



Official Publication of the  
West Allis Radio Amateur Club

# Hamtrix

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Volume 61, Issue 12 December, 2014

## DECEMBER CLUB HAPPENINGS

### Club Meeting

St. Peter's Episcopal Church,  
7929 W. Lincoln Avenue, West Allis  
Decemberr 11, 2014 **7:00pm**

#### Program

Swapfest info Phil Gural W9NAW  
Join us for a pre-meeting dinner  
at Johnny V's Classic Cafe  
1650 S 84th St at 5:00pm



#### NUT NET

3.985mhz  
Monday-Saturday  
8:15am CT

#### Milwaukee-Florida Net

Every Day on 14.290 Mhz  
7:00AM - 9:15AM ET  
6:00AM - 8:15AM CT

December 23, 2014 Board  
meeting cancelled

### Swapfest

January 10, 2015  
This year in the Expo Arena  
Waukesha County fairgrounds  
More info on pg 5



#### WARAC 2-meter net

Every Wednesday at 8pm  
MATC repeater 147.045 standard offset  
127.3 Hz CTCSS

Club jackets and hats!  
Go to club Web site and click on  
The GOLD MEDAL IDEAS block  
[For more info or click here](#)



# *The President's Shack December 2014*

The holidays are coming faster than we know, and right after that is our **Midwinter Swapfest on January 10**. And the main focus of the upcoming December meeting will be on the Swapfest, since our January club meeting comes after.

Chairman Phil will conduct the discussion and fill us in on the details. The Swapfest is one of our big events of the year and **we need everyone possible** to be there to help make it run smoothly. Non-members are invited to help out as well. Come to the meeting and find out more!

As most of you know and appreciate, there is a lot of detail that goes into pulling off a swapfest of this size and this is especially true this year, since we will be in a different building. Please be at the upcoming meeting to find out what needs to be done to adapt to the Arena building.

The January meeting's program will be on the Arduino processor, with a look at some of the many cool projects that can be done with it. For the future, we are planning programs by a professional tower service and possibly West Mountain Radio.

Thanks to Mike Johnson, WO9B, we have published new information on our Worked All Wisconsin Counties Award. It's on our club website under WAWC - take a look! This award has been available since the 1990's, but the rules have been revised and the certificate has a new look. How many of you have worked all 72 counties in Wisconsin? If you have, the application form is there on our website.

Don't forget to get your copy of the salmon-colored **2014 Club Roster** if you haven't done so. This one

replaces the one with the lavender cover, which had some information missing.

The **ARRL 10 meter contest** is coming up on the weekend of **December 13-14**, 2013. To participate in our WARAC "piggy-back" contest, all you need to do is to submit your log to the ARRL as usual and also submit your log to Chuck, W9WLX. During the contest, work as many club members as possible for points in the club competition. Look elsewhere in this issue for more info.

I want to wish you and yours a happy and safe Holiday. Enjoy and stay warm. And in keeping with the WARAC holiday tradition, the **December Board meeting has been cancelled**. Also, please note that the **Nut Net breakfast** on December 23 is **still on!**

And, as always, the **before-meeting dinner** is at Johnny V's Classic Café, 1650 S. 84th St. at 5:00PM.

See you at the meeting! Bring a friend!  
Tom, K9BTQ

## **From the Editor**

It's December already. It seems we skipped a month or something! Lots of things are coming up. As said elsewhere: Swapfest is almost a month away; 10 meter contest and the normal business that comes with the season.

I'm not sure about the rest of you but the early cold weather sure threw my schedule off. Things like winterizing the summer equipment didn't get done on time and had to be done on the one or two days that were closer to fall weather.

Hopefully everyone got a chance to check their outdoor antennas, towers etc. Having to go up and work on antennas in the cold can cause more problems than just being cold. Of course the ideal unlimited funds and space setup is to have extra antennas on standby so all one has to do is switch a jumper inside and you're on your way.  
(see pg 9)

# **WARAC General Meeting Minutes**

## **November 11, 2014**

### **Introduction**

The meeting was called to order at 7:06 pm by President, Tom Macon, K9BTQ. Overall meeting attendance was 24 with 1 visitor.

