



**Milwaukee
Radio
Amateurs'
Club**



*"The ARRL's oldest
affiliated club"*



HAMATEUR CHATTER

Editor: Dick Strassburger, N9EEE
Proofreader: Gregg Sperling, KB9E

4th Quarter 2021

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OUR NEXT CLUB MEETING IS A WEEK EARLY!!! Gobble up some great info.

"HOAs and Stealth Antennas"

November 18, 2021

NEW TIME: 7:30 PM

Speaker Panel:

Michael Davis: Raingutter HF Antenna

Dick Strassburger: "HOAs and Stealth Antennas: They're Outta Sight!"

FROM THE VICE PRESIDENT'S SHACK

Dave is on hiatus for this newsletter, so please allow me to fill in.

Being primarily a portable field radio operator, my ham shack is out there somewhere in the forests, parks, and fields. A QRP radio, wire antenna, key, and picnic table is my comfortable operating space. Add blue skies and sunshine with a gentle breeze and it's a purely delightful way to play amateur radio. When it rains or gets too cold, a corner of my lower level entertainment room overlooking a forested conservancy becomes "the ham shack." That's how I like it; minimalist and flexible. Challenges come naturally, which is why I like CW QRP into a magnetic loop antenna, or my latest build - an EFHW.

Challenges is the topic of this brief article. The MRAC, like most other ham clubs, face many challenges to remain viable, relevant, and solvent. While some clubs fail to focus on the member, our Board meets monthly to discuss what needs to occur to add value and meaningfulness to your membership. This month we start the annual renewal process with emails and postcards asking you to renew your membership in the club. Last year, we initiated a member survey asking your participation in deeper questions to better understand YOU and how the club can be of relevance in your pursuit of happiness in the hobby. It may be easier for us to make assumptions knowing you may go along for the ride. But it's much more meaningful to have you onboard letting us know how we're doing, and where we should put our focus for the coming year. Please look for the membership renewal and survey information elsewhere in this newsletter. We look forward to hearing from you.

Another challenge we face is finding a meeting place that meets our needs. We're not picky - some place on the west side of Milwaukee County or east Waukesha County that provides easy access for all who travel; the flexibility of 20-50 attendees; and at low-to-no cost. Do you know of such a place? If so, let me know.

Another challenge we face in this multimedia environment is staying connected with you to keep you informed of club news, events and activities. We think issuing announcements on

the Nets, keeping the website up-to-date, instigating more conversation on Facebook, and compiling information into an e-newsletter each quarter is meeting the need. It takes a lot of time and work by a very small dedicated group to do this. So, we'd like to hear from you to make sure we're on the right track or need to investigate other means. So, obviously, we're asking for your input and that is also the challenge since we're not meeting in person, yet. Please take the survey.

Tomorrow, I'll be enjoying the warm weather playing radio along the Ice Age Trail.

--73 --

Dick Strassburger
N9EEE
VP, MRAC

TREASURER'S FINANCIAL REPORT

Treasurer's Report, as of 10/16/2021

Account Balances

Petty Cash: \$20 (Held by treasurer)

PayPal: \$664

Checking: \$5,918

CD #1: \$5,178

CD #2: \$7,635

Total all accounts: \$19,415

Items of note since our last newsletter, covering the Aug, Sep, Oct reports:

- Dues continue to come in for 2021 and 2022
- Promotional materials were purchased for swapfest and Ham Radio Boot Camp
- Swapfest proceeds and expenses are tracked separately
- Our Class A raffle license was renewed for another year \$25.50
- The Post Office Box was changed and 1 year lease \$204

Respectfully Submitted,
Joe Schwarz
N9UX
MRAC Treasurer

BOARD OF DIRECTORS MEETINGS SUMMARY

September, October and November meetings

The Treasurer reported that the club made a profit of \$57.98 on the Swapfest. All the Swapfest-related expenses have been paid.

