



Hamtrix

Volume 53, Issue 1 January, 2008

In this issue:

<i>The President's Shack</i>	1
<i>2008 Swapfest</i>	1
<i>Meeting Minutes</i>	2
<i>Contest Horizons II</i>	3
<i>Scuttlebutt</i>	4
<i>Club Happenings</i>	4
<i>Upcoming Programs</i>	4
<i>FAR Scholarships</i>	5
<i>Opportunities for 2008</i>	6
<i>About Antennas</i>	6
<i>Birthdays and Anniversaries</i>	7

Meetings & Events



January 8
Club Meeting
Program:
**FM38 Linked
Repeater System**
by Bob Schmidt, N9GMT

January 22
Board Meeting

February 3
Material Due for Next
Hamtrix

February 12
Next Meeting

March 9
WI QSO Party



The President's Shack

by Howard Smith,
WA9AXQ

I hope the Holiday Season was enjoyable for all and that 2008 will be a good year.

For most of you receiving Hamtrix via email, I can remind you that our Midwinter Swapfest is on Saturday,

January 5th. Setup time begins between 5:30am to 6:00am. Doors will open for vendors at 6:00am and to the general public at 8:00am. As I have said before, we need 100% participation at this event for it to be really successful. Please continue the support you have shown in the past. The club provides an admission ticket to each member and a coupon for one lunch.

We all need to work on the weather. We need a nice Saturday - not too cold, and no snow, ice, etc. I look forward to seeing you all there. Come and have a

(Continued on page 5)

Swapfest 2008

Saturday, January 5

Doors open at 6:00AM for vendors; 8:00AM for all

Your help is needed - even if you haven't signed up for a specific job!

Workers

- Be there at 5:30AM unless you have signed up for a different time.
- Please wear your WARAC hat (if you don't have one, it'll be provided at the event)
- If available, bring your HT tuned to 145.170 MHz) simplex (repeater output frequency).
- Workers will be given a door prize/admission ticket and a lunch ticket. Coffee and donuts will also be provided.

Admission

- **Red** seller tickets are required for admission during setup time. Do not admit anyone with a green ticket before 8:00AM.

Equipment Sales

- Better items—take to the South Hall and make arrangements with John, K9IAC, who will have a table for such items.
- Parts/components and less valuable items - take to Louie, W9GSV, at the club table in the **East** Hall. Note the change of location.
- Monetary or equipment donations are always welcome and will benefit the Scholarship Fund. See Phil for tax deduction form.



From the Minutes...

By Lynn Tamblyn, K9KR
Secretary

**Minutes of the General Meeting
December 11, 2007**

The meeting was called to order at 7:40PM by President Howard Smith. The meeting was lightly attended because of inclement weather.

Four visitors were introduced. They were our program presenter, Glenn, W9IQ, his wife Beth, his son Logan, and his father Lou, W9LOU.

Howard called for a discussion of the previous weekend's 10 Meter Contest. It was noted that more club members were on than in past years with John, K9IAC and Tom, K9BTQ reporting having worked 13 members. Informal results indicate that Chuck, WB9PUB is probably highest among club members with around 220 QSO's.

PROGRAM

The program topic was Hydrogen Fuel Cells (HFC's) and it was presented by Glenn Schulz, W9IQ. He began by describing the HFC as a device that converts hydrogen and oxygen gasses directly into electrical current. Since the only by-products are heat and water, HFC's are totally non-polluting. Also, they have no moving parts and do not produce noise. Fuel cells can be made to work with other hydrogen-rich fuels, but they may then have other chemical byproducts.

Glenn went on to discuss the role that fuel cells could play in reducing our society's dependence on petroleum-based fuels and the reduction of greenhouse gasses produced by the use of such fuels.

Use of bio-fuels will reduce greenhouse gasses but will not eliminate them. Since HFC's produce no greenhouse gasses, they offer a potentially better solution. The key to success is the establishment of a hydrogen production and distribution infrastructure.

He also stated that the advent of hybrid vehicle technol-

ogy has paved the way for HFC powered cars since it has brought electric powered cars into mass production. He went on to discuss some work currently being done to develop HFC-powered vehicles.

