Cherokee Amateur Radio Society
Winlink
Basic- 101

Version 8/14/2021

Agenda

1. Overview
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    1. Send to another HAM Callsign
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8. Final Comments
9. September 11, 2021- Over Lunch, Winlink Workshop (RF Demonstration, Assistance in Setup)

Overview

Winlink (www.winlink.org) is a worldwide network for passing email traffic over radio. It does not depend on the internet but has connectivity to internet-based stations allowing you to send and receive to other winlink.org recipients AND to email account that are internet based.

Winlink is used by mariners, RV enthusiasts, MARS, ARES, and many other agencies who need to communicate when the internet is not available.

The Winlink system consists of a group of Common Message Servers (CMS) placed at various locations around the world. These connect via the internet to Radio Message Servers (RMS) in many geographic locations to form a star network configuration. The RMS are the VHF, UHF, or HF RF gateway into the Winlink system. The final component is your station running the software to send/receive messages via your radio.

Winlink messages, like regular email, are sent to specific addresses and may contain file attachments such as pictures, weather maps, spreadsheets, ICS forms, etc.

References

- Winlink Site: http://Winlink.org

- Download Winlink Express: https://winlink.org/RMSExpress

- Winlink FAQ: Winlink FAQ - July 20, 2020 - Revised (Frequently Asked Questions) | Winlink Global Radio Email

- Subject Line to Send to a Gmail Account: **//WL2K + custom subject   Example   //WL2K Test Email**

- **Referenced material in presentation:** ConfigRMSWinlink.pdf (mecklenburgares.org)

References

How To Get an Account

• Download, install and configure [Winlink Express](#). Study embedded help about installation and use.

• With you have an internet connection, fill out the form presented on the first startup page after installation.
  • See the help article "Basic Configuration" for guidance.
  • Be sure to include a password and password recovery address.
  • Click 'Update'. Winlink Express makes the process easy. Your account is created!

Screen Shots Coming- Hang on!

Future Training

Advance training (outside of todays class) will consist in sending messages via:

- Packet (VHF- RF to Message Center who uses Internet to deliver to final destination)
- VARA FM (RF to Message Center who uses Internet to deliver to final destination)
- VARA HF (RF to Message Center who uses Internet to deliver to final destination)
- Utilizing Winlink Forms
- Utilizing Address Book
- Etc.

September 11, 2021
- Jim K9APD Cherokee ARES Simulation Emergency Test (SET) Exercise Overview and Winlink P2P- October 2, 2021
- Over Lunch, Demonstration outside on Winlink RF including P2P, and Hands on Installation Assistance

Download

- Download Winlink Express to your PC as shown on References

https://downloads.winlink.org/User%20Programs/Winlink_Express_install_1-5-37-0.zip

