



Official Publication of the  
West Allis Radio Amateur Club

# Hamtrix

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

Volume 70, Issue 4 April, 2021

## APRIL CLUB HAPPENINGS

### Virtual Club Meeting April 13, 2021 7pm

Using Zoom

#### Program

#### Wisconsin QSO Party

Chuck Dellis, W9WLX

#### Squalo Quest!

Mike Johnson WO9B

#### Zoom Meeting

Meeting ID: 647 484 5588 - Password: warac

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

Zoom phone in info on page 15

### Virtual Board meeting April 23, 2021 7:00pm

Same Zoom info as club meeting

### 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).

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## If you want to be included in the West Allis Radio Amateur Club Membership Book (PDF copy) send in your dues by the end of April (See page 12)

### The President's Shack

Wisconsin seems to be giving us a preview of spring and summer. Nice to be able to go out in a shirt.

I set up my picnic table station using Mike's sparkplug transformer ant. It is a end fed wire antenna. Small and compact. Used on 40 meters, 20 meters and 15 meters. No tuner is needed just plug and play,

I can't say anyone answered my CW CQ's but it is getting faster to set up. So I can go out and enjoy the outside while I play Ham radio. The radio I have been using is my old trusty Yaesu FT-817. It comes with a built in battery and keyer so I take my key out. Makes a small amount of gear to set up.

The other Ham radio related thing I did was volunteer to be a Net controller for the morning Nut Net. Not a big thing since I'm usually on every morning. I have been using my FT-817 on the net for years with good results. Me and others are sometimes surprised what 5 watts can do even on SSB. I now have my Yaesu FT-891 which allows more power so I can be heard more often.

Ham radio seems to have an endless supply of challenges if that is what your looking for. One fun thing I tried last year was a floating wire antenna. I only got to try it once. Mechanically it still needs some work I will have to see what happens. It might be something to use with the sparkplug transformer. It would remove the tuner from the equation. When you are sitting in a little row boat the simpler you can make it the better!

The submarines I was on had floating antennas for receiving. Salt water probably prevented transmitting through them, besides the fact we didn't transmit much because it gave away our location. Trouble was the huge 7 bladed wire cutter we used for propulsion worked really good at cutting the antennas. I think they have made headway on getting them to work better!

73

Frank KA9FZR



My morning nut net breakfast shack HI HI

• — • — •

## WARAC Club Meeting Minutes

March 9, 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 7:00 pm by Frank KA9FZR.

Approximately 18 virtual club members were identified by the Secretary Dave WB9OWN. There was one visitor, Chris W9CPU.

**Club Presentation:** "Wisconsin QSO Party" by Chuck Dellis W9WLX.

- 60 year anniversary of this contest.
- March 14th, Sunday 1-8PM CDT. This is an easy 7 hour one day contest.
- Note, this weekend begins Daylight Savings Time.
- 446 logs received last year.
- Phil Gural is going to be W9FK club station bonus contact, look for him.
- Mike Johnson has given six WI QSO Party presentations to local HR clubs.
- See you there, 73's Chuck W9WLX

### **General Discussion:**

- Frank KA9FZR and Mike WO9B have been practicing CW between themselves at night and have announced "Come join us" on Monday Night at 8pm, 21.060 Mhz, meeting first on 147.135 Mhz, 127.3 PL.
- HRO is now open for a limited number of in store customers per Howard WA9AQL.
- Club has lots of electronic material to sell – Call Steve NO9B.
- Club Field Day is still up in the air. What do you want to do?

February minutes were approved.

General meeting was adjourned about 7:57 pm.

