

From the NCARC President *Joe Hawley KDØTYU*

I would like to thank everyone who has been so patient with us during this pandemic, and I have some good news for our faithful NCARC members. If you remember, a few months ago we appropriated money for cameras and equipment to be able to broadcast our club meetings live to those who could not attend in person. We are now in the process of purchasing the equipment and are scheduling a dry run for our May club meeting.

This experiment will be at the Golden Corral and unfortunately limited to board members only due to COVID-19 protocols. I believe this will be a Zoom presentation, and as usual we will send out the credentials prior to the event. We may at that time be able to announce a live meeting starting in June or July. I would like again to thank you for your patience and support during this pandemic. If you have any questions, comments, or suggestions contact me directly.

Public Affairs Office *Dave Winnett WØDDZ*

Numbers as of March 9, 2021 **YouTube**

Views (last 28 days): 8,657
Watch time (last 28 days): 1,723
hours
Subscribers: 1,802
New Subscribers (last 28 days): 98

Facebook

Members: 442
New Members: 19

From the Editor

Ann Donoghue KOARD

In this issue: Jim Dixon has a super article (Part 1) on sending email using your radio and Winlink.

Please feel free to contact me with Newsletter ideas! We always welcome member contributions!



Club Meeting and Speaker

Next meeting

Saturday, March 20, via Zoom.

8:30 am socialize, 9 am club meeting, followed by our speaker:

Battery Technology

James Cizek, KI0KN

Snowmageddon Antenna Issues

Did the snowstorm wreak havoc with your antennae?

Do you need help in restoration?

NCARC is here to help if the snow devil got your antenna.

For information please send an email to elmers@ncarc.net



Treasurer's Report

Darren Kalmbach KCØZIE

February 2021 Account Balances

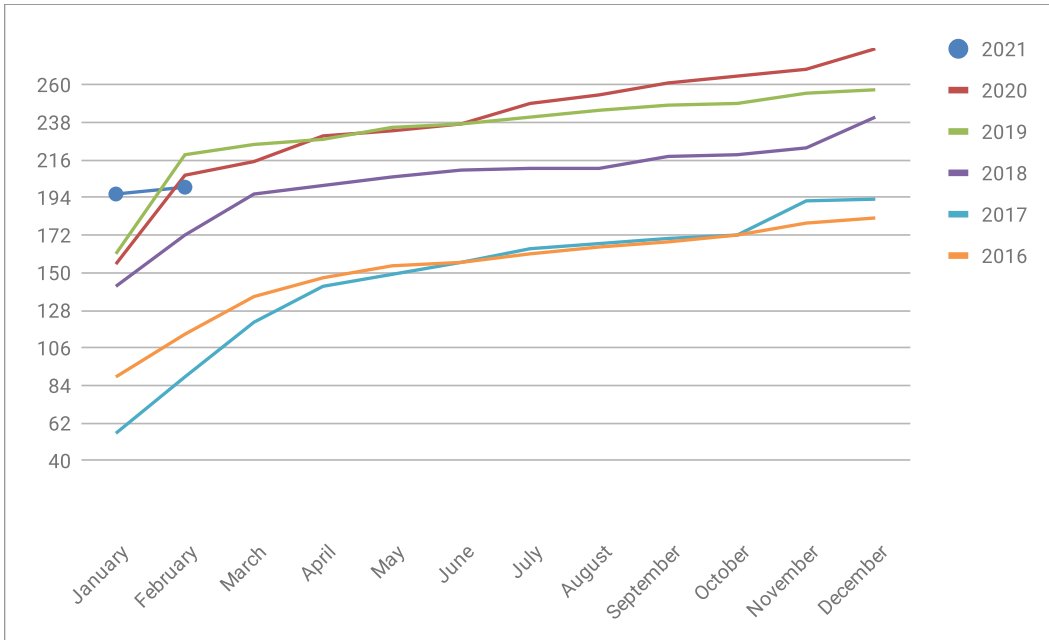
Account	Checking	Raffle	Savings	PayPal	Total
Beginning Balance	\$1,277	\$2,081	\$2,099	\$10,985	\$16,442
Deposits	\$808	\$0	\$0	\$370	\$1,178
Transfers	\$0	\$0	\$0	\$0	\$0
Withdrawals	\$132	\$0	\$0	\$13	\$145
Ending Balance	\$1,953	\$2,081	\$2,099	\$11,342	\$17,476
Outstanding Items	\$0	\$0	\$0	\$0	\$0
Net Balance	\$1,953	\$2,081	\$2,099	\$11,342	\$17,476
Net Change	\$676	\$0	\$0	\$357	\$1,034

Expenses: Storage

Revenue: Memberships, Donations

Membership Activity

February 2021: 200
 (107 still need to renew!)
 February 2020: 207



General Announcements

Radio Loan Program

If you are an NCARC member, and have an amateur radio license, you may borrow a radio from the club! The club has three Baofeng UV5 radios that are programmed and ready for use. The club will also supply someone to coach you on how to use it! You may sign out a radio for up to 6 months and will be required to sign the NCARC Equipment Loan Agreement. To receive a radio, contact Joe at president@ncarc.net. What are you waiting for?

