



Official Publication of the  
West Allis Radio Amateur Club

# Hamtrix

[click here to go to web site](#)

Volume 70, Issue 5 May, 2021

## MAY CLUB HAPPENINGS

**Virtual Club Meeting  
May 11, 2021 7pm**

Using Zoom

**Program**

**Update on Wisconsin QSO Party**

Chuck Dellis, W9WLX

**Parks on the Air adventure Mike Falk AA9RK**

**Bring Ham Stories to share**

**Pre-meeting at Greenfield park by volleyball nets north of  
pool From 4pm to 6pm**

**Zoom Meeting**

Meeting ID: **647 484 5588** - Password: **warac**

<https://zoom.us/j/6474845588?pwd=WjRRQ3E5bHVlbDY5aGNhazNwZlh0dz09>

Zoom phone in info on page 15

**Sendik's Grill Fund raiser dates**

**Saturday July 24, 2021 11:00 am to 4:00 pm**

**Saturday September 11, 2021 11:00 am to 4:00 pm**

**WARAC 2-meter net**

Every Wednesday at 8pm

SEWFARS W9TJK Repeater 146.820

standard (-) offset 127.3 Hz CTCSS

if repeater down try 146.55 simplex



**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](mailto:barbsewsblue@gmail.com).

### Index

President's shack .....	2	<b>Donation to Club.....</b>	<b>8</b>
Meeting Minutes .....	3	Freefest Hamfest.....	9
DX/contest update.....	5	Hamfests.....	10
Digital Digest.....	6	Military Comm.....	12
Starving Rock Hamfest.....	7	CW practice.....	16
Hamtrix Sale Corner.....	8	ZOOM meeting phone #.....	16

## The President's Shack

Another month has flown by and the weather is beginning to reflect that it is spring, at least a Wisconsin spring. At this point the weather looks like it will be Ok on Tuesday so I think at least at this time I will be going down to Greenfield park by the volleyball net (just north of the pool) for a pre-meeting/ eyeball QSO from 4:00pm to 6:00pm your welcome to join me.

We are scheduled to do a Sendik's Grill fund raiser on July 24, 2021 and September 11, 2021 both at the Greenfield store. More info will be coming as we get closer. The first one we did was enjoyed by all. So we, are hoping to have fun, besides adding to the clubs piggy bank.

My CW relearning project is slowly coming along. The Monday CW practice net we have been running has been helping get me to practice and being able to test where I am among friends with the always helpful feed back.

The feed back comes on the repeater we are using so it is just like having an Elmer standing next to you giving you hints. The CW is done on HF frequencies. Last Monday we used the 6 meter band and all four of us were able to hear each other as we had a short rag chew for practice.

Another challenge I have taken on is running the morning nut net which I have been a part of it for years. One of the many things you get reminded of is that propagation is a real thing and being that Ham radio operators know how to do a work around when they are needed. If you can't hear someone, another person will relay the info. That is just part of the game. Like so many things many hands make light work.

As noted in the board meeting minutes we are scheduling September as our first face to face meeting. New Berlin has approved that so lets keep our fingers crossed that everything works out.

73

Frank KA9FZR    • — • — •



My morning nut net breakfast shack HI HI

• — • — •

## WARAC Club Meeting Minutes - April 13, 2021

Due to the nature of the COVID-19 crisis and Governor Tony Evers "Emergency Order #12 Safer At Home Order", Chuck W9WLX hosted the Zoom Meeting.

**The club meeting was called to order 7:03 pm by Frank KA9FZR.**

Approximately 18 virtual club members were identified by the Secretary Dave WB9OWN. There were no visitors.

**QSO Party So Far:** "Wisconsin QSO Party" by Chuck Dellis W9WLX.

- 543 logs received so far.
- 97 more logs than last year.
- 2nd Year in a row, an uptick of 22%.
- Approximately 9 paper logs this year.
- Paper logs were processed by using the WARAC "web-form."

