2 February 2023

FIARC Meeting Minutes – 28 January 2023

Attendees:

N7NW – Hal Goodell	KI7CQM – Jim Braden	KJ7RVR – Jane Tollett
KJ7JCB – Paul Thorpe	KK7JEE – Keith Barnes	K7CRZ – Jeff Ferguson
KK7IVT – John Merryman	N7BRR – Brian Hevly	WA7BRI – Robin Carter
K1GCF – Gail Ferguson	KK7IVS – Roger Campanelli	Susan Campanelli
K7ND – Jim Christianson	W7JC – Jerry Cerny	AC7QN – Chuck Kemmer
WA7KCK – Ken Rowley	KJ7EZX – Bob Garbutt	KK7IYD – Steven Spann
Kirsi Vivolin		

The January 25 meeting combined the regular Club meeting from 10-11a, and training on Winlink from 11a-12p by **Jeff Ferguson**. Thank you to **Gail Ferguson** for providing the delicious cookies both for the meeting and for the GOTA class as well as delicious cookies from **Susan Campanelli**.

1. Minutes from the December 10th meeting were unanimously approved.

2. Updates from Hal Goodell, President
- Sunspot activity is increasing which is good for High Frequency (HF) contacts. Northern California was able to reach New Zealand on 6 meters. This is the beginning of another 11-year sunspot cycle.
- We are beginning the set-up to provide digital capabilities via Winlink and Vara in the FI EOC.
- Upcoming events: Swap Meet (March 11), Field Day(Jun 24-25), Fox Hunt(Chuck brought his setup)

3. Updates from Jim Braden, Vice-President
- Primary focus continues to be Island communication.
- There will be Disaster First-Aid training class on Feb 4 at the NCC.
- On the Fox Island Emergency Preparation Plan, the #1 item is individual preparation. After that, the #2 item is Neighborhood preparation. Lots of energy is going here.
- It is critical to have people trained in communication.
- An Island think tank called "The Cabinet" has been formed looking off-island at law enforcement, due to the concern about issues reaching Fox Island.
- Here are some comments by our former District 7 Council Member Derek Young about the Bridge.
  https://vimeo.com/793412897 Presentation is about 45 minutes long but the Bridge information is 8 minutes (minute 29 through minute 37).

4. Update from Jane Tollett, Secretary
- Our procedure to officially bring new members into the Club will now be to have them fill out an application form, which is then routed to Hal and Jane (per the bylaws) to approve. We will then welcome the new members at the next meeting and record that in the minutes.
- Welcome new members: John Merryman-KK7IVT, Roger Campanelli-KK7IVS, Susan Campanelli-Studying!

5. Fox/Bunny Hunt – Chuck Kemmer

- Chuck brought a working Fox Hunt set-up with a nano-pod player linked to a Baofeng UV-5R which would broadcast a signal, and a portable Yagi antenna hooked up to another handheld as a receiver.
- As the signal is broadcast (for perhaps 15 seconds every minute) you tune your radio and turn to try to find out where the signal is coming from. First to locate the signal apparatus wins. Many competitions around the world – great for helping to learn about radios.
- A suggestion was made to have a Hunt at the Fair, so that kids and parents could partner with licensed Hams and try to find the signal. Great idea!
- Next steps are to schedule a workshop to build some of these portable Yagis (Chuck used old steel measuring tape, rigid plastic tubing, and connectors). Jane will work on scheduling that maybe in May or July before the August Fair

6. Upcoming Events

- ARRL Field Day - Usually held at Fort Flagler, sponsored by Mike & Key Radio Club. Activities such as 24-hour marathon check-ins, HF GOTA radio, and other activities. Tacoma Radio Club hosted their Field Day last year at the Western City Hospital in Fort Steilacoom, also a good set of activities.
- Saturday March 11 is the Mike & Key Swap Meet at the Puyallup Fair Grounds. The $10 admission is waived if you sign up to volunteer – contact Hal for more details, or https://mikeandkey.org

7. Going Digital (more correctly referenced as adding digital capacity) Discussion

- The FI EOC will be using VHR and UHF FM for our Island communications and for checking into off Island Emergency nets. The added value of digital is for messages via Winlink and/or VARA to off Island EMCOMM stations. This provides and accurate message transfer in a much shorter time than via voice.
- Digital communication like Winlink has the potential to be of great value to us and so we will continue to pursue digital technology. Examples are: having a precise log of conversations in the record, and a process called Welfare that will permit residents to advise family away from this area of their situation after a major event.
- A value of Fox Island having digital communications is the speed and accuracy over voice communications when transmitting to PMACC (Peninsula Multi Agency Communications Center) which is at the Fire District Headquarters at 10222 Bujacich.
- Digital is a perishable skill – it takes practice to stay current as well as making sure the computers are kept updated and charged.