As of September all in-person meetings have been moved to Zoom because the current HRO COVID policy will not allow the club to use the classroom at this time. Discussions on topics for presentations were held and a list of possible meeting topics was compiled. The list includes the following ideas: ARRL LOTW, introduction to satellite/cubesats, antennas, QRP, anything electronic related, Digital HF modes, APRS/packet, HOA's and Ham Radio, ARES/Emergency Communications, demo on tuning a tube transmitter and amplifier, mobile HF installation, RF noise and grounding and bonding. The date when a topic will be presented will be determined in the future based on the availability of a presenter.

Meeting Location: The November Board meeting was devoted to the need to establish a new in-person meeting location. A number of key criteria were established for a desirable location. A location centered in the west side of Milwaukee county or the east side of Waukesha county was most central to the majority of member's homes. Any meeting site should be handy car accessible, have adequate onsite parking, be able to accommodate 30 people and cost no more than \$50.00 per use to rent the facility. No fees to use is the most desirable option. Any site should have adequate audio visual and internet capability. We may have guests presenting programs by Zoom in the future. The club is planning to have twelve meetings a year. This was felt to be the best number to keep in contact with our members.

The club will support the Boy Scout's Jamboree on the Air on October 16. Dean Burgland, Ted Carlson, Roger Heindl and Edward Goto will be the members supporting the event. The Boy Scouts expect 200 scouts and family members to attend the event near Racine.

Committee Reports

FM Simplex Contest: The Board decided to create a committee to run the 2022 Simplex contest. It will be held on February 27, 2022.

Membership Committee: Will be creating a data base of hams checking into the club nets. They are looking to touch base with lapsed memberships. A rookie net to engage newly licensed hams is planned to start in December on Tuesday evening at 8:00 PM. A new welcoming process is being developed for new members. A New Member Welcome Process to more deeply engage new members has been created. "Wing-hams" will act as ambassadors to serve as a point person to invite them to meetings and events, and introduce them to new members. A Membership Renewal Process has been created to better communicate with members and increase the retention rate of current members. The Membership Survey has been updated.

Net Control Committee: Greg Sperling is working on developing a survey to poll the membership about their feelings on the club nets.

Hams Helping Hams: There have been no new requests. Members needing help are encouraged to send in their requests.

Ham Radio Boot Camp: The camp has been delayed until early 2022 due to the

unavailability of Dick, N9EEE. Date is to be determined.

Marketing Committee: A Facebook Group has been created to make it more user friendly and approachable for club members to exchange ideas and comments rather than the current Facebook Page which has been restrictive. The committee has created a new and ongoing Special Event station commemorating the anniversary of the club in January of each year, one of the oldest amateur radio clubs in the US. The kick-off will be the the 105th anniversary of the founding of the Milwaukee Radio Amateurs' Club. It will be held at HRO on Saturday January 22, 2022 from 10:00 AM to 5:00 PM.

Repeater/Technical Committee: The committee is developing guidelines for the use of Fusion on the repeater. A webpage for Wires-X control is being developed. It was reported that APRS signals have accidentally been transmitted on the repeater.

Other Business: The West Allis Radio Club announced that they will not run a swapfest in January of 2022. They indicated they are not planning to do any swapfests in the future.

Compiled and submitted by
Ted Carlson, N9KQQ
MRAC Secretary

EVENTS, ACTIVITIES and PROJECTS

JOTA (Jamboree On The Air)

On October 16, 2021 I attended an event for Boy Scouts at Camp Oh-Da-Ko-Ta Burlington, sponsored by the Three Harbors Council of Milwaukee County. It was to introduce Ham Radio to the kids and also to work on Merit Badges. I went along as a helper and an observer. Soon after I was there I had fun and learned a lot!

