click here to go to web site

SEPTEMBER CLUB HAPPENINGS

September 14, 2021 7pm
New Berlin Community Center
14750 W. Cleveland Ave.
New Berlin, WI
Between Mooreland and Sunny Slope
presentation
Trip to the EAA
presenter Paul Sperbeck W9PCS
Premeeting dinner
New Berlin Ale House 5:15pm
16000 W. Cleveland Ave
West of Mooreland Rd.

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.

WARAC WED 2 MTR NET

EVERY WEDNESDAY NIGHT @ 8:00 PM 146.82 W9TJK REPEATER

SEWFARS W9TJK
Repeater 146.820
standard (-) offset 127.3 Hz
CTCSS
If repeater down try 146.55
simplex

LAST FUNDRAISER OF THE YEAR!!

WARAC @ Sendik's

SATURDAY, SEPT 11TH

Index

The President's Shack

Hi, Fall is almost here depending on what you use as a marker for when it is here! As we have done all summer we had another successful park activation yesterday, Wednesday. Weather being what it has been no rainouts this year. One thing doing this has confirmed for me, the more you do it the more comfortable the set up and collecting of parts to take along becomes.

Personally I haven't made a CW contact yet but my Monday practice and other practice has made it coming closer. I enjoy the challenge as much as the contacts.

Note the letter from Howard WA9AXQ on page 8 of Hamtrix. He has changed the contract to help ensure that only Wisconsin Hams will be given the scholarship. We also have an opportunity to increase the scholarship without any extra cost to the club.

Another item that was discussed at the board meeting Tuesday was disposing of the trailer. Steve NO9B has allowed us to store it at his house for many years. That has changed and no one has come forth with an alternate storage place. More at the meeting.

This doesn't mean that we are getting out of going to swapfests and field days, just that we will have to make changes. The club survived without a trailer many years before we got this one.

So on that note enjoy the weather and the Hamtrix. Thanks to Mike WO9B who went overboard on producing interesting articles for this Hamtrix.
Hope to see many of you at Sandik's Saturday
73
Frank KA9FZR

WARAC Club Meeting Minutes – August 10, 2021

The Pizza Meeting was called to order ~6:00 pm when the pizzas arrived. A big thank you goes to Mike Johnson for procuring the food. I believe Frank KA9FZR brought the soda. (The club secretary arrived late at 6:17pm, he claims his Garmin misdirected him.) No Club business was conducted during this Pizza meeting; this was a face to face fellowship meeting.

8 club members and 1 visitor had signed the sign in sheet per Dave WB9OWN. "I may have missed a couple folks." Bill Reed N9KPH and Phil Gural W9NAW where are you. Howard Traxler WA9RYF was the only visitor.

The pizza gathering quickly adjourned as the ominous wall-front clouds moved-in, sirens were going off, the winds picked up and then Metro Milwaukee got clobbered!!!

Respectfully Submitted,
David Garnier WB9OWN
Secretary WARAC, September 8, 2021

West Allis Radio Amateur Club – Sign In Sheet

General Meeting Attendance Listing			08/10/21
Name	Call	Member	
Frank Humpal	KA9FZR	Yes	
David Garnier	WB9OWN	Yes	
Al Hovey	WA9BZW	Yes	
Mike Johnson	WO9B	Yes	
Tom Macon	K9BTQ	Yes	
Bill Reed	N9KPH	Yes	
Charles Craven	WB9PUB	Yes	
Paul Sperburg	W9PCS	Yes	
Howard Traxler	WA9RYF	No	

• —• —••

WARAC Special Board Meeting, September 7, 2021

A board meeting was called by Frank Humpal KA9FZR and it was decided this meeting would be a virtual meeting via Jitsi https://meet.jit.si/waracBoardJuly2021

The special board meeting was called to order 7:01 pm by Frank KA9FZR.

