



Official Publication of the  
West Allis Radio Amateur Club

# Hamtrix

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Volume 62, Issue 10 October, 2015

## OCTOBER CLUB HAPPENINGS

### Club Meeting

St. Peter's Episcopal Church,  
7929 W. Lincoln Avenue, West Allis  
October 13, 2015 **7:00pm**

#### Program

Panadaptor

Presenter Erwin von der Ehe WI9EV

**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

One possibility for our December program is a show and tell of where we are on our **"Arduino" projects. With the weather getting cooler we all may have time to look at them again.**

### Annual Awards Dinner

**October 25, 2015**

**See page 5**

#### Milwaukee-Florida Net

Every Day on 14.290 Mhz

7:00AM - 9:15AM ET

6:00AM - 8:15AM CT



#### 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 October 2015*

The upcoming meeting is our most important meeting of the year - election of officers. (Yeah, I know - pizza in May is important, too.)

Once upon a time, our Board of Directors would appoint a Nominating Committee whose job was to come up with a slate of at least **two candidates for each office**. These candidates' names were placed in nomination, plus any additional ones from the floor, so there was always a choice for each office.

But times changed. We got into a period where it was impossible to get more than one candidate for each office. Sometimes getting even one was difficult, so the nominating committee faded away and those willing to hold office were reelected over and over. The previous president served for 12 consecutive years.

Now times have changed again, for the better. We now have a deeper bench with newer members willing to run for office. It's too close to the election now to set up a formal nominating committee but we can still have more floor nominations. And, if at all possible, please be willing to accept nomination - it's your club!

We need a new Secretary since Mike is stepping down, and I understand there is one person willing to accept this office. I hope there are more.

As for President, I enjoy the job and am willing to continue but I hope there will be other nominations. I've been in office for five years and a club member for over 50, so I have earned Old Fart status. Maybe its time for a New Fart - your choice!

This month's program will be Erwin's description of his **Panadapter project**. Many radios nowadays have a bandscope that lets you see the activity on a band with just a glance. Erwin added outboard bandscope capability to his station and will tell us all about it. Should be interesting. Sure would be nice for the 10-meter contest to spot activity without having to crank the radio back and forth across the band!

Last month's program was something different - a Show and Tell Night. I thought it went pretty well but what did you think? I'm interested in any feedback.

The sign-up sheet for our **Annual Awards Dinner** is in this issue of Hamtrix. October 25. Don't forget to send it in! This year's committee, Frank Humpal, Paul Hass and Erwin von der Ehe, is putting this event together. Important note - this is a bye weekend for the Packers.

The next **WIQP will be on March 13, 2016**. It's not too early to start thinking about your operating strategy for the 2016 party, especially if you're thinking of new antennas or going mobile. You don't want to be putting this stuff together in the middle of winter, right?

Don't forget our usual before-meeting dinner at **Johnny V's Classic Café, 1650 S. 84th St.** at 5:00PM. Also, remember our **Wednesday night 2-meter nets**. Every week at 8:00PM.

See you at the meeting! Bring a friend!

Tom, K9BTQ

## **From the editor**

Fall is beginning to show its beautiful head. It seems later than normal. I did a few minor antenna maintenance tasks. After at least 30 years of my ownership and who knows how many of the former owner I decided it was time to have my rotor rebuilt.

I had mentioned that I needed to do it on the 2 meter net and Mike WO9B graciously volunteered to help me with it. For many reasons it went very well! No bolts stuck (that alone can add much frustration to any project). It being on a tripod on my roof which is not a steep one and having good help! Of course none of this was planned to be easy. When I had originally put it up the antenna and other things were much lighter. I'm not sure why they have put on so much weight over the years. Maybe I have set a poor example for them. HI HI

See EDITOR pg 9  
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# **WARAC General Meeting Minutes**

## **September 8, 2015**

### **Introduction**

The meeting was called to order at 7:00 pm by President, Tom Macon, K9BTQ. Overall meeting attendance was 23 with 2 visitors.

### **Program**

The evening's program topics included:

Program is the Elmer, Project, Working on Open Mic Session

Steve, NO9B Component Analyzer

Tom, K9BTQ Antenna Analyzer

Phil, WA9AQL Demonstrated his Loop Antenna

Frank, KA9FRZ demo'd his Pixie 40 Mtrs Transceiver

Mike, WO9B talked about FSQ Digital Mode

Phil, W9NAW talked about wire antennas

Al, WB9BZW showed some classic QSL cards from the Bicentennial Ops.

Bill, N9KPH showed his 13 Colonies QSL Special Event Certificate

Dave, KA9WXN talked about the Makers Fair coming up on Sept 26, 27 at the State Fair Expo Center. Everyone is welcome to stop by, operate the station, exhibit something.

