



Saint Paul Radio Club, Inc.

[www.stpaulradioclub.org](http://www.stpaulradioclub.org)

## The Ground Wave

September 2007

### Field Day 2007

Ed Jacobson, WBØVHF

What a weekend in June! Wonderful weather—the best I can remember in a long time for Field Day—clear, dry, mild and not too windy. That allowed the operation to be set up on Friday afternoon and evening at a relaxed pace and still have things ready to go in time on Saturday. New this year was a tower and beam for the CW station, along with the usual big



loop for the low bands. Both seemed to work fine and the CW score certainly showed the effort. The SSB station used a long wire and an SGC auto tuner. Operation was easy, but the reports were mixed on how effective the combination worked. Digital changed to a home-brew antenna instead of the Buddy-pole. The change is thought to have helped in the interference level seen from the CW and SSB stations. GOTA ran essentially the same setup as last year. Both Digital and GOTA scores were up, indicating the operators were putting in a better effort. I know there were several youth at the GOTA station that were trying very hard to make as many contacts as possible. The Digital station better than doubled their 2006 QSO total—a sure sign that more experience and more interest is being generated

*(Continued on page 6)*

### Saint Paul Radio Club Meeting

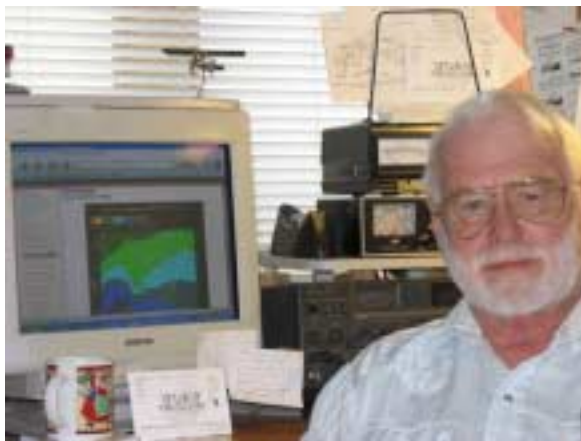
Friday, September 7th, 2007

Socializing 7:00 - 7:30 p.m.

Program 7:30 p.m. followed by the business meeting

University of St. Thomas

Murray-Herrick Campus Center, Room 155



**Richard "Red"  
Haines,  
WOØW:**

**Lightning  
Protection for  
the Ham  
Radio Station**

**Red Haines, WOØW**, has studied lightning protection for many years and will present the topic in greater depth than is found in the typical ham material. His updated program may help many hams, especially those with little background in the physics involved in lightning and lightning protection. He will dispel a few myths associated with the subject.

Red held positions as staff engineer and engineering supervisor at Honeywell and Alliant Techsystems prior to retirement. Retirement gives him time to pursue the technical aspects of amateur radio and other hobbies. His interest in electronics began with lead-galena crystals and phosphor-bronze cat whiskers in 1947. By the time an ice storm induced total isolation that winter, he added a pentode amplifier and provided the only communication for the family from the outside world for over a week.

**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.**

A map is available at [www.stpaulradioclub.org](http://www.stpaulradioclub.org) or download the campus map at [www.stthomas.edu/campusmaps/stpaul.asp](http://www.stthomas.edu/campusmaps/stpaul.asp). The color version is easier to read but takes longer to download than the black and white version. MHCC is # 5 on the map. Room 155 is in the round section of the building, in the north end.

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

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

## Refreshments Help Needed

SPRC needs a volunteer, or perhaps a team of volunteers, to help with refreshments at meetings. Please let **Orcy, WØQT**, know if you are interested. **Dale, NØPEY**, has written the following description of what is involved:

Provide snacks of some sort and hot and cold beverages for meetings and some other events for the SPRC. Requires at least one person to be present at each function so at least one back up partner is needed.

