Northshore Volunteer

Summer 2019

NEMCo Calendar

July

RACES Meeting
NS Fire Station 51 Kenmore
Jul 3, 2019 – 7PM-9PM

LFP Pet Parade
City Hall to Animal Acres
Jul 13, 2019 – 10AM-1PM

Volunteer Meeting
Kenmore City Hall
Jul 17, 2019 – 7PM-8:30PM

2019 NW Citizen Corps
Renton Technical College
Jul 26-27, 2019
11AM-5PM
http://nwcitizencorpsexpo.org/

CF Cycle for Life
Seeks Ham Radio Support
July 27, 2019
Contact Vickie (W7VSF)
vickie.fontaine@outlook.com

August

RACES Meeting
NS Fire Station 51 Kenmore
Aug 7, 2019 – 7PM-9PM

Bigfoot Trail Runs
Seeks Ham Radio Support
Aug 9-13, 2019
Contact Robert (KD7WNV)
kd7wnv@arrl.net

Continued on page 2

Welcome

By Rosie Schaffer, KD7YRH

Welcome to the first edition of the Northshore Volunteer. Credit for this idea goes to Mandy Maher, who conceived and produced "The Volunteer" newsletter for the Emergency Services Coordinating Agency (ESCA). We are taking her original idea and running with it for NEMCo.

This is a newsletter that is of, by and for NEMCo volunteers. The first edition is being produced by members of the Ham Radio Outreach Committee, but we are hoping for suggestions and additional contributions (and contributors) for future editions from all members.

Throughout this edition you will see photographs of events and NEMCo volunteers in action … below, handing out hats at the Northshore Fire Department table, a future volunteer, and several NEMCo members helping at Walk MS in April of this year.

We hope you find this to be fun, interesting and informative. Enjoy!

Volunteer Spotlight

Calendar Continued

August continued

Volunteer Meeting
LFP City Hall
August 21, 2019
7PM - 8:30PM

September

RACES Meeting
NS Fire Station 51 Kenmore
Sept 4, 2019 – 7PM-9PM

LFP Picnic in the Park
Animal Acres Park
Sept 7, 2019 – 10AM-3PM

Bike MS
Deception Pass Classic
Seeks Ham Radio Support
Sept 7-8, 2019
Contact Vickie (W7VSF)
vickie.fontaine@outlook.com

Fall CERT Academy
NS Fire Station 51 Kenmore
Begins Sept 9 2019 for
7 Mondays
Daytime Class – 9AM-Noon
Teen Class-6:30PM-9:30PM

Volunteer Meeting
Kenmore City Hall
Sept 18, 2019
7PM - 8:30PM

NEMCo Safety and Emergency Fair
LFP Third Place Commons
Sept 21, 2019 – Time TBD

Continued on page 4

2018 Volunteer of the Year

By Rosie Schaffer, KD7YRH and Robin McKenzie, KI7PZY

1) How, when and why did you get involved with NEMCo?

I had a cup of coffee with Carl in Jan 2018 to talk about the Northshore School District (NSD) and Emergency Preparedness. I realized that there was much work to be done both by me personally and in the district to better understand Emergency Preparedness. This was the beginning of my adventure into the world of CERT, HAM Radio and FEMA. I asked Carl to join NEMCo that day. This has become a passion and I do it so our children will be safe during any type of event.

2) You received NEMCo's first Volunteer of the Year Award. Were you surprised? Tell us something about your contributions that led to it.

I was deeply honored and truly surprised! My contribution was twofold, first my personal education taking over 25 on-line and in-person FEMA classes, becoming a General Amateur Radio operator, CERT/CERT TTT/CERT Program manager, Red Cross First Aid/CPR/AED Instructor and then working with the School District to establish an Emergency Preparedness resource and helping them with training courses that would educate administration and staff. I have spent many hours in meetings with Carl planning and then I formed the first ever in the region joint EOP/EOC NSD and Emergency Manager working group that meets monthly to discuss all aspects of School Emergency Management. I also established a PTSA (Parent Teacher Student Association) monthly Emergency Preparedness chair meeting and invited Carl & NSD to come and talk. Out of that meeting parents started working on projects, e.g. School Emergency Container clean-up, reunification, stop the bleed and many more initiatives.