### **Business**

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

Oct's Program will be on Erwin's Pan Scope Development project. Milw Observatory Tour is still in the work. Info to come

Annual Awards Dinner: October 25th at Carl's Catering. Hamtrix has the sign up form with specifics.

Reminder for the Wednesday evening 2 meter net. Everyone is welcome

The meeting was adjourned at 8:28 pm.

Respectfully submitted,

## **W.A.R.A.C. Board Meeting**

### **September 22, 2015**

Howard Smith (WA9AXQ), called the meeting to order at 19:04.

Present: Tom Macon (K9BTQ), Howard Smith, (WA9AXQ), Frank Humpal (KA9ZWF), Al Hovey (WA9BZW) and Erwin von der Ehe (WI9EV).

In light of the upcoming club board elections, it was agreed that we need more members seeking board positions. Mention was made of some clubs which have a protocol for progressing through the board positions. No definitive solutions were implemented.

Howard gave the monthly Treasurer's report. The general fund and scholarship fund are in good shape.

We will investigate a change to the Terms of Reference of the scholarship administration in order to provide for continuation of scholarship awards in the event of the Club disbanding.

### **Programs**

October:

Election of club officers

Panadaptor using SDR USB Dongle by Erwin von der Ehe (WI9EV)

November: (Tentative) Frank Humpal (KA9ZWF) & Steve Dryja (NO9B) present Linux software installation

December:

### **Future Program Ideas**

Arduino Show & Tell Hamtrix article by Frank (KA9ZWF)

Spotting by Gary (W9XT)

FM38 Repeater System by Dave (KA9WXN)

DSP examples using MathCad® by Steve (NO9B)

Yaesu Fusion System

Kreg Jig Fastener System

SO2R

AMSAT

Arduino project: Serial port monitoring of photocell

Arduino project: Interfacing to Mic inputs

Three-phase power monitors by Steve (NO9B)

Badger Weather Net – Sullivan

W5 Live program from Oklahoma

Antennas

### **Club Operations Manual**

Tom (K9BTQ) is updating the WIQP Manual.

Erwin (WI9EV) & Frank (KA9ZWF) plan to draft an Awards Dinner section.

### **Club financial audits**

2012 & 2013 were reviewed by Bill (N9KPH) and returned to Howard. Howard to plans to present the completed reviews at the next meeting.

2014 is in process.

### **Awards Dinner**

Work continues. Awards and door prizes were discussed.

### **Other Items**

2-meter net continues and needs some more check-ins.

Meeting was adjourned at 20:35.

Respectfully submitted,

Erwin von der Ehe (WI9EV)

Director and substitute Secretary, W.A.R.A.C.

# WARAC Annual Awards Dinner

Sunday, October 25, 2015  
5:00 PM QSO Time – 6:00 PM Dinner

Carl's Catering and Banquet  
5110 Loomis Road  
Greendale, WI

## WARAC Activities the year in review

Swapfest                      WIQP  
Field Day                      *more*

## Presentation of:

2015 Scholarship  
Years of Membership Awards  
Contest Awards  
2015 Member of the Year

## Dinner Menu

### Beef Tenderloin Tips and Stuffed Chicken Breast

Served buffet style with potato, vegetable, assortment of salads, bread, beverage, and dessert. Tax and gratuity included. Cash bar.

## Program

A History of Zoos by David Loosen

## Awards Dinner Reservation Form

Sunday, October 25, 2015  
5:00 PM QSO Time – 6:00 PM Dinner

Name \_\_\_\_\_ Call \_\_\_\_\_

Number attending \_\_\_\_\_ Amount (\$16 Each) \_\_\_\_\_

Sign up Deadline: October 16

Make checks payable to:  
W.A.R.A.C, Inc.

Bring form and money to club  
meeting or mail to:

Howard Smith  
4760 S Woodlawn Pl  
Greenfield, WI 53228



## Chasing the Paper Chase

By Mike Johnson, WO9B

We all have our own style in this crazy hobby. Since turning on the “ON” switch almost a year ago I have had the opportunity to revisit my particular likes and dislikes. One of those areas that I thought was really cool as a want-to-be ham back in the good old days was the WAS and DXCC Awards. Turns out, as my younger self soon learned, collecting all those QSL cards was more a matter of earning and less a matter of getting. The truth is, I have never been much of a QSL guy. Just do not have the knack or desire for filling them out, mailing and keeping track. So with that, POOF went my Ham Wall Paper Collection dreams.