Install

Run Winlink_Express_install_exe after downloading

1. If you received Windows Protected your PC, Click **Run anyway** to continue install.
2. Take all defaults to complete Installation.
3. Click finish to Launch Winlink Express and continue with Configuration steps.
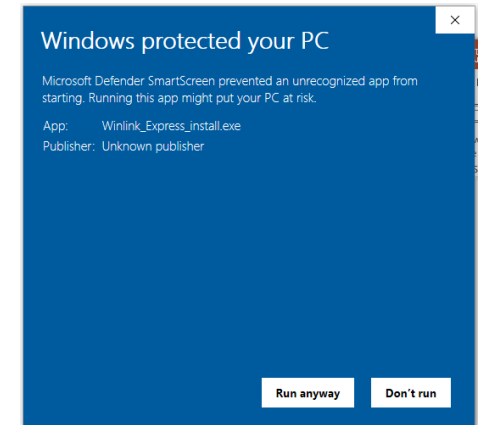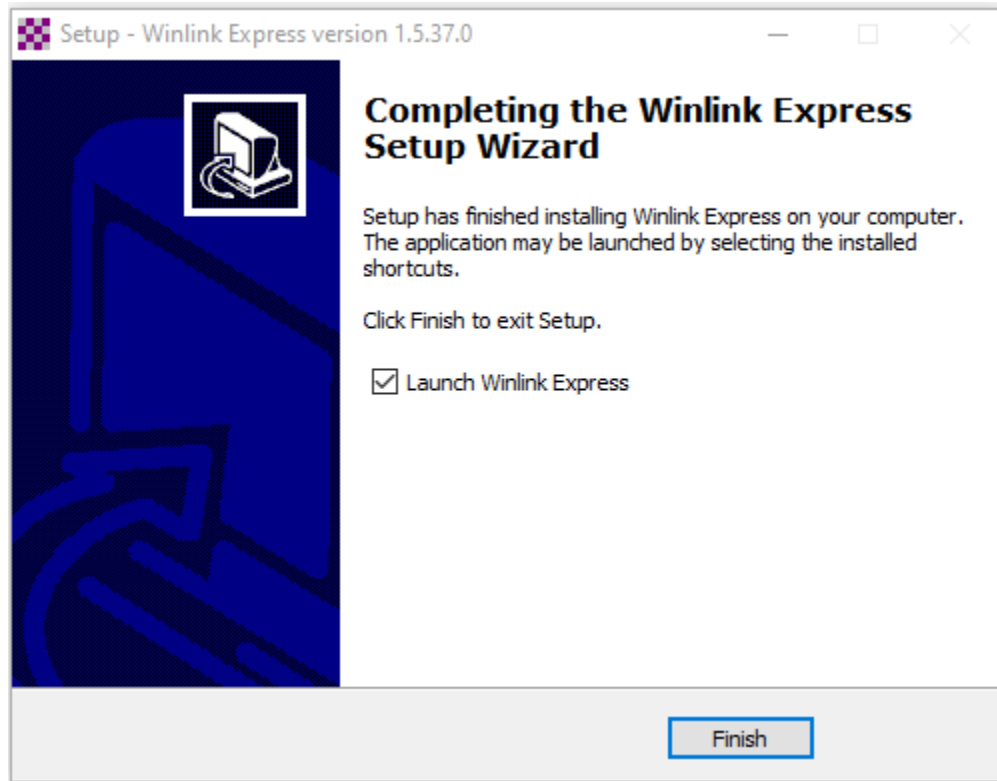
Configure

When Winlink opens for first time, the configuration screen (Winlink Express Properties) will appear.

Please fill in:
- My Callsign
- My Password (This will assign password on initial setup)
- Password recovery e-mail
- My Grid Square
- Optional Fields Self Explanatory

Then Click **Update**

Comment:
- **Find my Grid Square**
  - **https://www.levinecentral.com/ham/grid_square.php**
  - **Android: Grid Square Locator**
  - **IOS: Ham Square**

- **If Operating RF, consider checking "Display list of Pending Incoming message prior to Download" to avoid consuming time, power, and downloading message you may not be interested in at that time.**

- **If Operating Remote, update My Grid Square or Lat/Lon prior to deployment in order to obtain updated RF Propagation Data, discussed in Advance class.**
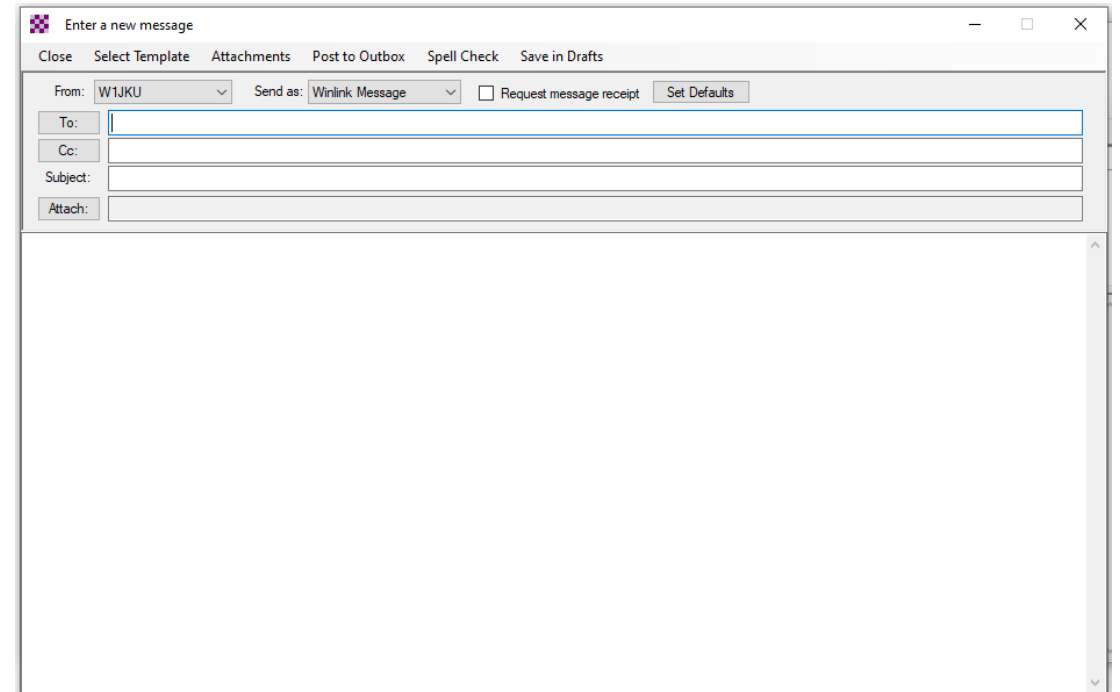
Compose Email