Respectfully Submitted,

David Garnier WB9OWN

Secretary WARAC, March 9, 2021 • — • —••

West Allis Radio Amateur Club – Sign In Sheet  
 General Meeting Zoom Call Listing

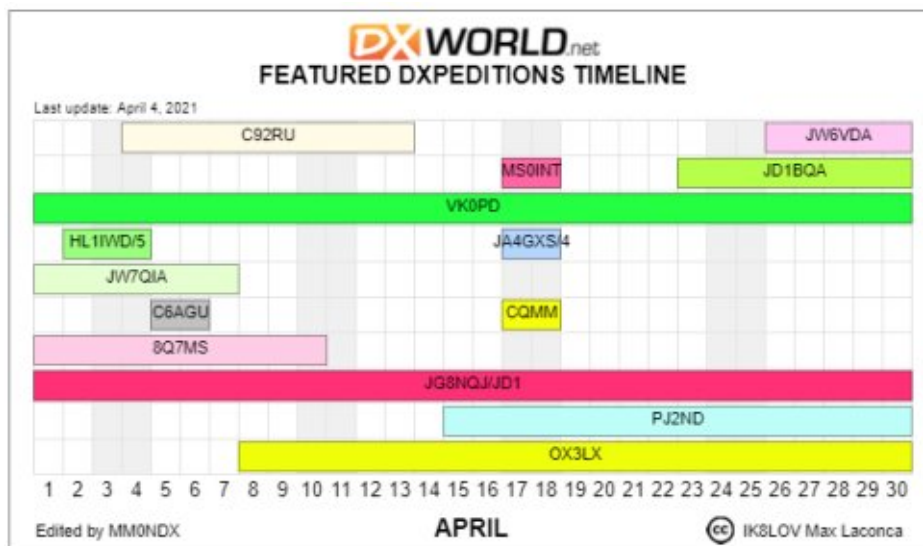
9Feb2021

Name	Call	Member	
1Frank Humpal		KA9FZR	Yes
2Bill Dargis		KD9BJZ	Yes
3Chuck Dellis		W9WLX	Yes
4Steve Dryja		NO9B	Yes
5George Dunco		AA9SR	Yes
6Mike Falk		AA9RK	Yes
7David Garnier		WB9OWN	Yes
8Phil Gural		W9NAW	Yes
9Al Hovey		WA9BZW	Yes
10Mike Johnson		WO9B	Yes
11Tom Macon		K9BTQ	Yes
12Herb Phelps		KC9SND	Yes
13Bill Reed		N9KPH	Yes
14Howard Smith		WA9AXQ	Yes
15Paul Sperbeck		W9PCS	Yes
16Lee Todd		K9HCW	Yes
17Phil Tollefson		WA9AQL	Yes
18Ewin Von de Ehe		WI9EV	Yes
19CHRIS PASBRIG		W9CPU	Visitor • —• —••

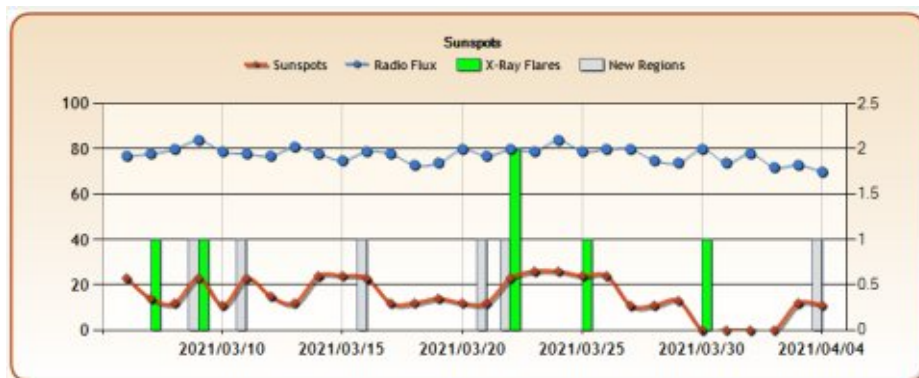
## DXing and Contesting - April 2021

### DX UPDATE:

You can check out the announced ops this month. Bands improving means these ops will likely pop up for those in the chase. FTx modes will be your friend. News this week from the competing 3Y0I (Rebel) and 3Y0J (Intrepid) Bouvet groups. As the window for Bouvet is January, we have many months of speculation to mill around. Or as the old joke goes, "Which came first, Bouvet or the K4?"



