



# The *ORC* Newsletter

Official publication of the Ozaukee Radio Club, Inc. Mail all contributions to the editor, Tom Ruhlmann, W9IPR, 465 Beechwood Dr., Cedarburg WI 53012 (phone 262 377-6945). Permission to reprint articles published in any issue is granted provided the author and the Ozaukee Radio Club Newsletter are credited.



ORC Repeaters on 146.97, 224.18 and 443.750 MHz - Callsign W9CQO  
Web site: [www.ozaukeeradioclub.org](http://www.ozaukeeradioclub.org) Facebook: [facebook.com/orcwi](https://facebook.com/orcwi)

Volume XXXII

September, 2014

Number 9

## From the President

*de Gary Drasch, K9DJT*



If you missed the corn roast, you missed a good time. It was the first one I've been able to attend and I must say I truly enjoyed it. A big thank you goes to Tom Trethewey, KC9ONY, for picking up the ball and running with it. This wouldn't have taken place if it hadn't been for Tom's efforts. Let's not forget to also thank Stan Kaplan, WB9RQR, for cooking; Nancy Stecker, KC9FZK, for setting up all the other fixings; and Ed Rate, AA9W, for bringing the corn. We also need to thank Kristian Moberg, KC9TFP, for reserving the site. Everyone did a great job in creating a fun time. Thank you!

Had an opportunity to visit the Lighthouse Event station in the town of Grafton. As usual, the LeFrog gang did a super job in setting up the station which had a phenomenal operating view of the lake. Bill Howe, KA9WRL, even managed to get the owner of the lighthouse, Dave Benet, at the mic. It is also my understanding that Kevin Steers, K9VIN, daughter, Abby had a little operating time too. If you didn't make this year's event, make sure you put it on your calendar for next year. It's like a mini-Field Day with a view!

The last major event of my term is just on the horizon. The Fall Swapfest! Yup. It will be held at Fireman's Park in Cedarburg, Saturday, September 27<sup>th</sup> from 6:00AM-1:00PM. Tom Ruhlmann, W9IPR, hosted a meeting at his home to discuss the final plans he and others had to help make it another success. I have no doubt about it! Please come and help...at the very least attend...and either buy or sell some stuff. (We all know we never have enough stuff!)

Ah...you are wondering what happened of our day in court with Circle B are you? The proceedings were done much different than what we had expected. When I say we, I mean myself who represented the ORC, along with Chuck Curran, W9KR, Bill Howe, KA9WRL, Ed Rate, AA9W, and Loren Jentz, N9ENR. Instead of appearing in front of a judge, I and the defendant stood in front of the Clerk of Courts who basically listened to our complaint and asked if the defendant disputed it. If so, she would have set a court date for us in September. If he didn't, a judgment would be filed in our favor for the amount we were asking plus court cost. We won! After Circle B saw the copy of the contract and cancelled check, he said he would pay. I thought we were done at this point. It was our understanding the court would collect the monies and send us a check. Not so. Things changed over the years and we discovered we are still responsible for the collection. The good news is Circle B recently obtained a loan from the Port Washington State Bank which in turn is being backed by the Town of Cedarburg. I say good news in that I believe we can use them as leverage to get Circle B to pay up. I personally dropped off a copy of the judgment to both entities which I can't help but believe will pressure them to pay. Let's hope for the best!

I heard some guy is going to be making an EXCELLENT presentation on the DX Cluster and HRD Operating Software at the September meeting. Hope to see you there!

73 and God bless, Gary, K9DJT, [k9djt@sbcglobal.net](mailto:k9djt@sbcglobal.net) 262 707 4279

# DX'ing & Contesting

De Gary Sutcliffe (W9XT)



The biggest area annual event for contesters and DXers is in September. Well the biggest, after the Ozaukee Fall Hamfest of course. This is W9DXCC convention in the Chicago area. Continuing something they started last year, DX University is Friday September 19. It is a full day of seminars aimed at DXers who want to get better at the sport. The main conference is Saturday with a full day of talks on DXpeditions, radio propagation and other interesting topics.