Amazing team work when setting up and tearing down the antennas. Dick, N9EEE, had good ideas on how to bring in the Scouts who want to talk on the radios, and where to put the club banner and information signs so the kids would stop and ask questions. We deployed different modes including HF SSB, 2M FM and C4FM, FT8, PSK31, and satellite FM with a Yagi - I had a hand held, Roger had an Alaskan Yagi on a tripod. Dean ran his Yaesu FT-857 radio and a laptop for PSK31. So the kids had choices.

Great questions from the kids as we made contacts. I noticed young Cub Scouts and Boy Scouts, both girls and boys. I give all the operators Ted N9KQQ, Dean KC9REN, Rodger AC9BT, Edward KD9OZD, and Dick, N9EEE credit for their kindness and encouragement with the Scouts as well as the parents. When we arrived at camp the BSA personnel welcomed us, offered lunch, and let us know if we needed anything they would help.

Great people! I hope we can do this again next year.

-- submitted by Darlene Berglund, KC9SBN

(editor's note: for more stories and pictures, visit our [Facebook Page](#))



MRAC & M.A.A.R.S. 10th Annual Swapfest

Another Successful Year!!!

In the midst of another challenging year, on August 28 the MRAC and MAARS clubs hosted another successful Swapfest at the Elks Lodge. There were a number of changes, including holding the event later in year, and the biggest change, having both indoor and outdoor vendor areas.

While the number of vendors and attendees was down, judging by the positive comments from attendees, many hams were ready to participate!

From a financial perspective, the Swapfest made a profit of \$115.96, split between the two clubs. This is down from last year, but being positive makes the event worthwhile to have.

Going forward, the Boards of both clubs will discuss what is next for the next joint-club Swapfest. We will make announcements at meetings, on the Nets, and in Hamateur Chatter.

Thanks to the many volunteers it takes to make this happen: Dick N9EEE, Gregg KB9E, Barry W9BLS, Bob KC9WCF, Bob N9PSN, Roger AC9BT, Steve N9FSE, Dave WB9BWP, Ted N9KQQ, Tom W9TJP, Antone, Pat N9LKH, and Dave KA9WXN.

-- submitted by Joe Schwarz, N9UX



SPECIAL EVENT STATION: CELBATING MRAC's 105th ANNIVERSARY

The Milwaukee Radio Amateurs' Club will be celebrating it's 105th anniversary of providing continuous operation and service to local amateur radio operators. Incepted and incorporated in 1917, and one of the oldest amateur radio clubs in the USA, thousands of Milwaukee area amateur radio operators have joined the club for social engagement, activities and events, and emergency and public service communications. The hallmark of this club is it's members who further the experimental nature of the hobby and aid each

other in the development of fixed and portable amateur radio stations through knowledge-sharing and camaraderie.

SPECIAL EVENT STATION

W9RH

January 22, 2022

10:00 am – 5:00 pm CT
1600Z – 2300Z

HF, VHF, WIRES-X
SSB, CW, Digital, FM, C4FM

Operating from inside the HRO-Milwaukee showroom.

Event Certificate will be available to all confirmed contacts.

Operators, loggers, and greeters are needed for hourly shifts. All licensed club members of all license classes are welcome. Contact me if you'd like to participate (N9EEE@arrl.net).

Check the website, our Facebook page, and QRZ.com for up-to-date details such as operating frequencies and certificate instructions.

Planning Committee:

Dick Strassburger, N9EEE*

Ted Carlson, N9KQQ

Dave DeFebo, WB9BWP

HAM RADIO BOOT CAMP



HAM RADIO BOOT CAMP

By Milwaukee Radio Amateurs' Club

"Now that I've got my license, how do I get on the air?"

Ham Radio Bootcamp from MRAC will answer that most asked question from newly licensed Technician Class and General Class amateur radio operators. Ham Radio

Bootcamp is a daylong series of training presentations and workshops conducted by MRAC club experts.

More Details Coming Soon...

HAMS HELPING HAMS

When a Ham needs help, who you gonna call?