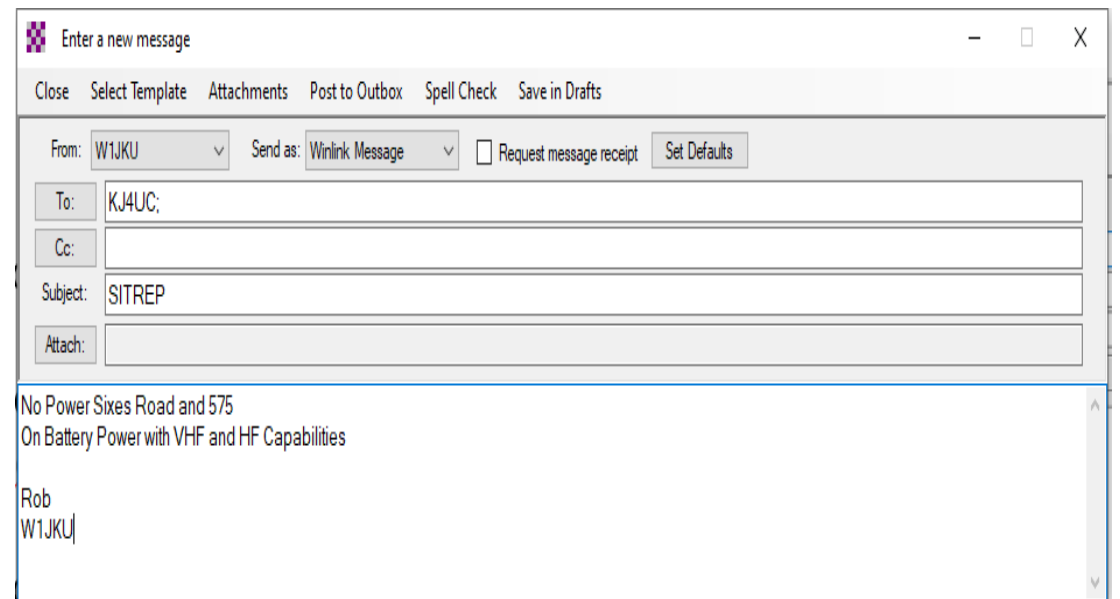1. Click New Message Icon
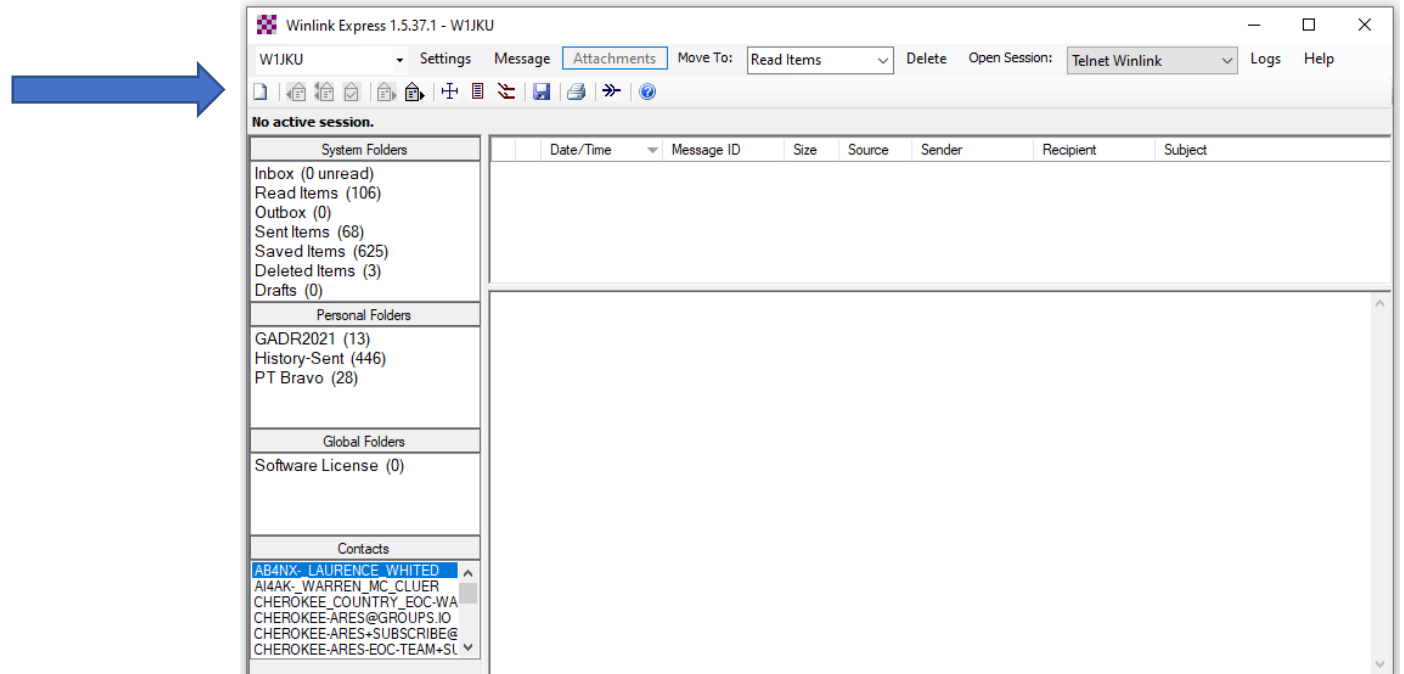
Compose Email

