



Official Publication of the
West Allis Radio Amateur Club

Hamtrix

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Volume 71, Issue 4 April, 2022

APRIL CLUB HAPPENINGS



NUT NET

3.985mhz

Monday-Saturday

8:15am CT

NUT NET

Breakfast

8:30am fourth

Tuesday

of the month

Milwaukee-Florida Net

Every Day on 14.290 Mhz

7:00AM - 9:15AM ET

6:00AM - 8:00AM CT

Sunshine Committee

If you know of a member who could use a bit of cheer or support,

Barb Garnier (KD9HPS) is now the Sunshine Committee Chair. Contact her: 414-529-3536 or barbsewsblue@gmail.com.

ELECTION OF OFFICERS

Meeting

April 12, 2022 7pm

New Berlin Community Center

14750 W. Cleveland Ave.

New Berlin, WI

Between Moorland and Sunnyslope

QSO Party Chuck Dellis W9WLX

First impression of Elecraft k-4

Paul Sperbeck W9PCS

Premeeting dinner

New Berlin Ale House 5:15pm

16000 W. Cleveland Ave

West of Moorland Rd.

2022 Challenge for our membership. Have someone you meet, Ham or Ham wannabe come to a meeting this year!

The Club election of Officers will be held at this meeting.

We have NO candidates for President

The Club needs YOU!

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Editor's Corner

Another month has gone by. Weather is at least making us think that spring may happen.

Still keeping busy learning international code. Our slow speed CW practice net is proving to be helpful. We are actually carrying on conversations in CW and understanding each other. Anyone wanting to join us is welcome. We are there to help with the practice not learning from zero knowledge. Even then you are welcome to join us with questions and to see how your learning is coming along.

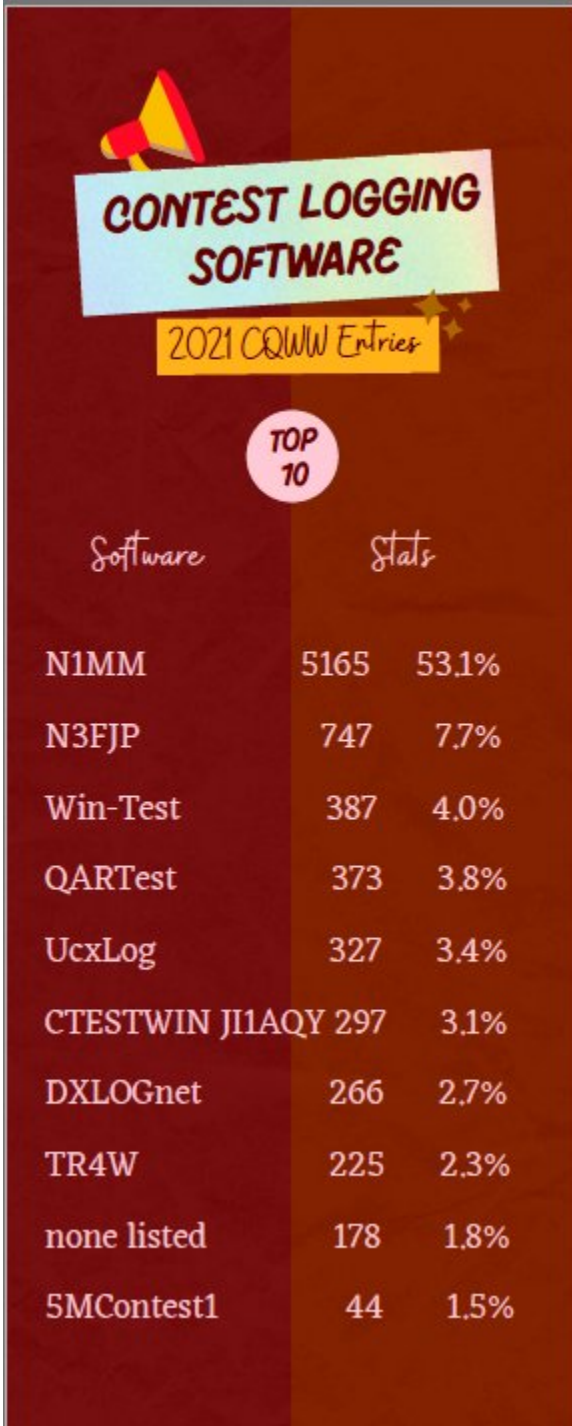
The mobile team of Mike WO9B, Dave WB9OWN, and Frank KA9FZR completed this years Wisconsin QSO party. For us it was a a success! We had set some goals at the beginning of our planning for this outing. The first and most important was have fun. Mike and me have done many QSO parties now, so we have some ideas about what makes it easier. Some ideas may surprise you. First: We like to take major roads especially express ways. They help for the surprising reason that you encounter less electrical noise from power lines. Also the operator gets bounced around less from stopping and starting and curves. Second: include an escape plan so if you need to get home for some reason (fatigue and bad weather come to mind) you don't have a long trip. Third: also helps to be close to home when you finish the QSO party. Many of these have been tested by us.

