

# The ORC Newsletter

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



ORC Repeaters on 146.97, 224.18 and 443.750 MHz - Callsign W9CQO Web site: www.ozaukeeradioclub.org

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Volume XXVV October, 2012 Number 10

#### From the President

De Ken Boston (W9GA)

October is here, along with the cool weather, and (especially this year) the fall colors and the falling leaves. I cannot believe how much color is evident, at this early in the fall, but that is understandable, given the drought conditions over the entire area. This appears to cause lots of stress to the trees and they 'bolt' or turn early! October usually brings better conditions to the higher HF bands, and this has certainly been the case; both 10 and 12 meters have been open for most of the day, every day, here lately.

September was a busy month, with the W9DXCC gathering, and the fall ORC swapfest. The weather was perfect this year, and attendance at the swapfest seemed to be good. There were enough vendors that most of the people that came were able to score a goodie or two. The scholarship fund trailer(s) really seemed to have a pretty brisk pace of selling going on, even right up to the time that we were packing up the remainder of the parts for transport back to the barn. (I saw Ed Rate putting loads of cash in his wallet, err I hope he doesn't spend it all in one place, hihi) I forecast that the report on the fest will indicate our success.

In what may be described as "Boat Anchors #2" and following the lead on old gear that was given in last month's program, Tom Ruhlmann will be giving a presentation on the restoration of old radio gear, and will feature some of his recent projects. Tom has done a great job on some of the older Hallicrafters receivers, and will be sharing some of his techniques for all to enjoy.

Won't you join us this Wednesday (10/10; 7:30PM) at the Grafton Senior Center. If you have any particular issues or input, bring those along, and let me know before the meeting gets underway.

73 Ken (W9GA)

# **DX'ing**

De Gary Sutcliffe (W9XT)

Have you not really tried working DX? Don't have room for a big antenna? Maybe you have a technician ticket and don't do CW so have not given the HF bands a try.

Well, now you have no excuse. Ten meters has been hot! If you got your license in the last 6 years or so, chances are you might have heard only hiss if you took a listen on 10. The sunspot count has been in an extended, extremely low, level for a long time. During the last sunspot peak I remember working over 2000 stations on 10 meters during a single contest weekend. That sounds like a dubious story your grandfather told you right?

Things are not that good, but the band has been providing a lot of DX recently. During the last weekend of September a guy from Illinois worked over 1000 stations during the CQWW RTTY contest. What's more, October and November are normally the best months to work DX on the higher HF bands.

So, what does it take to get on 10M? Antennas on this band are manageable in even the smallest yard. You can make a dipole with a couple of pieces of wire just over 8' long each. It does not have to be all that high either. Even 30' will get you about a wave length above ground. That would be like a 40 Meter dipole at 120'. Of course if you can go higher, go for it. If you have an old CB vertical, just start trimming it down until the SWR comes down. A small beam will really play, but don't let not having one stop you.

Technician class licensees can operate SSB from 28.300 to 28.500 MHz. This is the only phone HF frequency allocation. Most of the phone activity will be in this range, but if the band really opens up to Europe during a contest there might be activity up to 29.000 MHz or even higher. Watch the band edge if you are a tech. It is easy to get so engrossed in working stuff that you don't notice you are out of the band!

The last weekend of the month (Oct. 27-28) is the CQWW DX Phone Contest. These are UTC dates, so the contest starts at 7:00PM on Friday night and runs until 7:00PM Sunday night. This is the biggest international contest of the year. There will be thousands of stations from around the world on. Basically the format is the world works the world.

The report is signal strength and your CQ zone. There are 40 zones. We are in zone 4. So if you work someone you would give a report "59 04" or "59 4". The scoring is a bit complex. You get QSO points depending on what continent the other station is in. Multipliers are the number of countries plus the number of zones.

Basically you don't work other US stations because they are worth zero QSO points. If you are in the contest for a score you want to work a few for the zone and country credit, but if you are just working the contest for fun don't bother working other US stations unless one happens to call you. The complete rules are at <a href="http://www.cqww.com/rules.php">http://www.cqww.com/rules.php</a>

So what can you expect during CQWW on 10 Meters? Ten is a daylight band and propagation sort of follows the sun. The band will open to the east in the morning and close to the west at night.