We're Hams Helping Hams™

Interested in amateur radio but need help getting a license? Contemplating a project but need some advice? Facing a challenge in the ham shack but need an additional perspective? Stuck with a project and need some insight? Been away for a few years and need a jump start?

“Elmers” participate in a rich tradition within the Amateur Radio hobby whereby seasoned, experienced hams offer assistance and share knowledge to newer hams getting their start, licensed hams re-entering the hobby after time away, or budding hams interested in achieving their Technician class license.

Hams Helping Hams™ is a seasoned group of Milwaukee Radio Amateurs' Club members each offering a unique set of skills and expertise for assisting club members. Categories of expertise range from hands-on practical applications to advisory and counseling. We offer this service to our ham community as a give-back and thank you to the Elmers who helped give us our start in this multi-faceted and fascinating radio communications hobby many years ago.

The MRAC's Hams Helping Hams™ program is designed for one-to-one assistance with meetings and dialogue taking place over the phone, via zoom, or in-person, as the need fits and both parties feel comfortable, especially during the COVID wind-down period. Hands-on demonstrations may be best conducted in-person whereas advisory topics may be more immediate via zoom or phone calls. Let your Elmer be your guide during this process.

Your Hams Helping Hams are club members Dean Berglund, Ted Carlson, Dave DeFebo, Pancho Doneis, Dave Schank, Dick Strassburger, and Dale Webler.

The services noted below are available to any member of the Milwaukee Radio Amateurs' Club. Non-members should contact the Membership Committee regarding benefits or apply online for membership. Milwaukee and Waukesha County area high school students and younger may inquire about Tech Class License assistance without need for membership.

Antenna design	Noise reduction
Antenna raising	Operating skills
Building kits	Public service
Contesting	Em Comms
CW practice	RFI
Digital modes (FT8, etc.)	Satellites
Digital voice (Fusion, etc.)	SSTV/ATV
Direction finding (ADRF)	Station set-up
DXing	Tower raising
Grounding and bonding	Tech Class assistance
Logging software	

[When you need help, complete this request form.](#)

ARISS UPDATE



ARISS
Amateur Radio on the International Space Station

MRAC ARISS PROJECT UPDATE

Work continues on the ARISS Project. The new circuit boards have arrived and the polarity relays and other components have been installed. The boards were installed in enclosures for weather protection. Installation of the boards was completed on both the 2 meter and 70 CM antennas. SWR on both antennas were checked. The results were within acceptable values. This means the antennas are ready to be installed on the support masts.

Preamps for the backup 2 meter antenna and the 70 CM antenna have arrived and plans are to install them at the November work session. The 70 CM antenna is not required for an ARISS contact as the ISS operates its contacts as a bent pipe system. That means the uplink and down link are both in the 2 meter band like a VHF repeater. We are setting up both bands because most amateur radio satellites use a combination of 2 meters and 70 CM. One band is the uplink and the other is the down link. This will give the system the ability to be used for other events such as Field Day and allow us to check how robust the

system is.

The computer software used to track the satellites was updated with new orbital elements. A problem with downloading the data occurred and it took a half an hour to work around the problem. The down load should take about 30 seconds to do. We feel that the problem is a onetime problem attributed to an old security certificate which expired at that time (Think the Y2K issues in 2000). Based upon this event it was determined that at an ARISS event we will need three computers running the tracking software. One will be on the main station. The second will be on the required backup station. The third will run any audio visual displays for the audience. Any one of the three computers could be used in an emergency to run the main station if needed. In our November meeting we will attempt to complete the final assemble and take it outside and try to make a satellite contact.

-- Ted Carlson, N9KQQ

2022 ACTIVITIES AND EVENTS CALENDAR

Please consult this e-newsletter, check the website, follow our Facebook page, and listen to our nets for more information regarding these and other activities of interest.

