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## Help needed...

We are rapidly approaching the time when the election of the members of our Executive Board for the coming year RARC is scheduled. In the past we have had a number of good, hard working members of that Board, but we are coming to a time where all of the current members of that Board are at the point where they need to let other members step up and have their turn at the governance of our club. This is a very important and necessary occurrence.

The need for new members of the Board is both wanted and needed. In spite of the great job that our Board has done in the past, the time has come to encourage new ideas and new methods to, for that to happen, we need to make a change in the make up of that Board.

It is the responsibility of all RARC members to consider who should lead our club in the future. As a 501 C (3) Non Profit organization we need to have designated officers . It is the responsibility of our membership to nominate and elect the members of that Board. These positions must be filled in order for us, as a Non Profit organization, to meet the criteria of that designation. Every year we go through this process to both comply with this need and to encourage new members with innovative ideas to be elected to our Board.

This necessary work is not "rocket science" nor is it "breaking rocks," but it does require people who can work together for the good of our club. Oh yes, it does require a commitment on the part of each member of that Board. All are expected to participate in the needed work and to see that our club continues to go forth and to prosper. It isn't always easy to do this but the rewards of seeing this done result in the smooth and efficient running of our club.

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## UPCOMING Events for October 2022

- ♦ RARC Sunday Night 2Meter Net is held on the 146.970 repeater at 8:00 PM. Net control operators for September are:
 

October 2, 2022	Mark kb9ofq
October 9, 2022	David kd9epn
October 16, 2022	Rick kd9gvs
October 23, 2022	Wayne k0wlo
October 30, 2022	Shawn kd9kgq
- ♦ **Saturday** morning Rag chew, weekly on the 146.970 repeater, 8:00-9:00 AM.
- ♦ **October 4...**Monthly club meeting at UUF La Crosse
- ♦ **October 17...**Trustee Meeting, Time: 5:30 PM, Fork and Fable (formerly Arterial Bar and Grill) All members are welcome to attend. Notice new time and place.

## PRESIDENTS COMMENTS

### Greetings to all Club Members,

With the arrival of fall, my XYL and I have been finishing up our gardening activities. We've recently harvested our Honey Crisp apples and Concord grapes. A lot of work has been put into canning our harvest into apple pie filling, apple butter, apple jelly, grape jelly and grape juice. This is in addition to the green beans, cucumbers, cabbage, peppers, potatoes and tomatoes that we have processed for storage or immediate consumption.

With these gardening tasks winding down, I'm hoping to spend more time working around my ham shack. One task I want to focus on is to get better at copying Morse code using the G4FON Morse Trainer software. This is the software that Drew AB9NE used in his CW class this past winter for RARC members. Drew AB9NE did a good job of teaching, but I really struggled in the class to copy the code as we progressed. I would get so tense and frustrated with trying to get it, that I forgot it was supposed to be fun. After taking a hiatus from it, I decided to get back into practicing my copy skills using the advice from Drew's class and the G4GON software. By allowing myself to relax and not overdue the practice length sessions, I found that I was actually having fun and getting more accurate in copying the code.

On the RARC business side, as club President I've been working to incorporate the suggestions and feedback from members into improvements of the club's constitution and standing rules. All members should've received an email on September 12<sup>th</sup> with a copy of the latest proposed amendment. While there will no doubt be further improvements that can be made to the document, it represents an hon-

est effort to eliminate ambiguities in our current constitution and standing rules. I'm therefore requesting members be in attendance to the October 4<sup>th</sup> club meeting to bring its approval to a vote. We will need a quorum of club members with a 2/3 voting approval for it to pass and become the constitution and standing rules for our club.

At the last board meeting I asked Drew AB9NE and Carl KC9HDS to serve on a nominating committee for candidates for the December election of the Executive Board. After being on the board for four years, I have decided not to run for a board position next year. There may be other board members who choose not to run again as well. It is therefore important to the vitality of the club, for other members to be willing to step up and serve on the board even if it means stepping outside of their comfort zone (it certainly was for me). I urge each member to give strong consideration to serving on next year's board. Please contact either Drew AB9NE or Carl KC9HDS if you would be interested in running for a position on the Executive Board.

In addition to the business aspects of the October 4<sup>th</sup> meeting, Jeff Springer will be giving us a presentation on Electric Vehicles. This will have a deeper dive into powering from an EV (vehicle to load, home or grid). We will of course provide this meeting available on Zoom for those not able to attend in person.

Until we meet in person or chat on the radio, I bid you 73.

Shawn, KD9KGQ



# What is Radio?

In the nineteenth and early twentieth centuries, scientists studying electricity and magnetism discovered that synchronized oscillations of electric and magnetic fields produced energy that could be transmitted and detected at a distance. Different frequencies required different equipment for detection, but the only part we could detect without equipment is visible light.