Newsletter Articles Requested

If you have an idea for an article, or an announcement or other items for the Newsletter, please contact Ann Donoghue KØARD at newsletter@ncarc.net. We welcome any topic related to amateur radio!

NCARC Logo Items

Hats, polo shirts and jackets embroidered with the club logo, your name/call sign are available. You can place an order at any time. Details on colors, sizes and how to order are available on the website under the "Our Club" drop-down menu.

2021 Membership Dues

It's always time to pay dues! You can head to the website ncarc.net and click Our Club > Club Membership and fill out the on line form. Dues for an individual or family are \$26 for the calendar year. All forms of payment accepted (except maybe bitcoin). You can also pay by "paper", download this form and mail in your check. http://ncarc.net/sites/default/files/Membership%20Application_2020-11-12b.pdf



Winlink

Why should I use my radio to send an email message, when I can just use the internet?

By: Jim Dixon – KA6ETE

This question has come up many times regarding amateur radio and digital modes, mostly when it comes to modes such as Winlink. Winlink among other forms of amateur radio communications should just be viewed as another tool in our box at our disposal, given we understand the concept and use functions. The basic functions of Winlink can be done relatively cheap, if not free with equipment you already have on hand.

Equipment List:

- **Computer – Laptop or Desktop**
- **Internet (to get started only)**
- **Radio**
- **TNC/Soundcard**
- **Cables to connect the computer, soundcard, and radio**



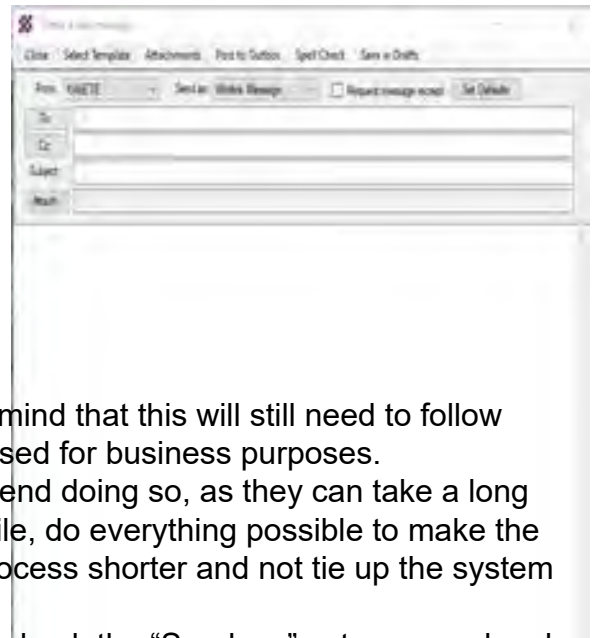
The list of equipment is all you need to have a fully functioning Winlink station capable of both RF and internet transmission. However not all of it is needed to get started in learning the software interface used to compose, send, and receive emails via Winlink, this can all be done with a computer and internet connection. Think of it as learning the process in a step-by-step scenario. Start with getting your Winlink software installed on your computer and learning to navigate the software prior to connecting to a radio. Below we will go through the steps in setting up a Winlink account and basic functions of the software. Due to there being many different types of computers and radios available, all the steps may not be exact but will give you a good starting point of understanding.

Steps to getting going with Winlink:

1. Download and install the Winlink software on your computer. (This will require a valid amateur radio callsign as well as a copy of your license)
 - Go to www.winlink.org and follow their instructions on setting up your account
 - Download and install the Winlink software.
 2. Open your newly installed Winlink software and begin the setup process.
 - Each time you open the software you will get a pop-up window asking for a registration number. This registration number is not required as the software is free to use. However, I recommend registering your software to help support the constant upgrades and maintenance for the software, it only costs \$24.00 to register.
 - In the top left corner of the window, you will see your callsign, if not click on "Settings" and then "Winlink Express Setup". This area will allow you to not only let you enter all your information but is also where you will update your information if anything changes in the future.
- Be sure to enter a good email address for recovery should anything happen down the road.

