



**Milwaukee  
Radio  
Amateurs'  
Club**



*"The ARRL's oldest  
affiliated club"*



# HAMATEUR CHATTER

Editor: Dick Strassburger, N9EEE  
Proofreader: Ted Carlson, N9KQQ

3rd Quarter 2022

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## AUGUST MEMBERSHIP MEETING

Cancelled. Join us at the Summer Picnic

Saturday, August 13 | Noon till the fun runs out

Greenfield Park - Picnic Area #2

## FROM THE PRESIDENT'S SHACK



Greetings!

Summer is the time to get out there and play radio.

I live for warm weather to head outdoors for kayaking, biking, and of course, to play radio. We should all get out of our ham shacks and have fun while the sun shines and warm breezes blow. Here are a few examples to get you motivated.

Field Day: attending Field Day is a test to find out if you're "field-ready" or not. It's a terrible feeling to show up and have malfunctions that could have been avoided with some pre-planning. The Boy Scouts preach "Be Prepared." Business schools teach "Rehearse and rehearse again." The ARRL has a starting gun at 1800Z, sort of a "Ready, Set, Go." So, Field Day is great training ground to practice setting up a functioning amateur radio station in an unfamiliar place, or at least one that's visited only once a year. It requires forethought, planning, equipment checks, and deployment. Murphy always seems to find an invitation to join us, so be ready to embrace that. The best part is you get to play radio outdoors.

Summer Picnic: food, drink and chatter abound at our Summer picnic. Making it "ham-worthy" is bringing a portable field radio gear and making a contact or two. There is growing interest within the club to resurrect fox hunting. Maybe not this year, but

workshops are coming whereby we can make antennas and attenuators, learn about fox hunting tips and get ready for next year's picnic. What a sight that would be...20 or so hams with tape-measure antennas scurrying around Greenfield Park in search of a small transmitter. That might raise a few inquiries, and some interest in the hobby and our brand of fun. And, we're outdoors playing radio.

JOTA (Jamboree On The Air): we'll be back at Camp Oh-Da-Ko-Tah setting up radios and antennas to talk with other hams with similar set-ups at other Boy/Cub Scout camps around the globe. Bring your own radio gear or work the club's equipment. We'll be outdoors playing radio.

Random Acts of Radio-ness: here's a few fun ideas to consider. Drive to Holy Hill and test the distance of your HT on simplex. Set up "field radio" in a nearby community park. Transmit from within the sea of parked cars at State Fair Park. Listen for a band opening on FM radio, then head to the lakefront to join those working 2 meter ducting to nearby states.

POTA (Parks On The Air): It's like Field Day but every day. So far this Summer, I've activated several new-to-me parks and will be visiting 5 more next week on my journey along the Mississippi River. Deb (N9IRN) and I will be kayaking on the river, biking the adjacent Great River Bike Trail, and hiking the trails in the various state parks along the St. Croix River and Mississippi River. Two weeks...outdoors...some of it playing radio.

Enjoy your Summer. And, go out and play radio!

--73--

Dick Strassburger

N9EEE

President, Milwaukee Radio Amateurs' Club

## TREASURER'S FINANCIAL REPORT

### Account Balances

as of 7/16/2022:

Petty Cash: \$20.00

PayPal Account: \$131.67

Checking Account: \$7,131.18

CD 1: \$5,178.94

CD 2: \$7,635.60

Total Funds: \$20,097.39

Additional Detail:

In this period, we had:

Interest Income of \$5.20 from CD's and Checking  
Renewal of AMSAT Membership: \$45.00  
PayPal Service Fees: \$2.38

Respectfully Submitted,  
Dale Webler, AB9DW, MRAC Treasurer

## BOARD OF DIRECTORS MEETINGS SUMMARY

**May, June, and July 2022**

### **Strategic Priorities for 2022-2023 Term**

1. Tighten up the administrative aspects of the club to reflect current interests and needs (see Organization)
2. Create activities that encourage participation and socialization among members (see Activities)
3. Enhance existing activities or assets to reinvigorate vibrancy (see Reinvigorate)

Priority tactics discussed and approved

#### Organization

- Bylaws need updating
- Encourage greater participation on committees by Board and general members(list of committees)
- Change of business type from Non-stock corporation to 501(c)3 to obtain grants and eliminate sales tax
- Membership categories and fees review

#### Activities

- Focus Feedback ideas
- Annual meeting, party, awards
- Equipment inventory / radio station
- Central Division Convention

#### Reinvigorate

- Repeater (Fusion Guidelines, Echolink)
- Swapfest
- Field Day
- Summer Picnic

**Change of organization status to 501c(3).** Advantages: eliminate sales tax; better qualify for available grant money. Dale to contact his son-in-law for an attorney's point of



view. Dick to contact two other clubs with this status to ascertain pitfalls, if any. Discussed availability of ARDC and ARRL grant money. Voted to move forward. Dick offered to re-write the Bylaws to qualify for 501c(3) status. Initial draft of bylaws was approved. Final set to be reviewed prior to Membership Meeting which is required for approval.

**Central Division Convention:** the Central Division Manager has declared HRO Superfest as also a Central Division Convention and is looking to the MRAC for participation. Board rejected consideration of sponsoring an ARRL speaker due to costs. Also rejected consideration of a banquet since we are already participating with forums for HRO Superfest, and have multiple activities underway requiring our focus.

**Membership Committee:** direct mail invitation to new hams to join our Field Day. attended South Milwaukee Swapfest with an indoor display adjacent to the ARRL display. This was a much better location with lots of interest as everyone passed nearby to insert their raffle tickets, or talk with ARRL, or buy food and drinks, or use the restrooms.

**Field Day:** Dale and Roger to obtain and re-purpose used laptops.

**ARISS Project:** Equipment phase of the project is complete. Now seeking a local school that meets the NASA criteria for an ISS contact.

**Ham Radio Boot Camp:** the daylong session will be extend by one hour to accommodate more time in the Workshop sequence. The next Ham Radio Boot Camp will be Saturday October 1. HRO has requested a "mini boot camp" to be held during the HRO Superfest. Dick will provide a 45 minute forum (topic is tbd) and Dean will provide a 45 minute workshop (subject is tbd).

**Marketing Committee:** still seeking a new editor for Hamateur Chatter. Tony Satariano, KD9NXU, has volunteered to do PR for the club. He will prepare a press release regarding MRAC Field Day plans and distribute to the local media.

**Repeater/Technical Committee:** coverage maps for base antenna or HT antenna reception of the MRAC repeater were obtained and will be posted on the website and Facebook Group page. Roger was given a tour of the repeater site, access to the equipment area, and remote access to control the repeater. Dick re-distributed the Fusion Guidelines he developed utilizing information received from other clubs with WIRES-X in the AMS mode.