Radio waves are the lowest frequency electromagnetic waves, running from 30Hz to 300GHz. It is further divided based on propagation characteristics, or characteristics of travel in our atmosphere.

The other major discovery in radio technology was the concept of modulation, or attaching information to the radio wave by varying its amplitude, frequency, or phase. This allowed us to send and detect signals over long distances without wires and recover the information encoded by the modulation process.

Amplitude modulation (AM) varies the amplitude, or strength of the signal, creating a carrier, or the original unmodulated signal, and sidebands that carry the actual information. To extract the information, the sideband is electronically compared to the carrier. Later we discovered that we could transmit just the sideband and recreate the carrier in the receiver, reducing the necessary bandwidth, and increasing signal power.

Frequency Modulation (FM) varies the frequency of the carrier in order to encode the signal. Its advantage is a cleaner, noise free signal, which is great for music, but it uses more bandwidth.

Digital forms of modulation on the ham bands usually use a form of Frequency Shift Keying (FSK) in which two frequencies are used. Often one of those frequencies represents a digital 1, and the other a digital 0, though other encoding schemes also exist.

Other digital forms of modulation also exist, such as OFDM.

Because bandwidth is limited, and multiple transmissions on the same frequency can cause interference, the radio spectrum is regulated. Licenses are required to transmit at most frequencies. In the US, the Federal Communications Commission (FCC) regulates transmissions and licenses, and works with the International Telecommunications Union (ITU), which is the international treaty organization for regulating the radio spectrum, among other things.

73

Scott

KB3MKD



## Help needed ... (continued)

I encourage all of our members to seriously consider the nomination and election of our Executive Board. Without members willing to be nominated and elected to the Board, our club can not continue. Ours is an old and well established organization. If you want to see it continue, you need to participate in the nomination and election to our Board. If you are willing to be nominated, that would be great.

A strong Board makes for a strong club and will ensure that the good work of our club will continue into the future.

73 de Carl kc9hds



## Question of the Month

### Technician exam question of the month

**T1A02**

**Which agency regulates and enforces the rules for the Amateur Radio Service in the United States?**

- A. FEMA
- B. Homeland Security
- C. The FCC
- D. All these choices are correct

(C)

## BUY-SELL-TRADE-ISO



*Wanted: Articles for The Key*

*Please submit your Article by the 26th of the month and include "The Key" in the subject line.*

*Send your Amateur related classified ad(s) to Scott, NLT noon the 26th of each month to kb3mkd@arrl.net. Please Include "The Key" in the subject line.*

Looking for items for this space

## CLUB INFORMATION



### Riverland Amateur Radio Club

PO Box 621

Onalaska, WI 54650

- \* The Key is published monthly and e-mailed to members and friends of the Riverland Amateur Radio Club by the 28th of each month. The newsletter focuses on news, announcements and activities of the Riverland Amateur Radio Club. It may also consist of news and information of interest to the Amateur Radio community as a whole. Guest editorials and articles related to Amateur Radio are welcome. Contribution articles should be submitted NLT the 26th of the month. Address any correspondence or anything that should be included in the newsletter to: Scott Cross KB3MKD@arrl.net. Please include the word "Key" in the subject line of your submission.
- \* The Riverland Amateur Radio Club maintains a website at [rarc.qth.com](http://rarc.qth.com). More information about the club can be found there as well as past copies of The Key.
- \* RARC also maintains a Facebook page where members add information and share their Amateur Radio adventures. Please friend us at Riverland Amateur Radio Club—RARC.
- \* RARC maintains a repeater that is located on the WXOW television tower above La Cresent, MN. 146.970 pl 131.8.
- \* RARC holds a weekly 2meter net on Sundays at 8:00 PM on the 146.970 repeater.
- \* Trustee Meeting is held the 3rd Monday of the month at Fork and Fable at 5:30 PM, all club members are welcome.
- \* Program evening is held the 1st Tuesday of the month at 7:00 PM, elmer session at 6:30 PM at Unitarian Universalist Fellowship, 401 West Avenue in La Crosse.
- \* Weekly "Breakfast Club" Ragchew on the 146.970 repeater on Saturdays from 8:00 AM to 9:00 AM. Stop by to say "hi".

### **Below are listed your RARC 2022 Board of Trustees and contact information.**

President.....Shawn Hicks, KD9KGQ Email...eistim68@gmail.com

Vice-President.....David Peters, KB9EWG Email...kb9ewg@gmail.com

Secretary.....Carl Thurston, KC9HDS Email...kc9hds@gmail.com

Treasurer.....Drew Neve, AB9NE Email...ab9ne@yahoo.com

Trustee.....Scott Cross, KB3MKD Email...kb3mkd@arrl.net

Trustee.....Rick Kolter KD9GVS Email rckolter@gmail.com

Repeater Trustee.....Roger Reader, KA9BKK Email...readers@centurytel.net

Newsletter Editor.....Scott Cross Email...kb3mkd@arrl.net