The banquet is Saturday night with Rick Roderick, K5UR, ARRL First Vice President, as the banquet speaker. Following the banquet is the hospitality suite sponsored by the Greater Milwaukee DX Association. We always put on a great suite with plenty of liquid libations and delicacies from the great state of Wisconsin. The venue has changed this year, and I am looking forward to checking out the new location. Complete information can be found at [www.w9dxcc.com](http://www.w9dxcc.com)

The shorter days and the approaching equinox will bring better conditions on the higher HF bands. It is amazing how fast the days get shorter after Labor day. The length of daylight decreases by about 3 minutes per day. In just a week we lose 20 minutes of daylight! I have noticed improvement of the higher bands. I picked up China and Mongolia on 17 meters in the early evening a few days ago. I was running 100 watts and a 40 meter antenna with a tuner.

September is also a good time to give the antenna system a check out while the weather is still nice and not too hot. As usual I am behind in my antenna work. I recently picked up a new HF beam. It is the TX38 which was designed for the WRTC competition which happened back in July. My 20+ year old 3 element trap Yagi has been giving me a lot of trouble and I decided it was time to replace it.

The TX38 covers 20, 15, and 10 meters. It has two elements on 20 and 15, and four on 10. There are no traps. I have only partially assembled it, but it is built like a tank. I will be doing a review of it in a future newsletter.

Contest-wise, things pick up a bit in September. The ARRL September VHF contest is September 13-15 for contacts on 6 meters and up. The September contest can be interesting because fall is typically the time of the year when we can get long distance tropospheric ducting on the VHF and UHF bands. This typically occurs when a cold front moves in after a warm spell. VHF FM operators will often notice times when a repeater a state or two away comes in stronger than local ones, or you can make long distance simplex contacts.

The other big contest is the CQ World Wide RTTY Contest. Unlike the CW and phone CQ WW events, this one lets you work US stations for QSO points and multipliers. RTTY contesting has become very popular the last few years. Free PC programs make getting on RTTY and other digital modes easy and inexpensive. I use MMTTY for RTTY operating and contests. It works well and interfaces with N1MM for contesting. Oh, yes, it is free. If you never have operated RTTY, this is a good time to give it a try.

DXpeditions pick up in September. A lot of it is centered on islands in the Pacific. One done by a big group of Australian hams is to Norfolk Island using the call VK9NT. Norfolk used to be pretty easy when Jim Smith, VK9NS lived there. Jim was very active but became a silent key in 2009. Since then there has not be a lot of activity. VK9NT will be on September 12-21 on 160-10M, CW and SSB.

Speaking of VK9's, VK9AN will be on from Christmas Island September 18- October 2 by N7QT. He will be on 80-10, CW, SSB & Digital.

If you need Papua New Guinea, you get four chances in September. Papua New Guinea is of course a number of islands. There is a very popular DX program called Islands On the Air (IOTA). There are a large number of islands in each continental area that count for this program. They have designators with

a continent and a number (e.g. NA-123). You can get awards for working them. I never got into IOTA, but know some DXers that are. There are DXpeditions to IOTA islands to active them.

A group of IOTA enthusiasts are hitting four islands from the area. They will be alternating between call signs P29NI and P28VCX. They start September 11; operate from one island for a few days and move on to the next one. The last one ends September 30. They will be concentrating on 20 and 15 meters, mostly CW with some RTTY and SSB.

Another good one from the Pacific is Chatham Island by a group of Japanese ops. They will be using the call ZL7X and be on from September 11-16. They plan on being on 160-6 meters, SSB, CW and digital.

Bhutan will be activated by a 3 Japanese hams. They will be using different call signs and different dates. A52LSS is on from September 4-10. A52IVU September 4-11, and A52AEF from September 5-7. If that is not enough, OH2YY will be there using A52YY from September 26 through October 2. In addition to not being very active, Bhutan is a tough path from here. Your best bets are probably 20 and 17 meters.

That wraps up September on the air activities. See you on the air!

## Junk Box Projects

De Tom Ruhlmann (W9IPR)



As those of you that were at the August meeting know, I finished restoration of the HT-18 multiband vertical I bought from N9FH.

It includes 23 radials ranging from 33 to 120 feet – all from the wire junk box. I need a few more radials so will have to dig a bit deeper in the box.

I really wanted to get on 160 meters but the vertical only went to 80. While digging in the box I found a B&W 80 meter trap and some old aluminum from which I could make a bracket. I clamped my home-made bracket and the trap to the upper 80 meter section of the vertical radiator and then strung out some wire until I got resonance as indicated on my MFJ259 antenna analyzer. I now have a great 160 meter signal and all from the junk box.

