 501c7. Board thought 501c3 is what we really want to allow tax-deductible donations. Allan will check

with SEMARC and SARA to see how they are organized.

Education: Fall Technician Class was cancelled due to lack of participation. A "seminar style" Extra class will be offered next February.

Treasury: accounts are solid.

Ground Wave: Don reports that he does not have time to be GW editor. Many ideas were discussed, but no decisions were made. We need to be looking at both stopgap measures and long-term solutions, including a search for a new editor.

Flyers: Distribute what we have; print updated version.

VA Medical Center Embraces Ham Radio

As a member of the Metro Hospital Compact of 29 hospitals, the Minneapolis VA Medical Center is serious about amateur radio. Since their first Technician class in December, 1997, they have had four more classes averaging a 95% pass rate, licensing 130 new hams.

They get it done in a single weekend-the next class will be Friday December 11, 6:00 p.m. to 9:00 p.m., and Saturday & Sunday, December 12 & 13, 8:00 a.m. to 5:00 p.m. The course is free except for the cost of the \$24.95 textbook and a \$14.00 examination fee.

If you're interested in the class, contact David.Adriansen@va.gov via e-mail or at (612) 467-3019.

David would also like to hear from anyone interested in helping to teach or mentor the new hams.

Dan Meyer, N0KFB, found this article in Computerworld promoting amateur radio.

<http://tinyurl.com/yz49ntg>

Saint Paul Radio Club Wearables



The official St. Paul Radio Club wearables are: Tee-shirts, polo shirts, sweatshirt, jackets and hat in a handsome navy blue with the colorful St. Paul Radio Club logo on one side of the chest and name & callsign on the other side (jackets can also have a big logo on the back for \$32.00 extra). Denim shirts come in dark or light blue, also with the club logo on one side and name & callsign on the other side.

The denim shirt and polo shirt are shown above, left. The hat is shown on the model (button not included, this may not qualify as a “free hat”).

Item #	Item Description	Price	Sizes
29M 29MP	Tee-shirt (short sleeves) Tee-shirt w/ pocket (short sleeves)	\$22.95 \$22.95	S – 6x "
29LS 29LSMP	Tee-shirt (long sleeves) Tee-shirt w/ pocket (long sleeves)	\$23.95 \$25.95	" "
H437 MH436MP	Polo Shirt (banded short sleeves) Polo Shirt w/Pocket (banded short sleeves)	\$29.95 \$29.95	" "
562M	Sweatshirt Hat (baseball hat style)	\$26.95 \$15.95	" fits all
8800 6800	Jacket - spring/fall (nylon w/ nylon lining) Jacket - winter (like 6800, but w/ fleecy lining)	\$59.95 \$69.95	S – 6X "
J10 J16	Men's Denim Short Sleeve shirt Men's Denim Long Sleeve shirt	\$36.95 \$36.95	S – 5X "
J210 J216	Women's Denim Long Sleeve shirt Women's Denim Short Sleeve Shirt	\$36.95 \$36.95	S – 2X "

**2X – 6X and
talls have an
additional
charge.**

LT add \$2
XLT add \$3

2X add \$2
2XLT add \$5

3X add \$3
3XLT add \$6

4X add \$5
4XLT add \$8

5X add \$6
5XLT add \$9

6X add \$8
6XLT add \$10

St. Paul Radio Club togs are embroidered by B & B Embroidery (www.hamthreads.com), owned and operated by Dave Birdsley, KF8WS and Shirley Birdsley, N7UPY.

Orcy will bring order forms and ordering information to the December club meeting.

Plan on using a **check or money order** for your wearables purchase. The Birdsleys recently made the big move from Michigan to Texas and are still setting up shop. They are embroidering wearables but haven't set up a credit card system.



Jim Nagle demonstrates the dangers of high voltage at the October SPRC meeting.

Pictures on this page
courtesy of
**Dawn Holmberg,
WXØZ**



Auction Items

Look for these items at the SPRC Auction in January. Bring your stuff and make the auction a real success.

