



www.arrl.org



# St. Paul Radio Club Ground Wave

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

## KØAGF

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

### NEWS AND NOTES FOR SEPTEMBER 2016 — Volume 76, Issue 9

## Monthly Meeting

September 9, 2016

UST OWS LL54

7:00 pm Socializing

Membership Meeting 7:30 pm

PROGRAM

### Bell Laboratories' Similarities in Wave Behavior

Video

From the AT&T Archives

We'll watch the 1959 video "Similarities in Wave Behavior," which shows us similarities of waves from the electrical, to the physical, to the spectral.

The video is hosted by Dr. John N Shive, author of the book "Similarities in Wave Behavior" and developer of the Shive Wave Generator.

## Kevin Lauderville KDØSNL, SK

Kevin was killed in a motorcycle crash on June 30<sup>th</sup> (an excerpt from the news account is below) and a Celebration of Life was held at the Rosetown American Legion Post 542 on August 21<sup>st</sup>.



Apparently there was quite a crowd, including a number from the Midway CUB.

(An obituary search did not locate one that could be included here.)

A motorcyclist who died in a Thursday night crash in St. Paul's Summit-University neighborhood was identified Friday as Kevin Jon Lauderville, 35.

The collision was reported about 8:40 p.m. at St. Anthony Avenue and Dale Street, just north of Interstate 94. Fadumo Aden Egal was driving a minivan north on Dale Street and Lauderville was heading west on St. Anthony Avenue, said Sgt. Mike Ernster, a St. Paul police

(Lauderville, Continued on page 2)

## Fred McCormick KBØNVC, SK

Fred passed away Aug. 13, 2016, at age 84, after a six-year battle with frontotemporal dementia. He's survived by his wife of 52 years, Eileen; sons Charles and John (Jackie) and son-in-law Dean Roehrich; grandson Neel McCormick, granddaughters Katie Roehrich, Anne McCormick and Tara McCormick; and numerous nieces and nephews. Preceded in death by daughter Mary Roehrich and infant son Michael; par-



ents Fred and Mabel; siblings Geneva (Lawrence) Moellers, LaVerne (Fritz) Brandberg, Warren (Hilda), Wayne, Mary Catherine, and Margaret (Michael) Rowles. Born in Minneapolis, Fred received his Eagle Scout and was senior class president and valedictorian at North High School. He earned his undergraduate and PhD degrees from the U of M and worked for the University, Boy Scouts of America, Higher Education

(McCormick, Continued on page 2)



Support the  
League

www.arrl.org/

The OWS building is located on the University of St. Thomas (UST) South Campus.

From I-94, take Cretin Ave south about a mile to Grand Ave. Turn right, then park in the ramp on your left or the surface lot on the right. In general, on-campus parking restrictions are not en-

forced after 6:00 p.m. on Fridays, but do not park in spots with parking meters unless paying or displaying a handicapped placard.

Enter the building just north of the parking ramp and take the elevator (in the hallway to the right) or stairs to the lower level. LL54 is not far

from the stairs.

For detailed maps, see [www.stthomas.edu/campusmaps](http://www.stthomas.edu/campusmaps).

OWS: Owens Science Hall

Contact Kim Schumann in Disability Services at 651-962-6315 or [kjschumann@stthomas.edu](mailto:kjschumann@stthomas.edu) for any accessibility requests.

*(Launderville, Continued from page 1)*

spokesman.

Police are investigating who had the green light at the time, Ernster said. There was no indication that either driver was traveling at high speeds, or that drugs or alcohol played a role in the crash, according to Ernster.

*(McCormick,  
Continued from page 1)*

Coordinating Commission, and Educational Management Services, before starting Educational Operations Concepts in 1978. Thanks to Lyngblomsten for the care Fred received. Mass was at 11 a.m. Monday, Aug. 22, at Corpus Christi, 2131 Fairview Ave. N., Roseville. (Excerpted from Pioneer Press of Aug. 21, 2016)

## **Dale's Details**

### **Dale Maroushek, NØPEY**

I was at Fred McCormick's funeral service on Monday, August 22<sup>nd</sup> to say goodbye to a long-time SPRC member. Although we haven't seen him for two years now, he usually made it out to Field Day to see the gang. For those of you who did not know Fred, I'll tell you a few things about him and what he did for the Club. His call was KBØNVC, which expired in 2014.