**Preliminary Results:**

- Wisconsin participation grew by 10%. (Big Thanks to Mike Johnson for your 6 WI Zoom presentations!)
- Out of state participation grew by 27%.
- Only 11 mobiles this year.
- No MMM mobile entries this year.
- 18 club members participated this year.

**Squalo Antenna Quest** by Mike Johnson WO9B.

- 6 meter is called the "Magic Band" because sporadic E propagation produces wildly variably signals strengths from S0 to S20. "FT8 is a blast, but my 6 meter vertical didn't cut it last year." "Maybe horizontal polarization is the way to go."
- Search criteria for a non-rotatable horizontal antenna began with PA9T page.
- <http://www.pg1n.nl/articles.php?lng=en&pg=1251>
- I settled on the K0FF design:  
<https://www.qsl.net/k0ff/Square Copper Loop Antenna for 6 and 2 Meters by K0FF/>
- Hint, flat copper sheet material was made by pounding copper tubing flat.
- See K2CJB entertaining video for the finer build details of this antenna.  
<https://www.youtube.com/watch?v=U3ZGJWuzgRs>
- How well does the antenna work? Time will tell.

Steve Dryja NO9B told a story about his new LDG tuner. A problem was discovered that couldn't be resolved with LDG, eliciting something to the effect "You must be doing something wrong." Steve returned the tuner back to HRO for his full money back. (Note. The Secretary is dealing with two similar situations. Beware some return fees range from 10% to 15%, whether there's a functional or a performance issue.)

- Don't forget the Monday night CW "Come join us" on Monday Night at 8pm, 21.060 MHz, meeting first on 147.135 MHz, 127.3 PL.

- Club still has lots of electronic material to sell – Call Steve NO9B.

- Sendik's Brat & Burger fund raising is now operational. We are looking at May 15th or June 5th openings at the New Berlin store, (3600 S Moorland Rd, New Berlin (between National & Moorland.) Any

volunteers?

Get you membership updates in before the next meeting.

- **Club Field Day is still an open question.** If some club members want to conduct FD at the New Berlin site, Chuck Dellis W9WLX has the contact information. What do you want to do?

Joe Seifert KB9QQJ and Feroz Ghouse WU9N are ill, please keep them in your thoughts and prayers.

Bob Script WD9ANY a long time club passed away on March 20, 2021, he will be missed. SK.

The next club meeting may be held at New Berlin Center, stay tuned!

March minutes were approved as is.

Elections are coming up, Frank KA9FZR may not want to run again.

General meeting was adjourned about 8:37 pm.

Respectfully Submitted,  
David Garnier WB9OWN  
Secretary WARAC, April 13, 2021

**West Allis Radio Amateur Club – Sign In Sheet  
General Meeting Zoom Call Listing 04/13/21**

Name	Call	Member			
1 Frank Humpal	KA9FZR	Yes	8 Phil Gural	W9NAW	Yes
2 Bill Dargis	KD9BJZ	Yes	9 Al Hovey	WA9BZW	Yes
3 Chuck Dellis	W9WLX	Yes	10 Mike Johnson	WO9B	Yes
4 Steve Dryja	NO9B	Yes	11 Tom Macon	K9BTQ	Yes
5 George Dunco	AA9SR	Yes	12 Herb Phelps	KC9SND	Yes
6 Mike Falk	AA9RK	Yes	13 Bill Reed	N9KPH	Yes
7 David Garnier	WB9OWN	Yes	14 Howard Smith	WA9AXQ	Yes
			15 Tom Seizer	K9SQU	
			16 Paul Sperbeck	W9PCS	Yes
			17 Phil Tollefson	WA9AQL	Yes

**WARAC Quarterly Board Meeting, April 27, 2021**

Due to the nature of the COVID-19 crisis and Governor Tony Evers “Emergency Order #12 Safer At Home Order”, Chuck W9WLX hosted the Zoom Meeting.

