The ORC News -

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.

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Volume XXII May 2003 Number 5

The Prez Sez

De Vic Shier, KB9UKE

The 25th Annual ORC Swapfest was a great success for our club. The attendance was over 300 and we sold nearly all of the tables. We generated good revenue from the club table and AA9W did a great job with the Scholarship table. Stan had fun as the club barker giving out numerous door prizes including the Grand Prize of $100.00. Gary, WI9M reported that the Badger Examiners administered 14 exams with several people getting their first ticket.

Thanks to our vendors who contributed door prizes and to the following organizations:

Amateur Electronic Supply – Numerous Gift Certificates
ARRL - For several reference books
N0OKS Software – Paper Chasers' Log software by Mark Kachel
HamTest OnLine – A Two-year subscription to this new on-line practice exam web site

It is encouraging to see so many of our club member's assist in this effort but I wish to give special thanks to Gene, KB9VJP, our Swapfest Chairman for the third year in a row. He runs an efficient and well-organized Fest. Gene got his ticket in the fall of 1999, joined the club shortly thereafter and a few months later was chairing the club's main fund-raiser. Kudos to you Gene!

Jim Hilins, KA4UPW provided the program for our last club meeting giving the first of a two-part demonstration on refurbishing antique radios. His current project is a 1937 Zenith HF console radio. He shared with us some of the tips he uses when selecting an antique radio for restoration. He looks for a low price and a working power supply believing that if the radio doesn't work, it isn't worth the time anyway. If it makes a little noise, that's even better. Of lesser concern is the condition of the wood cabinet. We look forward to hearing about the unexpected problems he came across and also viewing the finished radio at a future club meeting. Thanks Jim.

Our next major event is Field Day. There will be a Field Day planning session at Leon's, K9GCF on Wednesday, May 7th at 7:15. The purpose of this meeting is to develop ideas, which will lead to an improved club score for Field Day. All are welcome to attend. Can we improve on last year's score? That's a big request seeing as how we came in 3rd in the galaxy last year.

73's and remember…It's a hobby!

Upcoming Events

7 May – Field Day meeting at K9GCF's
14 May – ORC Membership Meeting
16,17 & 18 May – Dayton Hamfest
18 May – Tour deCure
31 May – Riverfest
1 June – Ride for the Arts
21 June – Field Day @ Lazy Daze
12 July – South Milwaukee WI - Swapfest
27 –28 Sept. – Grayslake IL – Swapfest

Swapfest 2003

Another great success for Gene Szudrowitz (KB9VJP) and the ORC. The total addition to the ORC general fund after expenses was $2,281 and a really great time. This included the $171 from the club consignment/donation table, sale of

about 90 tables and receipts from about 397 attendees. This does not include the $1,820 added to the scholarship fund from the sale of donated equipment by Ed Rate, AA9W.

With over 300 attendees and volunteers the Circle B was a madhouse of great buys that resulted in the transfer of hundreds of pounds of "good stuff" between basements

Hats off to Gene as the chairman and all of those who worked at set-up Friday evening and performed the many required tasks Saturday morning. A really great time even if only from the social aspect.

NUMBER 3 IN THE COUNTRY AIN'T GOOD ENOUGH!!! OR IS IT?

De Bob Truscott, W9LO

Yeah, I know—that ain't good grammar. I just wanted to get your attention.

Number 3 in the country was ORC's rating in the 5 transmitter class on Field Day, 2002. (There were 92 entries in the category.) It was our best effort ever, and an accomplishment we should all be proud of. But we can do better.

Over the years we have consistently improved our operation by upgrading our equipment, improving the antenna systems, using bandpass filters and spreading out the physical arrangement of the operating stations to minimize mutual interference between stations, and converting to computer logging. And high on the list of improvements has been the use of Ed Frac's big generator (50 kW?), which runs continuously for the full contest period and eliminates all refueling downtime. So all of these things have made ORC one of the better Field Day clubs in the country. The question is, are we satisfied with being #3? If we are, let's continue to have fun, and forget about it. If not, I offer some thoughts that we might use as a basis for discussion of how we might improve.

The first thing that comes to mind is individual effort. If each operator would increase his/her hourly production by just 5 QSO's , it would add 600 contacts over the contest period. This alone would give us a heck of a boost. Was every station in continuous operation for 24 hours? If not, why not? Downtime is very costly.

In the "old days" the phone & CW stations were pretty evenly matched, and it was always a toss-up as to which would be more productive. But that's changed in recent years–in 2002 CW had almost 700 more contacts than
phone. Now, we all know that any phone operator can talk faster than any CW op can send, and can listen faster than any CW op can copy. So why the difference? At the risk of being controversial, I suggest that the "logger" is the reason. The phone stations use a separate logger, and the CW stations do not. The CW ops can concentrate on the job at hand without distractions, but the phone op must communicate with the other person in the tent, thus losing his concentration. By the time the two people "talk it over" to make sure they are on the same page, the other station has often gone away. The need for two people to communicate every time a contact is logged can be a very efficient QSO rate reducer. The argument against eliminating the logger, of course, is that one less person gets to participate in two of the tents. However, when I visited phone stations on two separate occasions last year, there was no logger in sight.

If we eliminate the logger, it will be necessary to reconfigure the equipment so that the computer is directly in front of the operator. In the case where a particular op feels he must have a logger, leave a space open to the right of the rig so that the

computer can be moved. On this next point, I'm on shaky ground because I'm not positive, but I believe that a mouse operation is required each time a contact is logged. If this is correct, it is a problem because the op must have both hands free to operate the keyboard efficiently. A mouse operation would slow him down considerably. The question then is, can the software be modified to eliminate the mouse operation.?

In my view, the ideal phone setup would use VOX and a headset with attached mike, such as a Heil Proset-5, plus a voice keyer with pre-recorded messages using the voice of the op on duty. This would mute the rig's speaker, but an external speaker could be rigged so that other people in the tent could hear both sides of the QSO's. (We did that in 40 CW last year.) As an alternative, an external boom mike with a foot switch would be fine, and the rig's speaker would still be active. In either case the op would have both hands free to operate the rig & computer.

And finally, too many of the sheepshead players run for their sleeping bags much too early after the Friday night party, some as early as midnight. Real sheepshead players are good till at least 2 AM, or till the keg runs dry, whichever comes last. This situation has got to be corrected.

The official scores for ARRL November CW Sweepstakes Contest are out:

W9LO 736 Qs—75 Sections
W9XT 363 Qs—72 Sections
WI9M 340 Qs—74 Sections
W9KHH 250 Qs—71Sections
KB9UKE 223 Qs—65 Sections
W9ISC 32 Qs—23 Sections

Coming up in May:

May 17-18 US Counties QSO Party–SSB 80-10 meters. Rules in QST, May, 2003, page 95.
May 24-25 CQ WW WPX Contest–CW 160-10 meters. Rules in QST, March, 2003, page 99.

Have fun contesting.

Why You Need at Least One Antique Radio in Your Home

De Jim Hilins, KA4UPW

An antique radio can be one of the most unique, interesting, and attractive pieces of furniture in your home. There are thousands of
different types and styles. There is a radio to fit the decor of your home, no matter what the style. From art deco to traditional to machine
age, antique radios come in all shapes, colors, and sizes. You won't find Antique radios at "Rooms in a Box" so you know your home will be as original as you are.

Jim Hilins, KA4UPW, describes the process of restoring his "new" 1935 Zenith at the ORC April Meeting

Antique Radios are part of 20th century American History. Just imagine the sounds that came through these radios - Families sat on the edge of their chairs each evening listening to Edward R. Murrow and his newscasts of World War II, or FDR and his fireside chats. Radio entertained the family with shows like "The Shadow", "Ma Perkins", and "Jack Armstrong". Antique radios are art,
history, nostalgia, and furniture all rolled into one package! Antique radios a probably the easiest and cheapest part of American History you can own. These radios literally come out of barns,

attics, and garage sales. Many can be found in local antique store waiting for restoration.

A treasury of abandoned radios waiting to be restored by Jim Hilins, KA4UPW

Now that you have acquired the radio you plan to restore, lets proceed in the process one step at a time. During these next few months we will carefully review each of the 14 steps required in the restoration of your antique radio.

1.Removal of radio chassis from cabinet

This step can be very difficult or very easy. Some radios require only removal of the bolts fastening the chassis, others require removal of lots of other parts before removing the chassis. Start with the knobs. Before you pull too hard, look for setscrews and loosen them first. You can *usually* leave push buttons on the chassis. Sometimes the knobs are really stuck, do not pry them off with a screwdriver, this mars the cabinet and can break the knob as well. When faced with a troublesome knob, I pull firmly and evenly (sometimes with both hands!). If the knob still refuses to budge, I use a little WD-40 on the shaft.

Now that the knobs are off, determine what you must disconnect from the chassis before removal. Is the speaker fastened to the chassis? If not, disconnect the wiring if possible(usually a plug or terminals). Disconnect any antennas, carefully noting which wire connects to which terminal. On some radios (certain Zeniths and others) the push buttons assembly fastens to the cabinet separately from the chassis, this necessitates removing the wires connecting the push buttons to the chassis. On these same Zeniths, the tone control assembly is fastened to the cabinet and wired to the chassis without any plugs. You must turn the tone control sideways and push it back into the cabinet before chassis removal.

OK, all the extra stuff (if your radio has any) is disconnected. Find the bolts holding the chassis to the cabinet and take them out. Gently pull the chassis out. Does it slide out easily, or does it seem to be glued firmly to the cabinet? Often I find that the rubber feet on the chassis have deteriorated, gluing the chassis the cabinet. If your radio chassis seems glued to the cabinet, make SURE you have all the bolts loose, then gently pry up the edge of the chassis until the gooey rubber feet let go. Once the chassis is out, remove the speaker from the cabinet (if the speaker is not mounted to the chassis). Note: if your speaker is wired directly to the chassis you must remove them at the same time. Be careful not to poke holes in the speaker cone.

2. Cleaning

My favorite tool for radio chassis cleaning is an air compressor. I use 100-psi air with a trigger operated air nozzle. The high-pressure air removes the thick layers of dust. I use a 1" paintbrush to help loosen the dust and dirt as I blow compressed air on the chassis. I remove the tubes and tube shields and clean them separately. Careless or inexperienced use of high-pressure air damages radios, you may want to start with 40 psi. Improper use of high-pressure air ruins mica trimmer capacitors, bends tuning capacitors and breaks speaker cones. If you use compressed air to clean a chassis, do not blow air directly on the speaker cone or trimmer capacitors. The sheets of mica in the trimmer capacitors are fragile and will shatter if you blow high-pressure air on the edges. High-pressure air is the most effective method I have used for re-

moving small conductive particles from between the tuning capacitor plates. It works great as long as you do not blow on the flat sides of the plates (it can bend them sideways). If you do not have an air compressor, you can use a vacuum cleaner along with a paintbrush to loosen the dust. You have to work harder with the paintbrush when using a vacuum cleaner.

I clean tubes with 0000 extra fine steel wool. The steel wool makes the glass look new very quickly. Steel wool will **completely obliterate** the numbers and any other writing on the tube, so do not rub the numbers! Bakelite tube bases clean well with a mild water based cleaner.

The best advice I have for dial cleaning is: ***BE CAREFUL!*** Many dials will loose all their numbers when cleaned with plain water! Some glass dials clean up very well with steel wool, but this could remove the numbers, it depends on the dial. If you must clean a dial, experiment with a small part that will not show when assembled. Frequently, I clean only the side without the numbers and leave the numbers alone.

Who Does What

De Vic Shier,KB9UKE

Ham radio operators know the importance of bringing new people into the hobby but what can we do? Well Gary Sharbuno, WI9M does it. Gary and his friend Mickey, KB9G started Badger Examiners, an organization that provides ham radio license testing, in 1985. A few years latter Mickey moved away but Gary continued running this VE organization. So how many hams got their first ticket because of his efforts to give the exam? Hundreds? We don't know that answer. But Gary, WI9M has made a major contribution to Amateur Radio in Wisconsin for over 18 years.

For Sale, Trade or ?

HF TRANSCEIVER ICOM IC-751A Deluxe 160 through 10 meter all solid state

Transmitter, receives 100Khz to 32 MHz. Has additional board that has 1064 memories, with the 500 hot frequencies loaded. This has a 100% key down unlimited time transmitter - great for RTTY, FM & other full power modes.

K9CAN has contacted hundreds of countries using his. Was $1450 new, now $650.

NICAD & NICKEL METAL HYDRIDE BATTERY CHARGER. MAHA 777 a popular current model. I'm going to buy the deluxe model of this same charger. $50 new, $30 now.

William C. Vosburg,W9VLL, of Grafton SK

De Ron Yokes, W9BCK

Bill and me were friends since 1957. I thought of him as a brother as well as a dear friend. Others who knew him well (some for a longer time) ...Charlie WA9CPE, Hal W9RXJ, Bob W9LO, Bob WQ9N, Herb WA9UVK...may have remembrances worth recounting as well.

GOTO www.onwisconsin.com/deathnotices Friday, April 25, 2003 Obit for W9VLL.

Bill served as radio operator aboard a weather observation ship in the south Pacific during WWII. He was active participant in local ham radio activities long prior to the formal formation of the ORC. He was a master at gardening, carpentry, finish woodwork, metalwork and all things electrical and/or electronic. Bill's computer skills were born in his work for Burroughs
beginning with mechanical computational machines leading to the birth of the electronic computer system of today. An early ham radio experimenter, Bill built most of the devices necessary to get on the air with HF and VHF analog an digital systems including Television TX/RX systems using home brew vidicon camera to communicate with his QSO partner in Oostburg. Bill was a "foundation stone" of ORC and major contributor to its subsequent success.

Always a background player, Bill's guiding hand was always there to support the group through its faltering times.

The Club Re-mailer

De Nels Harvey, WA9JOB

The Ozaukee Radio Club maintains an e-mail re-mailer. This is a convenient tool for any of us to use, to send information to all others on the list. Just about everyone is on the list, who is using e-mail. If you are receiving the occasional ORC re-mailer postings, YOU can also post messages to the list! I'm telling you this, because several times I have been asked to post a message for someone who didn't realize they could do it themselves!

If YOU have anything you think the Club Members need to know, please use the re-mailer! It really is simple. Just send one e-mail to orc@mailman.qth.net. It's that simple! This is a great service that is operated by a fellow ham, Al Waller, K3TKJ. His group of volunteers work hard to keep the list free of that scourge of the Internet, spam. It's there for all of us to use. If you have a message to distribute to the group, please use the re-mailer. It's there for you!

No. 107 – TweakUI

by Stan Kaplan, WB9RQR

TweakUI is a free Microsoft Power Tool that has been around since at least 1998. It was written by Microsoft programmers and made available publicly, but it is a non-supported utility. That is, if a user has problems getting it to work, they will not help you with it. Nonetheless, it has been classed as a "must have" utility by a number of publications, including PC Magazine. Now, a new release (V1.33) is available that works with nearly every version of Windows (95, 98, 98SE, ME, XP and 2000). I recommend it. It is a Good Thing.

PREPARATION: Make a new folder called TweakUI on the drive of your choice, and remember where you put it.

GET THE PROGRAM: Go to www.microsoft.com, and in the upper left corner type TweakUI in the search box. When you find it, download the small program (only 111 kb) to your new TweakUI folder. It is compressed, with several components inside. Double-click the Tweakui.exe program to release the components. Windows will ask you if you want to unzip the file to C:\Windows\Temp (highlighted in blue). Don't let it do that. Instead, type D:\TweakUI (where D: is the your drive containing the TweakUI folder you recently created) so that the components are placed there.

INSTALL: This couldn't be easier. In the TweakUI folder, find Tweakui.inf. Right click it, then select Install from the menu that comes up. You are now done.

RUN: In the Control Panel, you will find a new TweakUI icon. Click it to run. As you see here, there are 13 tabs covering a number of items in Windows 98 SE (there may be more or fewer in other versions of Windows). I have opened just one here, Paranoia. With it, you can clear all sorts of histories at logon. The other tabs allow you to repair icons, alter boot parameters, remove a stubborn, long-gone program's name from the Add/Remove menu, change mouse etc. – extracted from and continued in the Badger State Smoke Signals at www.bsss.com

Next Meeting –

The May 14th meeting will feature antenna tuners. If you have a "home brew" antenna tuner bring it to the meeting for "show and tell".

Just Another Shack

De Todd Sprinkmann, KC9BQA

May's Just Another Shack visit is with Jim Albrinck - K9QLP. Jim has been an ORC member since October of 1984.

Jim's interest in radio was piqued as a youngster. He recalls an RCA console radio with short-wave bands that he would listen to with his father and grandfather. He also recalls getting one of the first RCA transistor radios for a Christmas present in 1957.

Jim's high school in Cincinnati had a ham radio club and by 1960, he had his ticket. Jim recalls a lot of 6m AM operation in those days.

Like many hams, Jim took some years off from the hobby as he married and raised a family. He got relicensed in 1983 in Anderson, IN, with the

callsign KA9QLP. In 1984, he upgraded to technician and moved to Milwaukee. In 1987, he got his general and shortly after, his advanced. In 1998 or 1999, he got his extra and dropped the "A" from his callsign

Jim (K9QLP) is shown here at his current operating position working some rare DX

Since getting relicensed in 1983, Jim has enjoyed various aspects of ham radio. He has lots of "paper" on his shack wall. DXCC, VUCC on VHF, WAS, WAC. Jim has 185 countries confirmed on HF. He got his DXCC on 10m, with a dipole and a converted 23-channel CB rig that put out 12 watts PEP. This was from the years 1987-91. It took Jim 3 years to get all the QSL cards. When it was time for him to send all the cards to the ARRL headquarters, Jim chose to make absolutely sure nothing would get lost in the mail! He transported everything personally to Newington, CT and operated W1AW as well.

K9QLP has also notched 42 states and 160 grid squares on 6m. Jim enjoys contesting, Field Day, and the Wisconsin QSO party. He is also active in a variety of ORC and Cedarburg Emergency Government capacities.

He is a past president of ORC and served as the repeater VP for 3 or 4 years. Jim is on the Cedarburg Fire Department radio committee, and operates a repeater on their radio tower on 442.10, under the K9QLP callsign. He helps Cedarburg Emergency Government with their weather nets. Jim emphasized that he enjoys giving back to the community what he has learned from the hobby.

Jim's radio equipment is mostly Icom. He has an IC-751A for HF. His 6m rig is an IC-505. His 2m and 440 rig is an IC-207H. K9QLP even has a rig for 220 - the Kenwood TH-315A. Jim has (along with Mark - WA9JMS, Dick - K9CAN and Joe - W9WQ, who is a silent key) assisted in getting the ORC's repeater on 224.18, -1.7 offset. The equipment was donated from Gregg - W9DHI. He reports that there are about 6 or 7 regulars on that 220 machine, but that they love to hear newcomers as well.

Jim's HF antennas are dipoles for 10m and 6m and a 135' random wire that tunes well from 160 - 10m. On VHF, he has a 2/440 dual-bander and a homebrewed ground plane for 220.

Jim's other hobby is trains. He has an extensive model railroad in his home, highlighted with a bit of nostalgia. Jim still uses the original locomotive and cars from the American Flyer set he received when he was 6 years old.

Jim had a big thrill last year, when he got an offer to operate on the Great Circus Train. Adding to the excitement for Jim was that on his special day, the Circus Train was being pulled by a live steam locomotive. Even though 40m was noisy and 20m was dead, K9QLP did manage to work Montana, Florida and Massachusetts. He also worked some locals on 146.52 as the train rode from Horicon to Milwaukee.

Another radio thrill occurred for Jim on Palm Sunday of 1965. As he drove from Indiana to Cincinnati, he witnessed 3 tornadoes, during an infamous outbreak of severe weather. Driving in wide-open farm country, Jim had a good view of the tornadoes and was able to stay out of harm's way as he relayed reports via 6m.

Radios, fire trucks and trains – What's next?

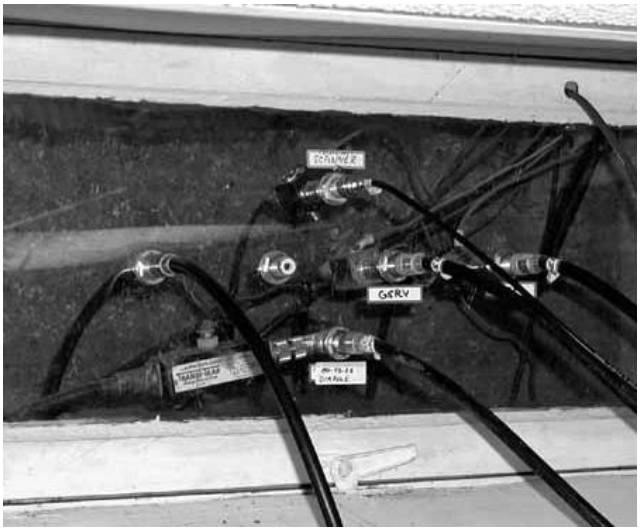
Project of the Month

Looking for a way to bring all those co-axial cables into the shack without making holes in the walls? Why not replace a window with 3/16" thick Plexiglas and use Co-axial feed through fittings. In this case, bulkhead jack to jack connectors were used . Just drill a 5/8" hole through the plastic "pane" to pass the connector through. I bought washers at the hardware store and used them on each side of the pane and tightened the bulkhead connector nuts against the washers.

On the outside of the window there is a lightening arrestor on each co-axial cable before it enters the house. The ground wire from these arrestors individually connect back to the single point ground ring near the base of my tower.

The bulkhead connectors and cables were all then color coded with tape so they don't get mixed up when reconnecting following a thunderstorm.

How can this system be improved? I am going to place a brass plate on each side of the Plexiglas window to use as grounds and pass the bulkhead connectors through the brass plates. This will also prevent any RF riding the outside of the cable from entering the house – it will be routed to ground at the grounded brass plate.



The current "entry bulkhead" at W9IPR

Now to find a bulkhead connector to pass the 8 wires controlling the antenna rotor. I would be much more comfortable if that were also disconnected during thunderstorms.

April 9 ORC Mtg. Minutes

De Carol Szudrowitz, KC9CBC, Secretary

ORC meeting called to order April 9, 2003 at the Grafton Senior Center.

Announcements by Vic KB9UKE - our landlord reminds us to make sure everything is clean and shipshape when we leave. Tom Maier, a guest, was introduced. He is looking for a key. Gabe said he could probably help out.

Herb WA9UVK, shared a SK announcement regarding Fred Stolte. He was instrumental in the first Repeater at the Cedarburg Water Tower. He worked for Delco Electronics and traveled. His son is Bill, W9UFW

Program:
Jim KA4UPW shared his old time radio hobby with the club. He demonstrated his working 1936 Zenith 600 Series Radio. Jim said that restoration is fun as you can switch from the radio to the cabinet during the process. He fixes the chasse first. When you do restoration, first think of which type you are willing to do. Functional means that you get the radio to work using a mixture of parts. Complete restoration uses only 100% original parts. This can be costly and more time consuming. Many parts can be obtained over the Internet. One source is AES Antique Electronic Sup-

ply. If you find a radio at a fair, if it lights up score one, and if it hums score two as you probably have a working one if you dry it out properly. Call Jim KA4UPW for more information. GoJo Hand Cleaner and 0000 steel wool for rubbing works well for cleaning the wood cabinet.

Auction:
Stan WB9RQR, held the usual auction.

Turkey of the Year:
Gabe Chido WI9GC was named as Turkey of the Year. He accepted with grace and good humor.

Business meeting after Break:
Secretary's minutes of March meeting were approved as in the March ORC Newsletter.

Treasurer's Report:
Gabe, WI9GC, passed the membership roster around for a final check. He also mentioned that the light and phone bill from the barn is sent directly to him for payment.

Repeater Report:
Nels WA9JOB, said there appeared to be less usage on the repeater. Currently the power is good. The donated amplifier for 2 meter and 440 is 100 watts. It is to be used as a temporary replacement till other one is fixed. 440 – Bring it up to 75-80 watts. It doesn't need a lot of power. Jim's K9QLP is only 2 watts and it does well. 220 is at Dick's _____ house for work. He is making a cage to keep the vermin out.
Auto patch had a busy signal. Had Phone Company fix it up to post so it is now OK. Reminder regarding it's' use. Be patient. **Key mike slowly**. Don't get to fast with buttons. You need to "wake up" the controller that has to go to voter**. Barn Party Clean up Day** should be sometime after next meeting or Swapfest.

OZARES Report:
Next meeting is 4th Thursday, April 23, with Rusty Capella. The topic is Severe Weather.

Committee Report – Swapfest:
Gene KB9VJP reminds all that setup help and other help is needed for Swapfest.
He also thanked everyone in advance for their help.

Friday night, May 2 6:00 PM to 8:00 PM set up
Saturday, May 3 6:00 AM to 8:00 AM set up
8:00 AM to 1:00 PM Doors open to public
Door Prize Announcement 11:30

Tom K9CAN reminds all that if you have one or two things you want to sell, bring it to the Commission Table. 10% of sale goes to the club. He keeps a log. Ed AA9W also has a scholarship table. If you have donations call him. Note: If Herb WA9UVK wins the grand door prize, he will donate 50% to the club. Other door prizes include software login program from Mark N0OKS and some from AES. If you have some other ideas call Gene KB9VJP or Vic KB9UKE.

Superfest:
Thanks to all that worked at the booth, it went well and Stan WB9RQR won a prize.

River Clean Up: May 31. Remember it. Any questions call Cindy KA9PZG.

International Space Station: For information call Gary N9UUR

New Business
Miller Ride for Arts:

Field Day:
Gary WI9M and Leon K9GCF are co-chairmen - Look for a planning meeting in future at Leon's home.

Meeting was adjourned at 9:15 PM.

Attendance:
Jim K9QLP, Gregg W9DHI, Nels WA9JOB, Gabe WI9GC, Kent N9WH, Dave N9UNR, Jon KB9RHZ, Joe AA9HR, Bernie AA9CI, Bill AA9OS, Herb WA9UVK, Roger W9UVV, Gene KB9VJP, Ray W9KHH, Bob W9LO, Ed AA9WW, Paul KB9WCC, Brian N9LOO, Keith KY9P, Tom, Terry KA9RFM, Julia KB9WBQ, Carol KC9CBC, Stan WB9RQR, Gerry KB9IMH, Wil KB9HHR, Gary W9XT, Don W9VSC, Jim N9WIU, Vic KB9UKE, James KA4UPW.

AGENDA

May 14, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program: Antenna Tuners
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Gabe (WI9GC).
9. Repeater report – Nels (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. 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, May. 14th

7:30 PM

The *ORC News-*

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Volume XXII June 2003 Number 6

The Prez Sez

By Vic Shier (KB9UKE)

What a great program we had at the last ORC meeting. Tom, W9IPR explained the advantages of a balanced feed line for an antenna. His program was complete with charts, graphs and humor. Then to top it off, several club members brought some home brew tuners for display. Thanks Tom for the fun and informative meeting.

More tuners than antenna's. Dick Scarvaci (K9CAN) is showing a balanced line tuner made by his father in 1937. Tom Ruhlmann (W9IPR) is showing essentially the same design that he recently built from flea market parts. Ed Rate (AA9W) is showing a tuner built from WWII Command set parts and Ray Totzke (W9KHH) is showing a "T" network tuner assembled by Stan Kaplan (WB9RQR)

… and thanks to Leon, K9GCF for planning the programs month after month. It's a big contribution to the ORC.

Our next major event is Field Day. In case you haven't noticed, we take it pretty seriously! Last year the ORC placed 3rd in the nation for a club running 5 radios and we are still crowing about it. We have plans this year to give it a good run again and many club members have already agreed to contribute to the effort. But I know that some members aren't sure what to do, wondering if they will be in the way or if they will be welcomed. Well let me assure you that the old saying "The More the Merrier" is absolutely true at Field Day. Here are some ideas for those of you that haven't joined us in the past:

1) Just come camping with your friends. A big part of Field Day is the camping, sitting around a campfire or enjoying a hot cup of coffee at sunrise. We meet at Lazy Days Campground. Check in at the front gate and let them know that you are a ham radio operator and they will give you a pass for a weekend of family fun.

2) Help with the set up on Friday afternoon and Saturday morning. It's a great way to learn more about radios and antennas. There will be plenty of Elmers there to explain why we do things the way we do.

3) Support the operators who are doing the contesting. Don't judge by the looks on their faces, they are having fun but they need some help too. Some times they need a drink of water or a cup of coffee. Stop in a tent and ask them if they need anything. Better yet, just bring them a cold drink. They will appreciate it.

4) Sit down next to an operator and give him a hand. How? Just listen. An extra set of ears is very helpful especially when it gets late into the contest. Was that last call K3VS or was it K3BF. After a few hours it is hard to tell.

5) Work the "Get OnTheAir" station. We need licensed operators who don't get on the air very often to run this special station. We could get several hundred extra points and there will be experienced hams to show you how. Just stop in at the cook tent.

6) Help an operator with the logging. Having an accurate log reduces problems and increases the score.

7) Sit down at the radio and start making contacts. Don't know how to do that? Well come to the next meeting and we will teach you. The program for the next ORC meeting will be Field Day focused. See you there!

8) OOPS. One more thing. We always need help when the contest is over. Tearing down the equipment is harder than putting it up because the excitement is over and everyone is tired.

Field Day is the most exciting event of the year for the ORC and one of the easiest ways to make new friends. Join us for Field Day.

73's and remember…It's a hobby!

Gerald Galvin – K9QXM Silent Key

A former ORC member, Gerry lived in Saukville and was regularly heard on the air on 3860 Kcs, rag-chewing with Bill W9VLL (SK), Ron W9BCK and his many more youthful friends from the area and surrounding states. A retired MSOE educated electronics engineer, Gerry's concentration was transmission line and antenna system performance analysis. Gerry had no peer in this endeavor. Well-versed in practical RF systems performance, Gerry's helping hand toward understanding these principles was ever extended to those of us who were in need of his guidance. No slouch in computer systems and technology, Gerry constantly probed the intricacies of computer applications "invented" by others, always to reveal their basic structure to have been extracted from DEC/IBM/Microsoft software DOS engineering expertise. It is often said that the mind of an engineer exists is also that of a skilled Musician. Gerry was that too as a self-taught pianist, a talent that led to his passion for jazz and Dixieland music, beats that he knew, understood and played with "Big Band" touring companies, including Tiny Hill, Lawrence Welk and other lesser known bands. Gerry never "blew his own horn" in these regards, his accomplishments simply "slipped out" during our "Rag Chews" on 3860 and the many breakfasts with QXM, VLL and BCK. Gerry is a "one of a kind" gem in our universe of jewels.

"God Rest You, Merry Gentleman"

Ron/BCK

MY FIRST FIELD DAY

De Bob Truscott (W9LO)

I was introduced to Field Day back in 1950 by Dean Wagner, W0OR, my brand new father-in-law. He was an interesting guy–first licensed in 1924 as 9ARW (before the "W" prefix was invented), and according to him, a bootlegger before that. He was a CW guy since day-1, and had zero tolerance for "those idiots who work phone". So it came as no surprise when I told him I wanted to marry his daughter, that his answer was " well, if you're a CW man you can't be all bad, so go ahead with it, but if I ever catch you with a microphone in your hand, I'll have the marriage annulled". Well, this was about the best dowry that a young ham could hope for, so I quickly accepted his conditions before he had time to think it over. (I happened to share his views on phone operation at that time–REAL hams work CW.)

Back to FD. It was June 24-25, 1950 (25 was the day the Korean War started–didn't know that, did you?), and we were set up in a county park near Davenport, IA. Dean & I were the only CW ops in the group–we had his surplus WW-2 rig on 80 meters, and my home brew 25 watter on 40, sitting side by side on the same park bench. This worked OK during the day, but it created a real problem when 80 became active at night and we tried to become a 2-band operation. My receiver died every time he touched his key, and vice-versa. But this only decreased our hourly contact rate by about 2–before that we had been working as many as 4 stations per hour. The phone guys weren't even doing that well—one guy got very excited when he got a "QRZ". The highlight of my day was working K9NRD. None of us had ever heard of a "K" prefix, so we all

assumed it was a rare DX station (rare because nobody knew what country had a "K" prefix). I was pretty proud of that accomplishment until we learned later that "K" was a new USA prefix, and NRD was the Naval Reserve Depot about 2 miles down the Mississippi River from us. Overall, I believe the club had a total of perhaps 50 contacts, but it was fun.

By today's standards it was a primitive effort, but it was a great experience for me, and the first of many FDs—I've only missed 3 or 4 since that time. (And I've never touched a FD microphone --Dean would be pleased to know that.)

This year's Field Day is June 28-29, with setup beginning on June 27 at Lazy Days Campground. Those of us who don't work for a living or can get the day off will be there about 10:00 AM to get things started. All others are welcome to join us at any time—it's a good opportunity for folks who are new to the event to learn the how & why of putting up antennas, how to set up the operating positions, how power is distributed, etc, etc. And don't forget the Friday night party, which begins somewhere around 5:30. All sheepshead players bring money.

Coming up in June:

June 14-16 ARRL June V HF QSO Party. Rules in QST, May, 2003, page 101

June 28-29 ARRL Field Day Rules in QST, May, 2003, page 101.

Have fun contesting.

Swap Fest 2003 – Cedarburg Style

It takes the whole club to make this the successful event that it is!!.

Behind the scenes artwork was created for handbills and tickets. Mailing lists were complied. Postcards were printed along with the handbills and tickets. Stamps and labels went on the cards for mailing. Newspapers were notified with information about the event. ARRL posted the event on the Internet. This was just the beginning. Handbills were taken to other swapfest for advertising or posted on local bulletin boards. Vendor table requests came in slowly at first. A map was made out for reserved tables. Thank you for all your help.

Friday night we arrived at Circle B and found out that the Cedarburg Auction Company had just finished. The place was a mess and only one young man to clean and organize! So some members pitched in and put away chairs, while others helped pull tables from the back room.

Great crowd and great deals at the ORC 2003 Swapfest – Great job by Gene (KB9VJP).

Some members swept the floor and others labeled the tables with numbers. Finally, with everyone's help we were ready for the early vendor setup time. Thanks for being there!

Saturday morning we again had many helpful members at Circle B by 6:00 AM. Vendors set up and the doors were opened to the public by 8:00 AM. Comments from visiting hams were positive. They like what they saw and purchased. That pleased the vendors. We had a great crowd. Our scholarship table did well. Final totals were good. We did not sell out all the tables; however, the crowd was larger then last year.

Thanks again to all who helped!! Gene KB9VJP

"Dayton" That says it all

The expeditions all arrived by Thursday evening and the Friday started with Nels (WA9JOB) and Ernie (K9LO) setting up the "point of sales"/rest station in the flea market.

For me it takes 8 full hours to tour the flea market one time. Others take it in stages. However it's done rest breaks are important – if only to discuss "what was seen where".

Early to take a break were Dave (N9UNR), Tom (W9IPR), Ed (AA9W) and Jim (KA4UPW). Note that the space under the sales counter is starting to fill.

And then came the Saturday rains and we all went inside to visit the commercial vendors. However we did get back outside to snap up some of those good deals brought on by the rain God's.

But all's well that ends well and what could be better than an evening gathering for nurishment, the telling of tall tails and a bit of libation.

And clearly, the winner at Dayton for "The Most Antenna on a Trunk Lid" was this K8 with 21 as counted by Dave (N9UNR) and Jim (WA4UPW)

Truly it was a really great time, rain and all, as can be attested too by the above gangs and the others who ventured forth including Gene Szudrowitz (KB9VJP), Kent Christiansen (N9WH), Gabe Chido (WI9GC), Ted Schweitzer (KB9RLI), Ed Frac (AA9WW), Jake Schmeling (KB9ZOR), Brian Skrentny (N9LOO) and Leon Rediske (K9GCF).

Upcoming Events

11 June – ORC Meeting
21 June – Field Day @ Lazy Daze
12 July – South Milwaukee WI - Swapfest
27 –28 Sept. – Grayslake IL – Swapfest

Old Time Radio – Part 2

De Jim Hilins (KA4UPW)

Last month we completed we found our radio for restoration. Perhaps it was and "old" Zenith as shown below. Then we completed the first two steps:

1. Removal of the radio chassis from the cabinet.
2. Cleaning of the chassis and components

Now for getting to the real project – that of figuring out exactly what you have and what it will take to restore it.

3. Determining Model Number

So you think this is easy? Sometimes it is. The most common locations for model numbers are the rear of the chassis, the top of the chassis, and the inside of the cabinet..

An Old Zenith console vintage 1930's. This is the type radio we modified to include a BFO and with which we copied code when I was a freshman in high school – that was 1951 when I got my N0ITI Novice ticket (W9IPR)

If your radio is one of these and the numbers are still legible, then you don't need to read the rest of this section

Unfortunately, papers come unglued and fall out of cabinets, and numbers printed on chassis become illegible. Before you give up looking for a legible number, look ALL over the inside of the cabinet and the chassis. Model numbers sometimes appear on the bottom of the cabinet or the front of the chassis. Still no model number? Read on.

The first step in determining model or chassis number is finding out who made the radio. Look at the name on the front of the radio. The name on the front will tell you who made the radio or give you a good clue. Next, find out how many tubes the radio has, and the type of tubes (e.g. 6A8, 6K7, 80, 6Q7, 6F6). Some radios have tube numbers stamped on the tube sockets. The type of tubes will give an approximate date. Now you need to get access to a set of Riders Perpetual Troubleshooters Manuals or some other resource listing tubes and model numbers. The rest is a process of looking at many schematics or tube listings and finding one that matches your radio. You can double-check your results by determining if the radio really includes all the parts listed in the schematic. Riders Manuals are now available on CD ROM. Consider purchasing a set of Riders if you are serious about repairing or collecting antique radios. Or make friends with someone who has a set!