Like any Club, finding people to voluntarily hold office or head committees can be a challenge. Back in 2000 when we moved into the Red Cross Building for our meetings and made many changes, we needed to fill positions to get the club moving forward again. After one meeting of begging with little results, Fred approached us and suggested that maybe he could recruit some volunteers. So we furnished a membership list to him and let him go to work.

About every two weeks, I'd hear from Fred about who he was work-

ing on and who he had already placed awaiting the Boards approval. We never asked him how he was getting these fantastic and quick results. We found out from the recruits later.

Fred was in sales all his life. (I think he started selling refrigerators to Eskimos). Seems when Fred called you the first time, and you showed even the slightest possibility of saying yes to the job, he never let up until you joined the team. Thank you Fred, for a job well done.

He continued to help recruit for the Banquet, special events and Field Day. He was our behind the scenes head hunter. He came up front to help me with our Field Day food kitchen. Each year we would try to add new things and change the process so it worked better. Thus was the beginning of the Sloppy Fred Sandwich, named after Fred. He would apron up and do anything--cook, serve, and clean--with that same happy go lucky attitude, and always ready to tease or tell a joke. He usually had an opinion about almost any issue, and loved to express it.

In fact, one day I was visiting with him at his home and the Good Neighbor (WCCO) was on the radio with a hot debate about something. Now Fred knew all the hosts so he grabbed the phone and called 'CCO. I'm sure their number was on speed dial. It took a while, but Fred got to talk to the host off the air. I'll bet the call screeners at 'CCO had a speed hold button for Fred's calls, too.

Fred was a devout Catholic, always tried to get to Mass and even took a time out at Field Day to pray.

Fred got his son John into Ham radio in 1980, he is NØFCD a busy contester and DX chaser in Elmhurst, IL.

His wife, Eileen, stood beside Fred all the way. Thank you Eileen.

The forgotten award. At Field Day 2015, I announced that the Club would be presenting a mug to Fred for all his years of dedication and support. Un-

fortunately I was never able to present it to him in person. I presented it to Eileen on Monday.

Dale, NØPEY

p.s. Here are Fred's son's thoughts from his eulogy

It's been pretty well established here today that my father loved a good joke. To be honest, he loved the bad ones, too. It was mostly cornball humor, knock-knock jokes and the occasional pun. As he'd walk out of this church each Sunday after Mass, it wasn't uncommon for him to drop the latest joke he'd heard--or one he'd just made up--on the priest. Mother would usually have to shoo him along.

In keeping with my father's sense of humor, I'm going to try to summarize some key aspects of his life using a dozen or so words that begin with the letter "F," as in Fred. Some capture serious aspects of his life, while others simply are fun stories to tell. It was the kind of shtick that he liked.

So, here goes.

FINAL FRED: Born in Minneapolis in 1932 during the Great Depression, my father was the seventh of seven children. The others included Geneva, LaVerne, Warren, Wayne, Mary Catherine and Margaret. There must have been something in the water at 2650 Morgan Avenue in North Minneapolis because all of those kids left their mark on the world. Dad was the last of those siblings to pass and several of his siblings' descendants are here today. Thank you for being here and for all the good times we've shared--whether it was playing piano in the basement of our home during those epic Christmas Eve gatherings, or hanging out at Fritz and LaVerne's lake place on the 4<sup>th</sup> of July. My father loved all his nieces or nephews, just as he did his

*(Eulogy, Continued on page 3)*

siblings.

**FRIENDLY FRED:** Whether walking down the street or in a city he had never visited before, my father was exceedingly friendly. He could strike up a conversation with anyone, and once engaged in that conversation you were going to be there for a while. I don't think he got to Mark Dayton, but he'd made it a point to shake hands with each of Minnesota's 12 previous governors, going back more than half a century. He was genuinely interested in meeting people with different backgrounds and from different places. He would have made a terrific traveling salesman, and actually used some of those skills in the educational consulting business he and my mother formed in 1978. He made many life-long friends, people like Ron Werdin, who stuck with him through the good times and the bad.

**FAIR FRED:** He would have especially liked this one because it has a double meaning, and my father loved a good two-for-one special. Yes, he liked to see justice done and people treated equally and honestly. He also absolutely loved another Fair--the Minnesota State Fair. Family legend has it that he'd attended the Great Minnesota Get Together every year of his life. (For the record, there were a few years that the fair wasn't held because of World War II and a polio outbreak). As a young man, he rode the street car there. As an old man, he rode a wheelchair there. He loved every corner of the fairgrounds. He loved the parades, the free concerts and the smell and the sweat of the place. Perhaps his favorite activity was simply watching the traveling salesmen demonstrate their sets of knives--often with a free juice extractor included--in the Agriculture/Horticulture Building. I think those salesmen and their colorful demonstrations appealed to his sense of wanderlust, his sense of

humor and his deep and ongoing search for a good bargain.