**The club 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.

**Meeting began @ 7:02 PM**

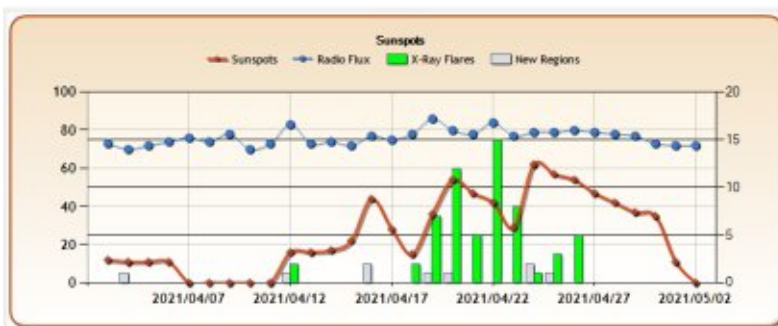
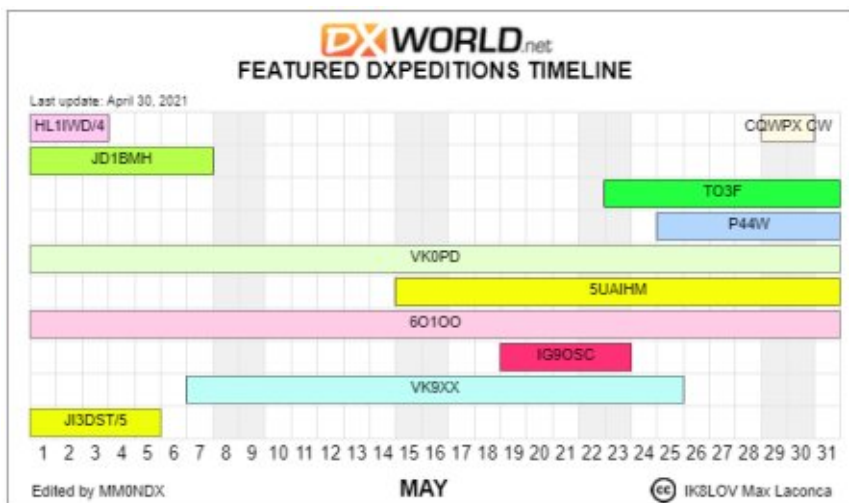
**Go to page 11 BOARD**

## DXing and Contesting - May 2021

### DX UPDATE:

DX is back in business. As happens, Cycle 25 will emerge with it's own personality. Rather than blather on about specific ops, use your internet resources to read all about them: DXWorld.net for one. Unexpectedly in addition to solar propagation, geo-political condx also affect the opportunities. As COVID restrictions are reduced, DX activations will increase dramatically. The emergence of FT8 as a dominate operating mode has really changed the the game. It is not just the ease of

making contacts, but the reporting systems tied to the internet which effectively makes real time graphical beacon reporting networks. Websites like PSK Reporter and DX Maps are a DX'rs dream. Take advantage of those tools. Your countries worked list will appreciate it.



**Propagation:** Sunspots are on a boom/bust cycle this last month. All good news. Though SS numbers are low at this moment, it is just a respite, the trend is distinctly positive and the SFI will be climbing into the 80's and beyond in short order. The K and A index's are also quite active which indicates good solar activity with a building Cycle 25. This is all good news.

### CONTEST UPDATE:

May is not a great contest month. With the absence of Dayton, the void left does not translate to a lot of good contest activity. Hey, no complaints. April was a QSO Party cornucopia so who doesn't need a breather? So contest activity takes a pause this month as we gear up for summer VHF season. Still, there are some good fruit on the tree, just not tons of it.

Reminder that WARAC sponsors the Monday night Slow Speed CW QSO Net at 8:00PM meeting on the 147.135 repeater. Jump in to polish your CW skills in a friendly, low pressure get together. It's fun.

- Arkansas QSO Party: May 8th
- Hamvention QSO Party: May 22nd
- CQ WW WPX (CW): May 29th-30th
- Kentucky QSO Party: June 5th
- Cookie Crumble QRP Contest: June 6th • — • —•





May 2021 \* Hamtrix \* By Michael Johnson, WO9B

## Code Plugs, Who Needs ‘em?

Obviously our bright, shiny, very capable DMR radios need a code plug. But the question remains just how complete of a code plug you need. For our purposes, the following is still being directed to the very popular BrandMeister Network, though later articles will cover other DMR networks. One other proviso is the technique listed below is aimed at AnyTone radios. If you have another brand, dig into the manual or online sources and see how to accomplish the same with your radio.

