

THE KEY

Official Journal of The Riverland Amateur Radio Club



**Riverland
Amateur Radio
Club**
P.O. Box 621
Onalaska, WI.
54636

Repeater
146.970 PL 131.8

RARC Net
8:00 PM Sunday
night on the
146.970 Repeater

Club Meetings
Trustee Meeting
3rd Monday of the
month at King
Street Kitchen at
5:00 PM, all club
members are
welcome.

Program evening is
1st Tuesday of the
month at 7:00 PM,
Gunderson Clinic
conference room 1

The Riverland Amateur Radio Club is a Special Service Club affiliated with the American Radio Relay League. The club is active in community service as well as actively promoting Amateur Radio in the Coulee Region. The Club is open to all who are interested in Amateur Radio and will help unlicensed persons become licenses thru the FCC.

AWARDS



Much to our surprise the normal awards night was held at the December Annual Meeting. Receiving awards was, from left to right, Dave Peters wb9ewg, 2017 Ham Of The Year. Rick Kolter kd9gvs, 2017 New Ham Of The Year. Greg Miller k9lec, 2017 Special Recognition . And Roger Reader ka9bkk, 2017 Ernie Gershon Life Time Achievement Award. Also receiving the Life Time Achievement Award was Tom Obrien wb9bjq, not pictured. Congratulations to all.



Well we made it thru another year and starting a new one. I for one have not been a big fan of this time of year, reason, COLD. I like to be outside working in the yard or driving the tractor, not cooped up in the house. Truth be told I do like sitting by the fireplace and watching a good football game. I should be more in tune to playing Amateur Radio because that is a good winter indoor hobby. I think what turned me off a little was the lose of my Yaesu FT767GX, no transmit. I wish I had the skill to dig into this rig and figure out what happened. Probably will have to send it off some where for repair.

As we head into this new year I want to thank the trustees of the club from 2017 for agreeing to hold there positions for 2018. Without having to make any changes we can continue on club improvements that have been worked on last year. And also I do not have to change the officer block located below.

Also Thank You to all who contribute to this newsletter. It makes my job so much easier.

k9lec

Riverland Amateur Radio Club
PO Box 621
Onalaska, WI 54650

President.....Kevin Holcomb, KC9ZGD
Vice-President.....Dan Abts, AB9TS
Secretary.....Rick Kolter, KD9GVS
Treasurer.....Greg Miller, K9LEC
Trustee.....Carl Thurston, KC9HDS
Trustee.....Roger Reader, KA9BKK
Trustee.....Bill Wood, KE9XQ
Newsletter Editor.....Greg Miller, K9LEC

The Key is published monthly and e-mailed to members and friends of the Riverland Amateur Radio Club. Address any correspondence to: Greg Miller at k9lec@arrrl.net.

Visit our website at rarc.qth.com

Listen to the Sunday
Night Net on 146.970
at 8:00 PM for info on
RARC's Winter Field
Day Activity.



*Mark
Your
Calendar*

January 2, 2018...Christmas Dinner at Schmitty's Restaurant

January 16, 2018...Trustee Meeting at King Street Kitchen

January 27-28, 2018...Winter Field Day

February 6, 2018...Program Night

February 20, 2018...Trustee Meeting at King Street Kitchen

2018 RARC Test Sessions

February 10, April 28, June 1, August 4 (RARC Swapfest) and November 10.

The Greatest Gift

by Carl Thurston KC9HDS

At this time of year, one often is occupied with procuring and receiving presents. Our society has become more and more tuned to commercial things, material things, and such. Not everything about this season is about presents, but a lot of it is, especially when you go out to the mall or visit other retail stores. There is an emphasis on things that you should buy to give away to friends and family. That is good, to an extent, but is that really giving a gift that's great. Oh yes, one could rationalize that the giving of an expensive gift to some one you know or love is a sign of your affection for that person. I don't know about you, but for me, I have too much "stuff" as it is and the receiving of an additional item is not necessarily a positive thing. Of course it depends on what it might be and who is giving it, as it might be of more importance to the giver that it was given to you than you might think. It is for this reason that I try to temper my friends and family with the suggestion that if they desire to give some thing to me during this season, make it some thing that is consumable or that is used up over time, rather than another piece of hardware.