MONTH	EVENT / ACTIVITY	DATE
January	MRAC 105th Anniversary Special Event Station	Jan 22
February	FM Simplex Contest	Feb 27
March	MRAC & MAARS Swapfest	Mar 26
April	Club Elections	Apr 28
May	Auction Night	May 26
June	Field Day	June 25-26
July		
August	Summer Picnic	Aug 13
September		
October	JOTA	Oct 15
November		
December		
	* Ham Radio Boot Camp	tbd

SAVE THE DATE:

Wisconsin QSO Party - March 13 - 14

A VOLUNTEER SPEAKS UP

I was asked to write something about volunteering. I thought about what to write and I could get real philosophical or I could do one of my rants (like many of you may be used to). The bottom line is someone volunteers for something, anything for their own personal reasons. Maybe it is because you really enjoy doing something and you just want to do that. Maybe you volunteer because you want to help others, provide some sort of service that others may be in need of. Hopefully you don't volunteer because you are trying to impress others or get people to give you some sort of extra respect / ego boost.

Many people, especially today, don't want to be part of a club. What I usually ask them is do they like being on a net, going to a hamfest, operating in a contest, working or being part of a special event operation, working a DXpedition, maybe looking for help in a particular facet of the hobby, looking for help in studying for a license or upgrade, even taking a license test? If you answer yes to any of those questions, there is most likely a club behind that function. A club needs people to perform in those functions. The club needs VOLUNTEERS!

Why do I do some of the stuff I have done? During my early days in the club I had the opportunity to meet both the second and fourth Presidents of the club. I also got to work with and know people like Charlie Dawson, Walt Glish, Travis Baird, Dick Oberholtzer, Al Belanger, Tommy Gettleman, and in later years Ed Wille, Dick McNew, Harry Cieszki, and others who freely gave of their time and sometimes money to help the club in its operations. I just missed out by a couple of years meeting Jack Doyle and Emil Felber but I heard a lot about them. I am not mentioning those few who are working for the club today. Look through the club history to see names frequently in officer and committee positions and participating in many club activities. If I would just sit back and reap the benefits of the club without working to help current operations of the club and to work for the future of the club I would feel like I was letting down all those people who came before me and did so much so I could enjoy things today. I don't want to let them down. Do you?

- Dave DeFebo, WB9BWP

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

There are many ways to volunteer. Be like Dave.

:

Operate the special event station, help log contacts, or greet other hams at the special event station

Join the Welcome Committee as a "wing-ham"

Score logs submitted for the FM Simplex Contest

Be an Elmer

Act as Net Control (2m, 10m, Fusion)

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

Help at the Swapfest (ticket taker, parking lot flag waver, repeater talk-in, vendor liaison, raffle ticket seller)

Membership Committee (hand out flyers, club rep at display table, phone caller, general helper)

Marketing Committee (publicity, social media content, write and distribute flyers, newsletter writing)

Program Committee (identify topics for membership meetings, contact speakers)

So, what interests you?

Contact any Board member and you'll be put to good use. Or N9EEE@ARRL.net.

"Volunteer to volunteer."

MEMBERSHIP NEWS

NEW MEMBER WELCOME

New members to the MRAC are feeling a different level of engagement when they join the club. The Membership Committee has launched a new program whereby each new member is assigned a "wing-ham" (kinda like a wingman but way cooler) who will welcome them into the club, bridge introductions at meetings, and help integrate their interests. If you'd like to be like Joe and Dick and be a "wing-ham" for a new member, let us know.

Joe Schwarz, N9UX

Dick Strassburger, N9EEE

WELCOME NEW MEMBERS

AA9DR - John Anderson (September)

WB9SXG - David Ingold (August)

KD9PFL - Kevin Reich (August)

KD9NXU - Tony Satariano (October)

KD9TRY - Scott Sterry (November)*

*Congratulations for recently passing your Technician Class exam!

