



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

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Volume XXXII

November, 2014

Number 11

From the President

de Gary Drasch, K9DJT



My hope is that everyone has their antennas pruned and tuned for the approaching winter and DX season. Speaking from personal experience, it is not as much fun working on them in the cold and snow. Unless you're Vic, WT9Q, who has nothing better to do in the middle of winter and makes contacts with the antenna wire on the ground. DXing has been pretty good with some fair propagation and a few good DXpeditions helping to fill in the holes on those rare ones. For those of you who monitor the "Cluster", you may have noticed that Tom, W9IPR, has even made some postings. Way to go Tom! I'm sure he is only doing it because it isn't costing him anything.

Although I wasn't able to join in last Saturday, it is my understanding there was a small group of people who starting sorting and cleaning out the Field Day stuff at the shed. At this point it is far from done.

Ken Boston, W9GA, has scheduled another work day for this Saturday, November 8th. Please join us! The more people, the faster it goes.

Chuck, W9KR, has looked into the price of some used box trailers for our Field Day equipment and found the going cost is somewhere in the \$2200 to \$2800 range. My goal is to have a board meeting and ask for the approval of up to \$2750 for the purchase of a used, square nose, box trailer. We'll keep everyone informed on the progress. The other thing which needs to be done is to determine where the club will keep it. The thought right now is that it would fit with one of the two antenna trailers in the shed. So, if anyone has any ideas as to where it should be kept, please let a board member know. Maybe someone within the club would have some extra space!

As I mentioned last month, everyone needs to start thinking of a new slate of officers for 2015. We have several new members which I wouldn't mind seeing getting involved at a committee level. But we need others to step up to the higher positions including the presidency. I am not sure if the club has had the pleasure of not having repeat presidents or not. If not, maybe this is a time for consideration. As with any organization, the more people involved will keep things fresh while eliminating burnout and therefore continuing the fun and growth of a great hobby. Please consider helping by serving.

By the way, don't forget to join us for breakfast on Saturday mornings at PJ Pipers in Cedarburg (Talk in on 146.97 or 442.1). Nels opens the place at 6:30 AM (or is it 6:00 AM?) and others show up as they can. We usually order at 7:00 AM. Hope you can make it!

See you on the radio! 73 and God bless, Gary K9DJT

k9djt@sbcglobal.net

262 707 4279

DX'ing & Contesting

De Gary Sutcliffe (W9XT)



November is a busy month on the radio. There are 3 major contests. This month also has a pile of DXpeditions to some rare countries. So, let's jump right in.

The ARRL Sweepstakes are this month. The CW event already occurred the first weekend of the month. The SSB version starts at 2100 UTC (3:00PM local) on Saturday and runs to 0259 UTC on Monday (8:59 PM Sunday night local). You can operate up to 30 hours.

SS is different from most contests in that the exchange is very long. Usually you give a signal report and maybe your state or a serial number. SS was originally based on the header for message traffic. Handling messages was once a primary activity in ham radio but has declined as other, fast and low cost alternatives became available. There are still some that do it, and it becomes very important when there is a disaster and ham radio is called to help out.

The exchange is the serial number, precedence, your call, check, and ARRL section. The serial number starts with the first contact you make and is incremented with each QSO. The precedence is the priority in a message, but in SS you send your entry class. Q is QRP, 5 watts or less. A is low power, up to 150 watts, and B is over 150 watts. These classes are not allowed to use Packet or other spotting assistance. If you want to use packet, the class is U regardless of power. M is for multi-op groups, and S is for schools. Then you send your call, which for a real message is the originating station.

Next comes the check, which is the count of the words in the message, to ensure the message was received complete. In SS you send the last two digits of the year you were first licensed. Finally you send your ARRL section. For us that is WI (Wisconsin). Larger states have multiple sections.

So, for the CW weekend I ran low power, packet assisted. So, the exchange for my first contact was 1-U-W9XT-70-WI.

You can work a station only once regardless of band. Each contact is worth 2 points, and your score is the QSO points multiplied by the number of sections worked. If you are lucky enough to work them all you get a "clean sweep". That is often difficult as some sections don't have a lot of activity. In the CW weekend I missed NT which is the northern part of Canada. More info is available at the ARRL web site.