Starting a bit after sunrise you will start hearing stations in the Caribbean and maybe West Africa. A little bit later you will start hearing Europe. That might continue until about noon or so. African and South American stations take over for the next few hours.

A couple of hours after noon you will start hearing Hawaii and other islands in the Pacific. Later in the afternoon if conditions are good you will start to hear Alaska and then Japan. Note that Alaska and Hawaii count as DX and not the US. If conditions are really good you might start hearing stations like China and South East Asia. Finally the band will close down after sunset to the South Pacific.

With a dipole and 100 watts you should be able to work at least 50-75 countries if you put the time in. You will hear big pileups on rare stations. There is a good chance they will be back on Sunday, so don't spend too much time trying to work a specific station. If you don't get through after several calls, your best bet might be to move on and try later.

This sunspot cycle is odd. It has taken a long time to come back, and it probably won't get as high as past cycles. Still, you can expect pretty good conditions for at least a couple of years. You can have a lot of fun for the effort of stringing up a small dipole.

The DXpedition to keep an eye out this month is to Chad. The call sign is TT8TT. They will be there until October 16<sup>th</sup>. This is a pretty rare one. I think I only worked it a couple of times and need it on a bunch of bands. A number of rare African countries have prefixes that start with T. It is not easy to get a license in a number of these countries because of the political situation. They got the name "The Terrible T's" since they are so hard to work.

See you in the pile ups!

# Computer Corner No. 175: IF YOU THINK PASSWORDS ARE PROTECTING YOU, THINK AGAIN

Stan Kaplan, WB9RQR 715 N. Dries Street, Saukville, WI 53080-1664 (262) 268-1949 <a href="mailto:skaplan@mcw.edu">skaplan@mcw.edu</a>

This is a guest article, written by the guys at majorgeeks.com, the best site in the world for safe software. Printed with permission of the authors. Happy computing!

Passwords as a defensive measure are complete rubbish. There's no two ways about that. The fact that high-value services such as online banking, corporate email and data storage use simple Passwords as the only real security mechanism is a sad commentary on the state of defensive technologies. But, as the continued parade of password leaks of late proves on a daily basis, users who believe these companies are protecting their passwords are sadly mistaken.

The companies that provide these online services, such as email, cloud storage, online banking and others, would really rather not store your passwords, truth be told. As we've seen, it's just one more piece of data that they need to protect and can potentially lose. The business models at banks, retailers and social networks do not include acting as secure storage facilities user passwords. If there was some way for these services to exist without having to deal with user passwords, they would have found it.

But no one has yet, and there doesn't seem to be a good solution to the problem on the horizon. Passwords were a terrible idea at the beginning, they're still terrible now and they'll continue to be terrible in the future.

That's not going to change. What could change is the way that users think about their passwords and handle them. At this point, users need to consider that any password they create for a given site is going to be compromised. It may not happen, but if you go into the transaction thinking that somewhere down the line this combination of letters and numbers will be in the hands of someone other than you, then you can start to think about passwords in a different way.

Think of them as disposable tokens that you need to present to the site in question. With that in mind, you should change your passwords as often as you can. Many Web sites will never require you to change a password once it's set, so this is something that you'll need to do on your own.

Of course, the passwords you choose should be complex and not easily guessable. There are a number of random password generators you can use for this, including Random.org. You pick the parameters and it generates the password for you. Also, password managers and secure password generation apps such as LastPass and 1Password can be nice additions and remove

some of the burden of remembering passwords.

But, if you need to make sure that you can remember the password, you have a new problem. If you're dealing with passwords for personal use at home, it's not a bad idea to write them down.

The odds of someone breaking into your house and stealing your passwords and then using them online is negligible. If you're worried that someone else in your house will misuse them, you probably have bigger problems.

So, once you've done all that, followed all of the guidelines and logged into your favorite sites and gone about your online business, you have ceded all control of the security of your account to the site and its security policies. And you're right back where you started. You can do everything right, take all of the precautions possible and be diligent about your own personal security and still end up with your password sitting on Pastebin.