At St. Thomas, the food service provides the coffee set up, which comes with cups, napkins, cream and sugars. Simply contact Tom Sturm and have him order it for the meeting night. You pick it up on the 2<sup>nd</sup> floor off the back elevator on a cart and bring it to the room we are using that night, and return the cart to that point after the meeting.

Cold beverages should be at least four selections of pop or juice and should include two diet items. About 6 to 8 quarts. Snacks should be finger held cookies or donuts, 5 to 7 dozen, depending on expected attendance. You also need some plastic silverware, plates and napkins, table covers. Currently, all of this is contained in two plastic tubs with covers and easily transported.

Clean up consists of disposing of waste, and keeping or giving away leftovers depending on perishability.

Bookkeeping consists maintaining a record of cash received (in the contribution can) and paid out (with receipts). If the account remains self-sustaining, that's great; if not, a contribution is issued from the club.

When members bring snacks to meetings as additional items, thank them and serve it as needed.

### Field Day T-Shirt

Ed has one spare new Field Day T-shirt, size XL.

wb0vhf@arrl.net or 612-751-6176.

## Fall 2007 License Classes

### Entry-Level Class

The St. Paul Radio Club will be holding an amateur radio license preparation class where anyone can learn what they need to obtain an entry-level ham radio license. The eight-week course will be held on Monday nights, beginning on September 10, in Roseville. The classes will begin at 7:00 PM, and should be over by 9:00 PM. The last session will be on Monday, October 29, and there will be an exam session on Saturday, November 3.

The classes will be in the Hickory Room of the Roseville Fire Hall, at 2701 Lexington Avenue North, in Roseville. The Fire Hall is part of the Roseville Civic Center complex. It is on Lexington Avenue, about a mile north of Highway 36, and just north of County Road C.

The class is for beginners, and does not require any knowledge of radio or electronics. It will be taught by an experienced group of instructors whose past students have a very good success rate on the exams. The class is informal and there will be plenty of time for questions.

There is no charge for the class, but participants should plan on buying a copy of the ARRL Ham Radio License Manual for the Technician Class. This manual will be available on the first night of the class, but is

on sale now at the Radio City store in Mounds View. It can also be ordered from the ARRL online at [www.arrl.org/shop](http://www.arrl.org/shop), and may be available from other local bookstores. If you have questions about the class, call Allan Klein at 651-291-8815.

### General License Class

The Stillwater Amateur Radio Association (SARA) will offer a course of study for the General Class amateur radio license. The class will be held at Courage St. Croix on Curve Crest Blvd in Stillwater and will begin on Thursday 13 September at 7 pm.

There will be a total of 9 weekly meetings (skipping October 11) culminating in the VE session on 15 November. The course will use the new ARRL General Class License Manual. There is no cost for the sessions, and all amateurs are welcome, including those who are not members of SARA (The VE session will require the standard mandated fee).

SARA also plans to offer Technician Class study sessions in Spring, 2008, but the exact dates have not yet been determined.

For further information, contact Greg, [k0gw@arrl.net](mailto:k0gw@arrl.net). Information about SARA, including map and directions to Courage St. Croix, may be found on the SARA web site at [www.radioham.org](http://www.radioham.org).

2M Net Wednesdays  
7:00 p.m. 45.310 MHz



Friendly Net Wednesdays  
8:00 p.m. 28.310 MHz

### St. Paul Radio Club Nets

The St. Paul Radio Club has two nets: The 2 meter net at 7:00 p.m. on Wednesdays on 145.310- MHz (no PL tone), coordinated by **Andy Lokken, KCØTUD**, followed by the "Friendly Net" at 8:00 p.m. ("pre-net" at 7:45 p.m.) on 28.310 MHz, hosted by **Marty Gammel, KAØNAN**.

Anyone wishing to serve as net control on either net, plz contact the relevant person via contact information on the Volunteer page of this *Ground Wave*. The 2 meter net takes place via the SPRC repeater, which is located at the University of St. Thomas in St. Paul. The 10 meter net takes place via ground wave, so needs to have NCOs who are centrally located in the Twin Cities Metro area.