The other big contest is CQWW CW. This starts at 0000UTC Saturday November 29 (6:00PM Friday night local). It ends 48 hours later. The rules are the same as the phone weekend, which

I went over last month so I won't repeat it here. If you want to increase your DXCC totals, this is probably the best contest to do it. There is a lot of activity, and it is a lot easier to work DX with a small station on CW than on phone. The high bands have been very good, and getting on 15 or 20 meters will provide a lot of action.

The phone weekend was hit by a lot of solar flares. There was an X class flare a few hours before it started and two more during the contest. There were several M class flares on Sunday. Flares can cause a lot of problems including SIDs (Sudden Ionospheric Disturbances). They can happen as a sudden HF radio black out. I didn't have time to operate much during the phone weekend, and I missed the blackouts. I have experienced them in the past. It is pretty dramatic. You are hearing lots of strong signals. All of a sudden the band goes dead, like someone threw a switch. My guess is that a lot of guys started checking their receivers and antennas that weekend.

The flares were caused by the largest sunspot cluster seen in this solar cycle. Large sunspots often last more than one rotation of the sun. This is about 28 days. Because of quirks in the calendar the two CQWW weekends are further apart than normal (35 days) but it is likely that the sunspots will still be there but maybe not active. That would be good because they are less likely to spawn more flares. At any rate, conditions for the CQWW CW weekend could be very very good.

There is a lot of great DX on right now. FT5TA is on from Tromelin Island. This island is north east of Madagascar. It is hard to get permission to go there and it has not been on for a number of years. They will be there until November 10.

A really rare one is on from Nicobar Island. This is an island owned by India. It is hard to get permission to operate from the islands owned by India. India is not an easy path from here either. Past operations have not been all that well run. I only worked it once, and that was way back in 1987. I hope I can put them in the log on other bands. They will be there until November 13 and are using the call VU4CB.

Another rare Indian island, the Andaman Islands will appear on November 15 and run for 15 days using VU4KV. This actually counts as the same DXCC country as Nicobar. With 5 stations on running high power, it might be a better opportunity than VU4CB.

The ARRL Centennial event continues, with W1AW/n being used from every state at least twice in 2014. It is also being used from US possessions. They are currently on from American Samoa using the call W1AW/KH8. KH8 is a relatively rare DXCC country, and this operation should clean up a lot of demand. They should be pretty easy to work. They will be there until November 18.

The CQWW contests bring out a lot of activity from groups wanting to operate the contest from a DX country. Besides being active during the contest, they are often on the air a few days in advance to check out their equipment, propagation, etc. Since they want to work everyone in the contest, they will tend to be on before the contest more on different modes than the contest they will be operating. They often are active on the WARC bands as well.

That wraps up November. Conditions are usually good in November and this could be the best one for many years as we start our journey towards the bottom of the sunspot cycle.

The Computer Corner

No. 201. If You Don't Have It, You Should!

by Stan Kaplan, WB9RQR
715 N Dries Street, Saukville 53080 (262) 268-1949
wb9rqr@att.net



I just cannot believe that there are people who still have not put CCleaner on their machines! How can that be? Copies have been downloaded in all 195 countries, and the program has been installed more than 1 billion times, in nearly 25% of the PCs in the world! It is probably the most widely used, human-written program in the universe. And, on top of that, it is **FREE!** The poor souls who do not have it are really missing the boat. Don't be one of them.

CCleaner (originally named Crap Cleaner, but later changed to its more politically correct current title) is a simple, safe utility that you can use to help keep your machine clean. It works on any Windows machine from 2003 and 2008 servers through XP, Vista, Windows 7 and 8. It will also work on Macs and Androids (but not Linux at this time).

It is written by Piriform, a company headquartered in both New York and London. They also write other useful free software, such as Defraggler, a free defragmenting utility that also really works well.

The main value of CCleaner is that it cleans out the junk files that accumulate in any computer and slow it down, such as broken shortcuts, temporary files and the like – all useless files that have no function and eat up the space on your hard drive. You can prove to yourself that this accumulation is rampant. Run CCleaner, then reboot and run it again. More junk files will have accumulated in the interim, just by booting up!

You can also use CCleaner to delete passwords, system restore points and configuration files. Moreover, you can use it to wipe the free space on a machine you are selling or giving away, thus erasing forever the private stuff you have deleted.

