



Jay Taft, K1EHZ
New Hampshire Section ARES Zoom Meeting
July 14, 2020



Overview of the Winlink System

Winlink System Overview

This overview is about how the Winlink system works, not about how to set it up yourself.

It covers a lot of material to help convey the range of capabilities Winlink provides, because it's difficult to know in advance which features may interest a particular group or individual.



One Tool in the
ARES Toolbox



One Tool in the ARES Toolbox

along with NBEMS, verbal
radiograms, tactical messaging,
NCS skills, etc

Topics

- Objectives
- Winlink Structure and Function
- Hardware and Software
- Key Features of Winlink Express
- Our Winlink Hybrid Gateway
- Potential Training Opportunities



Objectives

To understand the basics of the Winlink system and how it complements other messaging tools, and

To encourage you to continue exploring Winlink if you like.



In other words, does Winink
provide interesting possibilities
for you or your ARES group?

What I was thinking when first asked
to explore learning Winlink --



More
Software???

I'm still
Learning
FLdigi !!!

Happily, with help I found Winlink
easier to learn than FLdigi



I'm Learning
Winlink !!!

Happily, with help I found Winlink
easier to learn than FLdigi



I'm Learning
Winlink !!!
and I'm still
Learning
FLdigi !!!



What is Winlink?

World-wide store and retrieve
email system, using radio
and internet.

Exchange email with any
valid email address in the world,
not just with hams.



Operated by the all volunteer
Amateur Radio Safety
Foundation



Brief History

- Winlink's roots can be traced back to the 1980s
- Amlink text-based messaging adapted for the Navy MARS and the ARRL National Traffic System.
- Winlink Classic was developed for Windows.
- Winlink + Netlink developed for internet email.
- Winlink 2000 planning started in 1998.

Winlink is used extensively in the southeastern states subject to tropical storms, and in western states where wild fires occur annually. For example

ARRL Web Page - 3/14/2019

Winlink already is well-known for its role in emergency and disaster relief communication, providing email with attachments, position reporting, weather reports, and information bulletins.

The system was extensively used in the aftermath of the high-impact 2017 hurricane season in the Caribbean.

Carr Wildfire - California

August 1, 2018 — Briefing excerpt:

Winlink continues to be the go-to mode to communicate with the Red Cross Disaster Operations Center. There are no voice channels that can reach Sacramento.

There was hope that Carla system would work, but a Carla node burned in the fire.

(What is Carla?)

CARLA

California Amateur Radio Linking Association

The C.A.R.L.A. System is an open repeater network covering California and Western Nevada comprised of 30+ UHF and VHF repeaters.

Lessons Learned for us:

- Linked repeaters are great until the one you need burns in a fire or is otherwise disrupted.
- Applies to regular repeaters as well.
- Have a Plan B.



Structure Based on
Common Message Servers (CMS)
on the internet and
Radio Message Servers (RMS)
that bridge radio to internet

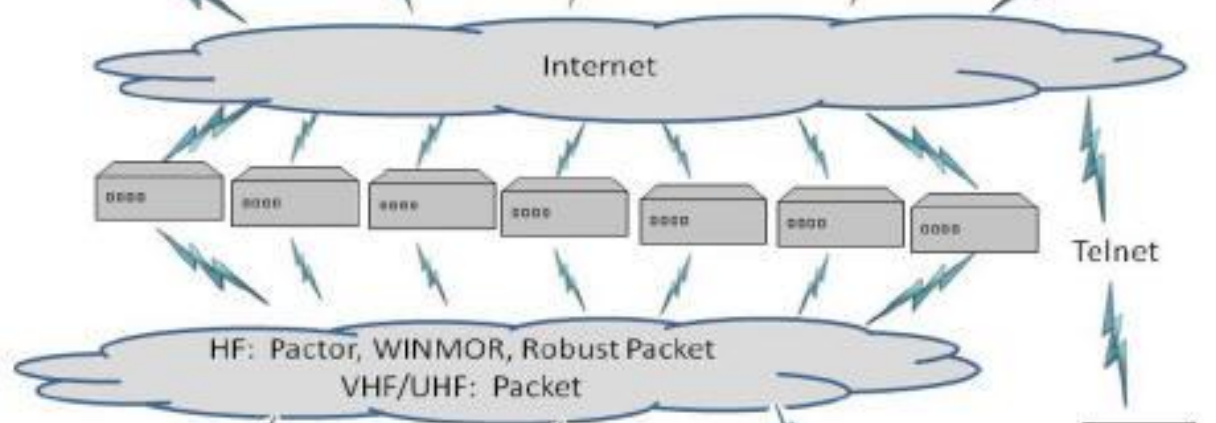
Global Winlink Network

Winlink Normal Network Operation

CMS



RMS
(gateways)



Client
(us)



Winlink Express software

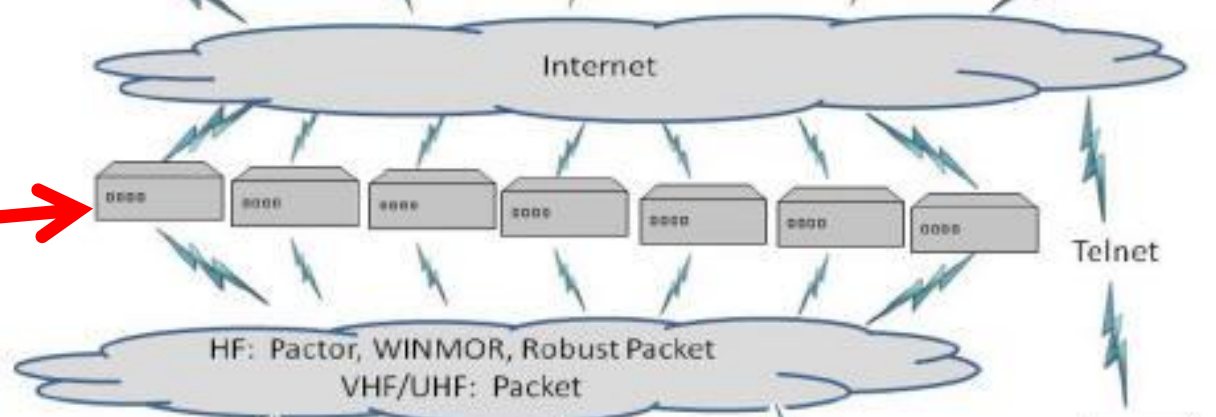
Global Winlink Network

Winlink Normal Network Operation

CMS



RMS
(gateways)



VHF / HF Radios
connected
to the Internet

Client
(us)



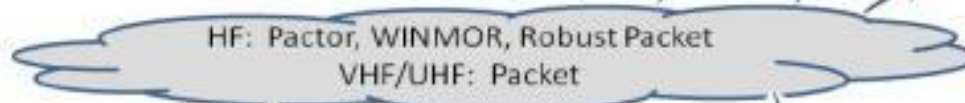
Global Winlink Network

Winlink Normal Network Operation

CMS
(AWS)



RMS
(gateways)



Telnet

Client
(us)



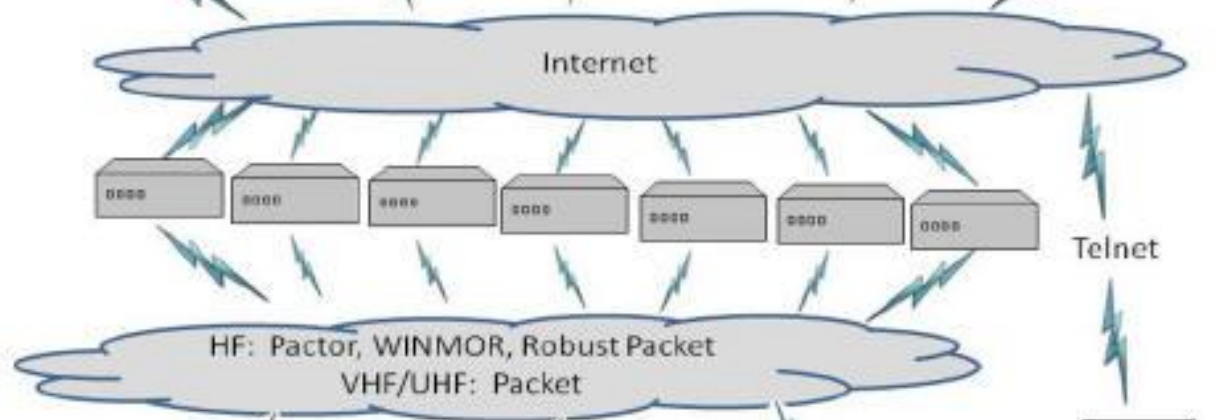
Global Winlink Network

Winlink Normal Network Operation

CMS



RMS
(gateways)



Client
(us)



Winlink Express software

Winlink Webmail

Check mail using a browser on
smartphone, tablet, computer

<https://webmail.winlink.org:446/>

Email resides on all 5 CMS
until retrieved, *after which*
email is deleted from all CMS.

CMS



Consider reading all Winlink email on same device.
Otherwise, different messages will download to
different devices.

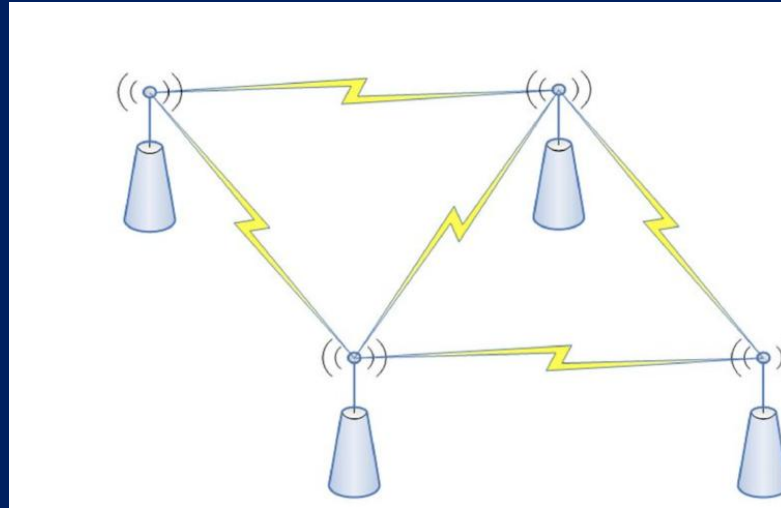
RMS Gateways



Some are "H" Gateways



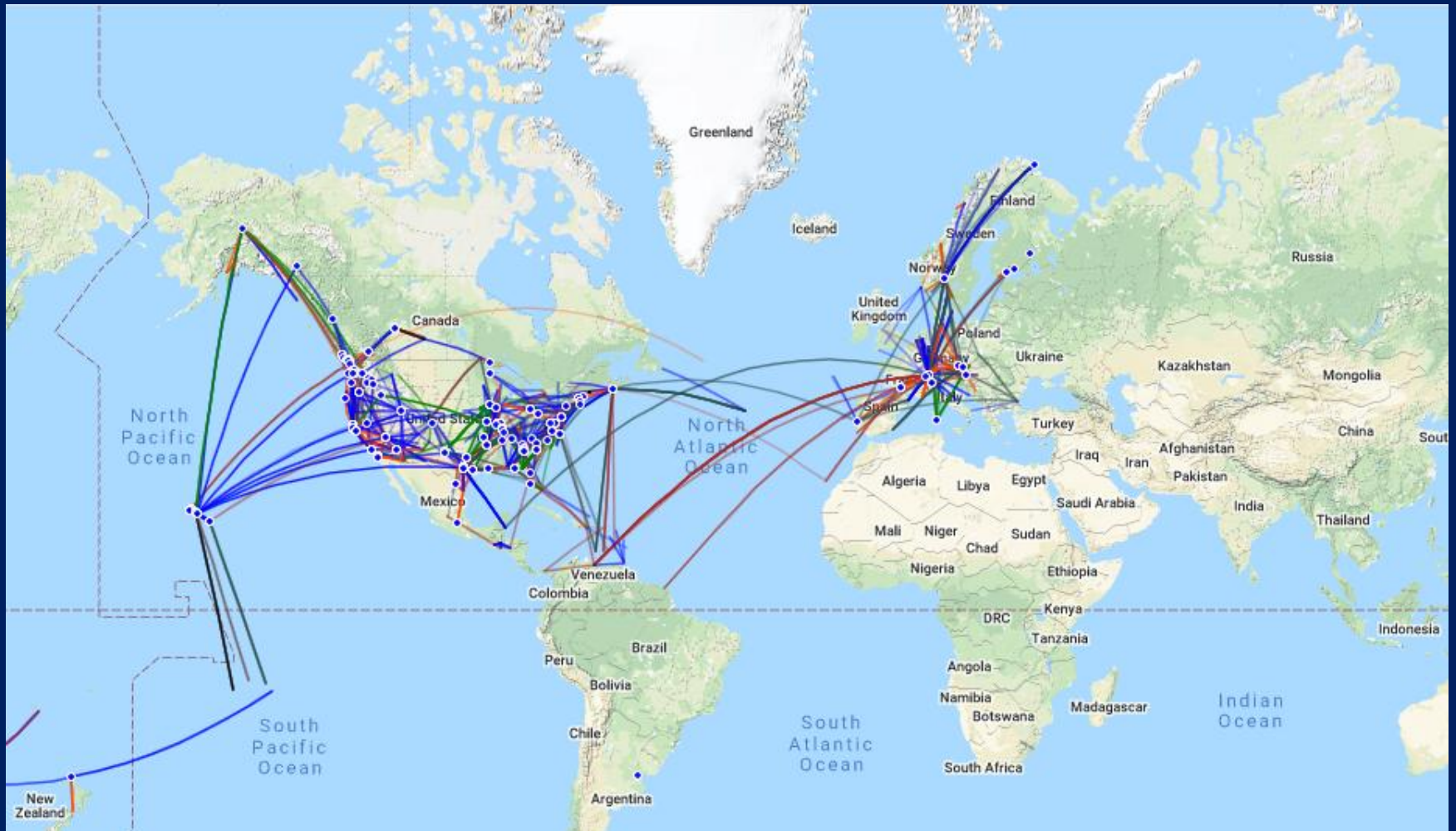
H = Hybrid Gateway Network



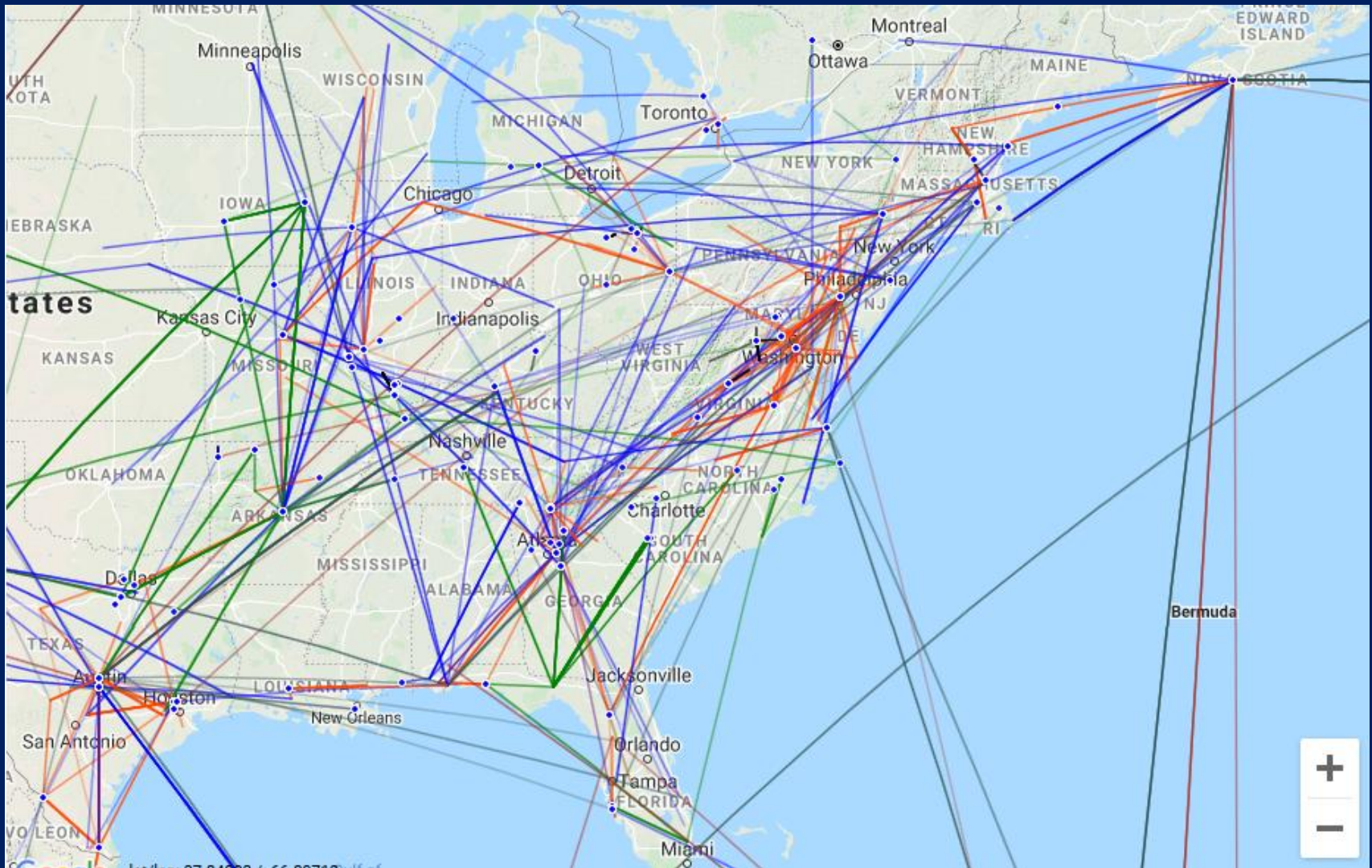
H = Hybrid Gateway Network

- Self-Healing Mesh Network (Pactor)
- Auto-Forwards Email from VHF to HF
- Auto-Forwards Email from HF to HF
- Until Email Reaches the Internet or the Addressee

Winlink System Radio Connections 24-hour Snapshot



Winlink Regional Radio Connections 24-hour Snapshot



Equipment

Terminal Node Controller (TNC)

supports AX.25 packet protocol

over radio

Equipment

Terminal Node Controller

Can Be

Hardware or Software

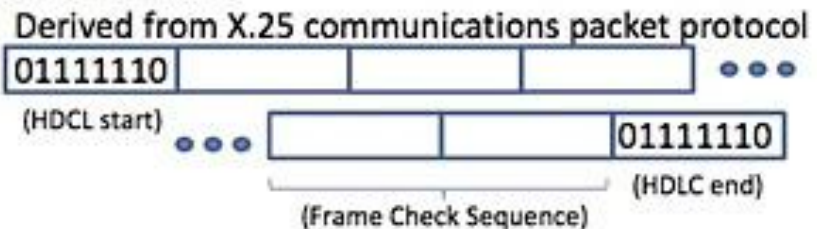
Basic Elements of Packet Radio



1. Hardware: Radio, TNC/modem, Computer
TNC can be implemented in software only on computer:
interface uses analog/audio soundcard connection between
computer and radio.