The only exception to this would be more Ham Radio equipment to add to my shack, but then most of my friends and family do not have the foggiest idea what sort of Ham Radio equipment I would need or want. So it is safer for them if they give me a fruit cake, a plate of cookies or candy, but then I really shouldn't over do any of those things either. A bottle of wine is nice and kind of handy during cold nights, but again, I probably don't really need that either. So what should you give to someone that's special to you? Again, this is a judgement call that is difficult to define.

Gift cards are always welcome, you know the kind, the ones that look like credit cards and that spend like money in various stores. The obvious advantage to gift cards is that they are always useful and are generally welcomed by everyone who gets them. Cash works well also. It is always the right color and it fits easily in everyone's wallet. The down side to the giving of cash or gift cards is that they are rather impersonal and imply a lack of forth thought on the part of the giver. So they should be used as a supplemental gift rather than a main gift, a stocking stuffer as it were.

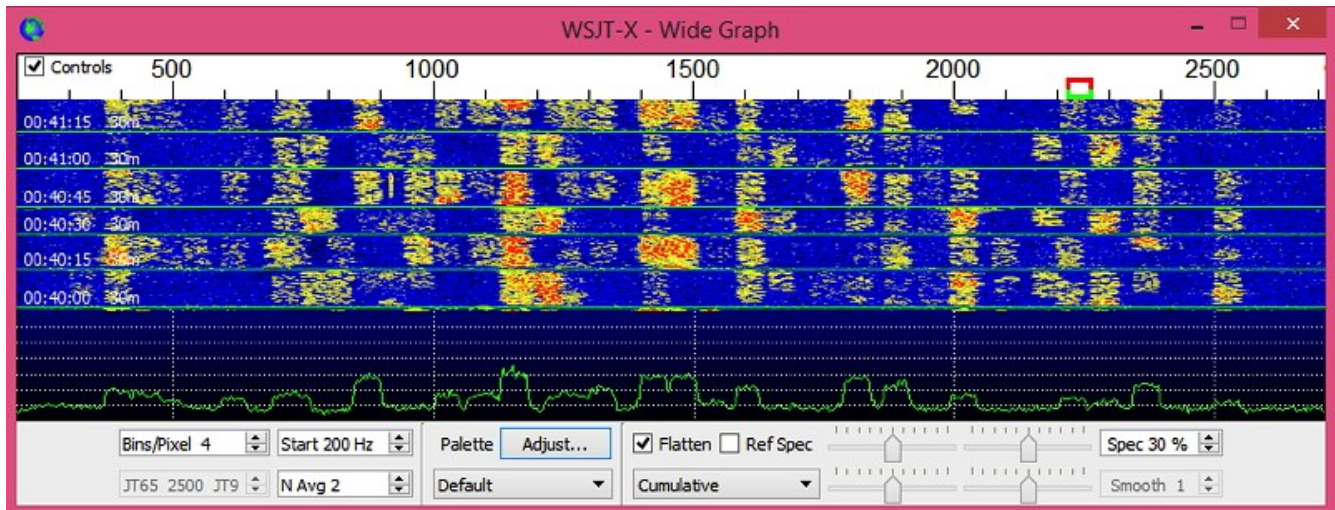
None of these suggestions can be necessarily be called a "Great Gift." Sure they will be welcomed, at least initially by the recipient, but may lose their luster quickly once received. So where does this leave us? What can we give that will be regarded as the "Greatest Gift?" A contribution to a worthy charity comes to mind. This can be a most fulfilling thing to give and to receive. This time of year people tend to be more jolly than during other holidays so a cash gift to a charity is especially warming in several ways. By doing that you can be assured that some one in need will be helped out a little bit so that they may have a happier than normal time during the holidays. That is a "Good Gift" but not necessarily a "Great Gift."

So what can you give that is the "Greatest Gift" you can give? Some thing more personal and caring than anything else? Think about it. Wouldn't it be best to give of one self in a totally unselfish way that others will cherish now and for all time. For me that describes the gift of friendship. Unlike advise, where it is some thing that is easy to give but hard to take, friendship is just the opposite, it is often hard to give, but is easy to take. Many times a simple smile speaks volumes at the right time and place. How often have you found yourself in a situation where a complete stranger smiles at you and you smile back without even thinking about it. Or do you wonder what they are up to by smiling at you? Friendship is one thing that you can give away without ever running out of more. Anyone can become your friend. Even if you don't agree on some things. It has been said that friends are people who you like in spite of who they are. So give the "Greatest Gift" this season to some one else.