That brings me to the next one.

**FRUGAL FRED:** Those Depression Era Kids really know how to pinch a penny and my father was no exception. He could ring every last ounce of value out of an appliance, car, undershirt or steak dinner. At the same time, he could be generous to his children, church and causes that he believed in. While it would sometimes drive my mother crazy, his ability to conserve resources was truly impressive.

**FIGHTING FRED:** Maybe it was his Irish blood, but it was always better to be Fred McCormick's friend than adversary. Whether it was taking on City Hall or the need for special accommodation for my sister during her college years, he could be a fierce advocate. If some product or service didn't deliver as advertised, watch out. He could work the phones like nobody else, starting in customer service and sometimes ending up in the CEO's office. His voice was almost always professional and positive, but it was also dogged and relentless. He got results.

**FITNESS FRED:** This is some of that cornball humor showing itself. My dad's version of a workout was mowing the lawn, followed by a cold Schlitz beer while seated in the driveway in a lawn chair. Later in life, he did enjoy a good bicycle ride. As a young man, he'd been active at Boy Scout camps and visited Cuba before Castro took over.

**FREQUENCY FRED** (this one could also be labeled Fred's Frequency): There was always just one radio station playing in our kitchen, in the garage, in the basement, in the backyard, and, yes, in the bathroom. WCCO-AM. The 50,000-watt clear channel Good Neighbor to the Northwest. There was something about radio that mesmerized my father, starting with the crystal set he had as a child. He'd grown up in an era when it was all there was

in broadcasting and 8-3-0 was his frequency for life. The cornball humor during the morning shows, the drive-time antics of the great Steve Cannon, the latest sports scores, breaking news, and even the lonely, middle-of-the-night talk show all had a strong appeal to him. At one point, the station gave him its coveted Good Neighbor award for his public service. It was an honor well deserved.

**FRONTIERSMAN FRED:** For an inner city kid from Minneapolis, my father was pretty comfortable in the great outdoors. His love of the Boy Scouts translated to a lifelong love of camping, campfires, and campfire songs. Snakes were not his thing, but that actually seems pretty reasonable. When my brother, sister, and I were children, we spent more time at campgrounds near interstate highways and at state parks than at the Holiday Inn, where mother probably would have preferred to be with three children in tow. How all of that camping gear, two adults and three children fit in a four-door sedan for a weeklong outing, I'll never know.

**FAITHFUL FRED:** My father didn't have an easy life. He lost his father not long after finishing college and lost not one, but two children -- Michael Thomas and Mary Elizabeth -- before his own death. His faith helped power him through those hardships. A well-worn booklet of prayers accompanied him to every Mass when I was growing up and he was an active participant in his faith, singing in the church choir at St. Rose and in the congregation here at Corpus Christi.

**FESTIVE FRED:** Dad loved holidays, especially Christmas. It wasn't Christmas Eve if my father didn't have on his red sweater vest. Of course, Christmas music had already been playing in the house for days and would continue well past New

Year's. My mother was lucky if she could take the Christmas tree down by late January. Holidays, for my father, weren't just a reason to have a party or skip work, but they were a time to embrace tradition and the joy that can be shared by simply doing the same thing every year. Those traditions also helped set expectations. My father was an Eagle Scout, so therefore, my brother and I would be Eagle Scouts. It's just how it was.

FATHER FRED: I want to start this one by actually talking about my mom, who Dad always lovingly called "Sunshine." As many here know, she's our rock. Smart, tough, loving, and she seemingly knows more about medicine than some doctors. She's had a tough last decade between my sister and father's illnesses and deaths. She's shown grace and compassion throughout. Dad was a good father, too. He was good at explaining things, telling a child about what was worth being frightened of and what was wasn't. He could be strict, but never mean. He instilled the importance of work, sacrifice and charity. He wanted to see his children be successful and thrive, at whatever the personal hardship to him.

It's hard to summarize a man's life in just a few minutes. But I'm going to leave you with something that left a big impression on my father: The Boy Scout Law. It calls for a scout to be Trustworthy, Loyal, Helpful, Friendly, Courteous, Kind, Obedient, Cheerful, Thrifty, Brave, Clean and Reverent. I can honestly say that my father was all of those things. By living a good Boy Scout life he left a big mark on the world and on our family. I think there's a lesson in that somewhere for all of us.