**Workshops:** Dean has volunteered to lead the development of a Workshop series to be held on the first Saturday of the month at 11 am starting in January 2023. Topics and materials needs were discussed.

**Maker Faire:** Ted volunteered to coordinate MRAC's involvement with Maker Faire.

Compiled by Dick, N9EEE

## MEMBERSHIP MEETING SUMMARIES

Saturday, May 21, 2022

Meeting Open: Dick, N9EEE, (new President) welcomed members and guests; introduced the new Board of Directors.

Financial Report: Finances are in good order

Committee Report: Simplex Contest winners were announced.

Presentation: Field Day planning was discussed.

Member Comments: Rich, KD9QLT, commented that the welcome he has received as a new member has been notable and appreciated. "I belong to another club and your welcome and communications far surpasses their communication, which is zero." Thank you Rich. We appreciate your feedback and complements.

Meeting concluded.

Saturday June 18, 2022

Meeting Open: Roger, AC9BT welcomed members and guests. Dick participated via Zoom due to being quarantined with COVID.

President's Report: The club's transition to a 501c(3) business status was presented.

Financial Report: Dale presented the months finances as stable.

Board of Directors Meeting Review: highlights from the BOD meeting minutes were presented which included: remote control issues with the repeater, need for a swapfest committee, club apparel was being planned.

Membership Feedback: Favorable comments for Hams Helping Hams; plans for a Workshop series, and the repeater issues were noted.

Presentation: Field Day plans

Workshop: Dave provided gear and a demo of mesh networking

Announcements: Roger discussed the need for volunteers for Irish Fest public service communications.

Meeting concluded.

Saturday July 16, 2022

Meeting Open: Dick, N9EEE welcomed members and guests.

President's Report: 501c(3) status. Field Day results

Financial Report: Finances are in good order

Board of Directors Meeting Review:

Membership Feedback:

Presentation & Workshop: Roger presented APRS 101 and deployment during Irish Fest.

Announcements: Ham Radio Boot Camp is October 1. Rookie Net is every Tuesday evening at 8 pm.

Meeting concluded.

Compiled by Dick, N9EEE

## EVENTS, ACTIVITIES AND PROJECTS



# FIELD DAY 2022

"We're Back!"

After a two-year hiatus, the last weekend of June was consumed with ham radio activity supporting the ARRL Field Day event. Though there were some equipment hiccups encountered, Murphy was shown the door and Field Day was a success. The MRAC style of Field Day - part operations, part social - ensued on Saturday and Sunday with new and old members alike taking turns on CW, SSB, and FT8 modes. The ARISS team arrived with radio, antennas and satellite tracking software for final testing and were able to snag their first two contacts. All in all, MRAC Field Day returned to normal at MATC in Oak Creek. Thank you to all who participated or visited MRAC's Field Day 2022. What follows is an expanded report on Field Day: anecdotes from new hams, facts, chart and map, and action shots on-site. Enjoy!

- Dick Strassburger, N9EEE

## ANECDOTES

From our newer members:

Saturday was when the fun began. We had all the stations up and running by the time field day officially started. I had not been making contacts in a pileup previously and I was able to watch how the more experienced operators handle the pileup. I was also able to see how other operating modes worked, as we had a CW station running as well as FT8, neither of which I have had a chance to do myself. It was also interesting to talk to others that came by just to visit, or to operate. I also tried to help with welcoming anyone new to the hobby and invited them to join us on the Rookie net. I was also able to take a turn at operating a station and made some voice contacts on Saturday.

Sunday was also a good time. I arrived back early in the morning and made a few more contacts. I was able to be there when our satellite station was able to make a successful contact as well. It was quite exciting to see the ARRIS station make its first successful contact as the team there has put a lot of effort into building the station.

Some of the things I learned at field day: better troubleshooting techniques. Watching more experienced operators work thru issues that came up will help me to follow good procedures when I need to work out issues. Not to be afraid of the pileup. Seeing how others worked through the pileup should help me when I am faced with a pileup in the future.

- Carter Davis, W9ERR

As a Field Day "first-timer" I was impressed with the camaraderie and collaboration between all of the participants. When you are with a group of people with such a broad range of practical experience you suddenly realize how little you know, and how much more there is to learn. Every minute of the event, from setup to tear down, was a valuable learning experience. I'm already making plans for the next Field Day!

- Jeff Weber, AD9AB

Truckfuls of transceivers, tuners, power switchboards, and local hams I recognized from a radio bootcamp earlier in the year. We hoisted up dipoles, charted satellites, and traded jibes over pizza. At the fire tower, I learned about QSO formats. And CW prosigns (shave and a haircut...) Enjoyed the opportunity to scan up and down the 20m General/Extra band, where I made my first, real contact in the wild outside of our local 2m nets. I heard voices way out in Florida, in North Carolina, in Chile, in Spain. Yeah, people do still use ham radio!

I would say I am fortunate to learn firsthand about common ham issues. I don't think we managed to QSO the International Space Station. Someone forgot to bring their power cord. But also, someone thought to bring a spare. So my takeaway from radio matches my experience as a professional software developer: Mistakes happen. It takes patience to work them over. Persistence is key. I spent a while trying to break through pileups to get to one station. Hearing your call sign back, what a wonderful feeling!

Fresh from the camaraderie of that Field Day, I have since obtained my General license, and am now experimenting with homebrew, speaker wire antennas.

- Andrew Pennebaker (Guest), N4JMA

Thanks to Dave Schank, KA9WXN, for organizing the effort this year and hosting Field Day at MATC - Oak Creek campus.

## STATS, CHARTS, AND MAPS

Club: Milwaukee Radio Amateurs' Club

Call sign: W9RH

ARRL Section: WI

Class: 5A

Operators: 14\*

Guests: 27

Preliminary Total Score: 2,386

Bonus Points: 1,250\*\*

\* AA9L, **AB9DW**, **AD9AB**, **AC9BT**, **KA9WXN**, KB9KBK, KC9GMW, KC9TZO, **N9EEE**, **N9KQQ**, **W9ERR**, **WB9BWP**, N4JMA, KG7VIZ (**members**)

\*\* 100% emergency power; media publicity; public location; public information table; natural power (solar); safety officer; social media posts; satellite QSO.