Officers Board Members Present
Frank Humpal KA9FZR, Bill Reed N9KPH, Phil Tollefson WA9AQL, Dave Garnier WB9OWN, Mike Johnson WO9B, Steve Dryja NO9B, Tom Macon K9BTQ and Phil Gural W9NAW and one visitor was Tom Sizer K9SQU.

Meeting began @ 7:07 PM

<u>Meeting Agenda</u>

1.) <u>Changes to ARRL Scholarship Fund</u> by Howard Smith WA9AXQ,

- Proposed the change to the ARRL TOR (Terms of Reference) that WARAC would always receive Wisconsin ham selection. <u>Unanimous board agreement to this change.</u>

- Proposed change to the ARRL TOR that WARAC would change the scholarship fund, a grant change from 2K to 3K, **at no monetary cost to the club in the next 4 to 5 year**s. "We can change the TOR at any point in time." <u>Unanimous board agreement to this change.</u>

A motion was made that Howard would summarize these proposed changes to the ARRL TOR (terms of reference) and present these changes to the membership for vote. Howard agreed to do this.

Secretary comments. I encourage everyone to Google the phase "Scholarship Endowment Fund" to further understand the scholarship gifting tool WARAC club has created.

2.) <u>Disposition of club trailer</u> by Steve Dryja NO9B Steve cannot indefinitely keep the trailer at his house. With shrinking club membership, shrinking club interest, downsizing or discontinuing Field Day how do we sell the trailer? "How do we get the Field Day crap out there?" Do we sell it with or without club contents? Do we still except club donations? Do we keep selective materials and toss the rest? Who wants to sell the selective materials? Steve is out, Mike isn't thrilled…

A motion was made to make a present this problem to the club, Steve NO9B has volunteered to present this multifaceted problem to the club, the rest of the board will bring tomatoes, Haha…

A motion was made to sell the trailer, <u>the board unanimous recommended to sell the trailer.</u>

3.) <u>Swapfest Activity by Steve NO9B</u> – Discussion about attending the last local swapfests, since I am winding down my behind the scenes swapfest activities. "I'm going to September 11nd Ozaukee Radio Hamfest?" "Who's going to help me?" Dave WB9OWN and Mike WO9B volunteered.

4.) <u>Sendik's fundraising event</u> at Layton Avenue Greenfield store Saturday September 11, 2021 11:00am to 4:00pm

5.) <u>Does WARAC want to run HF remote station?</u> The discussion about any progress was pushed off to the next general membership meeting. Steve NO9B hasn't finished a Flex Radio proposal for WARAC, more time is needed.

Meeting Ended @ 8:30pm
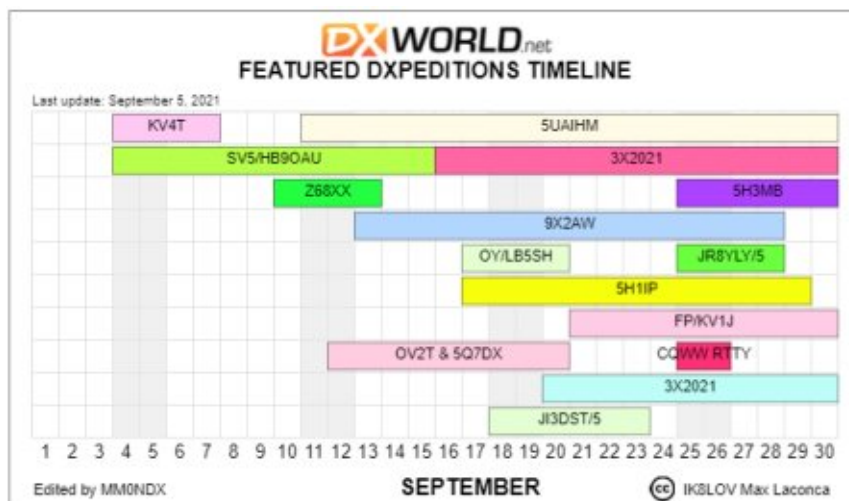
Respectfully submitted,
David Garnier WB9OWN
Secretary WARAC, September 9, 2021 . _. _..
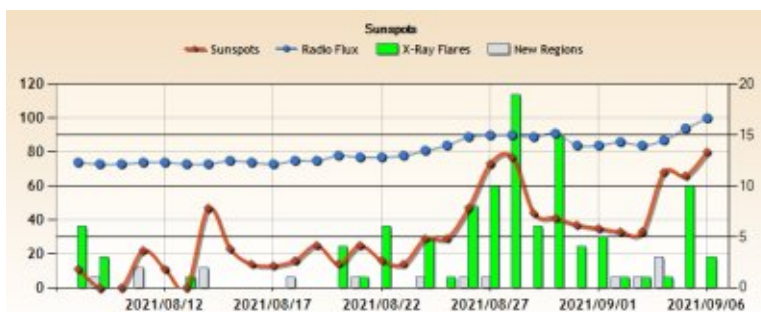
DXing and Contesting - September 2021