## Sixth Annual Fall Hobby Swapfest was a Success

De Tom Ruhlmann (W9IPR)

Over 20 ORC members were involved and the Fall Swapfest was a success by any measure. We have had more vendors, more buyers, more volunteers; more good deals and more fun each and every year of the Fall Hobby Swapfest since originated in 2006 by then chairman Ray Brunette (W9BUJ).



The purpose of the Fall Swapfest is social; to provide a venue for the exchange of ideas and equipment; and of course, to potentially add funds to the ORC treasury. By all measurers it is increasingly successful every year. Our attendance was again up noticeably this year and our parking girls were starting to have difficulty finding new parking spots. They even isolated spots for motorcycles and for those with disabled stickers.





After expenses we increased our treasury by about \$700 and the Scholarship fund increased by about \$800; plus, it was fun.

Were there really some good deals? Well there were two items that I negotiated on unsuccessfully and when I returned to try a renegotiation, they were both gone. Some HAM's know to buy a good deal when they first see it.

And the winners were: ARRL \$50 certificate – Rick Strauss (WB9HKE); ARRL \$25 certificates – Dave McCumber (N9WQ) and Steve Sunobuist (N9FSE); Tower Electronics prizes – Jack Krisel (WA9NQW) and Chuck Beyer (WG2A).

It is all the volunteers that make an event successful but there a few in particular that I would like to thank on behalf of the ORC: Ed Frac and team for preparation and selling of the refreshments that earned over \$225; Jim Albrinck and team for handling admissions and John Schneider for grounds coordination with the Fire Department; Stan Kaplan & his team for organizing the parking; Bill Howe for chairing the audio and announcing activities; and Loren Jentz for flyer distribution. Again, thanks to all who participated and I do hope you had fun.

# A First Attempt at 10 GHz Contesting

By Janice Hoettels, KA9VVQ

One of the truly great things about Amateur Radio is that it has so many different avenues to explore. From HF to satellites to contesting, QRP, emergency communications, and beyond, the possibilities seem endless. Most hams, however, rarely consider the operating opportunities that exist in the VHF + range (at least outside of working the local 2 meter repeater). This is unfortunate as these bands are completely open to all ham license classes, including Technician class hams.

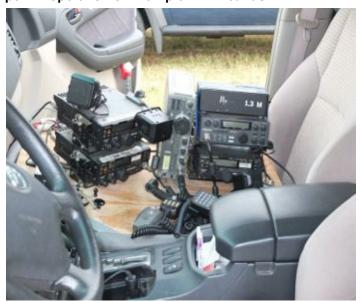
I, too, really never considered operating in the VHF+ bands despite being a ham for 26 years. This changed after I met Bruce Richardson, W9FZ, who is a longtime VHF+ enthusiast. Some ORC members might recall meeting W9FZ at the club's last Field Day event, where he helped out with the club's 6 meter, 2 meter, and 70 cm operations. A number of those QSOs were made from his antenna-laden vehicle, which is known as a "rover", since he roves the countryside to make QSOs. The W9FZ rover is shown in the photos below.



W9FZ recently invited me to try my hand at operating 10 GHz during the ARRL's "10 GHz and up" contest held September 15-16, 2012. 10 GHz operating is unique in many regards. First, it is a "line-of-sight" means of communication that utilizes a very tiny beam width (3 cm) and thus requires use of a dish antenna. Recycled satellite TV dishes are ideally suited for this task after some tweaking. Second, with 10 GHz operating, one doesn't sit in the shack "low-band style" and call CQ. Since 10 GHz utilizes line-of sight communication, one has to travel to a high spot with a clear view of the horizon to have any

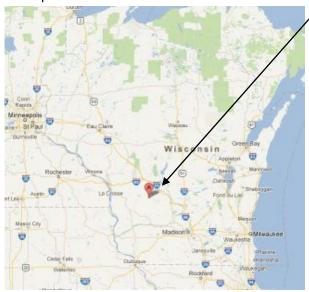
The W9FZ "Rover" at the ORC Field Day 2012. The antennas mounted on the roof rack are for 50 MHz (6 meters), 144 MHz (2 meters), 220 MHz, 440 MHz, 900 MHz, and 1.2 GHz bands.