## Board Meeting Minutes Friday, May 18th, 2007

President Orcy Lyle, WØQT, called a meeting of the St. Paul Radio Club Board of Directors to order on Friday, May 18th, 2007 at 7:05 p.m. The meeting was held at the University of St. Thomas in St. Paul.

### Board Members Present:

Orcy Lyle, WØQT, President; Dale Maroushek, NØPEY, Secretary; James Klassen, KBØUAZ, Vice President; Skip Jackson, KSØJ, Jeff Iverson, WBØDAN.

Don Kelly, WA6ZMT also attended.

### Old Business:

The Circuit Builders Group, Chaired by Jake, NØEIZ, is working with Tony Parks to obtain the RX/TX 6.2 Kits for SDR.

The Door Prize committee's first attempt with a major prize worked well. They will experiment further next year.

Field Day will happen as usual, but not as complete as last year. Volunteers are not stepping forward to take charge of the various sub activities. A tower and beam antenna has been found for the CW station.

Insurance: We received the forms, and returned it, to secure a quote for our club to see what the policy covers. Tabled this discussion until Allan is available.

### New Business:

Skip Jackson has completed the new Membership Application Form, and it will be issued.

A Club Picnic in October was discussed, we need a Chairperson. Other normal monthly activities were confirmed: December Holiday party potluck, January Auction and April Skywarn Class. Each Board member should look into procuring a program for the remaining months.

The meeting was adjourned at 8:20 p.m.

Don Moran's family has taken his ham gear to Paul March's

Amateur Radio Consignment Center  
632 Prior Avenue North  
Saint Paul MN 651 644-3102

## Membership Meeting Minutes Friday, May 4th, 2007

President, Orcy Lyle, WØQT in Room 155, Murray-Herrick Hall at the University of St. Thomas in St. Paul called a meeting of the St. Paul Radio Club Membership to order on Friday, May 4th, 2007 at 7:34 p.m.

Work continues on the radio net needed for the Capital Classic 2007 Bike race for Autism on Sunday, June 3<sup>rd</sup>. If you want to assist, please contact Dale, NØPEY, and watch for future info.

VE Exams are scheduled for, Saturday, May 5th at the Roseville Community Center in the Willow Room. Registration is from 8:30 a.m. to 9 a.m. when exams start.

Ground Wave – Don Kelly, WA6ZMT, asked that all members feel free to send in articles or ads to include in the GW.

Field Day planning meeting will be June 16<sup>th</sup>, at the Mining Club Trailer. Ed Jacobson, WBØVHF, as Chair, who is looking for confirmed committee chairs. The motto for this year is "Bitten by the Bug" and t-shirts, pins and other wearable items are available this year. June 23<sup>rd</sup> and 24<sup>th</sup> are the dates, so mark your calendars and prepare for the fun.

A Picnic Chair person is needed to plan and provide the members with a fall event of food, fun and games.

### Old Business:

The Repeater Committee will be looking for helpers to install the new controller board and raise the antenna a few more feet this summer.

### New Business:

Motion by Brian, NØBM, second by Manny, WØPIG, to donate \$150 dollars to the St. Thomas Radio Club to show our appreciation for hosting our events. Passed.

The raffle drawing had a new twist this month, with a Grand Prize of an ARRL Handbook, which was won by Paul Keck, W8TJI

After the very interesting program by Lyle Koehler, KØLR on Software Defined Radio, the Circuit Builders group offered to obtain a mass pur-

chase of the new SDR RX/TX 6.2 Kit. Anyone interested will be able to use the lab at St Thomas. Jake, NØEIZ, will head this adventure.

## Circuit Builders Jake Jacobson, NØEIZ

The Circuit Builders project to build a Software Defined Radio (SDR) kit is going along well. The few of us who managed to wind their toroids still have most of their hair. The rest of us are bracing for our moment to arrive! Most of us have reached the point in the build where we can run meter tests. The preliminary results are promising, and the rest of us have high hopes. We found regular meeting times that work for most, and everybody keeps trucking along—a couple are building two!