3) What do you find most rewarding from being a member of NEMCo and what do you hope to see for its future?

The most rewarding part of being a member of NEMCo is the wonderful people. I have always had encouragement, sincere help in solving problems and a strong sense of community. Everyone truly cares about our community and wants to help. It is an amazing group of people. The key part is Carl who truly leads us and trains us to be better citizens and people. His training is awesome and I have learned so much being a part of his team and as I was taking those FEMA classes I discovered in almost ever class someone knew about Carl and NEMCo; he has an amazing reputation in the Emergency Management circles. We are so blessed to have Carl!

4) We know you volunteer for other organizations as well. Please tell us about your involvement with them.

I am part of the Northshore PTSA Council Emergency Preparedness Chair which provides E-Prep leadership to some 33 PTA's in our school district and I created a webpage on the council and chair a monthly working group to support E-Prep parents. PTSA gave me a Golden Acorn Award this year for E-Prep work. I am part of the Woodinville Emergency Communications Team (WECT), created their website and part of their training team. I am part of King County's Outreach Working (COW) group and part of our NEMCo Outreach Team. I joined the NSD Safety Schools Advisory Committee and worked on Emergency Preparedness policies for the group. I also am PTSA president for LEOTA Middle School, E-Prep Chair and actively support our Leota Safety team. A member of the Lake Washington Ham Club (LWHC) and try to get out to as many meetings as possible.

5) Please tell us something about your background, your family and the activities you enjoy together.

I am a Canadian who became a citizen about 10 years ago. I am married to Carrie McKenzie and we have Emily, 12 years old, who is thriving at Leota. I have two older children, Caitlin and Jared, in Toronto from my first marriage. I am an Electrical Engineer that has been in telecom for most of my career, working my way up from design to the executive managerial. I went into Semiconductors and Aviation management. The most fun I had was working on fixed wing and rotary aircraft night vision systems in Portland Oregon.

6) What is your favorite …

Ice Cream Flavor – *Chocolate*

Place to travel – *I want to go to Machu Picchu, Gobekli Tepe and the pyramids*

Book – *All the Greg Iles books, mysteries*

Movie – *The Matrix*

Food (or foods) – *All food*

TV Show – *Star Trek, original series*

Thing to do for rest and relaxation – *I like to build computers, build remote control boats, photography, create websites and get on the HAM radio*

7) What is a fun fact about you that would be interesting for all of us to know?

I fell off our roof cleaning the gutters and now get to carry 2 titanium rods and six screws!
Fun fact, I love cats, we have two, and the new kitten is driving me crazy.

Community Events

Calendar Continued

October

RACES Meeting
NS Fire Station 51 Kenmore
Oct 2, 2019 – 7PM-9PM

NEMCo Communications Exercise
NS Fire Station 51 Kenmore
Oct 5, 2019 – Time TBD

Volunteer Meeting
LFP City Hall
October 16, 2019
7PM - 8:30PM

CERT Class
Final Disaster Simulation
NS Fire Station 51 Kenmore
Oct 26, 2019 – 9AM-Noon

Additional Resources

Ham Public Service and Events
https://www.mikeandkey.org/publicservice.php

ARRL Podcasts for New Hams
Check out "So Now What?" on Apple iTunes and Stitcher.

DART - Disaster Air Response Team Drill

Kenmore Air Harbor, April 27, 2019

By Randy Schaffer, N7OYN

NEMCo volunteers participated in a combined multi-agency drill held at Kenmore Air Harbor in April. This DART - Disaster Airlift Response Team - drill had 22 different participating groups including several pilots/seaplane associations, several Washington Counties (Clallam, Jefferson, Kitsap, Mason, Whatcom), Washington Cities (Kenmore, Renton, Walla Walla), Puget Sound Energy HAMS, Washington Department of Transportation, Kenmore Air Harbor and several others. *No Town Left Behind* was the coordinating group responsible for this major undertaking. 212 people were planned as participants in this drill spread between Kenmore, Renton, and various locations in the Counties. Kenmore Air had about 100 participants with around a dozen or more NEMCo volunteers from our CERT, RACES and General volunteer pool.

The major driving force for this drill is the premise that across the US there are small isolated communities that will be potentially underserved by the major response agencies in a large-scale disaster. These small communities will not necessarily be the primary focus (early in a disaster) for relief supplies or moving severely injured people to care facilities. *No Town Left Behind* looks to train local emergency groups to this reality and to determine ways to serve these communities during a major disaster.