FT-8: I'm not really feeling the magic

By Dan Romanchik, KB6NU □□□□□□

Partly out of curiosity and partly because Jeff, KE9V, shamed me into it, I setup my Signalink interface, downloaded WSJT-X from <https://physics.princeton.edu/pulsar/k1jt/wsjt.html>, and started operating FT-8, the latest "shiny object" (as the ARRL dubbed it) from the K1JT team. As you probably know, this mode has really caught on with the digital crowd, and the waterfall is chock full of FT-8 signals. Part of the reason for this is that it has some of the characteristics of JT-65, but is not as excruciatingly slow.



A waterfall display generated by WSJT-X at 7:30 pm, 11/23/17.

Over the past couple of days, I've made 32 QSOs, including a couple of DX contacts. It's been fun to try something new, but to be honest, I'm not really feeling the magic.

Part of it is that I don't feel like I'm really doing anything. I downloaded the software, plugged in my digital interface, fooled around with the settings a bit, and then, the computer started making contacts. I have to click a few on-screen controls to make contacts, but even that's a step that could be easily programmed in by the WSJT-X developers. (In fact, I wonder why they haven't done that already!)



WSJT-X screenshot. The sequence of transmissions in the Rx Frequency window comprises a contact.

Take a look at the screenshot above to see how a typical contact happens. When a CQ appears in the "Band Activity" window, you double click on it. When you do this, the software begins listening for signals on that frequency. In this case, I double-clicked on the CQ by WA9THI. When I double-clicked on the CQ, the program began decoding signals on that frequency and display the transmissions in the "Rx Frequency" window.

Then, I clicked on "Enable TX" and the program began the contact sequence, sending "WA9THI KB6NU EN82." EN82 is my grid designator. This is shown as the first yellow line in the Rx Frequency window. The transmissions that I sent are highlighted in yellow. The transmissions sent by WA9THI are highlighted in red.

The sequence of transmissions shown there comprise a complete contact, and that whole process takes less than two minutes. And, once WA9THI received my first transmission, the sequence is all automatic. You just sit there and watch the two computers talk to one another.

While I can certainly appreciate the thought and the work that went into the design of the protocol and programming to implement it, sitting and watching the computers talk to one another just doesn't excite me. On the other hand, if you're one of those guys who wants to make contacts, but doesn't really want to talk to anyone, than this is the mode for you!

Here are a few more notes about FT-8 operation:

Not surprisingly, synchronizing your computer with the other stations computer is very important. To do that, you need to get your computer to use the network time protocol (NTP). I failed to do this when I first installed WSJT-X, and while my waterfall was full of FT-8 signals, WSJT-X just wouldn't decode them.

I got my PC laptop to talk ntp by installing Meinberg NTP software (<http://www.ntp.org/ntpfaq/NTP-s-def.htm>). Once I did that, WSJT-X magically started decoding transmissions.

Most of the cool guys seem to be using Meinberg NTP, but there are other options. One of the guys in our club is using a program called Dimension 4, for example.

Apparently, you don't have to limit your power output as you would with PSK-31. At first, I set my output power to 10 W. I had a bit of success at 10 W, but I expected more. When I asked on Twitter how much power other guys were using, most of them said that they were using more than that.

For the last couple of sessions, I've been setting my output power to 25 W, and I've been having more success. I've now worked several Europeans on 30m.

Even at 25 W, my signal reports are more often than not not as good as the signal reports I'm handing out. I haven't figured this one out yet. This doesn't happen to me when I'm operating CW, so I don't think it's my antenna.

When I'm operating, I write down the calls of stations I've contacted. The reason for this is that while WSJT-X does have a logging function, it doesn't have a log window, so unless you have a great memory, you could end up working guys two or three times a session. That's probably not a big deal since contacts are so quick, but I'd rather avoid doing that if I can.