Another project of mine is trying to get WSTJX to work on my Linux machine with my Yaesu FT-891. Sounds easy but something isn't right with the computer. I'm sure I'll get it. But that's the type of problem that can make you lose hair or have it turn gray. HI HI

Hope all is well. Enjoy the change of weather.

73

Frank KA9FZR • — • — •



A graphic titled "CONTEST LOGGING SOFTWARE" with a megaphone icon, followed by "2021 CQWW Entries" and a "TOP 10" badge. Below is a table listing the top 10 software programs and their statistics.

Software	Stats
N1MM	5165 53.1%
N3FJP	747 7.7%
Win-Test	387 4.0%
QARTest	373 3.8%
UcxLog	327 3.4%
CTESTWIN J11AQY	297 3.1%
DXLOGnet	266 2.7%
TR4W	225 2.3%
none listed	178 1.8%
5MContest1	44 1.5%



WARAC Club Meeting Minutes – March 8, 2022

Club meeting @ New Berlin Center was called to order by Feroz Ghose WU9N at 7:02 pm.

Attendance was 15 club members with no visitors noted.

Minutes of from February 8th 2022 club meeting were approved and seconded.

Gadget demo Feroz's WU9N Pulse O2 meter, over night data recorded via blue tooth.
<https://getwellue.com/products/o2ring-wearable-pulse-oximeter>

Field Day Status by Dave WB9OWN. None to report.

Potential Club money maker, building traps for Mike's WO9B spark plug antennas was discussed. <https://www.sparkpluggear.com/>



WARAC ARRL Scholarship endowment increase is finally coming to fruition, Bill K9KPH has cut a \$12K check to the foundation for a yearly \$2K tuition offering. More to follow.

WI-QSO party discussion by Chuck Dellis W9WLX. Thank you for excellent historical analysis presentation Chuck!
http://warac.org/wqp/wiqp_rules.htm

Don't forget the WARAC Sendik's Fundraising Dates, New Berlin Store, May 28th and September 10th.

Slow speed CW net is meeting Mondays at 8pm. WB0AFB repeater 147.045 is being used for net coordination frequency. All are welcomed!

Election of club President Nobody has stepped forward to assume this position.

Meeting ended @ 8:25pm and coffee and donuts followed.

Respectfully Submitted
 David Garnier WB9OWN
 Secretary WARAC, April 5, 2022

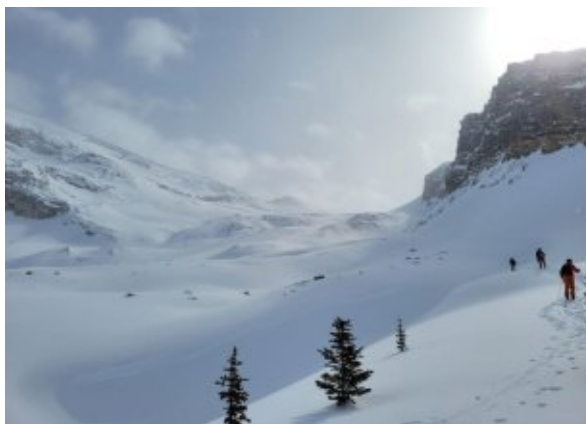


2022 April Notes

So far the pre-season has produced only one outing. The weather will be turning so hang in there and keep an eye on the Facebook Group for notifications of upcoming events.