2. Compose Message

- **To**: Enter Callsign your sending Email to
- **Subject**: Enter Subject of Email
- **Body**: type the message

- Click "**Post to Outbox**" when your done editing the message to put email into Outbox folder, required step before you may send the message…

Advance Comment:
- To send Email to an Internet Email Address like Gmail, the Subject should be : **//WL2K + Custom Subject**

- To send Email directly to another station via P2P,
You must click "**Send as**" and chose **Peer to Peer Message**.

*** P2P Message are not routed via Internet to designation
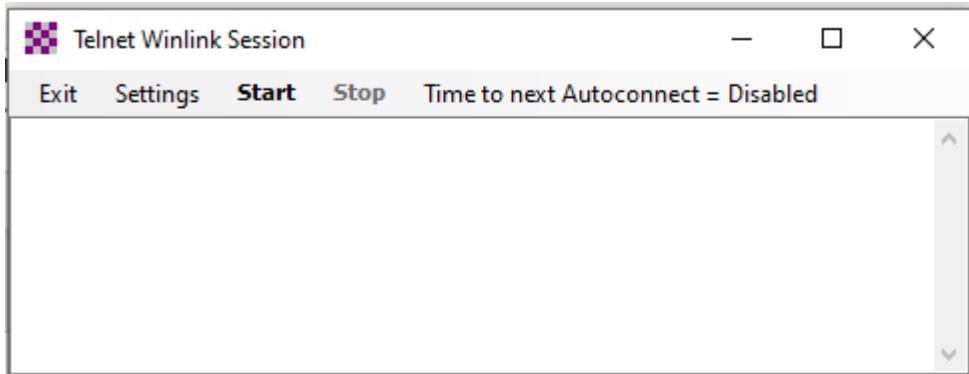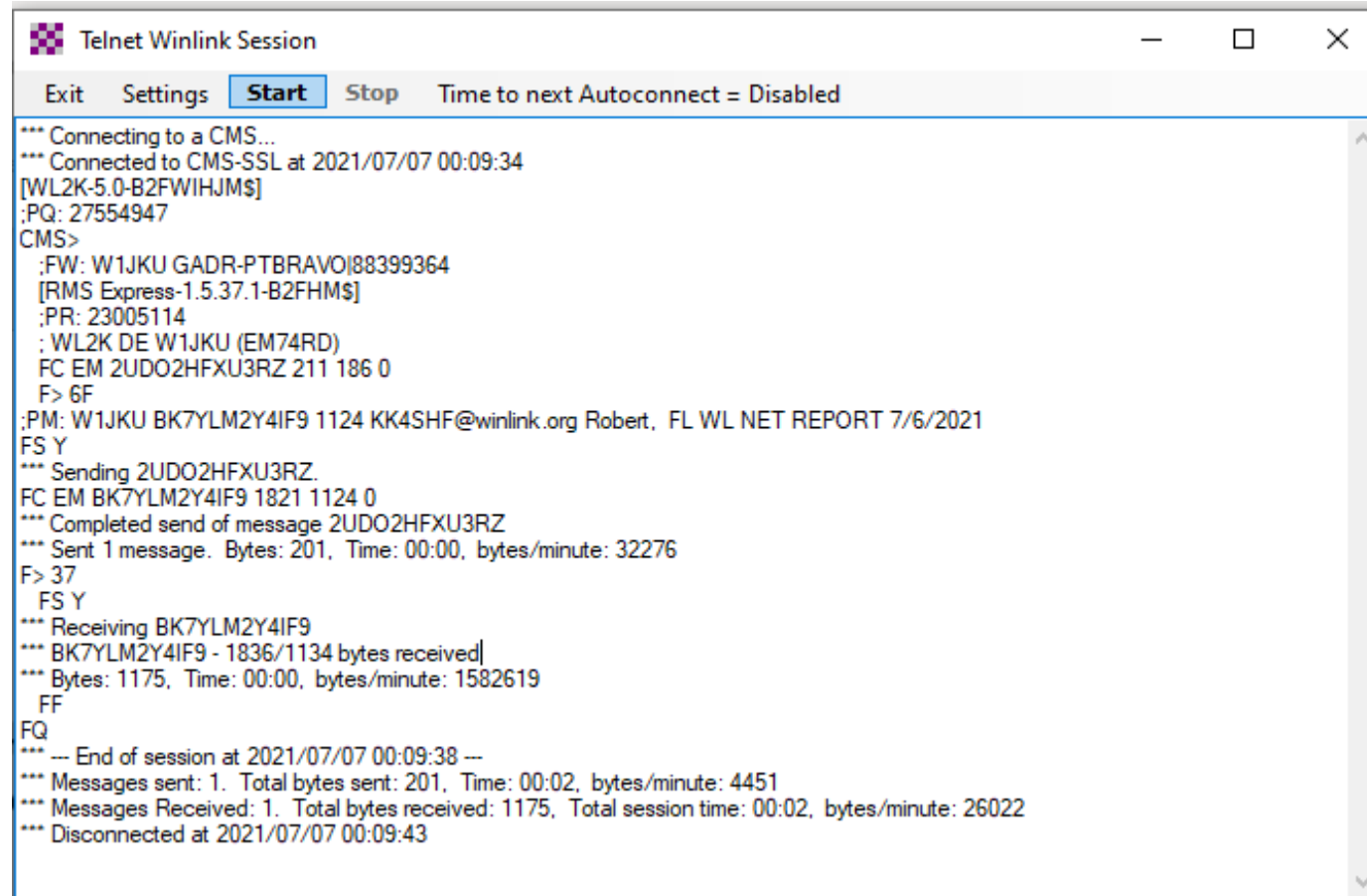We will discuss this during advance class.

