



Hamtrix

Volume 54, Issue 2 February, 2009

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Meetings & Events



February 10
Club Meeting
Program:

**Setting Up a
Contest Station**
Starts at 7:00 PM

February 24
Board Meeting
Starts at 7:00 PM

March 1
Material Due for Next
Hamtrix

March 10
Next Club Meeting

March 15
Wisconsin QSO Party



The President's Shack

by Howard Smith,
WA9AXQ

I am sorry that I missed the January meeting. I was asked at the last minute to assist with the startup of one of the Leak Detection machines that the company that I work for builds. It is a new design and we are working through the usual problems when a new machine is introduced.

Tom, K9BTQ, told me that everything went fine at the meeting, except that the attendance was a little light due to the poor weather conditions.

I know a lot of our club activity revolves around contests. There is the WIQP, Field Day, and the 10 Meter con-

test. Many club members participate in these contests, and several of those members are what I would call contest pros.

There are other reasons to be on the air, and I would like to suggest a different kind of contest that may appeal to a broader group of club members. As a young ham, I had the goal to get the Worked All States (WAS) certificate from the ARRL. I don't remember how close I got, but I did not get them all.

I would like to suggest that maybe we could use the WAS as a means to promote more activity by club members. This would likely be over a 6-month period, with each participant reporting his totals at each meeting. At the end, an award would be given to the member with the highest total. If more than one made all 50 states, then I suppose we would provide duplicate awards. This is just an idea right now, so I would like to have your

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February Program

SETTING UP A CONTEST STATION

By Chuck Craven, WB9PUB

Do you want to work contests but found it to be taxing and you have low productivity (scores)? Are you curious as to how a home contest station is set up? Are you afraid to call "CQ Contest" because more than one person may answer your CQ? Do you have an annoying problem when working general rag chewing stations?

At the upcoming club meeting, the program will give you some ideas in laying out your ham station for contesting. The

program will be on setting up a ham station for radiosport / contesting. Three of our club members will give you insight as how they have set up their stations for working contests. You'll see and hear how they work the station quickly and log the stations calling them. Bring a paper and pencil; take notes, as there will be many good ideas on fixing those nagging station problems.

See you at the meeting!

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From the Minutes...

*By Lynn Tamblyn, K9KR
Secretary*

**Minutes of the General Meeting
January 13, 2009**

The meeting was called to order at 7:09 PM by Vice-President Tom Macon.

Visitors - Jerry Riedel, KA9AJF, and Wayne Peach, KC9OSY, were introduced. Club members then introduced themselves to our guests.

Potpourri - Charles Craven announced he was accepting the 10M club entry forms. Tom indicated he had printed copies of the club roster for those who did not get one. Mention was made of the upcoming ARRL January VHF Sweepstakes contest.

Program - Modeling Wire Antennas. Tom Macon spoke about a commercial software program called EZNEC4, that he purchased, because he wanted to look at antennas. Tom went thru the entry screens: wire, segments, source (feed point), and ground; and then the output screens: 3 dimensional view, 2 dimensional views both azimuth and elevation; and then talked about gain. Following this, Tom went thru several examples of wire antennas - dipole, inverted V, trap inverted V, 3 sided horizontal loop and end feed. Tom then plotted a G5RV for one of the audience members, to give them an idea of what the impedance and pattern would look like.

The meeting was adjourned at 8:30 PM, followed by refreshments and eyeball QSOs.

*Respectfully submitted,
Lynn Tamblyn, K9KR*

**Minutes of the Board Meeting
January 27, 2009**

The meeting was called to order at 7:09 PM. by Vice-President Tom Macon, acting on behalf of Chairman Howard Smith, who was out of town on business. Board members present were: Charles Craven, George Dunco,

Tom Macon, Lynn Tamblyn and Dick Wood. Guests in attendance were: Phil Gural and John Westimayer.