Band	CW	Phone	Dig	Total	%
80		19	41	60	15
40		128	75	203	50
20	29	23		52	13
15		72	11	83	20
10			3	3	1
6			3	3	1

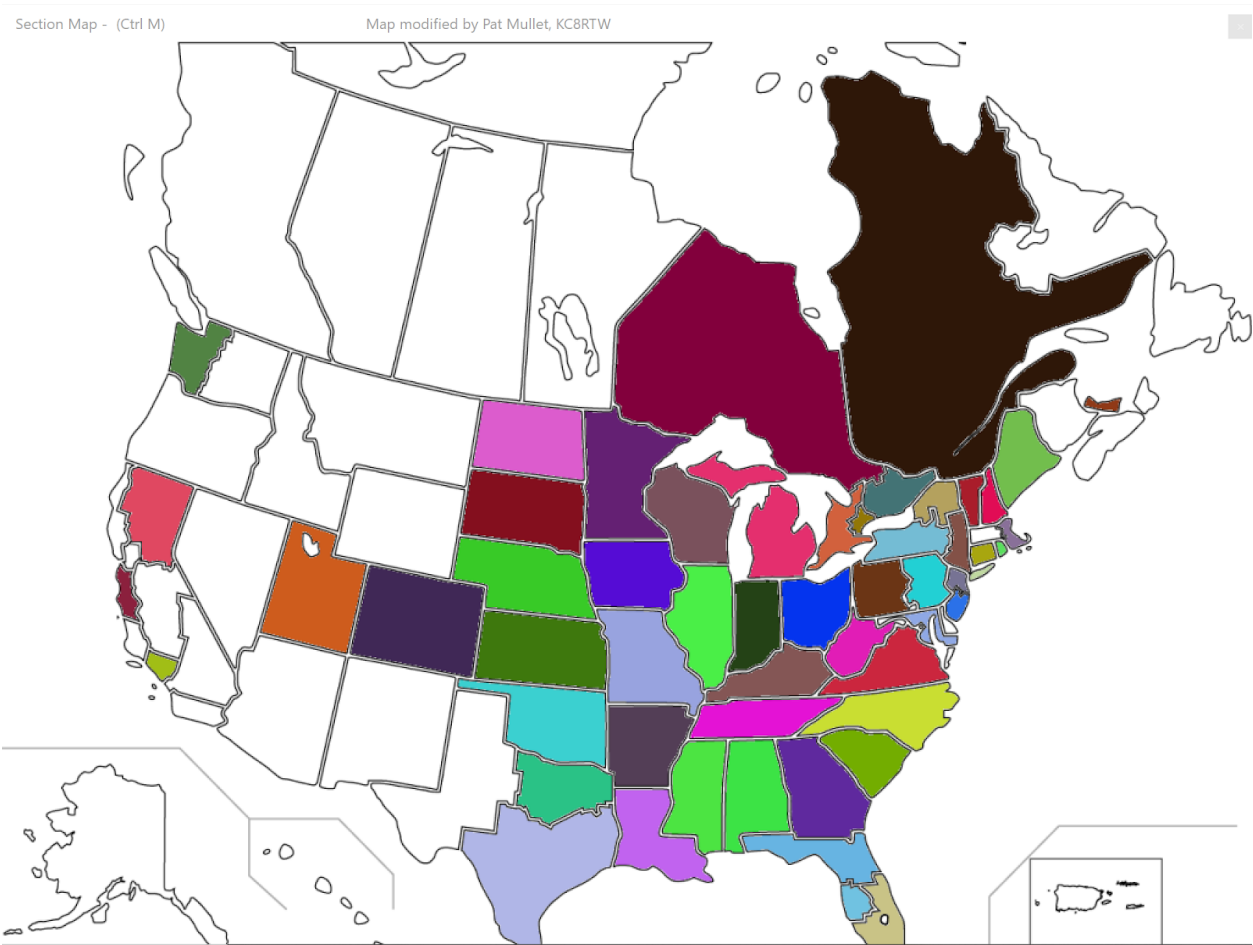
SAT		2			
Total	29	244	133	406	100

QSO Analysis

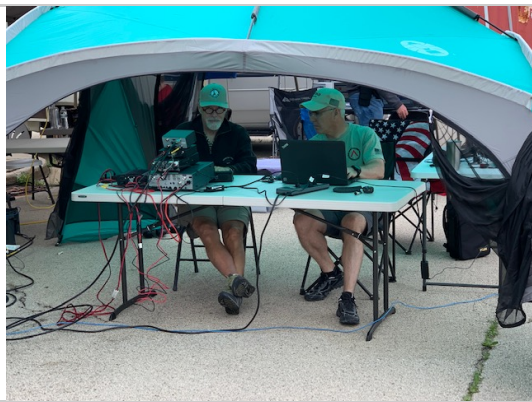
Sections: 56

States: 43

Countries: USA - 375 (92%), Canada 31 (8%)









## **SUMMER PICNIC '22**

**Saturday, August 13, 2022**

Noon till the fun runs out

Greenfield Park - Picnic area #2 (across from the Aquatic Center  
(enter off 124th Street)

Burgers, Brats, and Buns will be provided  
Water will be provided



Feel free to bring a side dish to share (optional)

HT Toss Tournament.  
Field Radio Ops  
Visit our [web site](#) for map and other details

So, what's the HT Toss? See below.



2021 MAARS / MRAC Picnic - Greenfield Park 8/11 - Dean Berglund KC9REN  
with Tony VanDerWal K9UDS waiting his turn



2021 MAARS / MRAC Picnic - Greenfield Park 8/11 -  
Barry Sprifke W9BLS presenting HT Toss 1st prize to  
Jim Goelden KA9ZYW



2021 MAARS / MRAC Picnic  
Greenfield Park 8/11  
HT Toss Prizes

# IRISH FEST PUBLIC SERVICE COMMUNICATIONS

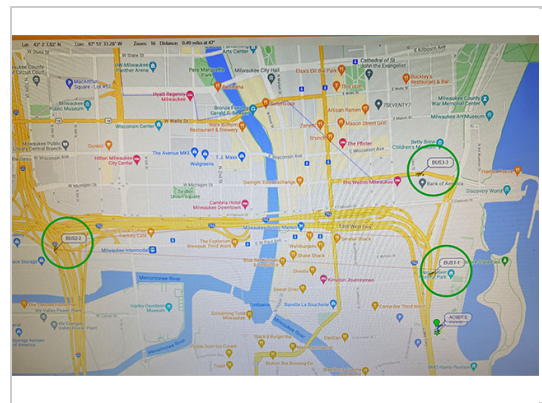
August 18 - 21

An opportunity to learn about and participate in public service communications. Volunteers will monitor the APRS units aboard shuttle buses, and provide communications from shuttle buses back to the command center.

Free parking and food vouchers will be provided.

Contact Roger, AB9BT for more information or visit this [web page](#) for information and sign-up.