2. Encoding

- Computer<->TNC: serial port, ASCII (text) characters
- TNC<->Radio: typically two or three wires
Audio Frequency Shift Keying (Bell 202, 1200 baud)
1200 hz: mark, 2200 hz: space
0: change in tone, 1: no change in tone
- Data Link: AX.25



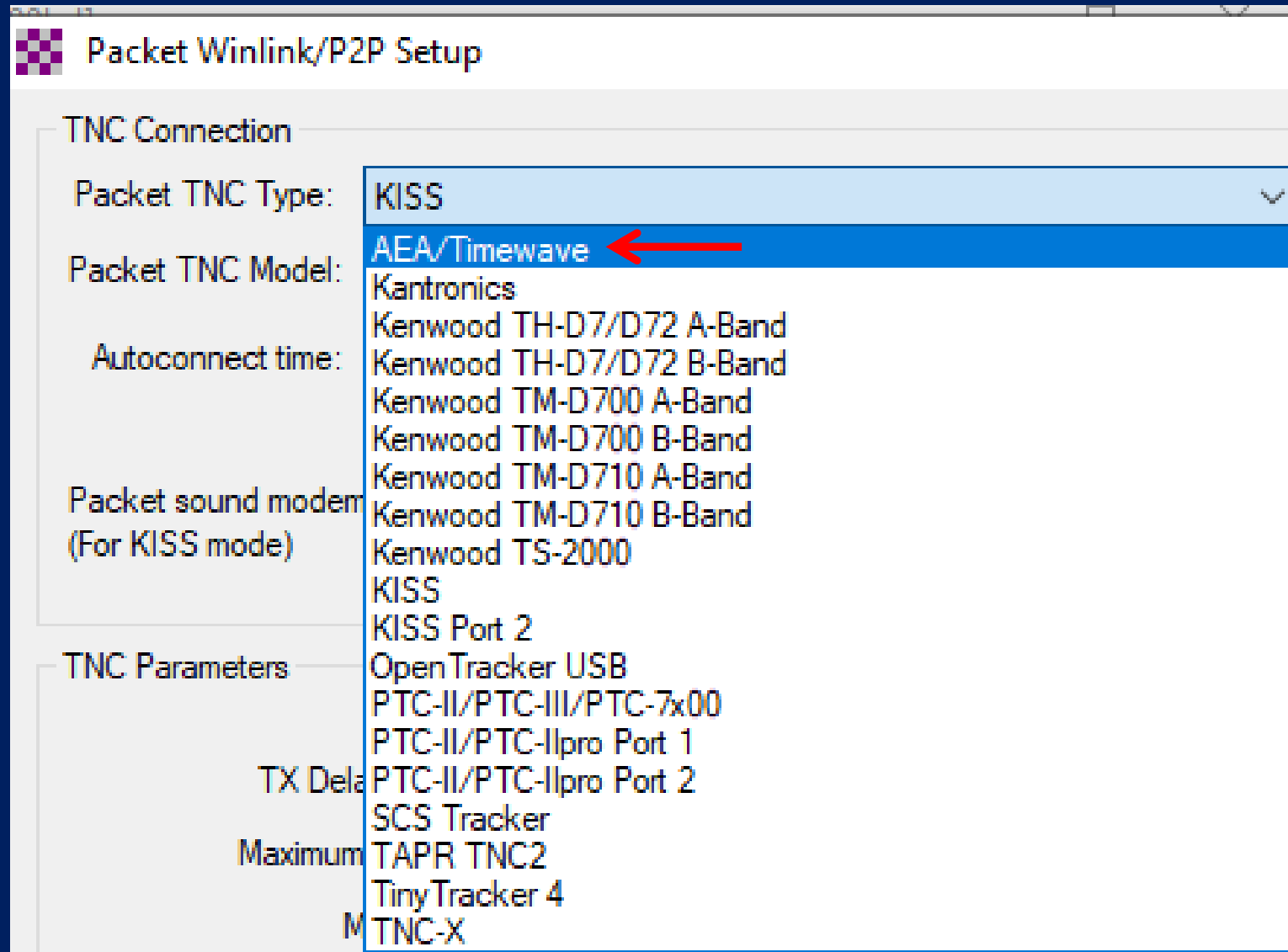
3. Applications

- SCC ARES/RACES: detailed reports (Situation Report, etc. using Outpost and PacForms)
- Automatic Packet Reporting System (APRS): a multi node system for reporting and recording packets that typically includes station ID and position/telemetry

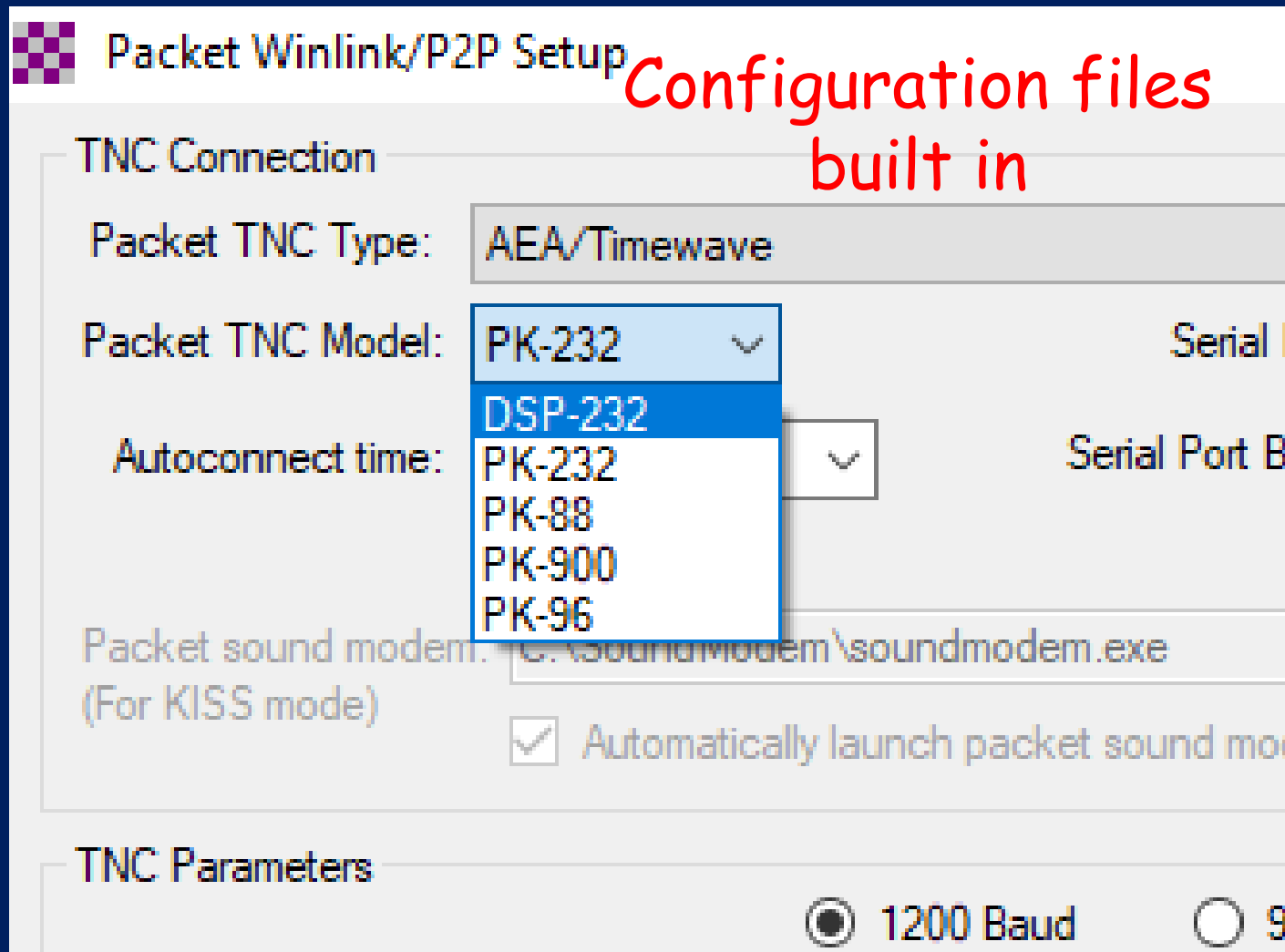
Hardware TNCs



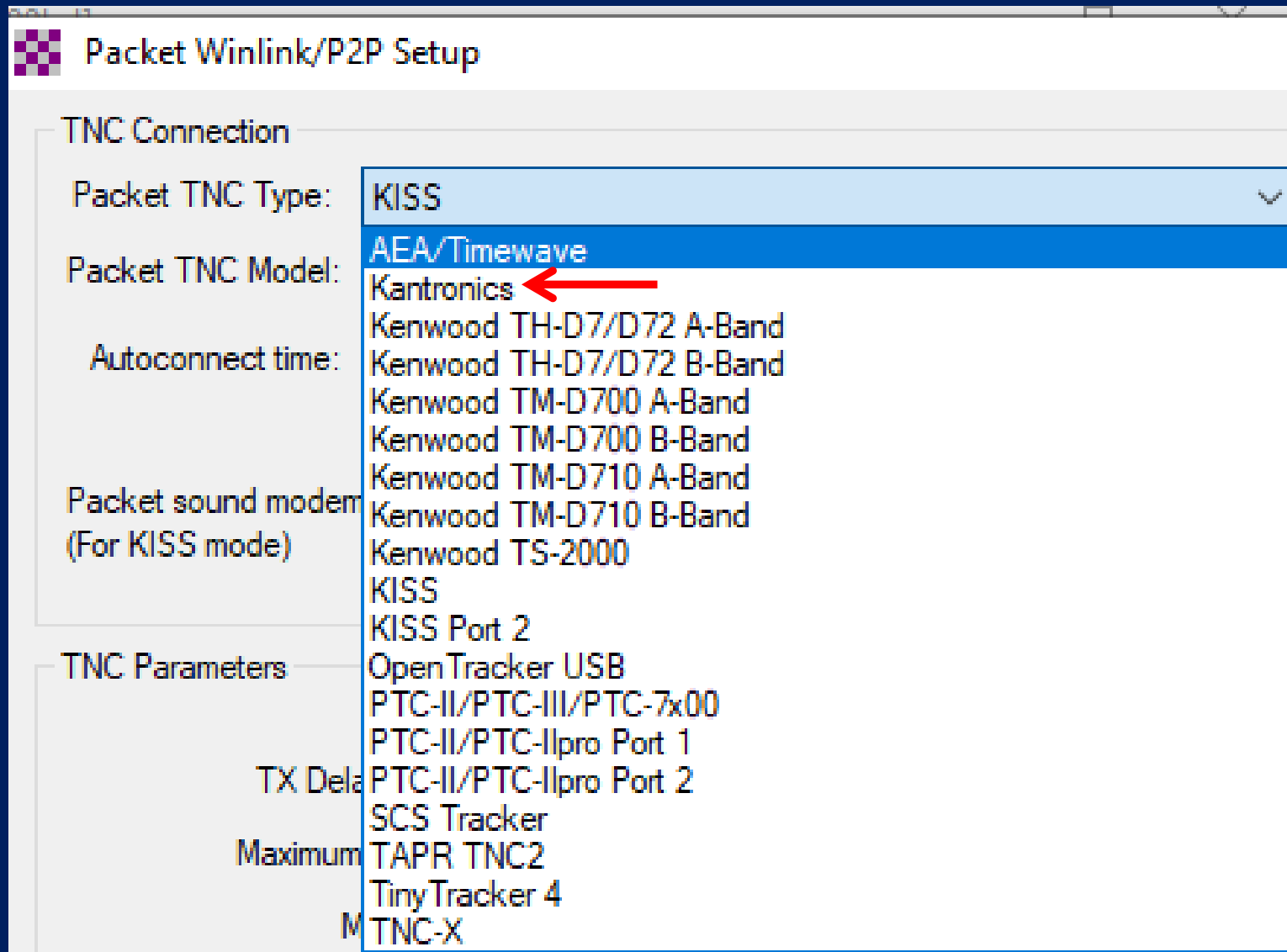
TNCs Winlink Express Supports



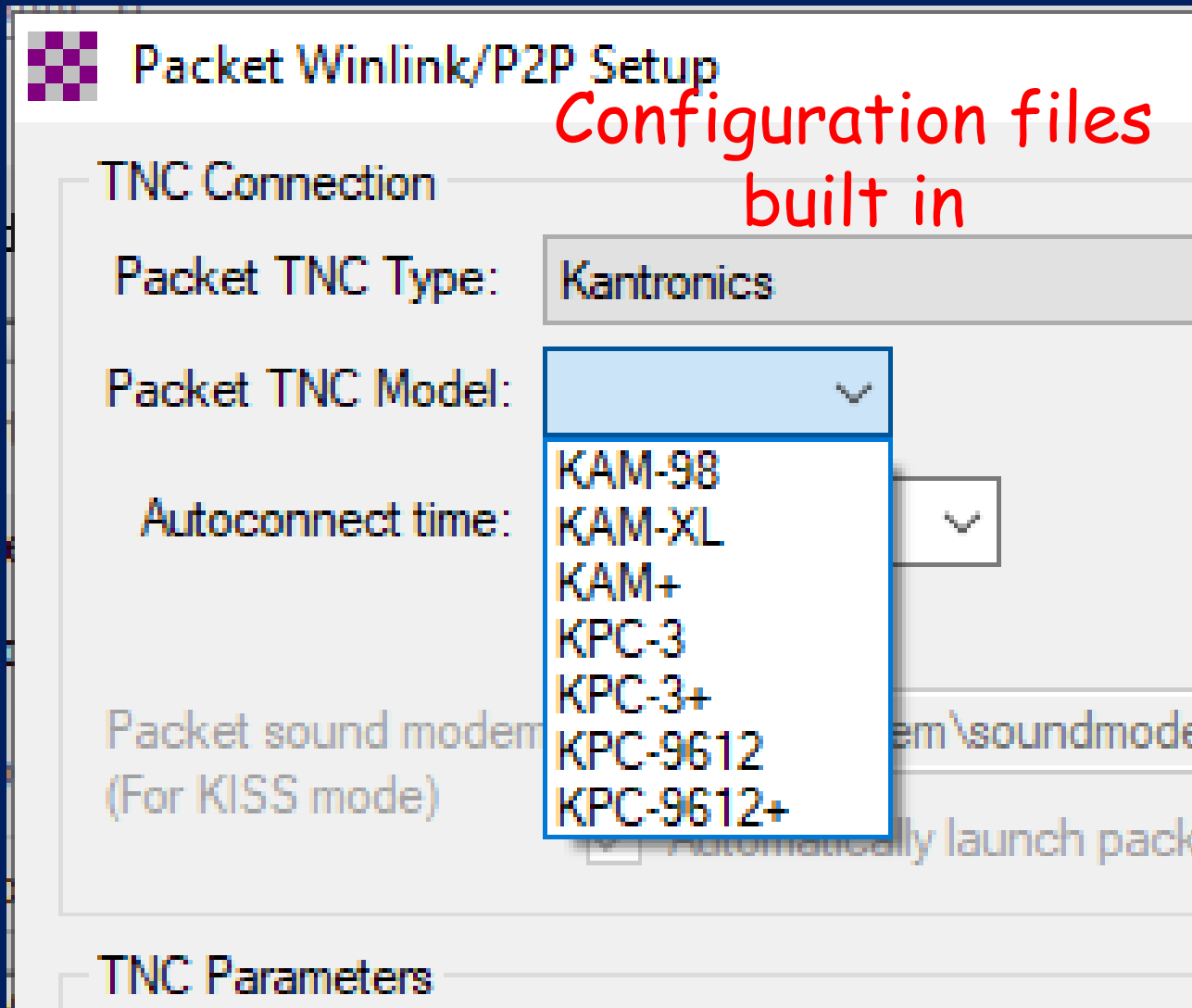
TNCs Winlink Express Supports



TNCs Winlink Express Supports



TNCs Winlink Express Supports

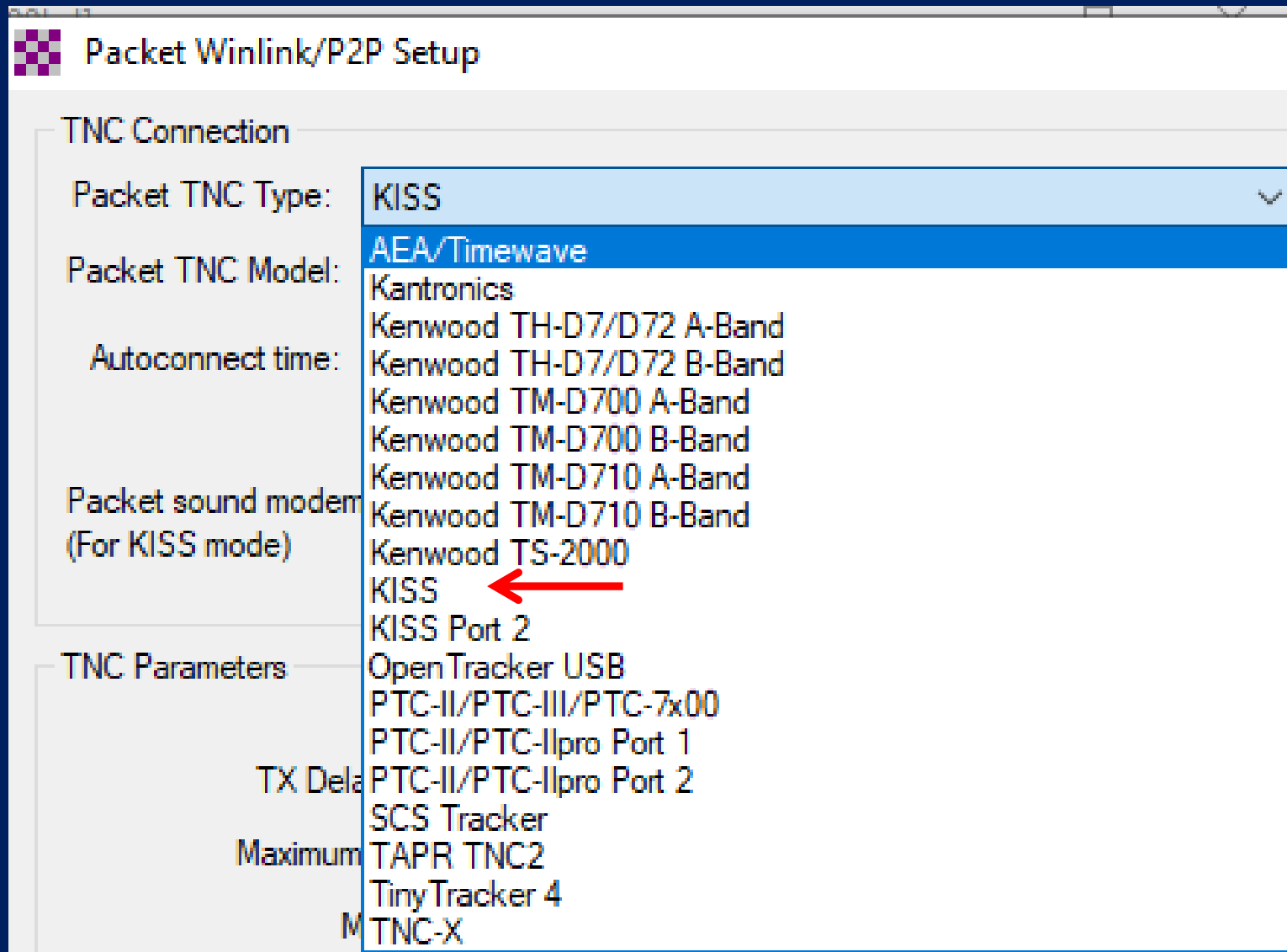


Software TNCs...

Computer converts
ASCII to AFSK

Use KISS with a sound card
Signalink, Rig Blaster, etc.

TNCs Winlink Express Supports



Soundcard Interfaces

Signalink



Rig Blaster



Soundcard + Software TNCs

- Packet on HF with ARDOP, VARA TNCs
- Packet on VHF with SoundModem TNC

Software Downloads (Free - Donation Requested)

- Winlink Express (= RMS Express)

<https://downloads.winlink.org/User%20Programs/>

- SoundModem for VHF Packet

http://uz7.ho.ua/modem_beta/soundmodem105.zip

Winlink Complements NBEMS

- Both operate on HF and on VHF/UHF with a variety of operating modes and frequencies for differing band conditions.
- Winlink is a radio-to-email system offering 3 modes with 5 redundant world-wide servers, and Message Pickup Stations when internet is out.
- The Narrow Band Emergency Messaging System (NBEMS) is our primary local to regional system offering dozens modes for a wide variety of propagation conditions.

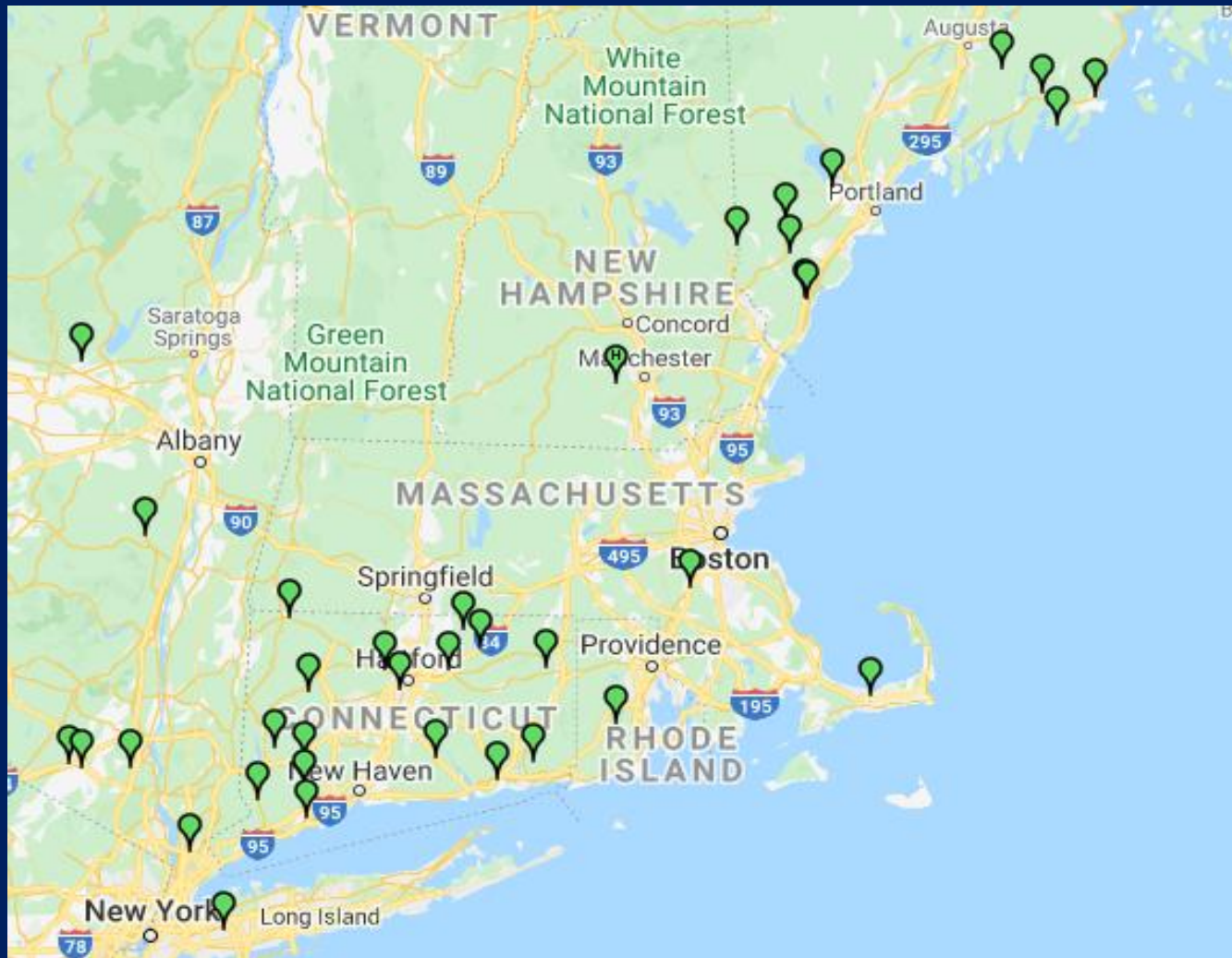
Winlink Complements NBEMS

Both programs can be open on the computer simultaneously, share a Signalink, & share a frequency.