Budget - Tom Macon handed out his spreadsheet, which contained the previous 2006, 2007 and 2008 numbers, as well as a 2009 column for the Board to fill in with the Board's numbers for 2009. A lengthy discussion followed on what the numbers should be. As part of the discussion, by motion, the Board decided to award a \$ 1500 scholarship for 2009. Also, as part of the discussion, by motion, the Board approved Dick Wood's plan to take what monies he needs to fund this scholarship from a CD that is ending, adding to what he has in the scholarship checkbook, to achieve the needed \$ 1500, without taking any funds from our general operations account. Dick would then start a new CD with the remainder.

Waukesha County Technical College - Dick Wood informed the Board that space is available at WCTC for an amateur setup. Some amateur equipment and antennas are already there. Dick indicated that Glenn Schulz, W9IQ, wishes to do a club station from WCTC, possibly including a repeater. Glen wondered if WARAC might be interested. After discussion, the Board asked Dick to obtain further information.

Radio Classes - Dick Wood also reported that Glen and Dick would be teaching a radio class at a Germantown government building. Tom Macon will be placing a notice in the next issue of Hamtrix.

Swapfests - Phil Gural gave the Board his annual report on the 2009 swapfest. Phil then discussed his 2010 swapfest proposal. By motion, the Board approved holding the advance admission ticket prices at \$4 and the table price at \$19, for the January 9, 2010 swapfest. Prices at the door will be \$5 for admission and tables will be \$22. Electricity will be \$20. Phil mentioned that he had tentatively booked swapfest dates of 1/8/2011, 1/7/2012, 1/5/2013, 1/4/2014, 1/3/2015 and 1/9/2016.

Repeater - John Westimayer reported that he needs several sections of tower installed, and then will install the club's Sinclair antenna at the top. He has the UHF link equipment ready to go. This work will be done during better weather and according Phil Gural's schedule (Phil will be doing the tower sections). Lynn mentioned that

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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 (2009)	George Dunco, AA9SR	262.782-6325		
Director (2010)	Chuck Craven, WB9PUB	262.642-7628		
Director (1 year)	Robert F Zach, KC9AGX	414.427-0333		
Board Chairperson	J. Howard Smith, WA9AXQ	414.425-5626		
			

SHOE GOO TO THE RESCUE

By Tom Macon, K9BTQ

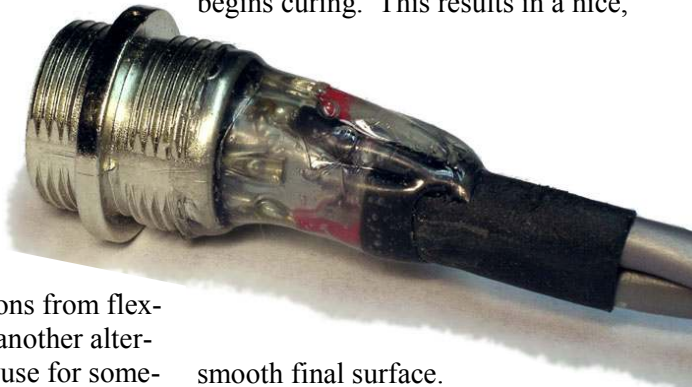
Occasionally we run into the need to use a chassis style connector on the end of a cable. Making a microphone adapter cable is a good example, where a cable style female connector is either hard to find or very expensive, if not both.

Obviously the best solution is to have the right connector, but we've all tried various work-arounds to protect and strain-relieve wiring attached to an open style connector. Electrical tape works, sort of, but can become a sticky mess in time. Silicone RTV can also be used, but may not be strong enough or stiff enough to keep the connections from flexing and breaking. Epoxy is another alternative but is really messy to use for something like this.

I've recently found a product called *Shoe Goo* that I think is a better alternative. It's more permanent than tape and easier to apply than RTV or epoxy. It hardens into a clear plastic, but is still a

bit flexible – not as hard as epoxy. Also, it seems to adhere fairly well to most common materials. The only downsides are that it takes a couple of days for it to cure and it's kind of smelly when first applied.