DX UPDATE:

DX Operations: DX conditions are GOOD.. Operations remain very active and propagation is alive to literally all regions. You can check on the current and planned ops @ DX WORLD. Covid travel restrictions are certainly an issue.

The big news, of course, is Bouvet. It is difficult to follow the on-off aspects of all things Bouvet, but it certainly is an attention getter. If you are a 3Y0I or 3Y0J follower, sooner or later someone's gonna hit this impossible beach. In the meantime, get stories.

Solar: Solar activity remains strong as Cycle 25 continues to ramp up. SFI averaged 88 last week and the A index jumped to a 10.7 average. SFI predictions for the coming month are calling for an SFI of 80+. The A index is predicted to remain a pace as well. Higher solar activity means CME's and other less desirable effects, but that comes with improved index performance.

CONTEST UPDATE:

September rocks some great contest activity.

QSO Parties are back in abundance. Who doesn't have an hour to spend making a few QSO's? In particular TX and CA are well attended events that offer a target rich environment. The ARRL VHF event always holds out the possibility of fun action, particularly for those 6 meter FT8 fans. Finally, don't miss the Tom Macon favorite: The Salmon Run. If more contests had great names like this one, you could sell tickets!!!

- Alabama QSO Party: Sept 11-12
- ARRL Sept VHF Contest: Sept 11-13
- Iowa QSO Party: Sept 18-19
- Texas QSO Party: Sept 18-19
- Wisconsin Parks on the Air: Sept 18
- Washington State Salmon Run: Sept 18-19
- CQ WW DX Contest, RTTY: Sept 25-26
- Maine QSO Party: Sept 25-26
- California QSO Party: Oct 2-3

• —• —••

DMR Gateway

This month we are talking about your hotspot and getting it to function on the clever DMR networks and crossmodes we discussed in the last article. This can be a bit convoluted and keeping with the digital voice norm, there is more than one way to skin a cat in this game. Basically you can set up your hotspot to do one network at a time which will require a reboot to change networks OR you can set it up to access the various networks by dealing with a bit of complexity setting up the background files which will then allow you to jump from network to network by changing talk groups.

The Easy Way
The easiest method is to set the DMR Master option to the mode you desire to go to. This is accessed on any Pi-Star page by selecting "Configuration" on the top Pi-Star menu and then scrolling down to the DMR

Configuration box and selecting the network you want to change to from the drop down options in the DMR Master box:

Networks you can select include BrandMeister, TGIF, DMR+, XLX and various crossmodes including DMR2YSF. Depending on the network, you will need to infill appropriate credentials and reboot the hotspot. Now you are on that network. This is a great way to explore what these networks have to offer and to find your place within them. It is, however, not very convenient due to the set up and reboot aspect.