## For Sale, Trade or ?

For all the items for sale on behalf of the ORC and the scholarship fund go to [ozaukeeradioclub.org](http://ozaukeeradioclub.org) and then click on the "items for sale". It will take you to a drop box with several spread sheets of donated equipment listed and the suggested pricing. Call Tom Ruhlmann at 262-377-6945 if you are interested in any purchases.

## Tips and Tails

For weekly updates on swapfests and nets subscribe to Sherm's newsletter at:

[sdswanson@milwpc.com](mailto:sdswanson@milwpc.com)

# The Computer Corner

## No. 199. Is the Desktop Computer Dead?

by Stan Kaplan, WB9RQR

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wb9rqr@att.net



The simple answer: YES! But first, let's look at a couple of definitions.

We all know what **desktop PCs** are ... medium to big boxes that sit permanently on or under the desk. They can generally be classed as powerful, with lots of memory and lots of hard disk space. **Laptops** are small versions of desktops, often seen as mobile versions of the classic desktop unit. Laptops are generally more compact, light and mobile than desktops, and this trend has continued over time. Presently, you can perform all the tasks available on a desktop PC with a laptop. **Tablets** are even more compact and lightweight than laptops. While they are very easy to carry, they really

don't have the computing power of a laptop. On the other hand, they are sufficient for many people's needs. Good enough to watch TV, surf the Web, play light games, check email and the like. A few of the more popular tablets include the iPad, Kindle Fire and the Nook.

Let's look at sales. In 2015, desktop sales are projected to be about 20% of all computers sold, at 129 million units. Laptops will be about 194 million or 30%. Tablets will reach 332 million units or about 50% of all computing units sold. Clearly, the desktop is declining in popularity and the tablet is increasing. This increase will continue as tablets catch up to the power of desktops and laptops.

We have not even considered smart phones, which are getting more and more powerful, and doing the many computing tasks that some folks consider essential. In my opinion, these will take over the functions of all other computing units within 10 years. I doubt that desktops, laptops and even tablet computers will exist in 2025. Everything will be done with smart phones. They will be called something else by then. And many will be implantable. Yes, implanted inside the human body. If you want to make a call, you will just need to think it; there will be no buttons to push.

But, let's get back to the present. I got into this article because my wife Nancy (KC9FZK) wanted a different computer to replace her desktop. She wanted something faster with more bells and whistles. I suggested a laptop. Laptops can be placed in spots where desktops just would not fit. Another big plus is that laptops contain their own batteries, keeping them up and running during short blackouts. Hey, we take advantage of the latter attribute every Field Day – the logging laptops keep on “chugging” even when the generators are being refilled. That's like a UPS (Uninterruptible Power Supply) being built into each unit! And, laptops are great for mobility – Nancy can check her email while watching TV in the living room. Or she can take it with her to lunch to show the ladies something interesting she came across. No need to use it just in our upstairs office.

Laptops are amazing. They are getting faster and generally more capable every year. Until the implantable smart phone comes along, they are a good choice for your general computing needs. Consider one next time you need to buy a new unit.

Happy Computing!

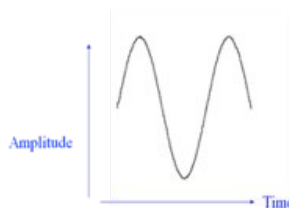


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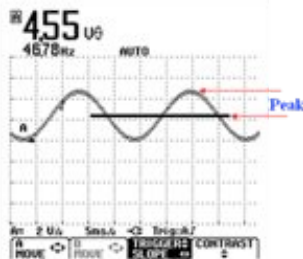
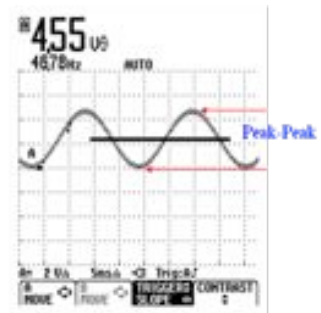
de Gary Drasch, K9DJT



Last month I touched on the importance of an oscilloscope as part of a technician's arsenal. In order to use an oscilloscope (scope) one must first be able to understand waveforms and the terminology used relating to such. The only difficult part is that many times terms are used interchangeably. As an example, last month I used "wavelength" in place of "time" in the drawing at the left. They both are correct. You need to keep an open mind and rely on your understanding of the basics.