Send Email via Telnet-Internet

1. Click **Open Session** after selecting **"Telnet Winlink"**
2. Ensure your PC is connected to the Internet before moving to Step 3
3. Click **Start** to initiate Sending any emails in Outbox and Receive any emails waiting for your callsign.
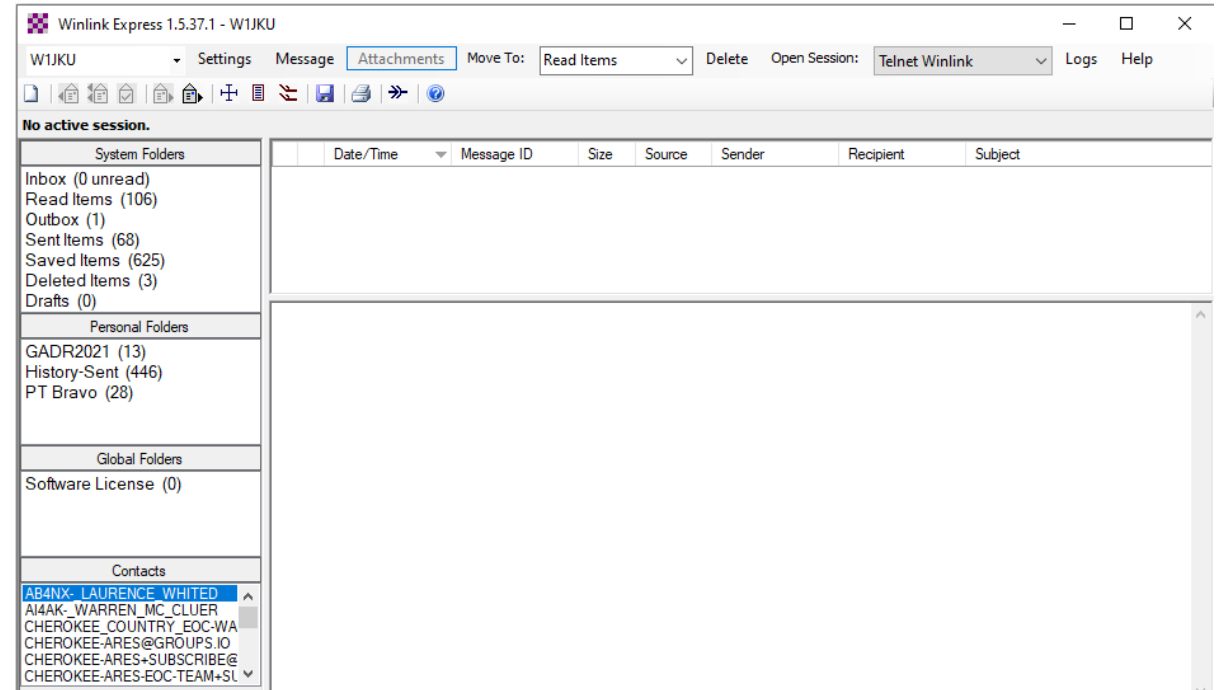
Send Email via Telnet-Internet (Continued)

Example of Telnet Winlink Session Log after a Successful Send and Receive is performed:

Receive Email via Telnet-Internet