4. Assessing the condition of the chassis

You can get a rough idea of the scope of repairs your radio needs by a good visual inspection. You have removed all the dust at this point, so let's start looking at what was underneath all that dirt. First, is there anything obviously missing? Look at the top of the chassis. Large holes in the chassis and empty tube sockets are a good indicator that something may be missing. Some radios came with extra-unused holes in the chassis, so this is not always a good indicator. I've seen many radios with holes in the chassis where the old electrolytic capacitors were removed and replaced with newer units located under the chassis. Look for loose ends of wires, another good indication that something is missing. Double-check the schematic for the parts that the radio should include. Does it include a power transformer? If so, does the transformer look like it has been overheated? Burnt paint, and exces-

sive amounts of tar or wax drips are signs of overheated or failed transformers. How many coils should the radio have? (some coils live on top of the chassis, others lurk underneath) Look for the audio output transformer, it may be under the chassis, on top of the chassis, or on the speaker frame. While you look for the audio transformer, look at the speaker also. Is the speaker cone intact? You can repair even large tears. If much of the cone is missing, you will need to have the speaker re-coned.

If your radio is complete and free from obvious problems, you can move on to preliminary testing!

5. Preliminary Testing of your Antique Radio Chassis.

Now comes an exciting step! When I began restoring antique radios, I skipped some of the necessary safety precautions and just plugged radios in. I always asked the questions- will it work? Will it just be dead or will it smoke and spark? I ruined a number of rectifier tubes in this manner and started a few small fires! So, before you start, make sure your radio has a good line cord.

The most important piece of equipment in this step is the Variac. The Variac is an adjustable transformer. Given a 115V input, my Variac will give me a variable output from 0 to 140V, continuously adjustable by a single knob on the front. The Variac is useful since it allows you to apply a low voltage input to the radio for testing. This low voltage allows you to test your radio without damaging it - even if there are electrical shorts in the radio. You can order a Variac from Aircraft Spruce and Specialty.

Set the Variac to zero and plug the radio into the Variac. Remove the rectifier tube. The first test assesses the condition of the power transformer. If the radio does not have a transformer, skip this step. Turn the radio on and slowly bring the voltage up to about 70 volts. Make sure nothing is overheating. Carefully measure the voltage from the power transformer at the rectifier socket. The high voltage will be around 200 to 400 volts. If nothing looks or sounds suspicious, adjust the Variac to 115 volts. Leave the power on for approximately one-half hour. Watch the radio to make sure nothing is getting too hot. The power transformer should be warm, but not hot in this test. A shorted power transformer will heat up even with the rectifier tube removed. If the transformer passes the test, proceed to the next step.

Connect an antenna to the radio if the radio requires an external antenna. Turn the radio on. Slowly bring the power up to about 50 volts. Make sure the rectifier tube is not getting too hot (if the plate glows a dull red, it is definitely too hot!). Check the B+ (high voltage from power supply). The B+ voltage should be about one third of normal. If it is zero, turn the radio back off. If all is well bring the power up to about 70 to 80 volts. Check the rectifier tube again and the B+ voltage. If the radio works at all, you will hear it begin to play. If the radio plays, then you may only need to replace capacitors for it to operate safely and reliably. If the radio makes no noise at all, but has reasonable B+ voltage, the audio transformer may be bad or one of the audio circuit capacitors may be shorted.

"But I don't have a Variac, what can I do?"

If you do not have a Variac, you can wire a 250Watt heat lamp in series with the radio for testing. The lamp should not light up, a little glow might be OK.

6. Filter Capacitor Replacement

Filter capacitors smooth out the waveform of the DC current produced by the power supply. Many old radios came equipped with liquid filled filter capacitors. Filter capacitors are frequently labeled "electrolytic" on the schematic diagrams. My rule of thumb for filters it to replace them unless someone else has already replaced them recently. Shorted or leaky filter capacitors ruin power transformers, rectifier tubes and speaker chokes - often difficult and expensive to repair.

Check the schematic diagram to find out how many filters the radio has and what the values are. Use the same value filter for the capacitor closest to the rectifier tube. Using a lower value will increase the hum, a higher value will cause the voltage to be higher than normal. You can replace the other capacitors with ones of equal or slightly greater values.

Do not discard the old wet capacitors from the radio chassis. Leave the original cans on the chassis for the sake of authenticity. You can mount new capacitors under the chassis, or you can cut open the old capacitor and install the new one inside it. Either way, make sure the re-

pair is neat and safe (insulate all connections). When I install new capacitors inside the original cans, I cut the can open at the top, or wherever a cut is the least noticeable. Once the new capacitor is inside the can, I glue the top back on using gap filling super glue or Duco cement.

Potted (encased in wax or tar filled cans) capacitors present a little more challenge. First, remove the can from the radio, marking all the wires as the can is removed. Many potted capacitors are soldered closed, so the first order of business is to get inside the can. Dynamite is the quick and easy method of opening potted cans. Dynamite is a tad dangerous, so I recommend a large soldering iron or a small propane torch. Once the can is open, you still have to get the potted capacitors out. The best way to get the capacitors out is by heating the entire assembly in your oven. Before you heat the capacitors, send your wife out shopping. Heat the can at 200 to 250 degrees F. When the wax or tar starts to become soft, remove the can from the oven and slide or dig the mess out. Make sure you clean up every trace of this mess from the oven! Use aluminum foil and an old cookie sheet to keep potting material off the burner. Fire is always a hazard in this type of operation, so keep the heat low, and have a fire extinguisher handy.

Once you have and empty can, install new capacitors (make sure the wires are not shorted to each other or the can). If you are a real purist, refill the can with the wax or tar you removed earlier.

Who Does What & Lazy Day's

By Vic Shier (KB9UKE)

The Ozaukee Radio Club has held its field day event at Lazy Day's Campground for over 30 years thanks to the owner, Joe Waters. Mr. Waters isn't a member of the ORC and he isn't even a ham but he certainly has been a supporter of the club.

He learned electrical engineering at DeVry Institute in Chicago and upon graduation repaired radios and televisions for Railroad Salvage in Milwaukee. Shortly after that he became the Maintenance Engineer for WOKY TV station. From there he and a group of 9 others were sent to St. Louis to start a new station, KLPR where he met several famous personalities including Pearl Daily and Richard Rogers, of Rogers and Hammerstein.

Not long after the station was up and running he returned to Wisconsin and worked for a variety of radio and TV stations. One of his responsibilities was to negotiate the purchase of a new $46,000 videotape machine from RCA. The RCA rep at that time was Ron Yokes, W9BCK. Some of his co-workers through the years included Nels Harvey, WA9JOB and Bob Truscott, W9LO. It was sometime in the mid 1960's that Bob asked if Joe might have some space available for the ham radio operators. Joe said, "Sure, if you can't help other people, what good are you?" That space was at Lazy Day's.

The Waters' family enjoyed camping and in 1963 he purchased a farm with frontage on Little Green Lake in Washington County and started Lazy Day's Campground. Little Green Lake is nice for fishing and swimming. It is a great place to take the family.

Two years ago he opened Stoneridge, a new golf course on an adjacent property and a driving range. It is a regulation 18-hole golf course with bent grass fairways and a fun course to play.

Starting a campground and a golf course from scratch has presented Joe with many challenges but he hasn't let them bother him. He said "I work hard all day and when I go to bed at night it is to sleep, not to worry."

Next field day make an effort to thank to Mr. Waters and his family for supporting the ORC these many years.

What's Worth Repeating?

De Nels Harvey, WA9JOB

On Tuesday, May 27th, Alan Rome, KB9DRZ, a professional tower climber from the Madison area, was kind enough to climb our tower, and replace the old antenna with the new one Leon, K9GCF, and I had purchased from a radio shop in Fon du Lac. This was arranged by our ARRL Wisconsin Section Manager, Don Michalski, W9IXG.

This new antenna is operating very nicely, and there is a noticeable difference between the old antenna's performance, and the new one's. Please give us reports on your receiving results as you travel on weekends and vacations.

Minutes

De Carol Szudrowitz (KC9CBC)

ORC Meeting was called to order May 14, 2003 at the Grafton Senior Center.

Announcements:
Dayton Bound hams request an early end to meeting - leaving early May 15 for Ohio.
River Fest – May 31 - Community Service 7:30 AM, Saukville.
Miller Ride for the Arts – June 1, if you can help, call Jeananne N9VSV, for more info.
Technicians Class – No Class for 2 weeks, Ohio Superfest and Memorial Day Weekend.

Program:
Tom W9IPR, gave an interesting program on tuners. Best Resource available is the ARRL Antenna Manual. Info on feed lines, tuners and balanced line antennas.
Tom W9IPR, Ed AA9W, Ray W9KHH and Dick K9CAN displayed their tuners.

Break and then Auction:
Stan WB9RQR, held the usual Auction

Business Meeting:
Minutes:
Approved as in the newsletter.

Treasurer's Report:
Swapfest was successful, see report.

Gabe, WI9GC, is retiring to Arizona in September; therefore, Tom AA9XK has graciously agreed to finish Gabe's term as of Sept. and run for office next year.

Repeater Report:
Nels, WA9JOB, reported the repeater failed in a storm on Saturday May 10th. The 7K controller was blitzed. It will be taken care of after Ohio Trip. A 5K SCOM controller is serving for now. The damaged controller has been sent to SCOM for repairs and updating. Plans are for the 220 system to be outfitted with the newly acquired 7K controller and possibly interfaced with the 146.97 MHz. repeater for nets. This would make autopatches available on the 220 MHz. repeater.

OZARES Report:
Jon, KB9RHZ, just a meeting reminder on Thursday, May 22 at 7:30 PM Justice Center.

Scholarship Report:
Ed, AA9W, said the Scholarship Table did very well at Swapfest, over $1000. Still has 2 handitalkies.

Committee Reports:
Swapfest:
Gene, KB9VJP, said Thank You! Thank You! Thank You! For all the set up help and that day help. Everything went well! The Board awarded Gene a new pocket protector for his efforts.

RiverFest:
Saturday - May 31 - River Cleanup 7:30 AM - Saukville -Call Cindy KA9PZG for more information. Remember it's a great service project for the community.

Old Business:
Superfest:
Thanks to those who worked the booth, Stan, WB9RQR, won the prize.

International Space Station:
For information contact Gary N9UUR.

New Business:
Field Day:
June 27, 28, 29, 2003
A preliminary planning meeting was held at Leon's, K9GCF. The next one will be at Leon's June 3 at 7:15 PM. We need a replacement for beverage responsibility. It's all pre-ordered at Otto's and prepaid. It needs to be at the park by Friday for set up. There is another keg run in the middle and then return everything by Sunday afternoon.

Gary WI9M, gave the run down. The park will spray mosquitoes with DDT. Poison Ivy will also be taken care of. Think about sign up times next month. To practice computer logging go to www.KANE.com/ham Check Gary's article in newsletter for more information. If you have pictures from previous events, share them for our

bulletin board. We are also trying to get local paper out there for a picture. Ed Frac's generator will be back as well as Stan's WB9RQR turkeys on Friday night. Remember to bring a dish to pass.

The meeting was adjourned at 9:40.

Attendance:
Dave NRUNR, Ted KB9RLI, Herb WA9UVK, Gabe WI9GC, Kent N9WH, Nels WA9JOB, Bernie AA9CI, Jim K9QLP, Tom W9LNL, Gene KB9VJP, Joe AA9HR, Roger W9UVV, Gary WI9M, Bob WQ9N, Bob W9LO, Ray W9BUJ, Ron W9BCK,
Chris, visitor, Charles WA9CPE, Gary N9UUR, Jeananne N9VSV, Terry KA9RFM, Bob N9NRK, Gay KB9OBR, Julia KB9WBQ, Carol KC9CBC, Ben K9UZ, Stan WB9RQR,
Jon KB9RHZ, Ed AA9GT, Don W9VSC, Cindy KA9PZG, Dick K9CAN, Ed AA9W,
Jeff KB9QQE, Leon K9GCF, Jane KB9SYI, Paul KB9WCC, Bob W9RNA, Tom AA9XK, Tom W9IPR, Ray W9KHH, Mike WJ9O, Sky N9XRU.

AGENDA

June 11, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Gabe (WI9GC).
9. Repeater report – Dave (N9QA)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

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

7:30 PM

The ORC News

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ORC Repeaters on 146.97, 224.18 and 443.750 MHz - Callsign W9CQO Web site: http://www.qsl.net/orc/

Volume XXII July 2003 Number 7

The Prez Sez

By Vic Shier (KB9UKE)

We had a rough start to Field Day 2003. The weather worked against us as small storms rolled through the area Friday afternoon and evening. Then we woke to an ominous looking sky on Saturday that produced rain in the morning and thunderstorms at night. We weren't able to test all 5 transmitters prior to the start of the contest and the propagation was poor.

A reporter from the Milwaukee Journal/Sentinel asked if I considered this field day effort a success. My response was "absolutely," but I didn't have clear reasons as to why I believed it was a success. In fact we had some problems this year, which lead to fewer contacts being made and we didn't get all of our bonus points. His question forced me to focus on the purpose of Field Day and the benefits derived from it.

Field Day is an exercise in emergency preparedness; we learn and improve each and every year. It is also a team building exercise and it gives us a chance to meet the families of our members, helping to build lasting relationships within the club. Hams who are new to the hobby learn how to assemble a station and get a chance to operate on HF. The general public gets an opportunity to learn about amateur radio, as do government officials. It is also a contest that gives us a measure of how we stack up compared to other clubs throughout North and South America.

Each and every one of these key points was accomplished. Yes, Field Day 2003 was absolutely a success and we can all be proud of our efforts.

…but that was last week. Now it's time for a corn roast!

73's and remember…It's a hobby!

FIELD DAY–THE KING OF ALL HAM RADIO EVENTS

De Bob Truscott (W9LO)

IS IT REALLY OVER? DID IT REALLY HAPPEN? OR WAS IT JUST A DREAM? Darned if I know. I arrived at the FD site about 10:00 AM on Friday to begin putting up antennas and tents, and the next thing I knew it was Sunday afternoon, and we were taking the antennas down and loading our cars to go home. Or so it seemed. What happened to all of that time? We must have been having a ton of fun for it to have passed so quickly. You might think that after about 50 of these events it would get to be "old stuff", but it's not----every FD is new, different in some ways, and exciting in all ways. Some of us planned and prepared for this one for at least 11 & ½months , and to have it "fly by" in what seemed to be about 5 minutes was disappointing—it should take a little bit longer than that.

The gods of FD were unkind to us this year. Scores in all tents were down compared to last year because of band conditions, we put up some of the tents and antennas in the rain, got more than a little chilly on Friday night, and some of us shut down and disconnected our antennas when the storm went through the area on Saturday night. So what! It's Field Day, and these things are supposed to happen.

On the funny side, the 40-meter CW crew appointed a chairperson to supervise the erection of the tent. After much discussion (arguing?) the canvas was laid out on the ground according to

this person's instructions, and then erected. It didn't take long to discover that the tent was inside-out, and it would be impossible to guy the tent poles, and still be able to close the tent flaps. She was embarrassed.

Gary, WI9M, at the 40 meter CW keyboard

And, we had a practical joker in the group. Gary, WI9M, took his turn operating in the 40 meter CW tent on Sunday morning. I relieved him after about an hour, and noticed a strange phenomenon–our standard way of ending a QSO is simply to send "TU" (thank you) to the other station , and when I did that, some other station always sent "and have a beer" immediately after I sent TU. That was puzzling because he was always on my frequency, his timing was always perfect, and his speed always matched mine. I finally realized I'd "been had" when I checked the preprogrammed messages on the computer—Gary had added "and have a beer" to the standard TU message. Thanks, OM.

The highlight of my weekend? I played sheepshead for 4 hours on Friday night, and it only cost me 75 cents. Now that's cheap entertainment.

Coming up in July:

July 12-13 IARU HF World Championship–Rules in Apr. QST, page 99.
July 12 FISTS Summer Sprint–Rules in Feb QST, page 103.
July 19-20 North American RTTY QSO Party–Rules in July QST, page 94.
July 19-20 CQ WW VHF Contest–Rules in July QST, page 94.

Have fun contesting.

Wanted

HERK-2 – Mobil HF 400 watt amplifier by TenTek – Contact Ray Burnette (W9BUJ) at 262-377-5777

160 TVH B&W plug in (swing link) coil –Contact Tom Ruhlmann (W9IPR)

60-Meter band is here… have you tried it yet?

De Gary Sharbuno, WI9M

Well I tried it on midnight July 3rd, and was not too successful. I did hear some stations and tried to work them. I was at my trailer, and with 50 watts and a long wire, it did not cut the mustard. When I arrived home on July 7th, I tried my 850s to an inverted vee (G5RV), and worked a W9HBF in western Illinois. The info on this band is as follows:

The NTIA advised in a letter to the FCC Office of Engineering and Technology (OET) that users of 60 meters should set their carrier frequency 1.5 kHz *lower* than the channel center frequency, according to this NTIA chart:

Channel Center	Amateur Tuning Frequency
5332 kHz	5330.5 kHz
5348 kHz	5346.5 kHz
5368 kHz	5366.5 kHz
5373 kHz	5371.5 kHz
5405 kHz (common US/UK)	5403.5 kHz

Noting that high-frequency audio response can vary considerably from radio to radio, Hare has suggests a more conservative approach. He suggests restricting audio bandwidth to 200 Hz

on the low end, and 2800 Hz on the high end--for a total bandwidth of 2.6 kHz.

So give it a try, it is sort of like 75M, but open most of the time. Be sure to stay below 50Watts, I just turned down my power level to 12 o'clock, and watched my meter output not to exceed 50 Watts, and also make sure your in upper side band on your transceiver. If you need to modify your rig, contact the manufacture or Internet for mods.

73's Gary WI9M

The Dead Battery

De Stan Kaplan, WB9RQR

No, this is not about your car. It is about, however, a minor catastrophe in the making concerning your computer. It happened to me yesterday, but fortunately, I had taken steps to make it fairly painless.

Inside every modern computer is a "wrist watch" - a small battery-powered clock. When you shut your computer off today, it will know what time and date it is tomorrow when you fire it up again, because the little wristwatch in its belly is ticking along, keeping track of the time and date. More important, the battery also powers a little bank of memory that, when you boot up, tells the computer several vital settings it should make. Those settings, contained in a memory cache called the CMOS Setup, are very important to the proper operation of the computer. The CMOS settings are changeable by the human user, and remain set that way until the human user alters them again, so long as the battery does not go dead. If it does go dead, the CMOS settings revert to a default condition which may not be at all optimal for your computer.

A few years ago, those settings held information on the number of cylinders, heads and sectors per track on the hard drive. When a battery went dead in those years, not only was the date and time wrong, but also all the data on the hard drive was inaccessible, and the machine would not boot from the hard drive! Fortunately, the CMOS setup designers and the hard drive designers got together and solved that problem. In all modern machines, the following conversation takes place between the computer and the hard drive, every time it is booted:

> Computer: Is there a hard drive residing in my belly?
> Hard Drive: Yes! I am here!
> Computer: Who are you?
> Hard Drive: A Maxtor Model 98196H8 and my operating parameters are _

The computer then registers the data (actually more than what is suggested above - a total of 512 bytes of data, including even the unique serial number of the drive) in the CMOS memory, and booting is successful because the proper boot records can now be found on the hard drive. That happens today, even when the battery is dead. A Good Thing, indeed!

However, other things might not work properly. Just to mention a few: The second floppy drive, if present, may not be recognized. A PS/2 mouse may no longer work. The expensive VGA card you installed may not work (so the monitor will not work!). An Infrared port may not work. A USB port may not work. The machine may operate at only half speed etc.

Copied from and continued in the Badger State Smoke Signal newsletter at www.bsss.com

Next Meeting – July 9 th

Old Time Radio – Part 3

De Jim Hilins, KA4UPW

This is the continuing saga of the steps required in the restoration of an antique radio. Up to this point we have:

1. Removed the chassis from the cabinet
2. Cleaned the chassis and components
3. Determined the model number and obtained related information
4. Assessed the condition of the chassis
5. Tested the radio to determine if operational
6. Replaced the filter capacitors.

Now its time to check the resistor values (they change with time), make any required speaker

repairs and then run an “operational check”. Now, lets get started.

8. Resistance Tolerance Test

Most resistors remain within tolerances, but enough of them change value to make testing worth the effort. The standard tolerance for resistors in most old radios is 20%. Replace any resistors that are more than 20% off of their rated value. Replace any burnt resistors, even if they still have the proper resistance. Shorted and leaky capacitors overheat the resistors. Atwater Kent radios made in the 1930s normally contain many out of tolerance resistors. The AK resistors change value over time. Any high value resistor should be suspect as they tend to change value more than the lower value resistors. Radios with tuning eyes usually have a bias resistor in the socket of the tuning eye. I have found the tuning eye resistor bad in 80% of the radios I restore. When replacing resistors, use the same value in ohms (or close) and an **equal or greater wattage rating.** A resistor with a lower wattage rating will overheat.

9. Speaker Cone Repairs

Most speakers need minor repair or adjustment. I always try to repair a speaker before resorting to re-coning. You can repair large tears and holes in the cone as well as loose cone edges. An old speaker rebuilder once told me to glue torn speaker cones with RTV (silicone caulk). I thought this was messy and "unprofessional”, but I found that it works great! RTV looks really bad, but unlike other glues, it remains flexible. Gluing a speaker cone with a rigid glue often just results in another rip since the glue will not flex with the rest of the cone.

Speaker cones frequently come loose at the outside edge where the cone meets the frame. Loose cones edges cause loud rattles in the speaker. The chief difficulty in re-gluing the cone edge lies in getting the glue in the right spot. I use a syringe and needle to get glue under the edge of the cone. Woodworkers glue works well for this since it flows easily and cleans up with water. Other suitable glues include super glue, Duco cement, or RTV.

Many speakers use a spider to center the voice coil in the magnet. Often, the speaker voice coil is rubbing the magnet, causing buzzing and distortion in the speaker. Sometimes, you can cure this by adjusting the spider. Carefully loosen the bolts holding the spider in place, and move the spider to a position where the voice coil does not rub the magnet. Retighten the bolts to finish the job. This may take quite a few tries to complete a successful repair. The speaker spider is located in the center of the speaker where the coil meets the cone, or on the outside of the voice coil where it meets the cone. Spiders on the inside of the cone use a single bolt fastened to the magnet, spiders on the outside of the cone fasten to the speaker frame with several bolts. Newer speakers (1940's and later) use a combination spider/dust cover on the outside of the voice coil. These covers are glued to the speaker frame. When the glue ages and fails, the loose cover rattles and buzzes. Re-glue these using the same techniques as for re-gluing the cone edge. Make sure the voice coil is centered before gluing.

10. Operational check

All the repairs done? Will the radio work? Now it's time to find out! Hook up your Variac; set it for zero volts. Turn the radio chassis on its side or in some position where you can measure the high voltage in the power supply (other wise known as the B+ voltage). Plug the radio into the Variac and turn on the radio. Slowly bring up the voltage to 80 volts. At this point, your radio may begin to play, if not don't despair. Measure the B+ voltage; it should be around one half of the normal reading. If the voltage is zero or very low, turn the radio off and look for the cause. If the radio seems OK, examine tubes, resistors, transformers, capacitors, and the speaker field coil for overheating. Once everything passes your scrutiny, attempt to tune in a strong local station. Gradually bring up the voltage to 100volts (I'm assuming a line voltage of 120volts). The radio becomes louder and more sensitive as the voltage comes up.

11. Additional Repairs and Troubleshooting

If the radio did not work properly, then it's time to dig a little deeper to repair the radio. I start at the audio section and work back through the radio. If the radio has a first audio tube with a grid cap (75, 6Q7, 6F5, etc.) touch your finger to the cap and you should hear a loud hum. If there is no hum, the problem is somewhere between the first audio tube and the speaker. The best way to check the audio stages is with a signal generator that supplies a modulated audio signal.

Who did what at Field Day?

De Gary Sharbuno, WI9M

Well here we go again, the 2003 version. We had a good gathering at the barn, Thursday evening and thanks to Gabe WI9GC for getting the big trailer from Ed AA9W, and getting all our stuff out to the Lazy Days site.

Steady as you go as the 15-meter team erects the trailer mounted tower & tribander under the direction of Leon, K9GCF

Friday was a busy day, for towers were going up and tents to get erected. We had 3 new tents to try this year, and they worked just great. The group over at 40 CW area had a little trouble trying to figure which end is up, thanks to Ron 's W9BCK supervision, just remember Ron GREEN SIDE UP !!!

They finally got it up side out – the discussion at hand seemed to be who was going to last the longest, this Korean War vintage tent or W9LO

The cook tent was up in plenty of time to have the annual gathering of appetites for the Stanley WB9RQR turkey roast. Lots of good food was out there, and if you missed it, put it on the calendar for next year. The evening was great, the Sheepshead players were abundant, and even had 2 tables going. Gary and Jean Ann cleaned me out of my quarters.

Stan, WB9RQR, had to move the turkey roasters inside during the rain but he kept the gang lined up for seconds

As the rain stopped the evening was spent by many visiting about things other than radios, contests and antenna

Some spent the evening perfecting their beer balancing technique, as did Tom, W9IPR

Saturday had a little rainy start, but we had a lot of stuff up already, but there was nothing we could not handle.

We again had the benefit of central "portable power" from the trailer mounted 50 kW generator provided by Ed Frac, AA9WW.

So all was readied, with the antennas, and tents up, and the rig tuned up and ready, 1 PM came and went with the sound of dots and dashes flying, and the sound of (cq field day cq field day). We had a little rain that night, and with lousy band conditions, contacts were tuff to get.

State Representative Glenn Grothman learns about HAM radio and the 6-meter band from Mike Borchardt, N9NPB and Dave, N9UNR.

Sunday had some tired folks running around but we got the job done. The breakfast that Julia and the gang put on was just great.

Julia, did another great job on the ORC information board which proved to be of interest to members and visitors alike.

We seemed to have enough operators, and thanks to all club members who helped out in the GOTA area.

Jake, KB9ZOR and Carol, KC9CBC try their luck at the 20 meter GOTA station – a real point getter.

Paul, KB9WCC oversees his niece as she makes a contact at the 10 meter GOTA station.

The rough count is as follows: CW had 1666 contacts times 2 is 2332 points, and SSB had 1455 contacts for ruff of 3783 points. Last year we were approximately 5000 points. So band conditions and weather did take us down a bit, but think this was the norm for all over the country. So all in all things went well. Thanks much for the great participation, and on behalf of Leon and myself, thanks for the great turn out. Results will be published in December.

What goes up in a day and a half must come down – and it only took a couple of hours – What a crew. They all knew what to do and did it – great time by all.

Finally, Leon, K9GCF and Jim, KA4UPW collaborated to get an aerial shot of Lazy Days – and create a certificate of appreciation which was presented to Joe Waters, the owner.
73 to all

River Fest

By Cindy (KA9PZG)

In spite of a little drizzle in the early morning hours of Saturday, May 31, 2003, the river cleanup in Saukville was another success" Once the groups of volunteer cleanup crews and ham operators were out among the community, the rain stopped to make it a nice day. By 11:30 AM, everyone returned to Grady Park to be treated lunch and be given their official thank you gift, a "glow in the dark" flashlight with batteries included!!!

Nels, WA9JOB who was our newcomer this year was among other seasoned helpers to offer communications between workers and home base: Tom (W9LNL), Bernie (AA9CI), Don (W9VSC), Skip (KA9DDN), and Cindy (KA9PZG) all pitched in to help maintain a more beautiful river.

The River Fest Committee members wish to offer many thanks again to those gracious volunteers who offered up their morning to help make sure the cleanup crews were safe. Hope to see you next year!!

Airfest – 2003

What a show at the West Bend airport – C130, B-25, P-51, T-28, Pitts, Extra 300, WACO's, T-6's , F-16 and B2 performances, skydivers, wing-walkers, helicopters, homebuilt's etc. etc. etc. A really great aerial show with over 4 hours of aerobatics each day. There were several groups there volunteering for the sake of a donation to their club and to watch the really great show. Just ask Tom Oehler (W9LNL) and Ed Rate (AA9W) if they had a good time working the show. Join us for the 2004 airshow the weekend following Fathers Day.

Upcoming Events

12 July – South Milwaukee WI - Swapfest
27 –28 Sept. – Grayslake IL – Swapfest

Minutes

De Carol Szudrowitz (KC9CBC)

ORC Meeting was called to order June 11, 2003 at the Grafton Senior Center.

Introductions: None
Announcements: AA9W Ed's Novice Class is done. 6 people will take exam.

Upcoming Events:
Field Day Update: Jim KA4UPW led the discussion by saying that Field Days are his favorite event. This comes from being part of a club in Virginia whose focus was primarily Field Day. They planned for nine months of the year and became one of the top scorers. KA4UPW said he wants to share the tips he learned there so he will go from tent to tent to help operators and instill his enthusiasm for the event.

Gary WI9M continued the discussion by asking TomW9IPR to take pictures as that will add bonus points to our score. Vic KB9UKE will take care of newspaper promotion. Nels WA9JOB will set up the computer logging. Others volunteered to work on the myriad of other jobs to ensure a successful Field Day.

Important: Be at Barn Thursday night, June 26, 6:30 PM to help load equipment for the weekend. We have new tents to use this year. Also it is important to set up Field Day Display Board.

Leon K9GCF shared the summary of the Field Day meeting held at his home June 3, 2003. Bring Era Bottles – Orange color is good for identifying danger areas. Also emphasized that help is needed for set up and especially tear down on Sunday when everyone is tired.

Fish Day: Kathy Poole requested ORC's help for communications during the parade on Saturday, July 19, 8:30 to 1:30 PM. Please sign up. She will bring more information at July meeting. 100 units are expected in the parade. ORC members would travel with parade people for communication purposes.

Fellowship Break:
Auction: Stan WB9RQR held the usual auction.

Business Meeting:
Secretary Notes: Minutes of last meeting were accepted as printed.
Treasurer's Report: Accepted as printed on report.

Repeater Report:
Nels WA9JOB, restated that the 7 K Controller was blitzed. It has been repaired, and returned from Scom Industries. The 443.75 repeater failed, and was taken to Nels' workshop. It is on the air there, and the amplifier donated by Ozaukee County Emergency Government has been added. The repeater is now putting out 52 watts. Unfortunately, the repeater's preamp failed, and has been sent back to the manufacturer for repairs. Dick K9CAN has the 220 repeater at his home, where it is being gone over before placing it at the repeater site. Once at the repeater site, the repaired 7K controller will be interfaced to it, and connected to the telephone line. The plan is to connect both the 224.18 repeater and the 146.97 repeater for nets and emergency communications. If a user presses 900* on the 146.97 repeater, it will announce the date and time. Alan Romeis, KB9DRZ, climbed the tower and checked over everything when he replaced the old 146.97 repeater antenna with the new one the Club bought from Fond du Lac. Greg W9DHI, stated that as of April 30 he sold his company to General Communications in Madison. They have agreed to keep our repeaters on the tower in Germantown rent free, but ask that the club donate their services in perhaps June and October to cut the weeds down in that area. Also the new owners want us to remove the 220 antenna if it is not going to be used in that location.

OZARES Report: Meeting moved to 3rd Wednesday of month due to Field Day.

Scholarship Fund: Ed AA9W, reported that he still has a 757 YAESU to sell and an oscilloscope.

Old Business:
River Clean Up Report: Cindy KA9PZG, reported that the day went well after the drizzle stopped, lunch was good and over 2 tons of garbage was picked up. Tires were the big thing this year.

New Business:
Ray W9KHH, made suggestion that club pick up fees for new hams to take exam. Ed AA9W stated that now we give new hams who pass exam one year free membership to club.

Tom W9IPR suggested a Kids Club to make radio club more interesting to young people. Perhaps a NET on a kids level. It was stated that ARRL currently has a kid's section. Ed AA9W, Ray W9KHH and Tom will look into this further.

Dave N9UNR, offered to update the leaflet about the club and make sure that AES has them for distribution at the store. He will give them to Ray W9 KHH.

Terry KA9RFM said to mark your calendar for the Special Olympics Air Show, Aug. 2. He is selling tickets. It is an annual RC model airplane event.

Tom W9IPR gave a plug for the air show in West Bend. Clown act on a Piper airplane was very good. It is scheduled for Sat and Sun.

Meeting was adjourned.

Attendance: Jake KB9ZOR, Stan WB9RQR, Mike WJ9O, Jim N9WIU, Jon KB9RHZ, Jim K9QLP, Gabe WI9GC, Greg W9BHI, Charlie WA9CPE, Nels WA9JOB, Tom W9LNL, Herb, WA9UVK, Keith KY9P, Gary N9UUR, Ed AA9WW, Ray W9BUJ, Bob W9LO, Paul KA9RPR, Gary W9XT, Paul KB9WCC, Tom W9IPR, Jeff KB9QQE, Julia KB9WBQ, Terry KA9RFM, Bob N9NRK, Carol KC9CBC, Jane KB9SYI, Leon K9GCF, Don W9VSC, Gary WI9M, Ed AA9GT, Ed AA9W, Cindy KA9PZG, Jeananne N9VSV, Gary N9UUR, Gene KB9VJP, Andy W9ASB, Darrell W9DB, Bernie AA9CI, Ron W9BCK, Vic KB9UKE.

AGENDA

July 9, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Tom (KG9DP).
9. Repeater report – Dave (N9QA)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, July 9th

7:30 PM

The ORC News -

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: http://www.qsl.net/orc/

Volume XXII August 2003 Number 8

The Prez Sez

By Vic Shier (KB9UKE)

Who doesn't love a parade? What fun it is to watch the fireman drive down the hill in their clean machines with the lights flashing and horns blasting. Then come the Veterans carrying our flag with pride and marching to the cadence of "left, left, left-right-left." Next are the old cars with the funny sounding horns, motorcycles, pretty girls with batons, and marching bands.

Everyone wants to get a good view. Little kids stand on the curb hoping for a piece of candy. Adults set up their lawn chairs early so they can be close to the action.

But some people have a chance to get even closer. When they pull their cars up to the barricades, they are allowed to pass. They can talk to the clowns, meet the drivers and pet the horses. Who are these lucky ones? They are the ham operators who have volunteered to provide communications for the parade, a community service.

The Ozaukee Radio Club is one of 6 amateur radio clubs in Wisconsin to be designated as a ARRL Special Service Club and providing a service to the community is just one of the requirements. Each year Ed, AA9W (the club Trustee) applies for this special designation on behalf of the ORC.

Here is what the ARRL has to say about Special Service Clubs or SSC's, "A special program exists to recognize those ARRL Affiliated clubs who do more than the usual for their communities and for Amateur Radio. They're the ones with the active training classes, the publicity program and the members who actively pursue technical projects and operating activities. Truly special Amateur Radio clubs are well balanced in their programs for serving the community, developing club members' Amateur Radio skills and social activities, striving each year to build on their successes to improve their effectiveness."

A SSC must be active in the following areas: 1) New Ham Development and Training. 2) Public Relations. 3) Emergency Communications. 4) Technical advancement and 5) Operating activities.

That certainly describes the ORC.

If you love a parade and would like going where most are forbidden, put your name on the next sign up sheet. One of the parade Elmer's will be happy to show you what to do and they might even show you where the best seats are.

73's and remember…It's a hobby!

Upcoming Events

16 Aug. – Corn Roast @ YY Park
6 Sept. – Eau Claire Hamfest
– KG9RA@ecarc.org
20 –21 Sept. – Grayslake IL – Swapfest
Disregard previously published and flyer published dates for Grayslake – the correct date is Sept. 20 & 21.
20 Sept – fifty first **W9DXCC Convention** at Holiday Inn in Rolling Meadows, Illinois – looks really quite interesting – check it out on the web.

2003 Scholarship Winner Announced

De Dave Knaus, N9QA

The winner of the $1,000 ORC Scholarship for 2003 has been announced by the Foundation for Amateur Radio (FAR). He is Jayson J. Kempinger, KB9VGF of Milwaukee. Jayson will be chemistry major at the University of Wisconsin Madison and hopes to become a research chemist. He is a member of WARAC and holds a Technician Plus license. He serves as an Assistant Scoutmaster and participates as a volunteer in several public service organizations.

Our 2003 scholarship winner, Jason Kempinger, KB9VGF, is pursuing computer science and chemistry degrees and is shown here at his "ham" station.

A letter from Jayson follows:

Dear Ozaukee Radio Club Members,

My name is Jayson Kempinger. My call is KB9VGF. I am a sophomore at the University of Wisconsin-Madison. I am working towards a Bachelor of Science degree in Computer Science and a Masters degree in Chemistry. I am hoping to use my chemistry education to do research. I would like to use my computer skills and education to help in my research and also to expand my electronics skills for hobbies such as amateur radio.

My first memory of amateur radio was sitting with my dad and listening to short wave at night. I became interested and started taking lessons through the West Allis Radio Amateur Club to earn a license. I earned a Technician's Plus license and began making some short contacts on my 2-meter Kenwood (TR-2600). I became more involved at the Jamboree on the Air (JOTA) with the Boy Scouts of America. I made some interesting contacts to Japan at the first JOTA I attended. To me this was amazing that I could talk all the way to Japan without having to pay a long distance bill! The next year I volunteered for JOTA and had the experience of working with multiple transceivers and some very experienced hams. I worked with the Boy Scouts to run a radio merit badge clinic. We awarded 40 scouts the radio merit badge award. My dad and I purchased a Kenwood 570 and a G5RV and set up a ham shack at our cabin up north. From there I made numerous contacts to many different countries. To this day I enjoy the thrill of ham radio and am working on my General class license. I am now a member of the Badger Amateur Radio Society at my college and hope to get more involved in their club activities.