Are you interested in seeing what we do? Care to lend some advice? Feel free to pop in on one of our meetings. We meet Tuesday 9am-11am, Thursday 7pm-9pm and Saturday 9am-11am (except on 3rd Saturdays when there is a club breakfast, then we meet at 10:30am). We are looking for help in finding a suitable casing for the unit and ANY advice on or assistance with winding toroids. The more experience we can get with those darned toroids would be helpful. They're so doggone small!!!

## This Space Available

Contributions to the  
Ground Wave are  
always welcome

Send your report, story, monthly column, ad or whatever to

dk@donkelly.biz

or

Fax: 651 842-1001

or

Don Kelly  
1547 University Ave W #350  
St Paul MN 55104

## NOOZ from the PREZ

The Dayton Hamvention seemed to have a lot more people this spring than it did two years ago, which was the only other time I've been there. As I recall, the attendance two years ago was around 20,000. For 2007, the attendance figure given on the [www.hamvention.org](http://www.hamvention.org) website is 19,318. I'm sure this figure is too low. I was present during the drawing of ticket stubs for door prizes this year--on Sunday before the Hamvention closed. The highest ticket number drawn was 24,800 something, which indicates that the attendance was close to 25,000, if not higher. I have sent an email to the Hamvention Chair asking about this discrepancy. At any rate, the 2007 event was described as having reports from the vendors of excellent sales, with some vendors selling out on Saturday morning. Although I bought only odds and ends, I had a great time browsing the ham gear and schmoozing with hams from all over.

After Dayton, I went on a vacation spree which, except for a foxhunt in Eau Claire and the SPRC/Mining Club Field Day in Tartan Park, didn't involve much radio and provided a long break from radio club activities.

I spent a week at a friend's cabin in Wisconsin on my way home from Dayton and, in June, a week on the North Shore with friends, hiking during the day and going into Grand Marais for gourmet meals in the evenings, also to Nanaboujou for their famous Sunday brunch. Later in June, I drove out to upstate New York for a family gathering in Keene Valley, in the High Peaks area of the Adirondaks. This last vacation ended in the middle of July, just in time for the beginning of the St. Paul and U. of St. Thomas radio clubs' SDR project of building software defined radios.

Looking at a map on Verizon's website, I could see that cell phone coverage blankets the country between here and the east coast. That is, except for a few tiny little slivers of white on the map, indicating no coverage. Two of my vacations were in these little slivers. On the North Shore, we camped at Judge Magney State Park, 14 miles northeast of Grand Marais. I found that indeed there was no cell phone coverage either there or across the road at the Nanabou-



Dawn Holmberg, WXØZ, helps nephew Garth Meyer with practice soldering as he prepares to start his Softrock SDR kit

jou resort.

The High Peaks surrounding Keene Valley, NY, block cell phone coverage up and down the highway in that area, although I heard that Verizon has plans to erect a tower on a building in Keene Valley. While geocaching with a friend, on a hill in an open area of a cemetery overlooking the highway near Keene Valley, I found that I could get my cell phone to work, sort of, briefly. I found that I had two messages. I never could hear one of them, and, after trying to listen to the other one five times, I picked up enough words to get the gist of it.

Cell phones didn't even work very well, if at all, much of the time at my friend's cabin in Wisconsin, since the cabin was down in a low spot by a waterfall, surrounded by hills and forests. Guests there went out into a clearing near the cabin to have partial success in using their cell phones.

The Internet was another matter. It was available wherever I went, or at least not far away, and I could keep up with my email. I wrote my NOOZ column for the June *Ground Wave* on my laptop while sitting at a picnic table in Judge Magney State Park, then used an Internet computer at the Grand Marais Public Library to send the column to the *GW* Editor. In driving east and west cross country a couple times, I found Internet in motels

that I stayed in across the U.S. and Ontario, no matter whether the motels were fancy or inexpensive. Wireless Internet was available on the car ferry across Lake Michigan.