As a reminder, I can put out an email to alert those non-Facebook participants where we are planning to go. If that is of interest, send me your email address and I will add you to the email list. Let me know: mike@palomonet.com

As a motivator for we easy living Milwaukee hams, I had a conversation with my friend Paul, VA6MPM this past week. A week or two ago, which means late March, he activated Crowfoot Mountain in the Canadian Rockies. I've come to understand Paul's tolerance for weather is several bars above what any normal person would put up with. In this case, even Paul thought it was way too cold. I'll let the pictures speak for themselves.





DX UPDATE:

Sorry, but as of the due date for Hamtrix my usual DX World monthly DX Report visual was not available.

XT2MAX – Burkina Faso April 7-20

Nepal: 9N7AA, Robert, has been very active on FT8. He has a very high noise level so can no longer hear on 30M. I have worked him on 30M and 20M and he has confirmed via LOTW within 6 hours. It is Mt. Everest trekking season so look for other activity from here including 9N7MK up until April 23.

Contesting:

Nebraska	<u>Nebraska QSO Party</u> 1300Z, Apr 9 to 0100Z, Apr 10, 2022 and 1300Z-2200Z, Apr 10, 2022
New Mexico	<u>New Mexico QSO Party</u> 1400Z, Apr 9 to 0200Z, Apr 10, 2022
Georgia	<u>Georgia QSO Party</u> 1800Z, Apr 9 to 0359Z, Apr 10, 2022 and 1400Z-2359Z, Apr 10, 2022
North Dakota	<u>North Dakota QSO Party</u> 1800Z, Apr 9 to 1800Z, Apr 10, 2022
Michigan	<u>Michigan QSO Party</u> 1600Z, Apr 16 to 0400Z, Apr 17, 2022
Ontario	<u>Ontario QSO Party</u> 1800Z, Apr 16 to 0500Z, Apr 17, 2022 and 1200Z-1800Z, Apr 17, 2022
Quebec	<u>Quebec QSO Party</u> 1200Z-2000Z, Apr 17, 2022
Florida	<u>Florida QSO Party</u> 1600Z, Apr 30 to 0159Z, May 1, 2022 and 1200Z-2159Z, May 1, 2022

There are MANY more contests in April Check the link below.

<https://www.contestcalendar.com/contestcal.html>

Special Event Station of interest:

World Amateur Radio Day is April 18 from 00:00Z to 23:59Z

For special event station listings (there are many) check out:

<https://www.425dxn.org/index.php?op=wcal>

If you have further ideas or suggestions for this page please let WA9BZW (Al) know.

wa9bzw@arrl.net • — • — •



April 2022

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Hamtrix

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By Michael Johnson, WO9B

Cross Mode Nodes

Every once in a while you have to go against the Ham Code and go spend some serious coin of the realm. Well, relatively serious. That is the long way of saying it can be a good thing to buy top shelf gear. The digital communication world can be complicated and we can all use a helping hand to ease our journey. So let's talk about digital radio that goes beyond an inexpensive DMR radio and MMDVM hotspot.

The class act of the hotspot game has been Shark OpenSpots. Unfortunately their availability is pretty close to nada at the moment. If you are fortunate to own an OpenSpot 2 or 3 then you have a very nice piece of gear. For those unfamiliar, the OpenSpots have a very well developed operating system that make your DMR and Cross Mode programming very straightforward. It will not get easier than with one of these little gems. With the builtin battery these become literally pocket portable so taking your DMR/Fusion/DStar show on the road is also convenient. But let's not fawn over that which we can't have...

Next up is Node-Ventures Clear Node (<https://www.node-ventures.com/>). This node has it all. Be warned, it will be a bit fussy but the capabilities are outstanding. Clear Node at its core is an AllStar/Echolink node that also bridges to DMR exactly like an MMDVM hotspot. AllStar, like Echolink, is mainly an analog radio mode that uses the internet to connect various node/reflectors as selected by the user. So what you achieve is internet connectivity with your analog HT. The game changing feature of Clear Node is that you can also extend your analog HT into the DMR world as if it were a DMR radio. The price of a Clear Node unit is \$300+, which seems like a lot, BUT then don't you know that is roughly the price of a good DMR radio. So is it really a more expensive route? Be warned that the operating system and capabilities may require some talent and patience to achieve maximum digital versatility, but the possibilities are there. Current availability is limited, but that should be solved in the near future. Definitely worth taking a look at.