Glenn related the history of fuel cell technology including its use in the US space program and in submarines produced in Germany. He also suggested some ideas for ham radio applications of the technology.

The program ended with a demonstration of a small hydrogen fuel cell that generates about half a watt of power. The demo unit is reversible - it can either generate hydrogen and oxygen when connected to a DC source or, in fuel cell mode, it converts the hydrogen and oxygen back into electricity. He used it to power a small DC fan motor.

BUSINESS MEETING

After refreshments there were only about six members to talk about the Swapfest. At this point it was learned that three members had been ticketed for parking on the wrong side of the street during a snow emergency. Since they had to move their cars immediately, the meeting was ended without the Swapfest discussion at about 9:30.

*For the Secretary
Tom Macon, K9BTQ,*

There was no Board Meeting in December



2007 WARAC Officers and Board			Hamtrix — Editor & Publisher
President	J. Howard Smith, WA9AXQ	414 425-5626	Submit newsletter material to: Tom Macon, K9BTQ 3547 S. 95 St Milwaukee, WI 53228 414 543-3878 tmacon@wi.rr.com ■■■■
Vice President	Thomas W. Macon, K9BTQ	414 543-3878	
Secretary	Lynn C. Tamblyn, K9KR	262 534-9655	
Treasurer	Richard M. Wood, W9JBE	262 542-5118	
Director (2008)	Robert F Zach, KC9AGX	414 328-3691	
Director (2009)	George Dunco, AA9SR	262.782-6325	
Director (1 year)	Wes Andersen, N9YE	414.423.0640	
Board Chairperson	J. Howard Smith, WA9AXQ	414 425-5626	

EXPANDING YOUR

CONTEST HORIZONS

PART TWO

By Lynn Tamblin, K9KR

After reading Tom Macon's *Contest Horizons* article in last month's Hamtrix and the informative article in the January 2008 QST on *The Joy of Contesting*, you decide you are interested in trying to improve your operating skills by participating in a contest in preparation for the upcoming club-sponsored Wisconsin QSO party (WIQP) March 9, 2008. You now wonder how to proceed. Let me help you with some further comments and clues.

Let's take a look at the WA7BNM website for the list of upcoming contests. On the site we find 21 contests listed for January, and 22 listed for February. Since WIQP happens in early March, about two months from now, I would pick two contests to use for practice, out of those 43 listed. Which ones? Right off the top, I would start in January, with the North American QSO Party (NAQP), on Saturday, January 19, 2008. I believe that would be a good one to start with for several reasons: it is a stateside type of contest (you mainly work the USA and Canada); it is all bands; it is only 12 hours long; and you can only use 100 watts (which puts all stations on a level playing field to start with). You can work the same station on each band, so the contacts pile up fast as you rework the same station again on each band. It starts at noon local time and runs until midnight. The ex-

change is just your name and your state.

Being able to use any band helps in case the higher frequency bands are not open, which makes 20 and 40 the bands of choice. The lower bands usually work better as the evening progresses. You could use 40 meters during the afternoon until the broadcast stations roll in and then switch to 75. Right now, 75 meters has been going long around supper time, which will actually help your contact totals, as it is easy to make more contacts since you are not limited to just local types of contacts. The other positive is that you can operate 40 and 75 with just a simple wire dipole, so you don't need a very elaborate antenna system, like a beam. So other than it being 12 hours, which might limit your available operating time due to other commitments, you should be able to participate for a portion of the NAQP.

NAQP is not listed as a state QSO party but it is very similar to a state party like WIQP, so the NAQP practice should help. Each contact you make will help improve your confidence so that when March 9, 2008 comes around, you can help WARAC by participating in WIQP.

Now that you have some operating time in your first contest, I suggest you continue training. In February, the big contest is the Minnesota QSO Party

(Continued on page 7)

On the Internet

- Check out the web page for the W0AIH contest superstation at <http://www.qth.com/w0aih/>. There are over 50 towers and many, many antennas. It's located near Eau Claire, WI, and is often heard in contests using W9EAU.
- Looking for information on batteries and associated circuits? Here's a web site with plenty of charging and inverter circuits for different kinds of batteries: <http://www.discovercircuits.com/B/batt-chrg.htm>

.....