WSJT-X works "split." While most contacts take place on the same frequency, a station can call you anywhere in the passband of your receiver and WSJT-X will decoded the signal and begin a contact. This threw me the first time or two that this happened, and I tried to change my transmit frequency to match the other station's. In doing so, I messed up the sequence. I now just let the contact proceed normally, and it works out great.

When I work the other digital modes, I set my IC-746PRO to the USB-D mode. In this mode, the receive passband is narrower than for working phone. When operating FT-8, however, you don't want to limit that passband. Signals will appear across the entire 2.6 kHz of the USB signal, and if you narrow the passband, you won't be able to work those stations.

WSJT-X checks the validity of call signs. This afternoon, there was a guy who had typed in his call as "WAMAD" and was calling CQ. WSJT-X wouldn't let me answer that CQ.

Operating this mode opens up the possibility of working more stations whose callsigns spell words and adding those QSL cards to my collection. I have, for example, already worked K1GUY, N4HER, and N5SLY. I'm guessing that these guys don't operate CW.

All told, I've found this to be an interesting foray into a new digital mode. While I'm not feeling the magic that some others seem to be feeling when operating FT-8, it certainly will be a change of pace to operate this mode from time to time. Give it a shot and tell me what you think.

Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides and blogs about amateur radio at KB6NU.Com. When he's not working FT-8, he teaches ham radio classes and operates CW on the HF bands. You can email him at cwgeek@kb6nu.com.



Ether Waves

Greetings Earthlings

Imagine if you will, waking up in a hospital bed and looking at the fluids they are feeding you intravenously. What are they doing, recharging your batteries??? The Dr. tells you he's putting more electrolytes into your system to help you get well again... We find from Wikipedia:

“An electrolyte is a substance that produces an electrically conducting solution when dissolved in a polar solvent, such as water. The dissolved electrolyte separates into cations and anions, which disperse uniformly through the solvent. [Wikipedia](#)”

Believe it or not, you are always involved with electronics one way or another. If you could take an electron microscope and look at the end of your fingers, what do you think you might see? Depending on the weather, you might see a little miniature thunderstorm complete with lightning and static filling the air. Dealing with many electronic components you need to ground yourself. Why is that you might say? Ever pet your cat and feel electric shocks, or touch the doorknob and get that shock? To feel that shock, you probably generated 6-7 thousand volts, maybe even a lot more.

Your smart phones are much of the time controlled by the electronic effects off the end of your fingers, which is one of the reasons we often use specific types of stylus'. You can think all day and come up with hundreds of usages and even problems that come around just because of this phenomena.

We talked a bit ago about a 19 inch piece of wire and the effects we could measure and or introduce upon that wire. Electrostatic and electromagnetic effects are a wonderful thing if we learn to control them.

Take that wire and coil it around a half inch doweling and you get a coil that does several things to the electronic influences you inflict it with. Capacitive effects between the windings and magnetic effects around it. Kind of reminds you of the electrostatic and electromagnetic waves you studied about preparing you for some of your exams to get into Amateur Radio in the first place. Now instead of winding that coil, let's cut it into twenty little pieces and align them all in a little row. Place a voltage on the end pieces, and what do you have now? A capacitor of sorts. Instead of being shorted out in that coil, now these short wires can add, store and lose their electrostatic charges. Deepening on how close the parts are can increase the charge storing capabilities or lower them.

If we were to take the coil we wound and the capacitor we made, we can place them side by side and create a new environment called a tuned circuit. Place them end to end and a different type of tuned circuit comes into being. With this simple set of tools, you can make a frequency trap, a band pass or even band blocking tool to help separate those signals you are trying to sniff out of the air.

One last thought for today. I may be chastised for this, but if the signal passes through my house, or my head, I should be able to do with it what I want. If you don't want me to listen to your program, then keep it out of my domain, head or radio. How dare you invade my privacy and then tell me to not listen to you... :) :) :) OK, better run for now, and thanks for your patience.

73 Folks

Bill KE9XQ

RIVERLAND AMATEUR RADIO CLUB

Monday Dec 5th , 2017 General/Annual Meeting MINUTES

Call to order: 7:05 PM

Members Present : Kevin Holcomb KC9ZGD, Greg Miller K9LEC, Roger Reader KA9BKK, Dan Abts AB9TS, Carl Thurston KC9HDS, Rick Kolter KD9GVS, Dave Peters KB9EWG, Scott Cross KB3MKD, Art Osborn W0JDC. Met quorum of 8 members. Also 2 guests, Nate KE0PFS and Drew AB9NE.