Yaesu Mark 5 Ft-1000 Transceiver and VP-1000 Power supply

Yaesu MD 200 A9X hifi desk top mic with keypad and foot switch

VL-1000 Linear Amplifier HF and 150 Mhz

VTV-1000 50Mhz transverter--all with manuals and connecting cables

DL2K dry dummy load 50 Ohm by Palstar

Advanced digital cable 2000 600v single wire, double insulated, 200'

Black Dacron quarter inch rope 40'

Wireman RG-58u foam coax, 50' in gray

Roll of coax, unknown

Double dipole W2AU balun feed point 160/80M

Dipole Skywalker cable RG-6 40M

Radial kit for Gap Vertical and 10 inch standoff

Spiro AS-2 COILS, LC-160 coils with only half wire

Four sets twin lead bundles, possibly radials

Box of RG-8 cable pieces with UHF ends etc

Blue wire roll

Diamond Truck lid mount antenna, need top whip, power gain ATS-120 Vertex

Four-plex 5-inch magnet roof mount bracket

Bencher Low pass filter to 30Mhz

Container antenna parts, Plastic antenna ends

Platform keyer with real spring paddles, homebrew

Zircon stud finder new in package

Industrial Communications Engineers model 473 AC line filter

Budwig HQ-2 antenna end insulators, 2 pair

3 coax A/B switches, Daiwa, MFJ, Delta 2

Misc cables and supplies

Belkin 4 port USB Port

Garmin Street Pilot III GPS

Hustle 5BTV 10-80 M Vertical antenna
ARRL antenna book 19th Edition no CD

Heil FS-2 Dual foot switch

Mix W transceiver interface 25 pin to USB

Micro Ham keyer setup with all cables
XM radio remote antenna w cable and PS

Yaesu G-450A rotor with; lower bracket, 100' cable and control box

Give Your Generator Some Space

Edited from The National Institute of Standards and Technology (NIST) 10/6/09 newsletter *NIST Tech Beat*.

Portable generators are a lifeline during weather emergencies when homes are cut off without electricity. But these generators emit poisonous carbon monoxide—a single generator can produce a hundred times more of the colorless, odorless gas than a modern car's exhaust. New research from NIST shows that to prevent potentially dangerous levels of carbon monoxide, users may need to keep generators farther from the house than previously believed—perhaps as much as 25 feet.

Up to half of the incidents of non-fatal carbon monoxide (CO) poisoning reported in the 2004 and 2005 hurricane seasons involved generators run within 7 feet of the home, according to the U.S. Centers for Disease Control and Prevention (CDC).

Carbon monoxide can enter a house through a number of airflow paths, such as a door or window left open to accommodate the extension cord that brings power from the generator into the house. While some guidance recommends 10 feet from open windows as a safe operating distance, NIST researcher Steven Emmerich says the "safe" operating distance depends on the house, the weather conditions and the unit. A generator's carbon monoxide output is usually higher than an automobile's, he says, because most

generators do not have the sophisticated emission controls that cars do.

"People need to be aware that generators are potentially deadly and they need to educate themselves on proper use," Emmerich says. With funding from CDC, NIST researchers are gathering reliable data to support future CDC guidance.

NIST building researchers simulated multiple scenarios of a portable generator operating outside of a one-story house, using both a test structure and two different computer models—the NIST-developed CONTAM indoor air quality model and a computational fluid dynamics model.

The simulations included factors that could be controlled by humans, such as generator location, exhaust direction and window-opening size, and environmental factors such as wind, temperature and house dimensions. In the simulations the generator was placed at various distances from the house and tested under different weather conditions.

"We found that for the house modeled in this study," researcher Leon Wang says, "a generator position 15 feet away from open windows was not far enough to prevent carbon monoxide entry into the house."

The generator study can be downloaded at <http://fire.nist.gov/bfrlpubs/build09/PDF/b09009.pdf>.

* L. Wang and S.J. Emmerich. Modeling the Effects of Outdoor Gasoline Powered Generator Use on Indoor Carbon Monoxide Exposures. (NIST Technical Note 1637,) 2009.

Watch for an SPRC Extra Class course this winter, beginning shortly after the Super Bowl.

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 Vowles, 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!

Annual dues are payable on September 1. Individual or family: \$20.00, student: \$10.00. Children 18 and under are free. Members joining mid-year are prorated.

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

Free Classes... The club usually conducts Technician level classes in the fall and General level classes in the spring.