Since I've opened the door about AllStar, a great way to get into that mode is with a SHARI node (<https://hamprojects.info/>). These come in a couple of different versions, but the SHARI PiHat version is the latest craze. Technically these can come as kits or fully built (\$135+). Again, these are not exactly Cross Mode, but they will get you into AllStar using your very familiar analog HT. Hard to beat that.

Interestingly, most of the solutions listed above operate with some form of Raspberry Pi in combination with an attached hat via the GPIO header. Clear Node uses some capabilities from the DVSwitch software platform, which is another whole subject for digital node design. Regardless, the equipment is well tested and utilizes a fair amount of off the shelf tech. This is really a lot of fun and literally opens the world up via HT's and internet connections.

Next Month: FreeDMR

Radio is Magic

- If you aren't impressed by the fact that you can wobble a few electrons in a wire and thereby wobble a few electrons in a wire half way around the world, you have no soul.



Nut Net Breakfast to start, AGAIN

Several years ago there was talk among Nut Net members that we should get to meet each other. A breakfast get together idea was started. It was open to all hams, XYL/partners and anyone who wanted to learn about amateur radio. Even visiting OM/XYL couples joined us.

So, on the fourth Tuesday each month at 8:30 am we will once again meet at Gensis Restaurant, corner of HWY 100 and Beloit Road, Greenfield, WI. Looking forward to seeing you, mark your calendar.

Phil, W9NAW



Green Bay Hamfest!!

Saturday June 4, 2022
from 9 'til Noon

At the Our Saviour Lutheran Church
120 South Henry St

On Green Bay's East Side, just off Deckner Ave and Main Street
Entrance tickets \$5 per person



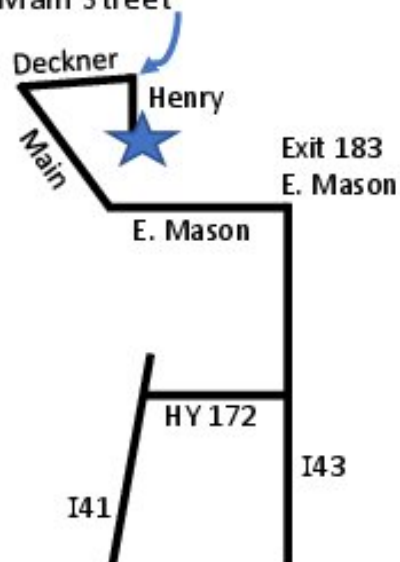
Featuring Tower Electronics

The Ham's dime store & wholesaler to the world since 1978! Specializing in Meters, Insulators, Coax Switches, Duplexers, MFJ Products & Coaxial Jumpers & Cables.

Huge parking lot for trunk sales/tailgating, **PLUS** plenty of space indoors with tables available for only \$5 a piece!

Be part of the fun!

- ✓ Food available on site
- ✓ 50/50 Raffle
- ✓ Door Prizes
- ✓ Meet our ARRL Section Manager
- ✓ Tower Electronics
- ✓ Trunk Sales/Tailgating
- ✓ FCC License Testing (Contact ks9wi@new.rr.com to schedule NLT June 1)



TALK-IN: 147.120 PL 107.2

- *Visit with Wisconsin ARRL Section Manager Patrick Moretti, KA1RB and get the latest from the league.*
- *This is a great opportunity to see old friends and find lots of electronics bargains.*

Don't miss out!

For more information and to reserve a table or parking lot sales space, contact Paul Racine, KB0P@yahoo.com

Sponsored by the Green Bay Mike & Key Club

HAMFEST/CONVENTION

04/30/2022 - ORC 42nd Annual Spring Swapfest

Location: Cedarburg, WI Type: ARRL Hamfest

Sponsor: Ozaukee Radio Club, Inc.

Website: <https://www.ozaukeeradioclub.org/>

05/07/2022 - ARAC Hamfest

Location: Superior, WI Type: ARRL Hamfest

Sponsor: A.R.A.C.

Website: <http://THEARAC.ORG>

06/11/2022 - Lyons Annual "Freefest"

Location: Lyons, WI Type: ARRL Hamfest

Sponsor: Lakes Area Amateur Radio Club Inc.

06/18/2022 - Sunshine Swapfest

Location: Kaukauna, WI Type: ARRL Hamfest

Sponsor: Fox Cities Amateur Radio Club, Inc.