Pictures of the Command Center and APRS tracking map are shown below.



**Saturday, October 15, 2022**

Jamboree On The Air (JOTA) 2022 is the largest Scouting event in the world. It is held annually the third full weekend in October. JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community. Boy Scouts of America would like us to participate in JOTA again. It will be held at Camp Oh-Da-Ko-Ta again this year. Camp Oh-Da-Ko-Ta is located at 3363 Dyer Lake Road Burlington, WI 53105 JOTA will be held on Saturday Oct. 15 this year. Last year was so much fun putting antennas up, hooking up the radios, and letting the scouts get on the air. They also talked to non-scouts. We have an open pavilion close to the Dining Hall so there are scouts walking by all the time. BTW they feed us too! We are looking for volunteers that would like to participate in this event. You can be a radio operator or be a greeter to the scouts as they come by and direct them to a radio they can talk on. If you want to know more about JOTA, check out this URL: <https://www.scouting.org/international/jota-joti/jota/> or just do a search for BSA JOTA.



Please let us know if you would like to participate. Also if you have any questions, contact [Dean KC9REN](#) or [Dick N9EEE](#).

I'm looking forward to doing this again! Hope to see more of our club there too.

submitted by  
Dean Berglund, KC9REN  
JOTA Coordinator

Pictures from JOTA 2021 are shown below.



## MRAC WORKSHOPS

**First Saturdays at 11:00 am  
Beginning November 5, 2022**

For our first Build-A-Thon, I thought we'd make a 2MTape Measure antenna. There seemed to be some great interest in this project at a previous membership meeting. A tape measure antenna can be used for many things such as SSTV, Fox hunting, Simplex conversations at greater distances or even talking through a repeater from a farther distance than your HT can do with a rubber duck antenna. I will be able to provide any tools you would need but of course you can bring your own tools if you want. I will have several soldering irons for you to use. You would need to obtain all the parts needed for the project though. You can get these at your favorite home improvement or hardware store. Coax and the BNC connectors can be supplied by you or HRO is willing to sell these two items at a discounted price for this project. The Build-A-Thon will be held on the first Saturday of the month, beginning November 6. If you have an antenna analyzer, bring it along. I will also bring mine so we can tune the antennas.

### 2M Tape Measure Antenna Parts List

(All ½" Schedule 40 PVC parts)

1 Slip "T"

2 Slip Crosses

30" ½" PVC Pipe


1" Tape Measure ( At least 10') "Many times free at Harbor Freight"

2 (1-1/2") hose clamps  
4 #8 X 1/2" sheet metal screws  
5" #14 or #16 AWG wire  
Aprox. 8' RG-58 coax  
1 BNC connector for RG-58 coax  
A few tie wraps to hold the coax to the tube

This article explains the Tape Measure antenna for direction finding:  
[http://theleggios.net/wb2hol/projects/rdf/tape\\_bm.htm](http://theleggios.net/wb2hol/projects/rdf/tape_bm.htm)

submitted by  
Dean KC9REN  
Workshops Coordinator





# HAM RADIO BOOT CAMP

GET ON THE AIR WITH CONFIDENCE

FREE TO NEWLY LICENSED AMATEUR RADIO OPERATORS

LEARNING SESSIONS

HANDLING MIC FRIGHT

STRUCTURE OF A QSO (SIMPLEX, REPEATER, NETS, HF)

WHAT YOU CAN DO WITH A TECHNICIAN CLASS LICENSE

WHAT YOU CAN DO WITH A GENERAL CLASS LICENSE

SETTING UP YOUR FIRST BASE STATION

SETTING UP YOUR FIRST MOBILE STATION

GOING PORTABLE

WORKSHOPS

ESSENTIALS OF A HAM RADIO WORKBENCH

SOLDERING TECHNIQUES

CREATE A DIPOLE ANTENNA

EXPERTS Q & A FORUM

**DATE: OCTOBER 1, 2022**

9:00 AM - 4:00 PM

TRAINING ROOM - HAM RADIO OUTLET (MILWAUKEE)

RSVP REQUIRED - LIMITED ATTENDANCE

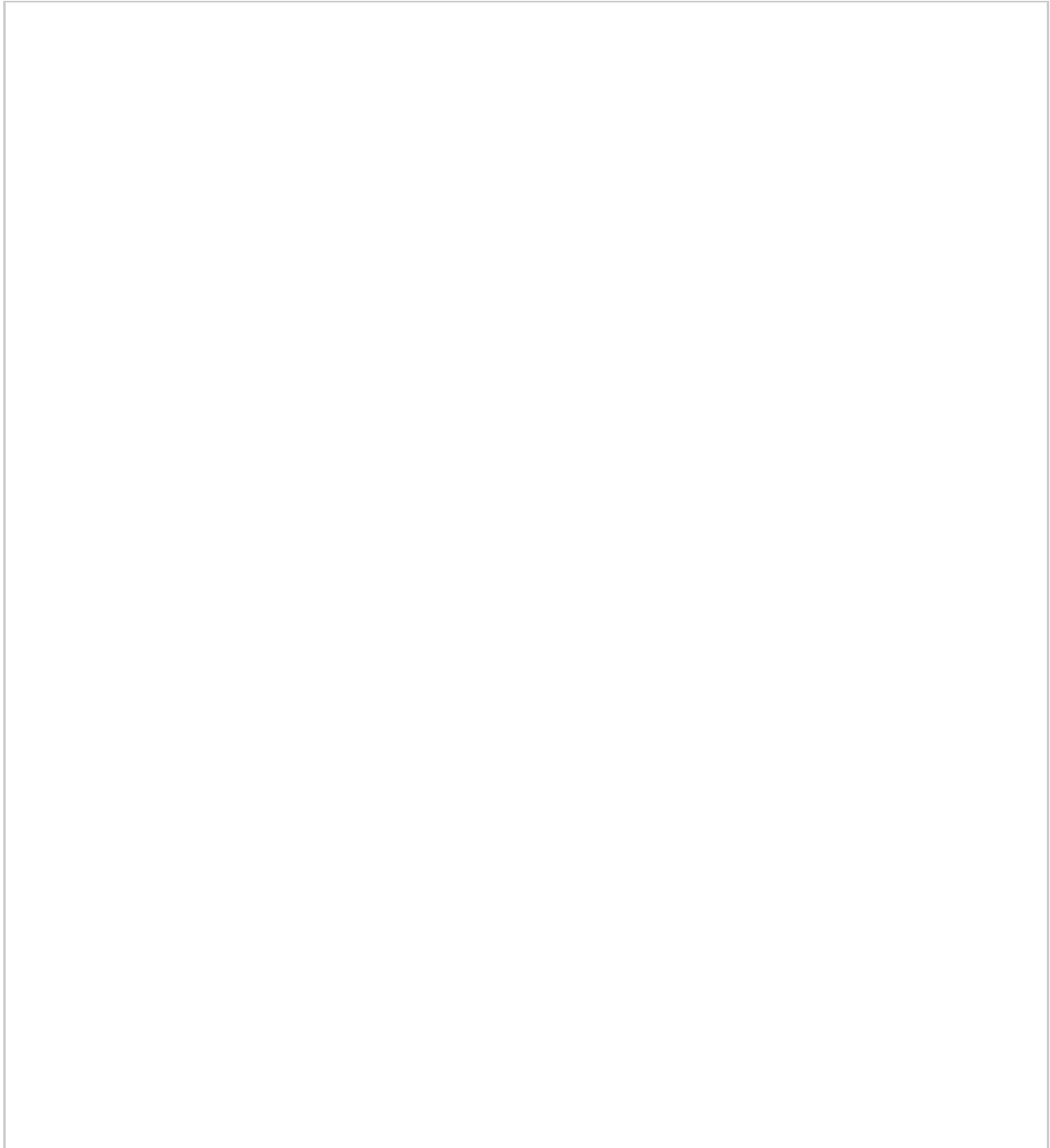
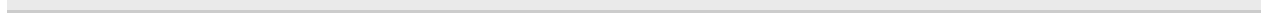
HAMRADIOBOOTCAMP@W9RH.ORG

