Lehigh Valley Amateur Radio Club

WINLINK
Global Radio Email ®

What is Winlink?

- **Winlink** is a network of amateur radio and authorized government stations that provide worldwide radio email using radio pathways where the internet is not present.

- The system is built, operated and administered entirely by licensed "Ham" volunteers.

- It supports email with attachments, position reporting, weather and information bulletins, and is well-known for its role in interoperable emergency and disaster relief communications.

- *It is capable of operating completely without the internet--automatically--using smart-network radio relays.*

WHY?

- Familiar format
- Easy integration / interoperability
- Bridge into established email systems
- Know and familiar to served agencies
- Utilization of standardized text service for message distribution (traffic) minimizes downstream handoff errors.
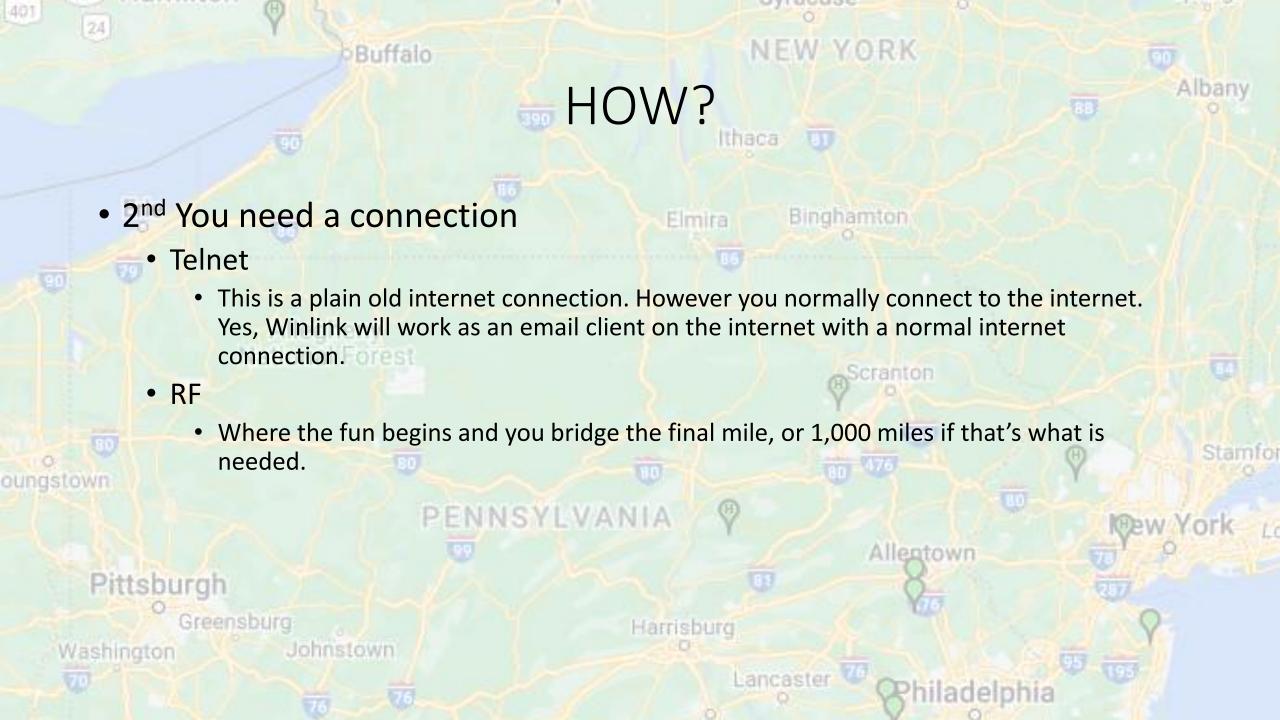 - EXAMPLE

HOW?

- 1st – You will need a client
  - Winlink accounts are created with a client program, you cannot create one on the host website.
    - **Accounts require** – **A valid amateur radio license**, or a license or authorization from a participating government service or agency (GMRS, LMR, ship station, other marine, or general radiotelephone licenses DO NOT qualify)
    - Download and install any client software, follow the program's instructions on account creation and your account will be created. Be sure to include a password recovery address.
  - Multiple clients are available**, Winlink Express** is recommended

HOW?

- 2nd You need a connection
  - Telnet
    - This is a plain old internet connection. However you normally connect to the internet. Yes, Winlink will work as an email client on the internet with a normal internet connection.
  - RF
    - Where the fun begins and you bridge the final mile, or 1,000 miles if that's what is needed.

RF Links

AX.25 Packet

Pactor 1-3

Pactor 4

ARDOP

VARA HF

VARA FM

Sound Card

TNC

GREAT, NOW WHAT?

- Why do I want to send email over amateur radio on a routine basis?

- Yes, but?

- What about email address that are outside of Winlink?
  - You must initiate the email to a non-Winlink email address from Winlink first.
  - The non-Winlink email can respond to you.

How is this used on a routine basis?

- Winlink Wednesday
- Great Lakes Winlink Net
- Club communications
- Red Cross Drills
- EPA Section Drills

Winlink by the numbers

Winlink Message Activity (Worldwide)	Dec 2023	Jan 2024
HF Activity		
Pactor 1	0	4
Pactor 2	61	22
Pactor 3	1,105	497
Pactor 4	2,481	1,037
Robust Packet	6	2
ARDOP 200	0	0
ARDOP 500	141	72
ARDOP 1000	0	0
ARDOP 2000	79	46
VARA	8,298	3,192
VARA 500	3,887	1,495
VARA 2750	5,675	1,770
Total Connections	21,733	8,137
Total Messages Received	28,657	8,461
Total Messages Sent	35,768	11,258
Message Size Accumulation	347,229 KB	95,040 KB
Average Message Size	5,390 Bytes	4,820 Bytes
FM Activity		
ARDOP 2000 FM	0	0
VARA FM	8,214	2,447
VARA FM WIDE	25,189	7,410
Packet Activity		
Messages Received	8,160	2,421
Messages Sent	10,178	3,197
APRS Gateway Activity		
Messages Received	82	31
Messages Sent	100	25
WebMail Activity		
Messages Received	6,581	1,873
Messages Sent	1,423	1,705
Total Message Activity	**90,949**	**28,971**