If you are equipped with a soundcard for NBEMS, you are equipped for Winlink.

VHF Packet RMS Gateways

VHF stations with internet connections



VHF Packet RMS Gateways

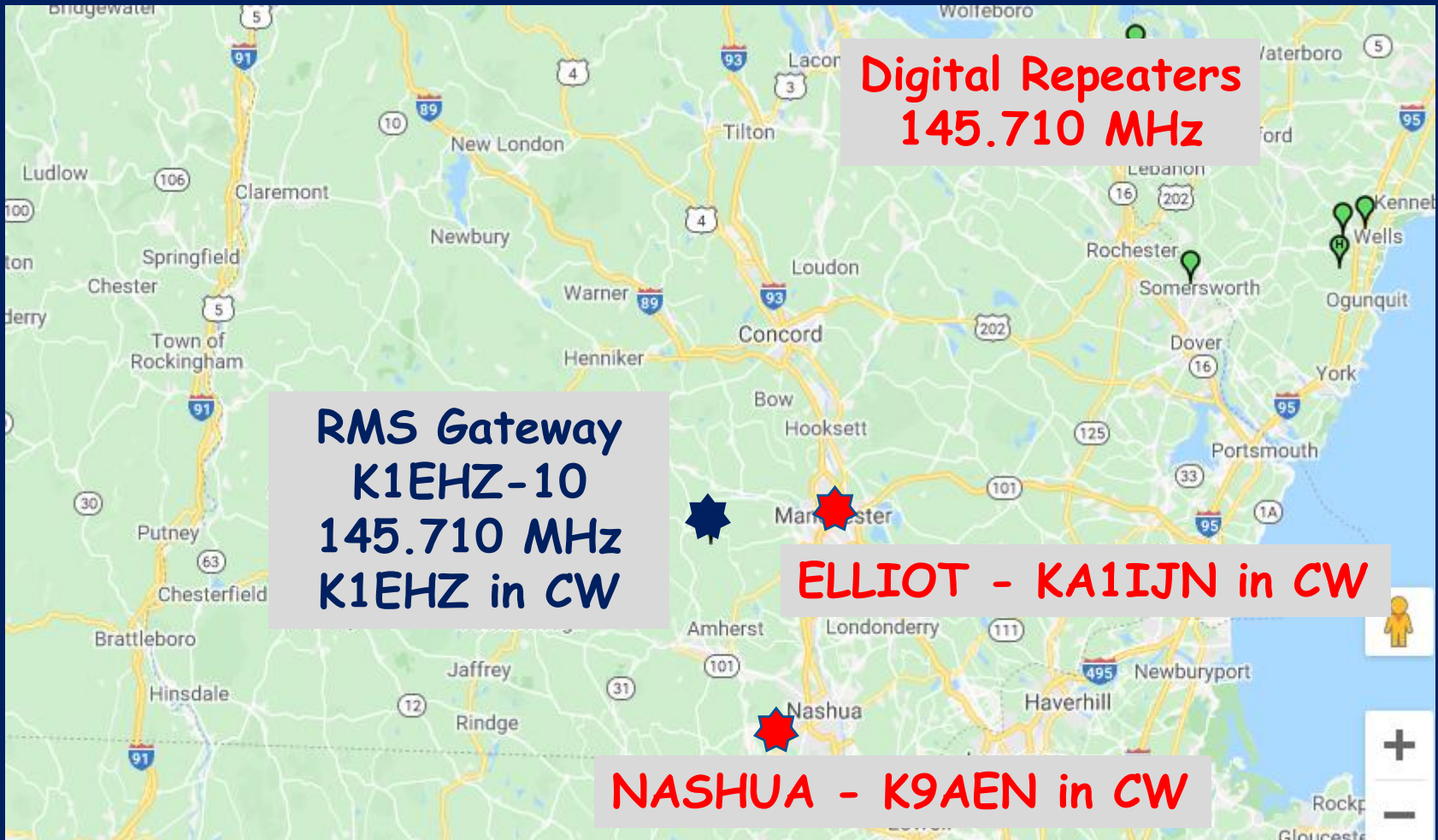
VHF stations with internet connections



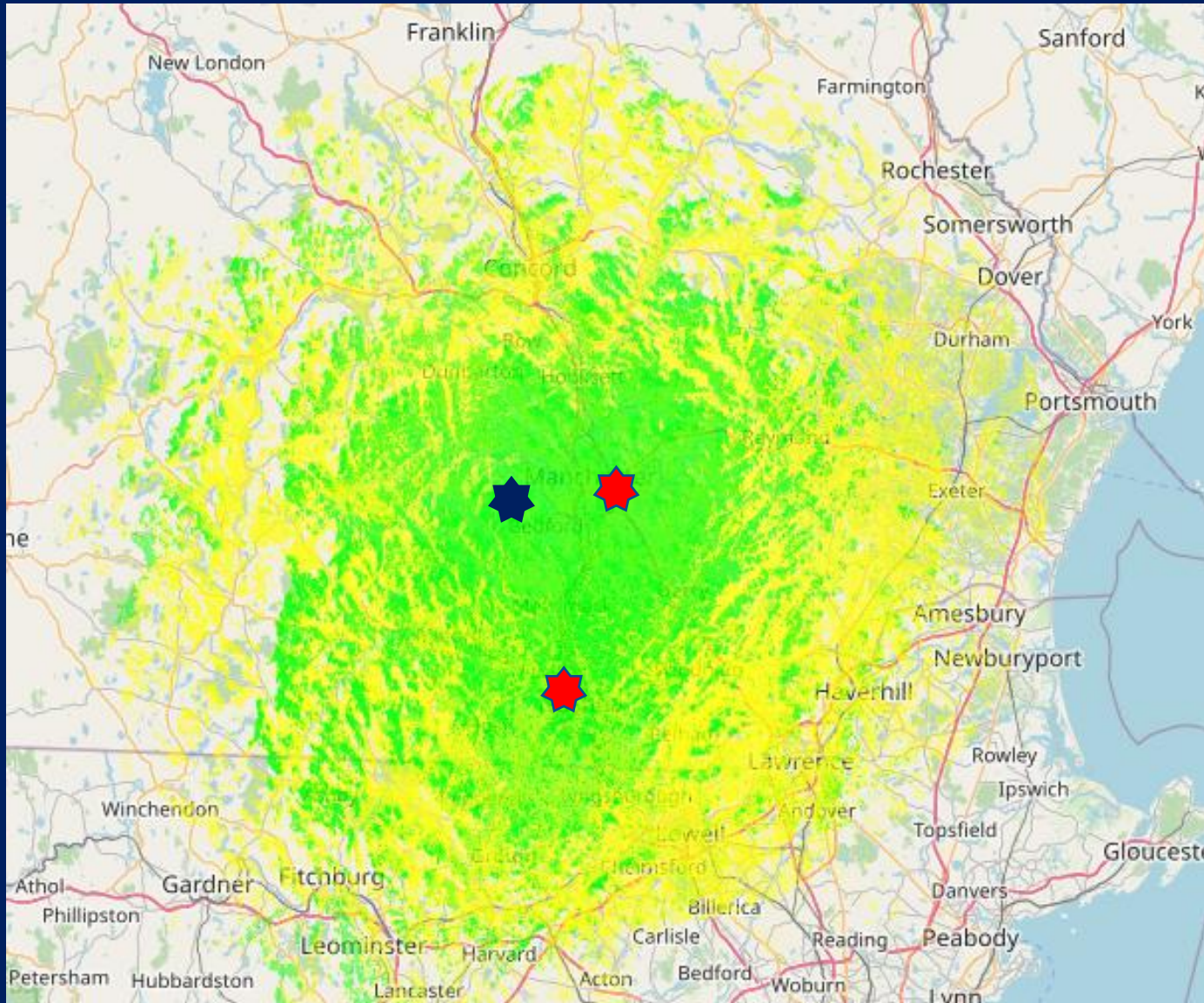
VHF Side of Our Hybrid Gateway



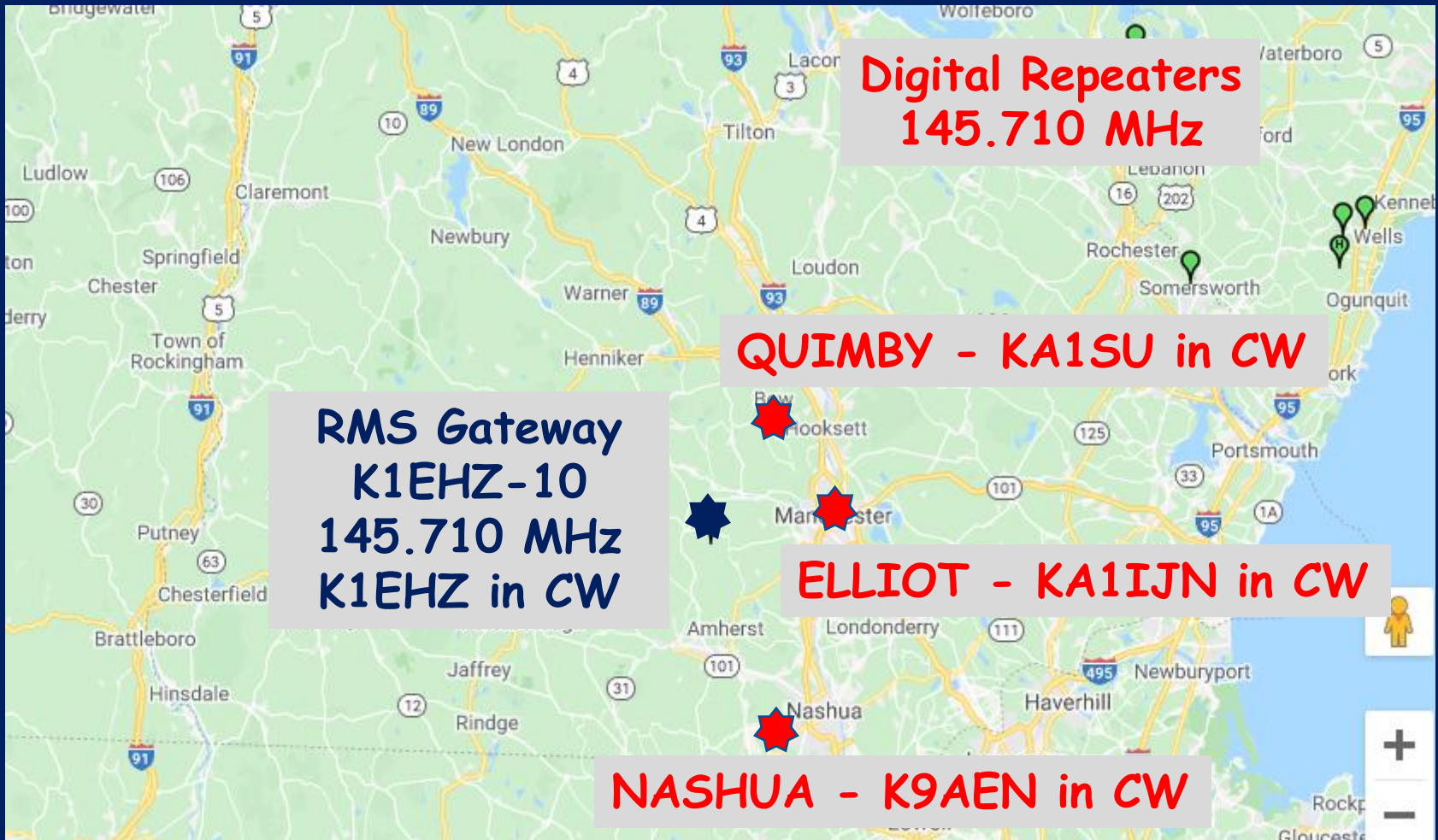
VHF Side of Our Hybrid Gateway



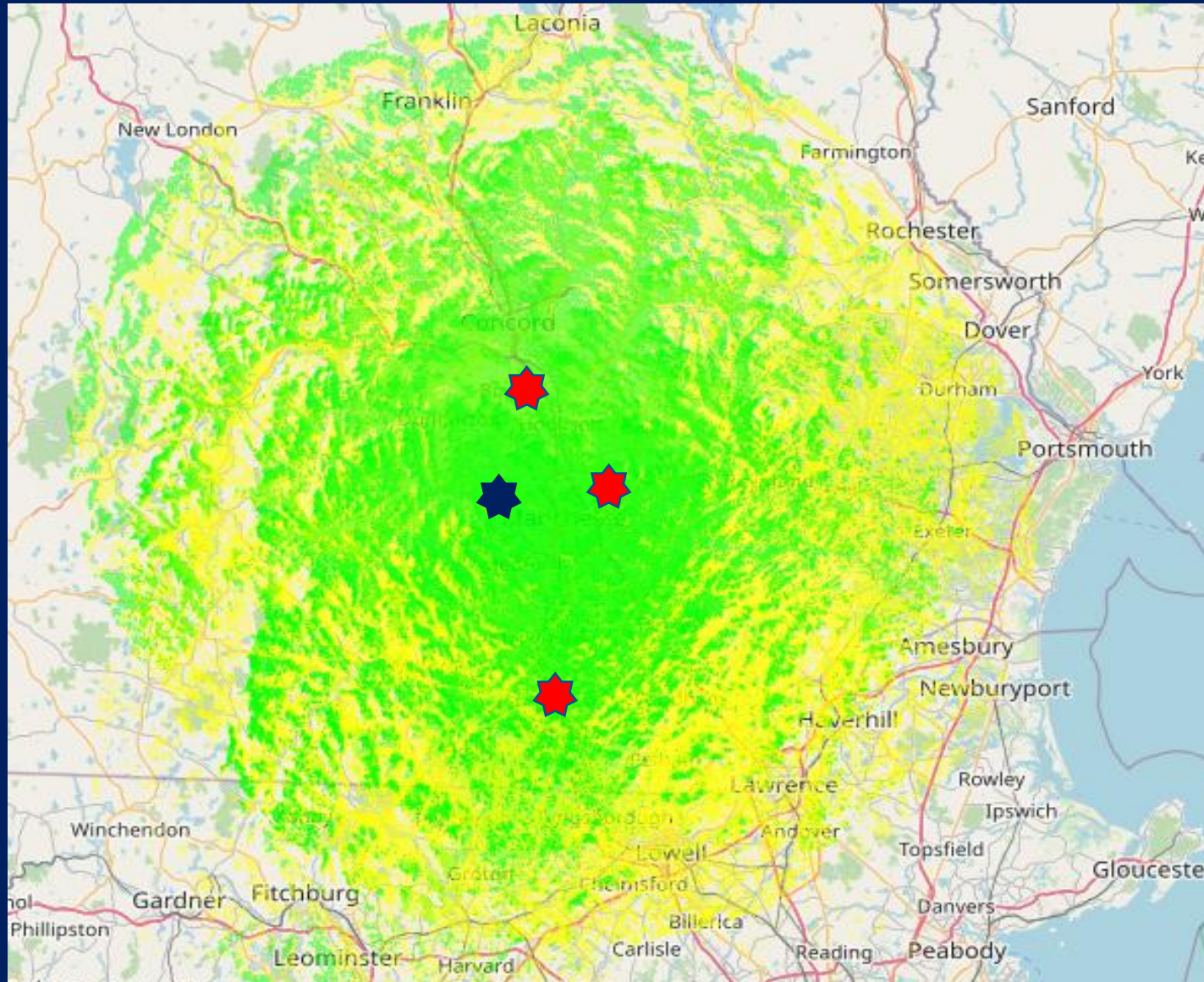
VHF Winlink Coverage - 145.710 MHz



VHF Side of Our Hybrid Gateway with Quimby Digipeater added



VHF Winlink Coverage - 145.710 MHz



How could we expand VHF coverage?

- Add fixed or mobile digipeaters
- Add VHF Gateways
- Place Gateway on a repeater frequency
- For drills and incidents, currently have the OK to use Winlink on the
 - Fort Mt, Epsom 70cm repeater (HARP)
 - Uncanoonuc Mt, Goffstown 2m repeater

Digipeater



FM Radio

TNC

Power Supply

Digipeater + Computer =
RMS Local Standalone Post Office

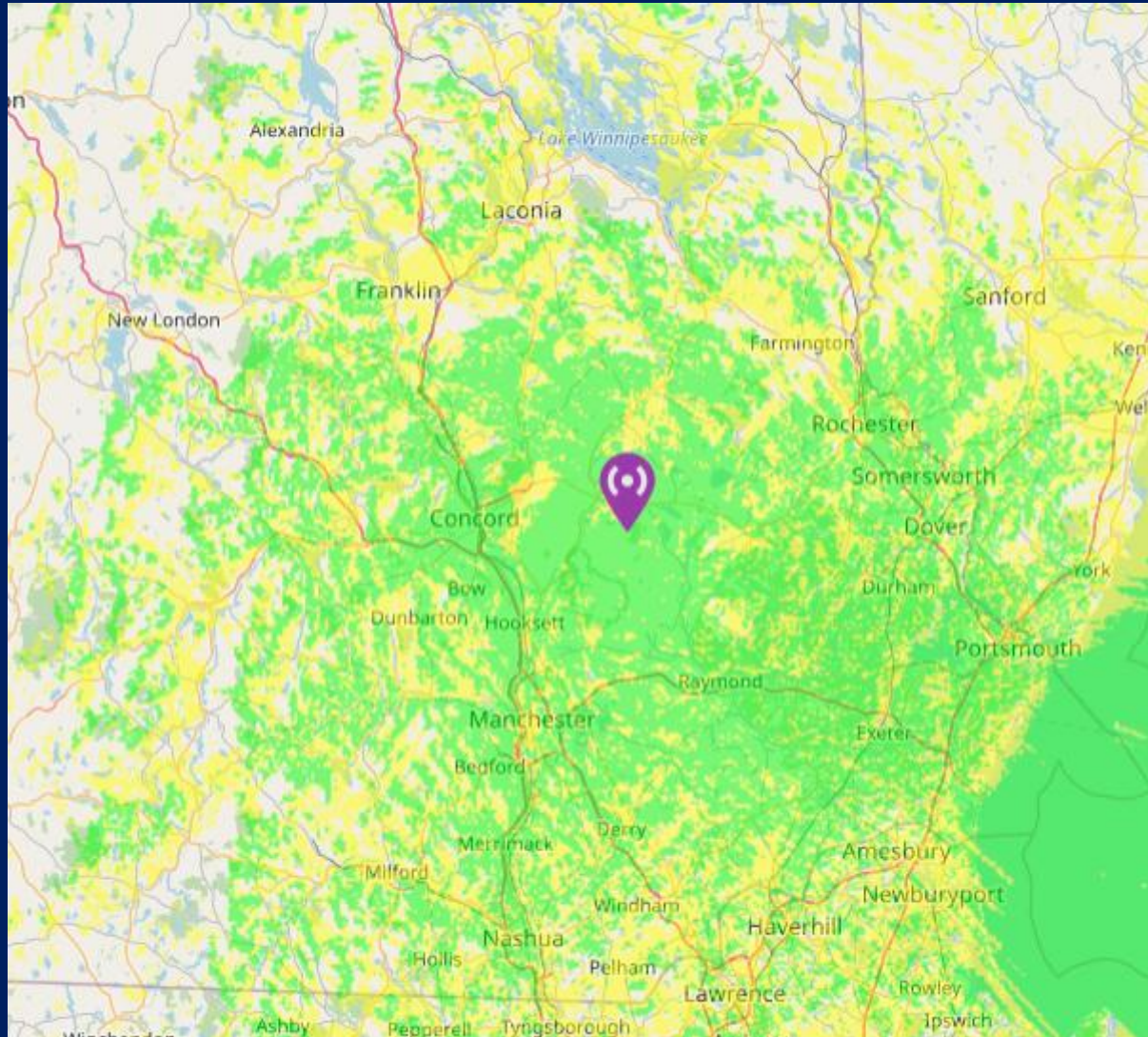


Digipeater + Computer + Regular Repeater =
Local Post Office Covering Wider Area



Epsom Repeater Coverage (70cm)