LED BY MILWAUKEE RADIO AMATEURS' CLUB

State Fair Park Exhibition Center  
Saturday and Sunday, October 22-23, 2022

MRAC will be participating in Maker Faire this year at the State Fair Park Exhibition Center. We are planning an exciting display with multiple forms of engagement with attendees of the Faire. If you would like to help staff the display by engaging with energetic and enthusiastic makers and tinkerers, we would welcome your participation. We are still making plans for creating a big Wow! at Maker Faire.

Contact Ted Carlson, [N9KQQ](https://www.facebook.com/N9KQQ), to learn more and join us.





## **Ask Questions - Get Answers**

Tuesdays

8 pm - 145.390 MHz

W9RH repeater

### **HRO Superfest 2022**

**Saturday, September 23rd - Noon to 5 pm**

**Sunday, September 24th - 9 am to 4 pm**

**MRAC will be presenting a Forum and Workshop on Saturday afternoon.**

Watch for our September meeting notice for more details.

Meet manufacturers, win prizes, watch forums, and test taking on Saturday.

Change from previous years: As of 8/6, there are no plans to have overflow parking at

the Elks Lodge. However, we can use all the parking available at the store since the car dealership has temporarily suspended operations at this location.

## ARISS UPDATE



# ARISS

Amateur Radio on the International Space Station

## MRAC ARISS MAKES SATELLITE CONTACT

The ARISS Project Team brought their gear (radio, two satellite antennas, laptop with tracking software) to Field Day for open field testing. On Sunday, June 27, Roger and Ted successfully made two contacts through the LEO satellites. More details of joy will be conveyed via our website in the near future.

Submitted by Dick Strassburger, N9EEE

## MEMBERSHIP NEWS

## WELCOME NEW MEMBERS

### June

Ken Dzuibek - WB9LLW  
Sandy Dzuibek - WB9LLZ  
Paul Gaffney - W9PJG  
John Sokolowski - KB9SXF

### July

Jeff Connor - KD9VGH  
Carole Poth - KD9VBS



## HELP WANTED

There are many ways to volunteer. Be like Joe:

Participate at Field Day (set-up, take-down, operate on air, log contacts)

Be Net Control for Rookie Net, 2m Net, 10m Net, or Fusion Net

Join the Welcome Committee as a "wing-ham"

Editor of Hamateur Chatter

Score logs submitted for the FM Simplex Contest

Be an Elmer - be a Ham Helping Hams

Plan our next Swapfest

Help at Ham Radio Bootcamp (room facilitator, workshop mentor, counselor)

Membership Committee (club ambassador at swapfests and events, direct mail)

Marketing Committee (publicity for events and activities; FaceBook posts)

Workshops - show us how to build something

Demonstrations - show us how to utilize new tools or on air modes

So, what interests you?

Contact any Board member and you'll be put to good use.

Thank you, and to all our volunteers who make this club thrive.

"Volunteer to volunteer."

## MEMBER RESOURCES

### W9RH.org IS YOUR INFORMATION RESOURCE

#### Newly added or updated:

- Meeting Date and Program
- Summer Picnic
- Field Day
- Ham Radio Boot Camp
- Member Directory
- 3rd Quarter Newsletter (Hamateur Chatter)

# Southeastern Wisconsin VHF/UHF Amateur Radio Net Directory

Revision: 1.7.0 Dated 04/28/22

Fred Schwierske, W9KEY

Report Changes / Corrections to: [w9key@arrl.net](mailto:w9key@arrl.net)