IT'S MEMBERSHIP RENEWAL TIME

THE VALUE OF MRAC CLUB MEMBERSHIP

When you belong to the Milwaukee Radio Amateurs' Club you draw upon the history of ham radio and help shape its future. The oldest ARRL-affiliated amateur radio club and one of a handful of the oldest ham radio clubs in the USA established in 1917, the MRAC is the bedrock for supporting local hams advancing in the hobby, fostering a unique camaraderie, and providing meaningful opportunities. These are just a few of the benefits of membership.

Field Day
Special Event Station
FM Simplex Contest
Wide coverage Repeater
System Fusion WIRES-X node
Hams Helping Hams (Elmers)
Ham Radio Boot Camp
Auction
Swapfest
Summer Picnic
Weekly Nets
Net control training
Monthly meetings
Special Projects, such as ARISS
Facebook Group
Quarterly e-newsletter

MEMBERSHIP RENEWAL

Look who renewed for 2022! If your name does not appear below, it's time to renew your membership online [HERE](#) or renew by mail. If you need a printed form, click [HERE](#). Don't delay...you won't want to miss your value in MRAC membership. Dues are due December 31, 2021.

These fine members have already renewed their membership for 2022. Thank you!

Bob McGowan, KC9YRR

Denise McGowan, KC9YRS

Craig Hanke, KB9POW

Michael Harris, KC9CMT

Steven St. Onge, W9MCU

Steve Sundquist, N9FSE

MEMBERSHIP SURVEY

Amateur Radio is a fast moving hobby with new technologies, new operating styles, and old ideas made new. By taking our survey, you're helping us plan programming for future meetings, and develop new activities. Please take the survey by clicking [HERE](#).

MEMBER RESOURCES

W9RH REPEATER USAGE GUIDELINES

The Board of Directors has released an updated, rewritten version of the [W9RH Repeater Usage Guidelines](#). These are commonsense guidelines that members would expect to be implemented on their repeater. Since we have a number of new hams and guests using the repeater, it was determined the guidelines should appear on the website.

Also, Fusion (C4FM & WIRES-X) Guidelines are a work-in-progress which will be reviewed at a near-future Board meeting and published shortly thereafter.

W9RH.org IS YOUR INFORMATION RESOURCE

Meetings, events, notices, and ham-related resources are added or updated almost daily.



NEW!!! FACEBOOK IS GETTING A FACELIFT

The W9RH Facebook Page is migrating to a Facebook Group, soon.

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

Watch for instructions on how to access the new MRAC Facebook Group, in future email announcements in early 2022.

Did You Know?



The Digital Voice modes (C4FM, DMR, D-Star) are being used by 31% of the club members on VHF and UHF.

(source: MRAC Membership Survey, November 2020 - February 2021)

HOW YOU CAN PARTICIPATE IN CLUB HISTORY

We need your story - We need your video!

Our club historian, Dave DeFebo, WB9BWP, maintains an extensive club history chronicling the 100+ years the MRAC has been a club with facts, pictures, and videos. While we have many documents of club business and activities, we have let a number of individual member's stories slip away. In an effort to change that for the future, we are starting a sub-project for the historical archives, that of individual member interviews. We see at least three different aspects to the project. One is a video interview conducted by someone asking the questions. Two could be a "self-interview" where a member produces their own video of themselves answering some questions. A third possibility is written comments based on a set of questions. Those comments would be compiled into one or more chapters of the MRAC History book. Everyone is welcome to participate. Here are the basic questions:

1. How did you get started in amateur radio?
2. How did you find/get started with MRAC?
3. How has amateur radio affected your personal life?
4. Did amateur radio have any effect on your professional life?
5. What is your most memorable amateur radio story?
6. Do you have any memorable MRAC stories?
7. What's next for you in amateur radio?

If you have any questions about this project, or how to provide your finished video, contact Dave at WB9BWP@ARRL.net.

There may be group video sessions such as at the summer picnic and swapfest, so watch for that info. Thanks for your help in this project.

- Dave, WB9BWP.



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
- 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.