Any new Message will appear on your screen, and you may click on the message to open it up and see more details

Advanced Challenges

Advanced Challenge – Experiment with Templates

1. Attempt to use Templates and try composing an email using ICS-213 Template
   Click "Select Template" when composing a new message, then chose ICS213.txt
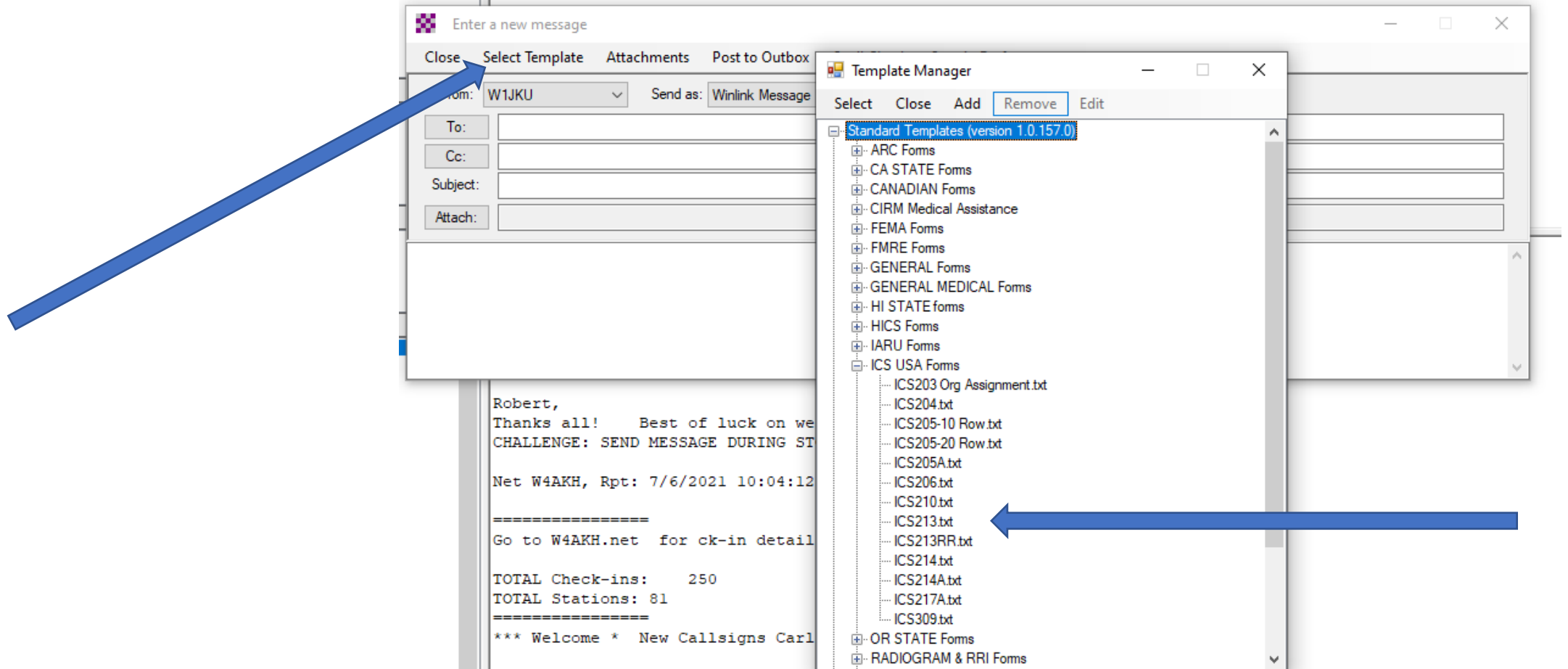
Advanced Challenge – Send Message via RF: Vara HF, VARA FM or VHF Packet