Day	Time (Central)	Net Name	Freq MHz	Offset	PL CTCSS	Location	Comments	Active
Daily	7:30 AM	Bkfst	144.155	USB	N/A	*Simplex*	Breakfast RoundTable	???
Daily	5:00 PM	HappyHour	147.270	+600 kHz	127.3	Racine	Lakeshore Repeater Assn Happy Hour Net - Racine	X
Sun	9:00 AM	X-Country	145.565	FM	N/A	*Simplex*	Cross-Country Simplex Group FM Net	???
Sun	10:30 AM	Sheb Co Net	147.060	+600 kHz	107.2	Sheboygan	Sheboygan County ARC Sunday Morning Net	X
Sun	8:00 PM	PSA Net	146.910	-600 kHz	127.3	New Berlin	Public Service Announcement Net - Milwaukee Repeater Club	X
Sun	9:00 PM	Swap Net	146.910	-600 kHz	127.3	New Berlin	Buy & Sell Radio & Computer Gear - Milwaukee Repeater Club	X
Mon	6:30 PM	Kids Net	146.910	-600 kHz	127.3	New Berlin	Kids Corner Net, Youth on the Air- Milwaukee Repeater Club	X
Mon	7:30 PM	MN-WIS	145.390	-600 kHz	127.3	Milwaukee	Minn-Wis Yaesu (C4FM) Digital System Fusion Net - MRAC.	X
Mon	8:00 PM	MSOE	145.270	-600 kHz	127.3	Milwaukee	Milwaukee School of Engineering W9HHX Repeater 2m Net.	X
Mon	8:00 PM	Emergency	146.445	FM	N/A	*Simplex*	Emergency Net	???
Mon	8:00 PM	ARES	146.865	-600 kHz	127.3	Elkhorn	ARES Walworth Co, ARRL Audio News	X
Mon	8:00 PM	Sheb Co Net	147.060	+600 kHz	107.2	Sheboygan	Sheboygan County ARC Fun Net	X
Mon	8:00 PM	WIARC	442.875	+5 MHz	127.3	Germantown	Wis Amateur Radio Club W9CQ Net, Echolink 576754	X
Mon	8:30 PM	ARES	147.165	+600 kHz	127.3	Milwaukee	Milwaukee/Waukesha County ARES Net	X
Tue	7:00 PM	Open Topic	146.910	-600 kHz	127.3	New Berlin	Open Topic Discussion Net - Milwaukee Repeater Club	X
Tue	8:00 PM	SSB Net	145.250	USB	N/A	*Simplex*	Badger Contester's Net	???
Tue	8:00 PM	Rookie Net	145.390	-600 kHz	127.3	Milwaukee	Rookie Net - Milwaukee Radio Amateurs' Club W9RH	X
Tue	8:00 PM	AM Net	145.700	AM	N/A	*Simplex*	Amplitude Modulation 2 Meter Net, 2nd Tue of each month	X
Tue	8:00 PM	ORC	146.970	-600 kHz	127.3	Cedarburg	Ozaukee Radio Club Tuesday Net, linked with 224.180 repeater	X
Tue	8:00 PM	ORC	224.180	-1.6 MHz	127.3	Cedarburg	Same ORC Tuesday Net, linked with 146.970 repeater	X
Tue	8:30 PM	FM Net	223.500	FM	N/A	*Simplex*	Cross-Country Simplex Group	???
Wed	7:00 PM	Open Topic	146.910	-600 kHz	127.3	New Berlin	Open Topic Discussion Net - Milwaukee Repeater Club	X
Wed	7:30 PM	Pub Service	147.270	+600 kHz	127.3	Racine	Lakeshore Repeater Assc Public Service Net - Racine	X
Wed	8:00 PM	ARES	147.270	+600 kHz	127.3	Racine	Racine Co. ARES followed by Swap Net	???
Wed	8:00 PM	Westside Net	440.200	+5 MHz	127.3	Waukesha	Westside Amateur Radio Club FM Net	X
Wed	9:00 PM	Swapnet	145.130	-600 kHz	127.3	Milwaukee	MAARS / Allstar SwapNet	X
Thu	7:00 PM	Tech-Net	146.910	-600 kHz	127.3	New Berlin	Technology Net - Milwaukee Repeater Club	X
Thu	8:00 PM	Elmer Net	146.910	-600 kHz	127.3	New Berlin	Exchange Info, Answer Questions - Milwaukee Repeater Club	X
Thu	8:00 PM	ARES Oz Co	147.330	+600 kHz	127.3	Port Wash	Ozaukee County ARES Net - 1st & 2nd Thursdays	X
Thu	8:00 PM	Tech-Net	443.800	+5 MHz	123.0	Milwaukee	FM 38 Tech-Net	X
Thu	8:15 PM	ARES WashCo	147.210	+600 kHz	127.3	Slinger	Washington County ARES Net - Slinger	X
Thu	9:00 PM	QCWA-Net	147.270	+600 kHz	127.3	Racine	Q.C.W.A Net (Quarter Century Wireless Association) - Racine	???
Fri	7:00 PM	Open Topic	146.910	-600 kHz	127.3	New Berlin	Open Topic Discussion Net - Milwaukee Repeater Club	X
Fri	9:00 PM	MRAC Net	145.390	-600 kHz	127.3	Milwaukee	Milwaukee Radio Amateurs' Club 2m Net W9RH	X
Sat	7:00 PM	MRAC-Dig	145.390	-600 kHz	127.3	Milwaukee	MRAC Yaesu (C4FM) Digital System Fusion Net	X
Sat	8:00 PM	America Link	145.390	-600 kHz	127.3	Milwaukee	MRAC America Link Yaesu (C4FM) Digital System Fusion Net	X
Sat	8:00 PM	PinkHamster	146.910	-600 kHz	127.3	New Berlin	Pink Hamsters Young Ladies Net (No Men) - MRC	X
Sat	8:00 PM	LEFROG	442.775	+5 MHz	127.3	Mequon	LEFROG Club Roundtable Discussion - informal	X
Sat	9:00 PM	Fun Net	146.910	-600 kHz	127.3	New Berlin	General Discussion Fun Net - Milwaukee Repeater Club	X

Click [HERE](#) to view and download this document.



## FACEBOOK GROUP

Welcome to our Facebook Group

What this means to you is:

- ability to post original content (no need to ask for permission. It's granted)
- limited access to members only (safety feature for you and the group)

- upload or view ham radio-related files (find our Field Day location)
- create polls (wonder how many club members have mobile radios? Ask and find out)
- invite others to an operating event (going to a park? invite others to join you)
- save the group to a shortcut for quick access
- increased group activity in your timeline
- higher security

Join the conversation at [Facebook.com/groups/MilwaukeeHamRadio](https://Facebook.com/groups/MilwaukeeHamRadio)



Zoom presentations are now uploaded to our YouTube channel, featuring:

- SSTV & ISS w/ Dean Berglund, KC9REN
- WIRES-X w/ John Kruk, N9UPC, Yaesu Nat'l Sales Manager
- MRAC Repeater Tour w/ Dave Schank, KA9WXN
- Parks On The Air w/Dick Strassburger, N9EEE\*

\* uploading soon

Watch a video, give us a "thumbs up," and subscribe to our YouTube channel to be alerted to new uploads. **Click on the logo above to access our videos.**

Soon, you will also access our YouTube channel from our website.

## FEATURE ARTICLES

### Are You Prepared To Become A Silent Key?

I recently fielded a phone call on the MRAC hotline from the spouse of a recently deceased ham worried about how to sell his equipment. I met with her in the SK's ham shack to itemize and categorize his radios, antennas, and other equipment, discuss the scenarios for selling the equipment, and discuss a compensation agreement for the effort expended on her behalf. Talk about a deer caught in the headlights, during this time of grief she now had to struggle with the complexity of ridding highly technical

equipment in a world she doesn't understand. Though she attended ham club breakfasts and occasionally stopped by the Field Day site, her familiarity of the world of ham radio was limited and she really had no idea how to liquidate the contents of his ham shack. Her immediate thoughts were for me to list it somewhere and people would respond, like the newspaper classified section that no longer exist. When I explained the purpose of swapfests and ham radio club auctions, she initially got excited, but then reverted to being highly protective of her dead husband's gear and her frame of reference. Her son, a non-ham, had told her, "the radios and stuff do not leave the property, no matter what." You know what happened next...nothing. The inability for me to bench test the equipment, display the equipment for others to view, and make it available at the point of sale shuts down any possibility of a local sale. Put them online? It would become a laborious task to list each item, with pictures, on QRZ.com or eHam.net. Compounding the issue is the SK is two hours away meaning multiple return trips would be necessary to sell these items piecemeal, box and ship. Stalemate! So now I, the helpful ham, feel helpless as well. Think about this. Do you want to put your spouse or loved ones in this position?