Propagation: Sunspots have not been particularly exciting of late. We seem to be in the SFI holding pattern of 70 +/- . Predictions are for this to continue, however, more activity with solar wind and auroral conditions will provide excitement. Wheels are in motion, things are happening.



### CONTEST UPDATE:

It is State QSO Party time. April events are every weekend. These are very nice low key events. Heads up for the surprise QSO Party of the Season: NORTH DAKOTA. That's right, seems a caravan of MN Wireless ops are headed to NoDAK for this weekend's party. They promise to LIGHT IT UP!! . Good for them.

- Neb, New Mex, North Dak, Georgia QSO Parties: April 10 & 11th
- Michigan QSO Party: April 17th
- Ontario QSO Party: April 17th
- Florida QSO Party: April 24th & 25th
- 7th Call, Indiana, Delaware, New England QSO Parties: May 1 & 2
- Arkansas QSO Party: May 8th

For those looking for low key CW contests, the season of summer QRP contests is starting this month. These are contests in name only. They really are operating events that normally have some kind of get out of the house and play QRP radio theme. Some one sponsors them at least once a month. First up...

- QRP to the Field: April 24th • — • —••





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

### Carpe Talkgroups: How to drop a Talkgroup like a Pro

DMR is all about Talkgroups (TG). What follows is aimed at the very popular BrandMeister (BM) network using a simplex hotspot. Dropping TG's with either a duplex hotspot or on a repeater is just a matter of changing channels. Not so with a simplex hotspot and it can be a real problem if your hotspot is locked onto a run-on TG and you want out. If you've visited Worldwide English TG 91, you may have found your stay much longer than you expected. That's what I'm talking about.

The good news is you have options to terminate that TG:

BrandMeister Manager			
Static Talkgroup	Slot	Add / Remove	Action
<input type="text"/>	<input type="radio"/> TS1 <input checked="" type="radio"/> TS2	<input checked="" type="radio"/> Add <input type="radio"/> Delete	<input type="button" value="Modify Static"/>
<input type="button" value="Drop QSO"/>		<input type="button" value="Drop All Dynamic"/>	

**Option 1:** You can drop a TG by dialing up TG 4000 and hitting PTT. This works best if you have TG 4000 already programmed in your active zone. The other problem is you need to find a long enough pause in the offending TG to issue the TG 4000 PTT. Secondly, the command will not drop a static TG, only dynamic TG's. TG 4000 is always my first try. It works most of the time for me, but not always. As mentioned, it requires a long enough break/pause between the users and that does not always happen.

**Option 2:** This option works all the time, but requires access to your Pi-Star Dashboard. I'm showing the MMDVM version, but if your hotspot is something different (DVMega, OpenSpot) they will have similar functionality. Simple solution: Bring up your Pi-Star Admin Panel and Drop the QSO, Dynamic or Static Talkgroup

If this panel does not appear on your Pi-Star Admin panel, then you will need to install the BM API Keys. It is very easy. Follow these directions: <https://amateurradionotes.com/bmapi.htm>

**Option 3:** All else failing, go directly to **BM Selfcare**. Under Hotspots you will find the following control panel. This is the master control and will, without fail, terminate with prejudice the offending TG.

The screenshot shows a web interface with two main sections. The top section, titled 'Actions', contains four red buttons: 'Get IP address', 'Drop call', 'Drop dynamic groups', and 'Reset connection'. The bottom section, titled 'Static Talkgroups', features a text input field on the left, two red arrow buttons (right and left) in the center, and a list of talkgroups on the right. The list includes 'Michigan (3126)', 'Wisconsin (3155)', 'MIS-STATEWIDE1 (31261)', and 'MIS-STATEWIDE2 (31262)'.