Ham Happenings

Around the area

Menomonee Falls Club

Bank One
Pilgrim & Mequon
Germantown
Wed, January 30, 7:30PM

Milwaukee Radio Amateur Club (MRAC)

Redemption Lutheran Church
Hwy 100 & Capitol
Thurs, January 31, 7:00PM

Ozaukee Radio Club

Grafton Senior Center
1665 7th. Ave.
Wed, January 9, 7:30PM

CQ3TUE

Old Country Buffet
16750 W Bluemound Rd
Tues. January 15, 11:15AM

South Milwaukee Amateur Radio Club

Wed. February 6, 7:00PM
Legion Post 434
Shepard Ave
Oak Creek, WI.

Amateur Radio Testing

Saturday, January 5, 2008
9:30AM
WARAC Swapfest
AMF Lanes
Across Northview Road from
Expo Center

NOTE

Please do not contact
meeting places for
information.

2008
**Dues
are
Due!**

Join in on the
**WARAC
Repeater
Net**

On the
"Off-Tuesdays"
of each month
(1st, 3rd and 5th Tuesdays)
7:30PM

On the WARAC Repeater
145.17 MHz
(or 145.17 simplex if the re-
peater is not available)

Thanks!



Thanks and a tip of the
editor's hat to the following
contributors to this
month's issue of **Hamtrix**

Wes Andersen, N9YE
Lynn Tamblyn, K9KR



Write an Article
This means
You!
Please??

Scuttlebutt...

- Happy New Year everyone! Resolve now that this is the year all those long-delayed projects will be completed!
- We're anxiously awaiting the big signal from AA9SR. George, when is that tower going to be up?
- Sunspot activity remains very low. It's not clear if we have passed through the minimum of the cycle but we've got to be close.

If you have any news you'd like to report , please submit it to your editor, Tom, K9BTQ. Such things as license upgrades, a new rig or antenna are great news. It won't be published if I don't know about it!

- Ed.

.....

Club Happenings

Committee Reports

Wisconsin QSO Party - An-
nouncements for the 2008 'test
have been submitted to ham

magazines. 2008 rules and
other information will soon be
published on the club web site.
Stay tuned!

Lynn Tamblyn, K9KR
WIQP Chairman

.....

Send in Your Log

Your ARRL 10 Meter Contest logs must be emailed or mailed to the ARRL. They need to be received or postmarked by January 8.

The WARAC Summary sheet for the WARAC "piggy-back" contest must go to Chuck Craven, WB9PUB. You can bring it to the Swapfest or to the next club meeting. See last month's Hamtrix or the club web site for the summary sheet form.

If you need help with your submission, call Tom, K9BTQ.

.....

Upcoming Meeting Programs

January 8

FM38 Repeater System

Bob Schmidt, N9GMT

Tentative Future Programs

Weather Forecasting

6 Meter Operation

Have an idea for a program? Something you'd like to hear about?
Let us know - Contact a Board member!

.....

FAR SCHOLARSHIPS FOR 2008

Information from Don Michalski, W9IXG, ARRL SM, and FAR

The **Foundation For Amateur Radio, Inc.**, a non-profit organization with headquarters in Washington, D.C., plans to administer 58 scholarships for the academic year 2008 - 2009 to assist licensed Radio Amateurs.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$3000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Here are some awards for Wisconsin-only residents:

The WARAC Memorial Scholarship, sponsored by the West Allis Radio Amateur Radio Club, Inc. Milwaukee, Wisconsin, pays \$1500. Applicants must be Wisconsin residents pursuing an Associate, Bachelor's or Graduate degree

in any course of study.

The OZAUKEE Radio Club Scholarship pays \$1000. It is available to Wisconsin residents pursuing a Bachelor's or Graduate degree in any course of study.

The South Milwaukee Amateur Radio Club Scholarship pays \$1000. Applicants must be Wisconsin residents and intend to seek an Associate or Bachelor's degree from a college or university in the U.S. Preference will be given to applicants studying Electrical Engineering or related technology.