With that said, let's get started. The following is a list of "Waveform Terminology" which I would like to discuss: 1. Amplitude, 2. Frequency / Period, 3. Rise Time / Fall Time, 4. Pulse / Pulse Width, 5. Duty Cycle, 6. Phase, 7. Glitch / Spike, and 8. Noise. A scope provides you with "Amplitude", i.e., a voltage displayed over a period of time. In most cases, we are looking at an AC voltage, but you are also able to look at, and measure, a DC voltage as well. More on that later.



The voltage amplitude may be determined in two ways. The first being a "Peak to Peak" measurement, i.e., the amplitude of the waveform is measured from the maximum point to the minimum point as show in the illustration to the right. The second is a "Peak" measurement which is the amplitude of the waveform measured from the maximum (+ or -) to a reference point which is illustrated to the left. Each value, voltage and time, of each division (square) is chosen by the user via the from panel selection knobs. With older scopes, the user actually needed to count the number of squares, up and down, left and right, and then multiply that number to the setting of the knob. Example:

1 volt/div times 2 divisions equals 2 volts...and then it might be multiplied by the probe being used, the most common is a X10. We now have a voltage of 20 volts.

The same goes for the time which is referred to as the "Time-base" or "Sweep-Time" and set as milliseconds (mS) per division or square. By counting the squares and multiplying by the mS per square you will be able to determine the frequency of the voltage you are looking at. Knowing your Peak-to- Peak or Peak values you are able to mathematically determine an average voltage or RMS voltage. As I said, that was with the old analog scopes which are still the foundation for the newer digital scopes which have adjustable cursers whereby they compute the values for you. Some scopes may even compute predetermined measurement values for you as in the illustrations I used above. If you look in the upper-left corner of each, you will see that Trace A = 4.55 Volts P-P and the frequency is 46.78 Hz.

OK, what about the DC voltage measurement I mentioned in the beginning. Think about it...it is a voltage...but it isn't alternating, i.e., not changing from + to - . The scope needs to be DC coupled (which we'll discuss at a different time) and is connected to let's say a 2 Volt DC source. The line will move up 2 divisions, assuming it is still set at 1 volt/div, and continue to move to the right in time as a straight line. It's not alternating! It's straight and steady across the entire display. Now let's say you are expecting to see just that, a straight line, but it looks a little like AC, you just discovered you have an AC Ripple on your DC output of your power supply! How cool is that? Now you need to determine how much of that ripple is acceptable, but that is for another time.

Don't forget to ask your questions on the "ORC Radio Chatter" forum board. I look forward to hearing from you. See you on the radio!

## Tips, Tails & Tools

Want to use those empty pill bottles for small hardware but can't get the labels off. Try soaking in soapy water for a full day and then they can be easily scraped off using an old credit card.

## Upcoming Events

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### Learn how to earn an amateur radio license

CEDARBURG —The Ozaukee Radio Club is offering free classes on preparing for the Federal Communications Commission technician amateur radio license exam.

The program uses the ARRL text available at Amateur Electronic Supply, 5710 W. Good Hope Road in Milwaukee or at [ARRL.org](http://ARRL.org).

Seven classes will be offered on Saturday mornings starting Oct. 4. The classes will follow and expand on the content of the text and provide equipment and component examples and some hands-on operating experience.

The course is perfect for anyone interested in amateur radio, talking to others around the world via their own home radio, building your own radio and electronic devices and providing public service communications during local emergencies.

Learn more about the Ozaukee Radio Club at [ozaukeeradioclub.org](http://ozaukeeradioclub.org).

For more information and class reservations, contact Tom Ruhlmann, W91PR, at 377-9645.

The upcoming Technician License Class was announced in the local News Graphic news paper. Have you yet encouraged your child, sibling, neighbor, friend or coworker? So far we have five enrolled for the classes starting October 4<sup>th</sup>.

**ORC Fall Swapfest at Fireman's Park on Sept. 27** – This is our tenth year offering a "Fall Swapfest" and each year it has grown. We hope to build the club operating fund with the admissions and refreshments revenue and to have a really great time. This is also one of the major events at which we sell the items donated to the scholarship and club operating funds. Be sure to volunteer (admissions free to volunteers) and seek out some of the very good deals that will be available through Tower Electronics, ORC, Club Scholarship Fund and the various vendors. Guaranteed, a good time will be had by all.