Training Example - HARP Net - Nashua, Manchester, Concord, Lakes Region, North Conway, Sea Coast

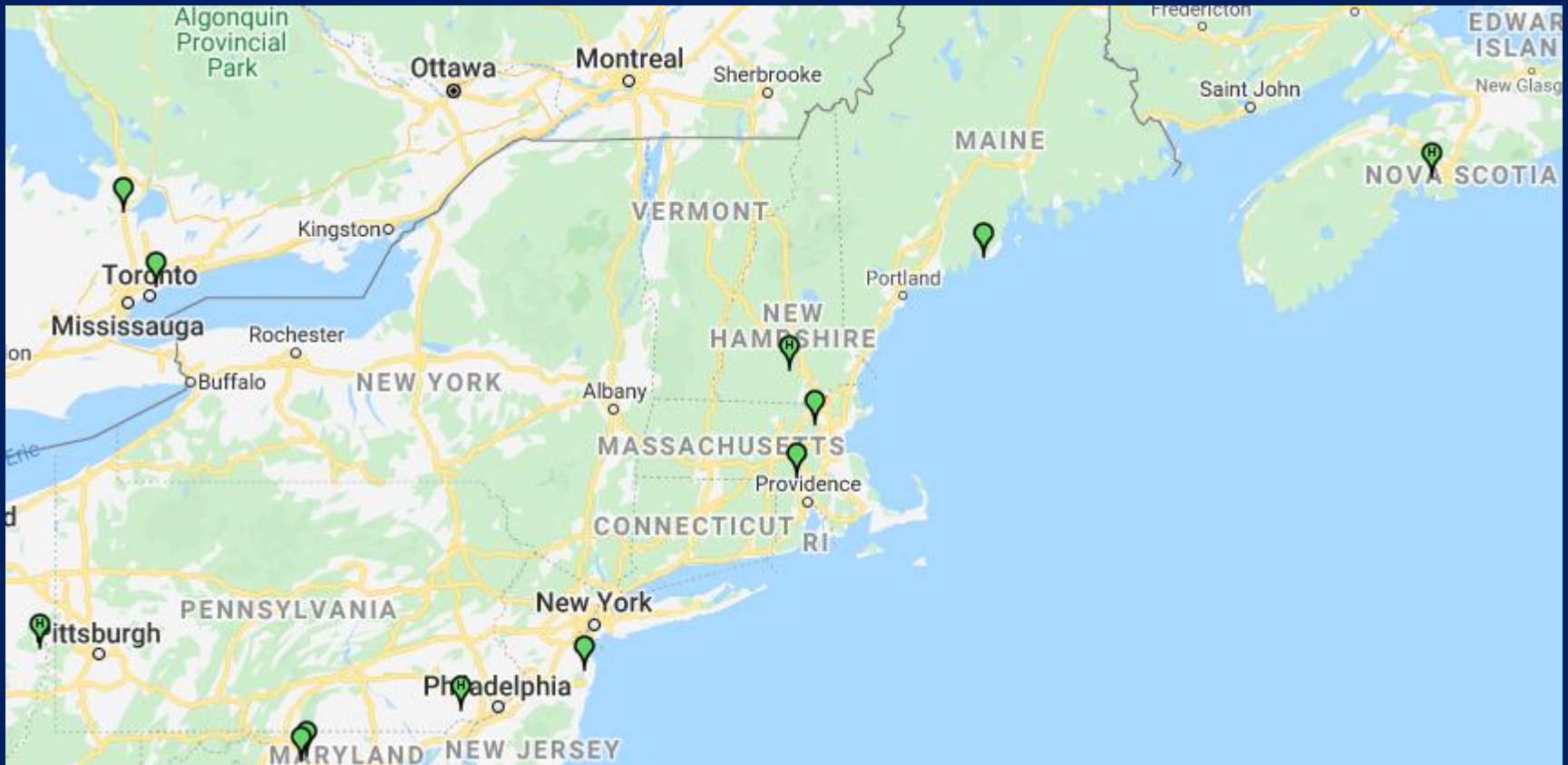


Digipeater + Computer + Internet =
VHF RMS Gateway to Winlink Global System



HF RMS Gateways

HF stations with internet connections



HF RMS Gateways

HF stations with internet connections



HF Side of Our Hybrid Gateway





Hillsborough County and Greater Manchester ARES Winlink Hybrid Gateway



HF Pactor Modem
P1 to P4 Capability

HF Auto Tuner
Auto-Forward on 160-10m

VHF Radio - FT-991

Winlink RMS Server
Dell Optiplex 780

VHF TNC - KPC-3+

HF Radio - IC-718

SignalLink



HF Capability
Receive 160 - 10m
Transmit 160 -10m

Currently listening on
80m with Auto-Forward
on 160-10m

Easily expand listening
to additional HF bands
with software setting

Remote server
management with
NoMachine software

Solar-Battery, Generator

RMS Gateway Server

RMS Packet 2.1.36.0 K1EHZ-10

Settings Disconnect Link Logs Help

Port	Stream	Callsign	Start Time	Telnet Server
Packet Channel Events				
[10]	:	FW: W1WRA		
[10]	:	PR: 33184953		
[10]	:	K1EHZ-10 DE W1WRA (FN42FX)		
[10]	:	FF		
[10]	:	FC EM OIK4WTH1RLCW 5961 1901 0		
[10]	:	F> F5		
[10]	:	FS Y		
[10]	:	FF		
[10]	:	FQ		
[10]	:	*** DISCONNECTED		
	:	2020/07/11 16:04:04		
Telnet Channel Events				
[10]	:	Connecting W1WRA to RMS Relay (localhost)		
[10]	:	Connected 2020/07/11 16:01:13		
[10]	:	Callsign :		
[10]	:	W1WRA K1EHZ		
[10]	:	SQ: 64395271		
[10]	:	SR: 60765848 145710000 0		
[10]	:	[WL2K-5.0-B2FWIHJMS]		
[10]	:	PQ: 14873566		
[10]	:	CMS via K1EHZ >		
[10]	:	FW: W1WRA		
[10]	:	[RMS Express-1.5.30.0-B2FHMS]		
[10]	:	PR: 33184953		
[10]	:	K1EHZ-10 DE W1WRA (FN42FX)		

Time: 2020/07/11 18:04 UTC -- Connections since 0000 UTC: Port 1 - 2 | Version: 2.1.36.0 | Uptime: 0 05:58:44

VHF

RMS Trimode - 1.3.31.0 - K1EHZ

Settings Stop Scan Link Abort Logs Dial Freq: 3595.000 kHz Center Freq: 3596.500 kHz Help

<input type="radio"/>	Robust Packet:	-----	Rcvd: 0 Posted: 0 Sent: 0	Disabled
<input checked="" type="radio"/>	Pactor I, II, III:	-----	Rcvd: 0 Posted: 0 Sent: 0	
<input checked="" type="radio"/>	Winmor 1600:	VA2DC	Rcvd: 0 Posted: 297 Sent: 297	
<input checked="" type="radio"/>	Vara 2300:	-----	Rcvd: 0 Posted: 0 Sent: 0	
<input checked="" type="radio"/>	ARDOP 2000:	-----	Rcvd: 0 Posted: 0 Sent: 0	

*** WINMOR 1600 connect from VA2DC on 3596.50 KHz at 2020-07-11 17:28:45 UTC *****

RMS Trimode 1.3.31.0 Hillsborough County & Greater Manchester NH ARES Hybrid Gateway -- WINMOR use on tis gateway is ending on July 20. Please start using ARDOP now.

VA2DC has 30 minutes remaining with K1EHZ

{SFI = 069 On 2020-07-11 14:00 UTC}

[WL2K-5.0-B2FWIHJMS]

:PQ: 35071110

CMS via K1EHZ >

*** Disconnected from VA2DC at 2020-07-11 17:30:51 UTC, CMS link ended.

--Connection Summary-- 2020-07-11 17:30:51 Mode: WINMOR16 Bytes Confirmed Sent: 297 Bytes To CMS: 0 Last Command: > Session Time: 2.1 min

*** Active Pactor Channels reported to Winlink system data base 2020-07-11 17:56:11

HF

RMS Relay - 3.1.1.0 - K1EHZ

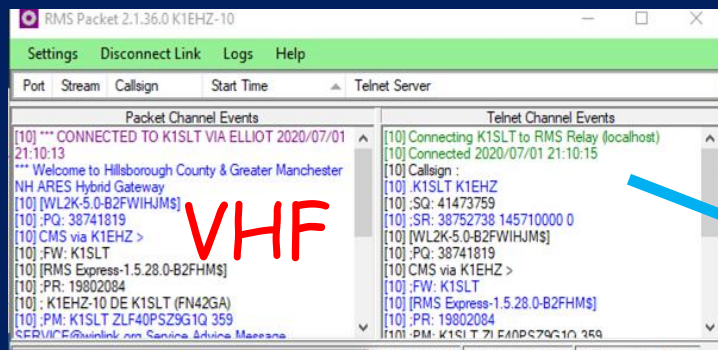
Settings Begin-forwarding View Logs Help

Inter-Connects
VHF-HF-Internet

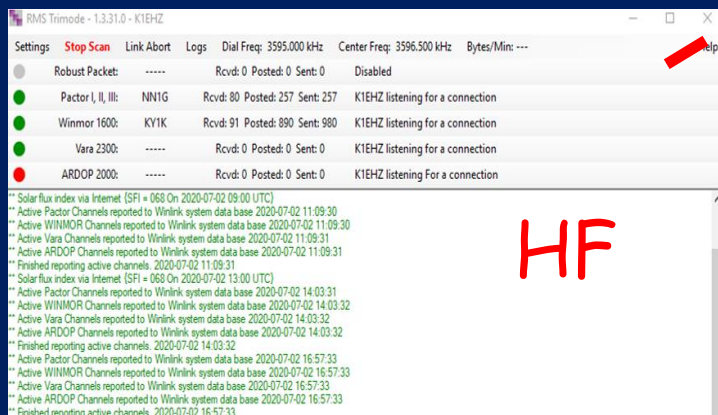
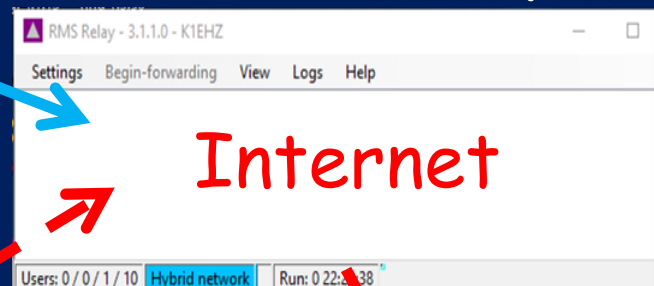
Users: 0 / 0 / 1 / 4 Hybrid network Run: 0 05:58:44

3 Programs Interact

When internet is available



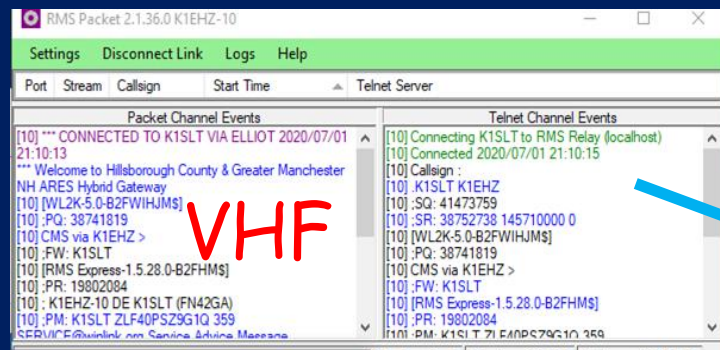
RMS Relay



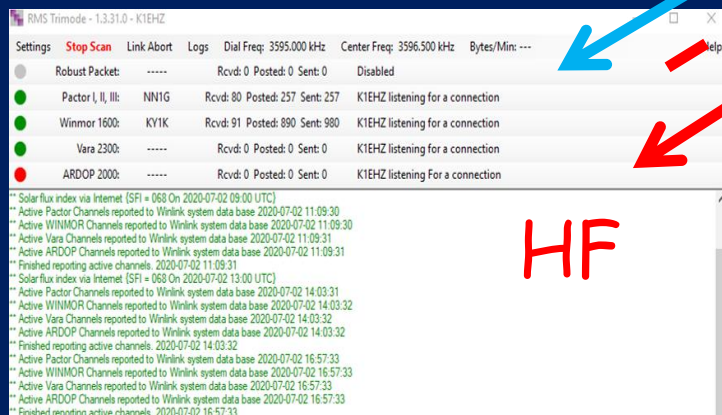
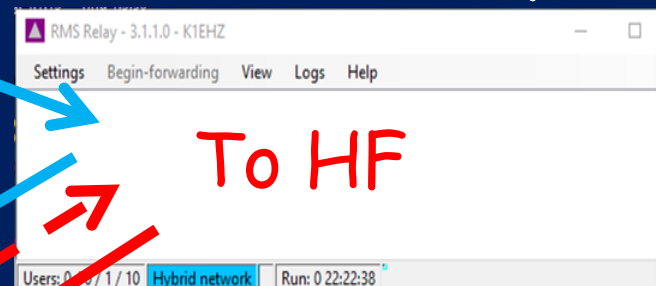
To Internet

3 Programs Interact

When internet is not available



RMS Relay



Auto-Forwarding

How does Auto-Forwarding work?

- Propagation forecast downloaded daily
- Software uses Reliability and Quality estimates in forecast to determine frequency and station for forwarding
- Software steps radio through calls to stations in decreasing order of Reliability and Quality until message is forwarded
- Pactor 2,3 have been the forwarding modes
- Pactor 4 used when FCC declares emergency
- New high-speed VARA mode may also be used for forwarding

Auto-Forwarding Propagation Forecast

Voice of America Coverage Area Prediction Model

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W1EO	1845.000	P2, P1	FN42IM	00-23	PUBLIC	36	151	100	100
K1EHZ	3596.500	P3, P2, P1	FN42EX	00-23	PUBLIC	0	000	99	99
W1EO	3597.900	P3	FN42IM	00-23	PUBLIC	36	151	99	99
W1EO	7102.500	P3	FN42IM	00-23	PUBLIC	36	151	96	96
KQ4ET	7102.700	P3, P2, P1	FM16XU	00-23	PUBLIC	483	210	78	54
KQ4ET	7101.500	P3, P2, P1	FM16XU	00-23	PUBLIC	483	210	78	54
WD1O	3589.500	P3, P2, P1	FN53IX	00-23	PUBLIC	136	059	78	53
KC8YJJ	7102.500	P3, P2, P1	EN90PL	00-23	PUBLIC	498	253	78	54
VE1YZ	5405.000	P4, P3	FN84BQ	00-23	PUBLIC	403	070	76	52
AJ4FW	7103.700	P3, P2, P1	FM07BC	00-23	PUBLIC	595	230	74	50
W6IDS	7084.500	P2	EM79NV	00-23	PUBLIC	717	257	67	45
W6IDS	7061.500	P2	EM79NV	00-23	PUBLIC	717	257	67	45
W3JY	3591.000	P3, P2, P1	FN20FA	00-23	PUBLIC	287	226	63	44
N2LEE	7102.000	P3, P2, P1	FM18HX	00-23	PUBLIC	407	229	63	47
VE1YZ	7096.500	P4, P3	FN84BQ	00-23	PUBLIC	403	070	62	46
N3HYM-10	7102.500	P3, P2, P1	FM19FK	00-23	PUBLIC	392	233	61	46

Reliability = % Time Path SNR meets or exceeds Required SNR

Auto-Forwarding Propagation Forecast

Voice of America Coverage Area Prediction Model

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W1EO	1845.000	P2, P1	FN42IM	00-23	PUBLIC	36	151	100	100
K1EHZ	3596.500	P3, P2, P1	FN42EX	00-23	PUBLIC	0	000	99	99
W1EO	3597.900	P3	FN42IM	00-23	PUBLIC	36	151	99	99
W1EO	7102.500	P3	FN42IM	00-23	PUBLIC	36	151	96	96
KQ4ET	7102.700	P3, P2, P1	FM16XU	00-23	PUBLIC	483	210	78	54
KQ4ET	7101.500	P3, P2, P1	FM16XU	00-23	PUBLIC	483	210	78	54
WD1O	3589.500	P3, P2, P1	FN53IX	00-23	PUBLIC	136	059	78	53
KC8YJJ	7102.500	P3, P2, P1	EN90PL	00-23	PUBLIC	498	253	78	54
VE1YZ	5405.000	P4, P3	FN84BQ	00-23	PUBLIC	403	070	76	52
AJ4FW	7103.700	P3, P2, P1	FM07BC	00-23	PUBLIC	595	230	74	50
W6IDS	7084.500	P2	EM79NV	00-23	PUBLIC	717	257	67	45
W6IDS	7061.500	P2	EM79NV	00-23	PUBLIC	717	257	67	45
W3JY	3591.000	P3, P2, P1	FN20FA	00-23	PUBLIC	287	226	63	44
N2LEE	7102.000	P3, P2, P1	FM18HX	00-23	PUBLIC	407	229	63	47
VE1YZ	7096.500	P4, P3	FN84BQ	00-23	PUBLIC	403	070	62	46
N3HYM-10	7102.500	P3, P2, P1	FM19FK	00-23	PUBLIC	392	233	61	46

Reliability = % Time Path SNR meets or exceeds Required SNR

Pactor Connection with N2LEE (VA)

RMS Trimode - 1.3.31.0 - K1EHZ

Settings	Start Scan	Link Abort	Logs	Dial Freq: 3595.000 kHz	Center Freq: 3596.500 kHz
<input type="radio"/>	Robust Packet:	-----		Rcvd: 0 Posted: 0 Sent: 0	Disabled
<input checked="" type="radio"/>	Pactor I, II, III:	N2LEE		Rcvd: 316 Posted: 712 Sent: 656	P3 200 Sending ARQ Repeating
<input type="radio"/>	Winmor 1600:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked
<input type="radio"/>	Vara 2300:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked
<input type="radio"/>	ARDOP 2000:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked

*** Pactor 2 connect from N2LEE on 7102.00 KHz at 2020-07-13 13:13:40 UTC *****

RMS Trimode 1.3.31.0 Dropping Support for WINMOR on Aug 1st - Please use VARA 4.0 or ARDOP

K1EHZ-R has 120 minutes remaining with N2LEE

Message will be sent to a CMS through the Internet and also forwarded to the recipient via HF radio.