Recapping from the previous articles, if you have set up your hotspot to monitor 10, 20 or more talkgroups and followed up by setting your radio to Digital Monitor (Promiscuous) mode, you should be getting a bunch of chatter. That’s the plan after all. But now you’ve got a new problem. How do you respond on one of those suddenly active talkgroups. You’ve got several choices.

**First Choice:** Dig up your programming software and add all those talkgroups to your list of talkgroups, channels and zones. Ugh. That’s going to get messy.

**Second Choice:** As before, add the list of talkgroups to just your talkgroups in the code plug. You can then activate that talkgroup from your radio’s Menu screen. This works and is not difficult to set up. The problem is the list of talk groups is going to expand and scrolling the list can be, well, challenging. Still, this works well and is a good candidate.

**Third Choice:** Without any modifications to the code plug, you can manually enter the talkgroup. This can be done either through the Menu screen or by using the keypad shortcut (Long Press the Zero Key). Either technique will bring up the manual entry screen. You can toggle between Private ID’s and Talkgroups with the # key. You want Talkgroups. Simply enter the TG number and start talking.

**Fourth Choice:** The AnyTone radios have several user programmable buttons. Either through the programming software or the Settings menu, you can assign one of those buttons with the option “LastCall Reply”. By simply pressing that button, the radio will be set to the last talkgroup it heard. This is the technique I use and is by far the easiest.

To effectively navigate the talkgroups available on DMR, I’ve found that I use all the choices listed above. If I find I’m using a particular TG fairly often, I will usually take the time to add it to the codeplug as a channel and include it in a zone. BrandMeister is currently offering 1545 TG’s. The list keeps getting more and more diverse. It will do you well to explore some options from time to time. You never know who you might meet. • —• —••

# STARVED ROCK RADIO CLUB

AMERICAN RADIO RELAY LEAGUE SANCTIONED HAMFEST 2021

**"Formerly PRINCETON HAMFEST"**



HAM RADIO, RC MODELS,  
COMPUTER & ALL HOBBIES  
FLEA MARKET

AMATEUR RADIO HOBBYIST &  
COLLECTORS SHOW



**SUNDAY, JUNE 6<sup>th</sup> 2021**

**8:00am to 3:00pm**

**MENDOTA TRI-COUNTY FAIRGROUNDS**

**<-NEW LOCATION**

**503 1<sup>st</sup> Ave, Mendota, IL 61342**

ARRL VE TESTING 9:30am to 11:00am  
GO-KIT JUDGING (Score sheet at w9mks.org) 11:00am  
GRAND PRIZE CASH DRAWING at 2:00pm

TICKETS \$7.00 ADVANCED (2 Stubs) or \$8.00 AT GATE (1 Stub)  
ALL ADVANCED ORDERS MUST BE RECEIVED BY MAY 27<sup>th</sup> 2021  
GRAND PRIZE WINNERS NEED NOT BE PRESENT TO WIN.

- ✓ LARGE INDOOR EXHIBIT BUILDINGS
- ✓ TABLES \$13.00 ADVANCED OR AT THE GATE WITH FREE ELECTRICITY
- ✓ FREE OUTDOOR FLEA MARKET TAILGATING AREA
- ✓ ON SITE CAMPING-ELECTRICITY AVAILABLE - FEE BY FAIR BOARD
- ✓ HOURLY DOOR PRIZE DRAWINGS

FOR ADVANCED TICKET AND TABLE SALES OR GENERAL INQUIRIES SEND A SASE TO  
SRRC C/O Hamfest Chairman, PO Box 198, Leonore, IL 61332-0198