### **Program**

The evening's program started with a look at receiver performance numbers by Howard Smith WA9AXQ. We also had a review of the TS-2000 by Steve Dryja NO9B and the Icom IC-7700 by Chuck Craven, WB9PUB.

### **Business**

Motion was made and accepted to approve the October meeting minutes as published in Hamtrix.

Paul Haas KC9JET shared some pictures from Northern Wisconsin's November 15" snow storm.

Phil Gural W9NAW updated us on the January Swapfest. Flyers are available. Layout has been worked out.

Thanks to the Awards Dinner Committee for doing a great job on the annual Award Ceremony Dinner. Erwin von der Ehe WI9EV was the member of the year. Congrats.

Howard Smith WA9AXQ reminded everyone that November is Dues month. All non-life members need to fill out the renewal form and return with the annual dues.

10 Meter Contest is coming up. Don't forget to forward logs to the club for our WARAC 10 Meter version of the contest.

Next month's meeting will be primarily about the swapfest. Future programs to be Higgins Tower service, West Mountain Radio, Spotting clusters.

General discussion on band conditions and operating events. Sweepstakes Phone is coming up this weekend.

Today is Veterans Day. Thanks to all the vets for your service.

Steve NO9B was looking for suggestions about computer related issues as an update to his program last year. He will publish the ideas in Hamtrix.

Revised 2014 Membership Booklets are available at the meeting. Members welcome to a copy.

### **Announcements**

2 meter net every Wednesday at 8:00 pm on 147.045, + offset, PL 127.3. Join in!

CQ Tuesday, 1:00 pm, 3rd Tuesday, in Waukesha at the New China Buffet.

The Nut Net breakfast is at Genesis Restaurant, 8:30 am, 4th Tuesday of the month. Dinner at

Johnny V's, 5:00 pm before the WARAC club meeting.  
The meeting was adjourned at 9:01 pm.

Respectfully submitted,  
Mike Johnson, WO9B  
Secretary WARAC

## **WARAC Board Meeting November 25, 2014**

Howard Smith, WA9AXQ, called the meeting to order at 7:11 pm.

Present: Tom Macon, K9BTQ, Steve Dryja, NO9B, Howard Smith, WA9AXQ, Erwin von der Ehe, WA9BZW, and Mike Johnson, WO9B.

### **Election of Board Chairman**

HOWARD Smith WA9AXQ was unanimously re-elected.

Cancellation of December Board Meeting on Dec 23rd.  
Moved, seconded and approved

### **Awards Dinner Wrap-up**

Carl's was generally considered to be very nice. Private room and accommodations were very good. Paul KC9JET, Frank KA9FZR and Ervin WA9BZW, are the committee for next year's dinner.

### **Swapfest**

Layout was finalized with the Expo Center. 3 volunteers (Steve, Erwin, Mike) will go through last year's entry tickets to update the email blast.

### **2014 Budget**

Howard Smith, WA9AXQ, distributed 2014 budget results and the rough outline of the 2015 budget. The next board meeting will finalize the budget.

### **Programs**

December – Swapfest 2014, Phil W9NAW

January - Arduino, Howard WA9AXQ

February – West Mountain Radio, Tom K9BTQ to follow up

March - WIQP

### **Future Program Ideas**

Milwaukee Astronomical Society (early spring)

Logbook of the World

Higgins Tower Service  
Spotting  
3 Phase Power Monitors  
Balloon Projects  
FM38 Operations  
Yaesu Fusion System  
Craig Jig Fastener System

### **Club Operations Manual**

Tom K9BTQ, updated component documents on the FTP site. Board members should review on the FTP site.

### **2011 Audit**

No report.

### **2012 and 2013 Audit**

No report.

### **Other Items**

2 meter net has been well attended. Mike keeping the momentum rolling.  
WAWC New Rules and Application Form is finalized

Meeting was adjourned 9:26 pm.