Website: <http://www.fcarc.club/sunshineswap.php>

07/09/2022 - WI9SM South Milwaukee ARC Hamfest

Location: Oak Creek, WI Type: ARRL Hamfest

Sponsor: South Milwaukee ARC

Website: [http:// www.wi9sm.org](http://www.wi9sm.org)

07/22/2022 - 07/23/2022

Central States VHF Society Conference

Location: La Crosse, WI Type: ARRL Convention

Sponsor: Central States VHF Society

Website: <https://2022.csvhfs.org>

08/27/2022 - Circus City Swapfest

Location: Baraboo, WI Type: ARRL Hamfest

Sponsor: Yellow Thunder Amateur Radio Club

Website: <http://yellowthunder.org>

08/28/2022 - Chippewa Valley Amateur Radio Club HamFest

Location: Chippewa Falls, WI Type: ARRL Hamfest

Sponsor: CVARC - Chippewa Valley Amateur Radio Club

Website: <http://w9cva.org/hamfest>

09/10/2022 - Ozaukee Radio Club Regional Fall Swapfest


Location: Cedarburg, WI Type: ARRL Hamfest


Sponsor: Ozaukee Radio Club (ORC)


Website: <https://www.ozaukeeradioclub.org/>

2022 WI QSO Party: TEAM WO9B GOES MOBILE

The WO9B mobile operation was back in the saddle for the 2022 WI QSO Party. This year's March 13th rite of spring event was championed by Frank-KA9FZR, Dave-WB9OWN and Mike-WO9B. The group piled into Frank's car and managed to cruise through 400+ miles and 17 counties. Given the outstanding weather this year the roads were wonderful and lacked the adventure component that visits the WIQP now and then.








2022 WISCONSIN QSO PARTY MOBILE OPERATION

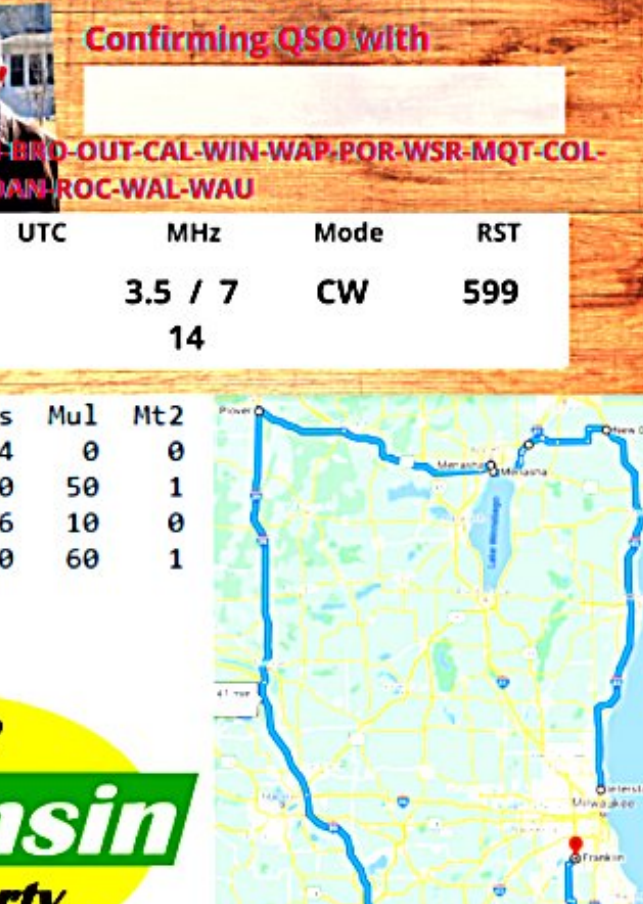
FRANK, KA9FZR DAVE, WB9OWN MIKE, WO9B



Confirming QSO with


County: MIL-OZA-SHE-MAN-BRO-OUT-CAL-WIN-WAP-POR-WSR-MQT-COL-DAN-ROC-WAL-WAU

Radio	Date	UTC	MHz	Mode	RST
Mobile	3-13-22		3.5 / 7	CW	599
	3-14-22		14		



Band	Mode	QSOs	Pts	Mul	Mt2
3.5	CW	7	14	0	0
7	CW	545	1090	50	1
14	CW	18	36	10	0
Total	Both	570	1140	60	1