E-mail: [starvedrockhamfest@gmail.com](mailto:starvedrockhamfest@gmail.com) or see our internet site for latest info [www.w9mks.org](http://www.w9mks.org)

B9 to Exit 72 US Rte 34, West to 1<sup>st</sup> Ave, South(Left) to Fairgrounds on Left  
GPS: N41 545580 deg W089 108484 ( N41 deg 32.735min (44.08sec) W089 deg 6.509Min (30.54sec))

TALK-IN by SRRC Repeater W9MKS 147.120 +103.5PL Simplex 146.520

BREAKFAST and LUNCH ON-SITE BY CATERER

**To keep ticket prices down, DO NOT dispose of unwanted equipment on the fair grounds.  
If it doesn't sell or you can't give it away- Take it Home!**

MAIL WITH PAYMENT & SASE ENCLOSED TO:

SRRC C/O Hamfest Chairman                      Make checks payable to SRRC  
PO Box 198  
Leonore, IL 61332-0198

Name: _____	QTY	ITEM	EACH	EXTENDED
Address: _____	_____	Advance Ticket	\$ 7.00	\$ _____
City: _____ State: _____ ZIP: _____	_____	Indoor Table	\$13.00	\$ _____
Phone: _____		Total	\$ _____	\$ _____

## Hamtrix Sales Corner

### Microcontroller Projects for Amateur Radio

All the information you need to build fascinating projects using the Arduino, STM32 (“Blue Pill”), ESP32, and Teensy 4.0 micro-controllers.

Unfamiliar with C or C++ programming? No problem. Microcontroller Projects for Amateur Radio provides all the introduction you need to build projects such as a programmable power supply, a signal generator, a DSP mic processor, and more!

Some of the practical hands-on projects featured:

- The Morse Code Tutor - learn and practice sending and receiving methods, with or without Farnworth encoding.
- The CW Messenger allows you to send up to 50 “canned” CW messages, that are completely changeable in the field without a PC.
- The Mini Dummy Load is small enough to fit in a shirt pocket, can handle up to 30W, includes an OLED display that shows RF power, yet can be built for around \$20!
- The Double-Double Magnetic Loop antenna sets a new standard for small (3' diameter), multi-band operation and includes remote tuning.

Special Member Price! Only \$34.95 (regular \$39.95)

Product Details

Softcover: 400 pages

One Copy  
New  
Price \$25.00  
Donated to club by  
Howard WA9AXQ

Call or email Frank  
KA9FZR  
KA9FZR@gmail.com  
414-425-0794



## R F Parts Contributes to WARAC

WARAC has received a wonderful \$500 donation from the renowned [R F Parts Company](#) in San Marcos, CA. The contribution was a result of an outreach WARAC made to them in an effort to sell some donated door knob capacitors. In addition to purchasing the door knobs, R F Parts contributed the additional \$500 to support our club operations and scholarship fund project. What a wonderful gesture and a total surprise.

R F Parts Company is a purveyor of high quality components serving the radio industry, not just the amateur radio community. The company is owned by Bonnie and Merit Arnold and has been in business since the 90's. In a market segment known for nickel and dime price sensitivity, the Arnold's have created a reputation based on customer service and quality components. Though the ham radio community knows them for their web based offerings, this is a company that actually answers the phone and is more than happy to have a voice-to-voice relationship with their customers. They may not be the lowest price available, but R F Parts customers know that the product they receive will be exactly what they expect.

So thank you Bonnie and Merit for your generous contribution to our club.



# **FREEFEST**

**Buy/sell Amateur Radio Equipment, Electronics and Computer Gear**



**Saturday  
June 12, 2021  
6am to 11am**

**This is a free outdoor event, there is no admission charge**

**Coffee and donuts will be available for purchase**

**Presented by the Lakes Area Amateur Radio Club  
Inc. - WI9ELK**

**Talk-in on 146.865 pl 127.3 repeater**

**Event location  
Lyons Town Hall  
6339 Hospital Road  
Lyons, WI. 53148**

# HAMFESTS

## WARAC ATTENDS MAY 2nd SANDWICH SWAPFEST

Steve, NO9B, is having the best month ever. As we all know and need a reminder from time to time, Steve has headed, mentored, sweated and generally dedicated more time than he dares to admit to our club's donated equipment sales. This essential work provides the club with much of our fundraising money to carry on not just the club's frugal day-to-day operations, but also the very important scholarship funds. With the epidemic, swapfests have been canceled for the last year or so resulting in an explosion of inventory with literally no place to go.