Inside the W9FZ "rover". Rigs and transverters permit operation on multiple VHF+ bands.



chance of making a QSO. So mobility and portability are key. Third, because of the tiny beam width associated with 10 GHz, QSOs must be "arranged". This is often done via 2m SSB, though more frequently it is done via a cell-phone call. Such arrangements, even via cell phone, are permissible under ARRL rules for this contest. During the call, each ham's compass bearing is exchanged so that each ham can accurately point his/her dish at each other. Then one ham agrees to send a signal for the other ham to home-in on. Typically this is done with a series of "dits" with CW. To tune in the signal requires manually adjusting the dish up and down and side to side until the dits are

heard and zero-beated. Then the phone call ends and finally the QSO begins! The required contest exchange includes the date, time, callsign and the 6-character Maidenhead locater (also known as the grid square) of the other station. A grid square measures 1° latitude by 2° longitude and measures approximately 70 × 100 miles in the continental US. A grid square is indicated by two letters (the field) and two numbers (the square). A subsquare is designated by the addition of two letters after the grid square, such as FN44ig. These more precise locators are used as part of the exchange in the 10-GHz contest. They measure 2.5 minutes latitude by 5 minutes longitude, roughly corresponding to 3 × 4 miles in the continental US. A copy of the US grid square map can be viewed and downloaded from here: <a href="http://www.icomamerica.com/en/amateur/amateurtools/Am GridSquareMap-03-2010.pdf">http://www.icomamerica.com/en/amateur/amateurtools/Am GridSquareMap-03-2010.pdf</a>. W9FZ and I set-up our 10 GHz operating site on a high hilltop in Hillsboro, Wisconsin (see images below), whose grid square is EN43tq.



"A" is the location of Hillsboro, WI, where KA9VVQ and W9FZ operated from for the ARRL "10 GHz and up" contest.



ORC member Janice Hoettels, KA9VVQ, tries her hand at her first ARRL "10 GHz and Up" Contest on September 16, 2012 from a high hillstop in Hillsboro, Wisconsin. Photo courtesy Bruce Richardson, W9FZ.

We worked the contest together the morning of Sunday, September 16. The weather was sunny, though cool, and the winds became quite gusty in advance of an approaching cold front. We started at about 9:30 am, but problems with power supply cables and other various and sundry equipment set-up problems delayed our efforts for about an hour. Of course, W9FZ also had to spend some time teaching me how to perform compass bearings, antenna tuning, and other operating techniques unique to 10 GHz, which used up another chunk of time. In the photo above, I am using W9FZ's well built, homebrew rig with 8 Watts output. The other rig was a "loaner" rig used by W9FZ that output 1 Watt. Our first 7 QSOs were with a rover group located about 160 miles away on Buck Hill, a ski hill, in Burnsville, Minnesota, located just south of the Twin Cities (grid EN34ir). Next, we pointed or dishes toward DeKalb, Illinois, about 145 miles away (grid EN51nv) to make a QSO with W9ZIH. All the signals thus far were strong and easily copied. As the noon hour approached, we turned our dishes towards Traverse City, Michigan, about 232 miles away, to work another group of hilltop rovers. Here our luck quickly ran out. We ran into a phenomenon called the "mid-day lull" where 10 GHz propagation quickly fades and doesn't reappear until the evening hours. After considerable effort, W9FZ was able to make 2 CW QSOs with the Traverse City hams, then the band fell silent. We then packed up our equipment, went to lunch, and went hiking for the rest of the day.

All in all, my first 10 GHz contest experience was a tremendous amount of fun. I got to learn about an entirely different aspect of amateur radio all while also enjoying the great outdoors. I definitely want to try this again! I hope this article encourages you to consider trying your hand with the VHF+ bands. Our club's president, Ken Boston, W9GA, is a long-time VHF+ enthusiast, and can help point you in the right direction.

## Minutes-September 12th, 2012

De Janice Hoettels (KA9VVQ)

#### Meeting Minutes—September 12, 2012

By Janice Hoettels, KA9VVQ, Secretary

President Ken Boston, W9GA, called the meeting to order at 7:30 p.m. Members present then introduced themselves.