Here is my suggestion. Realize that your ham shack is a technology mystery to your spouse and loved ones. It is technical and complex. The hobby itself has its own culture with norms and expectations the spouse and loved ones can't understand or anticipate. So, while you're still standing upright and breathing, now is the time to plan ahead for the inevitable...take an inventory of your equipment and write out a specific plan of how you wish the equipment disposed or liquidated. Here's how:

Take an inventory of your equipment. Create a spreadsheet listing each item in your ham shack, in your vehicle, second home, camper, boat, wherever; include antennas and towers. One big spreadsheet listing every item in column A. Then provide a short description of each item (such as HF transceiver, antenna rotator, service monitor, etc) in column B. List its condition in column C. List and estimated current value of the equipment to give your loved ones or selling agent a head start towards determining the selling price in column D. Be honest with the condition and pricing; when it hits the auction table for everyone to see, the reality will be shone. So be real.

Your wishes for the disposition of your ham shack. Write out specific instructions to guide your spouse or loved ones. The first item is to designate a trusted ham friend, or club, to lead the effort of what comes next, as well as act as intermediary with the spouse. The next decision is whether to donate the equipment to a family member, club, or another ham radio-related organization such as ARES. Or sell it on the open market. The final decision to be noted is the compensation to that trusted person or club for the time and effort it will take to dispose of your equipment. In the case of a sale, I have seen it go one of two ways...50% to the spouse and 50% to the friend, or 100% to the club as a donation. Don't feel squeamish about discussing finances. You are putting out significant effort and alleviating a huge burden on the spouse and family.

I hope this has illustrated that without such a plan, for your spouse, family or friends will be facing an unnecessary burden during a time of grief. Instead of thinking happy thoughts about you, they'll be muttering under their breath as to why you couldn't have taken up a hobby simpler to deal with like fishing. Help lighten the load and prepare for the inevitable. Then, go out and play radio.

submitted by

## **Chasing Airplanes From My Apartment**

SDR radios are all the craze. It seems these receivers can receive from DC to daylight nowadays. With just a few clicks of your mouse you can switch from lower sideband on 40M to AM aircraft transmissions or even FM railroad traffic. There is digital filtering and noise reduction built into the software. Not to mention, you have a spectrum scope showing an entire band.

Recently, I've been hearing people talk about decoding ADSB. Basically, most modern aircraft have a box that's hooked into the plane's GPS receiver and periodically spits out its coordinates and stats on 1090.000 MHz. I know that's an over-simplification.

Since I'm an apartment dweller, my ham radio activity is severely limited. For this experiment, I stuck a Larsen 2M/440 mag mount on the metal air conditioner sleeve of my wall mounted unit. Inside my apartment, not outside. I grabbed the cheapest of the SDRplay receivers (\$125) since I'm most familiar with that model. Any SDR radio capable of using SDRuno will work.

I downloaded the free SDRuno software program and installed it on my laptop. The next step was probably the hardest, I had to google search "adsb sdruno installer" to find the plug-in I needed. If you're not familiar with plug-ins, it's basically an add-on program that someone writes to enhance the capability of another piece of software.

I installed the plugin and started it up. The software automatically switched modes and frequencies. I immediately started seeing data. I was shocked. Remember, I'm just using a dual-band antenna stuck on a magnet mount INSIDE my 1st floor apartment.



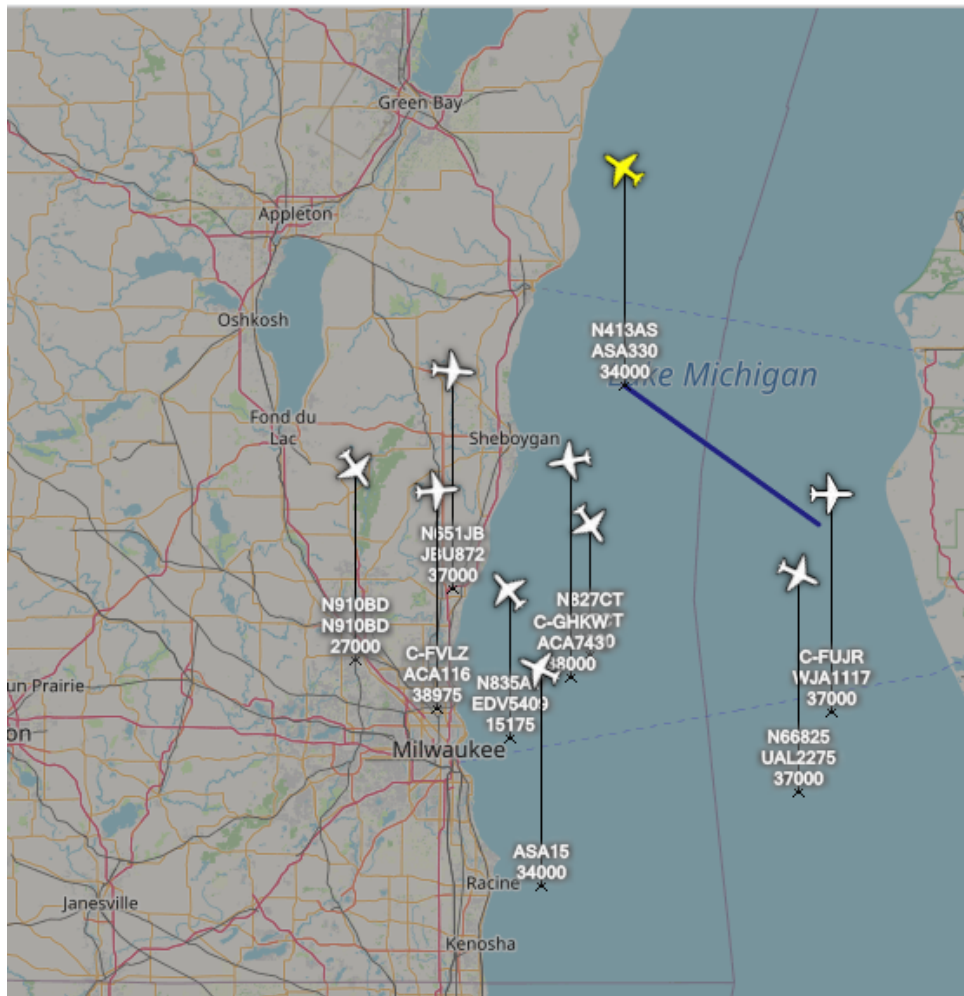
Next, I decided to download another free piece of software called Virtual Radar Server. I installed and clicked on the web link it showed. It looks like this but with numbers instead of Xs - <http://XXX.X.X.X/VirtualRadar/desktop.html>

It opened my web browser and then my jaw dropped. The images below are what I saw. Remember, this is data from my compromise setup. It is NOT being fed by the internet. There is a way to grab data off the web but to me the magic is grabbing RF out of the sky and creating my own map.