CCleaner also cleans out your browsing history and other temporary Internet files, thus reducing your exposure to identity theft. The program will also clean up the all-important Registry by removing invalid entries. It will reveal and help you select what programs start with Windows so that you can speed up the boot process. When uninstalling programs, CCleaner is a whole lot faster than using the Control Panel's Add and Remove Programs applet. It can also find (and remove) duplicate files that are taking up space on your drive.

In other words, it is an anti-clutter, free utility that everyone should have. On its menu, click the Cleaner icon to remove junk files, and when done with that, click the Registry icon to clean up the registry. Those two are perfectly safe to use just as they come. There is no better way to speed up your machine. After you are comfortable with those two parts of this amazing program, you can explore its other aspects.

You can pay for this program if you wish, but the free version does a splendid job. Get it! You will be happy you did. Happy Computing!

Understanding Test Equipment®

de Gary Drasch, K9DJT

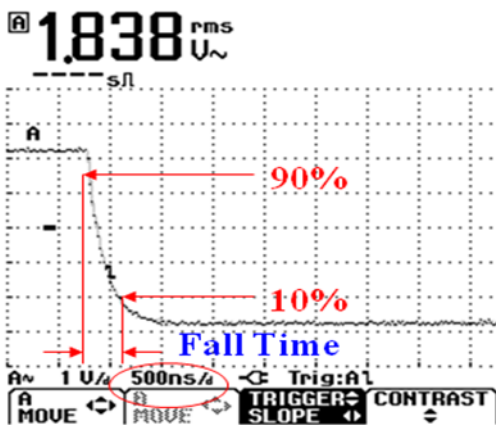
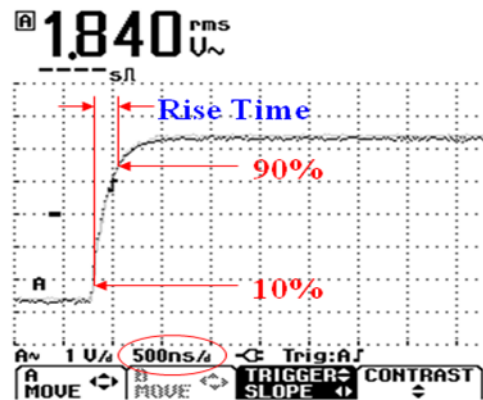


So far we have described what an Oscilloscope does, i.e., displays a signal amplitude against time or wave length; looked at the difference between Peak-Voltage and Peak-Peak Voltage; and how Frequency and a Period (Time) are measured. With most modern day scopes these measurements are made by using “cursors” where by the actual measurement is displayed on some portion of the screen.

The measurements we are going to look at today are “Rise-Time” and “Fall-Time” of a signal. Basically how fast does it take for a voltage to either rise or fall from one level to another. At the

left is an example of a Rise-Time measurement. The definition of such is as follows: ***The time it takes for a waveform to travel from the 10% point to the 90% point with the Value is expressed in seconds.*** Remember the actual time is measured from left to right.

So you need to look at the distance between the two vertical red lines intersecting at the 10 and 90 percent arrows. It appears that the distance is about 1/2 of 1 division, and if you look at the red circled area on the display, it shows the Time Base being set to 500 nano-seconds per division. Therefore our Rise-Time is equal to 250nS. OK. Now take a look at the display on the right. It is just the reverse of what we are seeing for Rise Time. That is because we are going to measure Fall-Time instead. As expected, ***Fall-Time is the time it takes for a waveform to travel from the 90% point to the 10% point. Again, the value is expressed in seconds.***



The Fall-Time of this signal appears to be a little bit different than the Rise-Time. The distance between the two red vertical lines appears to be about 66% of one division. The Time Base is still set at 500 nano-seconds per division, times .66 would equal 330nS per division. As you most likely can tell, I am eye-balling the distance between one division. This particular scope does have cursor measurements for time and amplitude, but they were not turned on when these measurements were made. If they were, we could have placed the Time cursors exactly where the red vertical lines are placed and we would have had a direct

readout displayed.

As always, you are welcome to ask questions on the “ORC Radio Chatter” forum board. I look forward to hearing from you.