More information and application forms are available at the FAR site: <http://www.amateurradio-far.org/index.php> or by writing to:

FAR Scholarships
Post Office Box 831
Riverdale, MD 20738

The Foundation For Amateur Radio



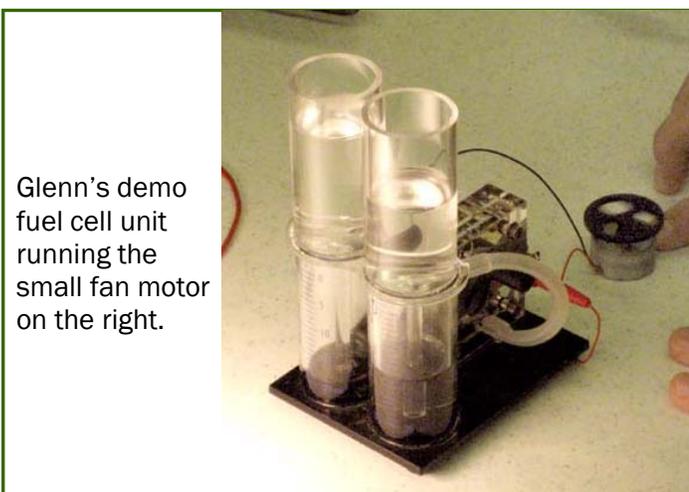
Washington, D.C.

The President's Shack

(Continued from page 1)

good time!

Speaking of weather, the December meeting was held even though there was lots of snow and West Allis had declared a snow emergency. Glenn, W9IQ, came with some family members and Glenn's presenta-



Glenn's demo fuel cell unit running the small fan motor on the right.

tion on Fuel Cells was quite interesting. He also had a working fuel cell that was completely self contained and powered a small fan. Unfortunately, the total attendance was just ten people and five of those were guests.

Several of us learned first hand what a West Allis snow emergency meant, as we had parked on the wrong side of the street and had to pay for that privilege. At least we discovered this before any cars were towed. While we cannot control the weather, it was really too bad the snow had to come when it did. Many of you missed a really good presentation.

I need to remind everybody that club dues are now due and should be paid to Dick, W9JBE, the club treasurer. He will be at the Swapfest as well as club meetings.

The Program will be a presentation by Bob, N9GMT, about the linked repeater system that is being used in the Milwaukee area.

See you at the meeting. With or without snow...

Howard Smith, WA9AXQ

OPPORTUNITIES FOR 2008

By Wes Andersen, N9YE

Are you a ham of 25-plus years, a new ham, or somewhere in between? Are you looking to expand your horizons? What follows is a list of possible ideas and opportunities for all hams. This list is by no means exhaustive, but here are a few ideas to get you started.

Technician class licensee:

- Earn the *Worked All States* award on 10 meter SSB
- Introduce someone new to amateur radio
- Check out SSB & CW on the UHF & VHF bands (there's more than just FM!)
- Join a club! Get involved if possible.
- Build something! Perhaps an antenna!
- Looking for help? Ask at a local club - or on a repeater - or read books and magazines

General class licensee:

- Explore 160 meters - enter a contest
- Mentor a new ham
- Earn a code proficiency award from ARRL
- Write an article for a club newsletter or ham magazine
- Check out Field Day or another operating event
- Explore the WARC bands or the 1.25 meter band

Extra class licensee:

- Help a fellow ham upgrade - you made it to the top so you know the way!
- Earn the *Worked All Continents* award on 6 meters
- Have fun working 30 meters - QRP
- Check out *RATS* - Racine Amateur Television Society
- Help teach a class - present a topic at a meeting - or become a Volunteer Examiner

Expand your own horizons - pick an area of interest, research it, explore it, and share your results !

.....

ABOUT ANTENNAS

From the December 12th edition of the ARRL *Contest Rate Sheet*:

Baluns

Tim K3LR uncovered two good on-line resources: A very nice PowerPoint presentation on baluns that can be downloaded in PDF format from http://www.geocities.com/ve2_azx/BALUNS2006-ang.pdf. Even in the abbreviated visual format of a slide show, there is plenty of detail about how baluns work and the differences between the various styles.

Antenna Basics

The second is an on-line book, *Understanding Antennas For The Non-Technical Ham* at <http://www.hamuniverse.com/n4jaantennabook.html> by Jim N4JA. The overly-technical among us will quibble with some of its bits and pieces, but the material may be just right to help a new ham pick up on the mysteries of the skyhook.