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. **SPRC REPEATER KØAGF 145.31 – 600** Open access no tone



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.
147.03 pl 114.8 Fri Night Roundtable 9:00 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 VOLUNTEERS

President	Dale Maroushek	NØPEY	651 777-5309	president
Vice President	James Klassen	KBØUAZ	651 451-8612	vp
Treasurer	Allan Klein	WØNLY	651 291-8815	treasurer
Secretary	Jeff Iverson	WB9DAN	763 560-4458	secretary
Past President	Orcena (Orcy) Lyle	WØQT	612 827-2707	past president
Board of Directors	Don Greenheck Skip Jackson	NØJPG KSØJ	651 483-1214 651 451-2313	n0jpg ks0j
Nominations	Fred McCormick	KBØNVC	651 633-1103	nominations
Membership Liason	Twila Greenheck	NØJPH	651 483-1214	membership
Membership Registrar	Skip Jackson	KSØJ	651 451-2313	registrar
Call Trustee	Tom Sturm	NØBGO	651 699-4270	trustee
Education Coordinator	Allan Klein	WØNLY	651 291-8815	education
VE Exams	David Buending	AD2B	952 486-0836	ve
Ground Wave Editor	Don Kelly	WA6ZMT	952 474-2766	editor
Club Historian	Joe Zwirn James Klassen	WØXL KBØUAZ	651 483-4784 651 451-8612	historian vp
Field Day	James Klassen	KBØUAZ	651 451-8612	fieldday
Parliamentarian	Tom Sturm	NØBGO	651 699-4270	parliamentarian
Annual Banquet/Picnic Coordinator	Jay Maher	NJØM	612 850-0810	banquetpicnic
January Auction	Coordinated by the board			auction
Refreshment Coordinator	Jay Maher	NJØM	612 850-0810	refreshments
Emergency Service Liaison	Ralph Bierbaum Janet Bierbaum	NØAWN KDØBZZ	651 490-9859 651 490-9859	ec
Skywarn	Dallas Fogg	NØLKD	651 644-2361	skywarn
Door Prizes/Drawings	John Hunt, Chair Tom Bredemus	KGØJD KCØINP	651 647-1341 651 414-5535	doorprizes kc0inp
Member Technical Assistance	Brian McNerney	NØBM	651 738-5932	technical
Circuit Builders Chair	Jake Jacobson	NØEIZ	651 554-0441	circuitbuilders
Friendly Net	Marty Gammel	KAØNAN	651 646-5428	friendlynet
2 Meter Net	Andy Lokken	KØAJL	651 224-5553	2mnet
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 trustee ks0j ag0h kc0jk wb9dan
University of St Thomas Liason	Tom Sturm	NØBGO	651 699-4270	ustliason
Webmaster	Orcena (Orcy) Lyle	WØQT	612 827-2707	webmaster

To send email to these club volunteers, use the prefix listed followed by an at-sign and "stpaulradio.org" (note: The word "club" is not included)

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 McNerney	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

Fri Dec 4 7pm SPRC Board meeting. University of St. Thomas OSS 435 (4th floor lounge, across from elevators)
Sat Dec 5 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b at arrl.net for info
Fri Dec 11 7pm Socializing, 7:30pm St. Paul Radio Club Meeting. UST room MHC 155
Program - Holiday Party / Fun and Games - refreshments provided, bring snacks and treats to share if you wish.
Sat Dec 19 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling
Sat Dec 19 11am SPRC Circuit Builders. University of St. Thomas OSS 415*
Fri Jan 8 7pm SPRC Board meeting. University of St. Thomas OSS 435 (4th floor lounge, across from elevators)
Sat Jan 9 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b at arrl.net for info
Fri Jan 15 6:30 pm setup – 7:30 pm auction, St. Paul Radio Club Annual Auction, UST room MHC 304
Sat Jan 16 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling
Sat Jan 16 11am SPRC Circuit Builders. University of St. Thomas OSS 415*
Fri Feb 5 7pm Socializing, 7:30pm St. Paul Radio Club Meeting. UST room MHC 155
Program - TBA
Sat Feb 6 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b at arrl.net for info
Fri Feb 12 7pm SPRC Board meeting. University of St. Thomas OSS 435 (4th floor lounge, across from elevators)
Sat Feb 20 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling
Sat Feb 20 11am SPRC Circuit Builders. University of St. Thomas OSS 415*

* The lab may be open other Saturdays, too. Visit <http://groups.yahoo.com/group/SPRCCB> or email [circuitbuilders at stpaulradio.org](mailto:circuitbuilders@stpaulradio.org) to confirm CB 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 Holiday Party
Friday December 11th — UST Room MHC 155 (see page 1)

ADDRESS CORRECTION REQUESTED

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