The Convenient Way
The best way to jump from network to network is to utilize the DMRGateway option (shown above) from the aforementioned drop down menus. DMRGateway will allow you to configure your hotspot to allow access to multiple DMR networks and Crossmodes simply by selecting talkgroups. The long and short of it is the configuration .ini files will define a talkgroup numbering system that the hotspot will then direct to the intended DMR network.

For instance, to access the YSF talk groups my hotspot interprets 7 digit long talk groups that begin with the

number 7 to be directed to the DMR2YSF cross mode AND that the talkgroup should be interpreted by dropping the leading "7". To get to the Westside ARC's Yaesu System Fusion Talkgroup, #37733, I enter 7037733 on my radio and click the PTT. I have now connected to the YSF network room 37733 Westside ARC Talk Group.   I can chat away with them on my DMR radio even though they are all using Yaesu radios.

This procedure is needlessly complicated by Pi-Star doing a really crappy job on their documentation. Once you are aware of the capability, Google can be of help, but it does require some patience to find meaningful resources.   This website can get you started: http://www.kc9umr.com/?p=794

My hotspot is configured to give access to: DMR Network 1 (BrandMeister), DMR Network 2 (DMR+), DMR Network 3 (DMR2YSF), DMR Network 4 (TGIF), XLX Network (D-Star Rooms). It uses the following rewrite rules:

BM   Talkgroups are entered directly, no rewrite
DMR+   Talkgroups are 5 digits beginning with "8"
TGIF   Talkgroups are 6 digits beginning with "5"
YSF   Talkgroups are 7 digits beginning with "7"

As mentioned before, once configured, jumping from network to network is trivial. The payofft is that you can now monitor talkgroups on BM, TGIF and YSF simultaneously by having your Digital Monitor set to wide open. DMR+ is a little different as it requires you to activate a talkgroup and then converse on talkgroup 9. TGIF and YSF will allow you to have only one talkgroup active at a time. BM has no such limitation. As such, my hotspot monitors 6 BM talkgroups, set as static talkgroups, and I occasionally add in a YSF and TGIF TG as well.

The Best Way:
The ultimate and time honored Plan B: Ask me and I will send you my configuration file. It's not plagiarism if it works!!

I threw a little shade at the Pi-Star developers above. As most of us are not coders or developers, their software package is more than a little bit lacking in documentation. On the other hand, they do have a really good community following them and help is available in abundance. Most of us fall into the category of just wanting it to work and I don't believe that is a failing. Not at all. To be able to implement and control the advanced features of Pi-Star does require a climb up the proverbial learning curve. Once you start using these features, some of the mystery goes away. So don't be put off by the complexities. I'll be happy to send you my .ini files and that will get you started on the right foot. That seriously is in the best ham tradition.

• —• —••

Next Month: Extended ID

Scholarship Notes:

1. The Terms of Reference for the David Knaus Memorial Scholarship has been updated to insure that the scholarship winner is from the State of Wisconsin.
2. There have been discussions at the board level about increasing the scholarship grant to $3,000, which is currently $2,000.
The scholarship is managed by the ARRL Foundation. The scholarship has been endowed by the club in the amount of $38,000. This endowment amount will support a scholarship grant of $1,500. For the past several years, our club has agreed to provide an additional $500 to bring the scholarship grant to $2,000. Since this change was approved, this additional $500 has not been required, because the rate of return on the endowment has brought in more than the $2,000.

Increasing the scholarship grant to $3,000 would require that the club increase the additional amount to $1,500 each year. The ARRL Foundation has a 'secondary fund' for our scholarship that is used to pay the scholarship grant. The yearly interest from our endowment is placed in the secondary fund each year, and this fund currently is in excess of $8,000. If we would assume that the yearly interest remains at or above the $1,500, the secondary fund would support the scholarship grant for $3,000 for the next 5 years without any scholarship expense to the club.

I recommend that the scholarship grant be increased to $3,000. It will make the David Knaus Memorial Scholarship more desirable, and will not cost the club any additional expense for at least 5 years.