Another thing I like about Shoe Goo is that, although it's a thick goo when it comes out of the tube, it flows a little as it begins curing. This results in a nice,



smooth final surface.

I bought Shoe Goo at Ace Hardware. For detailed information such as solvent resistance, visit www.shoegoo.com.

No doubt many of you have other good hints and kinks. Send 'em to me and I'll pass 'em on!

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LICENSE CLASSES TO BE OFFERED

Classes for General Class and Extra Class licenses will begin Saturday, February 7, running for six weeks ending March 14. The General class begins at 9:00AM and the Extra class begins at 10:30AM

These classes are hosted by the Wisconsin Amateur Radio Club (WiARC) and will held at the Germantown Police Emergency Operations Center, N112 W16877 Mequon Road.

ARRL License Manuals will be used and will be available for \$24.95 on the first day of class. There is no charge for the classes themselves.

Registration is by email to Glenn Schulz, W9IQ, w9iq@arrl.net.

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CONTEST CALENDARS

There are lots of contests every weekend, especially this time of year. Check the *Contest Corral* in QST or these web sites for complete listings:

- <http://www.hornucopia.com/contestcal/>
- <http://www.arrl.org/contests/>
- <http://n3fjp.com/dates.htm>

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Ham Happenings

Around the area

Ozaukee Radio Club

Wed, February 11
7:30PM

Grafton Senior Center
1665 7th. Ave.
Grafton

CQ3TUE

Tues. February 17
11:15AM

Old Country Buffet
16750 W Bluemound Rd

Wisconsin Amateur Radio Club

Wed. February 25
7:30PM

Germantown Police Dept
Germantown

Milwaukee Radio Amateur Club (MRAC)

Thurs, February 26
7:00PM

Redemption Lutheran Church
4057 N. Mayfair Rd

South Milwaukee Amateur Radio Club

Wed. March 4
7:00PM

Legion Post 434
9327 S Shepard Ave
Oak Creek

Amateur Radio Testing

Saturday, February 28
9:30AM

Amateur Electronic Supply
5720 W Good Hope Rd

NOTE

Please do not contact meeting places for information.

Don't forget . . .

Club Meetings

Now Start at

7:00 PM

Meeting Room Opens at 6:30 -
Come Early!

**Have You Paid
Your Dues?**

If you haven't already done so, please forward your 2009 dues to our treasurer, Dick, W9JBE. You can do this at any club meeting or by mailing it to him at:

S46 W22328 Tansdale Rd;
Waukesha, WI 53189

Join in on the
WARAC

Repeater Net

On the

"Off-Tuesdays"

(1st, 3rd and 5th Tuesdays)

7:30PM

On the WARAC Repeater
145.17 MHz

Thanks!



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

Chuck Craven, WB9PUB



Write an Article

**This means
You!**

Please??

Scuttlebutt...

- Bob Zach, KC9AGX, and John Westimayer, N9LGD, are headed to Florida to attend the Orlando Hamcation fest in mid-February. Extra-curricular activities will include the Milwaukee-Florida Net Lobster Feast on the 14th. This is a big annual eyeball QSO for Net members.
- Another item for your calendar: AES Superfest is coming up on April 3 and 4. Our club will have a PR table as we have in past years.
- The Minnesota QSO Party takes place this Saturday, February 7, beginning at 1400Z. Rules and more information available at <http://www.w0aa.org/>.
- Do you have something you'd like to have published here? A new rig or license upgrade? A unique on-air experience or anecdote? Please let me know... - Ed.

Need a WARAC Name Badge?

We are looking into getting name badges for any club member who would like one. Suggestions are welcome on size, color, style and supplier. Bring your ideas to the next club meeting. Meanwhile, I will see if our old badges (shown) are still available.



- Ed.

For Sale

Ameritron ALS-600 solid state 600-watt amplifier with matching ALS-600PS supply and manuals. \$650. Contact John Zach, K9IAC.

Upcoming Meeting Programs

February 10

Setting Up a Contesting Station

by Chuck, WB9PUB; Lynn, K9KR and Ron, N9AU

Sure, you operate in contests from your station. But is your operation really efficient? This program will show you how little things can make a difference - just in time for the Wisconsin QSO Party on March 15.