- If you are able to perform digital modes using your Laptop and Radio like (FT8) you are so close to being able to execute this Challenge:

Key Item performing RF Winlink:

- Open Session: Select your mode, **VARA HF Winlink** for this example

- Click **Channel Selection**

Advance Comment:
- You want to perform Channel Selection before you deploy to the field and while you have internet to get current propagation forecast, to make it easier to find a remote station you are most likely going to be able to connect to.

Advanced Challenge – Send Message via RF: Vara HF, VARAFM or VHF Packet

- Click **Update via the Internet**

- Wait for the updates to complete.

- Select Callsign/Freq that has a high **Path Reliability Estimate.**

- **Experiment! Experiment! Experiment!**

Advance Comment:
- Sometimes your best connection is not the closest station, you might be better off with a station hundreds of miles away!!!!

HF Channel Selector

Exit   Select   Update Via Internet   Update Via Radio   Map   Forecast   SFI   All RMS

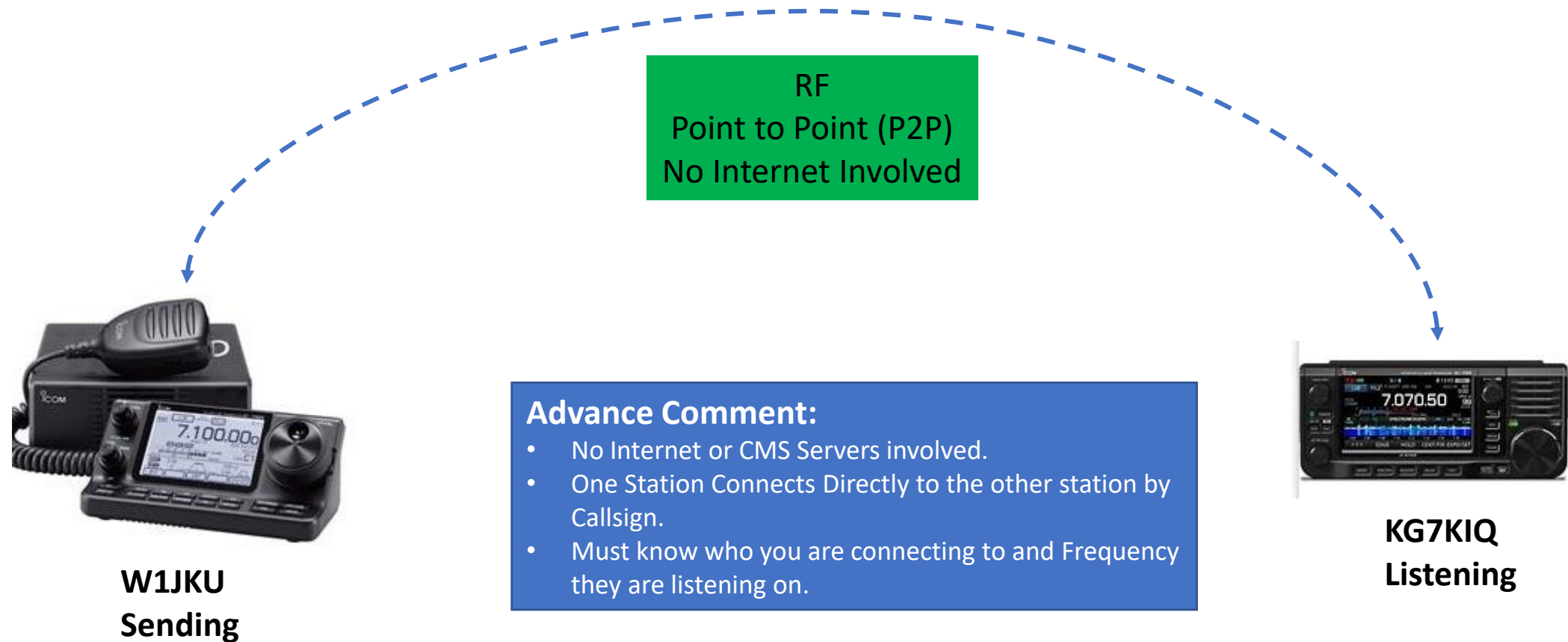| Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
AB4NX	3588.500	V2750	EM74UL	00-23	PUBLIC	27	032	99	99
AB4NX	7103.000	V2750	EM74UL	00-23	PUBLIC	27	032	96	96
AB4NX	28134.000	V2750	EM74UL	00-23	PUBLIC	27	032	82	82
N4BTA	28131.500	V2300	EM74UB	00-23	PUBLIC	16	113	82	82
KC8YJJ	7102.500	V2300	EN90PL	00-23	PUBLIC	485	025	77	51
NM5PB-11	7101.300	V2300	EM48UM	00-23	PUBLIC	439	315	76	51
N2LEE	7103.500	V2300	FM18HX	00-23	PUBLIC	518	048	76	49
KD7UHR	7108.500	V500	EM58BQ	00-23	PUBLIC	431	318	76	51