If you have questions, please contact me. jhsmith1024@gmail.com or Ph. (414) 425-5626

Howard, WA9AXQ

WARAC Scholarship Chairman

September 07, 2021   • —• —••

HAMFESTS

UPCOMING HAMFESTS

****

09/11/2021 - Ozaukee Radio Club Regional Fall Swapfest
Location: Cedarburg, WI
Type: ARRL Hamfest
Sponsor: Ozaukee Radio Club (ORC)
Website: http://www.ozaukeeradioclub.org

10/16/2021 - Wisconsin ARES/RACES Conference, ARRL Wisconsin State Convention
Location: Wisconsin Rapids, WI
Type: ARRL Convention
Sponsor: WeComm Ltd
Website: http://www.wi-aresraces.org

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.

Then COVID-19 showed up on the scene and the breakfast meeting was put on hold.

That was about March 2019 when we stopped this enjoyable gathering. We are now ready to start it AGAIN.

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.
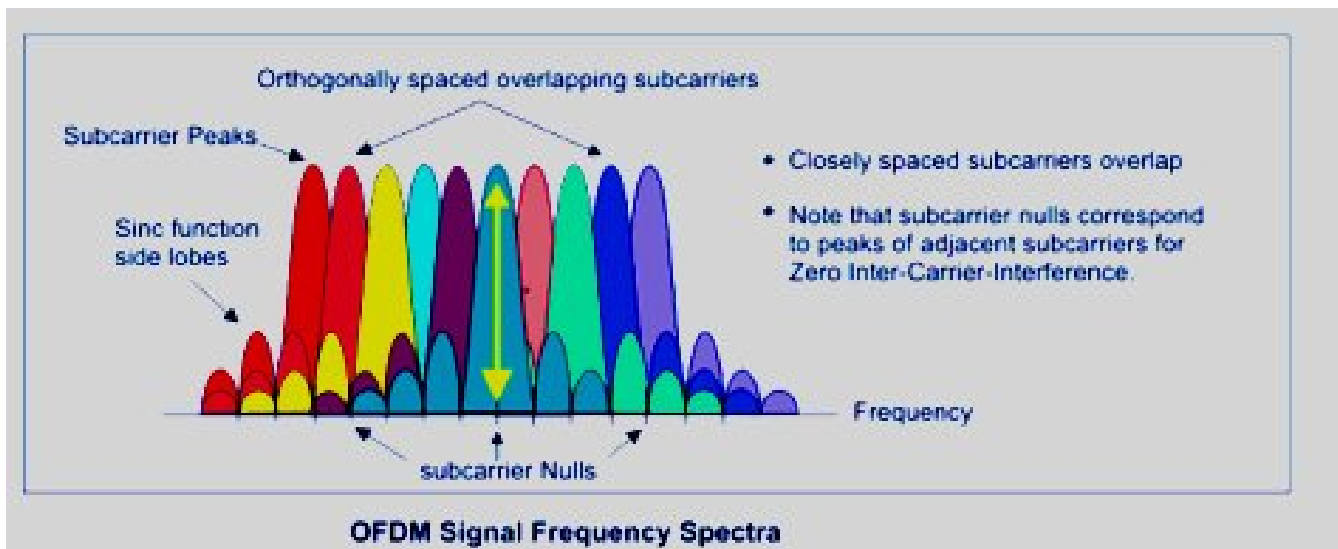
Phil, W9NAW . _. _..

Winlink: Email via HF
Mike Johnson, WO9B

Let's send email via amateur radio. Why? Despite the typical EMCOM rationale, for me it is just to be able to do it. Being able to put in my bag of tricks was something I wanted to get good at. That's enough reason for me.

My email over amateur radio quest is several years in the making. Two or three years back the expedition was mounted. It involved setting up WinLink along with a couple of other finicky TNC modem/emulation software packages. It actually worked a couple of times. I found the HF linking to be very unstable and frustrating. There were other approaches available at the time but getting involved in PACTOR solutions was well outside the budget and since this was an offhand quest, not viable. The biggest negative is the 300 baud limit on HF. Ouch.