3. Now let's compose an email, this is where things get slightly different than regular internet-based email messages.

- First you will click on the “Message” and then “New Message”. This will open a pop-up window that looks similar to any email compose window.
- Begin by entering the address of the intended recipient. This can be a full email address (i.e., john@abc.com), or if you are sending to another amateur radio operators Winlink account you will only need to enter the call sign (i.e., “KA6ETE”). You can also enter multiple address' by separating them with a comma.
- Enter the subject of the email, and ALWAYS keep in mind that this will still need to follow amateur radio rules and regulations and can not be used for business purposes.
- While you can attach files and such, I do not recommend doing so, as they can take a long time to transmit over RF. If you do need to attach a file, do everything possible to make the file as small as possible. This will make the whole process shorter and not tie up the system for other users.
- Once you are done filling in the body of the message check the “Send as:” category and make sure it is set to “Winlink Message” and then click on the “Post to Outbox” tab. This will save your message and prepare it to be sent.



4. Sending and receiving emails via Winlink. Now that you have your first email composed and posted to the out box lets go through sending it. We will use “Telnet” since it is something everyone is able to use, even if they do not have a radio capable of Winlink.

- At the top of the Winlink screen you will see a drop-down menu next to “Open Session:”, click on the drop-down menu and the very top item is “Telnet”, select that. Once “Telnet” is selected click on “Open Session”.
- A new pop-up will be displayed, now click on “Start”. This will begin the session and you will see running script of the various functions being performed.
- When it is done transmitting you will see “Disconnect at ...” at the bottom of the script. Congratulations you just sent your first Winlink email.



5. In addition, when a session is open it will check for any incoming messages and inform you if there are any. If incoming messages are found it will ask you to check a box for the messages you want to download and then click on “Download Selected Messages”.

Hopefully, this helped you to get going with using Winlink, as I mentioned above, think of it as just another tool in the box to assist with communications. In the next write up I will cover utilizing the pre-formatted templates available in the Winlink software. These templates can be extremely helpful in an EOC operation scenario as well as weather reporting and tracking among many other things.

Please feel free to reach out with any questions you may have or if you want to send me an email via Winlink feel free. 73, Jim Dixon KA6ETE

Tech report

James Cizek, K10KN

Horsetooth

All services at Horsetooth are running optimally, but the 145.115 repeater is still having some intermod issues and as a result, is less sensitive to valid signals. The site is heavily snowed in right now. Tracking this down will be a priority once access is possible again. We are still working with the site manager on our ability to install some type of backup power.

Buckhorn

The big news here: Construction is starting on the new tower!!! Permits are in hand and crews are booked. We are expecting to move to our new antennas on the new tower the week of April 26th. We will be installing a camera at the site to watch over construction, and have plans to make access to that camera available to the public so everyone can watch it. We will be attempting to build a time lapse video of the entire construction project. The 447.700 and 146.625 repeaters are working optimally. I have the 224 mHz repeater once again on my bench working through the desense issue.

Digital backbone to Sterling

Now that approvals are in place and the expense was approved, we are working on some equipment purchases as well as some MOU documents to finish the project of bringing the collaborative digital backbone over to Sterling. This will allow more expanded repeater coverage and provide better communications both for folks driving back and forth from Eastern Colorado as well as ARES and Skywarn activations. Stay tuned for more on this project!

Lee Hill 447.750 linked repeater

This repeater has recently been experiencing some lock-ups where it goes into continuous transmit. I am troubleshooting this now, but it's more valuable to troubleshoot when the problem is happening. If you hear the 447.750 repeater locked in continuous TX, *please notify me* via email (techfeedback@ncarc.net) of the issue so I may do more diagnosis. Thank you!

Upcoming projects

This spring, MANY new projects will require some help from YOU! Although last year squelched a lot of general help from members due to the virus, I'd like to reconstitute asking for help via the Volunteers list that NCARC maintains. If you'd like to help out with one of our many projects (installing new gear, maintaining equipment, painting or general maintenance on some of the equipment shelters, tree trimming, etc), please make sure you are signed up for this list. I'll be sending more requests for help via this list this year as we are allowed to come together at (hopefully) the tail end of the pandemic.

If you are not a member of the "Volunteers" list, just login to your account on the NCARC website, and in the "My account" section, you can add a checkmark to the "Volunteers" box. You will then receive email from the list for opportunities to help.