There were two main areas of emphasis in this drill - moving supplies and transporting patients. The morning portion of the drill was focused on moving supplies via float plane. The day before, supplies that had been flown from California to Walla Walla were moved by float plane to Renton. Around 1300 pounds of supplies were loaded on float planes in Renton on the day of the drill and flown on 5 planes to Kenmore for unloading. These supplies included items such as: blankets, diapers, food and snacks. All were then loaded on an Army truck and taken (donated) to Mary's Place. Several volunteers were needed to flag-in the planes to the proper dock, unload and carry the supplies to a staging area, and then load them on the truck. There was extensive training about safety around the float planes the evening before the drill and once again just prior to the planes leaving Renton.

The afternoon portion of the drill focused on moving injured patients via float plane. No people were transported by plane, but the mock injured patients were evaluated for injuries, carried to the planes on backboards, and securely strapped in. Their medical conditions were then written down for ham radio voice messaging to the patient's destination.

NEMCo provided ham radio support to this event at the Kenmore Air location. There were three operators (Jon Rumsey-K7RMZ, Rosie-KD7YRH, and Randy-N7OYN). We set-up a canopy with the ham station where 70cm ham bands were used and commercial airplane frequencies monitored. We elected to work this drill with handheld radios only since that would be a realistic "real event" scenario, at least in the early hours of need. In a test done for the Spring 5th Saturday Drill it was determined that communications to the PSE repeater on Rattlesnake Mountain (441.770) was good from the street level outside of Kenmore Air.

However, we determined that 5wt handhelds from the lake level were not clearly getting into the Rattlesnake repeater. Later in the day we transitioned to using a higher-powered mobile radio with a mag-mount antenna.

Ham radio between Renton and Kenmore Air was used to communicate the number of planes coming in and expected time for landing and unloading of supplies and also to communicate the medial status of patients moving by float plane.

Overall, this drill went off very well given its complexity and multi-agency participation. The weather (strong winds) caused all sorts of operational issues with our ham canopy wanting to take off along with the float planes! Our external J-Pole antenna fell over and our notebook papers wanted to fly off into space, but the drill goals were successful. All of the supplies were unloaded safely and transported to Mary's Place and all the people strapped to back boards were safely carried to the planes and secured.

Ham radio's primary training issue was related to the voice messaging of transport details and patient medical conditions. The medical messages were far too long and too detailed to transmit easily and clearly. We spent 53 MINUTES taking one single message regarding 4 patients being transported. The message had unfamiliar acronyms and abbreviations that made no sense to the ham radio operators and since the sending operator did NOT know phonetics it was exceptionally difficult to transcribe these messages.

A modified NATO 9-line message format was used to send basic flight and patient data to the transport site, but drill organizers had not created a blank form to fill out for each ham operator at the sending and receiving site. The night before the drill, Rosie created a blank 9-line form for us to use at our Kenmore Air site or we would have been completely overwhelmed trying to capture this basic information. The NATO 9-line form is a circle the answer type form and can be very quickly used to gather basic information accurately ... but ONLY if each operator has a form to use.

Observations:

1) Many volunteers are needed in multiple roles for this sort of support. Agencies involved would have to find 50-100 trained people to support an airlift of this nature. Safely approaching a running plane, unloading supplies, directing planes, loading and unloading critically injured patients, radio coordination of planes and transport of supplies and people, all call for trained expertise. This is quite an undertaking in a wide-spread emergency.

2) Ham radio communications from lake level needed more power and a better antenna or method of relay.

3) The PSE series of linked repeaters is an amazing network that needs more study and understanding to integrate into a multi-county exercise.

4) Working at Kenmore Air - the largest Air Harbor in the US, was exciting and fun. We thank all the agencies working during this drill, and especially thank Kenmore Air Harbor for their contributions and their unique position as a partner in an emergency of this sort.

Pack the Park – Lake Forest Park, June 8, 2019

By Gail Siani, KG7UBU

The Friday Food Packs program provides supplemental food during the school year to students in the Lake Forest Park and Shoreline communities. According to the Pack the Park organizers (https://packthepark.org) over $25,000 has been donated to the Friday Food Packs organization through this 5K fun run, now in its fourth year!