March 10

Four-Element Quad Project

by Dick Wood, W9JBE

Last summer Dick gave a program detailing the Quad antenna project he had in progress. Come and see this program on how it all turned out!.

April 14

Antenna Modeling, Part II

by Tom Macon, K9BTQ

This time we will model *your* wire antenna!

Have an idea for a program? Something you'd like to hear about?
Or do you have something you'd like to talk about?

Let us know - Contact a Board member!

BRAIDED STRAP FOR GROUNDING?

The use of braided strap as an RF grounding conductor has largely been discontinued by commercial and military station builders, particularly outside. How come? Frank, W3LPL, answers the question,

"Braid works well when it's under pressure and protected from corrosion, for example in coax cable where it's under pressure and protected by the jacket. It's fine for DC, as well, because there's no RF skin effect. However, braid is a poor performer for indoor RF applications and an extremely bad performer outdoors because the skin effect forces the RF to jump from wire to wire each time at each braided overlap. The joints aren't under pressure, so the quality of the connections is poor. Outdoors the joints corrode and the connections are terrible. In both cases the resistance of the braid joints is poor. So, for RF connections use copper wire or strap. You can use stainless steel as a buffer between copper and galvanize to avoid galvanic action (except in a salt spray environment)."

- from the ARRL Contest Update, January 21, 2009

400 YEARS OF SUNSPOT DATA

By Tom Macon, K9BTQ

It's becoming clear that we are now in an extended period of low sunspots. At 266 spotless days, 2008 was the most spotless year since 1913, which had 311 spotless days. 2007 had 183 spotless days. What does this mean? Only time will tell.

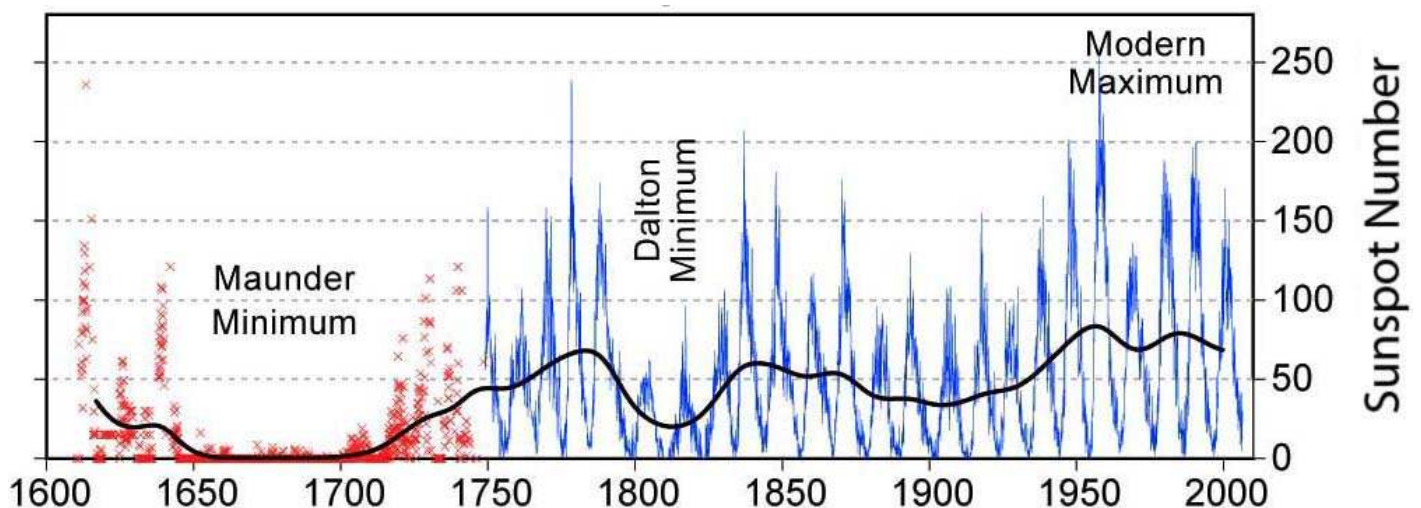
The graph below is an interesting look at past sunspot cycles. The blue cycles are numbered since more formal recordkeeping began around 1750. Cycle 1 is the first full cycle in blue, occurring around 1760. We are now starting Cycle 24. Earlier data is shown in red.

