



# 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.



AMATEUR RADIO

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

Volume XXVII

March 2008

Number 3

## "No Holes" Installation – Yukon XL - Part 2 of 2

De Tom Ruhlmann (W9IPR)

In the last issue we built an "insert mount" on which to mount the control head and made a circuit breaker bracket and mounted it along side the battery. Now to run the power leads from the circuit breaker and battery to the transceiver under the back seat and install the antennas.



The power leads from the battery were threaded along a main wiring harness that already passed through the firewall using a blunted clothes hanger. I was especially careful to avoid damage to any of the existing wires in the factory harness.

The wire used for the power leads was stranded AWG #10 to minimize voltage drop. The power leads were strung from the circuit breaker and battery along side an existing wiring harness and passed through the firewall. Inside the drivers compartment the wire harness passed through the firewall up high and behind the dash

area. The wires were protected and passed under the carpet and under the door floor moldings to the rear passenger seat area.



The exposed power wiring was protected with spiral "wrap around" plastic harness available at Radio Shack. Power connections were made using Anderson Powerpole connectors. A ferrite core was placed around the power cable "just in case".

It would be a little difficult to hear the speaker under the seat so a remote external speaker was mounted between the top of the driver's seat and the headrest. That places it right behind my head so only low volume is required.



With the seat lowered there is no evidence of the transceiver or cabling.

The transceiver is simply secured in place with “hook & loop” tape and it seems to do an adequate job. This completed the installation other than that of the antennas.



A special bracket was fabricated to mount the HF antenna ball mount. Shown is the upper portion. Note the mount rests on the bumper. This upper portion is secured with 3 metal screws to the doorframe to prevent any lateral motion of the mount. So OK, I did drill some holes but they were small.

My Yukon XL has a “hatch back” type of rear door and it allows about a half inch of clearance along the side of the hatch through which a flat bracket can be placed and secured to a fender flange below the vehicle. I made a cardboard pattern before any metal was cut and formed.



The lower portion of the mount that clamps to a fender flange is shown here from below the vehicle.



A “mag mount” UHF/VHF antenna was used as in the past and the coax was passed through the door and along side the door seal gaskets. Should the coax eventually be damaged just replace it. It’s a lot better than cutting a hole in the vehicle.



The HF antenna coax was also passed through the hatch door seal gasket and under the carpeting to the transceiver. Notice that the Hustler antenna was stabilized to the luggage rack using a stiff plastic rod (electric fence pole) and tie wraps.

Well, that's about it. An almost "no holes" installation. Actually I am very pleased with the overall result. It is "wife acceptable" and functions very well. About the only thing I might change is to add an ICOM antenna tuner so that I can use my 20-meter Hustler on 20 through 160 – maybe. I will let you know how that turns out once completed.

## The Orlando "HamCation"

De Tom Ruhlmann (W9IPR)

It was great! And again I found some great bargains. My thanks to Leon (K9GCF) who last year told me about the Orlando "HamCation" just before we left for Florida for the month of February. This year I made sure that if I had to go to Florida it would be at "HamCation" time and I am glad I did.



**AES was there with great deals as were most of the other larger distributors.**

"HamCation" definitely has the flavor of swapfests past. There was one large building for commercial vendors, including AES and Tower Electronics, and another equally sized building for the "amateur" vendors.



**A whole building of "good stuff"**

And then there was the great outdoors – it was great.



**The best deals? The open air flea market of course.**

Well I guess inflation has occurred because I couldn't seem to get anything for fifty cents but I did get some great buys ranging from \$2 to \$200. They ranged from a \$2 Simpson VOM and 6 partial spools of #14 solid copper wire for radials for \$12 to an ICOM AT-180 automatic antenna tuner for my "706 MkII G. All in all it was a good time.

And then there were the visits to "Fantasy of Flight" and "Sun & Fun" aviation museums and watching the launch of the Space Shuttle Atlantis at the Cape. It has been a great visit to Florida and I won't even mention the 70-degree weather without a snowflake in sight. See you at the "Post Everything Party".