8. Sunday Net and other Useful Nets

- Our Sunday Net is at 700pm PST/local time and is generally run from the EOC. Our schedule of Net Control Operators is as follows:
    - 1st Sunday – Paul Thorpe, KJ7JCB
    - 2nd Sunday – Hal Goodell, NNW
    - 3rd Sunday – Glenn Hansen, KB7PKC
    - 4th Sunday – Jane Tollett, KJ7RVR
    - 5th Sundays (when they occur) – Brian Hevly, N7BRR
- Canterwood, every Monday at 1830 local on CH15
    Repeater PC-15S Amateur Canterwood RX-444.9000 W CSQ TX-449.9000 W 162.2 A Name-WW7CW
- ARES Peninsula Team, every Monday at 1900 local on CH8
    Repeater PC-8S Amateur Peninsula Team RX-145.3500 W CSQ TX-144.7500 W Tone-103.5 A Name-KA7EOC
- District 5 ARES, every Tuesday at 1900 local on CH1
    Repeater PC-1S Amateur District Primary RX-145.3700 W CSQ TX-144.7700 W 136.5 A Name-W7AAO

- 146.82MHz, a daily Social Net run by Mike & Key at 730pm PST, tone 103.5
- 146.82MHz, Wednesdays at 730pm PST, tone 103.5, a Technical Net
- Here is a link to a local nets page from Mike & Key   https://mikeandkey.org/nets.php

9. Winlink Class – 11a-12p – Jeff Ferguson

- The class was very well-received, many people were able to sign on and send and receive messages.
- A reminder that Winlink has limitations, and in a crisis, will be used as one-way communications to send welfare messages. It would be sent in batch, and again due to what would likely be limited resources in a crisis, might not transmit as quickly as messages did in class. However, it can be a very useful tool and is a part of the training needed for utilizing digital technology in the future.
- An excellent suggestion was made by Hal and very well received, that we should start integrating Winlink check-ins into the Sunday night net. Although we are in the process of determining exactly how to do this per ARES protocols, it will be somewhat like this:
  a. Send messages during the week to WA7FI through TelNet, due Sunday night by 7pm.
  b. The Net Control Operator will run the program to download messages.
  c. Number of check-ins (or some other data) will be given to the appropriate ARES contact.
- Two PowerPoint presentations are attached:
  - The first are the overheads from Jeff that were used during the training
  - The second is from an ARES Winlink presentation with more details.
- Also useful is the Winlink Book of Knowledge   https://winlink.org/content/winlink_book_knowledge

10. Next meeting
Saturday 25 February 2023, 10-11am. Social time 930-10a

Respectfully Submitted,

EJ Tollett KJ7RVR

Attachments
PowerPoint Presentation on Winlink – Jeff Ferguson
PowerPoint Presentation on Winlink – ARES

Winlink Express Install Instructions

Your computer and setup might be different from mine – after two setups this is generally how it goes.

1. Open winlink.org/winlinkExpress

2. At the download pop-up(or wherever you find your downloads), click on "WinlinkExpress (current production version)"

3. Open/click on "Winlink_Express_install_1-7-4.0.zip" file

4. There may be a pop-up asking you to purchase a WinRAR license. I got it on one computer, and not on the other. However you do not need this. Just click on "Close"

5. Click again on with Winlink_Express_install...exe link

6. "Yes" you do want the app to make changes to your computer, otherwise Winlink will not be installed.

7. Destination Location - click on "Next" unless you want to change the location where the start-up wizard will place the file. The name of the file is "RMS Express" which used to be the name of Winlink Express.

8. Start Menu Folder - click on "Next"

9. Create desk-top shortcut if you want (recommended - it can always be deleted or moved) - click on "Next"

10. Ready to install - click on "Install"

11. Click on "Finish" to complete setup with Wizard

12. The next screen to appear will be the Winlink Express Properties screen and you will need to fill it out to open your account. If you do not know, Fox Island lies in the CN87 square.

Jane Tollett – KJ7RVR

How to get WinLink Express to run on a MacBook Pro.

Since Winlink Express is a Windows only program, you will need an interface of some kind.

Option #1 - Parallels. Good program that allows you to run Windows programs but is $99/year. You also have to buy a copy of Windows 11 Home at $119. So, it will cost $200+ to use one program.

Option #2 - Patching. There are several YouTube videos showing a convoluted way to run scripts, terminal commands, etc. to get it to run. This could take hours if you are not familiar with the process.

Option #3 - Crossover software. John Merryman found a program called CrossOver. It is not an emulator but somehow translates Windows commands into Mac commands. John installed it and felt it worked well and was able to send messages using it. It costs $74.

Steps:
1. Download and install CrossOver. It has a 14 day trial.
2. Download and install WinLink Express. Follow the instructions that Jane sent out(attached)
3. In CrossOver, you have to install WinLink Express. They call installation directories Bottles. It installs pretty normally.
4. Reboot and start CrossOver.
5. Should be able to start WinLink Express.
6. Once in WinLink, you have to select Telnet for transmission.
7. Create your message, put in Outbox, select the little icon for transmission and Telnet should start and run a session. This will run and then close. You can configure so it checks every so often.

Radio Email for EMCOMM

Our objective:

What – Develop skills needed to employ "radio email" for emergency communications (EMCOMM).