With the reboot of my radio hobby into the 21<sup>st</sup> century, along came the answer to my QSL nightmare. The amazing Log Book of the World (LoTW) is doing it all for me. No more stamps. No more QSL Bureau's. No more snippy QSL managers. No more Green Stamps. Speaking of Green Stamps, as a novice I couldn't figure out what the heck S&H Green Stamps had to do with QSL cards. If you don't know what I'm talking about, I'll let you Google that one on your own. So I signed up. OK, I tried to sign up. It was not as easy as a couple of clicks. It was not all that hard, but LoTW initiation is clearly a process designed by some database admin with a minimal amount of people skills. Let's just leave it at that. Once you're in, you know you've entered the QSL land of milk and honey.

Uh Huh. Sure. Here's the problem:

Today is Mon, 28 Sep 2015 UTC  
You are WO9B  
**Log Off**  
You have 1,586 QSO records  
You have 667 QSL records

Turns out I am getting about a 40% return on QSL Confirmations to submittals. I don't know what the average ham's rate is, I just know mine. And don't take this as a complaint. The truth is without doing a whole lot of work, just sending in log entries from time to time, I've almost got the WAS and DXCC Awards in the bag, being just a couple of confirmations short. Regardless, the relatively low response has come as a surprise. Clearly, everyone is not drinking the Kool-Aid. I wanted to get a handle on what is going on and to see if I can improve my percentage. It's not like you can guilt the ARRL into beating on someone for not submitting to LoTW. It's pretty much a take it as it goes kind of deal. Also, I was not all that interested in deep diving into the LoTW

months to see if some kind of trend could be discerned. Some interesting stuff came out. Not particularly surprising, but good to know.

Turns out there are two main characteristics to improved responses: 1) US hams use LoTW much much more than international hams, and 2) Ham activity that concentrates on computer use and QSO rates generates significantly higher LoTW QSL's than ragchew modes. Here are a couple of examples.

I spent a Saturday morning working the CQ WWRTTY Contest. It was a lot of fun. The last step in entering a contest, for me, is to do my LoTW submittal. Apparently, I'm not the only one who does it that way, as the results in the picture are all within 24 hours of the contest completion. Admittedly, I've cherry picked the results somewhat, but this an example of US Ham's responses verses DX:

	Call sign	Worked	Date/Time	Band	Mode	Freq	QSL	
<a href="#">Details</a>	WO9B	KP2M	2015-09-26 17:23:55	15M	RTTY	21.07990		
<a href="#">Details</a>	WO9B	3Z5N	2015-09-26 17:20:40	15M	RTTY	21.07620		
<a href="#">Details</a>	WO9B	DA3X	2015-09-26 17:08:51	15M	RTTY	21.09227		
<a href="#">Details</a>	WO9B	G9V	2015-09-26 17:07:11	15M	RTTY	21.14740		
<a href="#">Details</a>	WO9B	CO8LY	2015-09-26 17:03:48	15M	RTTY	21.14358		
<a href="#">Details</a>	WO9B	HG7T	2015-09-26 17:02:04	15M	RTTY	21.13078		
<a href="#">Details</a>	WO9B	HG1S	2015-09-26 17:01:21	15M	RTTY	21.13078		
<a href="#">Details</a>	WO9B	P40BC	2015-09-26 16:58:14	15M	RTTY	21.12150		
<a href="#">Details</a>	WO9B	DK5MB	2015-09-26 16:55:10	15M	RTTY	21.11022		
<a href="#">Details</a>	WO9B	EA1BD	2015-09-26 16:53:42	15M	RTTY	21.10327		
<a href="#">Details</a>	WO9B	9A5Y	2015-09-26 16:38:15	20M	RTTY	14.11813		
<a href="#">Details</a>	WO9B	W4MLB	2015-09-26 16:34:41	20M	RTTY	14.11122		
<a href="#">Details</a>	WO9B	DP7D	2015-09-26 16:32:47	20M	RTTY	14.09709		
<a href="#">Details</a>	WO9B	S50R	2015-09-26 16:24:21	20M	RTTY	14.08877		
<a href="#">Details</a>	WO9B	WM5DX	2015-09-26 16:16:38	20M	RTTY	14.08461	UNITED STATES OF AMERICA	<a href="#">CA</a>
<a href="#">Details</a>	WO9B	OK2SFP	2015-09-26 16:13:17	20M	RTTY	14.08135		
<a href="#">Details</a>	WO9B	AA5AU	2015-09-26 16:10:35	20M	RTTY	14.08135	UNITED STATES OF AMERICA	<a href="#">CA</a>
<a href="#">Details</a>	WO9B	DJ4MA	2015-09-26 16:01:10	15M	RTTY	21.10044		
<a href="#">Details</a>	WO9B	M3I	2015-09-26 15:57:10	15M	RTTY	21.10044		
<a href="#">Details</a>	WO9B	CR3A	2015-09-26 15:50:31	15M	RTTY	21.09707		
<a href="#">Details</a>	WO9B	OH8KVY	2015-09-26 15:43:06	15M	RTTY	21.09374		
<a href="#">Details</a>	WO9B	ES9C	2015-09-26 15:40:56	15M	RTTY	21.09077		
<a href="#">Details</a>	WO9B	4O3A	2015-09-26 15:39:52	15M	RTTY	21.09077	MONTENEGRO	
<a href="#">Details</a>	WO9B	P49X	2015-09-26 15:36:32	15M	RTTY	21.09077		
<a href="#">Details</a>	WO9B	E17M	2015-09-26 15:33:42	15M	RTTY	21.08803		