;WL2K-Radio/Internet_Network
[WL2K-3.1.1.0-B2FWIHJMS]
;PQ: 94399894
N2LEE RMS Relay >

;FR:
;WL2K-Radio/Internet_Network
[RMS Relay-3.1.1.0-B2FWIHJMS]
;PR: 93792071
; N2LEE DE K1EHZ (FN42EX)
FC EM QR7FFYRNYPU4@AB4NX@R 809 520 0
F> 10
FS Y
[Transferring binary data to Pactor TNC]

Message via HF Radio and Internet

RMS Trimode - 1.3.31.0 - K1EHZ

Settings	Start Scan	Link Abort	Logs	Dial Freq: 3595.000 kHz	Center Freq: 3596.500 kHz
<input type="radio"/>	Robust Packet:	-----		Rcvd: 0 Posted: 0 Sent: 0	Disabled
<input checked="" type="radio"/>	Pactor I, II, III:	N2LEE		Rcvd: 316 Posted: 712 Sent: 656	P3 200 Sending ARQ Repeating
<input type="radio"/>	Winmor 1600:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked
<input type="radio"/>	Vara 2300:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked
<input type="radio"/>	ARDOP 2000:	-----		Rcvd: 0 Posted: 0 Sent: 0	Blocked

*** Pactor 2 connect from N2LEE on 7102.00 KHz at 2020-07-13 13:13:40 UTC *****
RMS Trimode 1.3.31.0 Dropping Support for WINMOR on Aug 1st - Please use VARA 4.0 or ARDOP
K1EHZ-R has 120 minutes remaining with N2LEE
Message will be sent to a CMS through the Internet and also forwarded to the recipient via HF radio.
:WL2K-Radio/Internet_Network
[WL2K-3.1.1.0-B2FWIHJM\$]
:PQ: 94399894
N2LEE RMS Relay >
:FR:
:WL2K-Radio/Internet_Network
[RMS Relay-3.1.1.0-B2FWIHJM\$]
:PR: 93792071
: N2LEE DE K1EHZ (FN42EX)
FC EM QR7FFYRNYPU4@AB4NX@R 809 520 0
F> 10
FS Y
[Transferring binary data to Pactor TNC]

Radio-only Message for AA3YB on 7102 KHz

HF Forwarding Session

Call sign: N2LEE Frequency: 7102.00 Stop Close Dial: 7100.5 kHz

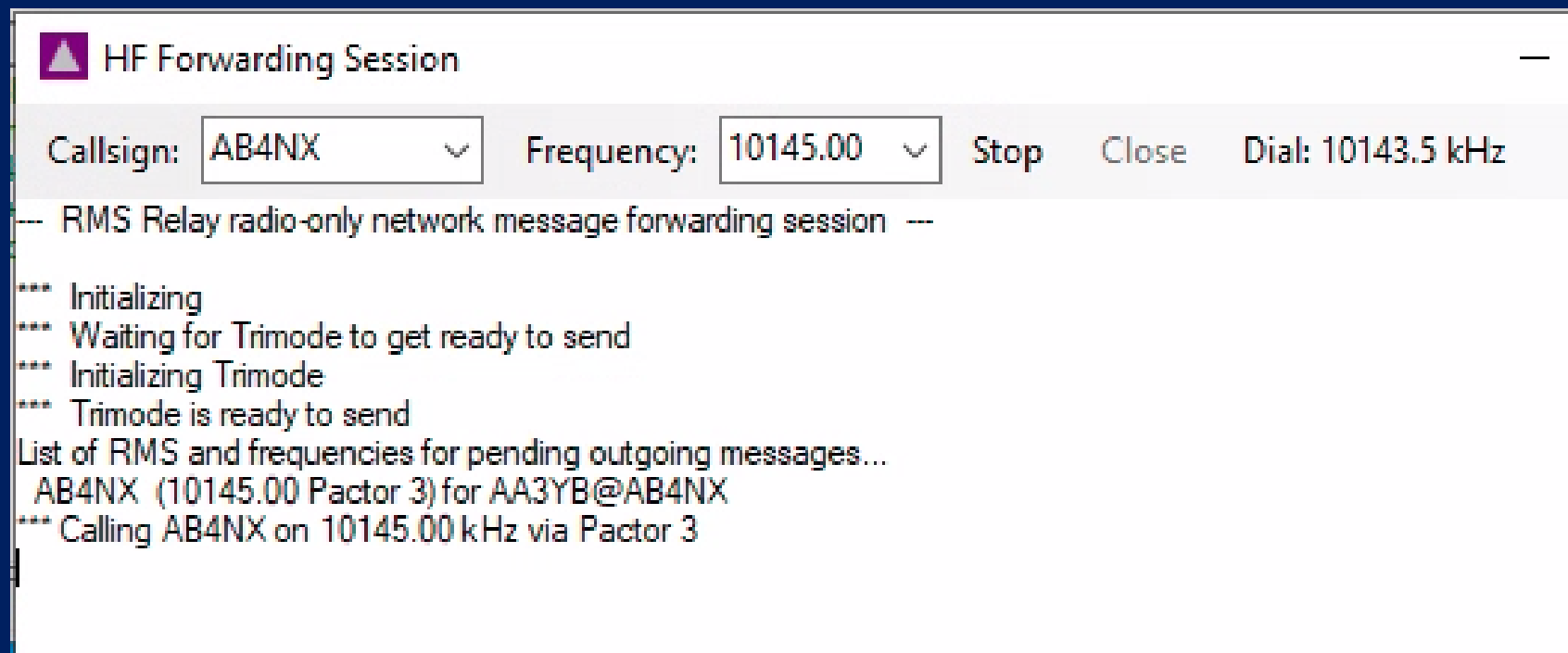
RMS Relay radio-only network message forwarding session

*** Initializing
*** Waiting for Trimode to get ready to send
*** Initializing Trimode
*** Trimode is ready to send
List of RMS and radio-only messages for priority outgoing messages...
N2LEE (7102.00 Pactor 3) for AA3YB@AB4NX
Calling N2LEE on 7102.00 kHz via Zartov?

RMS Trimode 1.3.31.0 Dropping Support for WINMOR on Aug 1st - Please use VARA 4.0 or ARDOP
K1EHZ-R has 120 minutes remaining with N2LEE
{SFI = 068 On 2020-07-13 11:00 UTC}
Message will be sent to a CMS through the Internet and also forwarded to the recipient via HF radio.
:WL2K-Radio/Internet_Network
[WL2K-3.1.1.0-B2FWIHJMS]
:PQ: 94399894
N2LEE RMS Relay >
:FR:
:WL2K-Radio/Internet_Network
[RMS Relay-3.1.1.0-B2FWIHJMS]
:PR: 93792071
: N2LEE DE K1EHZ (FN42EX)
FC EM QR7FFYRNYP4@AB4NX@R 809 520 0
F> 10
FS Y
Sending Messages
*** Sending QR7FFYRNYP4@AB4NX@R

Msg for AA3YB in FL

Auto-Forwarding to AB4NX (GA) Message Pick-up Station on 10145 KHz

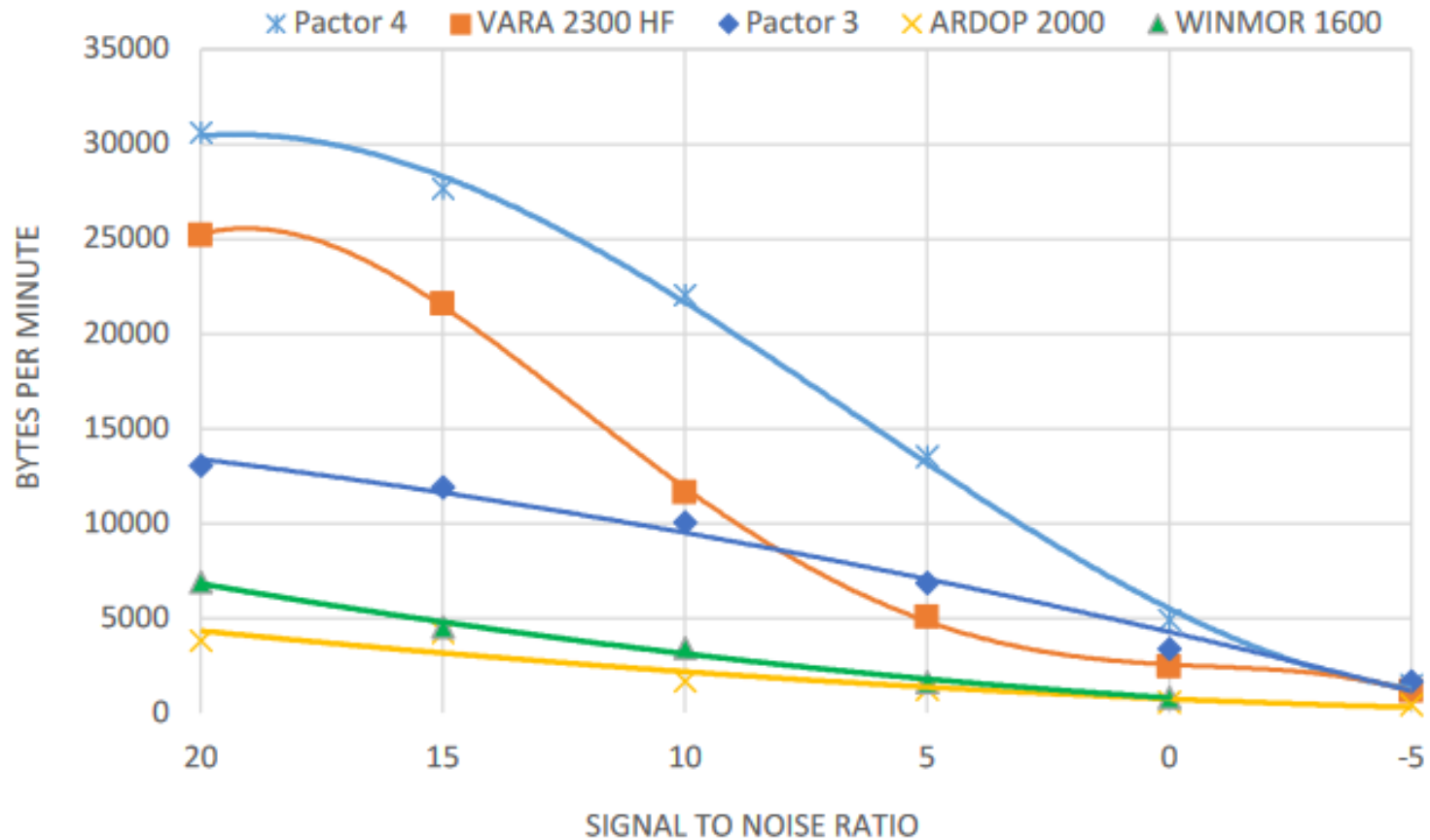


The screenshot shows a software window titled "HF Forwarding Session". At the top, there is a header bar with a purple triangle icon on the left and a minus sign on the right. Below the header, there is a control bar with the following elements: "Callsign:" followed by a dropdown menu showing "AB4NX", "Frequency:" followed by a dropdown menu showing "10145.00", a "Stop" button, a "Close" button, and "Dial: 10143.5 kHz". Below the control bar, there is a status bar that reads "RMS Relay radio-only network message forwarding session". The main area of the window contains a log of messages:

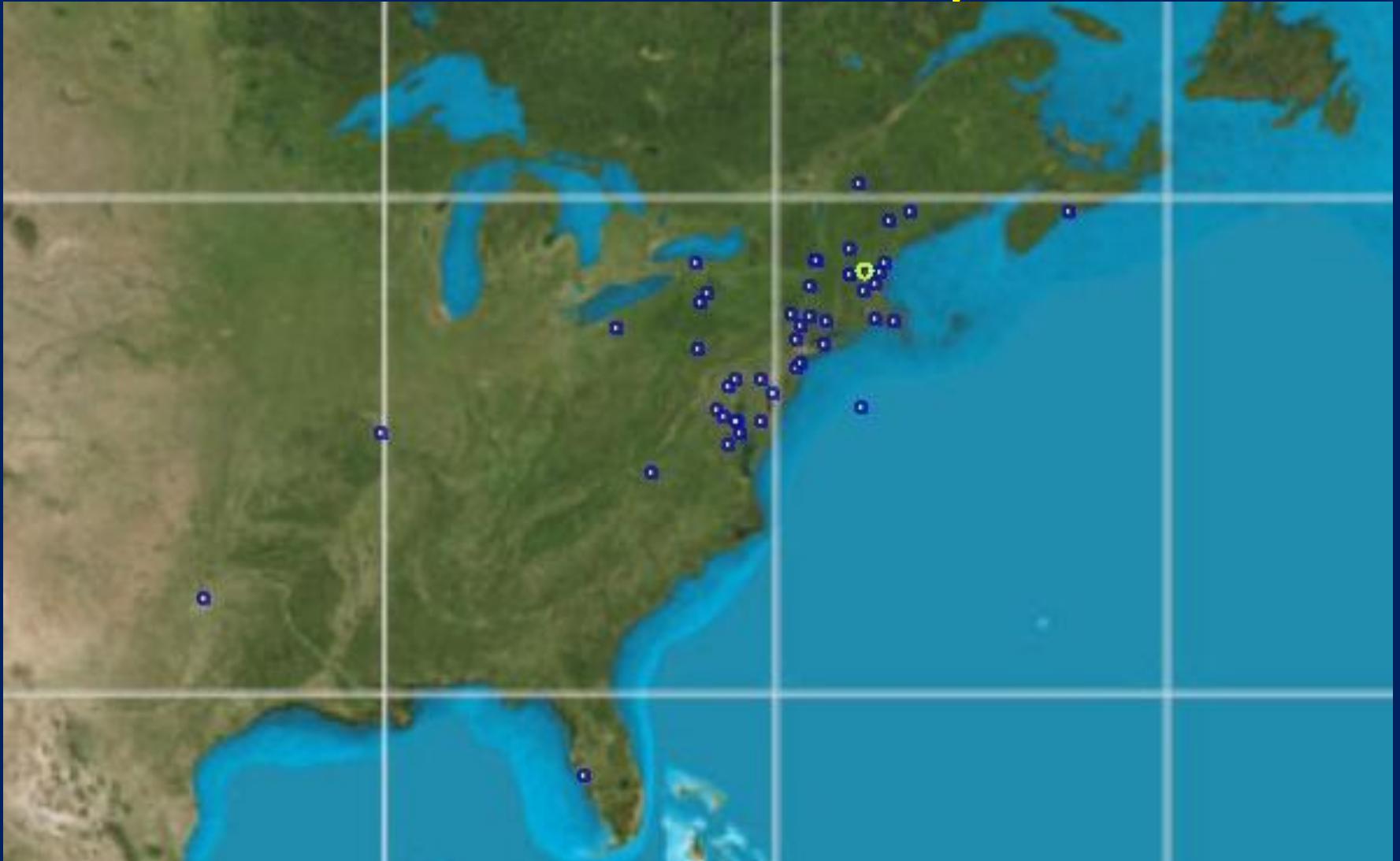
- *** Initializing
- *** Waiting for Trimode to get ready to send
- *** Initializing Trimode
- *** Trimode is ready to send
- List of RMS and frequencies for pending outgoing messages...
- AB4NX (10145.00 Pactor 3) for AA3YB@AB4NX
- *** Calling AB4NX on 10145.00 kHz via Pactor 3

Winlink Mode Simulations - N5TW

PERFORMANCE VERSUS SNR: MPG

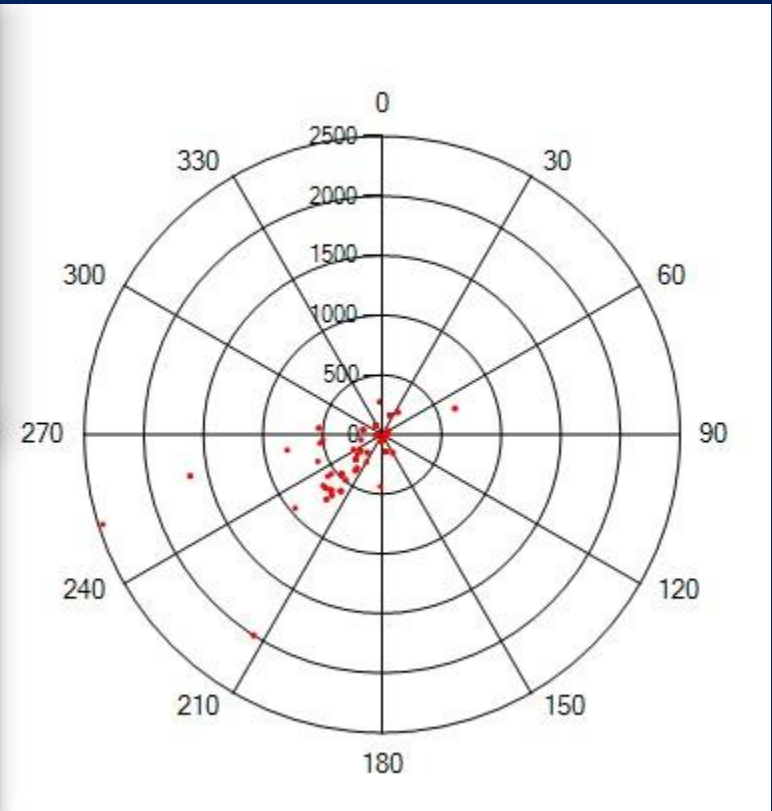
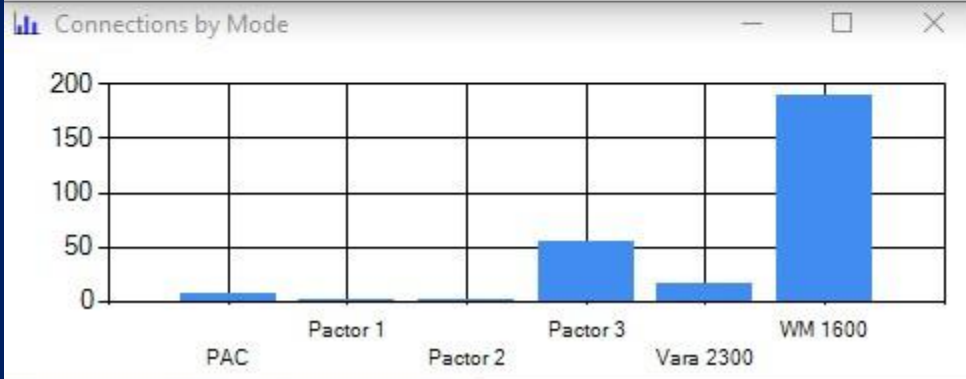
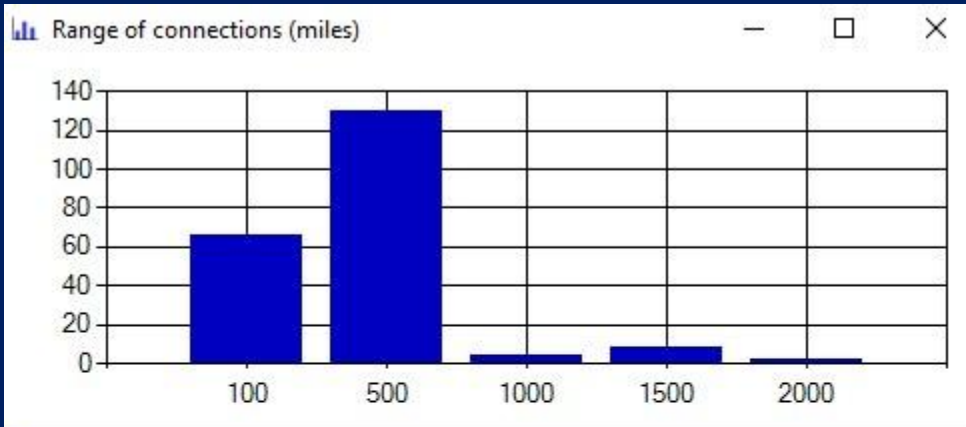


30-day Snapshot of Stations Using Our HF Gateway



30-day Snapshot of 80m Gateway Use

Intentionally NVIS for Regional Coverage



ARES Groups Use Our HF Gateway

- ARES groups in several states use our HF gateway for training, including check-in nets, sending net reminders and rosters to their ARES members, and doing radio-only messaging drills.
- FL, VA, MD, DE, OH, PA and NY ARES groups use the HF side weekly to monthly.
- WI and MI ARES groups use the HF side occasionally.
- AR and LA ARES used it once or twice.
- VA has state-wide Wednesday Winlink Check-in.

Importantly, if these groups can reach our gateway, we should be able to reach gateways in their areas if (when) the internet is out here.

Winlink Express

Key Features

Winlink Express

=

RMS Express

Winlink Express Client

Winlink Express 1.5.30.0 - K1EHZ

K1EHZ Settings Message Attachments Move To: Saved Items Delete Open Session: Packet Winlink Logs Help

No active session...

	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
	2020/06/30 19:57	66C45627YU19	241	NF1L	NF1L	K1EHZ...	Winlink Wednesday Net
	2020/06/19 05:21	W3GO1JMHHQSV	161	W1EAA	W1EAA	K1EHZ	test chromebook
	2020/06/19 05:18	235W07D0PU36	172	W1EAA	W1EAA	K1EHZ	test chromebook
	2020/06/19 00:40	0WG7K2EYLVQU	332	NF1L	NF1L	W1EAA...	Winlink Wednesday Net
	2020/06/11 17:47	2EGMMI TAI W21	206	K411IN	K411IN	K1EHZ	Test

Message ID: F1O29DXLBSGM
 Date: 2020/03/02 16:46
 From: N5EI
 To: AB1AV; AB1ST; K1ACL; K1CHR; K1CMD; K1FDP; K1HIL; K1MHT; K1MWV; K1NCS; K1PJS; K1ROC; K1SGA; K1STF; K1WRK; K1VGM; KB1CFL; KD1TD; KL1WD; NIAMD; N1CKM; N1GB; N1MEO; N1RCQ; W1CEN
 Cc: W1COS; W1CPL; W1GRF; W1MHT; W1PID; W1ROC; W1RTM; W1SEC; W1SUL; WA1OE2; WA1YZN; WA1ZCN; WQ2H; WX1GYX; K1EHZ; KA1TWX; KB1SWW; KB8RPO; KC3DOW; NK1N; WB2GAI; KB1NEK; K3EUI; KB3SAR; KC3JUD; K1CFI; W1WNS; K3SKS; K3BFP
 Source: N5EI
 Downloaded-from: Telnet:CMS-SSL
 Subject: Quarterly Test of Winexpress Capability

All NHDN users.
 This is a test of your WinExpress capability and attention to your WinExpress mail.

Please respond with the SUM of 3, 5, and 7.