I would like to thank the Ozaukee Radio Club and the Foundation for Amateur Radio for awarding me this scholarship. I believe this will be of great benefit to my education.

Sincerely,
Jayson Kempinger

BLESS THE 40 METER CW FD TENT AND ALL WHO LIVE THEREIN

De Bob Truscott (W9LO)

(And maybe even those who just visit there.)

Every year about this time, the hecklers come out of the woodwork and hassle us about what a crummy tent we have, and suggest that because of its many flaws we should erect it 10' underground before next Field Day. They poke fun at it's decaying canvas, point out that it has so many holes in it that it looks like a planetarium, and claim that it leaks. They also say it's too heavy and is a burden to transport from the barn, and difficult to erect. There is some merit in their arguments in that it does look like a planetarium, and it does leak, but only on the

north half, and only when it rains. We like the planetarium effect because it gives the tent character, and the leaks are not a problem because we put the rig on the south side. It's not too heavy—5 or 6 people can lift it easily. And, it's easy to erect–3 of us did it without a hitch in 15 minutes last year. This year it took a bit longer and had an amusing hitch because we did the job by committee. (A camel is a horse designed by a committee, you know-----we had a camel for a little while.)

The 40 meter CW tent with only one hump

For the benefit of those who don't know the tent's history, it is a WW-II military surplus unit which the club purchased about 35 years ago, along with another one just like it, which the phone operators abused and had to destroy, plus the cook tent which is still in service. The tent is a Field Day social center, second only to the cook tent. We usually have 4-5 people visiting inside the tent, and several others outside watching the hamburgers burn, and sipping a brew. Those scrawny little tents that we bought for the other HF stations recently can't offer that kind of hospitality—they are simply not visitor friendly. Our tent has the most comfortable operating position (maybe that's why it's the most productive) of all the club's stations, except possibly for those wimps who use the air-conditioned camper. We can roll up the tent flaps on all 4 sides for maximum cross-ventilation and minimum operator fatigue, while the folks in those little tents sweat and complain about the heat. Stop trashing our tent, you guys!

Thirty-five years of club history has been made in that tent. Joe Bauer, W9WQ, died in that tent about 15 years ago. I intend to die in that tent, but not until 2027 (my 100th year). After that you can bury it, and put a marker over it which says "W9WQ/W9LO Memorial Tent". In the meantime, bring a couple rolls of duct tape to Field Day next year to help us patch the holes.

Coming up in August:

Aug. 2-3 North American QSO Party–CW—Rules in Jan. QST, page 97.

Aug.16-17 North American QSO Party-SSB—Rules in Jan. QST, page 97.

Aug. 16-17 SARTG WW RTTY Contest—Rules in Aug. QST, page 91

Have fun contesting.

Bob, W9LO

Field Day Summary 2003

Well sports fans here is the final tally on our 2003 field day event. Due to band conditions, which were El stinko, we did the best we could.

Band	Number	Band	Number
80cw	189	80ph	29
40cw	636	40ph	381
20cw	480	20ph	325
15cw	104	15ph	42
10ph	3		
80cw (nat)	10		
2Mph	72	6Mph	78
Total	1419		983
Total CW	1419 x 2	= 2838	
Total ph	983 x 1	= 983	
Total points		= 3821	

We had about 4500 plus last year.

Bonus points: 100% emergency power, Media, Set-up public place, Information booth, NTS message to SEC, W1AW FD message, Satellite QSO, Natural power station, Visit by elected official, Visit by agency official, TV demonstration. This all accounted for 1100 bonus points.

So that's it. Any questions call me. 73 Gary Sharbuno WI9M.

No. 109 - Bits and Pieces

De Stan Kaplan, WB9RQR

Here are a couple of things that don't warrant a whole article each.

WINDOWS UPDATE: Using Windows 98SE? Did you know there are 47 Critical Updates and Service Packs that have come out for this version? A number are patches that plug security holes of one kind or another, so if you ever connect to the Internet (who doesn't, these days?), you should definitely download and install at least the Critical Updates. Just click the Start, then Windows Update buttons while connected to the Internet.

Be aware, though, that Microsoft has redesigned their web site and now does collect information when you download. The "…without sending any information to Microsoft" disclaimer that used to be there (see #93, Sometimes Microsoft Does It Right) is no longer present. What do they now collect? 1. The version of Windows you are running. 2. The version of Internet Explorer that is on your machine. 3. The version of any other software on your machine that they provide a download for, such as Office. 4. The plug-n-play ID number of hardware devices on your machine. 5. Your region and language settings. The above five items are perfectly reasonable and necessary to the download process. After all, if they are going to furnish you an updated driver for a CD-ROM drive on your machine, they need to know what model it is so that they can make the correct version of the driver available.

On the other hand, there are more items. 6. They generate a globally unique ID number (GUID) for your machine, which they then store on your machine (they use this to determine that you have a valid copy of Win98). 7. They also gather the Product ID and ID Key for your version of Windows, which they save just for that connection session. 8. They also gather on their site records of GUID numbers and what was downloaded and configured. Clearly, items 6 - 8 may cause some users to feel an invasion of privacy. On the other hand, they specifically exclude gathering any personal information such as your name, address or email address.

(extracted from and continued at www.bsss.org)

220 Repeater

De Nels Harvey, WA9JOB

The 220 repeater is up and running on 224.18 Mc at the 146.97 repeater site.

As time goes by, there will be some improvements including the addition of autopatch, the 10-Meter link, and linking for our nets.

Wanted

HERK-2 – Mobil HF 400 watt amplifier by TenTek – Contact Ray Burnette (W9BUJ) at 262-377-5777

160 TVH B&W plug in (swing link) coil – Contact Tom Ruhlmann (W9IPR)

Old Time Radio – Part 4

De Jim Hilins (KA4UPW)

This is the continuing saga of the steps required in the restoration of an antique radio. Up to this point we have:

1. Removed the chassis from the cabinet
2. Cleaned the chassis and components
3. Determined the model number and obtained related information
4. Assessed the condition of the chassis
5. Tested the radio to determine if operational
6. Replaced the filter capacitors.
7. Resistance tolerance checks
8. Speaker cone repairs
9. Operational checks
10. Final troubleshooting and repairs

And now it's time to make the radio look as good as it sounds. Step 11, cabinet preparation for refinishing.

Finishing a cabinet requires many intricate steps and delicate processes. First, staining begins only after the cabinet has been completely sanded.

Equipment and supplies used in the preparation and finishing process

Most of the equipment used in the following finishing process is readily available and inexpensive. The big exception is the spray equipment used to apply the finish. Below is a list of the equipment necessary.

- Paint brushes - 1" to 2"
- Modeler's knife - for cutting veneer patches
- Steel wool - 00 and 0000
- Sandpaper - 100 to 250 grit dry, 400 and 1500 grit wet paper
- Clamps - 5' bar clamps, various size C clamps
- Putty knives - for removing old finish
- Veneer scraps - for patching damaged veneer
- Wood scraps - for use between the cabinet and clamps
- Rottonstone or other fine polishing compound
- Spray equipment - I use an HVLP (high volume low-pressure) system due to the low amounts of overspray possible with this system.

Spray Application of Lacquer Finishes

A short explanation of spray application of lacquer finishes is necessary to make the following how-to information understandable. Since lacquer dries quickly and temporarily softens during application of additional coats, spraying is preferred over brushing. While it may be possible to achieve good results with brushing, this is out of my area of expertise. Mixing and spraying your own lacquer has a number of advantages. When mixing lacquer, other ingredients may be added such as thinner, retarder, fish eye killer and color. Adding thinner allows you to achieve the consistency desired for a smooth finish. Retarder slows the drying time of the finish, allowing it to flow out into a smooth finish. Warm weather requires greater amounts of retarder. Fish eye killer keeps the finish from puddling up around impurities on the wood surface. Wax, silicone and other impurities can be impossible to completely remove from an old cabinet. Fish eye killer helps the finish flow over small amounts of surface impurities. Color may be adding as desired to reproduce the original finish color. Lacquer in spray cans may work well for small pieces, but it is not always a good idea on large console radios. Spray can lacquer usually does not contain adequate retarder to keep it from drying before the entire piece is coated. Lacquer in spray cans does not normally contain fish eye killer. Wet sanding between coats and extra buffing may, however, overcome some of the difficulties of using lacquer from a spray can.

Good technique is essential in producing a good sprayed finish. Each successive pass must overlap the last one by 50% for proper coverage and blending.

Jim, KA4UPW, displaying a radio cabinet to be prepared and refinished to better than new condition.

A. Removal of chassis, speaker, grill cloth and escutcheons:

I cover radio chassis removal under the page on chassis restoration. When you have the chassis and speaker removed, it is time to take off the escutcheon, and remove the speaker board and grill cloth. Most escutcheons fasten with several small brass screws. Remove these screws carefully, and place them in a labeled container. Be careful not to drop the escutcheon, especially if it has a glass mounted in it. Store the escutcheon in a SAFE place. One radio I restored had all the dial numbers painted on a curved glass fastened to the escutcheon. I knew that I could not replace this glass. If I broke it, all the rest of my restoration work would have been in vain. I wrapped it in bubble-wrap packing and stored it in a strong box. It was not broken, and the restored radio lived happily ever after.

B. Assessing condition of cabinet, noting colors and patterns of original finish.

Once you have the chassis removed from the cabinet, look for loose parts in the cabinet. I have found knobs, screws, receipts, mouse bones, and even antique toys inside old radio cabinets. Once you have removed all loose or important items from the cabinet, vacuum the dust out. **Caution!** Some radios use sheets of friable asbestos under or above the chassis.

Examine the inside of the cabinet for loose plys in the wood and for missing braces or glue blocks (those little triangular shaped pieces of wood). Inspect the outside of the cabinet for loose or damaged veneer and missing parts. If you are considering refinishing the cabinet, take pictures to document the proper color scheme. Pay careful attention to the color of the wood filler used to fill the open grain wood. You may need to take pictures after cleaning the cabinet to get the correct colors. This step is important; I often cannot remember the color scheme on a particular cabinet since restoration may take a while.

C. Cleaning the Cabinet

Clean the outside of the cabinet using #0000 steel wool and cream type hand cleaner (not the gritty type). The hand cleaner and steel wool remove all the old buildup of wax and dirt. Frequently, the cleaning will make the radio look so good, that refinishing is unnecessary. Cleaning with hand cleaner also hides scratches and imperfections. Follow these steps for successful cleaning:

Clean each side or surface separately so that the cleaner does not dry out.

Gently rub the finish with the steel wool, large amounts of pressure will remove the finish. Use more pressure as needed in small areas to remove paint or other resistant grime.

As soon as a surface is cleaned, gently rub off the dirt and cleaner with a soft absorbent cloth. Be careful not to pull up any loose veneer with the edge of the cloth.

Does the radio now look so good that refinishing is out of the question? If so, apply a coat of paste wax and you are done! You can buy paste wax at most grocery stores. Does the set look marginal?

D. Repairs before stripping

If the finish on your radio is in really poor condition and you have decided to refinish the set, you may need to make some repairs even before you strip the set. Chemical strippers soften exposed glue. If any of the veneer is loose, the stripper may soften the glue and loosen it further. So, what needs gluing before stripping? The following list will help.

- Loose veneer that may be damaged or come loose during stripping.
- Gaps between pieces of wood that may trap stripper residue (it may be almost impossible to clean and glue later)
- Loose cabinet sides that may warp if not secured.

I recommend Elmer's woodworkers glue for almost all cabinet repairs. The glue is water-soluble when wet, sets up in one half hour, and provides sturdy repairs. I use a large selection of clamps for gluing radios. C clamps from 3" to 12", extended reach C clamps, bar clamps, and strap clamps.

Use good flat pieces of scrap wood to distribute the clamping force across the repair (see picture). I use scrap wood on both sides of the clamp to avoid damage to the radio cabinet. 3/4" plywood works well for distributing the clamping force, it is hard and uniformly flat. When gluing parts under stress, I allow the repair to dry 24 hours before removing the clamps.

What about the places that cannot be clamped?

I have two tricks I use in cases where clamps will not work

1. To glue loose veneer on curves and other hard to reach places, I use a clothes iron. First, I inject glue between the veneer and the substrate. I cover the part to be glued with a thin cotton cloth and iron the veneer down using a high heat. The heat and pressure cause the glue to set up quickly.

2. In a few isolated cases, I cannot use an iron since I need to draw two large pieces together (as opposed to sticking veneer down), and cannot reach the repair with clamps. In these cases, I remove a small diamond shaped piece of veneer (this shape is the most unobtrusive when replaced later) and drill a hole in the cabinet. I pass a bolt or threaded rod through the hole. Finally, I cut two pieces of scrap wood to clamp the repair, drill holes in the wood and bolt them to the area needing repairs. I thread nuts onto the threaded rod and tighten as needed to clamp the cabinet together.

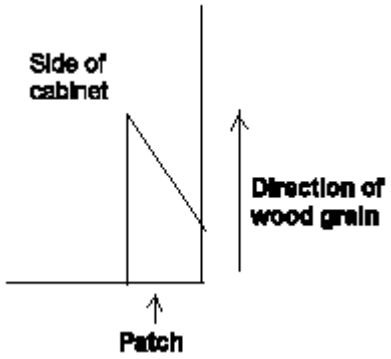
To sum up, many cabinet repairs are best accomplished before stripping. I patch damaged veneer after the stripping.

E. Stripping The Cabinet

If you decide to strip the cabinet, use a good quality paste stripper. Paste stripper is available at hardware stores. Dipping the cabinet often delaminates the veneer, warps the cabinet and raises the wood grain, so I recommend radio be stripped by hand. Paint stripper is quite hazardous, so read the instructions carefully, and use the correct safety equipment (rubber gloves and safety glasses). Paint stripper will cause chemical burns on skin, especially on sensitive areas. Apply the stripper according to the instructions. Most strippers recommend brushing the stripper on with one or two brush strokes. This technique maximizes the effectiveness of the stripper. Once the finish has softened, gently scrape it off with putty knife. I use 1" and 3" putty knives on flat areas. Steel wool works well for areas with curves. Two coats of stripper usually suffice to strip the original finish. Paint or polyurethane requires additional stripper. Wipe the cabinet down with a rag soaked in lacquer thinner to remove the remaining residue.

F. Cabinet Repairs

Now is the time to finish any remaining cabinet damage. First come the veneer patches. The area to be patched must be cut to a manageable shape. To make the patch less noticeable, cut in the same direction of the grain when possible. Never cut directly across the grain, cut at an angle when necessary.



When the patch area is prepared, you are ready to make the patch. The first step is to make a pattern exactly the same size as the patch area. The best way to make a pattern is to cover the patch area with a piece of paper and trace over the edges of the patch area with a pencil. It's just like the crayon rubbings you did in Kindergarten.

Next, find a piece of veneer that matches the original wood (More on matching veneer later). Glue the paper with the rubbed pattern to the veneer being used for the patch. Pay careful attention to the direction of the grain when gluing the paper to the veneer. The patch will be very obvious if the direction of the grain does not match the rest of the cabinet. Using a metal straight edge and a razor knife cut out the veneer patch. The paper will hold the patch together if it cracks along the grain (a common problem). Check the patch for proper fit. Sand the edges as needed for an exact fit. When the patch fits perfectly, glue it in place. Use the same woodworkers glue as for other repairs. Now, clamp the patch in place while it dries. Use a block of wood between the clamp and the patch for even pressure. Insert a piece of paper between the block of wood and the patch to keep from gluing the patch to the block of wood. If clamping is too difficult, fasten the patch using heat and pressure from an ordinary clothes iron (not your best iron you use for clothes). Use a medium to high heat. Apply pressure in a direction that will keep the patch from sliding out of place. A minute or two of heat should set the glue. Use steam only if needed to conform the patch to the cabinet shape (curved areas).

G. Initial sanding

Start sanding the cabinet with 120 grit paper after stripping. If the cabinet is fairly smooth, skip the 120-grit paper and go directly to 220 grit. Always sand the wood in the same direction as the grain. Any sanding across the grain will stick out like a sore thumb. Never use an orbital sander on a wood cabinet, it will leave little circles that are extremely difficult to sand out. I always sand my cabinets by hand to make sure the sanding is not overdone. Sanding with 120 grit paper will level veneer patches, remove any left over stripper residue, and level the wood grain. Once the cabinet is smooth, use 220 grit paper to smooth the surface in preparation for the finish.

H. Application of wood filler on open grain wood

The wood filler I am writing about here is not the type used to fill nicks and gouges. Paste wood filler for filling open grain wood is made to be brushed on. You can choose from several colors. Most stores carry natural and walnut colors. Do not buy the natural color filler, it must be heavily stained for use on any radio cabinet. The walnut filler is suitable for most radio cabinets. For darker colored radios, mix in a little dark walnut stain until the wood filler is dark enough. (This is the reason I told you to note the color of the filler after cleaning the radio). Thin the filler with paint thinner according to the directions on the can. Brush the filler onto the veneered portions of the radio **against** the grain. This works the filler into the crevices. Apply the filler to just a portion of the radio before wiping off the excess. Do not let the filler dry before wiping the excess off (it will be very hard to remove if you do). When the filler begins to loose it's wet shine, wipe off the excess with a clean cloth using a circular motion. When most of the filler has been wiped off, use another clean cloth to remove the remainder of the residue. Once you finish applying the wood filler, use a pointed instrument to remove excess filler from corners and crevices. Allow the filler to dry for several hours. Sand the filler with 220 grit or finer sandpaper. Sand lightly in the direction of the grain. The sanding will keep the wood grain from appearing muddy after finishing.

Finally, the cabinet is prepared. In September we will place a finish on it and reassemble the radio. Now that will be fun.

Next Meeting – August 13

Corn Roast – August 16

At Wabedonia Park – Take Hy I north to the end and turn right on Hy A. Cross the river and turn right into Wabedonia Park – See you there.

Minutes of July 9, 2003

De Carol Szudrowitz, KC9CBC

Minutes

ORC Meeting was called to order July 9, 2003 at the Grafton Senior Center.

Leon Rediske K9GCF called the meeting to order, as PRESIDENT VIC KB9UKE was on vacation in northern Wisconsin. Stan WB9RQR was out of town so no auction was held.

Introductions: Ray W9BUJ introduced a visitor Steve Burnette. Josh Rady was also a visitor, grandson of Gene KB9VJP.

Announcements: Fish Day is coming up July 19. Gabe WI9GC will contact club members with information or show up at Port Washington at 8:30 AM. South Milwaukee Ham Fest was Saturday, July 12. Wisconsin Association of Repeaters meets Saturday, July 12. Gary WI9M has information on it especially regarding the ATV Group from MN coordination.

Leon K9GCF mentioned that GPS magazine talked about interference on radio frequencies especially L2 and L1 bands for military and civilian use. WORS has frequency allocation problems. Problems have surfaced in Russia and Europe. QST magazine and letter from AARL encourage hams to object by writing letters regarding broadband on power lines. It is for Internet access and it endangers ham frequencies.

Program: Ray W9KHH had a short talk about his tuner. Even simple ones do the job.

Discussion: Gary WI9M threw out an idea to the club, a weekend class to learn CW 5 words a minute. He feels that anyone can learn. So think about what weekend would work and let him know. Leon K9GCF talked about the OZARES severe weather alert Sunday night. Fortunately it lasted only a few hours. Leon showed a couple of portable power sources for a shelter to increase usage of walkie-talkies. Terry mentioned that raffle tickets are still available for the Astro Fly-in for Special Olympics in Port Washington. Ray W9BUJ talked about encouraging hams who own family motor coach homes to join Family Motor Coach Association as it has an amateur radio chapter that meets 2 times a year in different parts of the USA and they "meet" on the radio everyday. It is a worthwhile organization. Gary, WI9M, discussed the new 60-Meter band authorization. The permitted mode is only upper sideband, with 5 specific frequencies, and a 50-Watt power limit into a dipole antenna.

Repeater Report: Nels, WA9JOB, reported that the 97 repeater is doing well and the 220 is still at K9CAN Dick's home. The 440 repeater broke down, and Nels fixed it with the help of Dick, K9CAN. Greg W9DHI will check it first before it goes back out. The donated amplifier has been placed on the 440 repeater. The output is 55 watts, which is great. Nels will be doing the wiring for the phone line. Also there seems to be a problem in Germantown site. Nels feels like we are being stonewalled, as site is not accessible. It is an excellent receiver site. Good news from Ted KB9RLI. The Port Washington Power plant is being rebuilt. Last smokestack will be coming down and the company will be building a new 330-foot tower near service center, which is near the county garage, and we may put our repeater there. It is a secure commercial site. WE energy project managers for communications are hams. We would also like to keep the signal off of the lake. Caution note from Nels regarding computer worms. They are titled– Alavire, Brasil and Marco!. Make sure that your virus definitions are up to date.

Break then Field Day Rap-up: Gary WI9M thanked everyone for their help in making Field Day a success. The help to set up all the sites on Friday and Saturday was great and tear down help on Sunday was greatly appreciated. See June newsletter for details. We were down 40% in points because band conditions were bad at certain times.

June Newsletter Correction: Ray, W9BUJ made the suggestion to pick up fees for exam for new hams not Ray W9KHH.

Treasurer's Report: Accepted as written. Tom KG9DP thanked Gabe WI9GC for his help. He announced that Jayson J. Kempinger, KB9VGF of Milwaukee was awarded the $1000 club scholarship. Jason is a member of the West Allis Radio Club and is going to UW to major in Chemistry.

OZARES report: Jon KB9RHZ not present. There was a severe weather alert Sunday night that activated the net but thankfully no major problems arose.

New Business

Corn Roast: Date set for August 16, 2003

Attendance: Ted KB9RLI, Gary WI9M, Gabe WI9GC, Nels WA9JOB, Gene KB9VJP, Bernie AA9CI, Jim K9QLP, Bill AA9OS, Herb WA9UVK, Wil KB9HHR, Ed AA9GT, Jeananne N9VSV, Gary N9UUR, Julia KB9WBQ, Mark N9OKS, Terry KA9RFM, Jane KBPSYI, Don W9VSC, Tom W9IPR, Tom AA9XK, Gary W9XT, Dean K3GGN, Paul KB9WCC, Ray W9KHH, Bob W9LO, Ray W9BUJ, Steve, Joseph KB9URC, Carol KC9CBC, Josh, Leon K9GCF, Dave N9UNR, Ben K9UZ.

AGENDA

August 13, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report –Tom (AA9XK).
9. Repeater report –Nels (WA9JOB)
10. OZARES report –Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Aug. 14th

7:30 PM

The ORC News-

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:

Volume XXII September 2003 Number 9

http://www.qsl.net/orc/

The Prez Sez

By Vic Shier (KB9UKE)

The last meeting gave us two interesting programs. Mark, N0OKS did a Show 'N Tell on his Elecraft K2, a small transceiver that comes with assembly instructions and a bag of parts. It was obvious that Mark not only enjoyed building it but also enjoys using it. It seems that many hams are excited about these little rigs with big features.

Then Ted, W9NHE gave an enthusiastic demonstration of meteor scatter operation. Using a computer and an all-mode 2 meter rig, he has made contacts all over the States. Some of them with high speed CW that only a computer could copy.

Thanks to both of them for the informative and entertaining presentations.

Fall is coming and with it is an annual event called JOTA or Jamboree On The Air. JOTA started in 1958 and runs the third full weekend in October. Scouts from around the world are given an opportunity to operate ham radio and talk to scouts in other lands. About 500,000 Scouts and Guides participate each year. This is a wonderful opportunity to introduce children of all ages to ham radio.

Bill, KA9WRL will tell us more about it at the next meeting.

Look forward to seeing you there.

73's and remember…It's a hobby!

Upcoming Events

4 Sept. - Badgerland Amateur Television Society - 7:00 PM at Space Place in Madison. Tentative launch date for the balloon flight is Sept. 27 with Oct. 4 as rain date

6 Sept. – Eau Claire Hamfest
– KG9RA@ecarc.org

20 –21 Sept. – Grayslake IL – Swapfest
Disregard previously published and flyer published dates for Grayslake – the correct date is Sept. 20 & 21.

20 Sept – fifty first **W9DXCC Convention** at Holiday Inn in Rolling Meadows, Illinois – looks really quite interesting – check it out on the web.

Contesting

De Bob Truscott (W9LO)

One of the better state QSO parties is coming up on Oct. 4-5. It's the California QSO Party, commonly called CQP. CW/Phone on all bands (except for 12, 17 & 30) from 160 through 2 meters. Work CW only, phone only, or a combination of the two. It starts at 1600Z on Oct. 4, and ends at 2200Z on Oct. 5. Complete rules at http://www.cqp.org/ , and probably in Oct. QST. Free logging software at http://www.cqp.org/Software.html/ . I used an earlier version of that software a few years back, and it worked very well, but plan to use NA because it's my favorite, and it also supports that party, as do a number of other programs. This is not the old "dog eat dog" contest that November Sweepstakes and Field Day sometimes are, but rather it has a more leisurely pace like the Wisconsin party. It's also a good opportunity for you county hunters to pick up a bunch of California counties—should be able to get them all if you

put your mind to it. And for you "gung-ho" contesters, it is a good warm up for the fall/winter contest season. Try it—you'll like it.

Now a word about co-existence with non-contesters. Sometimes it's like the NRA and the gun control advocates butting heads—each thinks the other has, or should have, no rights whatsoever. Those guys don't have frequencies, but we do, and too often some of us think we own the one we happen to be using , no matter that a net happens to use it at the same time every day. And then there is the rag chewer who attempts to clear "his frequency" of contesters because it is his schedule time, even though the contester has been using it for the last hour. These kinds of incidences often lead to verbal confrontations where things are said which should never be said on our air, and, to malicious interference. And you contesters, don't bug the rag chewers for contacts–if they want to participate, they will tell you so. You'll probably miss a couple other contacts during the time you're trying to pry the contact info out of them.

And don't forget the contester who puts his keyer on automatic repeat (so that it sends CQ repeatedly) and "holds" the frequency while he takes a break for a brew and a burger (or whatever he does for 15-20 minutes). The first time I heard someone do that I thought his receiver had died or he had a noise level of S-9 +40 dB, and just couldn't hear all of us calling him. I thought that, until a guy bragged about using that technique on the Internet after one of the contests last year—Sometimes I'm slow to catch on to the crummy operating practices that some of our selfish brethren use from time to time. Fortunately those guys are in the minority.

With the fall contest season about to start, it's time for us all to clean up our acts, regardless of which side of the fence we operate from, and be more considerate and tolerant of others. Try it—it will lower your blood pressure.

Coming up in September:

Sept. 7 North American Sprint----CW - Rules in Feb. QST, page 103

Sept 13-15 ARRL September VHF QSO Party - Rules in Aug. QST, page 103

Sept. 20-21 QRP Afield - Rules in Sept. QST, page 106 - This looks like a good one.

Sept. 27-28 CQ WW RTTY DX Contest -Rules in Sept. QST, page 106

Oct. 4-5 California QSO Party - See details above.

Official Scores:

ARRL 2003 Int. DX Contest – CW

	Score	QSO's	Mults
W9XT	114,144	464	82
K9CAN	71,910	282	85

ARRL 2003 Int. DX Contest–Phone

W9XT	154,008	552	93
K9CAN	66,555	261	85
WI9M	32,193	147	73
K9LO	8,256	64	43

Have fun contesting.

For Sale, Trade or ?

A complete station: Kenwood TS520, microphone, headset, SWR-1 meter, straight key, speaker, 80 – 10 Mtr. Trap dipole etc. - $450 OBO.

Contact Don Belstner (W9VSC) @ 377-0426

Old Time Radio – Part 5

De Jim Hilins (KA4UPW)

This is the final installment in the process of restoration of an antique radio. Up to this point we have:

1. Removed the chassis from the cabinet
2. Cleaned the chassis and components
3. Determined the model number and obtained related information
4. Assessed the condition of the chassis
5. Tested the radio to determine if operational
6. Replaced the filter capacitors.
7. Perform resistance tolerance checks
8. Make speaker cone repairs
9. Perform operational checks
10. Complete final troubleshooting and repairs
11. Complete cabinet preparation for refinishing

Now it's time to stain and "finish" the cabinet so it looks like new.

This is the 1936 Zenith that Jim started with

1. Application of stain

The solid wood portions of radio cabinets usually need darkening to duplicate the original color. Oil based stains work well for achieving the proper color. I usually use Minwax brand stains since they are good stains and reasonably priced. I use the Special walnut color most frequently. I also use Dark Walnut, Mahogany, and ebony. You must brush the stain evenly to achieve good even coverage. Mix the stain thoroughly before application. Practice on a scrap piece of wood. I do not normally wipe the stain after application because the color would be too light if any stain is removed. If there are drips or uneven coverage, the stain must be wiped after application to even it out. If this happens, an additional coat of stain may be necessary (depending on the color desired).

I don't recommend oil-based stains on the veneered portions of the cabinet. These stains hide the highlights in the grain and give the finish a muddy appearance. Transparent stains mixed with the lacquer work best if you need to color the veneered wood. Solar-Lux makes a variety of colors that work well with lacquer. Sometimes, the wood will not take enough stain. When this occurs, tinting of the finish is required. I will cover tinting in a later section.

2. Lacquer Sealer and Sanding

When the stain is dry, it's time to seal the cabinet. Remove any dust with a tack cloth. These sticky pieces of cheesecloth are sold just for this purpose and are available at your local paint store. Before continuing, I'll take a minute to explain why we need a sealer.

The purpose of the sealer is to seal the wood (and the wood filler) in preparation for building the lacquer finish. If we were to use the lacquer finish for the seal coat, the finish would soak into some parts of the wood more than others, producing an uneven finish. Since the sealer is thin, it soaks in and leaves little buildup of finish on the wood.

Once the cabinet is clean and dust-free, spray an even coat of sealer over the entire cabinet. Overlap the spray patterns by 50% as pictured. Since the sealer dries quickly, you can sand the cabinet within 10 or 15 minutes. The purpose of the sanding is to smooth the surface before the next coat. Sand the sealer with 250 or finer grit paper. Dry sanding works well, but make sure you change paper often. Wet sanding uses less paper, but requires more cleanup. When wet sanding cabinets, I apply water to the sandpaper, not the cabinet. Wet sanding requires paper made especially for wet use. Sand carefully or you will sand through the sealer. I use sandpaper on the flat surfaces only to keep from sanding through the finish. I use steel wool on the remainder of the surface. If the surface is quite smooth already, you can skip the sandpaper and use 000-grade steel wool on the entire cabinet. After sanding the sealer, remove any residue with a tack cloth.

3. Gloss lacquer application and rubbing

The purpose of the gloss lacquer is to build a clear smooth protective finish over the wood. The number of coats of gloss lacquer required depends on the type of lacquer, the type of spray equipment and the desired smoothness. A high build acrylic lacquer requires fewer coats than a nitrocellulose lacquer. High-pressure spray equipment normally requires more coats than High Volume Low-Pressure (HVLP) equipment. I prefer using high build acrylic lacquer and HVLP spray equipment. This combination gives good results with only 3 coats of gloss lacquer. I mix the lacquer as follows: thinner - 10%, fish eye killer - several drops per quart, retarder - 0 to 20% depending on temperature (none for cool weather, lots for very hot weather). When the lacquer is mixed, it's time to spray!

As with the sealer, apply an even coat to the entire radio and let it dry. When the finish is dry you need to prepare for the next coat. If the finish is

smooth, rub it down thoroughly with 000-grade steel wool. Rub the surface until all the gloss is gone. Do not rub hard enough to remove the finish! If the finish is textured, wet sand the flat parts with 320 grit wet paper. Make sure you use the black sandpaper made for wet sanding. Use extra elbow grease and steel wool on the parts that can't be wet sanded easily. Wet sanding will cut all the finish off the high spots if used on the areas that are not flat (routed edges, moldings, etc.) Once the finish is smooth, remove all dust with a tack cloth. You can apply another clear coat or a colored (shaded) coat.

4. Application of colored coats

Colored Lacquer darkens or tints the finish to reproduce the original cabinet color. Many radios came with colored lacquer when new. Some radio cabinets were shaded all over, others were shaded only on trim pieces or the sides. When applying a colored coat, my goal is to duplicate the original color scheme. Masking is necessary where the colored coat is in sharp contrast to other parts of the cabinet. Often, the original finish was not masked, and the colored portion has a soft edge. Duplicating the soft edge is quick, but requires skill and accuracy when spraying. **Before spraying a color coat, practice on a scrap piece of wood!** A cabinet may even have two different colored coats of finish, one sprayed over the entire cabinet, and another darker one just on the trim.

I use Behlen Solar-Lux stains in my lacquer. These stains dissolve easily in lacquer and produce a beautiful transparent color. Normal oil based stains tend to give a muddy look to veneers. For this reason, I use colored lacquer on the veneered portions instead of staining the wood before finishing. The colors I use are: Medium Walnut, Dark Walnut, Mahogany, and Black. I use the black to darken the walnut for very dark trim. I add 10% to 20% stain (by volume) to my mixed lacquer. I spray the color coats a bit more carefully than the gloss coats (runs are harder to fix in a colored coat). I am not as concerned that every nook and cranny get a full wet coat of finish when using a colored coat. Altering the spray pattern to cover difficult to reach areas (as done with a normal coat) increases the risk of runs. If the color coat is not quite as smooth as I want, I gently rub it with steel wool (not too much or the color goes away) and apply another coat of gloss lacquer to smooth the finish.

5. Satin Finish Coat

When the finish is smooth enough, you are ready for the final satin lacquer coat. Make sure the finish is smooth before spraying. Steel wool as needed. The final coat must be smooth, and even. I thin the lacquer just a little bit more on the final coat and add a little extra retarder, especially if the weather is warm. I spray the sides and front before the top to minimize overspray. The satin coat will look very glossy until it dries. If the finish is perfect, you are done!

6. Buffing the Finish

Sometimes, the final coat is not perfect so a little more work is needed. If the finish is rough, wet sand it with 1500 or 2000 grit wet paper. Don't sand the satin coat off, just smooth it. When the finish is smooth, you are ready to buff out the sanding marks. You can use rottenstone or some other fine buffing compound. I buff the cabinet by hand using a sponge. Electric buffers may cut through the finish. After buffing, remove the excess buffing compound. Now wipe the cabinet down with a soft cloth, install the radio and speaker, and prepare for many years of enjoyment of the “old time radio”.

This is the 1936 Zenith after Jim worked his magic

JOTA

De Bill Howe, KA9WRL, President "LeFrog"

I would like to invite the Ozaukee Radio Club to join the LeFrog club in J.O.T.A. this year! As you may or may not know, the Local Emergency Field Radio Operating Group (L.E.F.R.O.G.) has been sponsoring Jamboree On The Air (J.O.T.A.) locally since 1987. Boy Scouts, Cub Scouts, Tiger Cubs, Girl Scouts, Brownies, leaders and parents from all over the area talk to other Scouts around the world. The problem is, the Scout attendance has been growing, but our club's participation has, pretty much, remained the same. Frankly, we could use the help!

The dates for this year's J.O.T.A. event are October 17th, 18th & 19th. We have the shelter at Horicon Ledge Campground reserved, at no charge to the club, and the only cost to us is for camping in club or personal tents. This year we'll have two (2) aluminum towers, one 30' and the other 50'. We'll have a tribander (10m, 15m & 20m) atop the 30' tower, UHF & VHF antennas atop the 50' tower and a 40m di-pole, fed with coax, between the 2 towers. We basically set up & play Friday night, operate with the Scouts all day Saturday and, after breakfast and some playing around Sunday morning, take everything down and vacate the premises. The club owns a Kenwood 2m all-mode, but the other radios come from members in attendance. I'll bring a couple of HF radios w/tuners plus various other equipment for the weekend. Steve, WB9UEN will provide all the food for the event, for a nominal fee. We do eat good!

I don't know if the Ozaukee Radio Club has ever done J.O.T.A., but it is a lot of fun...and it gives us another excuse to do some camping and play with our radios!

wghowe@netzero.net

Who Does What @ Fish Day

By Vic Shier (KB9UKE)

Community service is an important aspect of amateur radio and members of the Ozaukee Radio Club have provided communications for the Port Washington Fish Day Parade for many years.

There is royalty in every parade and "Fish Days" is no exception

This years hams included; Gabe WI9GC, Jim K9QLP, Gene KB9VJP, Carol KC9CBC, Jon KB9RHZ, Gary WI9M, Skip KA9DDN and Cindy KA9PZG.

Gabe, WI9GC, and other ORC members were on hand to help organize the parade and "shadow" the various dignitaries

These ham radio operators help by shadowing parade officials, providing scheduling for participants, and contacting emergency personnel when assistance is needed (they also get the best parking spots in the city.) Their 4-hour commitment helps to make a great parade even better.

What's a parade without a band and the music was great – makes you want to march

It was Aug. 16th

The annual Corn Roast was again held at Waubedonia Park and as in the past, it was great.

There was plenty of time to set by the river and "just visit" while the corn cooked and others prepared the vittles

It was again a group effort with Ed (AA9W) supplying the corn and Stan (WB9RQR), Gary (WI9M), Jane (KB9SYI, Leon (K9GCF), Carol (KC9CBC), Bob (N9NRK), Kent (N9WH), Tom (W9IPR), Herb (WA9UVK) and Jim (W9WIU) doing everything from hauling the equipment to bringing the refreshments and food to the cooking itself.