## The ORC Corn Roast at Waubedonia Park Pavilion



Talk about a great time, that it was. Everybody brought a dish and the club supplied the meat, corn and refreshments. Good food and great conversation. The only thing missing was more kids. The park is a great place for the kids and games. Maybe next year. Thanks again to Tom, Stan, Nancy, Ed and Kristian.



# The Light house special event

This article in the News Graphic says it all. A fun project with great PR .



Members of the Ozaukee Radio Club and LeFrog (Local Emergency Field Radio Operating Group) set up shop at the Lake Michigan home of David and Mary Bennett in Grafton.



Reaching out to international lighthouses are, seated from left, Tom Therthaway, Zach Yatso and Dick Holtz, and standing, Chris Gadmundsson.



Bill Howe, president of LeFrog, call sign KA9WRL, stands beside a world map showing contacts the club has made in years past.

## Radio-active

*Local Ham radio operators communicate with lighthouses around the world*

Photos by Art Dahlke

GRAFTON — Members of the Ozaukee Radio Club and LeFrog joined forces Aug. 16 for the International Lighthouse Lightship Weekend 2014 event. Fittingly, the site of the exercise was a private lighthouse owned by Dave and Mary Bennett of Grafton.

This annual amateur radio event is organized by the Association of Lighthouse Keepers.

According to the international event organizers, the basic objective is to promote public awareness of lighthouses and lightships and their need for preservation and restoration, at the same time promoting amateur radio and fostering international goodwill.

Lighthouses are fast becoming an endangered species with the introduction of Global Positioning Systems and Satellite Navigation and the automation of the light source to solar power, which has resulted in the withdrawal of magement personnel (keepers).

Over the years, the event has continued to grow. To date, more than 450 lighthouses and lightships in more than 50 countries around the world are participating in the event each year.

Although the local club members didn't beat last year's numbers, they did have more DX (two-way) contacts.

In 2013, at an event in Port Washington, they had a total of 229 contacts; this year they reached 168 contacts. Among the distant countries contacted were Normandy, France; Columbia, Germany, Italy, Czech Republic, Denmark and more from the provinces of Canada.



"Technical guy" Loren Jentz, call sign N9ENR and a member of both clubs, holds a D-Star radio, one of the newest pieces of equipment used by Ham radio operators.



Club member Alan Albinger, call sign W9VNM, communicates with a fellow Ham radio operator.

# Ozaukee Radio Club Minutes

*Brian Skrentny (N9LOO) - Secretary*

August 13, 2014

President Gary Drasch, K9DJT, called the meeting to order at 7:28 p.m. Gary opened the meeting with a moment of silence for Wally, WA9KFR, who passed away August 1<sup>st</sup>. Introductions followed.

## **Announcements/Show-and-Tell:**

Nels, WA9JOB, reported that his wife Joyce is back in the hospital. Also Tom (W9VBQ) Murtaugh's wife, Sonja, passed away on Aug 4<sup>th</sup>.

Gary, K9DJT, is repairing an Alpha 8100 and doing some tower work.

Chuck, W9KR, is restoring a Collins radio and Bill, WA9WRL is repairing a receiver for someone.

Stan, WB9RQR, has rebuilt 22 of 44 laptops for OZARES so far.

Bob, KD9AAD, recently installed a new antenna as his work office.

## **Program:**

Tom, W9IPR, discussed various best ways to put up a stealth antenna. His slide deck is available on the website and reminded everyone that even a large antenna can be stealthy and camouflaged. He showed how long wires can be 'hidden' in the trees, a flagpole can serve a dual purpose and that they can even be put out-of-sight in the attic.

## **50/50 Drawing:**

Kristian Moberg, KC9TFP, ran the drawing and Bernie, AA9CI, was the winner.

## **Auction:**

Stan Kaplan, WB9RQR, ran the auction.

## **Officer Reports:**

**President's Report:** The bill sent to Circle B via certified mail with the expenses incurred was refused.

**1<sup>st</sup> VP Report (Chuck, W9KR):** A small claims court date has been set for Aug 20<sup>th</sup> for ORC vs. Circle B.

**2<sup>nd</sup> VP Report (John, W9FAD):** None.

**Repeater VP Report (Tom, KC9ONY):** The power supply for the 2m repeater amplifier was replaced with a new switching power supply. Previously, he had put in a spare of his own. He also replaced the power supply for the receive site at the Grafton Fire Department with a new switching power supply. Previously, Nels WA9JOB and Jim K9QLP had put in a spare that was donated with some other old radios.