When I made my reservation at a B&B in Keene Valley, the owner of the B&B proudly told me that none of the rooms have phones or TV, because people go to the mountains to get away from technology. Imagine my surprise, when checking into the B&B, to see a sign stating that the B&B now has wireless Internet! Their wireless Internet was unprotected by a password, as was also the case with the Public Library's Internet down the road. This made their Internet available to anyone within range. My cousins, who were staying in a cabin just out of town, parked in front of the Library with their laptops in order to pick up their email from the Library's wireless Internet, not even having to go inside for it.

*Ground Wave* Editor **Don Kelly, WA6ZMT**, will be working on this issue of the *GW* while on vacation in Wyoming and Montana. He will be receiving written items from people and sending out the electronic copies of the *GW* via the Internet. It doesn't matter whether he is in the Twin Cities or out west, all he needs is his laptop to publish the *GW*. He receives his wireless Internet directly from cell phone towers

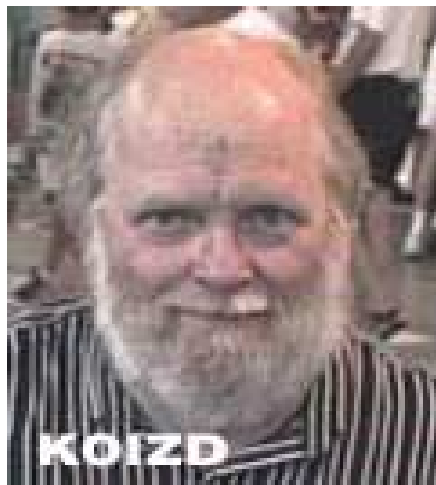
## Don Moran, KØVII 1944 - 2007

**Donald Moran, KØVII**, of Burnsville, passed away June 25, 2007. Don grew up in Delano, MN and attended the University of Notre Dame, earning degrees in 1967 in Liberal Arts and Electrical Engineering. He was a U.S. Marine Corps Captain, serving in Vietnam until 1970. After earning a Master's degree in Electrical Engineering from the University of Minnesota in 1972, Don worked 30 years for Univac/Sperry/Lockheed Martin. He had several patents. After he retired, Don founded Toddler Food Partners, a nonprofit organization that supports nutrition for young children in Haiti, Bangladesh, and Malawi. Don's hobbies were canoeing, sailing, skiing, woodworking, and traveling, as well as ham radio. He held a General Class License, operating his base station and mobile rig. According to his obituary in the 6/27/07 Minneapolis Star Tribune, Don "loved any analog device with big knobs or an enormous antenna". He had a great laugh, and had lots of energy. He canoed often in the Boundary Waters Canoe Area (BWCA). Don and his wife raised a son and two daughters. Don is buried in Fort Snelling National Cemetery.

## Curt Risvold, KØVII 1921 - 2007

**Curt Risvold, KØVII**, of Edina, died in June of pneumonia. He is survived by 10 children, 22 grandchildren, and 11 great-grandchildren. Curt and his brothers expanded their father's infant products business, O.E. Risvold & Sons of the Twin Cities, into the largest infant-product distributor in the country before selling the business in the 1980's. Curt served as an aviation radio operator with the Coast Guard during World War II. Subsequently, he was very active as a ham radio operator, reaching all but two nations, which are small islands. He was a skilled CW operator. On vacations, he met ham friends and, after news of his death reached them, hams from all over the world sent their regrets.

# Silent Keys



## Dave Young, KØZID 1942 - 2007

by Orcy Lyle WØQT

When I read the obituary of **Dave Young, KØZID**, from the Pioneer Press last May, I didn't realize that I knew him. Yet the description of him kept nagging at me; it sounded like someone I knew. Then I realized that of course I knew him--most of us did, at least by sight. He turned up occasionally at SPRC and FM club meetings, and often at hamfests.