Overall, I did 190 contacts with 96 being US and 94 being DX. My one-day-after the contest QSL rates are 46% for US contacts and 14% for DX. That is a pretty big wow. As time goes on, I do expect the DX QSL's to come in better, but this initial result is very surprising, particularly since all the participants had to ride the computer keyboard to play in the contest.

The second example was from some JT-65 QSO's I uploaded just today. I tried out 80 Meter JT-65 and surprisingly made six contacts in a good half hour of operating. It was a lot of fun. I normally upload the JT-65 contacts once or twice a month as the WSJT software does not automatically interface with my logging software. So I do it every once in a while. Here is what resulted:



	Call sign	Worked	Date/Time	Band	Mode	Freq	QSL
<a href="#">Details</a>	WO9B	N0MHL	2015-09-28 03:32:00	80M	JT65	3.57697	<a href="#">UNITED STATES OF AMERICA</a>
<a href="#">Details</a>	WO9B	VA3TPS	2015-09-28 03:26:00	80M	JT65	3.57749	
<a href="#">Details</a>	WO9B	W6EDY	2015-09-28 03:20:00	80M	JT65	3.57652	<a href="#">UNITED STATES OF AMERICA</a>
<a href="#">Details</a>	WO9B	K4OP	2015-09-28 03:14:00	80M	JT65	3.57652	<a href="#">UNITED STATES OF AMERICA</a>
<a href="#">Details</a>	WO9B	WU9D	2015-09-28 03:08:00	80M	JT65	3.57705	<a href="#">UNITED STATES OF AMERICA</a>
<a href="#">Details</a>	WO9B	KC9MEG	2015-09-28 03:00:00	80M	JT65	3.57705	<a href="#">UNITED STATES OF AMERICA</a>

Holy cow, these guys all beat me to the upload punch. I've never had such fast and complete results before. In checking all my JT-65 contacts, I have submitted 40 contacts and received 24 confirmations for a 60% return. Not everything, however, is so rosy in the digital world as my PSK31 response rate is, you guessed it, 40%.

I'm not so sure there are any hard and fast lessons to be learned here. My biggest take away is to make sure I upload contest and digital QSO's to LoTW. Also, Special Event Stations and DXpedition stations have a very high QSL response. Ragchews and other casual contacts, well, don't hold your breath.

For the WAS, I need four easy states: WV, VT, ND and DE (is that the right abbreviation?). ND may not be all that easy, but they are definitely available if you hang out in the right spots. I will definitely be looking for the November Sweepstakes to provide the QSO's. From what I can see in the above discussion, I'll need to work those states twice in the contest to get the needed QSL's. It's just the way it is.



Ham Radio on the Internet  
(click on red web address)

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

"The New DXer's Handbook"  
Second Edition  
<http://www.k7ua.com/>

<http://www.globalqsl.com/> If this service had been around when I was a ham-ster (i.e. Novice), I think I'd have a wall of QSL cards.

<http://www.hrdlog.net/> On line web based log book. It seems like a good idea, but I'm not sure I want to go all in on a website for my log. Which raises the question: Have you backed up your hard drive lately?

<http://www.arrl.org/news/view/jamboree-on-the-air-2015-stations-urged-to-register> Here you go, the BSA Special Event of the year.

<http://www.arrl.org/news/view/now-clarity-on-parity-the-video> The ARRL has come up with a video to help Congress understand Our parity problem.

## EDITOR

The other project was to actually measure the heights and angles of my fan antenna. I hope to digitize the info and run it through an antenna modeling program just to see what it is doing and maybe have an article for Hamtrix from it.

The information may help some beginner. I think books give the impression that a wire antenna has to be in a straight line and any deviation from that will break it. While I will concede the pattern will change if you droop it or bend it the antenna will still put out a good signal.

Thats all for now.  
Frank KA9FZR

## FOR SALE

WARAC has received a 4 drawer letter size file cabinet. It was manufactured by Cole and is in clean, very good condition. Cost: a donation to the WARAC Scholarship Fund.

Any questions should be directed to Phil, W9NAW, (414.425.3649) for any additional details and pick-up arrangements.

Officers and Board  
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Mike Johnson, WO9B

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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.