NEMCo RACES volunteers provided communications assistance to the race organizers and RACES/CERT and general volunteers assisted in monitoring safe routes for walkers and runners. Thanks to all our amazing NEMCo volunteers for helping to make this 5K race/walk a success!

NEMCo, the Lake Forest Park Police, Public Works Department, and race coordinators all contributed their time and energy in ensuring this was a safe and fun event.

The enthusiasm of the runners was contagious!

Pancake Breakfast – Kenmore, June 22, 2019

By Gail Siani, KG7UBU

The Northshore Fire Station 51 hosted a pancake breakfast combined with a health and safety fair on June 22, 2019. There were firefighter demonstrations, opportunities for children to use a fire hose and run a mini-obstacle course, to explore the fire engines, and to participate in a number of other activities.

NEMCo volunteers had both an information booth and a Ham Radio Field Day station. At the booth, NEMCo volunteers offered a number of useful materials. Information on what NEMCo is and the many activities volunteers participate in and RACES volunteer activities were passed out - both flyers written by our RACES Outreach Committee. We distributed other useful ham radio brochures, information about the upcoming CERT academy, and how to build an emergency preparedness kit along with other goodies. The USB car chargers, collapsible dog bowls, and safety blankets were huge hits! We also assisted Northshore Fire with distributing firefighter hats to the children and kids-at-heart along with coloring books on disaster preparedness.

We provided sign-up sheets for AlertSense so Kenmore and Lake Forest Park residents can be notified of emergencies in their area. We had about 80 sign-ups!

NE7MC 442.000 Repeater and the Baofeng Radio

By John Cornaby, KI7YQR

You may have noticed an issue with trying your Baofeng radio on the 442.000 repeater. This is the repeater NEMCo will be using after the repeater and antenna are moved from their current location.

When tuning to the 442.000 frequency you may get a hissing white noise instead of a clear channel. This is called a “birdie”. So what is a birdie?

A birdie is a false, or phantom, signal. Birdies are internally generated, resulting from the outputs of the oscillators that form part of the receiver circuit. They usually sound like unmodulated carriers -- signals with "dead air." Occasionally they are modulated by clicks, humming sounds, or audible tones. The UV5R and UV82 series radios use a 26MHz reference oscillator. These have been known to cause interference on the following frequencies which are multiples of 26. Frequencies 156.0, 234.0, 416.0, 442.0, 468.0 and 494.0 MHz.

If you are like me, the explanation is more of a “huh, how do I fix that”?

I have found one thing that works on my Baofengs. You have to reprogram the internal squelch settings. This can’t be done from the radio menu but has to be done using the free CHIRP programming software. You also will need the correct programming cable to use from your PC to the radio. If you don’t normally use CHIRP or don’t want to invest in the cable, you may be able to find someone who already has these and can reprogram your radio.

Instructions for reprogramming the squelch can be found at:
http://www.miklor.com/COM/UV_Squelch.php

Your factory original setting for the internal squelch should look like image 1. I found the internal squelch settings that seem to work best are the ones referred to in the reprogramming information as spread 6 as in image 2. Remember to always make a backup of your original image before changing any of the factory programming.

CHIRP software is available at:
https://chirp.danplanet.com/projects/chirp/wiki/Home

The reliable programming cable to buy is the BTECH PC03.
https://baofengtech.com/Programming-cable