Dave was quiet, shy, and self-effacing, although friendly and frequently smiling on the occasions when I conversed with him. He was short and rotund, with a long white beard and a fringe of white hair. He wore round plastic-rimmed glasses, which he removed when I took a photo of him at the first Buffalo hamfest.

In Dave's obituary, it was mentioned that he collected junk. (Well of course he did; he was a ham.) This brought to mind the image of Dave going out the door after our Auction last January, pushing a large cart heaped with items that he had bought, including some of the ancient stuff from along the west wall of Room 304. I was grateful to Dave for buying my humongous computer tower, which I had priced at \$1.00 with the desperate hope that some-

one would actually buy it and take it off my hands.

Dave was part of the "Cooler Crew," a group that hunted every year for the St. Paul Winter Carnival medallion. Dave had hunted fruitlessly for this medallion for over 25 years. After he died, his treasure-hunting friends obtained a medallion from the Pioneer Press to place in his casket when he was buried.

The Cooler Crew called him "Santa Dave" because he looked like Santa. Indeed, he was Santa at Lindner's during Christmas seasons.

Dave also was a friend of comedians, getting to know them at RJ's Too in Princeton, where he lived, and at comedy clubs in the Cities. Dave even tried his hand at comedy. His comedy friends called him "The Hitman of Comedy."

Dave received his first ham license in 1957 when he was in high school, eventually obtaining the Extra Class license. He also held General Radiotelephone and Second-class Radiotelegraph licenses.

## Joybubbles, WØRPA 1949 - 2007

**Joybubbles, WØRPA**, died of a heart attack on August 8 in his apartment in Minneapolis. He was a former member of the St. Paul Radio Club and a Life Member of ARRL. A search of "Joybubbles" on Google brings up 837 listings; Joybubbles was well-known all over the country and further away. Joybubbles has a Wikipedia listing. Joybubbles discovered that a 2600 Hertz tone, into the phone, would trip the circuit which allowed long distance calling. With perfect pitch, Joybubbles could duplicate this tone and make free long-distance calls. He once called himself around the world, free of course, and used a second phone to receive his call. The call took eight seconds. Joybubbles, an extra class ham, liked socializing with hams and other technical folks. He had a pleasant, deep radio voice. An article about him in the Pioneer Press appears on the following page.

## On a Joyful, Curious Spirit

His legal name was Joybubbles, and he saw himself sending packets of joy to his many friends. He lived on the telephone lines, and he died Aug. 8 in Minneapolis.

He was born Josef Engressia Jr. in 1949 in Richmond, Va. He was blind at birth and later told of how he suffered abuse at a residence for blind children. He was fascinated with telephones and could hear clicks and beeps and chirps no one else paid attention to.

At the University of South Florida in the late 1960s, he was known for being able to whistle the right tones to allow him and his friends to make free long-distance calls. He was called "The Whistler," and his craft was called "phone phreaking." In Tennessee, he was charged with telephone fraud, later reduced to malicious mischief. His sentence was suspended.

Later in life, he wanted to reclaim his lost childhood and decided to become what he called an "eternal child." Living in Minneapolis, he went to a spiritual retreat where he was asked to take a new name for the week. He blurted out "Joybubbles." "You felt the rightness of it," he later told a reporter. "I guess because it conjures up in my mind joyful feelings."

Engressia legally changed his name to Joybubbles in 1991. He had a shaved head and a sweet manner and a calming presence. From the telephone lines in his apartment in Minneapolis, he offered comfort and advice and solace to callers from all over.

He was a "Mister Rogers" fanatic. He moved to Pittsburgh to listen to the archived tapes of all 870 episodes of the show. He was a frequent contributor to Bulletin Board in the Pioneer Press.

He remained a legend in "phone-phreaking" circles, according to Phil Lapsley, an Oakland, Calif., writer who is writing a book on the topic.