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

Stan Kaplan, WB9RQR, showed us two wideband field strength meters he recently built (photos below). Each covers 10 KHz-1 GHz. Stan noted that the main chip was a surface mount chip, which made soldering challenging.



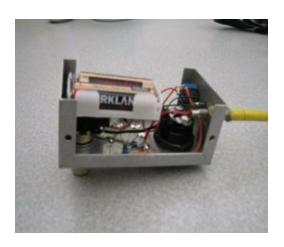


Photo (left) of the smaller of 2 wideband field strength meters built by Stan, WB9RQR. Photo (right) of the meter's construction.

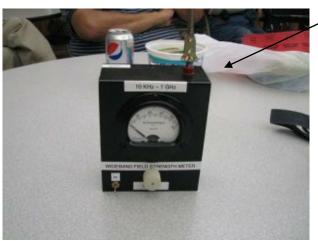


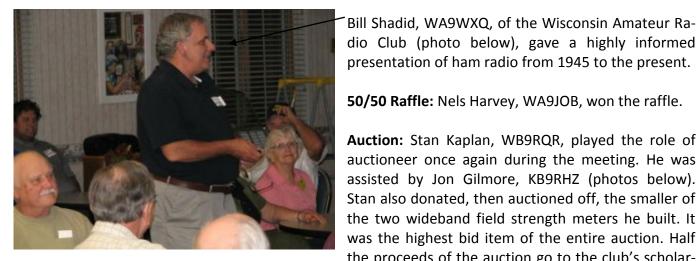
Photo of the larger of 2 wideband field strength meters built by Stan, WB9RQR.

Brian Skrentny, N9LOO, showed us an arduino-based LED sign he programmed.

Leon Rediske, K9GCF, showed us a US flag that he received as a memento from a past employee of his who is now a pilot in the US Air Force and serving in Afghanistan. The letter that accompanied the flag noted that the flag accompanied the pilot during a fly-over the war zone at about 47,000 feet.

Tom Ruhlmann, W9IPR, discussed his recent experiences with a fellow ham that helped Tom obtain a needed switch for a radio he is restoring.

#### Program:



presentation of ham radio from 1945 to the present.

**50/50 Raffle:** Nels Harvey, WA9JOB, won the raffle.

Auction: Stan Kaplan, WB9RQR, played the role of auctioneer once again during the meeting. He was assisted by Jon Gilmore, KB9RHZ (photos below). Stan also donated, then auctioned off, the smaller of the two wideband field strength meters he built. It was the highest bid item of the entire auction. Half the proceeds of the auction go to the club's scholar-

ship fund and half go to OZARES.





#### **Business Meeting:**

President's report: Ken Boston, W9GA, once again asked for volunteers to help clean up the club's shed and surrounding land, which has become a mess over the years. The shed is located in Cedarburg. Contact Ken if you're interested in helping out. Clean-up will be on a Saturday after the club's September 29 swapfest, although no firm date and time has been set yet.

1<sup>st</sup> VP Report: Nothing to report.

2<sup>nd</sup> VP Report: Nothing to report.

**Repeater VP Report:** Tom Trethewey, KC9ONY, noted that all the club's repeaters are in good working order.

**Secretary's Report/Minutes:** Dave Barrow, N9UNR, motioned to accept last month's meeting minutes and Stan Kaplan, WB9RQR, seconded the motion and the motion passed.

**Treasurer's Report:** Dave Barrow, N9UNR, noted that the August ORC Income & Expense Report was sent by email to the club's members. Any members with questions or who want more detail should be sure to contact Dave. Stan Kaplan, WB9RQR, made a motion to accept the treasurer's report. Nancy Stecker, KC9FZK, seconded the motion and the motion passed.

#### **Committee Reports:**

Tom Ruhlmann, W9IPR, reminded the club about the club's fall swapfest on September 29, 2012. Help is still needed in several areas. See Tom if you'd like help out.

Tom also noted that there was only one person who responded to posted flyers for the technician license class Tom is conducting. However, 3 unlicensed ORC members also signed up. With the small number of participants, Tom is now holding the class at his house instead of the Cedarburg police station.