On behalf of the McCormicks, thank you so much for attending today. Your presence here means a lot to

us and to my father. Now, after father's dismissal, let's go do something dad really liked to do: engage in lively conversation and eat food. Please join us after Mass for lunch. Thanks again for being here.

## Volunteer Examiners Leon Dill, WØCOE

Once again, we'll be testing on the first Saturday of each month (except for July and August.) We'll continue to use the Maplewood branch of the Ramsey County Library, 3025 Southlawn Dr. Let me know if you're coming or to learn more about our VE program.

The dates for the upcoming year are

2016: 9/3, 10/1, 11/5, 12/3

2017: 1/7, 2/4, 3/4, 4/1 (no foolin'),  
5/6, 6/3.

Here's a breakdown of the SPRC VE team activity from last season (Sept. 2015 - June 2016):

- 88 Total Candidates
- 81 Unique Candidates
- 8.8 Average Candidates / Session
- 16 Most Candidates at a Session (Jan)
- 3 Fewest Candidates at a Session (June)
- 60 New Hams
- 52 Technician Licenses
- 16 General Licenses
- 13 Extra Licenses
- 7 Nothing Earned
- 88 Total Served
- 118 Total Exams Given

- 5 Tech + General Earned Together
- 0 General + Extra Earned Together
- 3 Tech + General + Extra Earned Together

My sincere thanks to the entire team for allowing such nice numbers. Since the board authorized me to offer a free year of membership to all newly licensed hams, you can see that we had 60 candidates that fell into that category. A couple may have declined the offer, but that should have given our membership somewhat of a boost last year. It would be interesting (and likely quite a bit of work on someone's part) to see how many of these will be converted to regular dues-paying members in the future.

But I digress...back to the stats. A big thank you to Shep, NØNMZ, and his Anoka County VE team for holding our March exam for us, so that our VEs could

attend the funeral service for our own Ray Voss, KGØDK.

In all, we had 17 different VEs help out this season (an average of 5.8 per session):

- Leon, WØCOE, 9
- James N., NØALE, 8
- Shep, NØNMZ, 7
- Greg, KCØRET, 6
- Ralph, NØAWN, 5
- Ray, KGØDK, 5
- Richard M., KDØHDT, 4
- Ann, KØANN, 3
- Jim L., WØQEI, 3
- Al, AEØAL, 1
- Barb, WØKX, 1
- Brian, NØBM, 1
- Jay, NØMDF, 1
- Jim H., AJØCM, 1
- Lou, ACØX, 1
- Richard W., KWØU, 1
- Ted, KDØNPJ, 1

And finally, the results of asking the candidates how they found out about our exam session, here are their responses:

How did you hear about our exams?

- ARRL Web Site, 51
- Referral, 9
- SPRC Web Site, 7
- Radio City, 7
- Did Not Answer, 5
- Returning Candidate, 4
- Google Search, 2
- Net, 1
- YouTube, 1
- hamradioonline.com, 1
- Total, 88

So, there you go. Your VE team is alive and well.

## Presidential Ponderings

Dang I forgot to duck at the May meeting and ended up president; now the Ground Wave editor says I have to do something I have always tried to avoid—writing.

The decision has been made to install the SPRC's System Fusion repeater at Dale's QTH, and we've been assigned a coordinated frequency of 442.450/447.450. On Labor Day, we'll have a work party at Dale's QTH to prepare the site for it. Everyone's welcome to come and help starting at 10 a.m.

The St. Paul Radio Club is able to meet at the University of St. Thomas and have our repeater there through

a cooperative agreement with the UST Amateur Radio Club. Unfortunately, the UST club has a really poor track record of attracting student members. We need suggestions from SPRC members to build student membership of the UST club if we expect UST's continuing cooperation.

Of course we always welcome suggestions for programs, activities and anything that benefits SPRC.

One of my ham highlights over the summer break illustrates why 6 meters is called the magic band. On one of the VHF/UHF contest weekends, I saw an email on the NLRs (Northern Lights Radio Society) reflector that one of the members was roaming and looking for contacts; they gave some 2 meter frequencies and then mentioned 6 meters.