## **WISCONSIN QSO PARTY: THE CASE FOR QRP**

By Bob Truscott, W9LO

I wrote an article for the February 1993 issue of this newsletter suggesting that ORC might want to consider operating QRP on Field Day that year. The suggestion was based on an experiment that W9BCK and I carried out during a Saturday morning QSO on 75 meter SSB. We lived in Bolingbrook, IL at the time, a distance of about 130 miles from Ron's QTH in Grafton. He reduced his power output from 100 watts to 8 watts, the bottom end of his power knob, while I watched my S meter. The received signal dropped all the way down to S9. The club had no interest in QRP, so the idea died, but it provided some background for my later interest in QRP.

Some of the domestic contests have a separate category for QRP, while some do not. The WIQP offers an additional power multiplier for QRP, specifically, up from 1.5 for low power to 2 for QRP. This represents an opportunity to significantly increase your score, about 30%, for a given number of QSOs and multipliers. The question is, of course, can you produce the same numbers when you operate QRP. With this in mind I worked QRP in several contests during the past year to try to get a handle on that question. I found no simple answer, but did

find I could compete head to head with the 100-watt guys when band conditions were good, but could not when they were bad. But that's not all bad because my problems occurred in popular nation-wide contests, and resulted from heavy QRM from everywhere, not because my signal was 13 dB down, but because there were just too many competing stations. I believe that the QRM level in areas outside Wisconsin will be much lower in the WIQP than they were in those earlier contests, and that will result in an acceptable number of state multipliers. Another thing to consider is that if conditions are bad the 100-watt guys scores will also be down

I recently ran an experiment here in my shack, trying to simulate "real world" conditions. I set up a steady S-9 signal into the FT-1000, and then switched in 18 dB of attenuation. The S meter dropped off to S-7. I can live with a signal just 2 S-units lower than that of the 100 watt guys, and probably will in the WIQP. I want that x2 power multiplier. Tom, W9VBQ, told me at the last club meeting that he also is considering going QRP in the party. Go get em, Tom. Maybe we can start a trend.

## **Upcoming Events**

March

1st – 2nd ARRL International Phone DX Contest

**8th Post Everything Party**

**9th Wisconsin QSO Party**

**12<sup>th</sup> Membership Meeting**

16th TriCounty ARC Hamfest @ Jefferson WI

29<sup>th</sup> – 30th CQ World Wide DX SSB Contest

27<sup>th</sup> OZARES

**28th – 29th AES Superfest**

April

**9<sup>th</sup> Membership Meeting**

19th Madison Swapfest @ Stoughton

24<sup>th</sup> OZARES

Central WI Swapfest @ Colby WI

May

**2<sup>nd</sup> Opportunity Day @ Parkview School**

**3<sup>rd</sup> ORC Swapfest at Circle B**

3<sup>rd</sup> – 4<sup>th</sup> 10-10 CW QSO Party

10<sup>th</sup> CQ National Fox Hunting Weekend

**14<sup>th</sup> Membership Meeting**

16<sup>th</sup> – 18<sup>th</sup> Dayton Hamvention  
 22nd OZARES  
 24<sup>th</sup> – 25<sup>th</sup> CQ WW CW DX Contest

## LAST CALL FOR THE WIQP

By Bob Truscott, W9LO

Mark your calendars and reserve a few hours for THE **WISCONSIN QSO PARTY** on March 9<sup>th</sup>. It runs from 1:00 PM to 8:00 PM, local time. CW, SSB, FM, choose any or all of these modes, work 80, 40, 20, 15, 10, 6, and 2 meters and up.

As you all know, ORC won the club competition in 2007, and we are hoping for a repeat performance this year. Last year we won by submitting 20 logs. This year we'll have a target painted on our backs, so we'll need more that. The goal is 30 logs, plus just a little bit of improvement from each of us who participated last year. (A lot of improvement would be OK, too.) Computer generated logs are preferred, but paper is OK. Be sure to spell out "Ozaukee Radio Club" on your entry form – the judges won't recognize "ORC". Get rules, entry forms, county maps, etc. at [www.warac.org](http://www.warac.org).

Daylight savings time starts on March 9, so don't forget to reset y our clocks. See you all at the party.

ten message over the air, they read it much too fast for the ham at the other end to write. Invariably, the ham reads it at a conversational pace, which is certainly not a pace conducive to accurate transcription at the other end. That tendency must be something that is hard-wired into our human brains.

Here is another example of why training is so important for emergency communications. A trained pair of hams will send (and receive) a written message just once, in a minimal amount of time. A pair in which one or both are not trained will need to send it several times before the message is accurately written down at the receiving end. A lesson best not learned during an actual emergency!