Image 1

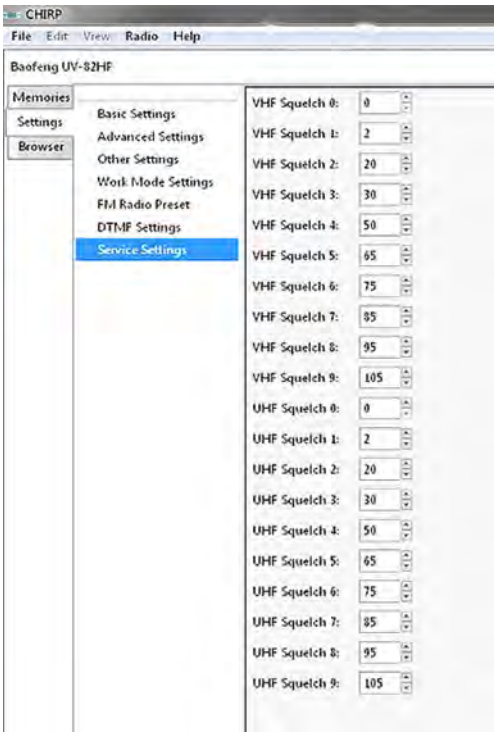
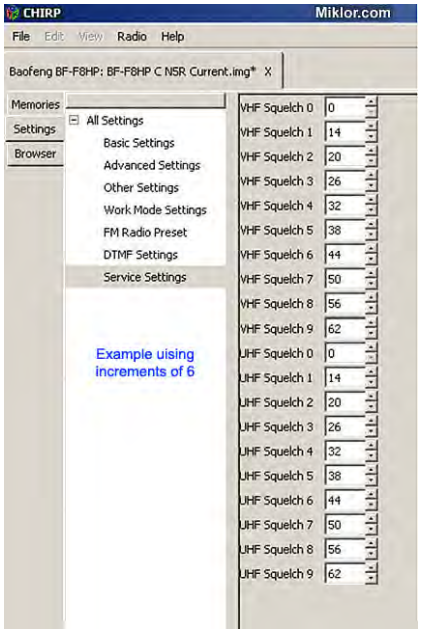


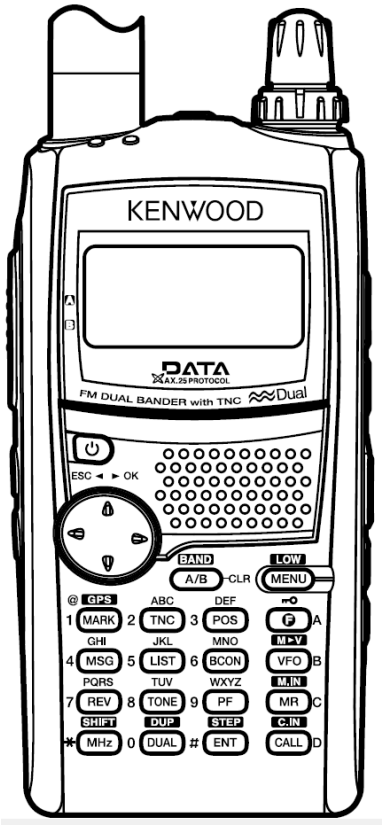
Image 2



Winlink Peer to Peer Setup for the Kenwood TH-D72 Handheld Radio

By Doug Hilderbrand, KF7RQ

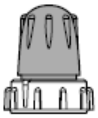
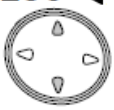
There are a few NEMCo members who have invested in the Kenwood handheld radios model TH-D72. This radio is the little brother to the TH-D74. This radio has a built in TNC (terminal node controller) which simplifies the connection between a computer and the radio for packet use via WinLink. The TH-D72 requires the computer and radio to be connected via USB cable, This article will cover setup for the TH-D72 radio using a USB cabled connection.



As with all ham equipment there are several small details that once found can make this interface smooth…but until you find those details the whole process can be quite entertaining. The simple equipment needed for sending WinLink messages with the Kenwood D72 radio makes for an excellent field deployment system. All you need is your HT-D72, a USB cable, and a laptop for fast, accurate packet messaging.

Step-by-Step setup

In this article we will use some symbols to enter things into the radio. When referring to a radio button on the front, we will use brackets and the button name like [ENT].

Like many ham radios, this Kenwood radio is highly menu driven. The Kenwood TH-D72 has many internal menus that are accessed through the [MENU] button. The menu system in this radio can be referred to with a three digit number (this numbered menu system is also used in the Kenwood TH-D74 and the mobile rig D710). They can be accessed using from the [MENU] Button then the  tuning control and the **ESC ◄ ►OK**  navigation pad.

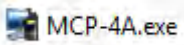
Remember, if you are looking around in the menu, you can always use the **ESC ◄** navigation pad to move back up a menu without making a change.

To use the menu system you push the

1. [MENU] button
2. Scroll the tuning control
3. Push the **►OK** navigation pad to go down a level or accept an option
4. When done, push [MENU] or **ESC ◄** up one level.

Its actually a pretty nice and organized system of navigating the menus. They put some thought into this.