Approval of Minutes: Nov. 20th minutes approved without comment.

Treasurer's Report: Greg gave verbal report of November summary balances.

Committee Reports:

1 Carl had update on tower status: existing tower will not actually be replaced next summer as originally thought, according to Dan Rasmussen at WXOW. Van has a new 2M antenna to put up however. DeJarlais will not climb tower, instead will most likely hire WXOW's contractor to replace our antenna. This may help alleviate some recent problems with "crackling " noise on repeater output frequency.

Dan Rotary lites: A big THANK-YOU to all involved on Nov. 25th. Needed 6 volunteers and had 8.

Old Business:

Roger sending out Christmas Party invites and membership renewals today. Party is Jan 2nd at Schmidty's in La X, family style. Roughly \$13.99 per person + tax and gratuity.

Dues change was discussed. It was decided to leave as is, \$20 per year.

Thanks goes out to all current club officers for their hard work throughout the year.

New Business:

Thoughts on future direction of the club were discussed. The creation of a dedicated "reflector" is underway to possibly use for Officer communications, in lieu of a monthly meeting. Current practice of separate Executive meetings and general membership "Program Nites" has worked well, but can be a challenge to organize each month.

Elections of Executive board members was held with results as follows: Kevin 8 votes, Dan 10 votes, Rick 10 votes, Carl 9 votes, Greg 10 votes, Bill 6 votes, Scott 5 votes, and Dave 3 votes. Officers for 2018 will be selected at final meeting of the year on Dec. 18th.

Kevin then presented awards for 2017:

Ham of the Year: Dave Peters KB9EWG

New Ham of the Year: Rick Kolter KD9GVS

Special Recognition Award: Greg Miller K9LEC

Ernie Gershon K9ZVU Lifetime Achievement Award: Roger Reader KA9BKK

Ernie Gershon K9ZVU Lifetime Achievement Award: Tom O'Brien WB9BJQ

Motion to Adjourn :

8:15 PM by Scott KB3MKD

Respectfully Submitted:

12-7-17

Rick Kolter, KD9GVS, Secretary

RIVERLAND AMATEUR RADIO CLUB

Monday Dec 18th, 2017 Executive Meeting

MINUTES

Call to order: 6:04 PM

Members Present : Kevin Holcomb KC9ZGD, Greg Miller K9LEC, Roger Reader KA9BKK, Dan Abts AB9TS, Carl Thurston KC9HDS, Rick Kolter KD9GVS, Bill Wood KE9XQ

Approval of Minutes: Dec 5th General/Annual meeting minutes approved without comment.

Treasurer's Report:

In addition to the Monthly treasurer's report, Greg presented the year-end summary sheet to the group. The annual report was submitted to the President for the audit process. Kevin appointed Bill and Dave Peters, KB9EWG for this task.

Committee Reports:

19 RSVP's have been received so far for the Holiday Party. We will make an announcement/reminder on the Sunday Net on 12-31.

Bill reported that the RARC Board "reflector" is all set up and ready to go, with the help of Scott, KA9FOX. Thanks to Bill and Scott for setting this up for us.

Old Business:

RARC Board/Officer update for the coming year :

Kevin Holcomb: President

Greg Miller: Treasurer and will also continue to produce the monthly newsletter, "The Key".

Dan Abts: Vice-President

Rick Kolter: Secretary

Roger Reader: Station Trustee

Carl Thurston: Board Member at large

Bill Wood: Board Member at large

New Business:

Winter Field Day upcoming, January 27 and 28, 2018.

Program List will need to be developed for 2018

Modern Electronics video series subscription has expired, and will need to be updated if we wish to continue with presenting that. More hands-on projects would like to be explored for Club projects for the coming year. Licensing classes are also a possibility.

Roger suggested the Club purchase vests or shirts with our logo attached, for lending out to members for use at public service events. Apparel could be purchased outright by individual Club members if desired.

Motion to Adjourn : 7:10 PM

Respectfully Submitted:

12-21-17

Rick Kolter, KD9GVS, Secretary