"He's in some ways the epitome of that technologically curious spirit," Lapsley said.

Joybubbles died of natural causes at the age of 58, according to the Hennepin County Medical Examiner's office

This article appeared on the Pioneer Press website. Find more about Joybubbles including links to the New York Times obituary and memories on NPR at [www.wikipedia.org](http://www.wikipedia.org).

*(Continued from page 1)*

there. As in past years, food was not an issue, and returning this year was Skip's famous Saturday Spaghetti feed. A number of club members and families stopped out to enjoy the meal and the evening.

Some things to think about for 2008: networking the logging laptops. Not only will that make the final score collection and compilation easier, it will help the logging efforts during the contest (once a station is worked from any of our positions the exchange info will be available to all of our positions). Along with the network, newer logging computers should be found. Several of the ones we are using have no battery – no power, no save (the program does an auto-back-up every 15 minutes, but...). Also, at least one of the PCs does not have a functioning data exchange method (no floppy drive, USB port, CD-writer, etc). Makes getting the data off the PC a hand copy process. One other item that is being worked on for next year is connecting the logging PC to the radio in the CW station for sending the contest exchanges. This year, John Desmond, KØTG, stopped in for his shift and saw our lack on the connection, brought out the cable he carries and showed how well it works. If the CW connection proves as easy as it looks, then checking into other connections should follow. The logging system will track band and mode changes from the rig (no more having to remember to change the band in the program when you change the radio). The logging program can also do voice-keying, though not to the same extent as for CW.

On to this year's numbers. In general, we are down from 2006, but we still made a fine showing. As mentioned earlier, CW did the best...601 total contacts, over half of them on 20M, with the rest split between 40M and 80M – fairly typical for the low part of the sunspot cycle. SSB was the major change from last year... 194 total QSO's (also mostly on 20M), about a 1,000 less than last year's record performance. Part of the issue was a lack of a SSB chairperson this year. I was unable to secure any volunteers (or draftees) for the position, and was not able to put as much effort into the station as a dedicated station chair would have. Digital this year made 39 total contacts, up from 17 in 2006. I hear that the operation went smoothly this year, with less interference and equipment issues than in the past. The GOTA station had a fairly constant operation, with several younger operators from members' families. We also had a former member come back out and get back on the air, with plans to get re-licensed and back on the air. Total GOTA contacts were 109. Without a VHF chair, no VHF station was operated this year.

Our contacts score came to 3,166 before bonus points.

With the lack of SSB and VHF chairs, and a declining interest in some of the side work, we were not able to do as much for bonus points. Missing this year were setting up any demonstration-mode stations and attempting to make a satellite contact. Those were somewhat offset by our youth and GOTA operation bonus points, leaving a total bonus of 1,070 points for a final reported score of 4,236. On average with our scores from before 2006, and doing fairly well in the sunspot doldrums.

Thanks to my event area chairs: **John, K9NJ**, for CW, **Orcy, WØQT**, for Digital, **Ron, KØRJW**, for GOTA and **Dale, NØPEY**, for Food. Of course, none of us could have made this happen without the help of all the club members that came out to set up, operate, feed, take down and lend moral support. Remember, Field Day 2008 is June 28-29, 2008.