We will use the results for WinExpress peer to peer traffic generation.
 73,
 Ed, N5EI

Operating Modes

- Telnet Winlink
- Packet Winlink
- Pactor Winlink
- Robust Packet Winlink
- Winmor Winlink
- Ardop Winlink
- Vara HF Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only

- Vara HF Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only
- Winmor Radio-only
- Vara Radio-only
- Telnet Radio-only
-
- Telnet Post Office

Operating Modes

- Packet Winlink
- Pactor Winlink
- Robust Packet Winlink
- Winmor Winlink
- Ardop Winlink
- Vara HF Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only



Modes for Connecting
to Radio Message
Servers over the air

Operating Modes

Peer-to-Peer
(Point-to-Point)
Modes
Don't Need
Radio Message
Servers or
Internet



- Telnet Winlink
- Vara HF Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only
- Winmor Radio-only
- Vara Radio-only
- Telnet Radio-only
-
- Telnet Post Office

Operating Modes

Radio-only Modes
Don't Need
Internet



- Telnet Winlink
- Vara HF Winlink
- Vara FM Winlink
- Iridium GO Winlink
-
- Packet P2P
- Pactor P2P
- Robust Packet P2P
- Winmor P2P
- Ardop P2P
- Vara P2P
- Vara FM P2P
- Telnet P2P
-
- Pactor Radio-only
- Winmor Radio-only
- Vara Radio-only
- Telnet Radio-only
-
- Telnet Post Office

Message Pick-up Stations

During internet outage we still need a place to drop & pick-up email

Radio Message
Severs on the
Hybrid Network
Have Built-in
Post Offices

Hybrid Network Parameters

Parameters specified on this screen control the flow of messages when they are being sent via radio-only forwarding.

Message Pickup Stations (MPS)

MPS 1:

MPS 2:

MPS 3:

Update list of RMS available as MPS

Display list of RMS available as MPS

Register MPS via Internet

Queue radio message to register my MPS

Last MPS list update: 2020-06-25-08:28

E-mail notification of pending messages on MPS

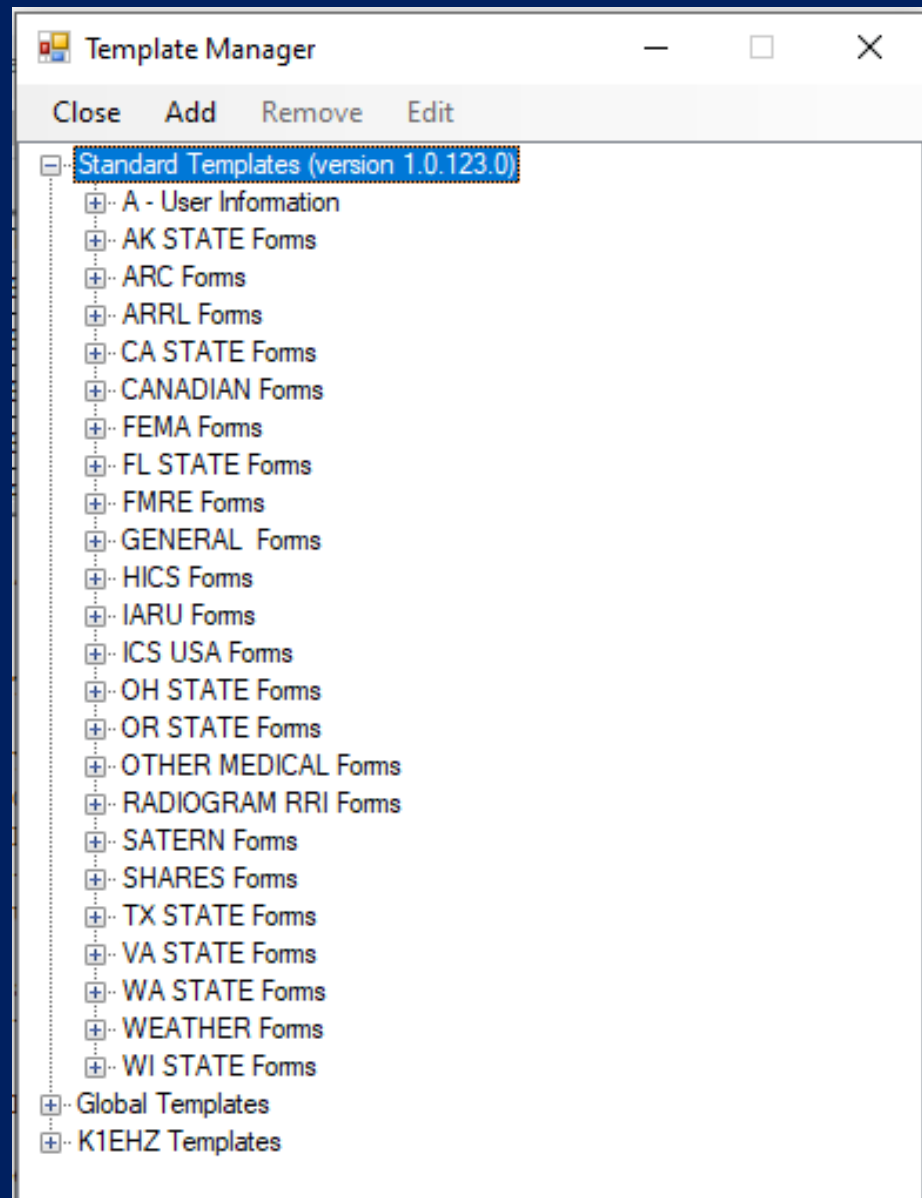
Send e-mail notifications to these addresses when there are pending radio-only messages being held on MPS for you.

(Separate multiple e-mail addresses with semicolons)

Hours pending before notification message is sent:

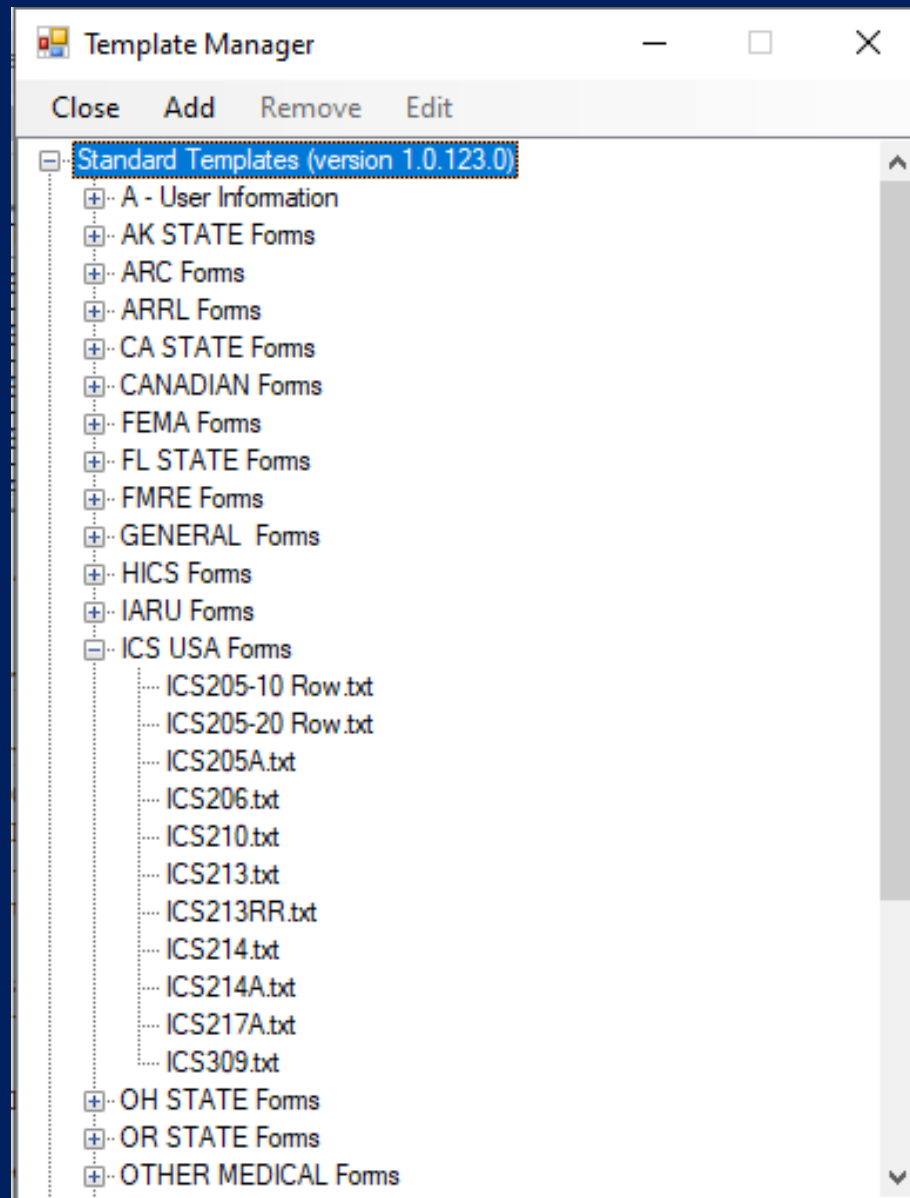
Save Cancel

Standard Forms



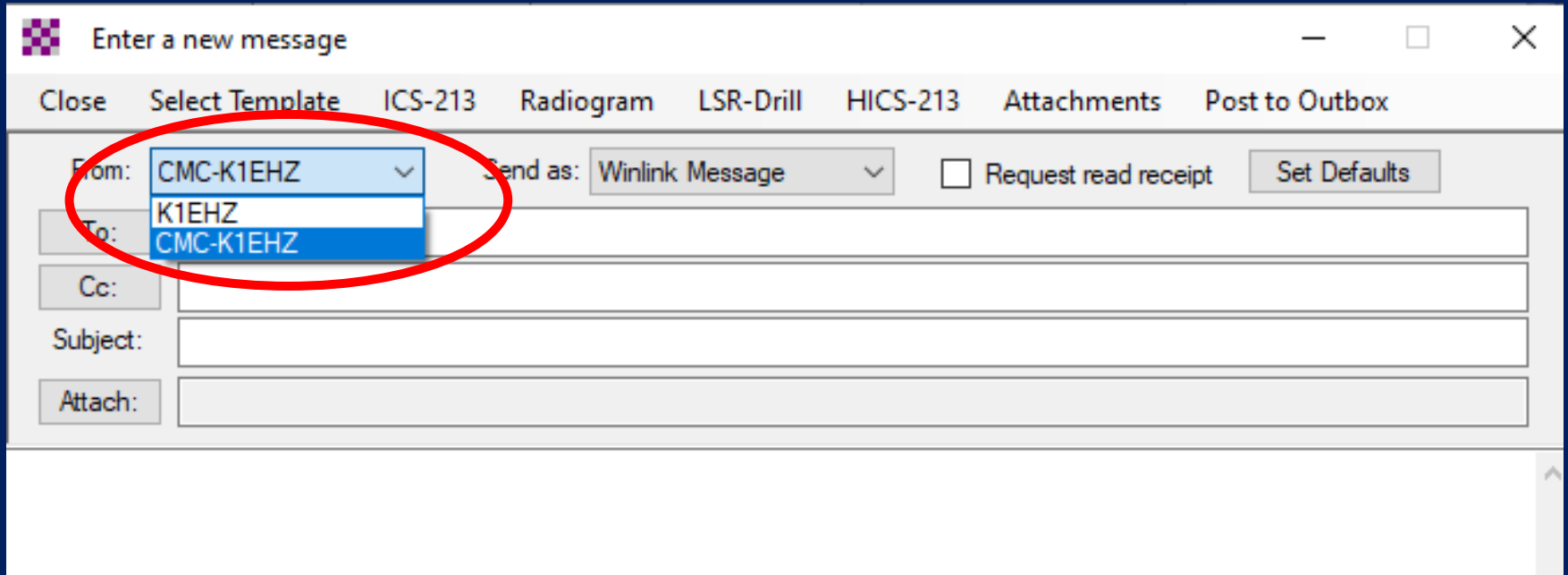
Standard Forms

ICS
Forms



Message Form

FCC or Tactical Callsign Address



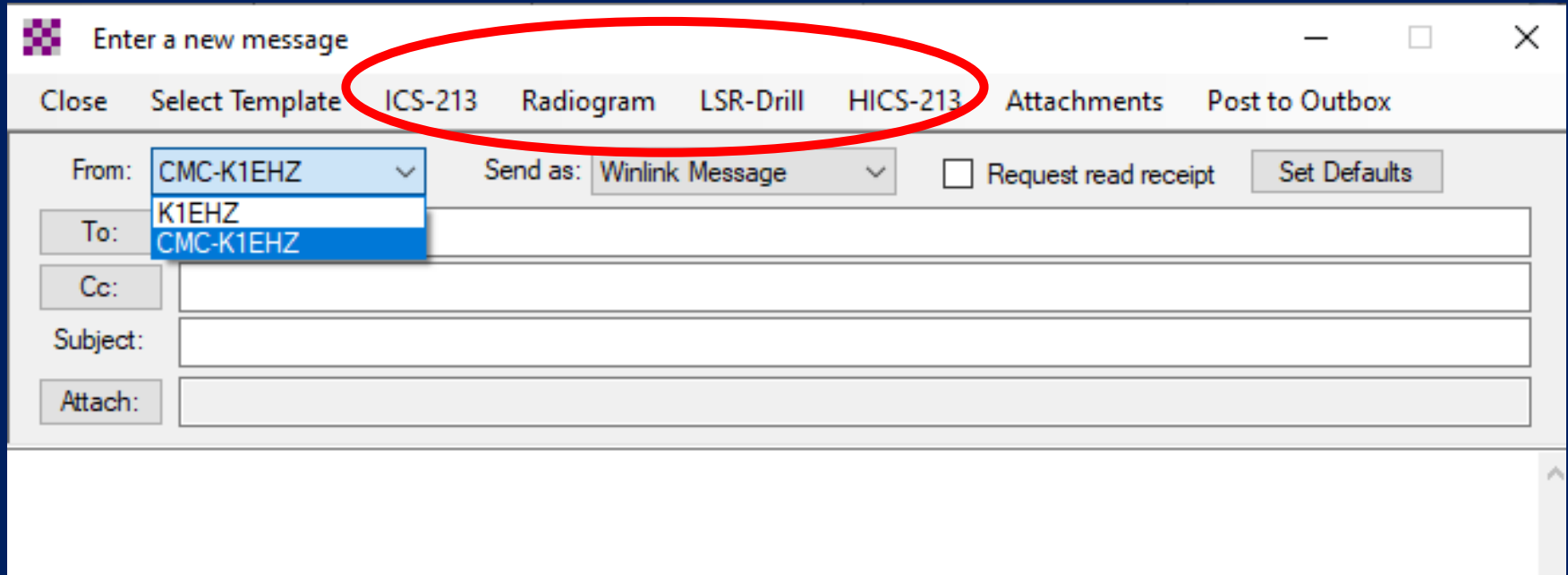
The image shows a screenshot of a software interface titled "Enter a new message". The window has a title bar with a checkered icon, a minus sign, a maximize button, and a close button. Below the title bar is a menu bar with the following items: "Close", "Select Template", "ICS-213", "Radiogram", "LSR-Drill", "HICS-213", "Attachments", and "Post to Outbox".

The main form area contains several fields:

- From:** A dropdown menu is open, showing three options: "CMC-K1EHZ" (highlighted in blue), "K1EHZ", and "CMC-K1EHZ". A red circle is drawn around this dropdown menu.
- Send as:** A dropdown menu showing "Winlink Message".
- Request read receipt**
- Set Defaults** button
- To:** An empty text input field.
- Cc:** An empty text input field.
- Subject:** An empty text input field.
- Attach:** An empty text input field.

Message Form

Favorite Message Templates



The image shows a screenshot of a software interface for creating a new message. The window title is "Enter a new message". At the top, there is a menu bar with the following items: "Close", "Select Template", "ICS-213", "Radiogram", "LSR-Drill", "HICS-213", "Attachments", and "Post to Outbox". A red circle highlights the "Select Template" menu and its sub-items. Below the menu bar, the form has several fields: "From:" with a dropdown menu showing "CMC-K1EHZ", "Send as:" with a dropdown menu showing "Winlink Message", a checkbox for "Request read receipt", and a "Set Defaults" button. The "To:" field has a dropdown menu showing "K1EHZ" and "CMC-K1EHZ". The "Cc:", "Subject:", and "Attach:" fields are empty text boxes.

Enter a new message

Close Select Template ICS-213 Radiogram LSR-Drill HICS-213 Attachments Post to Outbox

From: CMC-K1EHZ Send as: Winlink Message Request read receipt Set Defaults

To: K1EHZ CMC-K1EHZ

Cc:

Subject:

Attach:

ICS-213 Template Like Custom Forms in NBEMS

General Message (ICS 213)			
Load ICS213 INITIAL Data		Form Instructions	
1. Incident Name:	<input type="text" value="Incident name is optional"/>		
2. To (Name/Position):	<input type="text"/>		
3. From (Name/Position):	<input type="text"/>		
4. Subject:	<input type="text"/>	5. Date:	<input type="text" value="2020-06-24"/>
		6. Time:	<input type="text" value="12:05"/>
7. Message:	<div style="border: 1px solid black; padding: 5px; min-height: 150px;"><p>Be Brief and Concise</p></div>		
8. Approved by:	<input type="text"/>	Position / Title:	<input type="text"/>
Save ICS213 INITIAL Data Submit Reset Form			Ver 41.3

Radiogram Like Custom Forms in NBEMS

Amateur Radio RADIOGRAM Text Creator [Read Help and Instructions!](#)

Number <input type="text" value="20"/> <input type="checkbox"/> SVC (Handicapped)	Precedence <input type="text" value="R"/> EMERGENCY P W <small>Emergency not in use at this time.</small>	Handling Instructions <input type="text" value="NONE"/> PGA HXZ ASK Help <input type="button" value="ADD MORE PK INF"/>	Station Of Origin <input type="text" value="K1GHC"/> <small>Change # if you.</small>	Check <input type="text" value="0"/>	Place of Origin <input type="text"/>	Time <input type="text" value="Optional"/> <input type="radio"/> UTC Time <input type="radio"/> Local Time <input checked="" type="radio"/> No Time	Date <input type="text" value="JUN 24"/>
------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------	------------------------------------------------	------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------

IO:

Name: **Call Sign:**

Address:

City / Town: **State or Province:** [Link Codes](#) **Zip:**

Country:

Phone: **Extension:** **E-mail:**

Cp Note about this Radiogram:

MESSAGE: Text Check: [ASK Message Number Help](#)

SUGGESTION IS NO MORE THAN 25 GROUPS (WORDS)

Signature (name) of person for whom message originated:

Operator Note:

*** [NEW! MARK HRTS and select a Location Station](#) *** [Contact KB1TCE about this form: We'll](#)

Easily Print ICS-309 Log

Generate ICS-309 Communication Log

Generate an ICS-309 Communication Log as a pdf File

Select Message Mailboxes

Inbox Outbox Drafts Personal 1:

Read Sent Deleted Personal 2:

Saved Global:

Message Date Range

Limit start date/time: 2018-10-01 09:43 (Local time)

Limit end date/time: 2019-09-13 09:43 (Local time)

Page Layout Options

Separate entry for each recipient

Combine recipients into a single entry

Format of Dates on Report

UTC time

Task ID:

Task Name:

Operational period:

Operator name:

Station ID:

Output pdf file:

Easily Print ICS-309 Log

COMMUNICATIONS LOG		TASK # Combined Entry Log		DATE PREPARED: 06/24/20
OPERATIONAL PERIOD # 11/14/2018 to 9/16/2019		TASK NAME: Winlink Training		TIME PREPARED: 11:50
RADIO OPERATOR NAME: jt			STATION ID: K1EHZ	
LOG				
TIME	FROM	TO	SUBJECT	
10/01/18 13:49	KA1UN	K1EHZ	//WL2K ELH	
10/01/18 18:23	W1EAA	K1EHZ	//WL2K winlink	
10/03/18 17:13	K1EHZ	KA1UN W1EAA K1EHZ	//WL2K Digipeater Test Message	
10/03/18 17:17	K1EHZ	KA1UN W1EAA K1EHZ	//WL2K Digipeater Test Message #2	
10/03/18 17:33	KA1UN	K1EHZ	//WL2K Test	
10/03/18 17:40	K1EHZ	KA1UN	Re: //WL2K Test	
10/04/18 10:23	W1EAA	K1EHZ	//WL2K digipeater	
10/10/18 08:48	WQ2H	K1EHZ	//WL2K Test for Pactor	
10/10/18 10:28	K1EHZ	WQ2H	ACK: //WL2K Test for Pactor	
10/18/18 19:07	K1EHZ	KA1UN jtafh@comcast.net	//WL2K Winlink by HT	
10/18/18 20:43	KA1UN	K1EHZ	//WL2K Update	
10/20/18 09:11	jtafh@comcast.net	K1EHZ	Test message 1	
10/25/18 09:24	K1EHZ	jtafh@comcast.net	//WL2K Test Attachment	
10/25/18 09:25	K1EHZ	jtafh@comcast.net	//WL2K Attachment Test	
10/25/18 13:21	K1EHZ	jtafh@comcast.net	//WL2K Attachment test	
10/25/18 13:50	K1EHZ	KA1UN ham1radio@comcast.net	//WL2K Test sending attachment	
10/25/18 19:28	WA1QBY	K1EHZ	//WL2K test	
10/27/18 17:12	K1EHZ	jtafh@comcast.net	//WL2K Test ICS213 Attachment	
10/27/18 17:16	K1EHZ	jtafh@comcast.net	//WL2K Attachment Test ICS213	
10/29/18 11:08	W1EAA	K1EHZ	//WL2K pactor	
10/29/18 13:04	K1EHZ	W1EAA f8doc@comcast.net	Re: //WL2K pactor	
10/29/18 15:53	K1EHZ	N1MEO	//WL2K Welcome to Winlink!	
10/31/18 14:53	K1EHZ	jtafh@comcast.net	//WL2K Test thru to HF	
10/31/18 14:57	K1EHZ	jtafh@comcast.net	//WL2K Test message 2 thru HF gateway	
10/31/18 15:24	K1EHZ	jtafh@comcast.net	//WL2K Test Message 3	
11/02/18 13:52	N1MEO	K1EHZ	TEST	
11/02/18 22:20	K1EHZ	N1MEO k1ehz@arrl.net	//WL2K Re: TEST	
11/13/18 08:08	K1EHZ	NF1L	//WL2K Nashua Digipeater	
11/14/18 08:34	NF1L	K1EHZ	Re: //WL2K Digipeater Order	
11/14/18 09:46	K1EHZ	NF1L	Re: //WL2K Digipeater Order	
11/14/18 10:19	K1EHZ	NF1L	//WL2K Gateway Test	
11/14/18 10:58	K1EHZ	NF1L	//WL2K HF Forwarding	