**Next Month: Carpe Talkgroup: Controlling your talkgroups**



# The DEKALB Hamfest

Sponsored by the Kishwaukee Amateur Radio Club  
Sunday... May 2, 2021... 8 AM to 1 PM  
Vendor Set-up—Saturday 1 PM to 9 PM and Sunday at 6 AM  
\$8.00 Advance Ticket (Double-Stub—See Below)  
\$10.00 Admission at the gate (Single Stub)

**Overnight Camping on Fairgrounds \$10 includes Electrical and Water**

- Rain or Shine
- 3 Large Buildings
- CASH Prizes
- Prize Drawings Every Half Hour
- TAILGATING
- Free Outside
- No VE Testing
- Chairs Not Furnished
- Food Provided
- Fairground regulations prohibit
- Vehicles in buildings

Masks and Social Distancing Required.



Always the First Sunday in May. May 2, 2021  
Sandwich Fairgrounds, Sandwich, IL  
(Just North of RT. 34 Intersection of SUYDAM and GLETTY Roads)  
TALK-IN: KARC Repeater 146.730 p=100 (-) or 146.52 Simplex  
\*\*\*\* PLEASE USE MAIN GATE \*\*\*\*  
????????????? Questions ??????????????  
Phone: Bob Yurs—W9ICU—Hamfest Chairman at 815-757-3219  
Or e-mail w9icu@arrl.net  
KARC Hamfest Webpage / Hotel Info: www.karc-club.org

Return to: KARC, PO Box 371, DeKalb, IL 60115  
**Deadline: April 20, 2021 MUST INCLUDE SASE FOR ADVANCE TICKET SALES**

\_\_\_\_\_ ADVANCE TICKETS @ \$8 each (Dual Stubs)  
\_\_\_\_\_ INSIDE TABLES @ \$10 each (FREE TAILGATING)  
\_\_\_\_\_ Total..Please make checks payable to KARC

\_\_\_\_\_ Telephone Number \_\_\_\_\_ e-mail address

\_\_\_\_\_ Call Sign

## 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

**The club has some items for sale, as for those with unknown condition, come over and plug them in. :-)**

As I get time I go out to the garage and plug stuff in with basic testing.

The following prices are for club members:

Tektronics 7704a Oscilloscope working \$100

Tektronics 7603 Oscilloscope working \$100

Tektronics 5113 Oscilloscope working \$75

Tektronics D40 Oscilloscope working \$50 (qty3)

Icom 1.2ghz mobile radio unknown condition \$25

450mhz liner amplifiers 100watts unknown condition \$40 (qty2)

Kepeco 20amp power supply, one working other unknown \$50

Kepeco 2amp power supplies unknown condition \$25 (qty 3)

Many antenna books \$5 ea.

Many Tektronics manuals \$5 ea unless its a service manual then it's \$10

20 pin IC sockets \$1 per tube

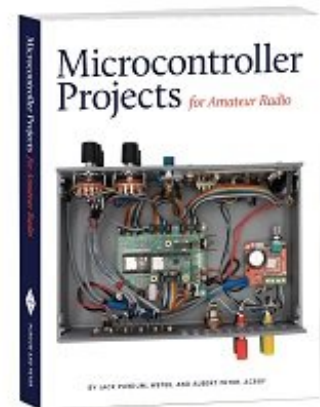
40 pin IC sockets \$1 per tube

Various lengths of hard line.

**If you come over and buy stuff the more you buy the better the prices get ;-)**

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

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







Tektronics 5113 Oscilloscope working \$75



Kepeco 20amp power supply, one working other unknown \$50



Tektronics 7704a Oscilloscope working \$100



450mhz liner amplifiers 100watts unknown condition \$40 (qty2)



Tektronics 7603 Oscilloscope  
working \$100



New Ham Radio Onboard The ISS Is On The Air  
Posted on September 15, 2020 by K0LWC

**Nice as it would be we do not have one for sale.**



# 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
- ✓ ONSITE 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 SPL 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	\$	_____



## If you want to be included in the West Allis Radio Amateur Club Membership Book (PDF copy) send in your dues by the end of April

### WARAC Members:

The club's new fiscal year began November 1st, which means that dues for the 2020 to 2021 year are payable now.