I tuned around 2 meters and didn't hear anything (I only have a dual band base vertical), so I went to 6 meters and tuned around. I didn't hear any locals, but I heard a bunch of east coast stations and responded to the first two--they sounded like they were on a local repeater. Then I looked at my setup and realized I was not using the tuner, which is one of the magic points. I do not have a 6 meter antenna, just a Cushcraft R7 (normally I have found that all of the R5 & R7 antennas resonate on 6 meters without much issue).

So I tuned the tuner and looked for, and found, a few more east coast stations. I worked several of them--they only lasted a few minutes at best, but they were loud and clear.

Next to the magic bits: My Yaesu FT-897D has had a low-power issue for a long time; the lower in the HF bands, the lower the output power--about 3/4 of a watt at 80 meters peak, and at 6 meters (more magic), 1.25 watts peak--average about 1/2 watt.

So without an antenna, without a

tuner, and almost no power, I was making almost DX--well not quite--contacts.

Just got confirmation on using our regular meeting place, UST classroom LL-54, for the meeting dates through the end of year. September 9, October 7, November 4 and December 2. The 2017 dates are not confirmed yet, but are expected to be January 6, February 3, March 3, April 7, and May 5. Put them in your calendar.

73 de John, KDØCAC

## Time to Renew

Membership renewal time is here again. Your yearly membership runs from September 1<sup>st</sup> 2016 to August 31<sup>st</sup> 2017. Many of you are paid through 2017 if you joined after April 1st or have paid ahead by mistake last year. Send an email to inquire if you need to know.

The optional donations for education,

repeater and general fund are greatly appreciated.

"What do dues pay for," you ask. The meeting refreshments, door prizes, GW printing and mailings, FD and picnic food and operational costs, banquet food subsidy, speaker and door prizes, Hamfest table, the new repeater gear and setup, and Club gear upgrade, repair, or replacement.

A membership form is included with this Ground Wave--the information you supply is entered into the Club Data Base. If you are renewing, and nothing has changed from previous years, fill in your name and callsign, your email, and the dues portion only. If you're not sure, fill it all out, send an email question, or see me at a meeting and I can show you your file for editing.

It's the best \$20 you can invest in local Ham Radio.

## FACEBOOK USER?

Look for our group:  
"St. Paul Radio Club"

Twin City FM Club presents  
**THE 2016  
LAST CHANCE  
TAILGATE  
SWAP MEET**

**Saturday  
October 1, 2016**

**7AM Sellers - 8 AM Buyers**

**\$10 Sellers - \$5 Buyers**  
Buy and Sell from your vehicle till 12 Noon  
First Come First Served

West Medicine Lake Community Club  
1705 Forestview Lane North  
Plymouth, MN 55441

P.O.C [WG0G@ARRL.NET](mailto:WG0G@ARRL.NET) - 612-747-1244

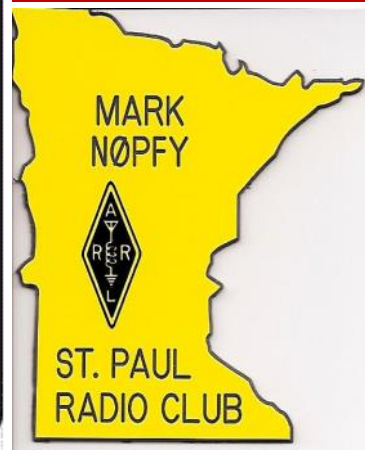
TALK-IN ON WØEF 146.76 REPEATER FROM 7 AM

## SPRC Name/Call Badge

Badges are available from Tag-Me Engraving for \$9.00 plus shipping and tax (They accept PayPal).

[www.tagme-engraving.com](http://www.tagme-engraving.com)

Click "Name Tags" then "St. Paul Radio"



## Available Donated Gear

What's left of the donated gear? All will be at the Ham-fest at Bob's farm in Lake Elmo on September 17<sup>th</sup>. If you want something before that, arrange with Dale (651-238-5720) or John (651-402-6482) for pick up.