K3DO	7103.800	V2300	FM19GL	00-23	PUBLIC	537	045	75	49
AK4ZX	3589.000	V2300	EM75KA	00-23	PUBLIC	69	331	74	49
K4FEM	3590.500	V2300	EM74UV	00-23	PUBLIC	53	015	74	49
WM4RB	3598.500	V2750	EM75ME	00-23	PUBLIC	76	342	74	49
N4JGW	3597.000	V2750	EM74LR	00-23	PUBLIC	49	325	74	49
NA1DX	7101.500	V2750	FM18QT	00-23	PUBLIC	544	051	73	48
W6IDS	7084.500	V500	EM79NV	00-23	PUBLIC	397	357	73	49
K4PAR	3586.200	V2300	EM83II	00-23	PUBLIC	91	127	73	48
W6IDS	7061.500	V500	EM79NV	00-23	PUBLIC	397	357	73	49

Advanced Challenge- Send Point to Point (P2P) Message

3. Send P2P Messages.

Weekly Florida P2P Winlink Net: W4AKH Winlink Net that KJ4UC-Don, KO4IFY-Mark, and W1JKU-Rob participate routinely in

**RF
Point to Point (P2P)
No Internet Involved**

Advance Comment:
- No Internet or CMS Servers involved.
- One Station Connects Directly to the other station by Callsign.
- Must know who you are connecting to and Frequency they are listening on.

**W1JKU
Sending**

**KG7KIQ
Listening**

Final Comments

1. If you do not have Winlink Installed, please do so. This is a great tool for all HAMS. You do not need to be a member of ARES, MARS, etc… to take advantage of Winlink

2. Do not send Work related information over Winlink (Same Amateur Radio Restrictions)

3. No Amateur Radio Emails are Secure/Encrypted via Winlink. **Do not send passwords or sensitive info via Winlink that you would not pass over the radio**.

4. Over Lunch in September, Bring our Laptop if you still need help, we will be around to help you install, configure and get Winlink Operational!

Q&A

THANK YOU