Since we are not holding physical meetings due to the COVID 19 virus, we are asking that you handle your membership in one of the following ways:

#### Life Members

- Please mail the club (PO Box 511381, New Berlin, WI 53151) a completed application so that we can update our membership records.

#### Other Members

- The preferred method of payment would be via PayPal using the "Friends and Family" option. By using this option, the club does not incur the usual PayPal transfer fee. Use this address: [waracpp@warac.org](mailto:waracpp@warac.org).
- Mail a check payable to WARAC at PO Box 511381, New Berlin, WI 53151.
- If you prefer, you can mail a cash payment to this address as well. A receipt will be emailed to you at your address of record
- **Whichever option you choose, we would appreciate having a completed application mailed to us so that we can ensure that our membership records are up to date.**

And please, please, please try to take care of your dues payment by the end of December. We will be publishing a new electronic membership directory early next year, and if we haven't received your dues by this date, your name will not be included in the directory.

Thanks in advance for your help!





## West Allis Radio Amateur Club, Inc. MEMBERSHIP APPLICATION

<b>Name</b>	<b>Call</b>	<b>Handle</b>
<hr/>		
<b>Address</b>		
<hr/>		
<b>City</b>	<b>State</b>	<b>Zip</b>
<hr/>		
<b>Phone</b>	<b>Email Address</b>	
<hr/>		
<b>Spouse's Name</b>	<b>Wedding Ann.</b>	<b>Birthday</b>
<hr/>		
<b>License Class</b>	<b>Expiration</b>	<b>Licensed Since</b>
<hr/>		
<b>Membership In</b>	<input type="checkbox"/> ARRL	<input type="checkbox"/> Amsat
		<input type="checkbox"/> Other
<hr/>		
<b>Operational Station</b>	<input type="checkbox"/> Fixed	<input type="checkbox"/> Mobile
		<b>Bands:</b>
<hr/>		
<b>Would You Be Willing To Serve</b>	<input type="checkbox"/> On A Committee?	<input type="checkbox"/> As An Officer?
<hr/>		
<b>Club Activities You Would Like To Participate In</b>		
<input type="checkbox"/> Field Day	<input type="checkbox"/> Programs	<input type="checkbox"/> Sweepst
<input type="checkbox"/> Hamitz	<input type="checkbox"/> Sunshine	<input type="checkbox"/> Education
<input type="checkbox"/> Community Service	<input type="checkbox"/> Public Relations	<input type="checkbox"/> Scholarship
<input type="checkbox"/> QSO Party		
<hr/>		
<b>Class Of Membership:</b>	<input type="checkbox"/> Full	<input type="checkbox"/> Associate
	<input type="checkbox"/> New	<input type="checkbox"/> Renewal
<hr/>		
<b>Dues Paid:</b>	<input type="checkbox"/> Full \$15.00	<input type="checkbox"/> Associate \$10.00
	<input type="checkbox"/> Family \$15.00	<input type="checkbox"/> Student \$10.00
	<input type="checkbox"/> Retired \$10.00	
<hr/>		

I hereby apply for membership in the West Allis Radio Amateur Club, Inc. in the membership class indicated above. I agree to abide by the Constitution and By-Laws of the club and any rules or conditions that may be set forth in accordance with the Constitution and By-Laws.

<b>Applicant</b>	<b>Date</b>
<hr/>	<hr/>
<b>Secretary</b>	<b>Date</b>
<hr/>	<hr/>
<b>Treasurer</b>	<b>Date</b>
<hr/>	<hr/>
<b>Accepted for Membership</b>	<b>Date</b>
<hr/>	<hr/>

Meetings on the 2<sup>nd</sup> Tuesday of the month at:  
New Berlin Community Center  
14750 W. Cleveland Avenue

Bring your completed application to a club meeting or mail with dues payment to this address:  
West Allis Radio Amateur Club, Inc.  
P. O. Box 511381  
New Berlin, WI 53151-1381

## 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 28.060 MHZ

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

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