NEW PRODUCT INSIDER

Filling a niche - Yaesu FM-only Dual-bander

I'm frequently asked for a simple, FM only dual-band radio. With the popularity of the digital modes, the selection for these types of radios has shrunk considerably. Luckily, there is a new kid on the block - Yaesu FTM-6000R

We hooked one up to play with and the first thing we noticed was the bright display with decent sized, high contrast numbers. I think in a mobile environment it's going to do extremely well.

The radio only receives one band at a time. However, you can mix and match your memory channels for scanning. For example, memory channel 1 can be our repeater on 145.390, memory 2 can be Timmerman Field and memory 3 can be 443.800. The only negative in the memory system is that there are no memory banks. Instead, Yaesu has introduced their Primary Memory Group (PMG) system for your most used channels.

The radio puts out 50W on both bands drawing a maximum of 10 amps. You can also knock the power output down to 25 and 5 watts.

The FTM-6000R has a great receive range of 108-999 MHz (except for the pointless cell blocked section). In the aircraft range, it will do AM mode. Since it's a single receive radio, it will not do cross-band repeating. If you plan on loading it up with memories, you're currently limited to the RT Systems software. At the time this was written, we haven't seen any free software from Yaesu nor any indication it's coming.

There are two ways you can mount the radio. Head attached to the body or you can use the included remote head bracket and 10' remote cable to mount the RF deck away from the head. The mic attaches to the main body so if you do a remote mount you may need a mic extension. By the way, the radio comes with Yaesu's redesigned DTMF mic that feels great in your hand.

The radio does not do APRS but there is a data port on the back. This will be great for users doing things like Echolink or want to hook it to a TNC. ([view data port connection](#)). It also has the capability of doing Bluetooth with the optional BU-4 installed.

Physical Specs - 2.5 pounds. Roughly 5.5" x 1.75" x 5.25". If you're measuring your car, leave space for power and antenna connections. Also, make allowances for the fan and vents. Yaesu is relying heavily on air movement through the radio to keep it cool.

At the time this was written, the average price from the major radio dealers was \$319.95.

- Tom Pachner, W9TJP

MRAC VEC TESTING

Upcoming Test Dates

- November 27, 2021
- January 8, 2022
- February 26, 2022
- March 26, 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

- 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

For more information about testing requirements and other useful information, visit their website, mracvec.org.

(Interesting News from their website)

October 30, 2021 Test Session Recap

It was a busy exam session, with a total of 19 candidates attending. Almost everyone left with either a new or upgraded license.

A big "thank you" to the volunteer examiners who assisted with the test session. We'd also like to thank the candidates for understanding and following our COVID-19 procedures. Doing so helps keep the test sessions safe for candidates and volunteer examiners.

Candidates earned the following licenses:

Technician: 9

General: 7

Extra: 2

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: Dave Schank, KA9WXN
Vice President: Dick Strassburger, N9EEE
Secretary: Ted Carlson, N9KQQ
Treasurer: Joe Schwarz, N9UX

Directors

Dean Berglund, KC9REN
Tom Pachner, W9TJP
Gregg Sperling: KB9E

Trustee

Dave De Febo, WB9BWP

MEETINGS AND NETS

NOTICE: At present, we are not holding in-person club meetings. We continue our official meetings via the repeater and Zoom. We anticipate in-person meetings returning in 2022. Cheers!

MEETINGS

...are held the last Thursday of every month, except when holidays conflict. During the pandemic, we are offering a hybrid of a formal meeting and check-in at 7:00 pm on the club repeater, followed at 8:00 pm via zoom with a social program and occasional formal presentation.

Meeting Dates:

November 18, 2021: HOAs and Stealth Antennas

December 30, 2021: Egg Nog Social

January 28, 2022: tbd

NETS

10m SSB: Fridays, 8:00 pm CT

FM 2m Repeater: Fridays, 9:00 pm CT

Fusion 2m Repeater: Saturdays, 7:00 pm CT

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

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