**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!

**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 (Orey) Lyle	WØQT	612 827-2707	president@stpaulradioclub.org
Vice President	James Klassen	KBØUAZ	952 953-6916	klas0037@umn.edu
Treasurer	Allan Klein	WØONLY	651 291-8815	allankmn@cs.com
Secretary	Dale Maroushek	NØPEY	651 777-5309	n0pey@arrl.net
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@arrl.net jaiverson@juno.com
Membership Chair	Steve Huntsman	AAØP	952 894-3341	aa0p@arrl.net
Membership Registrar	Skip Jackson	KSØJ	651 451-2313	ks0j@arrl.net
Call Trustee	Tom Sturm	NØBGO	651 699-4270	calltrustee@stpaulradioclub.org
Education Coordinator	Allan Klein	WØONLY	651 291-8815	allankmn@cs.com
VE Exams	David Buending	AD2B	952 486-0836	ve@stpaulradioclub.org
Ground Wave Editor	Don Kelly	WA6ZMT	952 474-2766	dk@donkelly.biz
Club Historian	Joe Zwirn James Klassen	WØXL KBØUAZ	651 483-4784 952 953-6916	clubhistorian@stpaulradioclub.org klas0037@umn.edu
Field Day	Ed Jacobson	WBØVHF	952 884-2335	wb0vhf@arrl.net
Parliamentarian	Tom Sturm	NØBGO	651 699-4270	calltrustee@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 Tom Bredemus	KGØJD KCØINP	651 647-1341	doorprizes@stpaulradioclub.org kc0inp@hotmail.com
Technical Liaison	Brian McInerney	NØBM	651 738-5932	technical@stpaulradioclub.org
Friendly Net	Marty Gammel	KAØNAN	651 646-5428	martygam@usfamily.net
2 Meter Net	Andy Lokken	KCØTUD	651 224-5553	alokken@gmail.com
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 calltrustee@stpaulradioclub.org ks0j@arrl.net kmlr@msn.com jlkreitzer@stthomas.edu wb9dan@arrl.net
Webmaster	Mike Thomas	WØMKE	612 616-7709	webmaster@stpaulradioclub.org

**DAKOTA DIVISION ARRL OFFICERS**

Director	Jay Bellows	KØQB	651 222-7253	k0qb@arrl.org
Vice Director	Twila Greenheck	NØJPH	651 483-1214	n0jph@arrl.net
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.net

## St. Paul Radio Club - Summary Calendar of Events

- Fri Sep 7 7pm St. Paul Radio Club Meeting UST MHC 155. See page 1.  
Sat Sep 8 9am—Noon Rush City Radio Rendezvous, Rush City High School. [www.magicrepeater.net](http://www.magicrepeater.net), Marty's Announcements  
Sat Sep 8 9am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Mon Sep 10 7pm-9pm SPRC Entry-Level License Class first meeting, Roseville Fire Hall Hickory Room. Call Allan Klein at 651-291-8815  
Thu Sep 13 7pm SARA General License Class first meeting, Courage St. Croix, Stillwater. Contact Greg, k0gw@arrl.net.  
Fri Sep 14 7pm St. Paul Radio Club Board Meeting. University of St Thomas OSS 435 (4th floor lounge, across from elevators)  
Sat Sep 15 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling  
Sat Sep 15 10:30am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Sun Sep 16 8am-11am MARA Hamfest, Shoreview Village Mall. [www.magicrepeater.net](http://www.magicrepeater.net), click on Marty's Announcements  
Sat Sep 22 9am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Fri Oct 5 7pm St. Paul Radio Club Meeting UST 3M Auditorium (Owens Science Hall on South Campus)  
Sat Oct 6 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b@arrl.net for info  
Sat Oct 6 9am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Fri Oct 12 7pm St. Paul Radio Club Board Meeting. University of St Thomas OSS 435 (4th floor lounge, across from elevators)  
Sat Oct 13 9am St. Paul Radio Club Breakfast. Perkins Midway on University east of Snelling  
Sat Oct 13 10:30am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Sat Oct 20 9am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Sat Oct 27 9am SPRC Circuit Builders. University of St. Thomas OSS 415.  
Fri Nov 2 7pm St. Paul Radio Club Meeting UST MHC 155.  
Sat Nov 3 9am SPRC VE followed by EC Exams – Call David M. Buending AD2B, 952 486-0836, or ad2b@arrl.net for info  
Sat Nov 3 9am SPRC Circuit Builders. University of St. Thomas OSS 415.

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 Friday September 7th (see page 1)**

ADDRESS CORRECTION REQUESTED

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