That changed this past weekend.

NO9B stuffed his car with club treasures leaving just enough room for WO9B to tag along for the Sunday, May 2nd Sandwich IL Swapfest. The weather was perfect and the crowds were amazing. As the 'O9B Boys were in the process of unloading the car, Steve jumped into old form and made two sales to a couple of the early pickers so prevalent at these events. The place had a great vibe and business was brisk. The club netted over \$850 in sales.

What could be better? Sun, sales and Swapfest. Nice to see a little bit of normal creep back into our ham lives.

**2021 Hamfest Calendar Ver 0.2**

Date	Verified Rate	Time	Name	Location	Address
May 2, 2021	✓ ?	8:00 AM	Dekalb Hamfest	Sandwich Co Fairgrounds	1401 Suydam Rd, Sandwich IL
June 6, 2021	✓ ?	8:00 AM	Starved Rock	Mendota Fairgrounds - <b>NEW</b>	503 1st Ave Mendota, IL
June 6, 2021	✓ 1	8:00 AM	WI Antique Radio	New Berlin Ale House - <b>NEW</b>	16000 W Cleveland Ave, New Berlin WI
June 12, 2021	✓ 1	7:00 AM	LAARC Freefest	Lyons Town Hall	6339 Hospital Rd, Lyons WI
June 19, 2021	✓ 2	7:00 AM	Sunshine Swapfest	Starlite Club	W2091 County Rd JJ, Kaukauna WI
July 10, 2021	✓ 7	6:30 AM	South Milwaukee Hamfest	American Legion	9327 S Shepard Ave, Oak Creek WI
July 11, 2021	✓ 1	8:00 AM	WI Antique Radio	New Berlin Ale House - <b>NEW</b>	16000 W Cleveland Ave, New Berlin WI
July 18, 2021	✓ ?	6:00 AM	Karsfest	Will County Fairgrounds	710 S. West St, Peotone IL
August 1, 2021	✓ ?	6:00 AM	Hamfesters	Will County Fairgrounds	710 S. West St, Peotone IL
August 7, 2021	✓ 4	8:00 AM	Jefferson Hamfest	Camp Spangler - <b>NEW</b>	892 N Jackson Ave, Jefferson, WI
August 28, 2021	✓ 2	8:00 AM	Interclub Swapfest	Elks Lodge	5555 W Good Hope Rd, Milwaukee WI
August 28, 2021	✓ 1	8:00 AM	Circus City Hamfest	Badger Steam & Gas	S3347 Sand Rd, Baraboo WI
September 12, 2021	✓ 1	8:00 AM	WI Antique Radio	New Berlin Ale House - <b>NEW</b>	16000 W Cleveland Ave, New Berlin WI
October 6, 2021	? 3	6:00 PM	So Milwaukee Auction	American Legion	9327 S Shepard Ave, Oak Creek WI
October 10, 2021	✓ 1	8:00 AM	WI Antique Radio	Terminal	5917 S Howell, Milwaukee WI