See you on the radio! 73, Gary, K9DJT

SCOUT JAMBOREE ON THE AIR (JOTA) - 2014

by Ray Totzke, W9KHH



On 18 October 2014 members of the Ozaukee Radio Club joined with the Boy Scouts of America and put Troop 797 of Port Washington on the air.

The morning rain did not stop the antenna party. A lousy support that usually has no difficulty with a #20 or less aluminum random wire could not remain vertical with a heavier all-band doublet. At ten feet maximum center height and ground level for the ends it still worked. Bill KA9WRL and Tom KC9ONY assisted. Scouts drove the tent stakes to hold

up the mast. The mast did not cooperate vertically. Oh, well! Coax was laid out to the operating room. The station was assembled. Antenna loaded with fine SWR.

Scoutmaster Sam Lockhart gathered the scouts. Five young men would be introduced to ham radio. Ray W9KHH gave the boys a quick overview and instruction with cue cards which they used when on the air. Tom took pictures, Bill held his breath, and Maxwell called, "CQ Jamboree, this is W9KHH" and KB2NQN, Roseland, New York, was in the log. W0AU in Missouri followed. Then K4JJA, Virginia.



The highlight was the QSO with AC0RL, Jerry and his travel companion, a Reindeer Chihuahua, mobile near Wichita, Kansas. All scouts had an opportunity to talk with him, AC0RL. The Chihuahua did not say much. A 59+ signal. More contacts in seven states and one in Austria.



Bill and Tom added much to the boys' experience. Encouragement on the air. Bill gave a Radio Merit Badge presentation. A display of reading material kept the boys occupied when not on the mic. A code oscillator and J-38 key was used by the boys. Dits and Dahs were soon filling the operating room with scout names.

Tom continued taking pictures. He tried to raise anyone on the club repeater. No responses.

At take down the scouts wound up coax, antenna, binder twine, pulled tent stakes, and cleaned up the area. Jamboree on the Air with Troop 797, five Scouts, one Scoutmaster, one Scouter who was one of the three ORC members, was a success.

To borrow from the ARRL Field Day library of quotes, "JUST WAIT 'TIL NEXT YEAR!!!"

146.52 Simplex still works

De Tim Boppre, KA9EAK

As of late I've had a renewed interest in the VHF bands, specifically 2 meters. At the time that I was first licensed 2 meters was in its heyday. This was in the pre-cell phone era. If you wanted mobile communications 2 meters was a great solution. Mobile rigs were getting smaller and were "solid state" as opposed to "hollow state." Repeaters were largely open and popping up everywhere. If the repeater wasn't open you'd whistle it up. Phone patches were a daily occurrence. I grew up in an extended family with a fair number of Amateur Radio operators and there wasn't a family gathering that didn't include at least 3-4 people with their 2m HTs squawking away. It was a great time to be newly licensed with access to a very active band.

Over the years usage of the 2m band has waned as compared to the past due primarily to the rise of cell phones and in recent years smart phones which may well be valued as much or more for their connectivity as they are for their usefulness as a mobile phone. Remember when cell phones were just phones?

With my renewed interest I have recently purchased a couple of additional 2m rigs. One, my first new VHF mobile rig in over 30 years, an ICOM IC-V8000 2m FM transceiver and the other another old Kenwood, a TR-9130 All-Mode to add to my stable of old Kenwoods. Just for the fun of it I've been doing some experimenting with various combinations of radios and antennas using both FM and SSB modes with some help from KA9WRL and W9KKX. I'll provide a report back to the club at some point in the future on my findings.

In the midst of these experiments I read a short article on eHam.net entitled "Revive Two Meters." (<http://www.eham.net/articles/32760>). The essence was a proposal to revive the use of 146.52, the national simplex calling frequency. As is true with most things on-line a lively discussion ensued. I enjoyed reading the article and the associated comment thread and decided I'd start to monitor 146.52 and make a call with the new ICOM in my car during my commute back and forth to work.