Our scholarship winner, Jayson Kempinger (KB9VGF) and his parents were also at the Cornroast where Jayson accepted the ORC $1000 scholarship award

We also had the opportunity to introduce a local Girl Scout troop who was camping in the area to ham radio and get them started on their way toward a communications merit badge.

Next Meeting – Sept. 10th

Jim Hilins, KA4UPW, will present the final results of his antique radio restoration efforts and will display the completed radio in the refinished cabinet.

More Freebies

by Stan Kaplan, WB9RQR

Here is a tip sent to me by Paul Nelles, K9DB, of Mosinee, Wisconsin, that will provide you with a free copy of TurboCad, a 2-dimensional drafting program. Go to http://www.imsisoft.com/free/ to download a copy of the program (16-Mb), a very nice Quick Tour (6.2-Mb) and a complete documentation file (4.1 Mb). Now get this. The package is fully functional and has no expiration date! It is powerful enough to create 2D drawings, yet easy enough to learn even by occasional users (especially with the Quick Tour, which is really quite well done and very useful). Drawings you make with it can be ported into Microsoft Office products (as well as other application programs). According to the company, "IMSI is making its Learning Edition available for free, with the firm belief that users will love the TurboCad product and will want to upgrade to our latest 2D/3D ver-

sions." The only caveat is that you furnish them with contact information so they can advise you of upgrades (and, if you choose, you can opt out of the email contacts later). That's pretty reasonable for a useful tool! Who can't use a good drawing program? I downloaded it and found it really excellent. Thanks for that tip, Paul.
And, that is not all that Paul sent. Here are some more interesting tidbits. Go to http://www.rmra.ws/rmra_WotM.html, which is the Rib Mountain Repeater Association's past "Websites of the Month" page. Each site should be self explanatory. You might want to pay particular attention to:

- Celestia = A super astronomy program that lets you fly through the solar system and galaxy and view things in from any vantage point and time.
- Sky and Telescope's Interactive Sky chart = Java applet that will display how the sky will appear from any location and time.
- Interactive Smith Chart = Java applet that demonstrates how a Smith Chart works.
- Spacecraft models = A list of sites that have downloadable printable spacecraft models. Pay special attention to the shuttle and ISS models available from the MARS center in Italy. Also note we have an RMRA designed printable model of AO-40 at http://www.rmra.ws/rmra_AO40_model.html.
- W7MD AZ-PROJ = This site will print a polar projection map of the world centered on your QTH.
- Wisconsin DOT = Maps of all 72 Wisconsin counties in .pdf format.

Happy computing!

©2003 Stan Kaplan, WB9RQR

(Copied from the Badger State Smoke Signals at Http://www.bsss.org)

Minutes

De Carol Szudrowitz

ORC Meeting August 13, 2003

Call to Order and Introductions: Mark Teller AB9CD Newest member.

Announcements:

-Jayson J. Kempinger, KB9VGF of Milwaukee, the scholarship winner, will be at the corn roast.

-Bill KA9WRL will be at the September meeting looking for volunteers to help with JOTA (Jamboree On The Air) October 17, 18 & 19. This program allows Scouts to use the radio under ham supervision.

-Hamfest in Eau Claire September 6

Program:
Mark Kachel N0OKS presented the HF rig that he built. The manual makes it easy as long as you follow directions. It is a quiet rig and a joy to put together. Everything you need is on the Internet. Check www.Ellecraft.com. A magnifier is useful to tell the parts apart when building the kit.

Ted W9NHE presented information on Meteor Scatter Operations. When you've done everything else, this is fun. You use a computer program that "reads" and "sends" information. The computer clock needs to be in-sink with real time. It finds meteors, which are dense; 12 Billion hit the earth daily. Best time is just before daybreak. It uses high speed CW – 1200 words per second 12,000 letters per second. One can register on line with another ham for a meeting during a meteor shower. You can use a choice of at least 4 different programs including one for moon bounce. Ted had handouts for more detailed information.

Corn Roast August 16, 2003
Corn Provider – Ed AA9W
Save the Place - Stan WB9RQR and Gary WI9M
Food – Jane KB9SYI and Carol KC9CBC Note: All bring a dish to pass.
Beverages – Bob, N9NRK
Pick up from Barn and take back – Kent N9WH plus others
Cook/ Roast – Stan WB9RQR and Tom W9IPR
Wood - will be taken care of as last year by Herb, WA9UVK.

Break and then Auction:
Stan WB9RQR set a record, over $200 taken in.

Business meeting
Secretary notes approved as published in newsletter.
Treasurer's report approved as written. It included breakdown of Field Day.

Repeater report:
2 meter repeater is OK. The Mequon site wasn't voting properly. This has been adjusted. The 220 repeater is in barn with 10-meter link being hooked up to it. Some problems need to be taken care of before we can make it available. The 440 repeater at KK & LL is running fine. There will be a board meeting to discuss new tower at We energies site. Next, Jim K9QLP's repeater has been linked to Ted, N9LLT's Echolink equipment. With the Echolink program running, one can use any radio on the 442.100 MHz. repeater and go over the Internet. It needs a control operator so Ted, N9LLT, will deactivate it, if he is not available. Ted demonstrated

on Echolink by contacting Ken in Sturgeon Bay. If Jim's repeater 442.100 isn't connected, Ted's Echolink interface might be running at Ted's house on simplex 147.42. Use 127.3PL to access either system.

All the information you need to set up your own Echolink connection is on the website, www.echolink.org. It is another mode of operation to increase ham radio fun. You can talk to New Zealand for example. No hard wiring is needed, just an IBM type computer with a sound card and a microphone, and your own Internet connection. It works like a phone patch, and uses VOIP (Voice Over Internet Protocol).

OZARES Report:
New membership ID cards are available.

Scholarship Report:
Jayson Kempinger, KB9VGF of Milwaukee, will be at corn roast.

Committee Reports: Jim KA4UPW will go over Field Day report next meeting. Ed AA9W mentioned that due to a donation we will have another aluminum tower for Field Day. Club member Sus Musashi, KB9OC, who is a WWII hero and veteran, is unable to operate his ham radio any more, and donated his things to the club.

New Business:
Comment from a few members, newsletters coming to homes by mail are destroyed. Suggestion from Tom W9IPR, he will ask Peter N9NOZ to put two sticky dots on newsletter from now on. Tom also asked if anyone would be interested in helping edit the newsletter as he is hoping to take a vacation. Talk to him about it.

Tom W9IRP, asked if anyone would be interested in working with local scouts to participate in JOTA. Greg W9DHI and Mark AB9CD would work with him.

Meeting adjourned at 9:43.

Attendance: Ted W9NHE, Ted N9LLT, Jim K9QLP, Stan WB9RQR, Nels WA9JOB, Mark N0OKS, Keith KY9P, Vic KB9UKE, Jon KB9RHZ, Ed AA9GT, Leon K9GCF, Bob W9RNA, Bob W9LO, Jeananne N9VSV, Gary N9UUR, Ron KC9DKQ, Don W9VSC, Dave N9UNR, Ed AA9W, Gabe WI9GC, Kent N9WH, Charlie WA9CPE, Greg W9DHI, Bernie AA9CI, Jim N9WIU, Herb WA9UVK, Roger W9UVV, Joseph KB9URC, Jane KB9SYI, Tom W9IPR, Tom AA9XK, Mark AB9CD, Terry KA9RFM,
Carol KC9CBC. Julia KB9WBQ, Leon K9GCF, James KA4UPW, Gary WI9M, Ray W9BUJ, Ray W9KHH, Ron W9BCK, Gary W9XT, Paul KB9WCC.

AGENDA

September 10, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program: Jim Hillins and "Refinishing the Cabinet"
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Tom (AA9XK).
9. Repeater report – Nels (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Sept. 10th

7:30 PM

OZAUKEE RADIO CLUB
Wisconsin
Ozaukee County
AMATEUR RADIO

The ORC Newsletter

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SPECIAL SERVICE CLUB

ORC Repeaters on 146.97, 224.18 and 443.750 MHz - Callsign W9CQO Web site: http://www.qsl.net/orc/

Volume XXII October 2003 Number 10

The Prez Sez

By Vic Shier (KB9UKE)

The old Philco was playing beautiful music as we entered the Senior Center for the September meeting. Jim, KA4UPW, finished the restoration of this classic console radio and gave the final presentation on how he did it. Not only was it working, it was playing music that Jim was broadcasting from his own miniature AM radio station. We enjoyed watching the progress on the Philco, thanks Jim.

An important portion of the rest of the meeting related to our scholarship fund. Several years ago the club became a 501c(3) organization, an IRS recognized non-profit. Since that time the club has received generous tax-deductible donations. Most times we also have an auction at the club meeting with half of the proceeds going to Wisconsin ARES organizations and the other half going to the scholarship fund. The result has been a significant increase in the balance of the fund.

When people wish to donate to the club they contact Ed, AA9W. He arranges for the preparation, transportation, and storage of the equipment. He then estimates the fair market value of the donations and sells it, first offering it to club members and then to the public at-large.

Due to suggestions at the last meeting, we are making some changes to the process.

Many members and officers use email for notification purposes. This is the least expensive and most efficient method of written communication. Any member who wishes to receive general announcements from club members should provide their email address to Nels, WA9JOB. There options here are to receive either the email messages and/or the notification that the newsletter is available on the web.

When Ed has equipment for sale he will announce it via this email system called a remailer. Club members will have time to review the list of equipment and place bids before it is released. If more than one person is interested in the same item, it will then be auctioned to the highest bidder.

Any member wishing to be notified of the items by a method other than the remailer, will have to make arrangements with Ed but please consider the amount of time and effort your request may require. He already spends a great deal of time and effort for the club and making his job harder is not a good option.

Each year the ORC awards a scholarship to a young amateur radio operator to help with his schooling. This is one of the most honorable activities that our club is involved in, evidence of the true spirit of ham radio operators.

73's and remember…It's a hobby!

NOV. SWEEPSTAKES HIGHLIGHT OF THE FALL SEASON!

De Bob Truscott (W9LO)

Nov. 1-3 (CW), and Nov. 15-17 (Phone).

I remember my first SS experience. It was in 1951 in a 3rd floor apartment in Oak Park, IL, with a 40 meter dipole about 5 feet above the rooftop. The rig was a 20-watt home brew job, and the receiver was a National HRO-7, my pride and joy at the time. The log shows that I worked a total of 75 stations, all on 40 meters. My hourly rate was about 9 contacts. I didn't enter the results–don't remember why, but if I had, I would have been # 31 in Illinois out of a total of 42 entries. Not much of an effort, but I was pleased

with it because I had a lot of fun and learned a few things about operating. Haven't missed a Nov. SS since that time. Hope to work a bunch of club members in the contest this year. (Maybe even on phone.)

Back in those days SS was held on two successive weekends, with a maximum of 40 hours of operating time, divided between phone & CW, as individuals saw fit, rather than a phone weekend and a CW weekend as we have today. The transceiver had not been invented, and neither had SSB, so as you might guess, contacts were a bit harder to come by. Most CW rigs that were not crystal controlled chirped, and you could often recognize your buddies by the characteristics of their individual chirpy signals. The good old days—primitive, but fun.

Results of the 2003 ARRL DX contest are in, but I can't tell you what they are because ARRL keeps telling me "The server is busy". I must be doing something wrong–I liked it better when they printed the results in the mag.

Coming up in Oct.:
Oct. 11-12 10-10 Day Sprint–Phone, CW, Digital—Rules in Aug. QST, page 91.
Oct 11 FISTS Fall Sprint–CW—Rules in Feb. QST, page 103.
Oct. 25-26 CQ Worldwide DX Contest–Phone—Rules in Oct. QST, page100.
Nov. 1-3 ARRL November Sweepstakes–CW–Rules in Oct. QST, page 107.

Have fun contesting.

Are you an Appliance Operator?

De: Gregg Lengling, W9DHI

Okay what is an appliance operator? An appliance operator is a Ham who goes and buys his rigs and just starts using them. REAL HAMS build their gear. I've been home brewing and kit building for over 40 years (yes I'm only 50 and that means I started at age 10). Well now the Ozaukee Radio Club is going to offer classes to help you get your feet wet. Learn how to build kits, learn how the radio really works.

As soon as we have enough members signed up myself and Dr. Stan Kaplan, WB9RQR, are going to run the classes. For the first project we picked the TenTec SWL receiver kit.

It is receiver that covers: 49 meter SWL band, 40 meter Ham Band, 12-15 MHz SWL and the 20 meter ham band. This radio is a Superhet design kit, relatively simple and inexpensive. The group cost is $25.80 per kit plus shipping expenses. The radio requires 9 to 12 volts DC , a set of headphones, and a random length wire for antenna.

The Ten-Tec "Superhet" SWL Receiver

Future classes will offer those that built the kit, to home-brew a 12-volt DC power supply and an audio amplifier and speaker so you don't need the headphones. The only requirement for the class other than purchasing the kit (we are purchasing the kits in bulk to get the discount), is a "temperature controlled soldering station". You could just use a 25-watt soldering pencil, but temp. controlled ones make it harder to destroy any components. If we have enough people that don't have the solder stations, we can also do a group purchase on those.

Contact me either at the meeting, via e-mail (w9dhi@ameritech.net), or by landline at 262-376-0711.
Looking forward to making this a Real Radio Club. Who knows maybe you can be like myself and a couple other members and be able to say the HF station you operate came from your own hands and building expertise.

Tips,Tails & Tools

Not sure if those trees are far enough apart to hang a new antenna? Try using a measuring

wheel to get an accurate idea of their separation.

Tom (W9IPR), trying to plot a path through the woods for a 540' horizontal loop antenna using an inexpensive measuring wheel.

They are available from Harbor Fright for about $9 and I purchased mine for $7 from the "traveling tool show" that comes to the Circle B each winter. It sure saves a lot of grief for just a few dollars.

2003/4 ORC PC COURSE

by Stan Kaplan, WB9RQR skaplan@mcw.edu

The course will be held on varying Wednesday nights, usually spaced two weeks apart, and always arranged so that there is no conflict with the ORC meetings. The course is limited to six students, and all must be current ORC members. To enroll, you must request it and I must confirm that you are accepted. The first session is scheduled for 19Nov03.

I do not charge for the course, but there are costs associated with it. First and most important, there is a **required** text that you must have in hand by the first meeting.

Mueller, Scott Upgrading and Repairing PCs, 15th edition. Que Corporation, Indianapolis.

The book retails for $59.99, but you can get it delivered to your door from amazon.com for $45.98. It is the best selling book in its class and will be in all the local bookshops, as well. Another cost is floppy disks. Bring a package of at least 10 new, formatted disks to the first meeting. You will receive about that many disks, containing software, during the course. A third cost is tools, and a list of those you should acquire will be provided at the first session.

This will be both a lecture and laboratory course. The goal is to introduce you to the physiology of computers (how the various parts interact so that the whole machine works), as well as the anatomy and surgery (hands-on practice at tearing down and building up). The ultimate aim is to have you come away from the course with the confidence to attempt troubleshooting, repairs and upgrading yourself. We will also do some virology, specifically, virus epidemiology (study of the causes and control of diseases). You will have the opportunity to infect a machine, and then cure the infection.

There will be homework. Sometimes it will be ancillary readings that I will provide, or specific assignments in the text. If no specific assignment is given, you are always expected, for example, to read about floppy drives if that is the topic for the following meeting. At other times, you may be assigned to take a piece of hardware home and reduce it to its smallest components. Taking things apart is one of the best ways to learn how things work!

For Sale, Trade or ?

A complete station: Kenwood TS520, microphone, headset, SWR-1 meter, straight key, speaker, 80 – 10 Mtr. Trap dipole etc. - $450 OBO.

Contact Don Belstner (W9VSC) @ 377-0426

Upcoming Events

Oct. 8 – ORC meeting
Oct. 17, 18 & 19 – JOTA - To volunteer, contact Bill Howel (KA9WRL) at wghowe@netzero.net

Club Static

PEORIA, Ill., Sept. 16 -- ROHN Industries, Inc., a provider of infrastructure equipment to the telecommunications industry, announced today that the Company and five of its direct and indirect subsidiaries have filed voluntary petitions for Chapter 11 relief in the United States Bankruptcy Court for the Southern District of Indiana.

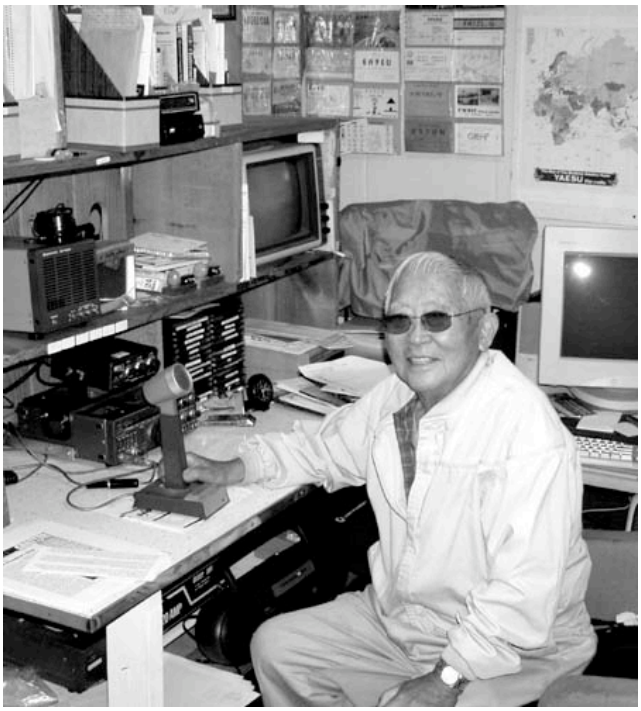
Just Another Shack

De Ed Rate, AA9W, and Nels Harvey, WA9JOB

Sus Musashi, KB9OC, has been a member of the Ozaukee Radio Club for many many years. He is being forced to give up his Amateur Radio career because his hearing loss has taken the enjoyment from this great hobby. Sus has given all of his radio equipment to the Club with the provision that the proceeds of it's sale be shared with the Scholarship fund and himself.
There is a list of items being distributed on the remailer, and many things will be at the October ORC meeting, for auction.

Many of us have known Sus, and his lovely wife, Grace, from their attendance at the P.E.P. Parties, and Club cornroasts. For many years, they helped with the party planning, and details such as name tags and table decorations.

Sus has taken many pictures over many years at the P.E.P. parties. Some of these will be at the next meeting for all of us to look at.



Sus, KB9OC, at the "Mic" where he worked over 300 countries

Sus worked as a watch repairman. Working from his home, he had a regular routine where he would pick up watches to be repaired and cleaned early in the week, clean them, and distribute them back to the jewelers by the end of the week. This involved completely disassembling each watch to the last screw, cleaning the parts in a solvent, then assembling and lubricating them, one by one. I think I remember him telling me he used seventeen different lubricants on the watches! Sus limited his work to only fifty watches each week! His low band radio was present in his workshop and used extensively as he worked.

If you have ever had a chance to visit Sus's shack, you might have noticed a very special display tucked off on one wall. The framed display contains a lot of history that most members might not be aware of. In World War II, Sus was a soldier in the 442d Regimental Combat Team at the front line in southern France. The 442d consisted of many soldiers of Japanese heritage who volunteered into the US Army.

Our Section Manager, Don Machelski (W9IXG) and Dan volunteered to remove the "beams" from Sus's tower – interesting sight

The display on Sus's wall includes the medals awarded to Sus for his service. Among the many medals are the Silver Star, the Bronze Star, the Purple Heart, a Field Commission from Corporal to Lieutenant, and many other medals and commendations. Sus doesn't talk a lot about those days, but if you draw him out, he has a lot of fascinating tales to tell.

Sus's main interest has been DX for many years and he has been on the DX Honor Roll with over 300 countries. His ham shack walls are covered with awards and citations. Now, because of his service connected hearing loss,
he has had to curtail his Ham activities. An active member of ORC for many years and a life member of other area clubs, Sus and Grace are well known in Milwaukee ham circles.

Sus and Grace are active campers with their trailer. After he sold the watch repair business and retired, they increased their involvement with a camper's group, and have toured with the group to many campgrounds over an extended area.

Thank you Sus, and Grace, for all the contributions from you two, to the ORC!

The Rock Mite, a $27 Rig

De Gary Sutcliffe, W9XT

Over the last couple of years I have become interested in QRP. When I wanted to operate QRP, for the most part I would turn the power down on my FT-1000MP or fire up an old Heath HW-8 I put together in the 1970's.

That is only part of the action in the QRP world. A big part of the fun is the amount of QRP home brewing and the large number of QRP kits available. Late last year I started hearing about a little QRP transceiver kit known as the Rock Mite. It is designed by Dave Benson, K1SWL, and available through his company, Small Wonder Labs. Www.smallwonderlabs.com

The Rock Mite is a _ watt crystal controlled transceiver. It has a built in CW keyer. Models for 40M and 20M are available. The price is only $27, and that includes shipping! I was intrigued that a rig costing under $30 could make contacts. Just how good was it? I finally ordered one in early February.

There is a big backlog for these, and it took almost a month to arrive. I ordered the 40M version, but the 20M kit showed up with instructions for the 40M version. I would have accepted the 20M version, but there are some capacitors and inductors that are different in the two versions, and I wouldn't have known how to put it together. I sent Dave an email, and I got the right parts in a couple of weeks.

A bit of the fire inside me to get this on the air died while waiting for the kit, and it sat around for several weeks. Then the April 2003 *QST* showed up. Guess what was on the cover? Right, the Rock Mite! There was an article inside describing how the unit worked. Readers interested in technical details of the unit are referred to the *QST* article. It is certainly worth reading.

Obviously a lot of effort went into the design of this unit. There are a lot of clever but subtle ideas in the design.

The kit is not too difficult to assemble with reasonable soldering skills and the ability to identify parts. It took me about an hour and a half, but I have a lot of experience putting electronics together. Most hams probably take 2-3 hours.

The circuit board is a nice double-sided board with solder mask on both sides. I think he could have done a couple of things better on the layout. The holes for the pads where you connect the wires to the outside are a bit small. There is a lack of holes to ground. I ended up scraping off the soldermask at a couple of places to connect wires to ground. These are only minor inconveniences.

The kit only comes with the circuit board and parts that mount to it. Connectors and case are not included. You can buy those separately, but the cost for the case and connectors are more that the rest of the rig! Unfortunately that is all too common for some low cost electronic projects. I have a well-stocked junk box, so coming up with the connectors was not a problem. I wanted to fire it up quickly and did not bother with a box. The unit will eventually be housed in an Altoids® box once I finish eating the mints, true to QRP form.

The unit requires 12V. I have a bunch of wall wart type transformers. I tried that first, but got a lot of AC hum. That is not surprising since those beasts usually have poor filtering and regulation. I decided the best thing was to use a battery so I charged up a 12V-gel cell battery.

That took care of the hum. I hooked it up to an antenna and I heard signals! Lots of them! This is a direct conversion (DC) receiver. With that type, you get twice as many signals as you would hear with a superhet. It takes a while to get used to that, and to know what signals are on your frequency.

I listened for a few minutes. Soon I heard a loud signal starting to call CQ. I turned the 40M meter towards him because with only a half watt, I would need all the help I could get, and gave him a call. He came back! A 559 from Long Island, New York! We had a quick QSO before the QRM covered me up, but I had the first contact in the log.

I listened for a while longer, while I read the information about operating this thing. The manual mentions that the unit is susceptible to overloading by strong AM stations. I could hear a bit of that, but it was not really a problem. When I tried other antennas, like my 160-meter dipole, I would get WISN wiping out the 40-meter signals. Using a resonant antenna is certainly a good idea. A tuner would probably be even better.

In a couple of weeks I made about 30 contacts in over 20 states. I have worked all call districts except W6. I even fired it up in a QRP contest, and took first place in Wisconsin. I learned two interesting things that contest. First, it is difficult to hold a CQ frequency with only 400 mw. Second, with a single frequency crystal controlled rig, it does not take long to tune the band.

I'm not ready to trade in my FT-1000MP yet, but I have to say that I have had an awful lot of fun for a $27 radio!

The Remailer

There was a lot of discussion at the September ORC meeting regarding distribution of information, especially regarding availability of donated items. The purpose of this Newsletter is to inform all of our Club Members of items of interest. However, with the advent of e-mail, the ability to inform the membership of items of interest has been enhanced greatly.

The Ozaukee Radio Club maintains an e-mail re-mailer service for all who wish to be included in this electronic notification service. If you are not presently enrolled, and wish to receive these messages, please contact Jeff, KB9QQE, or Nels, WA9JOB. Jeff is the Administrator of the list. This list is open to ORC members, as well as other interested parties.

There is a great deal of confusion regarding this re-mailer. First, anyone on the list can place a message there. Simply send one e-mail to orc@mailman.qth.net, and everyone on the list will receive it. Your e-mail address will not be revealed, and the re-mailer provider protects your e-mail address from 'bots that harvest addresses from the net. You can use the re-mailer in confidence.

Items of timely interest can be posted on the re-mailer for all to read. This can include items for sale, wants, needs, help on how to do's, health-related things, such as someone who is ill, or other notifications. This communication form is fast, free, and extremely easy to use. Don't miss out on the pulse of what keeps the ORC running. If you aren't on the list, you are missing out!

73, Nels....

W9DXCC Convention

For the first time I attended the W9DXCC convention in Rolling Meadows, IL. It was September 20, same day as the Grayslake Hamfest, but with careful scheduling I was able to make both events. The W9DXCC convention is like a continuos travelogue – the story of one Dxpedition after another – South Africa (Lesotho and Swaziland), above the Arctic Circle @ Somerset Island, Roatan Island in the Caribbean etc.. While there you are in the company of folks who have worked 300+ countries and done some really extraordinary things.

There was also a great presentation on the search for Amelia Earharts Airplane – they are getting closer and closer.

The story of the search for Amelia Earharts Airplane held the group spellbound at the W9DXCC Convention

Attending the W9DXCC convention were our own Gary Sutcliffe (W9XT) and Mike Garcia (KD9AW), Noll Amidzich (W9RN) and Dave Schmocker (KJ9I)

Grays Lake Hamfest

The "Grayslake" September Hamfest has long been a regional favorite with commercial and amateur vendors of everything from sophisticated new HT's and HF rigs to 50 year old SX-28's and WWII BC610's and components.

However, I would estimate this year's attendance at about half of previous years. I would assume the low attendance resulted from the late rescheduling from the originally published Sept 27 and 28 weekend to Sept. 20 and 21. This revised date conflicted with the Hamfest in Peoria as well as the W9DXCC convention in nearby Rolling Meadows.

. I went to the Hamfest at 6:30AM and did get a couple of treasures. I found a Coleman 1KW generator and 2 operating manuals for which I had searched for these past 2 years.

While I was somewhat disappointed with the Grayslake event I am sure it will be back on track next year. See you there.

Long shadows are cast at 7 AM at the Grayslake Fairgrounds but the early bird does get the worm.

Minutes – Sept. 10, 2003

De Carol Szudrowitz, KC9CBC

Meeting called to order at 7:35 by President Vic Shier KB9UKE
Mohammed KC9CPC was introduced as our newest ham member.

Announcements:

Bill KA9WRL was present to tell more about **Jamboree on the Air** (JOTA) and invited anyone interested in helping to **sign up with Vic KB9UKE.** Bill's club has been sponsoring this since 1987. It is on the **3rd weekend in October** (Oct. 17, 18 & 19). Scouts talk to Scouts around the world. They will be setting up at least 3 stations in the Horicon Marsh area on Thursday and Friday. Friday Noon to Saturday midnight they will be transmitting. The Scout Council advertises it and participation is up. Scouts can work on requirements for a radio badge. Cost is minimal and the food is great.

Program:

Jim KA4UPW brought back the broken down old time radio fully restored and working. All enjoyed the music and tips for restoring the cabinet and the radio. One trick he shared was to "paint" both sides (the veneer and the radio) with Elmer's Glue. Let them dry and put them together. Use a steam iron. The steam penetrates the veneer and the glue is set tight. Because of the many coats of shellac, Jim feels that moisture will not allow the veneer to separate.

Auction and then Break

Business Meeting:

Minutes from the last meeting were approved as printed in the newsletter.

Motions from a board meeting held the week before were presented to the club for a vote by the President Vic KB9UKE.

1. Vote carried unanimously for Nels WA9JOB to continue discussions with We energies for placement of an antenna/equipment on their new tower in Port Washington.
2. Vote carried unanimously to send $50.00 to the QSL.net.
3. Motion approved for sending $50.00 to ARRL to help fight using BPL. Leon K9GCF explained how harmonics would be a problem for radio reception. There are leaks all over even with closed coaxial cable that cable companies use now.

Treasurer's Report accepted as printed on handouts.

Repeater Report:

Nels, WA9JOB, discussed the crackling that was heard on the repeater that remained after the new donated MIRAGE amplifier was tested. When he moved his hand over one of the feed lines, he concluded that it was a bad coax connection. The RG8X connector was loose. The outer shield was not making a good connection in the UG174 adapter. This was resoldered, fixing the noise (Use of a temporary RG58 cable lost 25% of power during the test.).

Nels is looking forward to further discussions with We energies to find out limitations and possibilities. It is an opportunity to get our foot in the door so to speak. He is looking at placing a cardioid antenna there with a 6db North and South 9db to the West, and –5db over the lake. We Energies may supply the feed lines. The idea of just placing a transmitter there and keeping the present main site for all the voting is being considered. There is a reluctance to place the 440 repeater there as their truck channels use 451 MHz. The elevation is about 100 feet lower than the antenna on Greg, W9DHI's tower was, and about 50 feet lower overall than the present site at the barn. Stan, WB9RQR, reminded us the 97 repeater is an emergency backup for OZARES 147.33 MHz. repeater. That may help in discussions.

The 220 is operating at the barn. Dick, K9CAN, wants the repeater to stay in the barn for easier access. General Communications is creating problems at the Germantown site. They want us to use the antenna or pay someone to take it down as well as paying their man to be there. Our alternative is to link a 220 receiver back to the main site 224.18 MHz. repeater, to justify the antenna use and utilize the receive capabilities there. The interface of the 220 and 2-meter repeaters is also planned for net operations. This will be done at the main site, and be automatic, rather than someone trying to do it acoustically from home.

OZARES Report:

I D cards are here and most have picked them up. Meeting is on Thursday regarding SMO operations.

Scholarship Report:

Ed AA9W reported that much of Sus, KB9OC's Donation has been spoken for. The agreement is that he receives half of the proceeds and the club gets the other half. A motion was made for **the club to purchase the aluminum tower for Field Days**. Dave N9UNR made the motion and Stan WB9RQR seconded it. The club voted yea.

A discussion commenced on how donations are made known to members and if they have first dibs on them for purchase. Ed said that he informs all by e-mail when donations are listed. Donations are listed on the re-mailer. It is also announced at meetings. Nels, WA9JOB, is one of the administrators of the re-mailer. He needs to know if you want to be on it. A suggestion was made to list it in the newsletter. Problem: newsletter is usually history when published. Conclusion: Ed AA9W and Vic KB9UKE will discuss how to get notice to all in a timely manner. Dave N9UNR noted with a show of hands that most members have e-mail.

Committee Reports

Field Day:

Jim KA4UPW posted a chart at the meeting showing areas that he and Gary WI9M identified items for improvement for next year. A new tower was one. It will also be published in the newsletter. They ask that members review it. We want to keep improving.

Fish Day:

Cindy KA9PZG reported that 6 members helped and everything went well. Kathy Poule sent a letter of thanks with a $150 donation, and a request that hams keep the 3rd Saturday of July open to help again next year. Cindy KA9PZG made a motion to donate this to the Scholarship Fund. A discussion began regarding the club's funds; therefore, Jon KB9RHZ made a motion to table the donation motion until next meeting when the treasurer is present to discuss funds. Greg W9DHI seconded the motion. Members voted yea.

New Business:

Radio Building Project:

Greg W9DHI found a Regenerative 4-Band SWL Receiver kit that is reasonable (approximately $29.00). This is a good starting point for building as it covers 20 meter and 40 meter ham bands. Greg will provide the support and teach those who are interested.

Swap Fest:

Gene KB9VJP said **the biggest money making event needs advertising**. Flyers are available for the 2004 Swapfest. Grays Lake Swap Fest is September 20/21. If you plan to go, please take the flyers along. Remember to call for flyers for other events. Thank you!

News Letter:

Some had trouble downloading the letter. Suggestion: Text only copy. PDF compressed form. Give suggestion to the Editor, Tom, W9IPR.

New Ham Radio Classes:

Ed AA9W is stepping down from teaching the class. The question pool changes next year. We need a teacher to encourage new hams. Please consider it.

Repeater:

Nels could use help on the technical end of the repeater. Greg W9DHI volunteered. Help with the WEB Page would also be appreciated. Nels uses a basic HTML Program.

Attendance:

Leon K9GCF, Mark N0OKS, James KA4UPW, Dave N9UNR, Ed AA9W, Bill KA9WRL, Ron KC9DKQ, Jim K9QLP, Ron W9BCK, Gene KB9VJP, Kent N9WH, Ed AA9GT, Nels WA9JOB, Paul KB9WCC, Ray W9BUJ, Terry KA9RFM, Herb WA9UVK, Bob N9NRK, Jon KB9RHZ, Greg W9DHI, Jane KB9SYI, Cindy KA9PZG, Carol KC9CBC, Jim N9WIU, Ray W9KHH, Bob W9LO, Mark AB9CD, Roger W9UVV, Peter KB9URH, Bernie AA9CI, Stan WB9RQR, Don W9VSC, Sky N9XRU, Gay KB9OBR, Muhammad KC9CPC, Mike WJ9O.

AGENDA

Oct. 8th, 2003

1. Call to order – Vic (KB9UKE)
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Tom (AA9XK).
9. Repeater report – Nels (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Oct. 8th

7:30 PM

The ORC News -

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: http://www.qsl.net/orc/

Volume XXII November 2003 Number 11

The Prez Sez

By Vic Shier (KB9UKE)

Installing a mobile rig can be a frustrating experience. We all want a great sounding rig with optimum power output but who wants a car with holes all over and a droopy headliner. The worst part is coming up a better idea after you punched the first hole. Well, Greg W9DHI, gave us many tips on mobile installations at the last meeting. He had suggestions for performance and safety while maintaining a neat and tidy install. He also made an offer that is too good to pass up. Although he won't install them anymore, he is willing to give club members some recommendations before we get started on the next vehicle. Thanks for the tips Greg.

Congratulations to the ORC for another great score for Field Day. The club efforts found us in third place for the 5A category again this year. Second place was taken by CO0US one of the more popular stations on the air during this year's event. CO0US was a joint effort between ARRL members from California and members of the Federacion Radioaficionados De Cuba, operating near Havana and was featured in the Field Day message. K4BFT, the Huntsville ARC, always a worthwhile competitor took first place. Fortunately the poor propagation during Field Day affected everyone not just the ORC. One statistic that should not be overlooked is that we had 29 participants this year, a great all around club effort.

Some important events will be coming up in the next several months and it isn't too early start thinking about them. The annual meeting is always the January meeting at which time the election of officers will be held along with the Ham-of-the-Year and Turkey-of- the-Year awards. You must be a paid member in order to vote at any meeting and dues are payable on January 1st of each year. Changes to the dues structure must be discussed at the November meeting and would then be voted on at the December meeting.

Another important issue is the offer by We Energies to provide space for an antenna and some equipment at the Port Washington site. This is an opportunity that doesn't come knocking often and we want to do it right.

73's and remember…It's a hobby!

DON'T FORGET – THE SSB SWEEPSTAKES CONTEST Nov. 15-17 !

De Bob Truscott (W9LO)

By the time you read this the Nov. CW SS will be history. Hopefully a whole bunch of you will have worked the contest, and racked up some big scores. But even if you only racked up little bitty scores, please send them to me so we can get them into the next newsletter. tbsi@hnet.net, or at the next club meeting. You might even earn bragging rights over your buddy who thinks he's better than you are.

The CQ WW Phone DX Contest was a couple weekends ago (Oct 25-26). I didn't participate– didn't intend to because those DX guys talk real funny and real fast, neither of which I can handle. Even though most of them supposedly spoke English, it was their own brand of the language. Even the Brits don't know how to speak it correctly. And when you add speech processing, it really becomes an impossible task for people with old ears to understand them. Then, of course, you have the hotshot operators who talk at about 90 mph—that's like

the CW guys who operate at 45-50 wpm. You might have to question the accuracy of their logs. I listened to several different DX guys working 5-6 stations per minute. That's pretty impressive, but I had to listen to about 10 of their contacts before I could figure out their calls and reports. One DX guy reported 5394 contacts—don't know how many hours he worked, but if he worked the full 40 hours, that averages out to 135 per hour. Now that's really impressive. And one other fella reported that he worked 200 stations in 1 hour. (We need that guy in our Field Day group.) So that's how the big guns do it. But don't let that scare you off—let's all go out and have some fun on Nov. 15-17.

Coming up in November:

Nov. 15-17 ARRL November Sweepstakes-Phone–Rules in Oct. QST, page 107.

Nov. 29-30 CQ WorldWide DX Contest-CW—Rules in Oct. QST, page 100.

Have fun contesting. Bob, W9LO

Field Day '03 Results

De Leon, KB9GCF

I'm going to share the good news with all of you.....The Ozaukee Radio Club's Field Day competition with the world has netted us great news!