All it took was an antenna that had been collecting dust in my closet, a 5 year old laptop, \$125 receiver and time.

Update: A few days after playing with this setup in my apartment I hooked up the SDRplay receiver to the Diamond X50A 2M/440 antenna on the roof of HRO. I got a measly 10 hits. I put an analyzer on the antenna to make sure it was working and it was good. I then hooked up the receiver to the Comet GP9 we have on top of the tower. I got maybe 2-3 more planes. I was wondering if maybe there was some sort of band opening that helped me out.

I figured I had nothing to lose so I patched into the Diamond D-220R mini discone on that roof that's routed to my office for when I want to monitor repeaters or use a scanner. The Virtual Radar sprang to life with 76 planes. I'm thankful for the reminder that using the proper antenna for specific frequencies will yield the best results.



submitted by  
Tom Pachner, W9TJP

## NEW PRODUCT INSIDER

### ICOM IC-V3500

If you're looking for a simple 2M FM radio to hang out on your favorite repeater, obviously 145.390 MHz, or you need a radio for packet communications, Icom has just started shipping the IC-V3500.

The radio puts out 65W and has a large heat sink to help dissipate the heat it will generate. Especially for those that are long winded...I'm not pointing any fingers. It hears from 136-174 so sadly there isn't any aircraft receive. It has 207 memory channels for all your repeaters, marine and railroad scanning needs. The radio also has built-in weather receive and weather alert capability.



I played with it for a few minutes and was impressed with how loud it is. It's the same Icom radio logic as their other mobile rigs so if you're upgrading from an old unit you'll be comfortable with this radio. I had some reservations about the white LCD display but in the glare of the LED lights in the store it was easy to read.

It comes with the basic accessories – mounting bracket, 12V DC Cord, microphone and the all important mic hanger. It's fairly compact – 5.5 x 1.3 x 4.6 and only weighs 2.4 lbs. On the highest power setting it will draw 11 amps on transmit.

At the time this was published the radio is in stock at most dealers and going for \$239.95

submitted by  
Tom Pachner, W9TJP  
HRO Milwaukee

## MRAC VEC TESTING

Here is a recap from the MRAC VEC test session on July 30<sup>th</sup>:

We had a good session, with 13 candidates attending. The word of the day is "general." As in General Class ticket. Twelve candidates earned a General Class license. All but one were Technicians who upgraded. One candidate tried to go the distance, but failed the Extra Class exam.

One candidate entered with a General Class ticket and earned his Extra Class license.

Licenses break out this way:

Technician: 0

General: 12

Extra: 1

### FCC Licensing Update

New FCC rules affecting Amateur Radio licensing went into effect on April 19, 2022 regarding a fee structure and licensing process. Please visit the [MRACVEC.org](http://MRACVEC.org) website for more information.

The fee structure is:

New Application (Technician)	\$35.00
License Upgrades	No Fee
Renewals	\$35.00
Vanity Call	\$35.00

### Upcoming Test Dates

- September 24, 2022 (during HRO Superfest)
- October 29, 2022



- November 26, 2022
- December 31, 2022

### **MRAC VEC, INC.**

The MRAC VEC is the local point for amateur radio license testing with regularly scheduled exam sessions each month. They have specific requirements as does the FCC, so please visit their website for instructions prior to visiting the exam site. Reservations are no longer being taken. Walk-ins only..

What to bring to the test session:

- A photo ID
- The FCC requires a valid email address directly accessible by you.
- FRN (Federal Registration Number). You must register with the FCC to obtain your FRN number, in advance of the test session
- Photocopy of your original license
- \$5.00 to offset the cost of testing materials
- Do Not bring the \$35 application fee. You will receive an email from the FCC with instructions for fees payable to the FCC

For more information about testing requirements and other useful information, visit their website, [mracvec.org](http://mracvec.org).

A big "thank you" to the volunteer examiners who assisted with the test session. Congratulations to the candidates who obtained a new license or upgraded their existing license! A hearty "welcome" to the new members of the ham radio community.

## **OFFICERS and DIRECTORS**

### Officers

President: Dick Strassburger, N9EEE  
Vice President: Roger Heindl, AC9BT  
Secretary: Tom Pachner, W9TJP  
Treasurer: Dale Webler, AB9DW

### Directors

Dean Berglund, KC9REN  
Ted Carlson, N9KQQ  
Tony Satariano, KD9NXU

### W9RH Trustee

Dave De Febo, WB9BWP

## MEETINGS AND NETS

### MEETINGS

...are held the third Saturday of every month. We continue to offer a virtual attendance for those facing travel or health reasons. View our website for current information.

#### Meeting Dates and Presentation:

August 20: Cancelled - No meeting

September 17: All About SDR

October 15: Show and Tell

November 19: Fox Hunting 101, and Demo

### NETS

Rookie Net: Tuesdays @ 8:00 pm CT - 145.390 MHz Repeater (FM mode)

10m SSB: Fridays @ 8:00 pm CT - 28.490 MHz SSB

2m FM: Fridays @ 9:00 pm CT - 145.390 MHz FM repeater (FM mode)

Fusion Net: Saturday @ 7:00 pm - 145.390 MHz Repeater (C4FM - DN mode)

### REPEATER

145.390 MHz, -600 kHz, CTCSS 127.3 Hz

FM and C4FM (Fusion) modes - Auto Mode Select

WIRES-X connected: Node ID: 33588 Room ID:43588

For more information about our repeater system, click [HERE](#).

## CONTACT INFORMATION

EMAIL: [w9rh@arrl.net](mailto:w9rh@arrl.net)

WEBSITE: [W9RH.org](http://W9RH.org)

FACEBOOK: [facebook.com/MRAC.W9RH](https://facebook.com/MRAC.W9RH)



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**Our mailing address is:**

P.O. Box 26938

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