NET CONTROL SCHEDULE: OZARES nets are held each Thursday at 8:00 p.m., except on meeting nights (4<sup>th</sup> Thursdays). Both a net script and check-in list can be obtained on the OZARES web site, [www.ozares.org](http://www.ozares.org). If you are scheduled for NCO duty and cannot make it, it is your responsibility to find a substitute. Check the complete schedule on the web site for possible hams to trade dates with, and keep the net manager (WB9RQR) informed of confirmed trades. Guests are welcome after the OZARES check-ins are complete, most especially ORC members! By the way, if you see a difference between the schedule on the website and this column, this column will always be correct, since it reflects last minute changes and substitutions. Such changes and substitutions to the website version will be in bold print here.

## The Column

By Stan Kaplan (WB9RQR), Column Editor

At our 28Feb OZARES meeting, our EC for Training Skip Douglas (KA9DDN) had us work with the Emergency Management ARES/RACES Message Form, which is a local modification of ICS Message Form 213. As a result, we put the final tweaks into the new form, as well as practicing sending and receiving messages. Even the Emergency Manager Mary Fitzgerald (KB9NBW) got some practice at the microphone, as each group of us traded places at sending, receiving, logging and transcribing. A good training session!

You know, it is amazing to observe that almost uniformly, the very first time a ham sends a writ-

06 Mar	W9KHH
13 Mar	W19M
20 Mar	WJ9O
27 Mar	Meeting
03 Apr	<b>KA9GCF</b>
10 Apr	N9PBY
17 Apr	KA9PZG
24 Apr	Meeting
01 May	KB9RHZ
08 May	KB9RLI
15 May	WB9RQR
22 May	meeting
29 May	W9BTN

# Minutes of the Ozaukee Radio Club Regular Meet- ing, February 13, 2008

De Nancy Stecker KC9FZK, Acting Secretary

At 7:00, Mark (AB9CD) held an Elmering Session showing various kits to be made as a learning project.

President Mike Yuhas (AB9ON) called the regular meeting to order at 7:30. In the absence of Tim Broppe (KA9EAK), Nancy (KC9FZK) acted as Secretary. Members and guests introduced themselves.

**Announcements, Bragging Rights etc:** Sadly, the president announced the deaths of Terry Koller's wife and Skip Douglas's stepmother. Cards were passed out for members to sign prior to being mailed. Bob (W9LO) reminded the club of the up-coming QSO Party on March 9 and the club's win last year. More information to come. Marc (N9ZF) said Wisconsin won 1<sup>st</sup> place in a 2007 ARRL low power contest. Chuck (WA9POU) finished a home brew linear amplifier that worked.

**Program: D-Star digital radio by Dan Workenaour (N9ASA) and Dave Schank (KA9WXN):** Dan (N9ASA) and Dave (KA9WXN) discussed their local D-Star digital radio system including how the Milwaukee Area Digital Operator's Group began, what equipment was purchased and then presented a demonstration of some of the equipment they brought.

**Fellowship Break:** A short break gave members the opportunity for a first hand look at the D-Star radios.

**Auction:** Stan (WB9RQR) held an auction of donated items. The 50/50 drawing was held and Dave (N9UNR) had the winning ticket.

## **Business Meeting:**

**Treasurers Report:** Nels (WA9JOB) said the financial report had been placed on the tables for review. He noted the rates on a renewed CD had lowered significantly and that this will have an impact on the scholarship fund income. The chair entertained a motion to accept the treasurer's report, Dave (N9UNR) so moved; the motion was seconded and passed.

## **Committee Reports:**

**General, Extra Class Report:** Mark (AB9CD) stated the General Class has one more session and that one student had already taken and passed the test. There are plans for an Extra Class in the near future. Dates to be announced.

**Repeater Report:** John (W9NRG) had to leave for a fire call, so Nels (WA9JOB) filled in by saying that not much is going on, everything is working.

**Post Everything Party:** The president reported on the up-coming party on March 8, 2008. The price is \$17.50 per person, to be held at the Grafton Legion Hall, cocktails at 6:00 p.m. and dinner following at 7:15 p.m. Bring your gift-wrapped "treasures" for exchange; ladies may also bring a gift to exchange. Awards will be handed out.