Why – Relative to voice communication digital traffic provides much greater accuracy and efficiency. Voice messages are very slow when recorded precisely often being sent in five word blocks, so the receiving station can write each word down accurately, with voice confirmation from the receiving station for each block. Furthermore properly formatted digital messages can be sent up and down the EMCOMM chain very efficiently (Fox Island to the Peninsula ARES Team/PMACC to Pierce County to Washington State to Federal agencies). Fox Island's digital EMCOMM traffic is likely to jump to the head of the line because it can be received and forwarded by the Peninsula Team's digital net control station at the Peninsula Multi Agency Communications Center (PMACC) with ease. Very few communities in Western Washington are prepared to employ this digital traffic capability. In addition Fox Island will be able to transmit welfare messages to family and friends outside the disaster zone, sending messages to any regular email address.

How – We will learn to use the global Winlink System by employing Winlink Express, a computer program which functions much like email.

Winlink (the global system) and Winlink Express (the computer program):

Fox Island EMCOMM computers and VHF/UHF radios are in the process of being preconfigured and tuned for digital communication employing a soundcard interface which converts digital computer signals to radio transmittable audio tones (much like an old telephone modem) with PTT control. Once configured and tuned trained Fox Island radio operators will only need to connect device cabling and operate Winlink Express to create and send properly formatted digital traffic with radios tuned to listed stations and frequencies.

The _Winlink system_ is a global system of computer servers and specialized radio stations, called RMS gateways, which connect Winlink digital traffic to the Internet. Radio email can be sent to any gateway on the system where it will be transitioned to the Internet and, if addressed to a regular email address, delivered via regular email or, when addressed to an amateur radio call sign, held until the receiving amateur radio operator connects to any Winlink gateway in the world at which point the traffic will be transmitted to the amateur radio station. The system, and software, offer additional capabilities but for now we will focus on employment when Internet service is functioning globally via RMS gateways, some of which employ satellite Internet service and/or automated HF retransmission.

Winlink Express (formerly RMS Express) is a computer program which enables us to employ the Winlink system. Messages can be created using a blank "new message" or by employing one of the many templates provided in the software.

Creating and sending a Winlink message entails the following steps (we will discuss each step in detail and send practice messages during classroom training):

1. **_Winlink Express_** – run the program.
2. **_"New Message"_ –** begin by clicking on the message menu then select "_New Message_".

3. Address and create your message text, much like regular email.
4. **"Post to Outbox"** - Send the completed message to the Winlink Express "Outbox". Note this is where radio email begins to differ from regular email because you don't have a continuous communication session when employing digital radio comms. Messages will be held in the "Outbox" until sent via radio transmission during an automated digital communication session.
5. **"Open Session"**, entails selecting a communication protocol from the drop down menu then selecting "*Open Session*" which opens the communication session window used to complete a digital radio communication session employing that protocol.
6. **"Start"** your communication session by clicking "Start" in the communication session window. The program will automatically connect to the specified radio station (RMS gateway) and exchange traffic through the gateway. The exchange will be conducted automatically after which the radio will automatically end the contact. You will be able to observe this process in the session window. Received traffic will be deposited in the Winlink Express "Inbox".

During classroom training we will not be employing radios rather we will use a protocol called "Telnet Winlink", one of the numerous communication protocols available in Winlink Express, to send messages directly to the Internet using WiFi service at the Nichols Community Center. During this class the intent is to provide an introduction to the Winlink system, Winlink Express and Winlink messages; training with radios will be offered later. Note, you can use the "Telnet Winlink" protocol on your computer at home to practice sending Winlink messages (see District 5 ARES weekly Winlink Net info linked below) and to check for inbound messages sent to your call sign via the Winlink system. During subsequent training sessions, probably two or three participants at a time, we will train in the radio room sending messages over Fox Island's radios through regional gateways; and perhaps practice some Peer to Peer sessions (if I can get a supporting ARES station to volunteer) which involves sending traffic directly to an addressed recipient's station, such as the Peninsula Team's digital net control station (KA7EOC) at the PMACC, when gateways and/or local Internet service are down.

All amateur radio operators are encouraged to install Winlink Express on their computer(s) and set up a Winlink account. The account must be set up through Winlink Express (*Settings → Winlink Express Setup*). The software and account are free although you can make a voluntary contribution, to support ongoing development of the Winlink system, and get a program registration key. Absent the registration key Winlink Express is fully functional but you will need to wait a few seconds before being able to clear the contribution reminder screen which pops up after the program starts.
If you have a laptop with Winlink Express installed please bring it to the class so you can practice on your machine with your account. Four Fox Island EMCOMM computers with Winlink Express installed will be available during training for those who do not have a configured laptop.

Much more information can be found at the following:
1. Winlink.org, particularly in the "Book of Knowledge".
2. The Wavetalkers Winlink training series.
3. The Winlink Express Video series.
4. And visitors are always welcome to keep their Winlink skills sharp by checking into the weekly District 5 ARES Winlink Net.

And for those who would like to get into comprehensive Winlink training take a look into "Winlink Thursdays" at emcomm-training.org.

Please feel free to contact me with any questions.
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