We, the Ozaukee Radio Club, coming from the smallest county in the State of Wisconsin, and operating as W9LO, placed as follows:

#1 in Wisconsin (in our Category of 5 Transmitters)

#1 in the 9th Call Area (of 3 States.....WI, IL, IN .in the 5 transmitter Category) We bested all the big clubs in the Milwaukee & Chicago areas!

#3 in the WORLD!! (5 transmitter Category)

WE did it!! Thanks to all that participated in any way or manner. You all deserve all the glory this ranking bestows.

The complete details can be found at:

www.arrl.org/contests/results

Some of the results areas can only be accessed if you are an ARRL member.

JOTA & LeFROG

On Saturday, October 18th, I went out to Ledge Park next to the Horicon Marsh to check out the Jamboree On The Air for scouts and hosted by the LeFROG group of "Ham's". I was really impressed.

The LeFROG set up for JOTA. HF through UHF and APRS in five different shacks. Same setup as used for field day including the "renovated" Channel 6 mobil system

Bill Howe, KA9WRL, is tuning 20 meters in anticipation of facilitating "scout to scout" QSO's throughout the weekend.

LeFrog members took advantage of the event attendance and conducted a 90-minute computer logic training session whenever they could get 3 or 4 scouts to set down at the Heathkit Logic Trainers

What a great way to help scouts earn their communications merit badge and perhaps get them interested in “ham” radio. As with several others in the ORC it was an Elmer taking the time to get me interested “ham radio” that led to my career in engineering. Why not an ORC JOTA in October 2004?

THE MILWAUKEE RADIO AMATEURS' CLUB'S FM SIMPLEX CONTEST

De Sherm, KB9Q

The FM Simplex Contest Committee of The Milwaukee Radio Amateurs' Club has completed fine tuning of the rules for their February 8, 2004 FM simplex contest. Among the changes for this year are additional time for the two meter segment, band QSO points that better reflect the number of operators on each band, and a perpetual plaque immortalizing the winning club entry now on display at AES! Take a look the next time you are at the Candy Store.

Like most contests, the FM Simplex Contest is designed to be fun. It is still in sprint format, lasting just two hours and fifteen minutes and covers the four lowest VHF/UHF bands. The true goal, however, is to develop operator skill in working simplex (no repeaters) and to promote development of station equipment capable of operating on multiple bands. This capability is valuable in support of a primary purpose for amateur radio; to provide communications when normal means of communications are disrupted. Under these conditions, it is likely that simplex will be the primary mode available, as repeaters may suffer the same disruption as normal communications channels. The contest is also constructed to give Technician licensed operators an introduction to the format used in VHF and UHF contests.

So, consider organizing your club for the local competition and getting its name on the award plaque! Feel free to contact me for copies of next year's rules via E-mail swanson@ticon.net or snailmail from my KB9Q callbook address. It is also be available on The MRAC web site, http://www.qsl.net/mrac/index.html.

Upcoming Events

Nov. 12 – ORC Meeting
Nov. 15, 16 & 17 – ARRL SSB Sweepstakes
Nov. 29 & 30 – CQ CW DX Contest

For Sale, Trade or ?

HP Inkjet 923C printer complete with CD. $50 Contact Sus (KB9OC) @ 414-466-4350 or SUSMU@MSN.COM

Realistic (Radio Shack by ICOM) HTX-404 UHF (440 MC.) HT - $70 – Contact Tom (W9IPR) @ 262-377-6945.

A complete Kenwood HF station – Contact Don Belstner, W9VSC @ 262-377-0426

ICOM 2-AT 2 Meter HT (With PL Deck for 127.3) Includes 12 v DC car adapter plus batteries and Wall Wart Charger

ICOM 04-AT 440 HT Programmable from keypad, includes PL. Contact Jim, K9QLP @ 262-375-3668 with reasonable offer. Also, 5 years of QST for the asking.

Help removing a TA-33 tribander from a 38' tower and raising a replacement TA-53 – Contact Tom, W9IPR at 262-377-6935

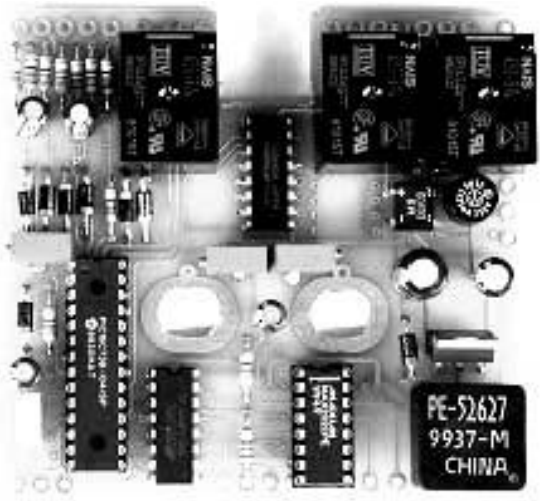
ORC Computer Course

This will be your last chance to sign up for the ORC Computer Course, starting 19 November. Students will explore all the hardware inside a computer case - how it works, how to repair or replace it, optimization, and even viruses and how to detect and kill them. Eight evening sessions, time and dates flexible by class negotiation after 19Nov. Costs are for a book (which you must get and keep) and a few floppy disks. Otherwise, the course is free. More details in the last newsletter. Only two slots left (maximum, 6 students). The only way to sign up is to contact Stan, WB9RQR, 262-284-9346.

Rotor-EZ Kit

De Gregg Lengling, W9DHI

Have you ever been plagued trying to turn you rotor to a station, log, and try to contact a station all at the same time. Holding down the brake, holding down the directional control and watching the Dial to see when you are at the proper orientation. Well you really don't have to anymore.



Idiom Press (http://www.idiompress.com) offers a kit that adds a computerized control board to your existing Ham rotor. If you have a Ham-II, Ham-III, Ham IV or any Tail Twister rotor you can now have Hands Free Rotor Control plus control via RS232 from your computer-logging program.

The kit takes about 1 hour to build the board and maybe another hour or so to install it in your existing rotor control box. The existing board on your meter is replaced with the new board and 4 LED's are added to box to show the operation. 3 are Red LED's that show action (brake release, CCW and CW) and the fourth is a multicolor LED that shows power, operation and changes color as it gets close to the final position. Once the board is installed and calibrated you can still operate normally, however there is now a 5 second delay after releasing the brake control before the brake re-energizes.

In automatic operation you use the calibration control to move the meter pointer to the desired direction and then press the brake release control for a second and the operation starts automatically. The control operates the rotor to the desired indicated position and stops about 3 degrees before the final location to allow for coasting. Five seconds later the brake re-engages. If you set up the free-up option, the rotor starts to move in the opposite direction for a degree or so before heading in the proper direction to free up the rotor, in case it has become stuck.

In RS232 mode you can control the rotor with a simple program or with many available logging programs that integrate and look up the logged call's location or a location that you input. (Many of these programs are free shareware programs.) For those of you using DX spotting programs this allows for instant rotation to the DX station's location.

The only bad thing I can say about the kit, is that the instructions while being pretty concise leave a little bit to the builder and aren't up to the standards of the old Heathkit manuals or

the newer Elecraft manuals. Either way I give this kit a 2 Thumbs Up.

For reviews on this kit or any other Amateur Radio product go to http://www.eham.net/reviews/ .

ARRL BPL Contribution

Dear Friends,

On behalf of the American Radio Relay League, thank you so much for your kind contribution in support of ARRL's special Spectrum Defense campaign against Broadband Over Power Line. Your recent donation of $50 -- added to the more than 5400 contributions -- will give ARRL a powerful voice in official Washington. You can be sure that ARRL leadership and staff are working to defeat BPL - the most devastating threat to Amateur Radio in decades. Your organization's leadership is deeply appreciated.

73,

Mary M. Hobart, K1MMH

Chief Development Officer, ARRL

SET Exercise Completed

De Jon Gilmore, KB9RHZ

On Saturday, October 25, seventeen hams participated in an exercise to test the ability of the ARES/RACES groups to carry out communications in an emergency in the six southeastern counties, including Ozaukee County. Three repeaters (146.91, 145.13, and 146.82) were used as well as simplex frequencies. As is the case in most exercises, there were some problems, but what was learned was very valuable. It became clear that communications in an emergency could be carried out in the SE using repeaters, but simplex operations are affected by terrain and distance.

Communications were also tested in Ozaukee County on simplex. The results were mixed as some areas of the county were totally inaccessible on simplex and other areas were no problem even though the distances were greater. Terrain seemed to be the limiting factor. Fortunately, the 147.33 repeater has emergency power backup and can be heard through the county except right along certain parts of the lakeshore.

ORC hams that participated were KA9DDN, K9GCF, W9IPR, WI9M, KA9PZG, KB9RHZ, WB9RQR, N9SQA, N9UNR, KB9URH, AA9W, KB9WBQ, N9WH, AA9XK, AND N9XRU.

In the next few months more training will take place testing communications and message handling. OZARES is always looking for more hams to participate. Meetings are normally at 7:00 p.m. on the fourth Thursday of the month in the Justice Center.

Next Meeting – Nov. 12th

De Leon, K9GCF

"VHF-UHF weak signal operating excitement" It is to be given by Ken Boston, W9GA, a notable contester. Ken works for L. S. Compliance, Inc., an EMC testing and consultation lab, right here in Cedarburg. Ken's the lab manager, so has a lot of RF experience.

Just Another Shack

De Todd Sprinkmann (KC9BQA)

This month's shack visit is with Don Belstner - W9VSC. Don was introduced to ham radio in a somewhat unusual way. While teaching his algebra class at Cedarburg High School in the mid-1950's, he noticed a student had a ham radio study book tucked inside his algebra text. That student was Gus Wirth - W9BTN.

From this, the ham radio bug hit Don and he got his novice ticket - WN9VSC. A Cedarburg High School ham radio station - K9KKW -- soon followed. Don was trustee of the station and he knows of at least a half dozen students who became hams via the CHS station.

When Don first got on the air in the mid-late 50's, 6 meters was alive and hopping. Don recalled his first DX was a Texas station he worked during his lunch break. Don says he worked 23 states, Alaska and Canada - along with ships at sea on 6 meters in those days. This was done with an Army surplus transmitter (tone-modulated) and a 3-element beam.

Don had a Hallicrafters for some time after that Army surplus rig. He recalls being inactive for a number of years and then having his interest rekindled by his son, John - W9EN. John and Don got a pair of HT's and they were active on 2-meter repeaters. This was back in the 70's.

Nowadays, Don has a Kenwood TS-520 for HF but he isn't very active on the bands. When on HF, Don uses a center-fed trap dipole for 10-80 meters. In the past, Don has enjoyed 20, 40 and 80 meters. He has collected a variety of Special Events wallpaper. One event that stands out to him was working the Flying Fortress.

Don Belstner, W9VSC, at the Mic in his basement corner shack

Don also has used 40 meters to keep in touch with his son John, especially when John lived in Virginia. Don also enjoyed checking into an Arkansas 80 meter net, because they vacationed there.

He was active in Cedarburg Emergency Government for 10 years. He recalls being in a communications van when a big windstorm hit in 1991. As the van rocked and rolled, Don was T-H-I-S close to bailing out for the ditch.

Don will be married to Katherine for 54 years next month. In addition to their son John, they have a son, Dennis.

Don is an avid skeet and pistol shooter. He got a laugh out of me as he relayed that their weekly shooting group meets at Gary Cooper time - High Noon.

Club Static & Comments

When buying emergency generators at swap meets that are a very good buy, make sure they have both the DC and AC output as advertised.

Keyers, Keyers, Keyers

By Gary Sutcliffe, W9XT

From my earliest days in Ham Radio I have had an interest in keyers, starting with CW keyers and continuing to voice keyers. This interest has evolved from a user of a number of keyers, building my own from kits or schematics, to designing my own. Eventually things got totally out of control and I now have a small side business manufacturing and selling keyers of various types (www.qth.com/w9xt).

In the first days of Morse, everything was sent with a straight key, and many hams still use them. It is probably best to learn CW with a straight key before moving to other ways. As code speed goes up, it becomes more difficult to send the dits fast enough. The bug was invented to help with this problem.

Bugs are still in use and are sometimes seen at hamfests. Basically, they are a mechanical device. Press the paddle to the right and a shaft with a weight vibrates causing alternating contact and non-contact, forming the dits. The speed the dits are made is adjustable by loosening a setscrew and sliding the weight forward or back. The dahs are made manually by moving the paddle to the left.

Because adjusting the dit speed on a bug is somewhat of a pain, some operators just set them for the maximum code speed they are comfortable with, and manually slow down the dahs. At the extreme, this is difficult to copy and irritating. You hear "Daaaaaaaah Brrrrrt". It is hard to discern how many dits are sent.

Because the bug is difficult to adjust, and dahs have to be made manually, an alternative was developed: the electronic keyer. The first reference I have found for an electronic keyer is a February 1953 article in *QST* for a CW keyer built with 12AU7 tubes. I have not been able to find a copy of the article, so I don't know what its features were, but it was probably about as complex as a decent receiver of those days.

Keyers really took off in the late 1960's when units based on logic ICs were introduced. Today most CW keyers use programmed microprocessors.

A keyer sends dits when you press one paddle and dahs when you press the other. The speed is adjustable with a pot, and the dits and dahs are always (well, almost always) sent in the standard 1:3 time ratio. Early keyer paddles were based on modified bugs. The dit side was changed so that it did not mechanically oscillate, but just made contact when the paddle was moved that way, just like the dah side. Electronics in the keyer then generated the dits and dahs, and key the transmitter.

Holding down the dit paddle produces a string of dits for as long as it is held down. Similarly, holding down the dah key produces a string of dahs.

A newer development is the "iambic" keyer. The first keyers with the modified bug paddle required a fair amount of movement to send characters with alternating dits and dahs. To send the letter C (-.-.) requires pressing and releasing the dah key, pressing and releasing the dit key, pressing and releasing the dah key, and pressing and releasing the dit key a final time.

If you press both paddles of an iambic keyer, the keyer will produce alternating dits and dahs. This reduces the movements needed to produce the C to press and hold the dah key, press and hold the dit key, release the dah key, and finally release the dit key. In addition you can insert dits or dahs. Sending Q (- - .-) requires pressing and holding the dah paddle, pressing and releasing the dit paddle, and finally releasing the dah paddle.

The iambic keying method allows faster sending with less effort than with straight paddles. Most keyers and key paddles sold today are iambic. When you learn one method, it is difficult to change over to the other, at least that is my experience. My first exposure to electronic keyers was a straight paddle unit at my high school club station in the early 1970's, and that is what I learned on. Even though I have been using iambic paddles and keyers for at least the last 20 years, I still need to think about it to send iambically. Fortunately if you like the straight paddle paradigm, you can still easily use an iambic keyer.

Another keying difference is known as mode A and mode B. I don't know the beginning of the two modes, but suspect it was just differences in timing between different models out on the market. Curtis, a major player in early electronic keyers, came out with a single IC keyer with two operating modes, A & B. The difference has to do with the timing to recognize when a paddle was pressed.

Say you want to send N (- .) You press and release the dah paddle followed by the dit paddle. With mode A, the dit will not be registered until the first dah is complete. With mode B, you can press and release both the dah and dit keys before the dah is completed, and the full letter N will still be sent. This may not sound like a big deal, but let me assure you that if you are used to one way, sending on the other mode can be a trying experience!

Some keyers allow you to change the relative times of the dits and dahs. Standard Morse has the dahs three times the length of a dit. Some operators like to change the dah width to more or less than the standard. This is changing the "weight".

For most people, the thumb is used for the dit key, and the index finger is used to send dahs. Of course the side of the paddle is different for right and left handed operators. I have also run into operators who got their first keyer and didn't know what the standard was. They guessed wrong when they wired up the paddle and

started to practice with it. Even though they are right handed, they send on a left hand wired paddle. Many keyers on the market today allow you to electronically flip the paddle sides. That is a great help at Field Day when you relieve an operator who uses the other hand for sending.

Actually, learning to send with the opposite hand is not all that difficult. Just remember that you want your thumb to send the same elements as it does with the other hand. In the early 1990s I learned to send left handed. In contests I could write in the log with the right hand while sending with the left. Computer logging and sending removed the need for that so I don't send left handed much any more.

Contesters are always looking for an operating or technical advantage to give them an edge in a contest. They send CQ's and exchanges over and over. A mechanical system to handle that is an advantage. Some early contesters constructed devices like a clear plastic wheel driven by a timing motor. Black marks were put on the wheel to form Morse letters. A lamp and photodetector circuit turned a relay on and off to key the transmitter.

In the early 1970s the first memory keyers started to appear. With a memory keyer you can program in a message and play it back with the press of a key. I was in college in 1974 and decided I needed a memory keyer for contesting. I don't remember if memory keyers were not available commercially back then, or if I just could not afford one, but I decided to build a memory add-on to the keyer I had built from scratch with a half-dozen TTL chips. I bought some memory chips at a Hamfest for the amazing price of $2.50 each, just under a penny a bit. At those prices that 128MB memory card in your PC that you paid about twenty-five bucks for would cost about $11,500,000!

Fortunately I didn't need all that much memory, and a few chips with 256 bits did the job. One disadvantage with those early chips is that I needed +5V, -5V, +12V, and -9V to run them. That was really a pain, but it did work well.

If you are buying a memory keyer, look for one that has non-volatile memory storage. With this type of memory, the messages you store will not be lost when you turn off the power.

Another new method of sending CW is with the PC. There are programs available for sending CW by typing with a keyboard. Many contest-logging programs have built in keyers either for hooking a paddle up to some printer port pins or for sending stored message strings.

The interface from the PC to the transmitter is generally done with a special cable connected to a printer or serial port. Many new radios also have CW keyers built in. Although the need for stand alone keyers is probably shrinking due to these alternatives, some of the built-in keyers have limited features, and having to carry a PC along to send CW defeats the purpose of the small portable radios in the field.

Samuel Morse patented the telegraph in 1837. The patent application included the famous dot and dash code he developed. I wonder what Morse would think if he knew of all the computer power being used today to produce a 160+ year old code.

Like their CW counter parts, phone contesters have developed keyers to handle their repetitive transmissions. Early voice keyers were made from tape loops on reel to reel tape decks. You either had to wait for the tape to get around to the start or your CQ would start in the middle. Obviously a better solution was needed. Next month we will discuss voice keyers.

Public Service Minutes Oct. 12,2003

De Carol Szudrowitz, KB9CBC

Meeting was opened at 7:35 PM

Tom W9IPR announced that he would be going to the JOTA radio experience with his camper and anyone interested could stay with him. He will investigate possibility of interesting Scouts in our area about joining this program next year.

Donation Procedures

Vic KB9UKE informed the club that he and Ed AA9W discussed donation procedures. More recognition

needs to be given to increase donations (talk it up it can be a tax deduction) and to publicize the availability of items. The re-mailer is the most efficient method for this. Let Ed know if you need "snail mail". We will also hold items for awhile and if two club members or others want it, we will set up a bidding procedure similar to an auction.

Motion Discussion

The motion regarding the $150 donation from Fish Day was discussed. Treasurer Tom AA9XK presented a graph plotting club funds from 2002 to 2003. The Repeater Fund is stagnate. Money has not been put in from Swapfest. The General Fund is also lagging. A discussion offered suggestions. Scholarship is not accessible for other uses and it is healthy at this time. The General Fund is accessible. The Repeater Fund is important as that determines radio transmissions. We are also looking at a new location with We Energies. Greg, W9DHI called the question and Jerry KB9IMH seconded it. It was voted in the affirmative to vote on the question. Should the Fish Day donation be put into the Scholarship Fund? Vote showed one yea and rest against it. Should it be put into the General Fund? The yeas carried it.

Treasurer's Report

The Treasurer's Report was accepted as printed.

Program

Greg W9DHI presented an informative and interesting program on the installation of antennas in automobiles. Laws in England determine placement on the roof. We seem to be more creative but the top is the best for reception. Of course not if you have a sunroof! It can be dangerous on glass. The RF 's can get in the car. Trunk lid is a secondary spot. Run cables down the driver's side inside the car. Other side is reserved for car computer stuff. Mag mounts are temporary solutions and they scratch the paint. There is not a significant difference in trade-in cost if antenna is permanently mounted.

When mounting the radio inside the car, research these areas; 1) air bag locations, 2) obstructions to passenger etc., 3) location so it is reachable, 4) before drilling check area for wiring.

Stan WB9RQR's Auction

Repeater Report

Ten-meter link is now set up. 29.6 MHz. FM link can go down to 29.48 MHz. by remote control. The 2-meter repeater is doing well. One remote site has a hum and will be taken care of. Voting is working pretty well, but still needs some fine-tuning. The 440 is working well, but sees little use. Plans for the 220 and 7K programmer include interfacing so both repeaters will be together for the Tuesday nets and emergency nets.

In some cases, if the 2 meter, 10 meter and 220 are up at same time, than the 2 meter repeater makes all kinds of noise. This is probably from one of the link receivers. Hard to document when it happens as I am 15 to 18 minutes away from the repeater site.

OZARES Report

Antennas on the justice center are adjusted and OK. October 23 is next meeting. November is the EC Conference in Appleton and John Stolte is a speaker.

Scholarship Fund

Ed AA9W has some big hitters. More donations are available. Dealers are interested in some of the things so let him know by e-mail if you are interested. Information will be released to public next week.

Swap Fest

Gene KB9VJP said that the first table for Swapfest 2004 has been sold.

Old Business

Greg W9DHI reminded club about radio kit building class. Cost is about $28.50 per person. Roland KB9TMB and his son want to do one together. Team kits are available. Limit people to 10 kits so he and Stan WB9RQR can handle it. It will be a good winter project after Thanksgiving. It will take 2 to 3 meetings. Let Greg know by next meeting.

Meeting adjourned at 9:30 PM.

Attendance:

Stan WB9RQR, Jon KB9RHZ, Ed AA9GT, Kent N9WH, Jim N9WIU, Dave N9UNR, Ed AA9W, Nels WA9JOB, Gabe WI9GC, Dick K9CAN, Joe AA9HR, Bernie AA9CI, Herb WA9UVK, Ray W9BUJ, Ron W9BCK, Bob W9LO, Bob WQ9N, Gary W9XT, Fred W9FH, Roger W9UVV, Terry KA9RFM, Paul KD9FM, Mark AB9CD, Gay KA9OBR, Sky N9XRU, Brian N9LOO, Tom AA9XK, Paul KB9WCC, Mike WJ9O, Tom W9IPR, Jake KB9ZOR, Ed AA9WW, Carol KC9CBC, Gerald KB9IMH, Gene KB9VJP, Jane KB9SYI, Leon K9GCF Jim KA4UPW, Gregg W9DHI.

AGENDA

November 12, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Tom (AA9XK).
9. Repeater report – Nels (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Nov. 12th

7:30 PM

The ORC News -

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: http://www.qsl.net/orc/

Volume XXII December 2003 Number 12

The Prez Sez

de Vic Shier (KB9UKE)

This is the last newsletter for 2003, which makes it an appropriate time to review our accomplishments and consider some future goals. The Ozaukee Radio Club had a good year. We had: a successful swapfest, a great Field Day, substantial contributions to the Scholarship Fund, a new 10 meter/220 link, and we provided communications for several community service events. The ORC is a healthy and vibrant amateur radio club.

There have also been several suggestions for next year. Tom W9IPR will be taking over the technician classes and he and Ray W9BUJ will be working on additional ideas for introducing kids to ham radio. Jim KA4UPW and Gary WI9M will be working together on Field Day improvements. Nels WA9JOB and the techies of the club have plans for the repeater systems including adding a 2meter/220 link for nets. If you have some additional ideas for the club, share them with a board member. New ideas keep the hobby fresh.

Elections will be held at the January meeting and any member of the club can run for office. The responsibilities vary with each office and require several additional meetings. Contact me if you would like to learn more of what would be involved as a club officer.

Don't forget about some of the lighter issues, the Ham-Of-The-Year award for the member who has made a significant contribution to the club and Turkey-Of-The-Year for a member who has made things fun. There is not a limit on the number of times a member can receive the Ham-of-the-Year award but the Turkey-of-the-Year award can only be received once. There is, however, one notable exception. Gabe received it twice, once as WI9GC and once as N9QQA. He is the one and only ORC double turkey recipient.

73's and remember…It's a hobby!

ORC ASSISTS GRAFTON CHRISTMAS PARADE

de Jim Albrinck (K9QLP)

Twelve hardy members of the ORC assisted the Grafton Chamber of Commerce in their staging of one of the "smoothest Christmas Parades ever" said one of the Grafton Chamber leaders, despite the chilly weather.

Bernie, AA9CI, is seen here making a final check of Santa's list to make sure he is noted as having been "nice".

Assisted by the communications van of Cedarburg Emergency Government, the ORC kept communications flowing, found lost units, and minimized gaps in the line of March.

Note the Emergency Government Communications Van on the parade route

The following ORC members participated: Gene, KB9VJP; Ed, AA9GT; Gary, WI9M; Jon, KB9RHZ; Nels, WA9JOB; Jim, K9QLP; Gabe, WI9GC; Bernie, AA9CI; Kent, N9WH; Ed, AA9W; Ted, N9LLT; and Vince, KB9ZOT. Thanks again to all of you for representing the Ozaukee Radio Club with true professionalism.

It is only fitting that a morning of communicating be followed by pizza and warming refreshments as the event is discussed.

ARF! ARF! - WHO SAYS YOU CAN'T TEACH AN OLD DOG NEW TRICKS?

De Bob Truscott (W9LO)

This old dog just learned one. I called CQ in a phone contest a couple of weeks ago. I've never done that before because if I barked into the microphone like some of the younger pups in the club do on Field Day my voice would dissolve into mush in about 15 minutes, and I'd miss the rest of the contest. But not this year– I've discovered the wonderful world of the voice keyer. Santa Claus gave me an IOU for one last Christmas, and one of his elves delivered it at the swapfest last May. You all know what it is—it's that little gray box with all the buttons on it that W9XT demonstrated to the club about a year ago. The one that allows you to program your CW messages and certain parameters, and then tells you (in CW) what adjustments you just made. Pretty neat for CW people, but you don't have to know the code to use it on phone–you just push the buttons and record your messages. I suspect that most phone ops use it mainly for CQing, but I also used it for the entire sweepstakes message, minus the number. That way, when answering a call I simply speak the number, and punch the button. That's the lazy man's way of doing it, but it saves the voice for another QSO. Who knows? It might even allow a CW hound to enjoy phone contesting.

Now, if I could just get that phonetic alphabet thing straightened out in my mind. I know WHISKEY, LIMA and OSCAR, but those WW-II phonetics just don't seem to do the job anymore—ABLE, BAKER, CHARLIE, DOG, FOX. How about ALPHA, BETA, GAMMA, DELTA, EPSILON, ZETA, ETA, THETA–that doesn't sound right either, but my high school Latin teacher would be proud of me for just remembering it. No, that doesn't sound like Latin– maybe it's Greek. But I never studied Greek. (Actually, I never studied Latin either–I just went to the classes.) Oh, well, maybe one of my phone buddies will help me out with this problem one of these days.

Reported Scores:
CW November Sweepstakes

	QSO's	Sections
N9FH	1072	79
W9LO	730	79
W9XT	395	73
WI9M	375	62
W9KHH	202	61
WB9UKE	151	58

SSB November Sweepstakes

N9FH	702	74
W9XT	631	78
W9LO	203	59

Coming up in December:
Dec. 5-7 ARRL 160-Meter Contest Rules in Nov. QST, page 112.
Dec. 13-14 ARRL 10-Meter Contest Rules in Nov. QST., page 112
Dec. 12-15 North American Meteor Scatter Contest. Rules in Dec. QST, page 84
Dec. 27-28 Stew Perry Top Band Distance Challenge. Rules in Dec. QST, page 84
Dec. 31 ARRL Straight-Key Night Rules in Dec. QST, page 96

WOOF ! Phydo, W9LO

Next Meeting – Dec. 10, 2003 – Same time & place

Just Another Shack

De Todd Sprinkmann (KC9BQA)

This month's Just Another Shack visit is with Stan Kaplan - WB9RQR. Stan is definitely one of the more visible members of ORC. He's been an ORC member since 1975 and he's always helping with the monthly meetings and Field Day. His prowess with a turkey is well documented.

Stan discovered his interest in radio via SWL'ing (Short-wave Listening) in his teenage years. He recalls having a Lafayette rig and being very fascinated with the concept of simply hitting a key or talking into a mic and having it heard halfway around the world.

Stan decided to get his ticket in the 70's and his original novice call was WN9RQR. Stan upgraded to Extra before the code requirement went away and as a result, needed to pass the 20-wpm mark. Even though he had to use CW as a novice, he found getting up to 20 wpm quite difficult.

Stan enjoys 2 and 440 FM in his car. He also enjoys a little bit of HF work and uses PSK31 to make QSO's in places like Austria, with only 25-30 watts. Stan is very excited about all the digital modes that are being developed.

On HF, Stan uses an NVIS antenna. This stands for Near Vertical Incident Skywave propagation. He explained that this type of antenna essentially pumps your signal straight up, where it hits the ionosphere and the comes back to earth in a shower-type pattern, much like a garden hose would. In this way, the signal is sprinkled evenly in a 200-400 mile diameter.

Having this kind of pattern is important for Stan because he is actively involved in emergency communications for Wisconsin.

Stan, WB9RQR, here demonstrates the effectiveness of his “clothesline” antenna on 40 meters. Note the “key” in the background on which Stan is also proficient.

For the past 5 years, Stan has been the head of Emergency Communications in Wisconsin for both ARES (Amateur Radio Emergency Service) and RACES (Radio Amateur Civil Emergency Service). In this role, Stan makes all appointments for Emergency Coordinators in the 72 Wisconsin counties and for the 9 District EC's in Wisconsin. He also maintains the database for all 1,350 ARES/RACES members in our state.

ARES/RACES members can be activated for any type of natural or manmade disaster or incident. Most of us are familiar with the severe weather nets on the Ozaukee 147.33 machine. There is also a weekly RACES net. It meets on 3.996 MHz at 7:45am every Sunday morning. Members from around the state check in for news and announcements.

Most of you are familiar with Stan's computer articles in the newsletter. What I also learned from Stan is that for several years now, he has conducted a computer class in his home for ORC members. He accepts up to six students and they meet for eight Wednesday evenings. The emphasis is on hardware and installing OS's (Operating Systems such as Windows). One student started from scratch 3-4 years ago and her interest blossomed from there. She is now Head of Computer Security for a major corporation.

Stan is a native of Miami, FL, and a retired biomedical scientist. He is an Emeritus Professor at the Medical College of Wisconsin and his specialty is in birth defects. He has 3 grown children and 3 grandchildren. Wayne is married and has lived in Israel for 16 years. Wayne is an engineering professor. Lisa is married and a TV anchor in Lexington, KY. Dean is also married and is a State Department officer currently stationed in Kathmandu, Nepal.

Voice Keyers

De Gary Sutcliffe, W9XT

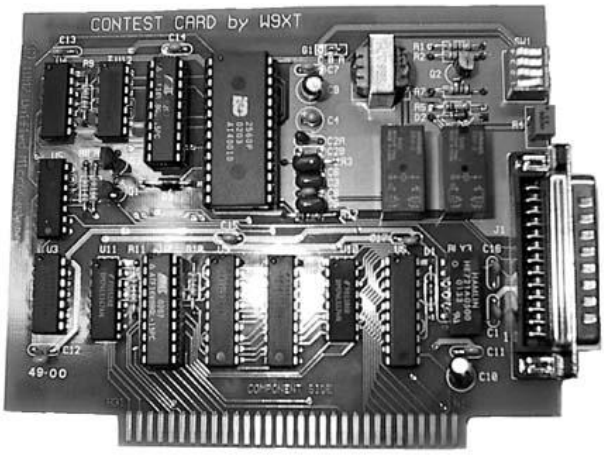
I designed and built my first digital voice keyer in the mid-1980's. It used a couple of hundred dollars worth of memory chips, and didn't sound that good. I was lucky that I was able to get the memory chips as free samples left over from a computer project at work.

In the early 1990s a company called Information Storage Devices introduced a series of ICs that included most of the key components for storing and playing back voice messages. They were perfect for voice keyers, and a number of articles appeared in the ham magazines with designs using them.

I learned about the ISD chips in a *QST* article. Like most project articles I find interesting, I find things I think could be improved. In this case, it was basically a good design, but was not designed with the contester in mind. For one thing, it was essential that mine would work with the main contest logging software.

K8CC in his NA program introduced a scheme to control voice keyers through the printer port. The other major program at the time, CT, soon adopted the K8CC standard. I started my design with an interface to the printer port, then realized I could make the keyer itself look like a printer port and put it right inside the PC. I also included the circuitry to add a CW interface so the PC could send CW. This was all done by wire wrap on a prototype board. I called it the Contest Card.

I showed it to some local hams and they were interested in getting one. Bruce Herrick, WW1M, offered to lay out a circuit board for it. Before long we had a few boards made up. A few months later Bruce went to Dayton. I had to skip it that year. He was talking to the editor at *QST*. He told them about my voice keyer, but they were not particularly interested because they did a voice keyer article a few months earlier. Then Bruce mentioned it was a plug in card for the PC. It turned out they were looking for a project for building a board that went into the PC, and they wanted me to write the article.



This "keyer" by W9XT plugs into the PC

As the time approached for the article to be published, the ARRL asked if I could sell kits. Project articles are more popular if the readers can get the parts from one place. I was an independent electronics engineering consultant at the time, so decided to do it. I was in the keyer business. The article appeared in the September 1993 issue.

Voice keyers all work on pretty much the same principle. Audio is sampled at regular intervals and stored in memory. At playback, the samples are retrieved from memory at the same rate, converted to a voltage, and put through filtering and an amplifier to reproduce the message. This same principle audio CDs work on.

There are two things to look for regarding voice keyers. First is the recording time, and the second is the sample rate. Recording time is pretty obvious. The longer the recording time, the longer you're your message can be, or the more messages you can store.

Sample rate is really more important because that affects the quality of your recorded message. The audio has to be sampled at a rate at least two times the highest frequency present in the signal you want to record. A front end filter is used to remove signals more than half the sample rate before the audio is sampled. The audio in an SSB signal is cut off at about 3.5 kHz. You don't want your audio to be limited by the voice keyer. To match the SSB signal you need a top end cut off 3.5 kHz and a sample rate of at least 7 kHz. In practice you want the sample rate higher than the minimum.

The memory to store your messages is proportional to the sample rate times the maximum recording time. Some keyer manufacturers will use a lower sample rate for a given amount of memory so the record time is longer. Unwary buyers think they are getting a better deal because the recording time is longer than a competitor's model.

In reality, you don't need all that much record time. A CQ should never be more than 10 seconds, and 5 or 6 seconds is usually better. Giving the Field Day exchange of "5A Wisconsin" takes less than 2 seconds.

Like any tool, keyers can be used incorrectly. I use CW keyers and computer generated CW very extensively in my contesting work. The biggest advantage is that you don't make mistakes sending the other guy's call or the exchange. Another advantage is that if you are calling CQ and working stations quickly you keep sending the exact sequence for each QSO. This makes it easier for stations listening in to know what is going one.

One mistake some operators make is sending the wrong speed, usually too fast. On some keyers or PC keyers changing the speed is not a smooth operation. You get a situation similar to the bug where the operator does not want to go through the hassle of slowing down for a slower operator. I like to wire a CW keyer in parallel to the computer CW. That way I can just reach for the paddle and turn a knob to the desired speed. I can slow down if needed, or maybe speed up if I want to say something to an operator I know can copy faster.

The purpose of a voice keyer is different than that of a CW keyer. With a voice keyer the main purpose is not so much for accuracy, but to save your voice. A long contest can really be tough on the old vocal cords. There are a couple of things to remember when using a voice keyer.

The first thing is that you want the audio from the keyer to sound the same as your natural audio. The other guy should be asking himself "Is it live or is it Memorex?" Some of the stations you work don't want to talk to a machine, and will not give you a call if you sound too mechanical.

About 10 years ago, K1EA, best known for his CT logging program, introduced a PC plug in voice keyer card known as the DVP. One interesting feature is that it would allow you to record the alphabet and numbers on the PC's hard drive. You would record "Alpha", "Bravo", "Charlie", etc. Then you could type the other guy's call in, and press a button, and the PC would piece the letters together and transmit the call sign and exchange.

The problem was that unless you spent a long time editing your audio snippets, the call sign would be very choppy, sort of like when you get a phone number from directory assistance. After a while the general consensus was that the choppy sound actually limited your contacts. The DVP is no longer in production, but was a fine keyer, and many are still in use. It is very rare to hear them used to send the other guy's call though.

This console "keyer" by W9XT can be interfaced with the PC for ease in "contesting"

I tend to use the voice keyer much less than CW keyers. One reason is that it tends to keep me mentally out of the contest if used too much. I like to adapt to the current situation. For example, if I am calling CQ and working stations quickly I will try to streamline my operation to work stations faster. If things are slow and there is a lot of QRM I might use a longer CQ to keep the frequency clear. I use the voice keyer primarily to CQ when things are slow.

If I get two responses to a CQ I might do the following: "W6 Zebra station standby, W1ABC you are 59 Wisconsin ... QSL W6 Zebra station you are 59 Wisconsin. I could not do that with canned messages.

One time I use the voice keyer a lot is when I am eating. It is hard to talk with a mouthful of food. I can have my call, and exchange in memory and tune up and down the band working stations. I hear a station call CQ and press the button for the message with my call sign. After he comes back I press the button for the exchange. I make the contact without getting any mashed potatoes on the microphone. The voice keyer is also nice for big DX pileups in the middle of the night. I can call and call without disturbing the rest of the family.