Easily Print ICS-309 Log

COMMUNICATIONS LOG		TASK # Combined Entry Log		DATE PREPARED: 06/24/20
OPERATIONAL PERIOD # 11/14/2018 to 9/16/2019			TASK NAME: Winlink Training	
RADIO OPERATOR NAME: jlt			STATION I.D. K1EHZ	
LOG				
TIME	FROM	TO	SUBJECT	
10/01/18 13:49	KA1IJN	K1EHZ	//WL2K ELH	
10/01/18 18:23	W1EAA	K1EHZ	//WL2K winlink	
10/03/18 17:13	K1EHZ	KA1IJN W1EAA K1EHZ	//WL2K Digipeater Test Message	
10/03/18 17:17	K1EHZ	KA1IJN W1EAA K1EHZ	//WL2K Digipeater Test Message #2	
10/03/18 17:33	KA1IJN	K1EHZ	//WL2K Test	
10/03/18 17:40	K1EHZ	KA1IJN	Re: //WL2K Test	
10/04/18 10:23	W1EAA	K1EHZ	//WL2K digipeater	
10/10/18 08:48	WQ2H	K1EHZ	//WL2K Test for Pactor	
10/10/18 10:28	K1EHZ	WQ2H	ACK: //WL2K Test for Pactor	
10/18/18 19:07	K1EHZ	KA1IJN jлтаft@comcast.net	//WL2K Winlink by HT	
10/18/18 20:43	KA1IJN	K1EHZ	//WL2K Update	
10/20/18 09:11	jлтаft@comcast.net	K1EHZ	Test message 1	

Potential Training Opportunities

- Assist operators set up Winlink
 - Help Individuals by Phone - K1EHZ
 - Small Group Workshops by Zoom - K1EHZ
- Wednesday Winlink Net Check-in
 - Email NF1L@winlink.org by VHF, HF or Telnet
- Quarterly Winlink Email Test - N5EI
- Radio Messaging Drills via Local Post Office
- Radio Messaging with other ARES Groups
- SET - NBEMS \longleftrightarrow Winlink messages
- You will come up with more training ideas

Winlink System Summary

- ❖ Local, regional & global coverage
- ❖ Software is well-supported
- ❖ Complements NBEMS & uses same hardware
- ❖ Access mail by VHF, HF, Telnet, Browser
- ❖ Expand coverage with digipeaters or repeaters
- ❖ Radio-only mail boxes when internet is out
- ❖ Automatic forwarding by HF radio
- ❖ Peer-to-Peer = Point-to-Point messaging
- ❖ Built-in message forms, reports, bulletins
- ❖ Modes for various band conditions
- ❖ Easily generates ICS-309 Message Logs

Watch Winlink Tutorials
by K4REF on YouTube

<https://www.youtube.com/user/K4REF/videos>

Contact Jay Taft at

k1ehz@arrl.net

for training / assistance

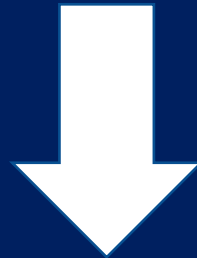
This PDF available on the N1GB ARES webpage

https://gblakesl.net//N1GB/N1GB_ARES.html



WINLINK *Global Radio Email*®

Extra Info & Screen Shots



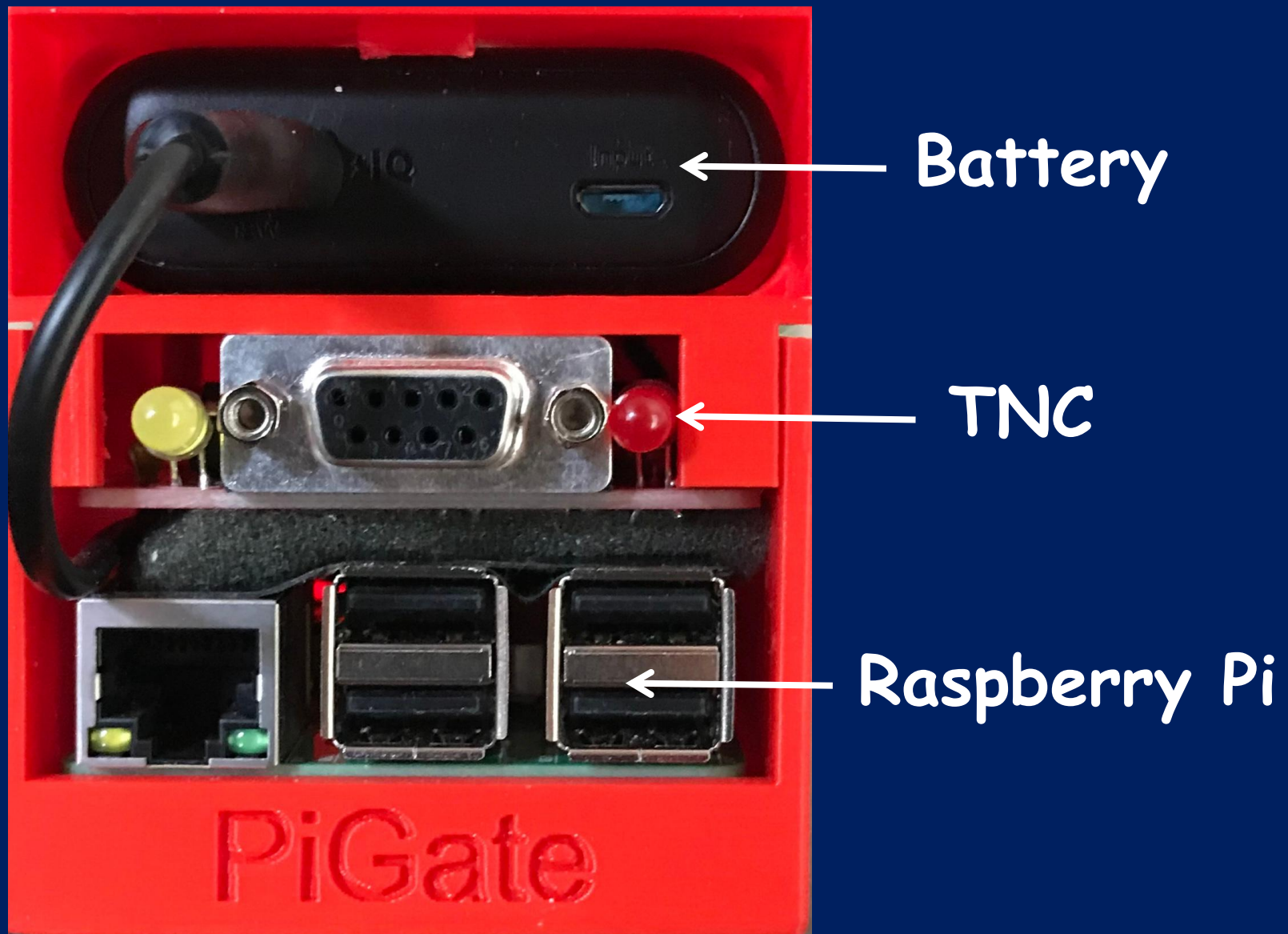
PiGate for Winlink

[My Account](#)[Tools](#)[News](#)[Positions](#)[User Programs](#)[Book of Knowledge](#)[Download](#)[Support](#)

PiGate 2.0 for the Raspberry Pi is Released

12 December 2019 -- **PiGate 2.0** software was released today by Mark Griffith, KDOQYN. Lots of new things in there. Go to the website and download the new docs, and a new image for your Pi. Also there are a number of "training" videos that describe the new interface and some details about it. [Take a look!](#)

PiGate Hotspot with TNC



PiGate Winlink Interface

PiGate

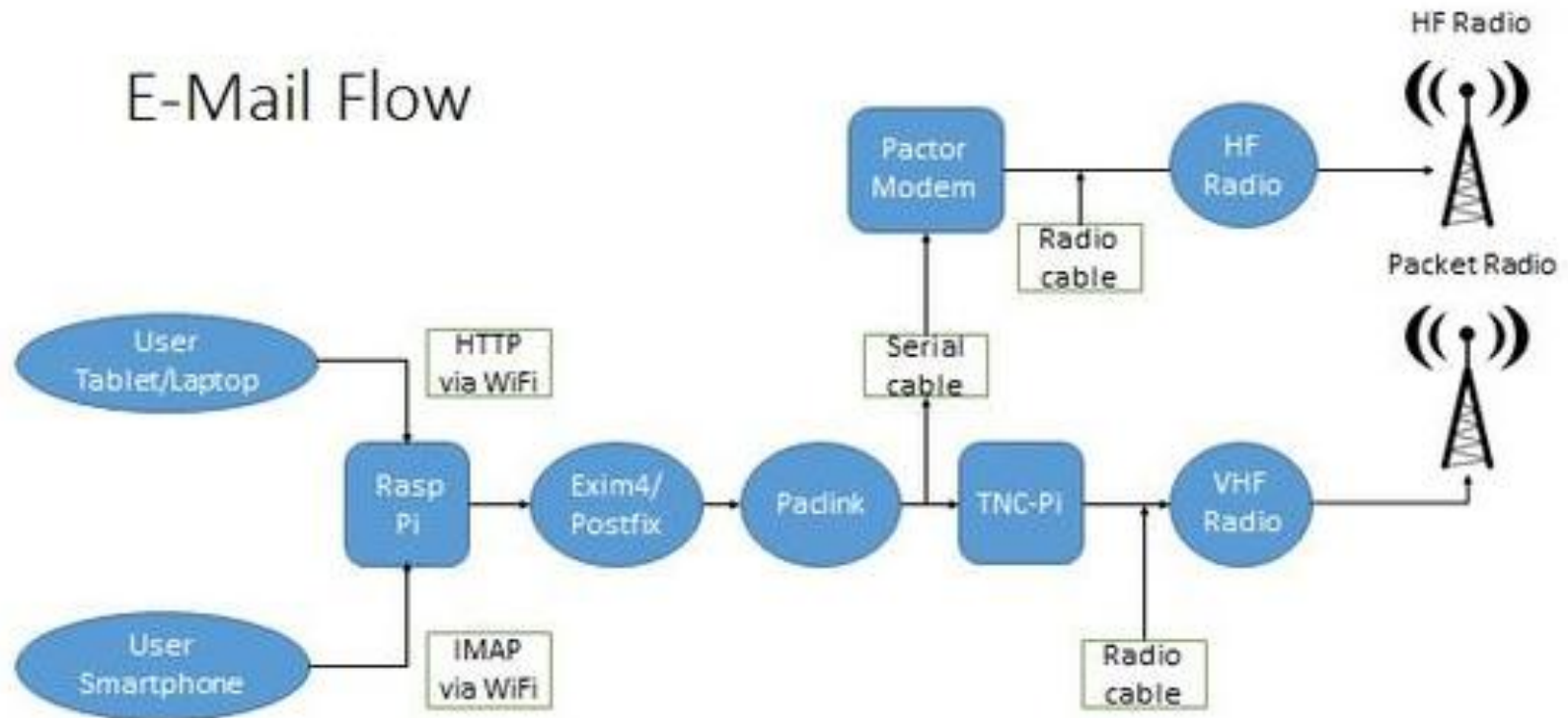
EMERGENCY EMAIL GATEWAY

When disaster strikes, communication is the most important missing service. Amateur radio operators have a long history of helping in disaster situations and this new device was created to assist in that effort.

The PiGate is a small piece of hardware that can be brought into a disaster area, connected to an already existing VHF or HF amateur radio and antenna (like in your car or truck), and used to send e-mail to the global Winlink2000 system through a Radio Message Server (RMS) station.



PiGate for Welfare Messages in a Shelter, for example



PiGate - Send Mail with Smart Phone, Tablet, Laptop

PiGate Emergency E-Mail Server



Amateur Radio Emergency Service

Send an Emergency E-Mail

Enter your name:

Enter one E-mail Address:

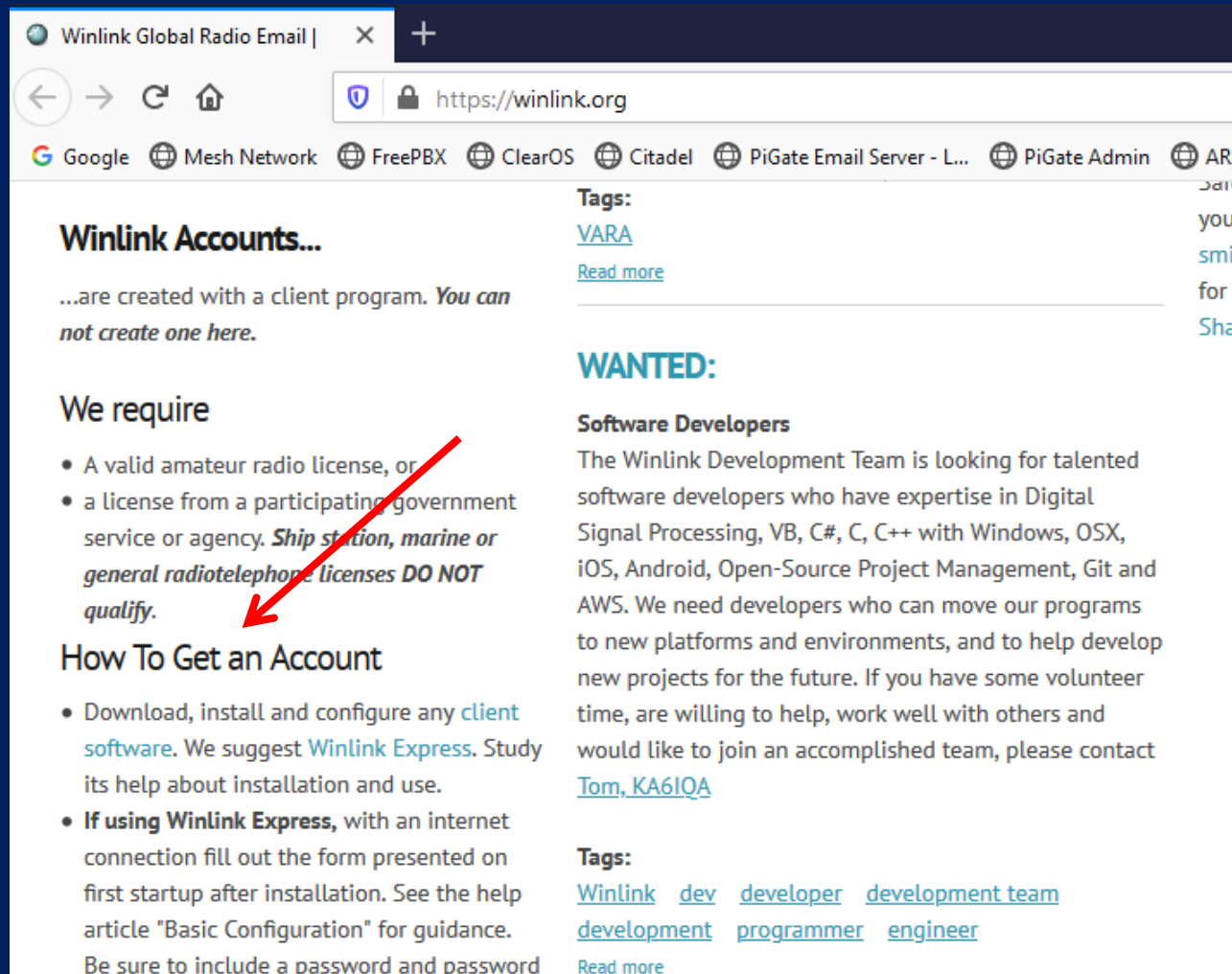
Now enter your message. Press **Send** to send it.

Send

**Messages must be
Part 97 compliant**

Winlink.org

Account = callsign@winlink.org

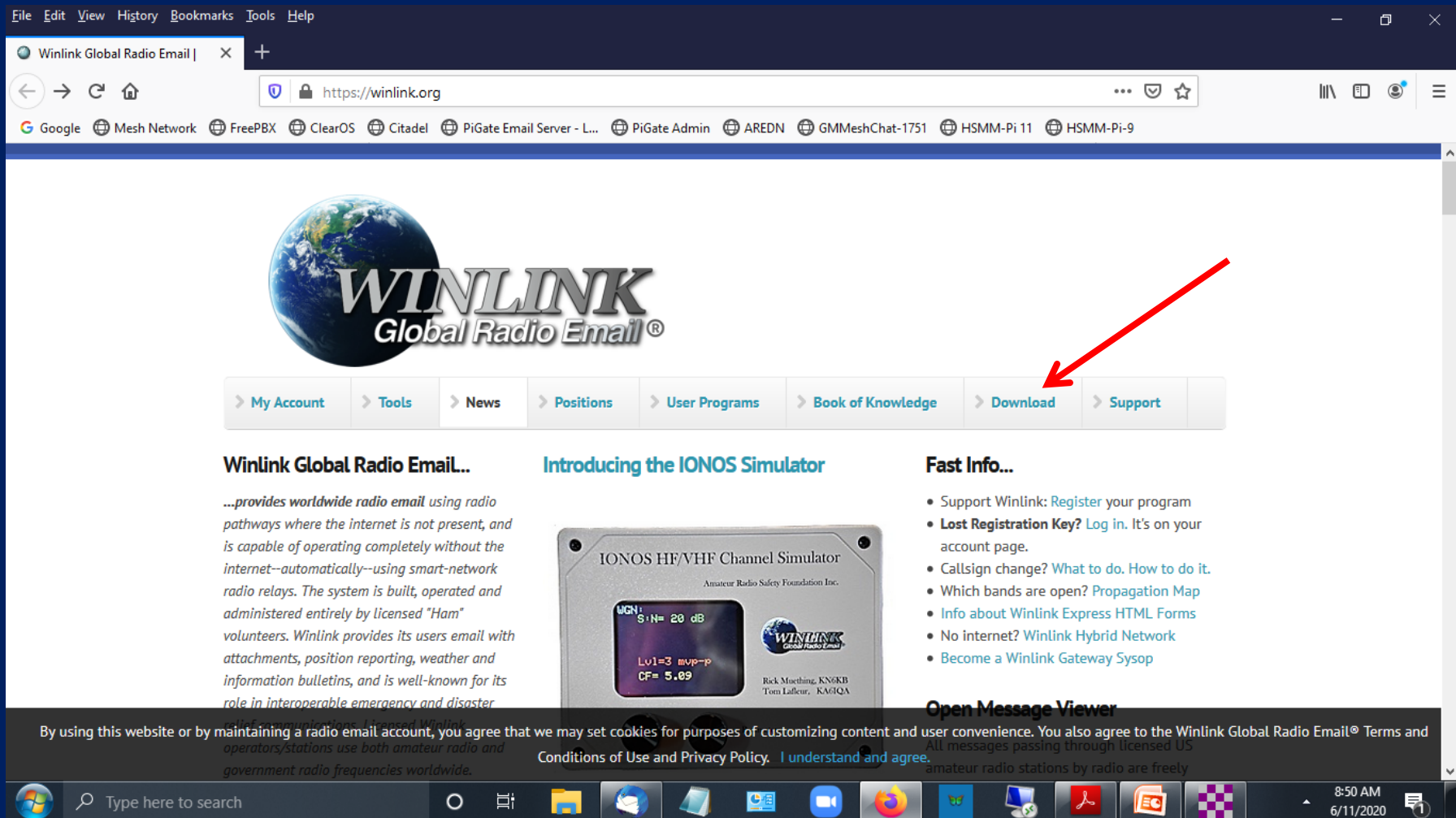


The screenshot shows a web browser window with the URL <https://winlink.org>. The page content includes:

- Winlink Accounts...**

...are created with a client program. *You can not create one here.*
- We require**
 - A valid amateur radio license, or
 - a license from a participating government service or agency. *Ship station, marine or general radiotelephone licenses DO NOT qualify.*
- How To Get an Account**
 - Download, install and configure any [client software](#). We suggest [Winlink Express](#). Study its help about installation and use.
 - **If using Winlink Express**, with an internet connection fill out the form presented on first startup after installation. See the help article "Basic Configuration" for guidance. Be sure to include a password and password
- Tags:**
 - [VARA](#)
 - [Read more](#)
- WANTED:**
 - Software Developers**
 - The Winlink Development Team is looking for talented software developers who have expertise in Digital Signal Processing, VB, C#, C, C++ with Windows, OSX, iOS, Android, Open-Source Project Management, Git and AWS. We need developers who can move our programs to new platforms and environments, and to help develop new projects for the future. If you have some volunteer time, are willing to help, work well with others and would like to join an accomplished team, please contact [Tom, KA6IQA](#)
 - Tags:**
 - [Winlink](#) [dev](#) [developer](#) [development team](#)
 - [development](#) [programmer](#) [engineer](#)
 - [Read more](#)

Download Winlink Express



The screenshot shows a web browser window with the URL <https://winlink.org>. The page features the Winlink Global Radio Email logo, which includes a globe and the text "WINLINK Global Radio Email®". Below the logo is a navigation menu with the following items: My Account, Tools, News, Positions, User Programs, Book of Knowledge, Download, and Support. A red arrow points to the "Download" item. The main content area is divided into three columns: "Winlink Global Radio Email..." with a paragraph describing the service, "Introducing the IONOS Simulator" with an image of the simulator hardware, and "Fast Info..." with a list of links. At the bottom, there is a footer with a cookie consent notice and a system tray showing the time as 8:50 AM on 6/11/2020.