It's interesting to note that the most intense cycle occurred in 1958, during the lifetime of many of us. I remember it well. It also appears that most recent cycles have been more intense than average. We live in good times, at least up until now.

The huge variation in intensity from cycle to cycle is impressive. What would happen nowadays if we had a cycle like those during the Dalton Minimum in the early 1800's? Although it's harder to tell from this graph, the 11-year cycle time also varies significantly. Cycles have been as short as nine years and as long as 13.5 years, so 11 years is only an average.

The natural variability of solar data makes it very difficult for experts to understand what's happening and, therefore to make predictions. Smoothing out the variations requires averaging the numbers over a long period of time, so by the time data becomes reliable, it is old. It's simply not possible to make solid conclusions based on a few days, weeks, or even months of data.

But there's one thing that's certain. It's very difficult to be certain.





February 6 - Phil Gural, W9NAW
 February 11 - Tom Liebe, WJ9TCM
 February 14 - Gene Wierzbicki, W9RYS
 March 7 - Ray Massie, WB9WNA

*Wedding
Anniversaries*

February 13 - Don and Lois Rohleder



**What do you think of our club's web site? What would you like to see changed or added?
 - Forward your comments to Tom, K9BTQ**

Minutes

(Continued from page 2)

the remaining item would be the need for control operators, once the repeater was ready to go, if it is to be placed under the club call sign.

Programs - The March meeting will consist of Charles Craven reporting on the results of the internal club competition from the 10M contest. Lynn will give a brief announcement on your club sponsored WI QSO party, to happen March 15. Then Dick Wood will show his pictures of his recent quad installation. The April program will be part 2 of Tom Macon's wire antenna modeling program. Tom will ask for members' wire antennas to

model. No programs exist for May and beyond at present.

Membership - George suggested that the club should do membership badges, identifying themselves as WARAC members. He thought it especially important that WARAC members identify themselves at our swapfest, as WARAC members, with name and call sign. There was some discussion but no conclusions.

The meeting was adjourned at 9:51 PM.

*Respectfully submitted,
Lynn Tamblyn, K9KR*

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President's Shack

(Continued from page 1)

thoughts and suggestions. I think it would be an interesting challenge and would encourage more of you to be "on the air".

If you are interested in upgrading your license to either General or Extra, The Wisconsin Amateur Radio Club is hosting license classes. The classes will run for six weeks beginning Saturday, February 7, and ending on Saturday, March 14. The class lasts 1.5 hours each Saturday. The General Course begins at 9:00AM and ends at 10:30AM. The Extra Course begins at 10:30AM and ends at 12:00 noon. See the notice on page 3 for information on location and registration.

I mentioned earlier that I considered several club members to be contest pros. Ron, N9AU, Lynn, K9KR, and Chuck, WB9PUB, are in that group, and they have collectively put together a presentation about how they have set up their stations to be contest friendly. Chuck will make this presentation at the meeting. This will be interesting, and also very timely, because WIQP is coming up in March. You do have March 15 marked in your calendar, don't you? That will give you a little time to try some of their ideas during WIQP.

See you at the meeting,

73,
Howard Smith, WA9AXQ

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160M/80M SUPER BEAM

The huge 80m/160m Arcala Mammoth antenna in Finland is described in *PileUP*, the newsletter of the Contest Club of Finland (CCF). There are several pages of information and pictures. The 160m array has three elements, each of which weigh 3800 lbs! Check it out at

http://www.helsinki.fi/~korpela/PU/PU4_2008.pdf.

The Mammoth article begins on page 43 of the newsletter.

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