Voice and CW keyers are nice accessories to the ham shack. I hope you have learned a few things to select the best one for you and for using it effectively.

The Christmas "Wish List"

We all tend to look through the QST magazine or AES catalog and think to ourselves "someday I am going to have one of those". However, perhaps we may feel guilty actually spending that kind of money so we secretly hope our family or spouse will somehow recognize the "need" and gift the item to us thus relieving us of any guilt feelings and making us forever grateful and indebted. I still remember the Christmas (1953) that my parents gave me a microphone I "needed" to improve my contact ratio as I got my General Class license.

The following list is intended as an aid to those spouses and family members who are looking for the perfect gift for their beloved "Ham".

$2,000 to $1,000
Yaesu FT-1000MP Mk V Field HF transceiver
Kenwood TS-2000 HF/VHF Transceiver
Ameritron AL-572 Amplifier
Yaesu FT-847 HF/VHF/ Satellite transceiver
ICOM 746PRO HF/VHF transceiver
TX-455 Crank up 50' Tower

$999 to $500
ICOM 706 100 watt HF/VHF mobile/fixed Xceiver
ICOM 703 10 watt HF transceiver
Yaesu FT-100D mobile/fixed HF VHF Xceiver
Kenwood RS-50S compact HF Xceiver

$499 to $250
High Sierra Motorized Mobil Antenna
Butternut HF-9VX all band vertical antenna

Garman Street Pilot GPS
MFJ 986 Antenna Tuner
Yaesu G-550 Antenna Rotor
Vibroplex 125 Iambic Presentation Paddle
Uni-Solar USF-32 32 watt solar panel

$249 to $100
MFJ #259 SWR Analyzer
Yaesu FT-50 HT VHF/UHF
Alinco DJ-596T HT VHF/UHF
Astron RS-35M 12 volt power supply
Unified Microsystems VK-64 CW/Voice Keyer
W9XT contest card for IBM PC
Bencher BY-2 Iambic Keyer Paddle

$99 - $50
MFJ #890 DX Beacon Monitor
Diamond D-130J Discone Antenna
Van Gorden Engineering G5RV-M HF antenna
W2AU 5 Band HF Antenna
Delta Coaxial Antenna Switch
PolyPhaser Rotor Control Cable Lightening Protector
Buckmaster "HamCall" CD listing of "hams"

Under $50
Coaxial lightening surge protectors
Shack Clocks
Microphones
Mobil dual band antenna
Mag mount
Headphones
Headset Mics
Code Practice Oscillator
Battery Chargers
Weather Radio
SWR Bridge

Club Static

My special thanks to all who helped me exchange my TA-53 beam for the TA-33 on my tower. It has a very low SWR on all 5 bands and works great – first contact was Malta on 17 meters – thanks again.

Climbing Shields

Climbing shields are easy to make for your tower and are essential if there are curious kids in the neighborhood or coming to visit.

The climbing shields shown above are on a Rohn "25" tower. They are simply 1" X 8" planks of pine six feet long. Each of the three shields has a wood bracket near the top which hangs around a horizontal member of the tower frame and a "hook bolt" near the bottom to secure the panel to a lower horizontal member. All that remains is to paint my call sign on the panel.

Climbing shields installed on W9IPR's tower. They are recommended if you have a tower and there are curious "kids" in the area.

Minutes of Nov. 12, 2003

De Carol Szudrowitz (KB9CBC)

Meeting was called to order at 7:30 PM by Nels WA9JOB. Leon K9GCF was out of town and Vic

KB9UKE was attending his mother's funeral. He and his family have our deepest sympathy for the loss of Mrs. Shier.

Reminder was given about Grafton Christmas Parade, Sat. Nov. 29 and a signup list was passed around and given to Jim K9QLP.

Sus,KB9OC, and Grace were present at the meeting.

Gregg W9DHI announced that he needs 1 to 3 more people to build the kit radio. There will be 2 sessions, starting in January. Cost is $25.50. Give him a call if interested.

Program:

Ken Boston W9GA presented an interesting program on "VHF-UHF Weak Signal Operating"

He gave helpful information on modes of propagation. Summer seems to have a greater range in tropospheric bending due to more "temperature inversions". Meteor scatter, Aurora (northern lights) and Earth-Moon-Earth offer challenges to a radio operator and CW is most effective here.

The ultimate prize or challenge is getting a contact with E-M-E. Digital modes like JT 44 really help here. A handout was available for more information.

Break:

Auction:

Stan WB9RQR announced that his computer class starts next week Wed. Nov 19. It is filled.

Business Meeting:

Secretary's minutes were accepted as printed.

Treasurer's Report:

Tom AA9XK said that phone bill is now taken care of by club.

Repeater Report:

Nels WA9JOB reported that the 2-meter is working. The 220 was working well until he tried interfacing it for the NET. He will be working on it again. More issues arose during a discussion with We energies so the board will have to weigh if it is a good idea to locate on WE's new tower.

Jim K9QLP gave a NET report said there are usually 5 – 6 check ins. The acoustical link is not steady. He and Nels are working on that. He also encouraged more to check in and volunteer for NET control. It is good practice for an emergency.

ORARES Report:

Jon KB9RHZ said that 63 people attended the conference. Stan WB9RQR is stepping down as EM Coordinator for the state after 5 years on the job. Bill Nemuth will take the position. Meeting is scheduled for the 3rd Thurs. Nov 20 (note this was canceled)

Donations:

Ed AA9W stated he has a pool table full of vacuum tubes in perfect condition. Call him. Also has 2 meter rigs, HF rigs with minimum bid prices. We have the tripod tower in the barn for Field Days.

Old Business: None

New Business:

Gabe,WI9GC, opened a discussion on dues and cutoff dates. Motion was made and seconded by Gregg W9DHI that everyone pay $15 with a cutoff date of 3/15. There was also a discussion on reduced rate if someone joins after July 1 (cost $7.50). Jim K9QLP noted that you do not have to be paid by election night to vote. That is in the by laws.

A motion was finally made by Tom W9IPR to refer dues motion - dues and compatibility to bylaws – to a board committee for study. This was seconded by Stan WB9RQR. Nels WA9JOB questioned if this was out of order. The board should meet before the next meeting and publish the findings in the newsletter.

Communications:

We received a poster from AARL as a thank you for the club's support donation.

Also thank you to Sus ___ and Grace for giving the club pictures of past Post Everything Parties. This is an interesting history of members past and present. Stan 'RQR made motion to close the meeting Greg 'DHI seconded it.

Attendance:

Carol KC9CBC, Cindy KA9PZG, Ed AA9GT, Jon KB9RHZ, Kent N9WH, Ed AA9W, Dave N9UNR, Gabe, WI9GC, Gene KB9VJP, Gregg W9DHI, Jim K9QLP, Ray WD9HOD, Dean K3GGN, Ken W9GA, Gary W9XT, W9BCK, Gary W9IM, Bob W9LO, Joe AA9HR, Ray W9KHH, Ron KC9DKQ, Bernie AA9CI, Gay KB9OBR, Sky N9XRU, Jane KB9SYI, Mark AB9CD, Tom W9IPR, Terry KA9RFM, Ed AA9WW, Jake KB9ZOR, Jim N9WIU, Herb WA9UVK, Ben K9UZ, Stan WB9RQR, Mike WJ9O, Nels WA9JOB, Don W9VSC, Tom AA9XK.

Ozaukee Radio Club, Inc.
2004 Membership Application / Renewal Form

Callsign _____

Date _____

Name _____

Street Address _____ City _____ State ___ Zip _____

Home phone _____ Speed dial number _____

Email Address to post on ORC web page (optional)

_____ PRINT CLEARLY

I need a copy of the newsletter sent by U.S. Mail NO YES

(New and archived ORC newsletters are posted at the ORC WEB site http://www.qsl.net/orc. Members with adequate Internet access are encouraged to decline a newsletter by U.S. Mail)

Membership Class Desired (check one)

REGULAR membership (1)	$15.00
CLUB membership (2)	$ 7.50

Make check payable to Ozaukee Radio Club

Return to Tom Nawrot - AA9XK
10335 N. Grasslyn Road
Mequon, WI 53092

(1) REGULAR: Regular members hold membership in the club, and also have repeater privileges.

(2) CLUB: Club members have all rights of membership, including voting rights, but have no repeater privileges. Graduates of ORC sponsored amateur radio courses are eligible for full Club membership for one calendar year after graduation, without dues charge.

AGENDA

Dec. 10, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Tom (AA9XK).
9. Repeater report – Nels (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Dec. 10th

7:30 PM

The ORC News -

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: http://www.qsl.net/orc/

Volume XXII | January 2003 | Number 1

The Prez Sez

By Leon Rediske K9GCF

At this cold time of the year, ORC hams have many hot items to keep them busy.

First, there is the RTTY Round Up Contest January 5, 2003. We need all the club entrants we can find. So join us. Next Contest is the Jan 18-20 VHF Sweepstakes, and next is the DX contest Feb 15-16.

Next there is the WARAC Hamfest at the Waukesha Expo Center January 4, 2003. This is a good hamfest, and one can get the components for the interface you'll need for the RTTY contest.

This time of year one needs to think of ORC officer material for next year. We have a broad contingent of officer candidates this year, so the choice is yours.

For the longevity of the club, I believe we need younger members and officers in training. I've seen this club, and also the Ft. Myers Radio Club, of which I am a member, gets older in its membership. Many of us seniors have health issues, and may not be around to help with things physical and not so physical in a few years. As the seniors drop away from club participation, we need young folks to replace us for the good of the club. We need to train younger members to take our place for the future of our club. This aging of the ham community is no secret. We see it at hamfests, clubs, and all ham gatherings.

In the same vein, how can we recruit new members as younger hams? I'd guess our best bet is to hold more ham license courses and become more visible in our community. Perhaps many members have ideas how we may improve this trend.

Next is the upcoming ORC's PEP (Post Everything Party) party Feb. 15, 2003. Send in your ticket money as soon as possible. Now the tradition of the PEP is that it is Post Everything.....after Christmas, New Years, Valentines Day, post Everything.....time for a party! Remember it is for our spouses as well, so bring him/her along to enjoy the wonderful dining put on by the ladies of the local VFW.

I've enjoyed my tenure as President at the helm of the good ship ORC. Now it is time for the next generation to step up to lead the ORC. May we enjoy light winds and smooth sailing.....

73's for now, and see you all at the second Wednesday, January 8, 2003, ORC meeting, 7:30 PM, Grafton Senior Center Building, 1665 7th Ave., Grafton WI.

Upcoming Events

01/04/03 – WARAC Swapfest–Waukesha Expo
02/15/03 - Post Everything Party @ the Cedarburg American Legion Post

Jan. 8th Meeting Program

PROGRAM: AA9W's Homebrew Antenna that mates with the FT-817.....which is that little low power, portable all band radio by Yaesu. Ed has invented & constructed this unique antenna for HF operating. Also, hear results regaling how well it works! Anyone interested in duplicating this antenna should see Ed.

Dues are Due

New members at our December meeting included N9FH (Fred Helmstetter), W9XT (Gary Sutcliffe), KC9BTF (Angie Skrentny), KB9WCC (Paul Wiegert) and KA4UPW (Jim Hilins)

Dues for the 2003 year are now due. There is an application form on the website at **http://www.qsl.net/orc/** that you can mail in or just fill one out at the January meeting.

Contesting

De Bob Truscott, W9LO

We have a real dandy coming up this month for the VHF people in the club. It's the ARRL January VHF Sweepstakes, on Jan 19-20. Operate on the bands of your choice, 50 MHz to light. High power, low power, "rover ", single op, multi-op—you name it. The rules are in Dec. QST, page 95. This is a great opportunity for you phone ops – Get together with your buddies and work as a multi-op station, and hone your contesting skills in preparation for next Field Day.

My choice for contest of the month is The North American QSO party, better known as "NA". CW on Jan. 11-12, and phone on Jan 18-19. Rules in Jan. QST page 97. 160- 10 meters, 100 watt power limit, work stations once on each band. Maximum of 10 hours operating time. This one is a ton of fun, but does not take a ton of time. Try it--you'll like it.

For you "top band" people, there is the CQ WW 160 Meter Contest. CW Jan 25-26, and phone Feb 22-23. Here is a chance to try out your new vertical array, or as some of us do, just load up the 80-meter dipole.

Reported scores:
10 Meter Contest:
W9XT–CW --1021 QSO's, 128 multipliers
Phone 1070 QSO's, 137 multipliers
N9FH-CW only–1449 QSO's, 136 multipliers
W9LO-CW only–407 QSO's, 99 multipliers
160 Meter Contest:
W9LO 310 QSO's, 50 multipliers
W9KHH 137 QSO's, (?) Multipliers
W9XT 70 QSO's, 24 multipliers
Nov. SS-Phone:
W9XT 781 QSO's, 80 sections
CQ WW DX Contest CW:
W9XT 580 QSO's, 88 zones, 268 countries
All this with 5 watts—amazing. Does this suggest that the legal power limit should perhaps be reduced?

Please report scores to 262-629-9685 or tbsi@hnet.net. Have fun contesting.

MRAC FM Simplex Contest – February 9th

This Contest is sponsored by MRAC to encourage amateurs to learn the basics of contesting and to expand the scope of their V-UHF operating techniques.

1. This event is a sprint, lasting 2 hours and limited to FM simplex on the 2 meter, 70 centimeter, 6 meter and 1.25 meter amateur bands.

2. In order to generate maximum activity, all stations would be on the same band at the same specific time. Each band is assigned a 30-minute segment during which contacts can be made on the listed frequencies. For more information see the MRAC web page at: http://www.qsl.net/mrac/FMContest.html

Or you can contact Sherm at KB9Q@arrl.net

Tom AB9EK, MRAC Secretary

Just Another Shack

De Todd Sprinkelman, KC9BQA

This month's Just Another Shack features Terry Koller - KA9RFM.

Terry's interest in ham radio can be traced back to his early teenage years. While at his grandmother's hardware store in Waubeka, Terry got to know a ham across the street. Terry vividly remembers one day in the 1950's where he went for a ride in this ham's mobile set-up. The mobile ham actually made a contact all the way up to Adell! (All of 10 miles away) For Terry, this was a big deal and he started listening to ham transmissions on whatever SWL and/or ham rigs he could get his hands on.

Terry is shown here operating SSTV. Note the rig-PC interface consists of the PC audio mic in front of the transceiver speaker and to transmit, he holds the transceiver mic in front of the PC speaker.

After a long break for the marriage and family years, Terry got his novice ticket in 1980, followed by an upgrade to general in '81 and advanced in '82. He further upgraded to extra in 1999 when they changed the code requirements. In 1981, Terry was able to snag a Mosley TR-33 beam (for HF) with all the trimmings for $60. This meant it was time for a tower. With his engineering background, Terry was able to build his own 35' crank-up tower. It is built from 6" diameter 1/16" wall galvanized steel tubing. On it is the original TR-33, as well as a Cushcraft 11-element 2-meter beam that he uses for repeater/simplex work. Terry also has a Butternut vertical for HF, and a 130' longwire hooked up to a tuner.

Terry's radios consist of a FT-767GX for HF, which also has the 2-meter module. He has a mobile 2-meter rig and a FT-530 for his HT. He has written a computer program to control his FT-767.

Terry has dabbled in many facets of ham radio. Overall, he is more of a ragchewer and listener. He has been active in packet, and currently enjoys SSTV, along with a little PSK 31. He also enjoys the company of a lunch group that gets together both in person and on 2 meters.

Terry has been an ORC member since the mid-80's. His interesting hobbies have been the focus of many a show-and-tell presentation at ORC meetings. Terry enjoys R/C aircraft and helicopters. He builds 1/4 scale, miniature model gasoline engines. Terry also has a website. Visit www.terrykoller.com to see more about his engines and ham radio.

One of Terry's important contributions to ORC has been supplying the power distribution to run Field Day for the past dozen or so years. I attended Field Day this year (as a visitor) and I heard over and over from folks how impressed they were with the new and improved power distribution setup. Here's a tip of the cap to Terry Koller and all he does to help our club.

MFJ 890 DX Beacon Monitor Review:

De Nels Harvey, WA9JOB,

I guess you all know that I've proclaimed myself as the World's first Nocode Extra! I don't have any desire to chase DX, work contests, or participate in the various net activities on the low bands. I don't know why, but I went out and bought one of those MFJ Beacon Monitors!

The beacon system gives hams the worldwide an opportunity to tell what bands, from Twenty Meters to Ten Meters, are open, and to where. It is necessary to copy the CW, then listen for reception of a series of four tones, from 1000 Watts to 1 Watt.

I guess it was a fascination with the red and green blinking LED's that caused me to purchase the Beacon Monitor. The mystique of just how it worked was another reason. There are no connections to your radio, or antenna system. So, just how does it work?

The unit is designed to sync' with WWVB. Once it is sync'd, it's internal programming determines which radio is supposed to be transmitting, based on the time, and lights the appropriate LED. A switch enables the operator to select the band to listen to, then using the display and the operator's own transceiver, determine which beacon transmitter is producing the tones.

This really is a good way to determine if a band is open, and to where. It is a good way to determine how good the antenna in use is working, and where to point it if it is rotatable. All this is available without the MFJ unit, of course! It is a neat conversation piece, and a real boost to those of us who aren't as proficient with the CW as some others are. This is something you might be interested in if you share a fascination with blinking lights, as I do!

"Ham", Patriot or Both?

De Jim Hilins, KA4UPW

Moving to Wisconsin I had several requirements for choosing a house, and to my wife's dismay some of the CTQ's (Critical to Quality) requirements included high ground terrain and NO ANTENNA RESTRICTIONS. So I bought a place meeting only half of my requirements. So my new antenna needed to be stealth to meet the community covenants. To make matters worse, I like to work the low bands 40M-80M.

Hiding an 80M antenna in a restricted area, of new construction, where there isn't a tree or shrub to be found, was going to be a challenge! I decided to hide my antenna in plain site. That is to say everyone would see it every day, but no one would ever know that they are looking at a multiband vertical capable of loading up on 160, 80, 40, 30, 20, 17, 15, 12, 10, and 6 meters.

The basic and most popular type of vertical is one that is a quarter wavelength long and is operated against ground or in a ground-plane configuration.

The antenna is usually made from tubing and the radials are wires. This project consists of two 20-foot aluminum flagpole kits, commercially available at Sams Club and about 5000' of #12 wire used in the ground radial system.

Jim Hilins (KA4UPW) flag pole vertical

An ideal ground plane (simulated earth ground) would be a sheet of metal with a radius of one-quarter wavelength or more. However, this is only practical at VHF so the customary method is to use wires as the radials. Probably the number one question asked about ground-plane antennas is, “how many radials are required?” The answer is simply, the more radials used, the better the antenna will perform, at least up to a certain point. This should not be construed to mean that an antenna with only two or three radials wouldn’t work. Such an antenna will work, but for *maximum* performance one should consider 40 or more radials. For this project I exceeded 120 wires ranging from 35 to 50 foot long limited by the edge of the propriety.

There are two resistances’ that exist when the antenna is non-resonant. When the antenna is not resonant, as is the case with my flag pole vertical, reactance is present in the feed point. Reactance is also expressed in ohms and as complex impedance made up of real and imaginary “j” values, but it isn’t a real resistance in the sense that power can be dissipated therein. Simply, reactance can be likened to a gate or door that stops or hinders the flow of current into a circuit. When an antenna is operated at some frequency other than the resonant frequency there will always be reactance present. Keep in mind that with any antenna, multiband or otherwise, we always have a condition on some band or frequency where the antenna is not resonant. Therefore, there will be reactance at the feed point and a matching network will be needed

For the first phase of this project I choose to use a commercially available automatic antenna tuning circuit (shown below).

Mounted ICOM Automatic ATU

When time permits I will exchange this for a home brew fixed match circuit (shown below) but capable of handling full legal limit, and band switchable.

I will discuss the design and manufacturing of this circuit at a later date. Another consideration, which should be mentioned, is that harmonics generated in the transmitter that reach the antenna can be radiated. It is true that a single-band antenna will reject harmonic energy, but *not* completely. In the case of a multiband non resonant antenna some harmonics are not rejected, simply because the antenna is designed to be resonant on all HF amateur bands

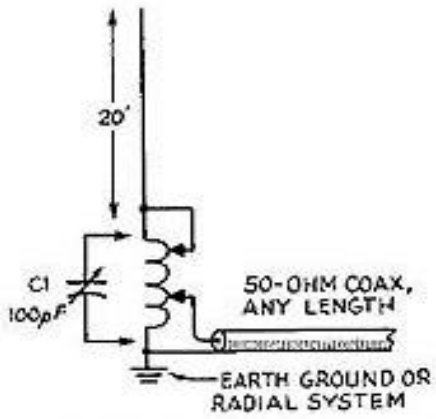


Fig. 1 – This is a typical multiband vertical antenna. A description of the system is given in the text.

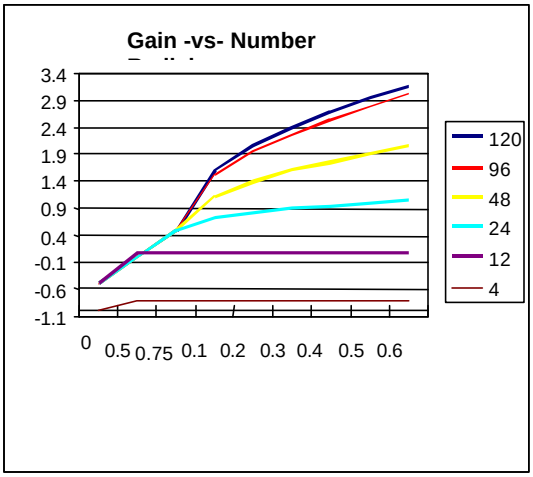
. The solution to this problem is the use of a selective circuit installed in the feed line. The antenna-matching network mentioned above is such a circuit and should provide adequate harmonic rejection.

Final construction consisted of assembling and wielding the 36' of the mast sections. I welded them to lower the radiation resistance and improve the antenna efficiency. The antenna needed to be electrically (RF) insulated from ground and this was done by inserting the lower 2 feet of the antenna into a 4 inch diameter piece of PVC pipe and filling the cavity with fiberglass and resin. I used a black rubber coupling and hose clamp to seal this from the elements (See photos above). As a final added measure the electrical connection between the antenna matching unit and the antenna was reinforced using conductive epoxy.

The performance of a vertical antenna on the ground is highly dependent upon a good ground system. Properly installed, the antenna can be a very good performer for DX and local communication. This is particularly true at higher frequencies where the dielectric property of the earth plays a major role. 120 radials of #12 wire a quarter wavelength long will increase the total radiated power by 3dB.

From my on the air checks and experimenting with different antenna lengths, surprisingly the ¼ wavelength seemed to perform just as well as the much taller 5/8 wave against the same ground.

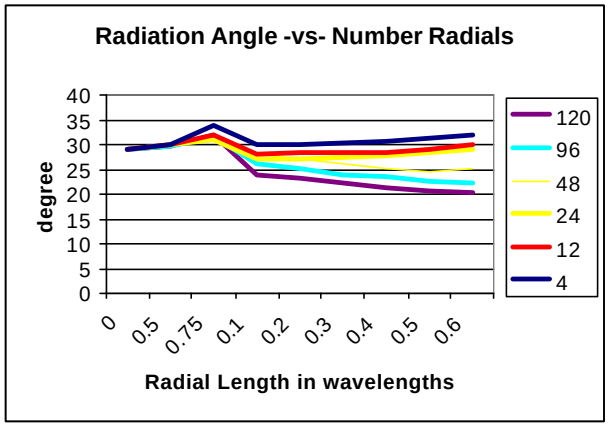
PVC Pipe Mount for Flag Pole Vertical Showing Termination of 120 radials at common ground rod



I decided to settle on a 40M ¼wavelength 34' vertical with 120 radials. I made several on the air tests with local amateurs before deciding to construct an inverted V as a test antenna. With prac-

tically all DX contacts, the vertical had a 6dB to 8dB improvement over the inverted V. The only exceptions were at about 500 to 600 miles where the V had an advantage because of its higher radiation angle. The big surprise came close in; locally the vertical gave far superior performance improvements as much as 10dB and 15dB.

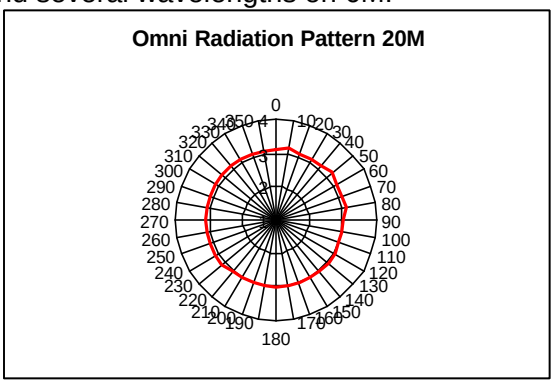
Theoretically a yagi has the advantage of gain and directivity which at first thought would be the natural choice for working DX. However DX capability of an antenna is determined by its low angle radiation. A large portion of the energy radiated should be between 5 and 25 degrees from the horizon. In order for a horizontal antenna to get a lobe below 15 degrees, the antenna must be greater than 60 feet off the ground on 20M and forget 40M and 80M unless you have a 250-foot tower!



A vertical however, possesses an image which is in phase with the ground to produce a lobe tangential to the earth's surface, making it an ideal DX antenna as seen in my on the air measurements.

Another measurement worthy of note is the antenna directivity. With all the ground elements connected the antenna lobe is nearly a perfect classical omni. When I remove some I can warp the lobe to favor one direction. In practice, this dose not focus energy in the direction of the lobe, the energy in the non-radiated directions is lost in ground losses, however, this situation offers some advantage in listening or nulling out unwanted signals, and warrants further investigation.

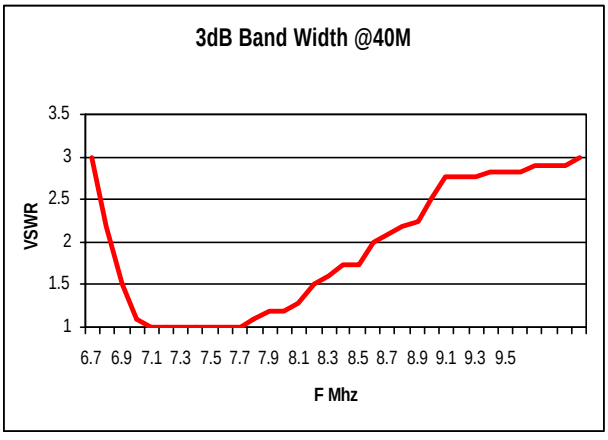
The antenna acted as a 1/6 wavelength on 160M and several wavelengths on 6M.



Using the calculations for electrically long/short antennas from the ARRL HANDBOOK. And the antenna gain factor from the number and length of the ground radials as well as measurements made at 20M. I was able to extrapolate a best guess gain of the antenna on 40M-10M I believe these to be accurate, however my guess is the ground losses are much higher on 160M and the antenna probably tends to end fire on 6M.

Freq.	dBi	dBd	l
54	4.6	3.4	2
28.4	3.1	1.9	1
24.9	2.9	1.7	
21.1	2.7	1.5	
18.1	2.5	1.3	
14.1	2.3	1.1	0.5
10.1	2.1	0.9	
7.1	1.7	0.5	0.25
3.6	-0.1	-1.3	0.125
1.8	-2.2	-3.4	0.0625

And of course, the antenna is self resonant on 40M so the construction of 2 ½inch tubing really shows when measuring the 3dB bandwidth of the antenna.



One final note. This is an ongoing project and experiment. Like most experimenters I'm only happy for a while. My next project will be to build a fixed tune full legal limit-matching network. Then to experiment with a capacitance hat made up of 6ea. 108" inch CB whips to see if I can increase efficiency on 80 and 160 Meters. Remember if the low portion of the band is not important to you, a 20M and up version need only be 16 feet high!

73's see you on the air.

Next Meeting – Elections

Per our by-laws, we must elect our slate of officers at the January business meeting. The nominating committee, comprised of Chairman Jim Albrinck (K9QLP), Jon Gilmore (KB9RHZ), Dave Barrow III (N9UNR) and Tom Ruhlmann (W9IPR) have canvassed the membership and present the following list of members for election at the January 8th, 2003 meeting.

President:	Gary Sharbuno (WI9M)
	Vic Shier (KB9UKE)
Vice President:	Mike Matthies (WJ9O)
Repeater VP:	Nels Harvey (WA9JOB)
Treasurer:	Gabe Chido (WI9GC)
	Tom Nawrot (AA9XK)
Secretary:	Carol Szudrowitz (KC9CBC)

Nominations from the floor are also welcome at the January meeting.

Automatic members of the 2003 Board of Directors are the immediate Past President Leon Rediske (K9GCF) and Repeater Trustee Ed Rate (AA9W)

Upgrade to General?

G9D09 What standing wave ratio will result from the connection of a 50 ohm feed line to a resonate antenna having a 200 ohm feed point impedance?
A. 4:1
B. 1:4
C. 2:1
D. 1:2

A If a load on a feed line is purely resistive, the SWR can be calculated by dividing the line characteristic impedance by the load resistance or vice versa whichever gives a value greater than one. 200/50= 4:1 SWR

G9D04 What is the typical cause of power being reflected back down an antenna feed line?

A. Operating an antenna at its resonate frequency
B. Using more transmitter power than the antenna can handle.
C. A difference between feed line impedance and antenna feed point impedance
D. Feeding the antenna with unbalanced feed line

C Power reflected back from the antenna returns to the transmitter which in turn reflects the power back towards the antenna. This creates a standing wave. The problem with high SWR really isn't the efficiency of the rig (power in / power out). When the transmitter and antenna impedances are not matched less power is transferred to the antenna.

Ref. ARRL Q&A Handbook

Minutes of the December 11, 2002 Ozaukee Radio Club Meeting

By Nels Harvey, WA9JOB, Secretary.

Call to order and introductions:

The meeting was called to order at 7:33 PM at the Grafton Senior Center by President Leon Rediske, K9GCF. Introduction of members and guests was made.

Events and Announcements:

Ted, KB9RLI's daughter is in the hospital. No word on her situation. Ted wasn't able to attend the meeting. Leon reminded everyone for Ted, that the Post Everything Party (P.E.P.), was to be held on February 15, 2003.

Gene, KB9VJP, reminded us about the May 3rd ORC Swapfest, and asked anyone planning to attend a swapfest to remember to take some of the flyers along.

Bob, W9LO, reminded us there was a 10 Meter CW and voice contest the coming weekend, December 14, and 15th.

Program:
Randy Grunewald, KB9KEG, explained how he uses the N1MM logging program, along with Packet Cluster data, to work contests, and DX stations. The logging program is free, supports many popular contests, QSO Parties, and PSK31 and RTTY. The logging program isn't a comprehensive, do-all program, but works very nicely with Packet Cluster data from over the air, or on the Internet.

After the break:

Stan held his usual auction, and the regular business meeting was convened.

Minutes: The minutes of the last meeting were accepted.

Treasurer's report: Dave, N9UNR moved to accept the Treasurer's report subject to audit. It was seconded by Gary, WI9M, and passed by voice vote.

Repeater Report: Nels, WA9JOB, reported that the new voter that was purchased by the Club about 2 years ago was finally installed at the 146.97 MHz. repeater main site. At this time, only the main site, Germantown, and Mee-Quon Park sites were operational. Nels said that the Port Washington site would be hooked up soon, as will the equipment for the Belgium site.
The 224.18 MHz. repeater has a receiver problem, and the power output is also low. The 440 MHz. repeater is working fine, but like the 220 MHz. repeater, sees little use.

OZARES Report: Jon, KB9RHZ, wasn't at the meeting to give a report. There is no regular OZARES meeting scheduled for December because of the holidays.

Old Business: Jim, K9QLP, reported on the Grafton Christmas Parade. All of the usual assignments were staffed, but just barely. Jim thanked helpers, Gene, KB9VJP, Carol, KB9CBC, Ed, AA9W, Gabe, WI9GC, Gary, WI9M, Bernie, AA9CI, Tom, W9IPR, Nels, WA9JOB, and non Club members, Ted, N9LLT, and Kevin, KB9ICU, who all pitched in.

Ed, AA9W, reported that he had a list of vacuum tubes that are donated to the Club. He offered them for a $1.00 donation to the Scholarship Fund, per tube. The tubes may, or may not be new, or even working.

Ed also reported that he had submitted the necessary updates to the Wisconsin Association of Repeaters, for the Club's three repeaters and associated links. There was no request for funding this year, and Ed was waiting for an answer to whether it was inadvertently omitted, or not needed.

New Business: There was no new business.

Vic, KB9UKE, wants someone else to take over the ARRL Audio News responsibility.
Leon read a Christmas card that the Club received from the Mabee's, John, Rosie and Tabitha.

Jim, K9QLP, gave the Nominating Committee report. The Committee members are Jim, K9QLP, Tom, W9IPR, Jon, KB9RHZ, and Dave, N9UNR. The election in January will be a cascading election, with separate ballots. The new President will be chosen first, and any failed presidential candidates will have an opportunity to run for a different office. The same procedure will be used for the other Offices.

So far, the slate includes for President, WI9M, and KB9UKE, VP, WJ9O, Treasurer, WI9GC and AA9XK, Secretary, KC9CBC, and Repeater VP, WA9JOB. Nominations are still open, until the election.

Adjournment: The business meeting was adjourned at 9:09 P.M.

Next Meeting: The next meeting is the official Annual Meeting and elections, and will be held on January 8, 2003, at the Grafton Senior Center.

Attendance: Nels, WA9JOB, Bernie, AA9CI, Gabe, WI9GC, Tom, W9IPR, Gene, KB9VJP, Bob, W9LO, Terry, KA9RFM, Ray, W9KHH, Don, W9VSC, Herb, WA9UVK, Paul, KB9WCC, Ed, AA9WW, Ed, AA9W, Jane, KB9SYI, Stan, WB9RQR, Leon, K9GCF, Carol, KC9CBC, Jake, KB9ZOR, Kent, N9WH, Vic, KB9UKE, Ben, K9UZ, Jim, K9QLP, Gary, W9XT, Gary, WI9M, Cindy, KA9PZG, Dave, N9UNR, Jim, KA4UPW, Fred, N9FH, Joe, AA9HR, Brian, N9LOO, Bob, N9NRK, Joe, KB9URC, Jim, N9WIU, Dean, K3GGN,Gary, N9UUR, Bob, W9RNA, Julie, KC9AGU, Tom, W9LNL, Randy, KB9KEG, and Cody Clark, visiting from Florida.

Agenda – JAN 8, 2003

1. Introduction Members & Visitors
2. Announcements, Upcoming Events, Etc.
3. Program: Ed Rate's QRP HF Antenna for the FT-817
4. Fellowship Break
5. Auction
6. Acceptance of Minutes as printed.
7. Reports: OZARES, Treasurer, Repeater
8. Old Business - Open to floor
9. New Business – Open to floor
   a. Kitchen Staff replacement
10. Nominations for Officers 2003/Election
11. Adjournment
12. Continued Fellowship Gathering..... Everyone's invited.
    John's Pizza: 1401 11th Ave., Grafton

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, January 8th, 2003

7:30 PM

The ORC News -

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: http://www.qsl.net/orc/

Volume XXII February 2003 Number 2

The Prez Sez

By Vic Shier KB9UKE

At the first Ozaukee Radio Club meeting of 2003 the members elected a new board. Many of the names stayed the same but most of the positions changed. Leon, K9GCF is now Vice President; Nels, WA9JOB is Repeater Vice President; and Gabe, WI9GC retained the position of Treasurer. Carol, KC9CBC a relatively new ham and XYL of Gene, KB9VJP filled the position of Secretary. Congratulations to the new board and we wish them success as they lead the ORC, one of Wisconsin's premier amateur radio clubs.

Thank you to Dave, N9QA for serving as last years Repeater Vice President.

I have received several good suggestions for improving the club and I encourage anyone who has additional ideas to contact me. One recurring concern is the lack of sufficient new hams joining the club. This is a well-recognized problem for amateur radio and has even been selected as the theme for Dayton this year. Perhaps those making this years pilgrimage will bring back some good ideas from the Hamvention. One simple way to get new people active in our club is to make sure that any licensed ham knows that they are welcomed when they do contact us. Having the reputation of a friendly club is very important. Don't pass up an opportunity to introduce yourself and make the visitor feel welcomed on the air. If a visitor shows up at meeting, it is important that they are introduced to several members who then take some interest in them. Encourage them to talk about themselves and they will get a positive impression of you and of the club.

It's time to mark your calendars for the upcoming ham events of 2003. The Post Everything Party is on February 15 and Ted, KB9RLI needs the reservations by February 8th. Superfest at AES is April 4th and 5th. The ORC swapfest is on May 3rd. The 52nd Hamvention in Dayton is May 16th to 18th and will focus on bringing 12-18 year olds into amateur radio. Finally, Field Day is June 28th and 29th.

Please note that the February meeting is one week early this month. It is on February 5th.

73's and remember…It's a hobby!

Shown here are our Club's new officers. From the left, Carol Ann Szudrowitz (KC9CBC - Secretary), Nels Harvey (WA9JOB - Repeater VP), Gabe Chido (WI9GC- Treasurer) and our new President Vic Shier (KB9UKE) being handed the gavel by our Past President and new VP Leon Rediske (K9GCF). Our thanks to the officers of 2002 and best wishes to those of 2003.