The first night that I made the call "KA9EAK monitoring" on 146.52 on the way home from work resulted in an immediate response from Ken, K9BKJ. Therein followed a very nice QSO. We discussed all the things that Amateur Radio operators love to discuss like the radios and antennas we were using, restoring Hallicrafters, and one of my favorite topics, Kenwood Hybrids, which Ken has an affinity for as well. K9BKJ is located in Greenfield and I was northbound on 45. Even with my sub-optimal mobile antenna, the path held well into Germantown and we even got some experimenting in by reducing power in steps to find the edge. I realized later that the only thing we didn't do was QSY off the calling frequency. Blame it on rusty simplex skills. It was a great way to pass the time on the drive home and brought back many memories of the olden days (to the degree that I get to refer to "olden days" at age 51), the simplicity of simplex FM, and the continued allure, after all these years of this great hobby in which we all participate.

So, go read the eHam thread, dust off your simplex skills if you haven't already, and make an occasional call on and/or add 146.52 simplex to your scan list. A great QSO could be waiting for you in a place that you may have overlooked.

Project of the Month - Sounders

De Bill Howe (KA9WRL)

As many of you know, I have an extensive collection of Keys, Oscillators, Telegraph Sounders and Relays, among other things. One thing I never had, but wished I did, was a circuit to transform any audio signal to electronic triggers to activate a Telegraph Sounder in "Auto Mode"!

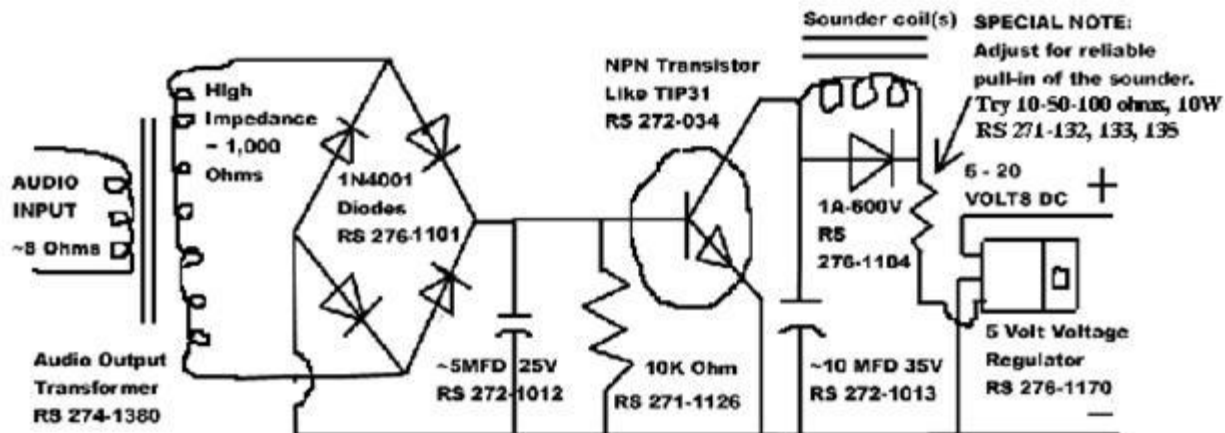
I've seen Sounders in "Automatic" mode being demonstrated in Dayton several times, but never asked how they did it. After searching the internet (what else is there?) I found only one schematic that did exactly what I wanted.

Because I was lacking a few of the components in my vast selection of electronic parts, I shot an e-mail off to Andy Eliason, KA9DOL with the specifics. A few days later, Andy had a working model of the circuit and I had to do NOTHING! Well, OK, I had to supply a 13vdc, 650ma "Wall Wart" for Power, a 100 ohm Resistor and a working 400 ohm Telegraph Sounder.

The Sounder is a vintage Western Electric type used by the Chicago, Minneapolis and St. Paul Railroad back in the days of Steam Locomotives, Straw Hats and Knickers. It would've normally operated on a 6vdc dry cell and a straight key or early Vibroplex.

I now have a great little demo to use for Scouting, Schools or just to show off in my Shack! It works best when plugged into the headphone jack on my HF Transceiver tuned to the CW portion of any band.

In case any of you are interested in building a device to operate your own Sounder, here's the basic schematic:



This simple circuit will allow you to take any audio signal such as the output of a receiver or code practice oscillator and use it to drive a sounder. You will need to select the value of the noted resistor to be as large as possible while still providing reliable pull-in of the sounder. This will avoid heating of the sounder coils and prolong its life. The 5-volt voltage regulator also serves to limit the available current and to protect the circuit from excess current flow. (Adapted from circuit by AD9E in Dave Ingram's book, Keys, Keys, Keys.)