Respectfully submitted,  
Mike Johnson, WO9B  
Secretary WARAC

## **2015 Swapfest—It's in the Expo Arena**

No doubt that by now you have read or heard that the WARAC 43rd Annual Midwinter Swapfest, scheduled for January 10th, will in the arena. Suffice to say that this change was required by a schedule conflict.

Pre-event preparations involving security, catering and VE testing are being completed. Some table reservations have been received and we have been contacting others who asked or provided a deposit for certain table locations. Tom, K9BTQ, with the help of Deb from Expo, has designed a layout that is considered workable and should accommodate almost all of last year's sellers. We are expecting ARRL representation at both the Central Director and Wisconsin Section Manager levels to be at our event.

(see **swapfest** pg 8)

## **WARAC Ten Meter Contest—Dec 13-14, 2014**

### **Chuck Dellis, W9WLX**

The ARRL 10 meter contest is coming up, 0000Z, December 13 to 2359Z, December 14, 2014. WARAC members have the opportunity to join in a friendly club participation event. To participate in the club event, work the ARRL contest as you normally would. Simply follow the standard ARRL rules for the contest and bonus points will be awarded for every club member worked.

The club's piggy back event has three categories, CW only, Phone only, or Mixed Mode, CW & Phone. Power level multipliers are used in determining the final score, QRP ( $\leq 5$  watts), Low Power ( $> 5$  but  $\leq 150$  watts), or High Power ( $>150$  watts). See the summary sheet for final score calculations.

Submitting your entry is easy. Send a copy of your contest log and a completed summary sheet to Chuck Dellis at the address on the summary sheet. Electronic submission is encouraged and if you send your Cabrillo log, your entries will automatically be checked against the club roster to insure no club member bonus points were missed. Certificates will be awarded at the 2015 Awards Dinner.

Have fun!

# 2014 West Allis Radio Amateur Club 10 Meter Contest

Summary Sheet for WARAC sponsored contest portion

Saturday, December 13, 0000Z to Sunday, December 14, 2359Z

Rules: ARRL General Rules and Rules for HF contests apply.

Operator Name: \_\_\_\_\_ Call Used: \_\_\_\_\_

Entry Category CW Only: \_\_\_ Phone Only: \_\_\_\_\_ CW & Phone: \_\_\_\_\_  
(Check one)

Power Level QRP \_\_\_\_\_ Low Power: \_\_\_\_\_ High Power: \_\_\_\_\_  
(Check one) (0-5 watts) (5-150 watts) (>150 watts)

## Scoring

CW QSOs \_\_\_\_\_ X2 = \_\_\_\_\_ CW Points

Phone QSOs \_\_\_\_\_ X1 = \_\_\_\_\_ Phone Points

CW Points + Phone Points = \_\_\_\_\_ Contact Points

| Class | Power Range | Power Multiplier |
|-------|-------------|------------------|
| QRP   | 0-5 Watts   | 2.0              |
| Low   | 5-150 Watts | 1.5              |
| High  | >150 Watts  | 1.0              |

Contact Points \_\_\_\_\_ X Power Multiplier \_\_\_\_\_ = \_\_\_\_\_ Total QSO Points

## Bonus

Number of Club Members Worked \_\_\_\_\_ X5 = \_\_\_\_\_ Club Member Points

Total QSO Points \_\_\_\_\_ + Club Member Points \_\_\_\_\_ = \_\_\_\_\_ Final Score

Send this summary sheet and a copy of your log to:

Chuck Dellis  
3542 S. Massachusetts Ave.  
Milwaukee, WI 53220-1118

Or submit electronically at [cjd@wi.rr.com](mailto:cjd@wi.rr.com)

ARRL 10 Meter Contest  
By Mike Johnson, WO9B

After having so much fun at Field Day, I decided it is time to end my 10 + year HF hiatus. The idea is to dip my toe in the water, not go full tilt off the diving board. This month's ARRL 10 Meter Contest looks like just the right event: Short duration, small antenna and a temporary shack can be easily set up in my office. Plus it is a Club Event. Sounds like a win-win..