Post Everything Party

This year's event on February 15th at the American Legion Hall in Cedarburg promises to be great fun. Cocktails at 6 PM and dinner at 7 PM – what could be more fun? Twenty-one dollars per plate at Peter Wollner Post 228 at W57 N481 Hilbert Avenue. Rummage through your "junque" box and wrap a "treasure" for an unsuspecting friend chosen at random

Remember last years "Post Everything Party"? That's when Vic (KB9UKE) received his very first Ballitine AC millivolt meter (circa 1955) which started him "tinkering".

For reservations contact Ted Schweitzer @ 262-285-3656 or send your money to:

Ted Schweitzer (KB9RLI)
126 Lilac Lane
Belgium, WI 53004

Upcoming Events

5 Feb – Membership meeting
15th Feb – Post Everything Party
23 March – Grayslake IL
4-5 April – AES Superfest
13 April – Stoughton WI
3 May – ORC @ Circle B
12 July – South Milwaukee WI
27 –28 Sept. – Grayslake IL

THE IMPORTANCE OF RECENT EXPERIENCE

By: Bob Truscott

I burned the steaks! Yeah, I did that. Jean and I thought it would be nice to start the new year off with a steak dinner, but decided to do it at home because those guys at the restaurants never seem to get it right. So we went shopping with that in mind. We picked out a filet for her, and a New York strip for me, plus all the necessary things to go with them. For cookouts I'm the chef, so about 5:00 PM on New Year's day I fired up the grill on the back porch (ours is the only deck that is screened in and has a roof, therefore we are the only ones in the neighborhood who cook out on Jan 1). It was about 20 degrees out there, so if I really worked hard at it I might have been able to dream up an excuse for the debacle that followed. But I didn't.

When Jean took the first bite of her filet, she said " gee whiz, this steak is not very juicy, and it's a little tough". I said "OOPS, I must have cooked it too long". She said "no, you cooked it just right—Pick-n-Save must have sold us a bad piece of meat", thus protecting my fragile ego, as she has for the past 53 years. I accepted this until I took the first bite out of my NY strip–it also was very "unjuicy", as well as more than a little tough. Well, that brought on some serious soul searching–Is it realistic to think that Pick-N-Save would sell us two different cuts of meat with the same problem? No way! So the only reasonable explanation I could come up with is that I goofed it up, even though I had been a pretty good chef all of last summer. I simply forgot how, and may well have a couple more crop failures before I re-learn how to do it.

The moral of this story? You may have done a pretty good job last Field Day with your 40 or 50 contacts per hour, or whatever your personal rate was, but unless you work at it a little between FDs, you're not likely to improve. (And you might even regress.) So I urge you, take advantage of the contest season that we are now in, and jump into a few contests and work some people. If you don't "re-learn" your contesting skills you just might burn your steak on FD, and if you do, the

FD chairman may burn YOU at the stake. (In effigy, that is.)

Reported Scores:
North American CW QSO Party:
N9FH–913 QSO's, 250 Mults.
W9LO-605 QSO's, 143 Mults.
North American SSB QSO Party:
W9LO-253 QSO's, 106 Mults.

There were no further scores reported, but with the high level of interest in VHF/UHF in this club, I expected a bunch of reports from the January VHF Sweepstakes Contest. Send them in—we'll put them in next month's column. 262-629-9685 or tbsi@hnet.net. (How come the only entry in the NA SSB Contest is a CW guy who doesn't even know the proper phonetics? You phone people should be ashamed of yourselves.)

Coming up in February:
Feb. 9—North American Sprint-CW. Rules in QST, Feb 2003, page103.
Feb. 15-16—ARRL International DX Contest-CW. Rules in QST, Dec. 2002, page95.
Feb. 22-24—CQ WW 160 Meter SSB Contest. Rules in QST, Jan 2003, page 97.
Feb. 28-Mar 2–ARRL International DX Contest. Rules in QST, Dec. 2002, page 95.

Have fun contesting.

For Sale, Trade or ?

Microphones – New and unused – YAESU MH-31B8 AND ICOM HM-103 hand microphones - $25 each – Contact Tom Ruhlmann W9IPR @ 377-6945

Wanted

Three associate editors – one each for the "Projects" column, "Club Static" column and the "equipment and software review" column. Contact Tom (W9IPR).

Gabe (WI9GC) was looking for a tower.

On the Air at Full Power

Again, our thanks to Nels Harvey (WA9JOB) and Dick Scarvaci (K9CAN) for keeping our repeaters on the air. Saturday morning Nels and Dick installed new finals in the "91" repeater bringing it back to full power of 150 watts.

Dick (K9CAN) is shown here making final adjustments after installing the final amplifier new tubes. Many thanks from the morning, afternoon and evening mobilers.

MFJ 890 Beacon Monitor

By Nels Harvey, WA9JOB

I guess you all know that I've proclaimed myself as the World's first No-code Extra! I don't have any desire to chase DX, work contests, or participate in the various net activity on the low bands. I don't know why, but I went out and bought one of those MFJ Beacon Monitors!

The beacon system gives hams the worldwide an opportunity to tell what bands, from Twenty Meters to Ten Meters, are open, and to where. It is necessary to copy the CW, then listen for reception of a series of four tones, from 1000 Watts to 1 Watt.

I guess it was a fascination with the red and green blinking LED's that caused me to purchase the Beacon Monitor. The mystique of just how it

worked was another reason. There are no connections to your radio, or antenna system. So, just how does it work?

The unit is designed to sync' with WWVB. Once it is sync'd, it's internal programming determines which radio is supposed to be transmitting, based on the time, and lights the appropriate LED. A switch enables the operator to select the band to listen to, then using the display and the operator's own transceiver, determine which beacon transmitter is producing the tones.

This really is a good way to determine if a band is open, and to where. It is a good way to determine how good the antenna in use is working, and where to point it if it is rotatable. All this is available without the MFJ unit, of course! It is a neat conversation piece, and a real boost to those of us who aren't as proficient with the CW as some others are.

This is something you might be interested in if you share a fascination with blinking lights, as I do!

Dues are Due

It's that time of year again. Where else could you "hang out" with such a great bunch of guys and gals for only $15 a year? You are needed for your involvement and your $15 are needed to offset administrative and repeater maintenance costs of the club. If you have not already "paid up" just complete the form at the end of the newsletter, enclose a check for $15 and mail it to:

Gabe (WI9GC) Chido

W58 N985 Essex Drive

Cedarburg WI.

Tips,Tails & Tools

One of the first things learned in flight training is to turn off the electronics prior to engine shut down and to start the engine prior to turning on the electronics. The reason is that due to the inductance (L) of the wiring there can be large voltage spikes (dv = L di/dt) generated due to large rapid load changes (di/dt) occurring in the system. These voltage spikes (dv) could potentially damage the electronics so the practice is to have the electronics "off" when they occur. This would seem to be a prudent practice with our mobile rigs as well.

Another Great Project

Ed Rate demonstrates the 10-80 Mtr. portable vertical he designed and built from Menards parts and which collapses to 3' and fits in his suitcase. No mention was made of the airport security personnel response to his handiwork.

Next Meeting is the first Wednesday – that is Feb. 5th, at the Grafton Senior Center.

Just Another Shack

By: Todd Sprinkmann (KC9BQA)

This month's shack visit is with Mike Greenfield - N9JIY. Mike has been a ham since 1989. His original callsign was KB9DLB, and he upgraded in 1990. Mike has been a member of ORC since 1989.

Growing up in Iowa in the 1950's, Mike built crystal sets and strung all sorts of wire antennas between farm buildings. He took an extended break from radio as he and his wife raised 5 children. When he moved out into the Jackson area in the late 1980's, he was guided toward getting on the air by Ray - W9KHH, and Mike - WJ9O.

Since getting his ticket, Mike has evolved into almost exclusively a CW operator. He has tried packet, RTTY, and running 100 watts but he keeps turning down the power and is delighted with the results. Mike usually runs about 10-25 watts.

When I visited Mike in the early evening, he was checking into The Wisconsin Novice Net on 3722 kHz. The WNN starts at 0000Z, or 6pm, local time. He explained that the code speed here runs about 10-12 wpm. A variety of signals were easily readable. Even more so if you know code, hi hi.

Here is Mike Greenfield (N9JIY) operating CW at the keyboard – hardly a "straight" key

As we continued to chat, Mike tuned in the Wisconsin Slow Speed Net. This starts at 0030Z and is on 3645 kHz. At 0100Z is the Wisconsin Intrastate Net, which is on 3662 kHz. These nets run 365 days a year and they are a good place to listen to traffic being passed in CW.

Mike's shack is the essence of simplicity. His motto is definitely "less is more". Or at least more enjoyable for him. Mike's transceiver is a very compact SGC SG-2020, which operates on 160-10 M. The SGC is hooked up to a paddle. A straight key is also nearby but Mike prefers the paddle. There is no microphone to be found. Mike's receiver is hooked up to a 135' end-fed Zepp about 15' above ground.

Mike proudly showed me a few goodies he has built. He has a nifty matched pair of 80-M transceivers that operate off of 9-volt batteries and put out 300 mw on a fixed frequency. He says this is enough power to work the Midwest with a quiet band. The remarkable part about these transceivers was that when you put both of them together, they are literally the size of a deck of cards. Talk about elegant simplicity!

Mike is equally proud to report that he has Elmer two young hams into the hobby. Mike is a proud grandfather of 13, and his grandson Eric recently passed his no-code tech exam as a 13 year-old. In addition, Mike also elmered Eric's cousin, Josh. Eric is KC9DBX and Josh is KC9COZ. Keep an ear out for them on 2 meters.

Next month, we will look in greater detail at Mike's CW activities. He is an avid mobile CW operator and he has some nifty QSL cards from all corners of the globe. He also is a proud member of FISTS, which is a worldwide club devoted to CW operation. With Mike's enthusiasm for amateur radio and the CW mode, there's just too much to fit into one article.

Club Static

Ron Yokes (W9BCK) just got a new knee and made it to the meeting. Welcome back Ron.

Angie (KC9BTF) and Brian (N9LOO) Skrentny are the proud parents of a new 8 pound baby YL and all are doing well – Congratulations from all of us in the club.

Free Programs That Make Your Life Easier

By Stan Kaplan, WB9RQR

There are some great freeware programs out there, written by folks who just do it for the love of it. For sure, some free programs are not so good – poorly written or they do stuff that really doesn't need to be done, or things that can easily be done with the operating system. But now and again someone writes one that really fills a need, and they write it well. Let me tell you about two I discovered recently. One I discovered just by surfing the freeware sites, the other was a tip from my oldest son Wayne, a Professor of Materials Engineering.

The tip Wayne gave me concerns probably the best graphics viewer available, called InfanView. You can download it (free) from infanview.tuwien.ad.at . The downloadable file is only 808 kb in size, so it won'' take long to get it. Download the .exe file to your desktop or other folder, and remember where it is. Then make a copy on a floppy for safekeeping. Double-click the .exe file to install it. It will want to know where you would like to install it, and you can certainly accept the suggestion it makes. Since I put all my application files on my D: drive, I selected D;/InfanView. Next it wants to know whether you want its icon on the Start menu, on the desktop, or both or neither. I wanted it on the desktop only. The next thing it will want to know is what kinds of files you would like associated with InfanView. This function, known as "file associations", simply means if you double-click a .gif file, do you want InfanView to be the program that opens it? I selected all from the menu it provided, knowing that I could change that later in the InfanView program if I needed to. That's it! You now have a bright new icon on your desktop, on your Start menu (or both or neither). Now delete the original .exe file, since you have a backup on a floppy disk. You can start the InfanView program with a click or two on the icon, then ask it to open nearly any type of picture file available, and it will do so with good clarity. You can select a full screen view, if you wish. You can even do some editing of the image – sharpen, rotate, swap colors, convert to gray scale and so on. If you have associated .gif files with InfanView during installation or later, you don't even need to start the program. Just click the .gif file, and InfanView will start automatically. Very nice, indeed. The latest version at this writing is 3.75. I recommend it.

The other free file is PrintDeskTop, 772 kb, available from www.printdesktop.com, version 1.05.
This is a real time and paper saver. Have you ever been surfing and found a document with information you needed, and wanted to just print the single page shown on the screen rather than the whole document? Or, have you ever wanted to just print your desktop as a record of the icons you have now? Have you ever wanted to print a pop-up error message that appeared on the screen? This will let you do all of those. Again, download the file to your desktop, make a copy on a floppy, then install it and erase the desktop file when the installation is complete. Now, you can print whatever is on the screen on a single sheet of paper. Just click the START button in the lower left corner, select Print DeskTop, and the program will send whatever is there to the printer. You can be surfing the web, or even in a program. For example, if you are in Microsoft Word, the entire screen will be printed exactly as it shows in the program. Well worth the effort of downloading and installing it: highly recommended. By the way, you can also install shortcut keys with this program, such as Ctrl-Alt-P, or even the Print Screen key, which will also send the screen to the printer. Then you don't need to click START, then PrintDeskTop. Your preference. It is interesting to note that we used to be able to print the screen from DOS by just tapping the Print Screen Button on the keyboard. For some reason, Microsoft took this highly useful

function of our Windows, much to the Chagrin of many of us. PrintDeskTop puts it back in. Hurrah!

Have you discovered other free programs that you really love? Tell me about them. I will try them out and , if they turn out to be of wide interest, I will publish them here. Happy computing!

Upgrade to General?

The following sample questions were copied from the ARRL's General Q&A manual available at AES.

GOAO5 RF radiation in which of the following frequency ranges has the most effect on the human eyes?

A. The 3.5 MHz range
B. The 2 MHz range
C. The 50 MHz range
D. The 1270 MHz range

D Your head and structures such as your eyes will absorb energy in the 1270 MHz range and higher frequencies more readily than in the HF or UHF range.

GOAO7 At what frequencies does the human body absorb RF energy at a maximum rate?

A. The high-frequency (3 – 30 MHz) range
B. The very-high –frequency (30 – 300 MHz) range
C. The ultra-high-frequency (300 MHz to 3 GHz) range
D. The super-high-frequency (3 GHz to 30 GHz) range

B The human body absorbs RF energy at a maximum rate in the very high-frequency range between 30 and 300 MHz range. The lowest H-field exposure levels occur at 100 to 300 MHz.)

Minutes - the January 8th, 2003 Ozaukee Radio Club

By Nels Harvey, WA9JOB, Secretary.

Call to order and introductions:

The meeting was called to order at 7:30 PM at the Grafton Senior Center by President Leon Rediske, K9GCF. Introduction of members and guests was made.

Events and Announcements:

Ted, KB9RLI, reminded everyone that Post Everything Party (P.E.P.), was to be held on February 15, 2003. He needs the sign-ups by February 8th at the latest.

Gene, KB9VJP, reminded us about the May 3rd ORC Swapfest, and asked for the volunteers to contact him, so he knows who he can count on.

Brian (N9LOO) and Angie (KC9BTF) Skrentny, are the proud parents of an 8 pound baby girl! Mom and daughter are doing fine. We weren't sure about dad!

Program:

Ed Rate, AA9W, presented a homebrew antenna that he built to work with his Yaesu FT 817 portable transceiver. Consisting of a PVC base, several aluminum rods, appropriate coils for the different bands, a couple of ground radials and an extendible whip, Ed showed us a portable antenna, light in weight, but sturdy, that can easily be carried around, and provide efficiency to send the 817's mighty 5 Watts into the ether! The only thing untested is how the antenna will make it through airport security!

After the break:

Stan held his usual auction, and the regular business meeting was convened.

Minutes: The minutes of the last meeting were accepted.

Treasurer's report: Stan, WB9RQR moved, and Ed, AA9W seconded a motion to accept the Treasurers report, and the motion passed by voice vote.

Repeater Report Nels, WA9JOB, reported the 146.97 MHz. repeater was still on low power, waiting our resident expert, Dick, K9CAN's, skills to repair the amplifier. The 224.18 repeater has been taken off, and is also being repaired by Dick. The 443.75 MHz. repeater is still there, experiencing very little use. There is a problem with the Autopatch on the 146.97 MHz. repeater that needs to be looked into.

OZARES Report: Jon, KB9RHZ, had no report except to remind all the next OZARES meeting is scheduled for Thursday, January 23, 2003.

Old Business: There was no old business

New Business: There was no new business. Leon then expressed a need for someone to take over the Kitchen duties on meeting nights. Julia, KB9WBQ, volunteered, and received a nice applause.

Leon then turned the meeting over to the Nominating Committee. Jim, K9QLP, He explained The election will be a cascading election, with separate ballots. The new President will be chosen first, and any failed presidential candidates will have an opportunity to run for a different office. The same procedure will be used for the other Offices. The slate includes for President, WI9M, and KB9UKE, VP, WJ9O, Treasurer, WI9GC and AA9XK, Secretary, KC9CBC, and Repeater VP, WA9JOB. Nominations for each position were open, until that position was voted on.

Vic, KB9UKE was elected President over Gary, WI9M.
Nominations for Vice President added Leon, K9GCF, to the slate with Mike, WJ9O. Leon was then elected Vice President.
Nels, WA9JOB, was the only candidate for Repeater Vice President, and was elected by acclaim.
Carol, KC9CBC, was the only candidate for Secretary, and also was elected by acclaim.
Gabe, WI9GC was elected Treasurer over Tom, AA9XK.

Gary, WI9M moved, and Leon, K9GCF, seconded a motion to destroy the ballots. The motion passed by voice vote.

Adjournment: The business meeting was adjourned at 9:19 P.M.

Next Meeting: The next meeting will be held on February 5, 2003, at the Grafton Senior Center. This is one week earlier due to a facilities conflict.

Attendance: Nels, WA9JOB, Bernie, AA9CI, Gabe, WI9GC, Tom, W9IPR, Gene, KB9VJP, Bob, W9LO, Terry, KA9RFM, Ray, W9KHH, Don, W9VSC, Paul, KB9WCC, Ed, AA9WW, Ed, AA9W, Jane, KB9SYI, Stan, WB9RQR, Leon, K9GCF, Carol, KC9CBC, Jake, KB9ZOR, Kent, N9WH, Vic, KB9UKE, Ben, K9UZ, Jim, K9QLP, Gary, W9XT, Gary, WI9M, Joe, AA9HR, Bob, N9NRK, Joe, KB9URC, Jim, N9WIU, Gary, N9UUR, Tom, W9LNL, Ernie, K9LO, Jon, KB9RHZ, Bob, W5CFB, Peter, KB9URH, Ed, AA9GT, John, W9FAD, Ted, KB9RLI, Julia, KB9WBQ, Tom, AA9XK, Keith, KY9P, John, WA9KNY, Wil, KB9HHR, Jeananne, N9VSV, Ron, W9BCK, and Todd, who isn't licensed yet.

Secretary's note: With this evening's elections, I no longer will be doing these minutes. The election process has made changes in our leadership. While reflecting on the dynamics of this great club, I also want to reflect on some who weren't there. I didn't see Charlie. Fred stopped by but had to leave shortly after. Skip was missed, as was Herb. Bill didn't make it either. Kyle and John have moved away. Mike hasn't been there for some time, nor has Wally. The likes of Matt, Jim, Dick, Harold, Gregg, Sky, Pat, Ray, Jim, Bob, Hal, Gerry, Sandy, Jeff, Dan, were missed as well. Some, like Gordon, won't ever return. This dynamic club is slated to move on, with new officers. Our leadership is being taken over with a mix of fairly new hams, and a couple of old ones. I have seen many changes over the last thirty years. Remember, this is YOUR CLUB! It is what you make it! I am very confident that this Ozaukee Radio Club has the vitality to take us all well into the 21st Century.

oooOOOooo
73, Nels....

Ozaukee Radio Club, Inc

2003 Membership Application /Renewal Form

Call Sign _____ **Age** _____ **Year first licensed** _____

ÿ Novice ÿ No-Code Tech ÿ Tech Plus ÿ General ÿ Advanced ÿ Extra

Name: _____ **ARRL Member?** ÿ Yes ÿ No

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone No. (day) _____ **(evening)** _____ **Speed #** ____

E-Mail_____ **(if you want to be listed on ORC Web page)**

Areas of interest:

ÿ HF ÿ UHF-VHF ÿConstruction Projects ÿAntenna ÿComputers ÿSatillites ÿ APRS
ÿ CW ÿ SSB ÿ AM ÿ FM ÿ Digital Modes ÿPortable ÿMobil ÿFixed ÿ Fox Hunt
ÿ Ground Systems ÿ Software ÿ Batteries ÿ QRP ÿ Contesting ÿ ARES ÿ
Community Service ÿ Frequency Co-ordination ÿ Collections ÿ WAS & DXCC ÿ
Boat Anchors ÿ Linears ÿ Newsletter ÿ "Elmer'ing" ÿ Presenting Programs
ÿPhotography ÿ Club Magement ÿ Community Service ÿ Test Equipment
ÿ Equipment Repair & Restoration ÿ Surfing the net

ÿ **Full Membership (supports club and repeaters) $15.00 OR**

ÿ **Club Membership (supports club only) $7.00**

The newsletter is available at http://www.qsl.net/orc/**.**

Do you also require a hard copy through the snail mail? ÿ Yes ÿ No

Spouce's Name:_____**& call sign:** _____

Comments:_____
_____
_____

AGENDA

February 5, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Gabe (WI9GC).
9. Repeater report – Nels Harvey (KA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, Feb. 5th

7:30 PM

The ORC News

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: http://www.qsl.net/orc/

Volume XXII | March 2003 | Number 3

The Prez Sez

By Vic Shier KB9UKE

The Post Everything Party proved to be a festive evening with delicious food. The party gives our spouses an opportunity to meet club members whose voices they often hear on the radio but seldom see their faces. The Ham of the Year and the Turkey of the Year will be announced at the next club meeting. Thanks to Ted, KB9RLI for chairing this event. By the way, someone mistakenly left his or her present at the hall. Don't worry; I'll bring it to the next club meeting so the rightful owner can claim it.

Gary Sutcliffe, W9XT gave a professional presentation on contesting at the last meeting getting the entire club involved in a contest for demonstration. Stan, WB9RQR gathered the most points even making a contact that originated in Chile. Gary writes a regular column for the National Contest Journal titled Contest Tips, Tricks and Techniques. Look for him there

What is one of the best ways to meet some ham friends you haven't seen for a while? Spend some time at the ORC booth during Superfest at AES. It will be on the first weekend in April. The ORC booth will again be adjoining the OZARES booth, which makes scheduling easier. This is an important event giving us the opportunity to invite many hams to our swapfest and to join our club. We will need people on April 4th from 2 P.M. to 7 P.M. and on April 5th from 9 A.M. to 3 P.M. Please let me know what times you can help.

The ORC may be sponsoring a contact with the International Space Station (ISS). The space station has a ham shack on board and NASA frequently schedules 2-meter contacts with kids from schools around the world. You may have heard about these contacts on the ARRL Audio News. The students are given an opportunity to ask the astronauts questions about life on the ISS. Ed Eckhardt the superintendent of the Grafton School District and Lee Wiskirshen the principle of the middle school believe that contacting the ISS via ham radio would be an exciting project for their students and Gary, N9UUR has agreed to be the coordinating amateur radio operator. What a great way to get some publicity for the club, possibly pick up some new members and have a lot of fun too. You can learn more about contacting the ISS by searching for Amateur Radio on the International Space Station (ARISS) on the web. The ORC may be the first club in over 10 years to help some kids from Wisconsin talk to an astronaut! Contact Gary if you want to help on this exciting project.

73's and remember…It's a hobby!

Upcoming Events

9 March – Wisconsin QSO Party
12 March – ORC Meeting
23 March – Grayslake IL
27 March – ARES Meeting
4-5 April – AES Superfest
13 April – Stoughton WI
3 May – ORC @ Circle B
12 July – South Milwaukee WI
27 –28 Sept. – Grayslake IL

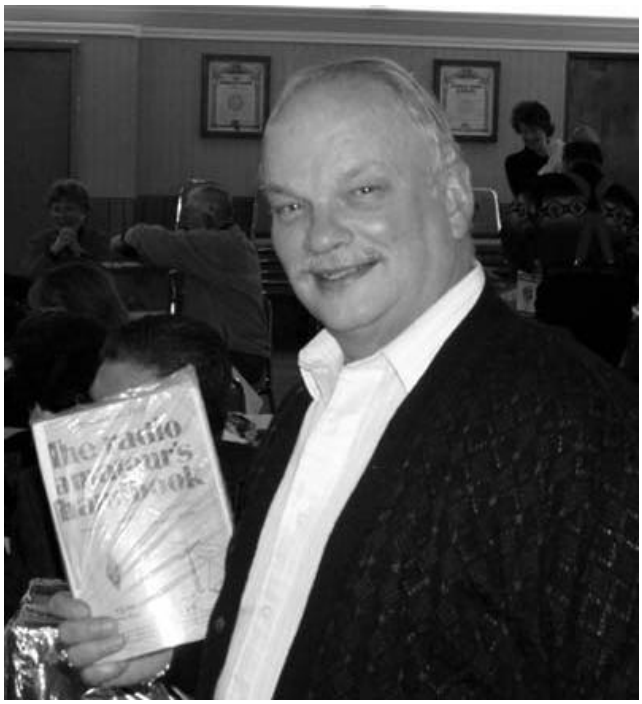
Post Everything Party

As it has been in past years, it was another great Post Everything Party with a great meal and much socializing. Many thanks to the party Chairman Ted Schweitzer (KB9RLI).

President Vic (KB9UKE) headed the program with an entertaining monologue on how spouses might

cope with the various ideosynchrocies of their "Ham" including their reclusive nature during contests and their annual desire to make the pilgrimage to Dayton.

This was followed by the "Computer Nut" award being given to Jeff Kane (KB9QQE) for the terrific Field Day Logging software he developed and the Viagra award to Tom Ruhlmann (W9IPR) for having erected so many antenna and keeping them up.



Gary (WI9M) shows the 1959 ARRL Handbook he received as a "gift" at the party.

Tom Nawrot (AA9XK) displays his "gift" of a vintage portable TV as the group becomes interested in Dr. Stan's (WBRQR) "gift" of vintage computer parts.

ARES Portable Repeater

By Nels Harvey WA9JOB

Maybe you missed it at last year's Field Day. Along with the generators, cables, computers, cook tent stuff, and antennas, it sat there, a collection of PVC pipes, silvery tanks, a hand truck, and a radio. That, my friends, was the portable, 147.33 repeater! Where did this come from? Whose is it? What is its purpose? Why did it get assembled? Well, you're just about to find out!

Several years ago, when the Ozaukee County Justice Center was being built, provisions were made for the radios for the Communications Center and antennas for the 147.33 MHz. and 443.525 MHz. repeaters. Funds were budgeted and two Uniden repeaters were purchased. The antennas were installed, and the repeaters were placed in service.

When the County developed the 800 MHz. County Trunking Radio System later, the contractor donated two new GE repeaters to Emergency Government. These were placed in service, and the Uniden repeaters were placed on a shelf in the back room. It was decided to try to build up a small, portable repeater for emergency incidents with these repeaters. All the parts were there, but some modifications were necessary.

Since I had been the person to interface the radios with the S-com MRC-100 controller, I volunteered to restore the radio to it's own built-in repeater function. The 147.33 MHz. Uniden repeater had a power output problem, but I was able to repair the damage, and set the output for a conservative 10 Watts.

OZARES 147.33 portable repeater at Field Day. Access it with your PL turned off to prevent enabling the "33" repeater at the Justice Center

Gregg, W9DHI, tuned up the spare set of duplexer cavities that were at the Emergency Communications Center, and Stan, WB9RQR, built the antenna, using PVC piping, along with a protective cage for the cavities. Viola, OZARES now has a portable repeater, capable of 12V. Battery operation, or 120V. Power.

This repeater is set up on 147.33 MHz. just like the coordinated repeater at the ECC. This portable repeater does not need P.L. tone to access it, and can be accessed without bringing up the ECC repeater if the tone encode is turned off on the user's radios. There is no automatic ID'er, so proper station identification by each user is accomplished by the ID'ing of their own transmitter.

This small repeater can be deployed at any incident that needs enhanced coverage, virtually anywhere! It is not coordinated, but in the case of emergency communications, such operation would take precedence anyhow. If the users don't turn off their transmit P.L. (encode), the ECC repeater will respond, if within range. Remember, this is an OZARES tool. Now you know what to expect if you assist at an incident and this repeater is employed.

CONTESTING AND HI-FI IT'S A MATTER OF OPINION, BUT -------!

By Bob Truscott W9LO

Yes, it IS a matter of opinion, and because I have this platform from which to express an opinion, I am going to pass along the opinion of someone whose opinion I regard highly, namely my own. (I bet you thought I was going to say "BCK's", didn't you?–No way! He is sometimes one of the perpetrators, depending upon which of his many rigs he happens to be using when he perpetrates.) The subject is speech processing. Do whatever you want to in the receive mode, but don't infect your transmitter with it. The goal of every phone operator should be to make his audio as readable as possible. In other words, make it sound as much like a commercial FM broadcast station as the rules allow. A "Hi-Fi" signal is much easier to copy, even in a crowd, than a louder processed signal. (In my opinion.) Improperly adjusted speech processing is just like deliberately introducing a chirp into an otherwise clean CW signal—it makes it stand out from the crowd, but harder to copy.

This little ranting was brought on by a recent SSB QSO on 3860 KC, and it relates to contesting in that most contesters want to have their transmissions understood by the guy they are trying to work. When I joined the QSO, I tuned in W9BCK (I normally use him as a reference when I set my own frequency), and tried to make him sound as natural as possible. This then usually makes everyone else in the group sound OK. But on this particular day, no setting of my tuning knob would do the job–there was a noticeable lack of low frequencies in his signal (in my opinion). So I

had to compromise, and set the knob as best I could. This resulted in one of the stations in the group telling me I was 1,000 cycles off. (Actually, it was about 140 cycles relative to his particular frequency----he had his decimal point misplaced.) Obviously, what I had done was tune to a slightly different frequency than the other stations in an effort to make Ron sound normal, but instead it made me sound abnormal to the group.

Now, this was a minor incident–it happens every day on every band, and was hardly worth a rant. However, it touched on a pet peeve of mine, namely speech processing, so I took a look around 75 meters to see how other groups sounded. The results were mixed. Most groups sounded good, some were excellent, and then there was the occasional individual who sounded louder than the others, but had about 50% distortion on his signal. This guy, I figured, was probably a DX hound who had pumped about 10 pounds of speech processing into his signal in an effort to raise the average level of his audio, and make him sound louder. (That's why TV commercials are louder than program segments, you know.) And he probably also had a so called "DX" mike, which according to the manufacturers, shapes the audio response in such a way as to eliminate all the frequencies that they deem unnecessary for communication. They claim that this adds "punch" to a signal. Perhaps it does, but what good is "punch" if the price is distortion? Get yourself a mike with a flat frequency response, and turn the speech processor off in the transmitter. Your audio will be more intelligible, and you will work more people. (In my opinion.) And in the case of 3860 KC, we would all be on the same frequency.

Having said these things, I must confess that I don't know what the frequency response of my own hand mike is, because I haven't been able to find any technical literature on it. I hope someone will tell me if I am one of the unknowing perpetrators that I have ranted about. Or is bad audio just like bad breath—even your best friend won't tell you?

Upcoming in March:

Mar. 1-2--ARRL International DX Contest-Phone. Rules in Dec. QST, page 95.

Mar. 9—North American RTTY Sprint---0000Z-0400Z. That's 6-10 PM CST on Mar 8. Rules in Mar. QST, page 99.

Mar. 9 – Wisconsin QSO Party – QST, page 99
Have fun contesting.

"Master Contester"

Gary (W9XT) writes a column in the ARRL NCJ (National Contest Journal) and at our February meeting he gave a number of pointers related to effective contesting and pointed out several contesting resources. A really informative and effective program.

The attendees were all given a log page and told to get the call sign of everyone in the room.

It was interesting to see the total count of those who just sat at their position (calling CQ) compared to those who would S&P (seek and pounce) and those who employed both practices

March 12 Meeting Program

Mr. Nels Harvey (WA9JOB) will do a demonstration with two pieces of equipment he owns:

1. The MFJ "Beacon Locator" or "Propagation Locator" if you prefer to call it that. This is rapidly becoming a very popular device in HF ham-shacks.

2. The Clear Speech Speaker.which has an automatic & active hetrodyne filter & Digital Speech Processing. Come and Hear what you are missing!!

Leon, K9GCF, Program Chairman

Tips,Tails & Tools

Would you like to like to log your contacts while operating mobile but find it too distracting to hold the note pad, find a pencil, make notes and talk all at the same time? An easy solution is to go to a pilot's shop and buy a "knee board".

It is simply a small clipboard, to hold a steno pad, with leg strap having Velcro tape ends so the board can be secured to the thigh. Works great. You can clip your pin on the board and take notes as the opportunity arises at stoplights etc. Better yet, the idea is pretty simple, make your own.

For Sale, Trade or ?

Microphones – New and unused – YAESU MH-31B8 AND ICOM HM-103 hand microphones - $25 each – Contact Tom Ruhlmann W9IPR @ 377-6945

Need some solid copper wire or transformers? Contact Herb (WA9UVK) @ 377-3307

Wanted

B&W Air Inductor 80 TVH (500 watt plug in coil)

Three associate editors – one each for the "Projects" column, "Club Static" column and the "equipment and software review" column. Contact Tom (W9IPR).

Gabe (WI9GC) was looking for a tower.

Just Another Shack

By Todd Sprinkmann KC9BQA

This month's Just Another Shack visit features Ron Yokes - W9BCK. Ron is a founding member of ORC. Born in 1926, Ron was raised in Chicago. He enjoyed fiddling around with portable crystal sets as a youngster. He was a Navy radio operator during WW II in both the Atlantic and Pacific. Maintaining radio silence, he never sent a single dit or dah. Instead, he copied 5-letter groups from various global installations, 4 hours on and 4 hours off. Back from the war in 1946, Ron met a ham at the University of Illinois, and got his own ticket. Ron retains his original call to this day.

Ron is a retired broadcast technician. For 40-some years, he worked in an amazing variety of television related broadcast and production capacities. An interesting article or two could be written about each of the various jobs Ron has held. One radio-related venture of note is that Ron and another fellow, working for RCA, put into use the first 42 mc (Ron urged me to say mc and kc!) FM mobile police radio system in the US -- in Iowa, in 1951. He worked with Bob Truscott - W9LO, for several years at Channel 6, in the mid-1950's. (In fact, I learned from Ron that a precur-

sor of the ORC was a Channel 6 club of ham operators.)

Because Ron was moving all across the country between 1949 and 1976 (he mentioned that he and XYL bought and sold 14 different homes), he had little time for ham radio. Once he was permanently back in Wisconsin, he got more active in the hobby. Ron has done packet, VHF, a very small amount of DX'ing and he has evolved into an SSB phone operator. His "hangout" is on 75M -- specifically on 3860 "kc". Ron says 3860 is where like-minded hams called the "Ticaro's" hang out. Anybody who can decipher what Ticaro stands for shall receive a year's subscription to the ORC newsletter, free! (3860 guys not eligible).

Ron (W9BCK) is shown here at his Number 1 (of 5) operating locations. To his back is a workbench with a complete array of vintage test equipment.

Ron's main rig is the Kenwood TS-850 S/AT (automatic antenna tuner) with the DSP-100 option (digital signal processing). The TS-850 drives a Dentron MLA-2500 legal limit amplifier whose output is switched to the input of either a Viking Johnson kW link-coupled Antenna Matchbox or a Dentron AT-3000 Tuner. These respective outputs are "knife" switched to the input (shack) end of 120' feed of openwire 450 Ohm ladder transmission line terminating at the dual-dipole feedpoint of a 75/20M antenna approximately 35' above ground supported by trees. A Mosley CL-33 20/15/10M beam mounted on a rotatable cylindrical tower is available for distance communication. Switchable dummy load, SWR and power metering are also system integrated.

Ron enjoys the hobby very much nowadays. He is never far from a rig, and he prides himself on having the kind of setup that he refers to as his "permanent" Field Day setup. He has been married for 54 years "to the same woman" and they have 7 children. I asked Ron if any of his kids are hams and he said, "No, thank God. I don't have to share my toys with them."

Ron is also the current Chapter 55 (Wisconsin) secretary for the QCWA. Ron was kind enough to explain to a ham radio newcomer like me what the QCWA stands for. It stands for Quarter Century Wireless Association. Membership is open to any radio amateur who had a license at least 25 years ago. Even if your licensed lapsed in the interim, you are still eligible if you had a license at least 25 years ago. I only have 24 years to go!

Here Ron is in the rag-chewing mode from his Number 3 operating position at the easy chair.

We Energies AWARD TO ARES/RACES GROUPS

From the Badger State Smoke Signals

We Energies, a Wisconsin gas and electric utility, has given ARES/RACES organizations in 17 Wisconsin counties a total of $39,000 to enhance their emergency communication capabilities. A ceremonial check presentation was held January 21.

"We are excited about this timely award, which will bring needed equipment to several of our counties," said Wisconsin Section Emergency

Coordinator Dr. Stan Kaplan, WB9RQR, who also serves as RACES Chief Radio Officer in the Badger State. "We thank We Energies for their forethought and generosity."
Kaplan said the grant would help to build an effective statewide packet network for use during emergencies. He also said he hopes the idea will "snowball" and inspire other companies to follow suit.
(Extracted from the Badger State Smoke Signals at www.bsss.org)

Club Static

You just can't start them too young according to Kevin as he showed up for breakfast with the Early Group at Prime Ministers in Thiensville.