What did work well at the time was using the software TNC solution on VHF with a 1200 baud speed limit. Nirvana by comparison. Unfortunately, VHF was not HF and navigating the packet environment in SE WI was less than satisfying. I quickly fell off the HF email wagon.

Fast forwarding to the recent Jefferson Swapfest, I found myself inspired by a ham who turned me on to VARA HF. Shame on me but I had never heard of it. VARA replaces the two finicky TNC emulators and is literally a snap to set up. As close to download and go as you will find. It is also fully integrated into the WinLink software so, again, very much a hand and glove situation. VARA is available in two flavors, HF and VHF. Either can be downloaded at no cost, however, it is necessary to pay a license fee to unleash the full power of the software. That will allow near PACTOR 4 speeds on HF, which is amazing. At this point I've been experimenting using the unlicensed throttled version and have been having great success.

OFDM Signal Frequency Spectra

VARA uses OFDM modulation which, to grossly oversimplify, allows parallel information transfer via multiple subcarriers in a single transmission channel. The speed increase results from transmitting the information simultaneously via the multiple paths. The long and short: it can be blazingly fast. But then we run into the pesky FCC mandated Symbol Rate limitation. I'm not going there in this discussion, but be aware of the restrictions for use within the US.
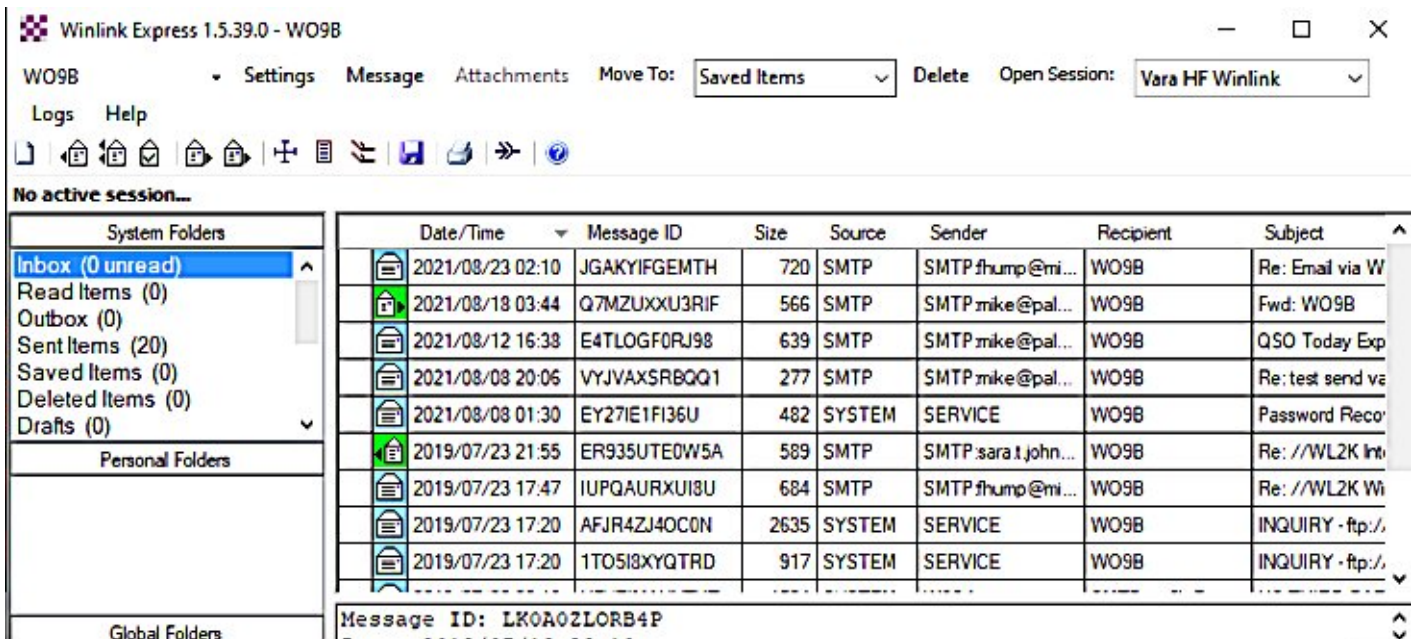
WinLink & VARA HF Setup
The necessary software is readily available from the links embedded above. Very straightforward and typical.
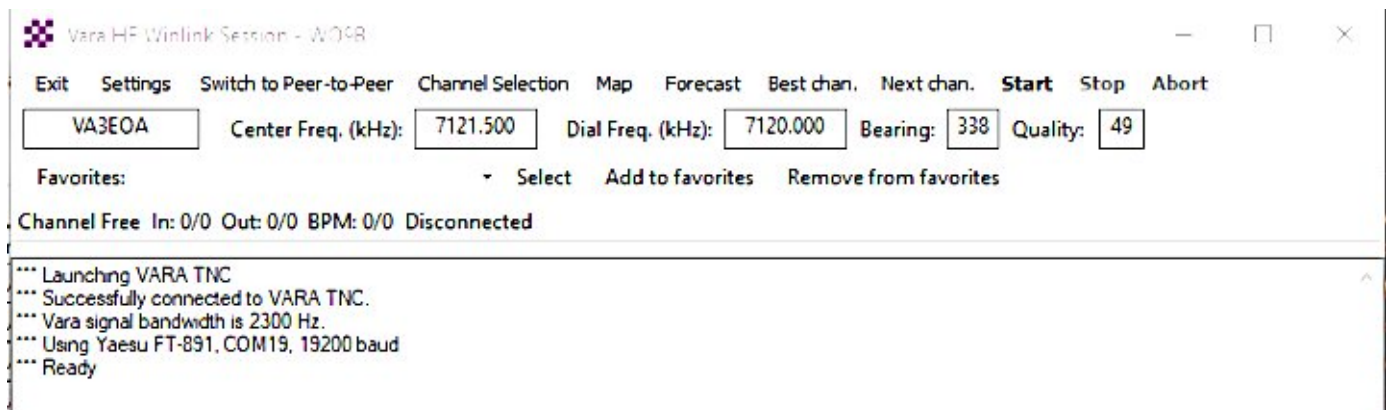
Both are available free of charge. So go get them and install them. You will need to register with WinLink as the service they offer is as an email forwarder, so they need to know your email address and user information. They also need to verify that you are a ham radio operator. I did this a couple of years ago and don't recall it as being overly painful. My account, which was dormant for those 2 years, was available to me without issue. It was very pleasant reacquainting myself with the the software. There are no registration hurdles with VARA HF. It will ask for you to register when you use it, but that is bypassed by checking the "Continue Evaluation" box.