When it comes down to it, setting up a decent (read that as non-competitive) station is pretty easy. The HF radio (TS-850) and accessories are all on hand, they just need the dust knocked off and I need to remember how they all work. What is missing is the antenna. Heck, it's 10 meters, how hard can that be? Turns out there are a lot of choices. And a lot of opinions.

My real goal is to put this thing up mostly with on hand materials. The ARRL has an article on a simple antenna embedded in the contest webpage (<http://www.arrl.org/files/file/10M-Vertical-1995-07-QST.pdf>) which caught my attention. Pricing the parts through the Radio Shack web site, I determined I did not want to spend the \$20 or so needed. John Zach was pushing for his famous Rain Gutter portable antenna, but he was missing the antenna whip to pair up with his gutter base, and my gutter situation is not at all ideal. That pretty much leaves me with the old reliable wire antenna solution. So what's it going to be, a dipole or a vertical?

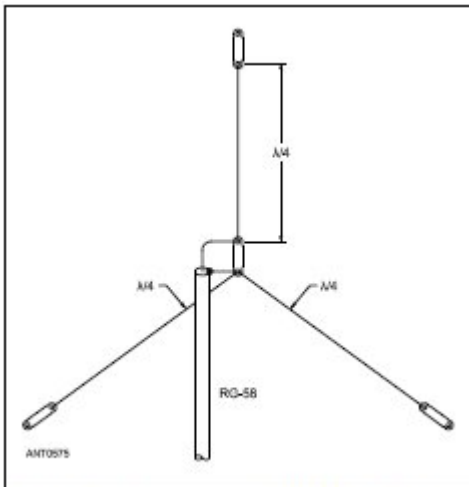


Figure 19.11 — Dimensions and construction of the tree-mounted ground-plane antenna.

I ran across this design in the ARRL Antenna Book for a simple wire vertical and was immediately sold. The feature that was very attractive is that it requires only one tree limb to get it up. So with a bit less than 30' of wire, a little piece of PVC and some twine for support, all the parts for my new 10 meter contest antenna were arranged on my desk. An hour or so of measuring and soldering and I was in business. I left a 10" piece of wire above the top loop support for tuning, otherwise the main pieces were a  $\frac{1}{4}$ -wave length of 8'-4". The tuning process resulted in the removal of all but an inch from the top loop. Not being sure if I will operate both cw and phone, I was looking for a decent SWR from 28.0 - 28.5 Mhz. With the pruning completed, the SWR is less than 2:1 across that range.

So how's it work? Well, I strung it up in a tree with the feed point being about 13' above the ground. Not all that high. I started tuning up and down the band. Conditions over the weekend were really good. Lot's of activity, particularly in the CW segment. Turns out I had stumbled into the CQWW CW contest. Perfect. So I did the only thing I could think of and entered the contest. Fired up the N1MM logging program on the laptop and I was raring to go. I got an hour of work in on Saturday and another few hours on Sunday. The antenna worked great. Asia was coming in Saturday evening, Europe Sunday morning, Africa and South America in the middle of the day. Mid-afternoon I worked Alaska and the very next contact was Hawaii. I closed out my tour of the continents with New Zealand. The final tally was a 22 country count including

Estonia, Sweden, Serbia, Italy, Wales, South Africa, Brazil, Argentina, Japan and Canada. Not a lot of QSO's, but then that was not really the point. A 100 watt signal, 30' of wire and a hot band make for a lot of fun.

Well that worked out pretty well. Bring on the ARRL 10 Meter Contest!!

(**swapfest** from pg 5)

Here is some other information that members need to be aware of:

Advance Tickets sales from members. Club members are encourage to get some advance tickets and sell them to other hams. It is a way for guests to save \$1 per ticket. This also helps the overall swapfest attendance and results in more income for the club. See Phil, W9NAW, at the December club meeting.

Do you want to sell or donate something? There are a couple ways you can do this. If you want to sell equipment, you will need to bring it to John, K9IAC. If you have electronic parts/components or donations you will need to get them to Louie, W9GSV. As of this time, table information is not available. All material needs to have a label stating selling price, name, call and other details.