## Board from pg 4

### Meeting Agenda

- 1.) **2021 Membership Booklet**, Dave Garnier is responsible for generating it, May 2021.
- 2.) **Treasurer's Report** - Bill, N9KPH. Financial Year To Date and 11/1/2020 to 4/20/2021 reports and North Shore Bank reports were submitted by email.
  - CD rates are pathetically low.
  - \$300 yearly deposit was made for the New Berlin Center.
- 3.) **Face to Face (F2F) Club Meetings** – Frank KA9FZR is aiming for an August outside meeting. Planning for a possible September club meeting at New Berlin Center. Discussion about reserving the larger room that has an outside door? “Can we open the outside door for antenna placement?”
- 4.) **Sendik's fundraising event(s)** coming to Layton Avenue Greenfield store, (we missed the New Berlin slots.)
- 5.) **Swapfest Activity by Steve NO9B** – Discussion about attending some local swapfests. I need help with determining equipment functionality, plug in and turn on & dust and clean. I'm going to May 2nd Dekalb Hamfest in Sandwich Illinois, “Who's going to help me?”
- 6.) **Field Day 2021** – Who's going to volunteer to be FD Chairman? Nobody from the WARAC board volunteered. Would New Berlin be willing to open the recycling center site during the pandemic Governor's Orders? ARRL is going to sponsor FD like what was done last year. “I still want to do it the WARAC way even if it's 1 or 2 people.” No club FD decision was made, maybe later?
- 7.) **Does WARAC want to run HF remote station?** There was no initial enthusiastic interest but there is interest to do so. How about the club running a Flex remotely? Why not start with simple SRD web based receiver an PA0RDT MIni-Whip E field antenna? “If there's interest, it will happen.” Yes, lets do it! Steve NO9B volunteered to ask Bob about hosting an HF Site at one of his networked repeater sites.
- 8.) **Election Discussions** were pushed off till July meeting.
- 9.) **Meeting presentation** for next month's meeting TBD.

**Meeting Ended @ 8:39pm**

Respectfully submitted,  
David Garnier WB9OWN  
Secretary WARAC, April 27, 2021

### West Allis Radio Amateur Club – Sign In Sheet

#### Board Meeting Zoom Call Listing 04/27/21

Name	Call	Member			
1 Frank Humpal	KA9FZR	Yes	4 Phil Gural	W9NAW	Yes
2 Steve Dryja	NO9B	Yes	5 Mike Johnson	WO9B	Yes
3 David Garnier	WB9OWN	Yes	6 Tom Macon	K9BTQ	Yes
			7 Bill Reed	N9KPH	Yes
			8 Phil Tollefson	WA9AQL	Yes

# Communicating the Military Way

Ever  
since  
humans  
first



## Military Phonetic Alphabet



developed into its own species on planet Earth, whether they used body language, spoken sounds, or even drawings on the walls of caves, they have attempted to communicate with one another. Over time, peoples that resided on various parts of the planet developed different sounds which would mean different things, for example, in early Semitic, a pictograph representing a house would have the translation of "beth" when verbalized, but on the other-side of the world, the Mayans word for house was "nahil".

*An aside: for the English alphabet, the alphabet used by the United States and its North Atlantic Treaty Organization (NATO) allies, a letter was typically developed by taking the first sound of the spoken word. In the case of "beth", the initial sound*



*became the second letter of the alphabet we use today!*

Differences in how we communicate persist to this day, and to ensure the communications between each other can be absolutely understood, clear and standard methods of communicating were developed. Three of those methods are via the Phonetic Alphabet, Morse Code, and Signal Flags.










The Phonetic Alphabet is used widely in military communications. The phonetic alphabet, a system set up in which each letter of the alphabet has a word equivalent to avoid mistaking letters that sound alike, such as B (Bravo) and D (Delta) or F (Foxtrot) and S (Sierra). The pronunciation for each letter's phonetic word is contained in the parenthesis below it.


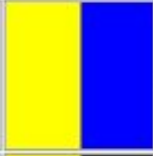
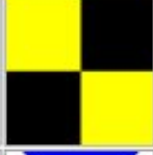




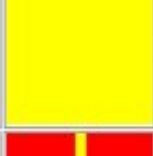


The letters of the alphabet in Morse code are represented by dots and dashes in the chart below. Radio operators usually substitute the expressions "dits" and "dahs" for the dots and dashes which resemble the tones of the telegraphic hand key when "speaking" the code. The groups of dits and dahs representing each letter must be made as one unit, with a clear break between each dit and each dah, and a much more distinct break between the letters. A dit is one-third the length of a dah.