Kevin (K9VIN) and daughter Abby make it to breakfast with the Early Breakfast Group at Prime Ministers in Thiensville

No. 105 - The Numbers Game, Revisited

By Stan Kaplan, WB9RQR

Back in May 1998 (#54, The Numbers Game), the column covered the disparity in reporting numbers by hard drive manufacturers who were trying to make their products look good. For example, if they made a drive that held exactly 40,000,000 bytes after formatting, they would call it a 40 Mb drive, when in fact it needed to hold 41,943,040 bytes to be called that. This stems from the fact that a kilobyte is 1,024 bytes, not 1,000, because in the computer world, binary notation is the standard, and 210 = 1,024.
Well, in an effort to clear up terminology, an international committee (the International Electrochemical Commission) set a new series of standard abbreviations and meanings. They actually did this way back at the end of 1998, and the standards should have become uniformly used and widespread by now. Change is slow; and they have not. Nevertheless, you will see these standards used more and more as time goes on, and they do help clear up the mess that existed before it was clear whether a notation was in decimal or binary.
Basically, the scheme is to add a lowercase letter "i" to any prefix to indicate it is in binary notation, while absence of the letter "i" indicates the old decimal system we are all familiar with. Thus, 1K = 1,000 (just like resistors), while 1Ki = 1,024 bytes. The new binary term is called kibibyte, while the old decimal is kilobyte. Look at the table below to see how this plays out.

NAME	ABBREVIATION	VALUE
Kilo	K	1,000
Kibi	Ki	1,024
Mega	M	1,000,000
Mebi	Mi	1,048,576
Giga	G	1,000,000,000
Gibi	Gi	1,073,741,824
Tera	T	1,000,000,000,000
Tebi	Ti	1,099,511,627,776
Peta	P	1,000,000,000,000,000
Pebi	Pi	1,125,899,906,842,624

Before this new standard, some folks called 1,048,576 byes a "binary meGabyte". Now, just "mebibyte" is the correct term. Before the standard, 1,000,000 bytes was sometimes called a "decimal meGabyte", while now, just "meGabyte" is correct.
So, is that new drive you are about to buy 40 giGabytes (40G), or is it 40 gibibytes (40Gi)? There is no way to tell, because the standards shown in the table are not yet used on an industry-wide basis. You can probably assume that the drive holds the lesser number, because 40 sounds bigger than 37.2G. Yes, there is a big difference – copied from and continued in the Badger State Smoke Signals at www.bsss.org

Upgrade to General?

The following sample questions were copied from the ARRL's General Q&A manual available at AES.

G9DO5
What must be done to prevent standing waves of voltage and current on an antenna feed-line?

A. The antenna feed point must be at DC ground potential.
B. The feed line must be cut to an odd number of electrical quarter wavelengths long
C. The feed line must be cut to an even number of physical half wavelengths long
D. The antenna feed-point impedance must be matched to the characteristic impedance of the feed-line

D Power reflected back from the antenna returns to the transmitter, which in turn reflects the power back towards the antenna. This creates a standing wave. The problem with high SWR really is not the efficiency of the rig (power in/power out). When the transmitter and antenna impedances are not matched, less power is transferred to the antenna. Modern solid state transmitters usually have protection circuitry that reduces the power output (and input) in the presence of high SWR. (When the SWR is high there are high voltages present that can damage components.) In order to avoid this situation, the antenna feed point impedance must be matched to the characteristic impedance of the feed line.

G9DO3
What is the characteristic impedance of flat-ribbon TV type twin lead?

A. 50 Ohms
B. 75 Ohms
C. 100 Ohms
D. 300 Ohms

D The flat ribbon type of feed line often used with TV antennas has characteristic impedance of 300 Ohms. This feed line is called twin lead.

Who Does What

Brian Skrentny, N9LOO plays the ARRL Audio News prior to the net on Tuesday evenings. Brian has also been in charge of one of the phone tents during field day for the last few years. His wife, Angie, is also a ham (KC9BTF) and they live in West Bend with their new daughter Chloe.

Minutes - the January 8th, 2003 Ozaukee Radio Club

Minutes of the February 5, 2003 Ozaukee Radio Club Meeting
By Carol Szudrowitz, KC9CBC, Secretary

Call to Order and Introductions:
The meeting was called to order at 7:30 PM at the Grafton Senior Center by President Vic Shier, KB9UKE. Introductions of members and guests were made. Paul, KB9WCC, brought magazines (CQ & QST) to share with whoever wanted them.

Program: Gary Sutcliffe, W9XT, presented an interesting program about Contest Tips, Tricks & Techniques. He had a great handout and encouraged all to have fun with contesting and not to give up. Some hints included; designing your station layout for efficient motion, having good equipment, and setting goals. Knowing what bands allow you best coverage, and at what times you are the loudest aids making contacts quickly. Other resources included ARRL Web site (www.arrl.org), www.contesting.com and www.qth.com as well as the National Contest Journal. One subscription was presented and auctioned off by Stan, WB9RQR.

Auction: Stan held his usual auction and then came the break.

Business Meeting:
Minutes: Minutes of the last meeting were accepted as in the newsletter.

Audit Report: Kent Christiansen, N9WH, Chairman of Audit Committee reported that the books balanced. No problems; however, we spent $100 more than we took in.

Treasurer's Report: Dave, N9UNR, moved, and Stan, WB9RQR, seconded a motion to accept the Treasurers report. Gabe, WI9GC, reminded all to **have dues paid by March 1** in order to be in the Roster. Stan, WB9RQR made a motion that after two years of non-paid membership, due in February, a person's speed dial number would be withdrawn from the Speed Dial list. This was

seconded and voted on. The yeas carried it unanimously. An exception for this year is an extension till March as Gabe will out of town and will not print roster until March. The board has the right to waive dues in some instances. Gabe also informed all that he is retiring from UWM in September. Then a discussion was held regarding the Repeater Improvement Fund and Repeater Maintenance Fund. Dave, N9UNR, made a motion and Jim, K9QLP, seconded that telephone and electric bills should be a general fund expense; however, after discussion, the motion was amended by Stan, WB9RQR, and seconded by Jane, KB9SYI, that this be referred to the board of directors for further review. The amended motion passed verbally with 20 yeas and 7 no then the initial motion was voted on verbally, and the yeas carried it. According to Gabe's, records $250 is placed into the Maintenance Fund annually from Swap Fest proceeds. Ed Rate, AA9W, mentioned that the amount should be set each year at the board's discretion, depending upon the needs of the repeater and/or the club.

Repeater Report: Nels, WA9JOB, reported that $200 was spent on new tubes for the repeater. The Telephone Interface Module (TIM) was replaced, and the Auto Patch is repaired. The 220 band is off the air for service. It is being worked on with the ultimate goal of improved usage and coverage on 10-meter interface capability. The 440 system is up and waiting for someone to use it. The Belgium site is still being tested in Nels' home. The control voter needs adjustments; however, it needs activity and a warmer day for doing the adjustments. Also if one has problems with unauthorized users, it is best to ignore them so that they go away. If a persistent problem arises than get in touch with Ed Rate, AA9W, or Nels, WA9JOB.

OZARES Report: None

Swap Fest: May 3, 2003 - Gene, KB9VJP, needs help with publicity and advertising. If any member is going to a swapfest please take handbill applications along for distribution. Call Gene to get them.

Old Business: Ted, KB9RLI, reminded everyone that the Post Everything Party is to be held on February 15, 2003. He needs the sign-up ASAP by February 8th.

New Business: Brian, N9L00, is now doing ARRL Audio News on Tuesdays. We still need a volunteer for the NET. Tom, W9IPR, encourages members to send him articles for the newsletter. They don't have to be long. Share a great memory about hams throughout the years. Share an idea or a project that you found intriguing. Share a website or contest idea. Share an author that inspired you. Share with your fellow hams to make the newsletter something you can look forward to.

Adjournment: Meeting was adjourned at 9:15 PM

Next Meeting: The next meeting is at the usual date- the second Wednesday, March 12, 20:00 at the Grafton Senior Center.

Attendance: Stan WB9RQR, Gene KB9VJP, Ralph N9UNR, Ed AA9W, Nels WA9JOB, Gabe WI9GC, Kent N9WH, Joe AA9HR, Bernie AA9CI, Tom W9LNL, Herb WA9UUK, Bob WG9N, Bob W9LO, Ron W9BCK, Bill W9VLL, Gary W9XT, Brian N9LOO, Paul KB9WCC, Keith KY9P, Tom W9IPR, John WA9KNY, Terry KA9RFM, Bob N9NRK, Julia KB9WBQ, Carol KC9CBC, Dan AA9QR, Jim N9NNA, Jim N9WIU, Ed AA9WCU, Rex W9CRQ, Jake KB9ZOR, Vic KB9UKE, Jane KB9SYI, Jim K9QLP

AGENDA

March 12, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program: New equipment demonstrations
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Gabe (WI9GC).
9. Repeater report – Nels Harvey (WA9JOB)
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

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First Class

Next ORC Meeting

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Wednesday, March 12th

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Volume XXII | April 2003 | Number 4

The Prez Sez

By Vic Shier KB9UKE

Ham radio is good clean fun and this year the Ozaukee Radio Club selected **Leon** Rediske, **K9G**ood**C**lean**F**un as the **Ham of the Year**. Leon got his ticket at the age of 12, encouraged by a middle school teacher who was also a ham and has had fun with the hobby for over 40 years. He is an accomplished direction finder who strives to improve his skills and those of his fellow foxhunters. He is active in a morning Florida net keeping in touch with his ham friends in Florida where he pilots his own plane for vacation several times a year. Upon arrival he sets up his shack before he unpacks.

Having served as the ORC president for the last 4 years, Leon has made many improvements for the club. Always looking for new ideas, he was instrumental in moving the club from 4A to 5A for field day; started the weekly ARRL Audio News; and has provided many entertaining and informative meetings.

Thank you Leon for your contributions to the ORC and amateur radio.

Nels, WA9JOB, provided the program at our last meeting. He had two demonstrations, the MFJ 890 DX Beacon Monitor which is a handy device for knowing were the band openings are and the ClearSpeach Speaker. The speaker demonstration sure impressed the club members that evening and as Nels recommended, anyone running HF mobile would benefit from this handy gadget.

The club swapfest is only a month away. Gene, KB9VJP the chairman of this project stated that although there are still some tables available many are spoken for. He is expecting a good turnout again this year so bring a friend and enjoy the day, which is our main fund-raiser. And don't forget, Gary, WI9M and his crew will be testing so it is a perfect time to upgrade or invite someone to join professor Ed, AA9W for his Saturday morning class and help them get that first ticket.

73's and remember…It's a hobby!

"HAM" of the Year Award

At the March 12th meeting the "Ham of the Year" award was presented to our Past President, Leon Rediske, K9GCF.

Leon has been club President these past four years and totally immersed in club activities. Leon succeeds his wife Jane (KB9SYI) who received the award last year. They are truly a "HAM Radio" couple. They moved to the area in 1996 and have been totally involved in the Ozaukee Radio Club ever since. Leon was owner/operator of the past Rainbow Airport and continues to pilot his own twin and teach aviation as a Certified Flight Instructor.

Who Does What?

De Vic Shier KB9UKE

Those of you who receive this newsletter by mail should know Peter Klode, N9GOZ. He is a Senior Vice President for Robert W. Baird and the ham behind the scene who is responsible for printing, folding, labeling and mailing our monthly newsletter.

Peter's father, who lives on a sailboat, encouraged Peter to get his general ticket so they could maintain contact via the airwaves. One early morning cold snap froze the cockpit door shut so after their QSO Peter phoned the boat yard to free his father from the frozen depths.

Just Another Shack

De Todd Sprinkmann KC9BQA

This month's shack visit is with Herb Roehner - WA9UVK. When visiting Herb, I thought I was up north. His home is sheltered by stately pine trees that were planted over 70 years ago by Herb and members of his family.

We sat down and talked for a long time. At 87, Herb must be ORC's eldest member. You'd never know he's 87, though. I listened as Herb told me of the places he travels, the friends he meets, and the activities he stays involved with. I marveled as he scooted on all fours to get underneath his shack's desk, to plug in some piece of equipment. This man doesn't seem to have a tired bone in his body.

Herb has held the callsign WA9UVK since he got his license in 1966. In his early radio years, he operated CW exclusively. Some years ago, he got more active in 2 meters and he still keeps up with friends on various repeaters.

Herb's main rig is a Kenwood TS-820, which he has had for years. When on HF, Herb is partial to 40 and 20 meters. He said that he got his 10-10 a number of years ago but never bothered to send it in. On Sunday mornings, you can tune to 3985 kHz at 8:30 am and hear Herb and the gang on the QCWA (Quarter Century Wireless Association) net.

Herb prefers to operate barefoot and his 820 is hooked up to either a Mosley TR-33 beam or a longwire cut for 3985. Herb has a tower that goes up about 50', and besides the TR-33, he also has an 11-element beam turned vertically for repeater operation on 2 meters. Atop the tower is an "original" ringo ranger. Herb's tower is cleverly designed - he has the ability to fold it over himself.

If you studied for your license through ORC, you probably learned CW under Herb's instruction. Herb said "I taught CW for over 30 years. Ed did the technical part and I taught the code, until about 4, 5 years ago when I got burned out." I had to hide a grin when Herb mentioned "burnout". This gentleman radiates life and vitality.

IT'S HAM CLASS TIME

ORC will be holding its annual Technician Class License class beginning April 6. Each Saturday morning starting at 9:30 and running for about seven weeks - "learned" members of the club will be presenting the information needed to obtain the FCC license. The location is the Justice Center at the intersection of highway LL and S. Spring Street in Port Washington. All of the required topics will be covered with slide presentations and hardware demonstrations. The classes are free of charge but the purchase of a Radio Shack book is recommended. All ages and genders are welcome. Our youngest successful student was nine years old and the oldest was a very senior, senior citizen. The

FCC license testing will be held at the conclusion of the class.
Contact Ed Rate, AA9W for details.

Upcoming Events

4-5 April – AES Superfest
13 April – Stoughton WI - Swapfest
3 May – ORC @ Circle B - Swapfest
18 May – Tour deCure
31 May – Riverfest
1 June – Ride for the Arts
12 July – South Milwaukee WI - Swapfest
27 –28 Sept. – Grayslake IL - Swapfest

WHAT A WAY TO RUN A RAILROAD, errr CONTEST!

The Wisconsin QSO Party was March 9. I didn't participate because I discovered too late to do anything about it, that my contest software does not support this particular contest. Actually I discovered it a year ago, and procrastinated for 12 months—bummer! I've been told since that time that the update is available at the author's website, so I'll probably download it next week or perhaps the following week, or perhaps next April, or perhaps next March. Procrastination has been one of my great strengths for many years now.

I did, however, spend some time listening on a couple of the bands just to see how things were going for those who had the right software, or were willing to use manual logging & checking. I came across one station calling CQ on 75 meter SSB, not a club member, who very badly needed a "contest Elmer" to get him on the right road. I missed his call when I first heard him, so I waited for him to repeat it. He did, about 30 seconds later, with a short " CQ contest", after which he apparently listened for an answer, and perhaps tuned around a bit before repeating the CQ after about another 30 seconds. Silence on "your frequency" is a real no-no in any contest. In broadcasting we call it "dead air", and it makes management people very upset, and makes the station look sloppy. This was a gross violation of the teachings of Contesting 101, which says that if you want to communicate with other contesters you must let them know that you do. I wondered at the time how many stations tuned right by him during his dead air so I monitored him for 15 minutes, and he didn't work anyone during that time, even though other stations nearby were working others at a good rate.

This brings us to the contest tip of the month. Allow no more that 3 seconds between CQs–eliminate the dead air. If another station is going to call you, he will make a noise at you the instant you finish your CQ–And don't tune around looking for callers–they will come to you. In order to hold your frequency, you MUST keep it busy at all times, or someone will steal it from you.

Wisconsin QSO Party:

N9FH—292 CW, 297 PH, --- 49 Counties, 42 States, 4 Provinces
K9LO—357 PH
K9QLP–193 PH—38 Counties, 30 States, 4 Provinces
W9RNA–119 PH—27 Counties, 6 States, 1 Province
WI9M—64 CW, 101 PH
AA9W–33 PH–29 Counties, 3 States

ARRL Int. DX Contest—CW

W9XT–480 CW– 100 Countries--10 meters only 560 CW–94 Countries--15 meters only

Coming up in April:

April 6—Annual QCWA QSO Party–CW/Digital/SSB-160 thru 10 meters. Rules in QST, April, Page 97.

April 19–TARA PSK-31 Rumble-80 thru 10 meters. Rules in QST, April, Page98.

Have fun contesting, Bob, W9LO

For Sale, Trade or ?

Mrs. C. Sweek, whose "HAM" father is now an SK, has donated the following items to our scholarship fund. Contact Ed Rate AA9W at 262-242-0376 if you are interested in any of the following items. Potential discounts to ORC members.

ITEM	MODEL	USED VALUE	NEW VALUE
RADIOSHACK VHF FM TRANSCEIVER	HTX212	$125.00	$325.00
HYGAIN ROTATOR AND CONTROLLER	HAM-IV	$300.00	$530.00
KENWOOD ANTENNA TUNER	AT-130	$75.00	$125.00
KENWOOD DUAL BAND W/ MICROPHONE	TW-4100A	$175.00	$300.00
YAESU DUAL BAND W/ MICROPHONE	FT-5100	$175.00	$320.00
ICOM 144MHZ FM TRANSCEIVER	IC-229H	$125.00	$150.00
SHURE MICROPHONE	MODEL 450	$45.00	$99.00
TIMEWAVE AUDIO NOISE REDUCTION FILTER	DSP-599ZX	$300.00	$400.00
YAESU SWITCHING POWER SUPPLY	FP-757GX	$80.00	$160.00
MIRAGE FREQ 2M 10W-160W	SN6508-68	$175.00	$340.00
MICRONTA 3WAY CB TESTER	21-526A	$5.00	$25.00
SWAN ELECTRONICS METER	SWR-1A	$10.00	$25.00
ATLAS HF TRANSCEIVER AND POWER SUPPLY	350-XL,350-PS	$300.00	$599.00
HIGH SIERRA HF MOBILE ANTENNA	HS-100	$180.00	$599.00
ALINCO DUAL BAND HT	DJ-582	$150.00	$210.00
ICOM HT	IC-2AT	$50.00	$325.00
KENWOOD 2 METER HT	TH-27A	$100.00	$220.00
ICOM HF TRANSCEIVER	IC-735	$400.00	$600.00
MISC. (CANTENNA, EARPHONES,PARTS ETC.)		$50.00	$75.00

DISCOVERY WORLD MUSEUM

De DON DOSS, K9QEN

Have you been to the James Lovell Museum of Science, Economics & Technology? Did you know that Milwaukee is home to this museum, designated as one of the top five interactive museums in the Nation by The Today Show? You may be more familiar with its more popular name: Discovery World Museum!

DWM has been a labor of love – love of children and the realization that the children are the future of our Country and our World. Such has been the mission of Executive Director Paul Krajniak. He has surrounded himself with people of like thoughts – people who have used their love and their talents to create a museum of masterpieces.

I had the pleasure of meeting Paul and working with him and his team with the remotely controlled cameras that are a hit with everyone that enters the museum. When the camera idea was first presented to Carl Schottel, the Museum's "Artistic Director", I learned that there's more than one definition of "Art". Carl is a master of making things functional yet childproof! I would have thought the way Carl redesigned the joystick would have been impervious to the Incredible Hulk. Instead, we had to go back to the drawing board – this time even an earthquake couldn't harm it!

I have shared my experience with you to give you some idea of the dedication this team has toward reaching out to the youngsters that walk through the DWM doors. I've seen this demonstrated frequently. The year before DWM moved to its beautiful new home, I was invited to demonstrate amateur radio during their Techno-Fest. Paul and Carl's team worked tirelessly in helping us raise antennas and run coax without really knowing what we were doing until we were all set up! Due to the huge success at this Techno-Fest we were invited back two years later, this time at their new home on 9th St. – later renamed James Lovell Street (remember the Museum's official name?). We discussed the idea of a permanent amateur radio station at DWM but shelved it for lack of time and other pressing DWM projects.

The idea resurfaced in October, 2000, when Paul called and asked if I could put a station together for the Jamboree On The Air – his call came on October 16th, the Sunday before the Big Weekend! Getting a team together on such short notice would certainly be a formidable task. However, Milwaukee ARES Director Jeananne Bargholz, N9VSV, had the solution – why not use the new ARES communications van? All we needed was a driver. (Why did everyone have to take a vacation on the same weekend?!?) Finally, when I was about to give up, Milt Klingsporn, N9WSZ, forgoing his personal obligations, stepped up. He drove the van from Mitchell to DWM and parked it on James Lovell Street. We set up and then had a continuous stream of fascinated scouts enjoying their first glimpse of amateur radio.

We're now on the threshold of what will become a permanent, hands-on exhibit of amateur radio at DWM. A group of about 30 hams have expressed their interest in being part of this exciting endeavor. Nine of those dedicated souls braved far less than perfect weather to attend a kick-off meeting at DWM on 4/1. We were shown two of three possible homes for the shack, any one of which would put most of our personal shacks to shame! In addition, rooms and even a small theater are available.

In my letter of appreciation to Carl for his hospitality, I stated that this was a win-win-win proposition. DWM wins by increased gate sales, amateur radio wins through exposing inquisitive youngsters (and oldsters!) to the exciting world of amateur radio, and the community wins by tapping the interest of youngsters and directing it toward very positive paths.

To keep the momentum, we need not just more ideas but ways to implement the ideas to pique the interest of our audience. Ideas presented include speakers outside the shack to draw interest and headphones for listeners to select a communication mode to hear; fast-scan TV; a functioning 2-meter repeater (just like the cops use!); electronic construction classes (crystal radio, code practice oscillator, etc.); amateur radio contests – live!; Jamboree On The Air; pictures; demonstration of radio evolution from spark gap to integrated circuit; communicate with schools and other museums via amateur radio; communication via satellite; communication with the Space Station ("Space Station" opens at Humphrey IMAX June 14th and includes a piece on the amateur radio station on board the Station); use of an audio tape being produced by Gordon West; having a telegraph key available and teach kids to spell their names in Morse Code; ad infinitum.

Yes, the list is endless. Can you offer other suggestions? Do you have an innovative way to use amateur radio to meet our objective of reaching out to the youngsters (and oldsters!) for amateur radio? If so, please share them with me by either e-mail k9qen@arrl.net or phone 414-281-9294. As licensed hams who love our hobby in whatever mode(s) we choose, we are obligated to preserve our right by being Elmers to interested non-hams. I look forward to hearing from each and every ham in the metro-Milwaukee area!

Another Great Project

De Nels Harvey, WA9JOB

Among some of the many Icom radios that I own, there is an Icom 3210 dual band, mobile radio. I have many miles on this radio, and it has served me well. I replaced it with a different radio in my car because the UHF transmit and receive was very intermittent. It now resides in my workshop, and I monitor several repeaters in scan mode when I am working down there. Some of you have visited my messy basement workshop, and know that I have a reasonable amount of test equipment. I know it's old and generally acquired quite economically, but it is serviceable.

I am in the middle of making decisions intended to fix, or dispose of certain things that have accumulated over the years. My workbench has a row of gear lined up and each will be placed on the bench in turn, have it's future and value determined. I want to keep the Icom, but I thought it would be a great place to start!

I took the radio out of service, and opened it up. I found the schematic, and after some testing (Well, a lot of testing), I found the radio had a logic inhibit that went between 5 Volts and 0 Volts. If the voltage was high, the radio didn't work on 440 MHz. "This can't be so hard", I thought! I poked and prodded,

used up a whole can of freeze mist (That stuff is expensive), and was unable to localize the problem!

I took a trip over to the Emporium, and prevailed on my friends there to see if I could get more information. A couple of photocopies later, I left with Icom's service telephone number. A long distance call to Bellevue, WA put me in touch with a technician at Icom, who was helpful. He looked up the service records for the radio, and discussed the problem with some others there. He then told me I needed to replace two capacitors in the oscillator circuit. He then mumbled something about getting the case super hot! There was a snicker in his voice!

Back at the bench, armed with new information, I pulled the circuit board out of the radio. The oscillator circuit has a cover over it. I thought about what the tech said about needing to heat the case, as I desoldered the tabs. A medium screwdriver finally popped the cover off, to reveal a blank circuit board! The oscillator was inside the cover, well soldered in, and I had broken off four leads with my screwdriver in removing it!

I systematically heated the sides of the tiny cover, only about ½inch by a little more than an inch, and 3/8 inch thick! Finally, I got the circuit out, and found some of the smallest 47 MFd. Capacitors! These two needed to be replaced. Wearing two pairs of glasses, I put two tantalum capacitors in there. After cleaning everything up I put the tiny oscillator circuit back on the spot where it was removed from. Jumper wires were placed where my might had broken them and I put the radio back together with little hope for success.

After applying power, my heart sunk! The logic voltage was high! Then, suddenly, the voltage dropped, and the oscillator was working! The radio was receiving 440 MHz. signals once again. There are still some issues with the transmitter audio section, but for my purposes, the radio is back on the shelf, monitoring the frequencies better than before! There is still some life in that old, familiar radio after all!

Wisconsin ARES/RACES Needs You!

By Stan Kaplan, WB9RQR
Section Emergency Coordinator (ARRL)
Wisconsin Chief Radio Officer (RACES)
Deputy Director, Emergency Management (Ozaukee County)

Do you think Public Service is an important activity for hams? Do you want to do some Public Service while engaging in your hobby? Do you want to have the added benefit of learning all sorts of new information related to communications? Well then, look no further. Join your local ARES/RACES unit and you will have it all.

If that sounds like a recruiting message, it should, because it is. It is accurate, but not the whole story. Let me tell you the "rest of the story".

How is ARES organized in Wisconsin? Each county in our state (72 total) potentially has an ARES unit, headed by an Emergency Coordinator (EC). The EC's job is to organize and train the unit, and to keep it ready and able to respond to communications emergencies. For example, under Wes Jones' (N9PHS) able leadership, 65 hams participated in providing emergency communications after a tornado in northwestern Wisconsin. You can see the counties with ECs and ARES/RACES units by looking at the map on our website: http://wi-aresraces.org. A very few counties have no ARES unit at present because no EC has been appointed

Why the ARES/RACES moniker? Every member of an ARES unit in Wisconsin is also registered as a RACES operator. Every RACES registered operator in the state is also a member of an ARES unit. This has been true since January 2000. ARES, as you know, is part of the Field Service Organization of the ARRL, a private, not-for-profit organization. RACES is administered by a governmental organization, Wisconsin Emergency Management. While it is not

possible to merge governmental and private organizations, we have virtually done so by merging their memberships - the hams who make up the working part of both ARES and RACES. This makes for better working relationships in emergencies, provides additional legal and medical protection for hams under certain circumstances and provides much better service to the public.

I hold a [Nov, Tech, Tech+, Gen, Adv, Ext] class license. Does that mean I am trained and ready to go in emergencies? Most emphatically not! There is next to no emergency training associated with the study leading to any class of ham license. Indeed, there is even a basic difference in the way hams must learn to communicate in emergencies. For example, we hams just love to ragchew. For many of us, that is one of the attractions of the hobby - to be able to have free wheeling conversations with our peers, close by or across the world. In emergency communications, we must learn to be very succinct, and to actually keep quiet when we have nothing to report. We must also learn to be conversant with non-ham communications conventions, such as the 10-codes still used today by a few police and fewer fire departments. We must learn what an Incident Commander is, and what a staging area is. In addition to non-ham language, we must also learn to use non-ham equipment, since we may be required to use public safety equipment in an emergency. In addition, there are a myriad of other areas that we need to train for: HazMat (hazardous materials) incidents, wildfires, tornadoes, earthquakes, maritime and aviation incidents and so on. We need to know something about all sorts of natural and manmade disasters, and the language that first responders will use when they are reacting to the emergency. Sometimes, this knowledge will help us to protect ourselves!

Where do I get the training? You start it after you join an ARES/RACES unit, and it never ends! Weekly nets polish your ability to provide succinct reports on the air. Training sessions, sometimes provided by an Emergency Manager, help you to understand the interface between hams and Emergency Management in a county or the state. Some units hold drills on packet communications, HF nets, weather operations, maritime incidents, HazMat incidents and even vehicular traffic management! Yearly SETs (Simulated Emergency Test) routinely help ARES/RACES units train inside their county for emergencies. During the last few years, the SET was extended statewide, with an emphasis on mutual aid between neighboring ARES/RACES units. Of course, Field Day is superb for learning how to set up emergency stations in the field, and this year the ARRL has made provisions for Field Day operations in municipal and county Emergency Operations Centers (EOCs). Beyond these sources, you can tap many others on your own. The ARRL has a new series of three excellent training courses (EmCom I, II and III) that you can take via the Internet. Nearly 70 of Wisconsin's 1,350 ARES/RACES hams have graduated from these courses as of this writing, and many more are currently enrolled. The EmCom courses even provide mentors - real, live persons - to check your assignments and provide feedback to keep you on track. FEMA (Federal Emergency Management Agency) has a whole host of related free courses that you can take on line or download and complete at your leisure. There are even courses taught by Wisconsin Emergency Management (WEM) that may be available to you as a member of Wisconsin ARES/RACES. Of course, all these courses provide nice wallpaper when you finish them. But most important, you learn the who, what, why, when, where and how of emergency communications, all very important knowledge when you participate in real emergencies.

Wow! Sounds like it could be a full time job! How much time do I need? Correct, it could be a full time job! However, no one expects that from you. You put in as much time as you can afford, or as little, though some ECs require that you make a certain number of meetings or training events each year. This varies, though, and you must query your EC to get an exact answer. Remember that we are all unpaid volunteers who wish to provide public service as part of our wonderful hobby. Families and jobs always come first. But then, about those spare 3 hours a week that you have…! By the way, an added benefit of becoming better trained for ARES/RACES is that you become better able to protect yourself and your own families when disaster strikes, and better able to prepare for such contingencies.

How do I join? Contact your EC. A list is on the ARES/RACES website referenced above. Indeed, there is an email button next to your EC's name on the website. Just find your county and click the button by the EC's name to send a message. If you live in one of the few counties that have no EC at present, pick an EC from a close neighboring county.

You do not have to live in a county to be a member of its ARES/RACES group. Note, however, that you can only be a member of a single county's ARES/RACES group in Wisconsin. Once you have joined a group, your EC will submit your name, call, address, etc., for inclusion in the RACES roster, a very quick process that completes your membership as a Wisconsin RACES operator. Your EC will inform you when that has been accomplished.

What's in it for me? Aside from those benefits mentioned above, you are guaranteed to acquire a sense of personal accomplishment as your training opens new vistas. You will have taken what used to be just a hobby, and extended it to a skill level that can be used to help others. That is something we hams are noted for in the mind of the public, and we want to continue that mindset. The Wisconsin ARES/RACES motto says it all: We communicate when no one else can.

(Reprinted from the Badger State Smoke Signals at www.bsss.org)

Wanted

Will club members again begin saving those bright orange/red ERA & TIDE liquid soap containers for use at our Field day effort this June 27-29? We use them as "Traffic Cones", markers of all kinds, safety covers for tent stakes, weights filled with water, etc. The water contained in them is useful as well.

Leon, K9GCF

Miller Lite Ride for the Arts de

Phillip Bogacki, KB9KEE

Sunday, June 1, 2003

Various morning start times but the event is over by 3pm. We are responsible for nearly 10,000 riders - this is a big event and covers a lot of area. Variety of positions open- all experience levels will find this fulfilling. The ride is comprised of 5 routes (all start at the Marcus Center on

Water & State St.):

1. 5 mile route around Veterans Park
2. 25 mile route south to Grant Park
3. 15 mile route south to St. Francis High School
4. 50 mile route north to Concordia University
5. Brand new 75-mile route north to the Allen Edmonds Factory in Port Washington

Our work is highly commended and appreciated every year by the Miller Ride officials.

Anyone interested in helping should contact:

Phillip Bogacki, KB9KEE

Email: kb9kee@arrl.net

Ph: (414) 761-7045

ORC March 12, 2003 Meeting Minutes -

De Carol Szudrowitz, KC9CBC, Secretary

Call to Order and Introductions:

The meeting was called to order at 7:35 at the Grafton Senior Center by President Vic Shier, KB9UKE. A reminder was issued about the time for AARL Audio News, Tuesdays at 7:45 with the NET at 8:00 PM. Ed Rate expressed interest in finding out if members would be interested in an informal NET on 220 or 440 to encourage the use of these bands. If anyone is interested in subscribing to the, Amateur Radio Today, magazine give Vic,KB9UKE, a call.

Leon Rediske, K9GCF, was awarded the Ham of the Year Trophy at the meeting. Congratulations Leon! Thanks for all your dedication to the club.

Program: Nels Harvey, WA9JOB, presented an interesting program regarding a Beacon Monitor which shows a light/beacon on a worldwide map which is synchronized with a radio band. With the help of Leon Rediske, K9GCF, Nels demonstrated how the static was cleared on his YAESU ATAS-100 mobile unit using a ClearSpeech Speaker. For more information see the handout flyer or Nels.

Mike Greenfield, N9JIY, demonstrated his homemade solar power heliograph, 400-700 nano band mirror for Morse code.

Auction: Stan Kaplan, WB9RQR, held his usual auction for the scholarship fund.

Business Meeting

Minutes: Minutes of the last meeting were accepted as in the newsletter.

Treasurer's Report: None as Gabe Chido, WI9GC, is on vacation.

Repeater Report: Nels, WA9JOB, said that the 97 link will be added to Belgium by the end of April. The 220 will be at the barn, auto patch is on it and on 97. The county may donate amplifiers. The 100-watt amplifier could be on hand as a spare or backup. The 443.7 could be changed from 8 watts to 75 or 80 watts. Sandy called to say that phone at barn wasn't working right. After a discussion by the board it was changed. Also the telephone and electric bill will be sent to Gab from now on. The board approved buying a new Phelps Dodge wave antenna. The old one was not cut to our band so reception

should improve. **Note: Watch for Nels "Barn Party".** Some Saturday after breakfast, all should meet at the barn with push brooms to help clean the place. Jim Albrinck, K9QLP, asked about the 220, seems to need preamp. Gary Becker, N9SBG, donated a generator with a self-starter. It needs a battery and transfer switch to be interfaced with the repeater. Herb, WA9UVK, said he might be able to help with that.

OZARES Report: Jon Gilmore, KB9RHZ, stated that the equipment report has been finalized. Next meeting is Thursday, March 27. It will involve training about weather system.

Scholarship Committee Report: Ed Rate, AA9W, informed all about a donation of radio equipment, (Icom, Kenwood names), from W5VCR. The family lives here and the ham taught others how to work the radios in his home area. The equipment will be sold at the Swapfest.

Swapfest Report: So far sign-up for tables is low so talk it up. There is an ad in QST and on the Internet (AES website with map) as it is ARRL sanctioned. Peter,WA9URH, has taken care of newspaper advertising. Those going to other swapfest should take along flyers. Example - Grays Lake, March 23.

New Business

Board Announcement: The Board approved the motion that the repeater Vice President can spend up to $500 from the Maintanence Fund on an annual basis for a fiscal year on parts for the repeater.

Technician no code Class: Ed Rate, AA9W, announced that the class for new hams will be at the Justice Center in Port Washington starting March 29, 2003. It will be listed in local papers.

River Clean up: There is a sign up sheet for the River Clean Up organized by Cindy KA9PZG. We helped last year. It takes place in May and takes about 3 hours in the AM.

Superfest "What's the Big Idea"- Location - AES - April 4 and 5 – ORC and OZARES tables are next to each other. Sign up sheets to work are available. We need help to set up at Noon, April 4 and take down April 5 at 2:30. Don't forget to give out our Swapfest flyers at that time and encourage others to join our club.

Space Station Project: Gary Bargholz, N9UUR, is working with math teachers at John Long Middle School to coordinate this. There are many applications to merge in order to get space station link. It helps to have this within school curriculum to qualify for link. Suggestions were Satellite tracking, space propulsion. There is a possibility that this project could grow to include other schools.

No Old Business as Ted, KB9RLI, not present to talk about PEP so the meeting adjourned at 9:10 PM.

Next meeting: The next meeting is at the Grafton Senior Center, the second Wednesday, April 9, 2003 at 19:30.

Attendance: Bernie AA9CI, Joe AA9HR, Herb WA9UVK, Gene KB9VJP, Kent N9WH, Ed AA9W, Nels WA9JOB, Ernie K9LO, Jim N9WIU, Dave N9UNC, Mike WJ9O, Peter KB9URH, Stan WB9RQR, Gary WI9M, Jon KB9RHZ, Gary N9UUR, Jeananne N9VSV, Bob W9LO, Paul KA9RPR, Ron W9BCK, Mike N9JIY, Kevin K9VIN, Jeff KB9QQE, Tom AA9XK, Gary W9XT, Fred N9FH, Paul KB9WCC, Brian N9LOO, Sky N9XRU, Robert W9RNA, Leon K9GCF, Jane KB9SYI, Julia KB9WBQ, Carol KC9CBC, Ray W9KHH,
James KA9UPW, Jim K9QLP, Wil KB9HHR.

AGENDA

April 9, 2003

1. Call to order.
2. Introductions.
3. Announcements, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Gabe (WI9GC).
9. Repeater report – Dave ()
10. OZARES report – Jon (KB9RHZ).
11. Committee reports.
12. OLD BUSINESS
13. NEW BUSINESS.
14. Adjournment to ?

Return undeliverable copies to

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting

Grafton Senior Citizens Center

1665 7th Avenue, Grafton

Wednesday, April 9th

7:30 PM