Editor's Comments

For those who are interested in HF, the bands of 20 through 10 meters have been hot lately due to new sunspots and various contests/DXpeditions. It should be easy to make DXCC in 2014. I sure do like Ham Radio Deluxe logging/rig control software. Sunspots will diminish the next few years – 11 year cycle.

Minutes– October 8th, 2014

Bryan Skrentny (N9LOO) - Secretary

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

President Gary Drasch, K9DJT, called the meeting to order at 7:27 p.m. Introductions followed.

Announcements/Show-and-Tell:

Joyce, WB9IMA, became a SK on September 14th and a memorial service was held on October 4th. Welcome back Jim, K9QLP, back from surgery and to keep Ron, W9BCK, in your thoughts and prayers recovering from a stroke.

Gary, K9DJT, reminded everyone that the CQ World Wide RTTY Contest is on the 26-28th of the month and that Jonathan, KD9AMW, passed his General Class test.

Dave, N9UNR, presented a serving tray commemorating Leon's (K9GCF) dedication to the ORC to Jane, KK4HQG, his XYL.

Bill, KA9WRL, recently repaired a radio that had a defective diode in the power supply and Stan, WB9RQR, is looking for someone to repair a Kenwood TS-440S.

Bob, KD9AAD, offered to make a DVD to anyone of the video he produced of the Lighthouse Event this past August.

Tom, W9IPR, donated an ARRL Hints & Kinks book to the Auction which he highly recommended.

Program:

Chuck, W9KR, gave an excellent presentation on his restoration of the "Gold Dust Twins". The Collins 75A-4 and KWS-1 were an impressive pair of technological marvel for 1955 when they were introduced. But when the median income for that year was \$3301 and the pair cost \$2130 (\$18,904 in today's dollars) you can appreciate why they were considered the Gold Dust Twins. Be sure to download his presentation on the ORC website at www.ozaukeeradioclub.org/downloads

50/50 Drawing:

Kristian Moberg, KC9TFP, ran the drawing and Mark, KB9PXE, was the winner.

Auction:

Stan Kaplan, WB9RQR, ran the auction and numerous items were sold.

Officer Reports:

President's Report: The board met this evening at 6:30pm and approved the expenses for the server tray to be presented to Jane, KK4HQG in memory of Leon, K9GCF. They also agreed to look at the cost of a new Field Day box trailer for storage.

1st VP Report (Chuck, W9KR): None.

2nd VP Report (John, W9FAD): None.

Repeater VP Report (Tom, KC9ONY): Repeaters are working fine and the check-ins for the 2m Net were up.

Secretary's Report/Minutes: Stan, WB9RQR, made a motion to accept the minutes and Nance, KC9FZK, seconded the motion. The motion passed.

Treasurer's Report (Dave, N9UNR): Tom, KC9ONY, moved to accept the treasurer's report. Bill, W9MXQ, seconded the motion. The motion passed.

Committee Reports:

Fall Swapfest: Tom, W9IPR, reported that everything went well and that attendance (190) was up.

Exams / Class: Tom, W9IPR, reported that he had 2 students last month and he anticipates an additional 3 more students for his next class.

Field Day: Ken, W9GA, needs volunteers to clean out the shed to make room for Leon's trailer that he donated to the club.

Old Business:

Bill, KA9WRL, needs to order more flyers for the Spring swapfest.

New Business:

None.

Adjournment:

Kristian, KC9TFP, moved to adjourn and Nels, WA9JOB, seconded the motion. The motion passed. The meeting adjourned at 9:20 PM.

Member Attendance:

There were 33 members present and one guest.

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

Respectfully submitted,
Brian Skrentny, N9LOO
Secretary

AGENDA

November 12th, 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:
 6. 50/50 – Kristian Moberg, KC9TFP
 7. Fellowship Break
 8. Auction – Stan Kaplan (WB9RQR)
 9. Presidents Report – Gary. Drasch, K9DJT
-
10. 1st VP Report – Chuck Curran, W9KR
 11. 2nd 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.
 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 7th Avenue, Grafton

Wednesday, June 11th

7:00 PM – doors open

7:30 – Membership Meeting