It is very rare that words would be completely spelled out in Navy flag hoist signaling due to the length and number of flags required, not to mention the time it would take to handle all the hoists. To make the process easier and more practical, the signal book was produced. The signal book defines the flags to be used to communicate various messages. Separately, each signal flag has its own meaning, and for the Navy, those meanings are listed alongside each flag below.

## **Military Alphabet, Signal Flag and Morse Code Chart**

Military alphabet, signal flag, and Morse Code comparison chart.

Navy Code of Signals – Phonetic Military Alphabet				
Letter	Phonetic Military Alphabet	Morse Code	Signal Flags	Flag meaning (Navy)
A	Alfa "AL-FAH"	• — Di dah		Diver down; keep clear and maintain slow speed.
B	Bravo "BRAH-VOH"	— ••• Dah di di dit		Taking in, discharging or carrying dangerous cargo.
C	Charlie "CHAR-LEE"	— • — • Dah di dah dit		Affirmative.
D	Delta "DEL-TAH"	— •• Dah di dit		Difficulty maneuvering; keep clear.
E	Echo "ECK-OH"	• dit		Directing course to starboard.
F	Foxtrot "FOKS-TROT"	•• — • Di di dah dit		Disabled; communication requested -- or flight operations are underway.
G	Golf "GOLF"	— — • Dah dah dit		Harbor pilot required.
H	Hotel "HOH-TEL"	•••• Di di di dit		Harbor pilot on-board.
I	India "IN-DEE-AH"	•• Di dit		Coming alongside.

J	Julieta "JEW-LEE-ETT"	• — — — — Di dah dah dah		Dangerous cargo aboard and on fire; keep clear.
K	Kilo "KEY-LOH"	— • — Dah di dah		Communication requested.
L	Lima "LEE-MAH"	• — • • Di dah di dit		Advise, stop your vessel immediately.
M	Mike "MIKE"	— — — Dah dah		Vessel is stopped.
N	November "NO-VEM-BER"	— • Dah dit		Negative.
O	Oscar "OSS-CAH"	— — — Dah dah dah		Man overboard.
P	Papa "PAH-PAH"	• — — • Di dah dah dit		All personnel return to ship (in port).
Q	Quebec "KAY-BECK"	— — • — Dah dah di dah		All boats return to ship.
R	Romeo "ROW-ME-OH"	• — • Di dah dit		At sea: preparing to replenish. In Port: Ready duty ship.
S	Sierra "SEE-AIR-RAH"	• • • Di di dit		Conducting flag hoisting drill.

T	Tango "TANG-GO"	— Dah		Do not pass ahead.
U	Uniform "YOU-NEE-FORM"	•• — Di di dah		Beware, you are running into danger.
V	Victor "VIK-TAH"	••• — di di di dah		Assistance required.
W	Whiskey "WISS-KEY"	• — — Di dah dah		Medical assistance required.
X	X-ray "ECKS-RAY"	— •• — Dah di di dah		Stop your intentions and watch for signals.
Y	Yankee "YANG-KEY"	— • — — Dah di dah dah		Ship has communications duty (visual).
Z	Zulu "ZOO-LOU"	— — •• Dah dah di dit		Tug required.

Written by [NCCM Thomas Goering USN \(RET\)](#).

Date Page Published: October 28, 2009.

Date Page Modified: May 30, 2020.



## 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.

### Heathkit: An Employee's Look Back

Lessons of a successful electronic business—an interview with Chas Gilmore, former Heath executive. Lou Frenzel

<https://www.electronicdesign.com/communiq/article/21148923/electronic-design-heathkit-an-employees-look-back>

Interesting vidios

[https://www.youtube.com/watch?v=74\\_N163HyhA](https://www.youtube.com/watch?v=74_N163HyhA)

[https://www.youtube.com/watch?v=uh88Y2\\_33GI](https://www.youtube.com/watch?v=uh88Y2_33GI)

----Zoom Telephone info----

Dial by your location

+1 646 558 8656 US (New York)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 346 248 7799 US (Houston)

Meeting ID: 647 484 5588

Passcode: 434973    • —• —••

- 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**