**Swapfest Committee:** Tom (AA9XK) said May 3 is the date, work and ideas for this year's Swapfest is on going.

**Youth Committee:** Bill (KA9WRL) said May 2 is an all day activity at the Parkview Elementary School in Cedarburg. The club has been asked to participate in this project again. He is also working at getting information about an EAA activity for youth this fall.

**Old Business:** None

**New Business:** Nels (WA9JOB) reminded members to get their reservations in for the Post Everything Party. In thanks for all the donated equipment for the scholarship fund from Hal Giese (W9RXJ) who now resides in nursing home, Nels (WA9JOB) made a motion to waive his dues for the year. Gary (WI9M) seconded the motion, the motion passed.

**Attendance:** The thirty members and three guests who attended the meeting were: Mike AB9ON, Ed AA9W, Doug N9KG, Joe AA9HR, Bill AA9OS, Stan WB9RQR, Mike N9JIY, Mike WJ9O, Dale N9NNE, Kent N9WH, Mark KC9GST, Jon KB9RHZ, Bill KA9WRL, Tom W9VBQ, Scott KC9IIZ, David N9UNR, Nancy KC9FZK, Mark AB9CD, Chuck WA9POU, Jeff WB9PZD, Bob W9LO, Marc N9ZF, John WA9KNY, Ted KB9POZ, Ron W9BCK, Ray W9KHH, Jim K9QLP, Nels WA9JOB, Gary

WI9M, Tom AA9XK and guests Phil KB9ZJU, Dan N9ASA and David KA9WXN.

**Adjournment:** At 9:20, the chair entertained a motion to adjourn, Dave (N9UNR) made the motion, it was seconded and the motion passed.

## ORC President's Column

By Mike Yuhas, AB9ON

THERE ARE a couple of fun things happening in March! First, I can almost guarantee that you can safely put away your snow shovel; it wouldn't hurt to start thinking about summerizing the snowblower, too. Just as the swallows return to Capistrano, our friends who spent the winter in warmer climes will soon be back in Wisconsin. Welcome back!

From a radio standpoint, the first item of importance is this year's edition of the Ozaukee Radio Club Post Everything Party. I'm looking forward to hobnobbing with ORC members and their spouses on March 8. The Awards committee assures me there will be a raft of recognitions to pass out. Will you be honored? You'll find out at the party!

The Wisconsin QSO Party takes place the following afternoon and evening. Remember to indicate the ORC when submitting your logs. Will our club take first place again this year?

Our regular meeting in March will feature Andy Eliason (KA9DOL) coming back for another program covering many nifty ham projects, including a 2-tube oscillator, an AM regen radio and a 40-meter CW transceiver. Please make an effort to attend on March 12.

ORC will again be represented at the Amateur Electronic Supply Superfest, on March 28 and 29.

Planning is proceeding for our own annual Swapfest. May 3 is just around the corner! Tom Nawrot is Chair this year; be in touch with him with suggestions and your offer of assistance.

Have a great month. See you on the air!

## Tips, Tails & Tools

By Tom Ruhlmann, W9IPR



**Now that's a slingshot. It can shoot a really big sinker and leader line high over the tree limbs to pull antenna supports to where no man has dared to climb – at least not on my lot.**

## FOR SALE OR TRADE

Your ad for sale or trade could have gone in here. Got stuff to get rid of? Submit it to Tom Ruhlmann for next months newsletter!

## **AGENDA**

*March 12th, 2008*

1. Call to order – Mike (WB9ON)
2. Introductions.
3. Announcements, Bragging Rights, Show & Tell, Upcoming events, Etc.,
4. Program:
5. Fellowship Break
6. Auction.
7. Acceptance of Minutes as printed.
8. Treasurer's report – Nels (WA0JOB).
9. Repeater report – John (W9NRG)

10. Committee reports.

Membership –

Youth Program – JOTA – Bill Howe (KA9WRL)

- Opportunity Days @ Parkview

Circle B Swapfest - Tom Nawrot (AA9XK)

PEP -

11. OLD BUSINESS

12. NEW BUSINESS

13. Adjournment to ?

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### **The ORC Newsletter**

465 Beechwood Drive  
Cedarburg WI\* 53012

### **First Class**

## **Next ORC Meeting**

**Grafton Senior Citizens Center**

**1665 7<sup>th</sup> Avenue, Grafton**

**Wednesday, August 9<sup>th</sup>**

**7:30 PM**