Tom Nawrot, AA9XK, discussed the club's participation in the International Lighthouse Lightship Weekend August 18 and 19. The club set up and operated a station at the Port Washington Lighthouse for this event. The station was well attended and many QSOs were made.

#### **Old/New Business:**

Ed Rate, AA9W, mentioned that a number of antennas have been donated to the club for its scholarship fund. See Ed if you'd like to buy one of them; otherwise, they will be made available for sale at upcoming swapfests.

Leon Rediske, K9GCF, noted that he and Janice Hoettels, KA9VVQ, belong to the Milwaukee "Fox Hunt" (transmitter hunt) Club, and that the club is having a hunt at Glacier Hills Park in Richfield Saturday, September 22 at 11 AM with a picnic to follow. He encouraged ORC members to attend. Contact Leon or Janice if you're interested in learning more about this unique aspect of ham radio.

#### **Adjournment:**

Dave Barrow, N9UNR, moved and Tom Trethewey, KC9ONY, seconded the motion to adjourn the meeting.

At 10:10 p.m. the meeting was adjourned.

#### Members signing the attendance sheet:

Ed Rate, AA9W; Gabe Chido, WI9GC; John Strachota, W9FAD; Gary Drasch, K9DJT; Nels Harvey, WA9JOB; Bernie Golownia, AA9CI; Mark Fielkow, KB9PXE; Todd Fast, N9DRY; Jim Caraway, W9LLL; Gary Klupper, KC9EOV; Ed Fischer, KC9LRJ; Terry Koller, KA9RFM; Tom Trethewey, KC9ONY; Nathan Scheunemann, AC9BU; Ken Boston, W9GA; Kristian Moberg, KC9TFP; Stan Kaplan, WB9RQR; Jon Gilmore, KB9RHZ; Dave Barrow, N9UNR; Ed Seigworth, AA9GT; Jerry Rauth (no callsign); Ed Frac, AA9WW; Tom Ruhlmann, W9IPR; Gary Sutcliffe, W9XT; Brian Skrentny, N9LOO; David Parkinson, KA9RNU; Lori Ann Parkinson, N9PCA; Nancy Stecker, KC9FEK; Kate Holt, KB0SIO; Julia Nawrot, KB9WBQ; Ray Brunette, W9BUJ; Dick Holt, AB0VF; Ben Smith, KC9TZM; Glenn Classey, KC9UHP; Don Hoffmann, N9KRC; John Thielen, WA9KNY; Ray Totzke, W9KHH; Paul Given, N9PG; Dale Matthies, N9NNE; Leon Rediske, K9GCF; Tom Nawrot, AA9XK; Janice Hoettels, KA9VVQ

Guests: Bill Shadid, WA9MXQ; Ed Fischer, KC9LRJ

#### **AGENDA**

October 10, 2012

- 1. 7:00 7:30 PM Network & Rag Chew
- 2. Call to order: Ken Boston (W9GA)
- 3. Introductions.
- 4. Announcements, Bragging Rights, Show & Tell, Upcoming events, Etc.,
- 5. Questions and Answers:
- 6. Program:
- 7. 50/50 Kent Christianson (W9WH)
- 8. Fellowship Break
- 9. Auction Stan Kaplan (WB9RQR)
- 10. Presidents Report Ken Boston (W9GA)

- 11. 1<sup>st</sup> VP Report Art Davidson (KC9PXR)
- 12. 2<sup>nd</sup> VP Report Brian Skrentny (N9LOO)
- 13. Repeater VP report Tom Trethewey ( KC9ONY)
- 14. Acceptance of Minutes Janice Hoettels (KA9VVQ)
- 15. Treasurers Report: Dave Barrow (N9UNR)
- 16. Committee reports.

Fall Swapfest – Tom Ruhlmann (W9IPR)
Other:

- 17. OLD BUSINESS
- 18. NEW BUSINESS
- 19. 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 7**<sup>th</sup> **Avenue, Grafton** Wednesday, October 10<sup>th</sup>

7:00 PM - doors open

7:30 - Membership Meeting