- Contributed by Ron Gorski, N9AU

.....



January 1 - Greg Jennings, W9GJ
 January 10 - George Dunco, AA9SR
 January 11 - Ferd Wesolowski, K9CGZ
 February 6 - Phil Gural, W9NAW

*Wedding
 Anniversaries*

January 20 - Eddie and Ethel Smith
 January 24 - Greg and Maria Jennings



Contest Horizons

(Continued from page 3)

(MNQP). With Minnesota being right next to Wisconsin, you should be able to do a decent job of making contacts with your dipole and 100 watts (although MNQP is not limited to 100 watts). The MNQP starts at 8 AM and runs until 6 PM, Saturday, February 2, 2008. That short 10 hour "party" happens during the part of the day when 40 meters should be great for propagation between Minnesota and Wisconsin, along with 75 meters later on in the day. You might even make some contacts on 20 meters, too.

The Minnesota Wireless Association sponsors this one. They are quite an active group so there should be lots of Minnesota stations on. This is a true state QSO party so you can only work stations in MN. You just need to give your name and state. The MN station will respond with their name and MN county. You may work each station on multiple bands here, too. There are 87 MN counties as possible multipliers. They even have a list of frequencies on each band where you can expect to find stations, which makes it easier to find participating stations. So try this one as your second training session. I think you will enjoy it a lot.

I also wanted to touch on logging. Tom mentioned the use of a computer logging program. If you are comfortable with that, go for it. There are a bunch of logging programs that support both NAQP and MNQP, in

addition to there being specific programs for each contest. If you are not comfortable using a computer, there is always paper - plain old lined 8.5 by 11 sheets of paper. Just make sure you keep each contact by itself, making sure to note the time and band with each contact. That way when you change bands, the information will be clear so you can compile your results when you are done. If you want to submit an entry, do so. If you have a problem, or need to ask some questions, let me know and I will try to help.

If you are comfortable with a computer and can use the Internet, visit <http://www.ncjweb.com/naqprules.php> for North American QSO Party particulars. The Minnesota QSO Party particulars are available at <http://www.w0aa.org/mnqp.htm>.

You can download a free MNQP logging program from the WR0DK site <http://home.comcast.net/~wr0dk/> (or follow the links from the www.w0aa.org website - see the *Rules* link). I am not aware of any free NAQP program, although there probably is one somewhere. If you want a specific program for either contest, you might try the N3FJP site. I know he has one for each contest at his rock bottom price of \$6.00 each.

Fast forward to March. Time for WIQP. I will be doing other articles about WIQP in the next two Hamtrix issues. Stay tuned for further training hints.

Politically Correct Colors

To help you remember the resistor color code with a politically-correct mnemonic, the ops on the QRP-L email reflector cooked up the following:

- Better Be Right (Ready) Or Your Great Big Project Goes West (Wrong)
- Big Boys Race Our Young Girls But Violet Generally Wins
- Bad Boys Race Our Young Girls Behind Victory Garden Walls
- Big Beautiful Roses Occupy Your Garden But Violets Grow Wild

And less politically-correct:

- Bad Beer Rots Our Young Guts But Vodka Goes Well

West Allis Radio Amateur Club, Inc.
Tom Macon, K9BTQ
3547 S. 95 St
Milwaukee, WI 53228

Swapfest
January 5
2008
Waukesha Expo



WEST ALLIS RADIO AMATEUR CLUB, INC.

PO Box 1072

Milwaukee, WI 53201

W9FK / Repeater 145.170 MHz (-600kHz offset)

<http://www.warac.org>

***See our Web Page or contact us
for more information on***

- WARAC Memorial Scholarships
- Wisconsin QSO Party
- Midwinter Swapfest
- Worked all Wisconsin Counties Award
- Amateur Radio Classes

WARAC holds meetings on the second Tuesday of each month and board meetings on the fourth Tuesday of each month. Meetings are held at 7:30 PM at:

**St Peter's Episcopal Church
7929 W. Lincoln Avenue
West Allis, WI**

Entry is off the alley at the rear of the church.
A wheel chair ramp and chair-lift are available.