Connect radio to Computer,At this point in time to connect your computer to the radio by USB cable.

But first we need to load the driver for the USB port. You may have already done this when you loaded the memory control program 

to be able to load memories into your radio. If not then load the CP210xVCPInstaller_x64.exe

Setting up the radio

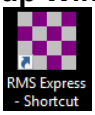
After turning on your radio, Enter the frequency:
Either go to one of your memories (remember that no tones are enabled) or direct frequency entry by doing this:
[VFO], [ENT] now enter the frequency you want on the keypad.

Put the radio into TNC (Terminal Node Controller) mode, push the [TNC] button once for APRS12, (pause just a moment to let the radio catch-up) then [TNC] again to put it into packet mode.
Set your RF power level to High by pressing the "[F], [LOW]" sequence several times till a small capital H is in the upper left of the screen. That will be 5 Watts.

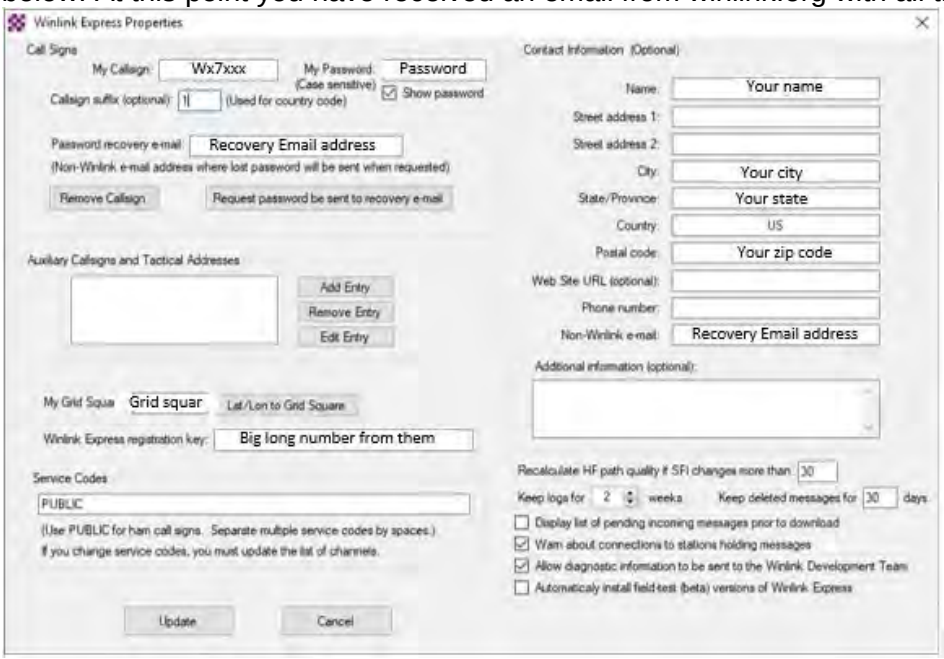
Here are a few things to ensure in the radio menu system:
[MENU], Radio, ▶**OK**, 1▶**OK**, 0, Off, ▶**OK**, [MENU]
The above radio commands would be abbreviated to the sentence below.
110 Battery saver, off
If you go into the wrong menu just press **ESC** ◀ to go back up one menu level.
Check for these also:
197 packet band, A-Band

While you are in the menu system, add your call sign to the power up display at:
100 Power-on Msg, "your call sign"-1

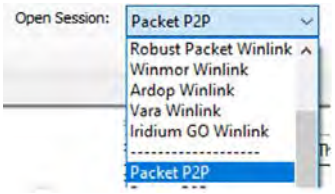
Its time to set up Winlink:

Open WinLink 

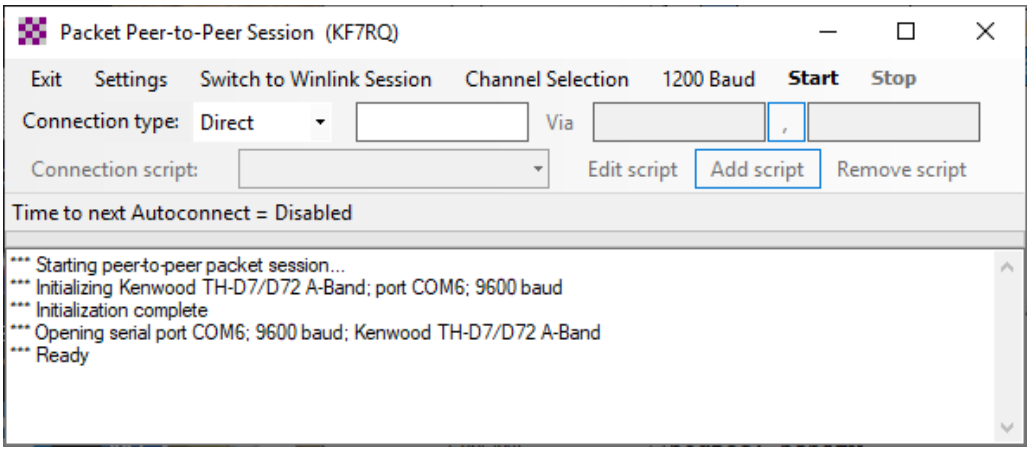
on the PC. Go into Setting → Winlink Express Setup… and fill in the fields shown below. At this point you have received an email from winlink.org with all the info that you need.



Configure WinLink to use the correct serial Port.
In the main menu use the drop-down menu next to "Open Session" to select "Packet P2P".

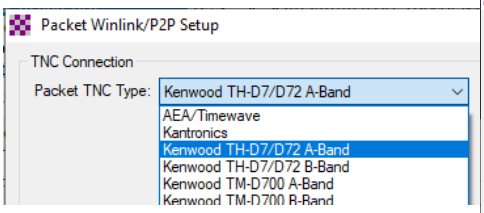


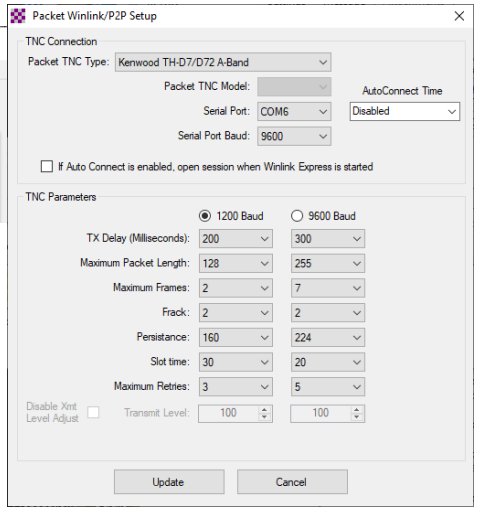
Then Open Session, a configuration window will open:



select “Settings” which will open a dialog box.

In the “Packet TNC Type” drop-down box select your radio, the “Kenwood TH-D7/D72 A-Band”. This will tell Winlink how to talk to your radio. It simplifies your life a lot.





There are a few more things to check for in this window.
see Screenshot. This radio uses “virtual” com ports over the USB cable. That is what loading the USB driver above was about. Enter your Com port number from the drop-down box. Ensure that 9600 is selected under TNC Parameters. This is the speed that your computer talks to the radio over the USB cable. Not the speed of the Radio communications.

If you are using the 2m band then click the 1200 Baud radio button (This may have to be changed if you use the 70cm band). This is the speed that your radio talks over the air. Setup the rest of the window as shown in the screen shot. Click Update.

The setup window will close and the Open Session window (In a few moments) will show that your radio has been initialized.

The TH-D72, WinLink and computer should now be fully configured to send both Peer-to-Peer messages and use WinLink gateways.

From this point, you would fill in the **call sign** 

of the person you are trying to connect with and push **Start** in the menu bar.

That’s it. Hopefully you are now able to send and receive Peer-to-Peer WinLink messages on your Kenwood TH-D72 handheld radio. If you encounter any issues let us know and at the next RACES meeting and we may be able to address these problems. Good luck and happy WinLinking with these amazing class of radios!

If you see any blazing errors to this please let Doug, KF7RQ know.

Photo Extras

(Volunteers in Action)

From Walk MS April 2019

From DART Exercise April 2019

From Ham Radio Field Day and the Pancake Breakfast June 2019

Photo Credits throughout the Newsletter:
Heidi Agun, Karen Kronberg, Carl Lunak, Robin McKenzie, Randy Schaffer, Rosie Schaffer, and Gail Siani.