There still seems to be some issue with the 70 cm repeater. Being that it's located at a commercial site, he's not sure when he can meet up with Nels to look things over. It is still useable, but not a clean signal when the repeater is finishing up. He believes we will have to pay a technician to be present, as we cannot go up there like at our main 2m site.

**Secretary's Report/Minutes:** Stan, WB9RQR, made a motion to accept the minutes and Kevin, K9VIN, seconded the motion. The motion passed.



**Treasurer's Report (Dave, N9UNR):** Vic, WT9Q, moved to accept the treasurer's report. Bill, KA9WRL, seconded the motion. The motion passed.

**Committee Reports:**

**Corn Roast:** Tom, KC9ONY, sent out information via the ORC remailer and made a posting on the Radio Chatter forum. More volunteers are needed and everyone is reminded to bring a dish to pass.

**Fall Swapfest:** Tom, W9IPR, will host a meeting at his place on Aug 27<sup>th</sup> at 7PM to go over what needs to be done for this year's swapfest.

**Lighthouse Event:** A new lighthouse has been selected this year. The Kevich lighthouse is located along Lake Shore Road between Falls Road and Lakefield Road (1270 Lake Shore Rd, Grafton, WI) will be used. Be sure to stop by and visit or help out operating the special event station.

**Old Business:**

Bill, KA9WRL, received information on purchasing an electric projector screen to be donated to the Grafton Senior Center on behalf of the ORC. A \$250 limit on the funds was approved.

**New Business:**

Tom, W9IPR, plans to hold a scholarship meeting in the near future. He also indicated that flyers for the Fall Swapfest are being distributed along with next year's Spring Swapfest.

Bill, KA9WRL, suggested that the club consider donating a motorized in-ceiling mounted projector screen for the Grafton Senior Center. He will get pricing information and report back to us. A few years ago, the club donated two wall-mounted fans in their basement in consideration for their low rent charge to the club and to provide additional community service.

Gary, K9DJT, brought a motion to the club to add \$100 to the Health and Wellness fund. Tom, W9IPR, seconded it and all members voted in favor. The motion passed.

**Adjournment:**

Kristian, KC9TFP, moved to adjourn and Max, KC9YZX seconded the motion. The motion passed. The meeting adjourned at 9:23 PM.

**Member Attendance:**

There were 38 members present and no guests.

A copy of the attendance sheet is available upon request in PDF format. Please contact me via email at: [n9loo@arrl.net](mailto:n9loo@arrl.net) if you would like a copy.

Respectfully submitted,  
Brian Skrentny, N9LOO  
Secretary

**Ozaukee Radio Club Membership Meeting Minutes**  
***Brian Skrentny (N9LOO) - Secretary***

## AGENDA

September 10, 2014

1. 7:00 – 7:30 PM – Network & Rag Chew
2. Call to order: Gary Drasch , K9DJT
3. Introductions.
4. Announcements, Bragging Rights, Show & Tell, Upcoming events, Etc.,
5. Program: Clusters & Han Radio Delux software – Gary Drasch, K9DJT
6. 50/50 – Kristian Moberg, KC9TFP
7. Fellowship Break
8. Auction – Stan Kaplan (WB9RQR)
9. Presidents Report – Gary. Drasch, K9DJT
10. 1<sup>st</sup> VP Report – Chuck Curran, W9KR
11. 2<sup>nd</sup> VP Report – John Strachota, W9FAD
12. Repeater VP report – Tom Trethewey, KC9ONY
13. Acceptance of Minutes : Bryan Skrentny, N9LOO
14. Treasurer's report – Dave Barrow, N9UNR
15. Committee reports.  
Fall Swapfest Sept. 27<sup>th</sup> – Tom Ruhlmann, W9IPR  
Corn Roast – Tom Trethewey  
Other:
16. OLD BUSINESS
17. NEW BUSINESS
18. Adjournment to ?

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### The ORC Newsletter

465 Beechwood Drive  
Cedarburg WI\* 53012

### First Class

Next ORC Meeting

#### Grafton Senior Citizens Center

**1665 7<sup>th</sup> Avenue, Grafton**  
Wednesday, September 10<sup>th</sup>

7:00 PM – doors open

7:30 – Membership Meeting