Score: 112,810



Worked	Expected	Spotted	Spotted (DLI)
ADA	EAU	LIN	RAC
ASH	FLO	MAN	RIC
BAR	FOR	MAR	ROC
BLV	GRF	MLN	RUS
BRO	GRF	MLN	SAU
BLF	GRF	MLN	SAW
BUN	GRF	MLN	SMA
CAI	GRF	MLN	SMT
CHI	GRF	MLN	SIC
CLA	GRF	MLN	TAY
COL	GRF	MLN	TRE
CRA	GRF	MLN	VTR
DAN	GRF	MLN	VIL
DOD	GRF	MLN	WAL
DOD	GRF	MLN	WAP
DOU	GRF	MLN	WAS
DUN	GRF	MLN	WAT

The operation was limited to CW only. Frank put into play his reclaimed screwdriver antenna which proved it worth. QSO's were made on 20, 40 and 80 meters with 40 being the big producing band. We are absolutely coming out of the solar minimum years and 40 looked a lot like its old self and produced a number of in-state county multipliers. The biggest surprise was that 80 meters, at least for us, was not at all a factor. What a difference sunspots make.

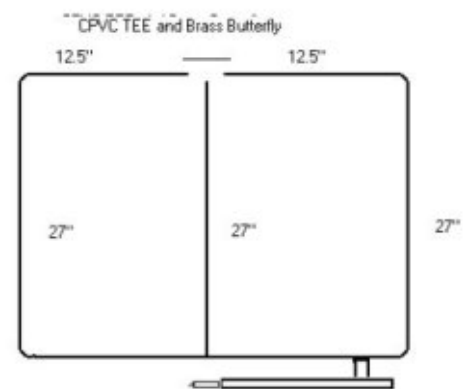
We were very pleased to make QSO's with WARAC members: K9BTQ and AA9RK. Both ops found us in a number of counties. It is always nice to work a familiar call sign.

SQUALO SEASON

When the snow melts, it can only mean it is time to get set up for the summer VHF Sporadic-E season. Last year I built a Squalo 6 Meter antenna and plopped it on the roof. It got me in the game and I made a bunch of FT8 and CW contacts. It works great and I'm looking forward to this year's 6 meter fun.



Construction was really easy with the 1/2" copper and various other parts being sourced at Menard's. The design and plans were pulled off the internet, so that was pretty easy. The bill of materials is below. Everything except the coax and SO-239 is literally falling off the shelf.



Let's Start Building - Material List

Material:

1/2 inch Copper waterpipe:

~~3 ea. 27-inch piece~~ REVISE to 5 ea @ 27.5" (3 5' lengths will do it)

4 ea. 12.5-inch piece

1 ea. 13.5 inch piece 3/8 i.d. Copper refrigeration tubing (Gamma tube) *

~~1 ea. Brass plate 1/2" x 3" (Butterfly) *~~ REVISE to Use Scrap 1/2" Pipe

~~1 ea. Brass plate: 1" x 2 1/4 in (to mount SO-239, Gamma rod) *~~ REVISE to Use Scrap 1/2" Pipe

1 ea. Copper strip 3/8 x 4" to make Gamma tube bracket * Use Scrap 1/2" Pipe

4 ea. Copper 90 Degree elbow

1 ea. 3/4 CPVC TEE

3 ea. 3/4 to 1/2 CPVC reducer

~~1 ea. Copper TEE~~ REVISE to 3 ea

1 ea. 11 inch piece of RG8 insides (center conductor and insulation, Discard shield and outer plastic) *

1 ea. SO-239 coax connector (with tapped mounting holes and center pin) *





SLOW SPEED CW QSO NET

Monday's - 8:00 PM - WB0AFB 147.045 Repeater

CW Practice

One of the best and maybe the only way to get better at CW is practice. Having someone else who also wants to practice also helps. Just makes it more fun.

The West Allis Radio Club is going to try to help. We are running a CW practice net on Monday at 8pm The repeater is 147.135+ 141.35 the CW portion is on HF

Mike WO9B has been joining me and setting up some practice but we are open for suggestions on where to go with this. Come join us.

Officers and Board
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Vice President
Feeroz Ghose WU9N

Secretary
Dave Garnier WB9OWN

Treasurer
Bill Reed N9KPH

Directors
Tom Macon K9BTQ

Phil Tollefson, WA9AQL

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Frank Humpal KA9FZR

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