Opening each package you need to go to the settings page and fill in the necessary information. It's not hard or exotic. WinLink asks for your callsign, email, address, WinLink password. VARA asks for the command and data ports (8300 & 8301). OK, with that you are ready to go.
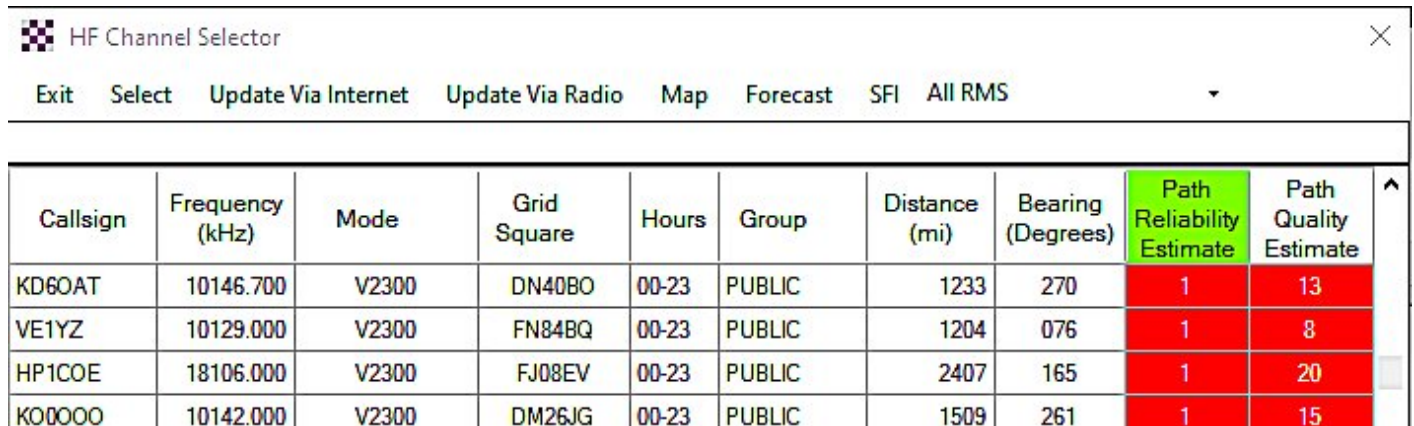
Starting WinLink brings up a familiar looking email type client.

In this window you can do all your email tasks: compose, read, erase. Very familiar and intuitive interface. Once you have composed and email and saved it in the Outbox, you simply click on the "Open Session" link next to the VARA HF Winlink box. WinLink will then open the following window and automatically start the VARA HF modem.

The recommended procedure at this point is to click on the Channel Selection button at the top of the window. This will open the Channel Selector Window which you should then update by clicking on the Update Via Internet button and then Exit.

HF Channel Selector   ✕

Exit   Select   Update Via Internet   Update Via Radio   Map   Forecast   SFI   All RMS

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
KD6OAT	10146.700	V2300	DN40BO	00-23	PUBLIC	1233	270	1	13
VE1YZ	10129.000	V2300	FN84BQ	00-23	PUBLIC	1204	076	1	8
HP1COE	18106.000	V2300	FJ08EV	00-23	PUBLIC	2407	165	1	20
KO0OOO	10142.000	V2300	DM26JG	00-23	PUBLIC	1509	261	1	15

You will then find yourself back in the WinLink Session window. All you do now is click on the Best Chan button which will set up your radio to the frequency of the station deemed to have the best propagation and then click START.

If all goes according to plan, you will make the connection and your email will be sent. Incoming emails will also be downloaded at the same time. Keep in mind this is HF and the baud rate is limited to 300. It will take a while. Obviously, text formatted messages are the norm in this mode. If you have difficulties making a connection with your first station, just click on Nex Chan and the next listed station will be entered. Hit Start again. Repeat as needed.

Experience will streamline the process. Your first few messages may not be real smooth as you learn the software and techniques involved. I have found 80 and 40 meters to be the best bands. I have not had to go deeper than the 3rd channel in may quest to send email via HF.

Give it a try. • —• —••

SLOW SPEED CW QSO NET
Monday's - 8:00 PM - N9FSE 147.135 Repeater
Don't Key like a Phone Man!!

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
President
 Frank Humpal KA9FZR

Vice President
 Steve Dryja, NO9B

Secretary
Dave Garnier WB9OWN

Treasurer
 Bill Reed N9KPH

Directors
Tom Macon K9BTQ

Phil Tollefson, WA9AQL

Newsletter Editor
 Frank Humpal, KA9FZR
 fhump@milwpc.com

Webmaster past president
 Mike Johnson WO9B

West Allis Radio Amateur Club
P. O. box 511381
New Berlin, WI 53151-1381

West Allis Radio Club
PO Box 511381
New Berlin, WI 53151-1381