Two 9 foot tripod roof towers with masts or without \$30  
Rohn top section, mid section and broken section for a base

BX 48 foot tower, rusty. \$40

Heavy duty rotor mast bearing \$30

KLM KT-35A 6 element Beam \$200

Hy-Gain CD 45II w/controller and Wire \$300

Hy-Gain CD 45II w/controller no wire \$250

Box of wires jumpers coax misc \$2 each or whole box for \$20

Other misc masts, metal supports, cheap

Knwd TS-850Sat with auto tune, 2 filters, both voice boards,

replaced leaky caps, boxes \$600

Knwd VGS-1 (new in box) \$70

Electro Voice Mic wired for Knwd \$70

MFJ 464 CW keyer/reader \$100

MFJ 921 VHF Tuner \$40

MFJ 1112 12 volt power strip \$15

## Field Day 2016

Our last field day at Tartan Park was a lot of fun. What else is important? Well, for some maybe it's the "results" even if it's not a contest. The total score for the SPRC/Mining Field Day was 6,914. That resulted from 1,074 CW QSOs and 594 phone QSOs—all HF, we did not have a VHF operation this year. (I think these numbers mean there were opportunities for lots more people to have fun—plan on coming to operate next year.)

There were 66 QSOs at the GOTA station—this provides an opportunity for non-amateurs to Get On The Air.

Our 2,742 QSOs resulted in 5,484 points when multiplied by 2 as we were generator-powered. We added 1,430 bonus points (see below) to yield our total of 6,914.

### Bonus Points:

100% Emergency power	200
Media Publicity	100
Public Location	100
Public Information Table	100
W1AW Field Day Message	100
Natural power QSOs completed	100
Site Visit by invited elected official	100
Site Visit by invited served agency official	100
Youth participation	100
Youth operators=7	
Youth participants=8	
GOTA Bonus	80
Submitted via the Web	50
Educational activity	100
Social media	100
Safety officer	100
<b>Total Bonus Points</b>	<b>1,430</b>



**Top: The phone station, Bottom: Ron (KØRJW) & Sam at the GOTA station, Right: Don (WA6ZMT) at the phone station. All Field Day photos courtesy of Dawn Holmberg, WXØZ**



**Above left: We didn't have the big club picnic, but the crew got fed. Right: It wouldn't be Field Day without some special weather. Bottom left: The CW station after the storm. Right: Mert (WØUFO) at the CW station. All Field Day photos courtesy of Dawn Holmberg, WXØZ**



- Sat Sept 3 10AM VE testing. Ramsey Cty Library, 3025 Southlawn Dr., Maplewood. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
- Sat Sept 3 9AM Circuit Builders. OSS 415 UST Campus\*
- Fri Sept 9 7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OWS LL-54. See Page 1.
- Sat Sept 10 9AM Circuit Builders. OSS 415 UST Campus\*
- Sat Sept 10 9AM – NOON. Rush City Radio Rendevous. Rush City High School, 51001 Fairfield Avenue, Rush City MN.
- Fri Sept 16 7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415) \*\*
- Sat Sept 17 8AM – NOON. Lake Elmo Swapfest. 8247-27th ST. N. Lake Elmo, MN 55042
- Sat Sept 17 9AM SPRC Breakfast. Midway Perkins on University Ave east of Snelling.
- Sat Sept 17 After Breakfast. Circuit Builders. OSS 415 UST Campus\*
- Sat Sept 24 9AM Circuit Builders. OSS 415 UST Campus\*
- Sat Oct 1 10AM VE testing. Ramsey Cty Library, 3025 Southlawn Dr., Maplewood. Contact Leon Dill, WØCOE@arrl.net or 651-688-9964
- Sat Oct 1 9AM Circuit Builders. OSS 415 UST Campus\*
- Sat Oct 1 7AM – NOON. Twin City FM Club Outdoor Swap Meet. West Medicine Lake Community Club - 1705 Forestview Lane N., Plymouth, MN.
- Fri Oct 7 7PM Socializing followed by 7:30 PM SPRC Membership meeting. UST classroom OWS LL-54.
- Sat Oct 8 9AM Circuit Builders. OSS 415 UST Campus\*
- Fri Oct 14 7PM SPRC Board meeting, OSS 121 UST campus (Alternate location is OSS 415) \*\*
- Sat Oct 15 9AM SPRC Breakfast. Midway Perkins on University Ave east of Snelling.
- Sat Oct 15 After Breakfast. Circuit Builders. OSS 415 UST Campus\*
- Sat Oct 22 9AM Circuit Builders. OSS 415 UST Campus\*
- Sat Oct 29 9AM Circuit Builders. OSS 415 UST Campus\*

\*Circuit Builders is each Saturday morning if someone is available to open the lab and there is no conflicting activity. Check the SPRCCB Google Group to confirm that the lab will be open.  
 \*\* Depending on business to be considered, Board Meetings are sometimes held electronically. Check with an officer or board member to confirm that the meeting will be at UST.