How is this swapfest going to operate? There are some changes. First of all, sellers will have to bring in their material thru the two loading areas on either side of the stage. WARAC members will be assigned to man carts and hand trucks. The idea here is to assist all sellers get their items to their assigned table(s) in an expedited manner. After unloading by the seller, the WARAC manned cart will return to the loading area for another assignment. Sellers in the balcony areas will have their material delivered to the nearest balcony stair, unloaded, watched over by a WARAC member assigned to that stair. Depending on how much material a seller has on site will determine how soon another vehicle can be in position to start unloading. This is going to be a learning experience for all of us.

Assignments: Besides members being needed as stated above, we will need doors manned, ticket table sellers and others to probably help in the loading area. Assignments will be discussed at the December general meeting. We are encouraging members to arrive about 5:30 AM. Please wear your WARAC hat/badge and, if available, bring your HT (tuned to 147.40 MHz simplex). All volunteers will be given a door prize ticket and coffee/donuts will be provided as well as a lunch ticket.

Thank you. We have succeeded in the past and this "slight" change won't be a big deal!

Phil, W9NAW  
Swapfest Chairperson



## Ham Radio on the Internet

[http://digital.wirelessdesignmag.com/wirelessdesignanddevelopment/november\\_december\\_2013?pg=12&pm=2&fs=1#pg12](http://digital.wirelessdesignmag.com/wirelessdesignanddevelopment/november_december_2013?pg=12&pm=2&fs=1#pg12)

Oragami Antennas... submitted by Steve NO9B

<http://www.public.navy.mil/spawar/Pacific/TechTransfer/ProductsServices/Pages/SeaWaterAntennaSystem.aspx>

An article about the navy using salt water for an HF antenna

[http://www.sippican.com/stuff/contentmgr/files/c9b920684182edab1a8ecb0e5f2aefc/sheet/buyoyant\\_wire\\_antenna\\_system.pdf](http://www.sippican.com/stuff/contentmgr/files/c9b920684182edab1a8ecb0e5f2aefc/sheet/buyoyant_wire_antenna_system.pdf)

An interesting advertisement on an antenna used by submarines while submerged. We used them when I was on a submarine. The biggest problem was the prop made a great wire cutter. HI HI

[http://securitywatch.pcmag.com/hacking/329044-crazy-spy-software-makes-computers-spill-secrets-over-radio?mailingID=026DCAD3833376DFADFCD EE2F4DD40E5?mailing\\_id=1074689](http://securitywatch.pcmag.com/hacking/329044-crazy-spy-software-makes-computers-spill-secrets-over-radio?mailingID=026DCAD3833376DFADFCD EE2F4DD40E5?mailing_id=1074689)

Here is an article on a possible way to get data off a computer that isn't attached to the internet.

<http://www.pcmag.com/article2/0,2817,2463592,00.asp>

Here is on article on "**Panda Free Antivirus 2015**" an alternate to buying antivirus protection.

Anyone can submit websites for this column. I'll check them out and include them. The editor

(from pg 2)

Most of us can't have extra antennas standing by. But there are alternatives that might be considered. My antenna farm consists of a fan dipole for 80, 40, 30 meters and a tribander on a tripod on the roof. If the tribander goes out. My qrp tuner would still allow me to operate on all bands. It might not be as good as the tribander but would allow me to operate. I'm sure there are many alternatives out there. It's good to think of what can be done. It's always fun to work and think about antennas.

Everyone have safe and happy Holidays.

Frank KA9FZR

### Officers and Board

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Steve Dryja, NO9B

#### Secretary

Mike Johnson, WO9B

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Al Hovey, WA9BZW

#### Newsletter Editor

Frank Humpal, KA9FZR

[fhump@milwpc.com](mailto:fhump@milwpc.com)

#### Webmaster

Tom Macon, K9BTQ

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



## WEST ALLIS RADIO AMATEUR CLUB, INC.

PO Box 1072  
Milwaukee, WI 53201  
W9FK  
<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 7:00 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.