File Edit View History Bookmarks Tools Help

Winlink Global Radio Email | X +

← → ↻ 🏠

🔒 <https://winlink.org> ... 🛡️ ☆

🔍 Google 🌐 Mesh Network 🌐 FreePBX 🌐 ClearOS 🌐 Citadel 🌐 PiGate Email Server - L... 🌐 PiGate Admin 🌐 AREDN 🌐 GMMeshChat-1751 🌐 HSMM-Pi 11 🌐 HSMM-Pi-9



> My Account > Tools > News > Positions > User Programs > Book of Knowledge > **Download** > Support

Winlink Global Radio Email...


...provides worldwide radio email using radio pathways where the internet is not present, and is capable of operating completely without the internet--automatically--using smart-network radio relays. The system is built, operated and administered entirely by licensed "Ham" volunteers. Winlink provides its users email with attachments, position reporting, weather and information bulletins, and is well-known for its role in interoperable emergency and disaster relief communications. Interested Winlink operators/stations use both amateur radio and government radio frequencies worldwide.

Introducing the IONOS Simulator



IONOS HF/VHF Channel Simulator
Amateur Radio Safety Foundation Inc.

WGN1
S: N= 20 dB
L: U1=3 mvp-p
CF= 5.09


Rick Moething, KN6KB
Tom Lafleur, KA6QA

Fast Info...

- Support Winlink: [Register](#) your program
- **Lost Registration Key?** [Log in](#). It's on your account page.
- Callsign change? [What to do. How to do it.](#)
- Which bands are open? [Propagation Map](#)
- [Info about Winlink Express HTML Forms](#)
- No internet? [Winlink Hybrid Network](#)
- [Become a Winlink Gateway Sysop](#)

Open Message Viewer

By using this website or by maintaining a radio email account, you agree that we may set cookies for purposes of customizing content and user convenience. You also agree to the Winlink Global Radio Email® Terms and All messages passing through licensed US amateur radio stations by radio are freely

Conditions of Use and Privacy Policy. I understand and agree.

Type here to search

8:50 AM
6/11/2020

File Edit View History Bookmarks Tools Help

downloads.winlink.org - /

https://downloads.winlink.org

Google Mesh Network FreePBX ClearOS Citadel PiGate Email Server -

downloads.winlink.org - /

6/8/2020	1:38 PM	<dir> Sysop Programs
4/29/2020	5:36 AM	<dir> User Programs ←
1/3/2019	3:24 PM	<dir> WINMOR TNC

File Edit View History Bookmarks Tools Help

downloads.winlink.org - /User Prog X

https://downloads.winlink.org/User Programs/

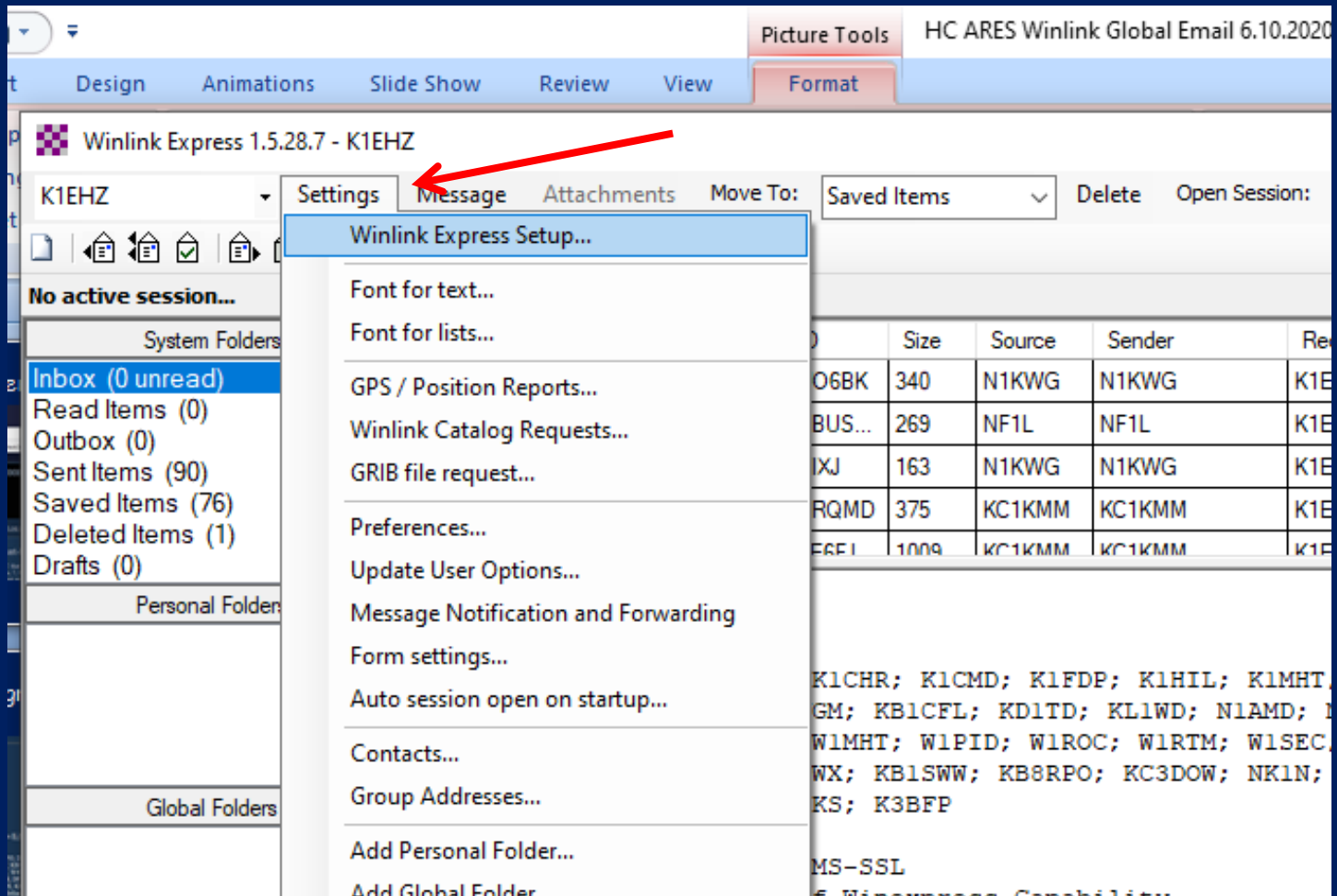
Google Mesh Network FreePBX ClearOS Citadel PiGate Email Server - L... PiGate Admin AREDN GMM

downloads.winlink.org - /User Programs/

[\[To Parent Directory\]](#)

5/21/2018	6:55 PM	626	Latest VARA Modem download site.rtf
7/19/2018	6:23 AM	1846835	Paclink install 4-3-11-0.zip
5/21/2018	6:55 PM	1132	README Software Install Instructions.txt
8/8/2019	3:56 PM	841606	RMS Link Test install 2-0-22-0.zip
5/21/2018	6:55 PM	12176	SCS PTC-IIusb and end of PTC-IIusb IIpro IIex.pdf
5/21/2018	6:54 PM	3470858	V4Chat 2.0.4.0 Full Install.zip
4/29/2020	5:36 AM	22797643	Winlink Express install 1-5-28-0.zip ←
1/2/2019	5:15 PM	2176889	Winmor TNC Install 1-5-13-0.zip

Go to Winlink Express Settings to Register for Account



Open Message Form

The screenshot displays the Winlink Express 1.5.28.7 K1EHZ interface. A red arrow points to the 'Compose' icon in the top toolbar. The 'Enter a new message' dialog box is open, showing the following fields and options:

- From:** K1EHZ (dropdown menu)
- Send as:** Winlink Message (dropdown menu)
- Request read receipt
- Set Defaults** (button)
- To:** (text input field)
- Cc:** (text input field)
- Subject:** (text input field)
- Attach:** (text input field)

The background interface shows a folder list on the left with 'Inbox (0 unread)' selected. The main pane displays a message header and body:

Message ID: [unreadable]
Date: 2020/04/04 10:00:00
From: N5EIB
To: AB1AV; K1SGA; K1S
Cc: W1COS; WQ2H; WX1G
KC3JUD; K1
Source: N5
Downloaded
Subject: Q

All NHDN u
This is a

Select Mode to Transmit

ES Winlink Global Email 6.10.2020.pptx - Microsoft PowerPoint non-commercial use

Review View

Attachments Move To: Saved Items Delete Open Session: Packet Winlink

Packet Winlink
Pactor Winlink
Robust Packet Winlink
Winmor Winlink
Ardop Winlink
Vara HF Winlink
Vara FM Winlink
Iridium GO Winlink

Packet P2P
Pactor P2P
Robust Packet P2P
Winmor P2P
Ardop P2P
Vara P2P
Vara FM P2P
Telnet P2P

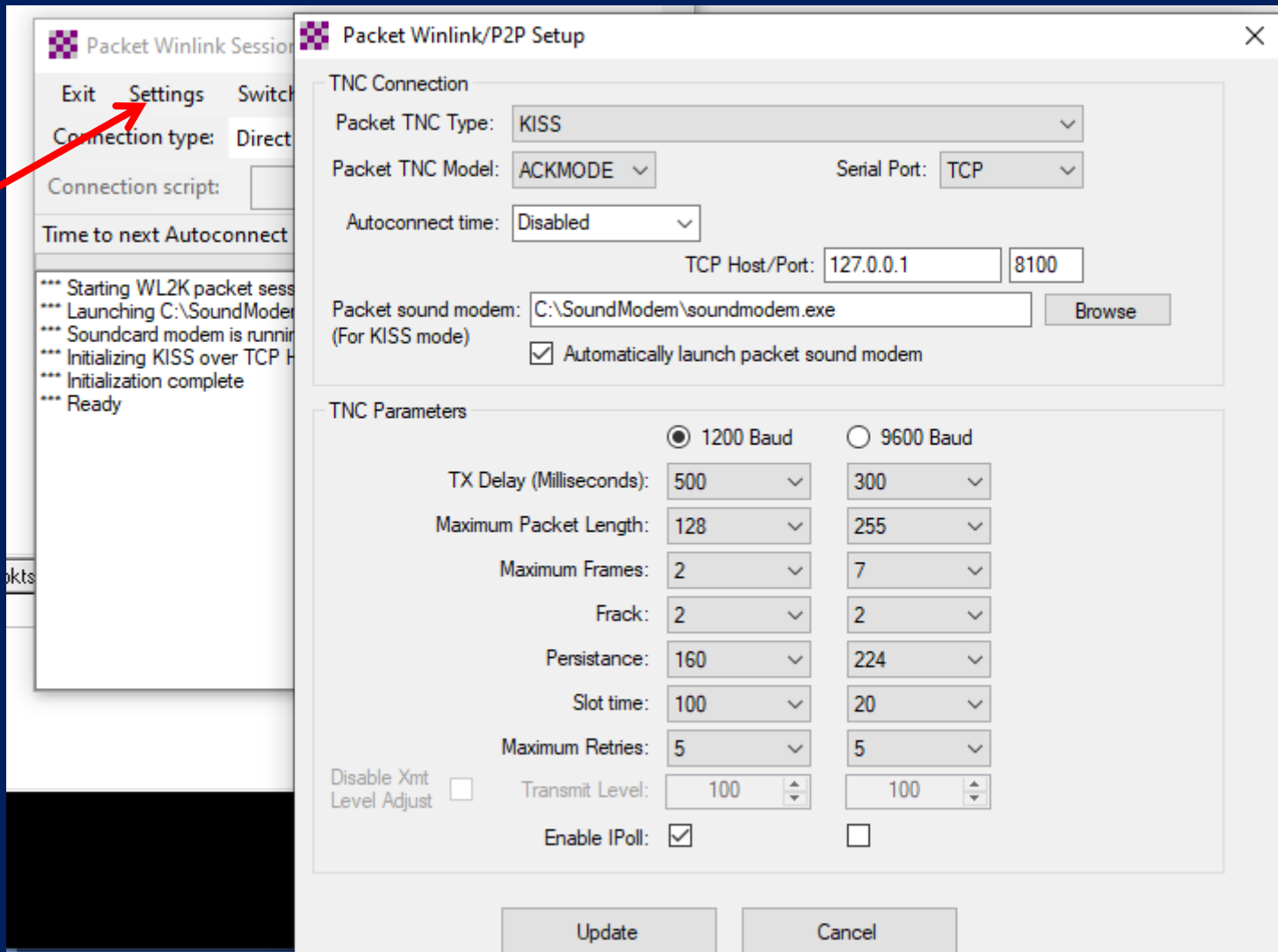
Pactor Radio-only
Winmor Radio-only

Date/Time	Message ID	Size	Source	Sender	Rec
2020/06/11 00:41	N6Z1NOAUO6BK	340	N1KWG	N1KWG	K1E
2020/06/10 22:37	WWVA9M3BUS...	269	NF1L	NF1L	K1E
2020/06/02 22:57	9F2T0J0QVIXJ	163	N1KWG	N1KWG	K1E
2020/05/01 14:51	057WG7U2RQMD	375	KC1KMM	KC1KMM	K1E
2020/04/27 13:17	AGLIYPKPA6FEI	1009	KC1KMM	KC1KMM	K1E

Message ID: F1O29DXLBSGM
Date: 2020/03/02 16:46
From: N5EI
AB1AV; AB1ST; K1ACL; K1CHR; K1CMD; K1FDP; K1HIL; K1MHT; K1NAG; K1STF; K1WRK; KA1VGM; KB1CFL; KD1TD; KL1WD; N1AMD; N1W1COS; W1CPL; W1GRF; W1MHT; W1PID; W1ROC; W1RTM; W1SEC; W1WNS; WX1GYX; K1EHZ; KA1TWX; KB1SWW; KB8RPO; KC3DOW; NK1N; N1JUD; K1CFI; W1WNS; K3SKS; K3BFP
Source: N5EI

Wednesday Check In
Winlink Settings
Winlink Test - 2020.04.27

Packet Winlink Settings for Signalink



The image shows a screenshot of the Packet Winlink/P2P Setup dialog box. A red arrow points from the 'Settings' button in the background 'Packet Winlink Session' window to the 'Settings' button in the foreground 'Packet Winlink/P2P Setup' window.

Packet Winlink/P2P Setup

TNC Connection

- Packet TNC Type: KISS
- Packet TNC Model: ACKMODE
- Serial Port: TCP
- Autoconnect time: Disabled
- TCP Host/Port: 127.0.0.1 8100
- Packet sound modem: C:\SoundModem\soundmodem.exe (For KISS mode)
- Automatically launch packet sound modem

TNC Parameters

	1200 Baud	9600 Baud
TX Delay (Milliseconds):	500	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	2	2
Persistence:	160	224
Slot time:	100	20
Maximum Retries:	5	5
Transmit Level:	100	100
Enable IPoll:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Disable Xmt Level Adjust

Update Cancel

SoundModem

rk's Tools Help

uz7.ho.ua/packetradio.htm

FreePBX ClearOS Citadel PiGate Email Server - ... PiGate Admin AREDN GMMeshChat-1751 HSMM-Pi 11 HSMM-Pi-9

Welcome to the personal page

UZ7HO

[Home](#) | [Contesting](#) | [Guestbook](#) | [Log search](#) | [Packet-Radio](#)

Solar-Terrestrial Data
11 Jun 2020 1256 GMT
SFI: 70 SN: 14
A-Index: 5
K-Index: 1
X-Ray: n/a
304A: 94.7 @ SEM
Calculated Conditions
Band: New Night

The software Packet-Radio TNC

I am developing a software dual-port Packet-Radio TNC that uses a soundcard as a modem and supports AX.25 protocol. It has been tested on Windows XP, Vista, 7, 8, 10 and has proved stable in operation. The Soundmodem has two TCP/IP interfaces to link with client application: AGW PE and CJKISS. In case of

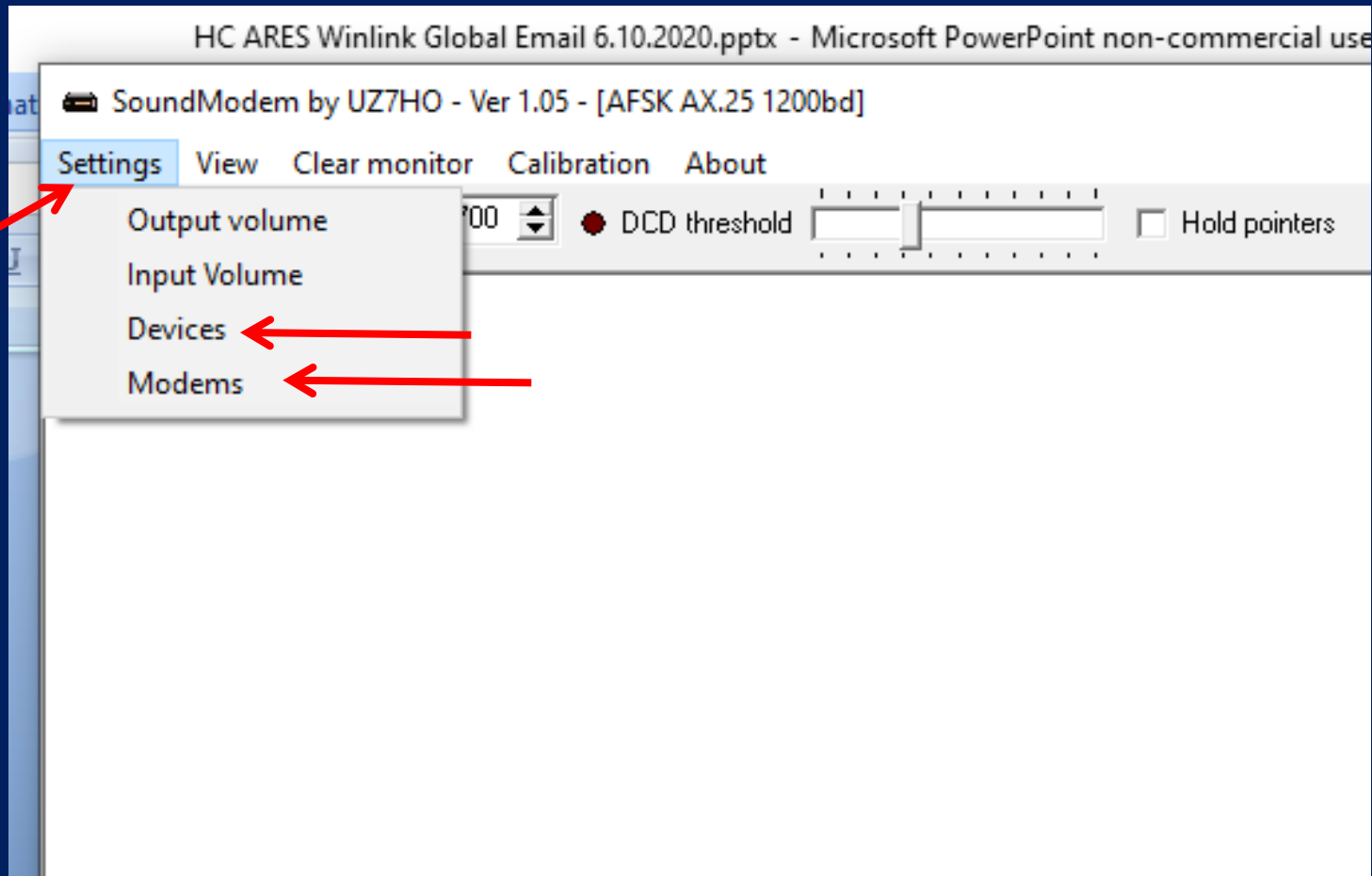
Scroll Down to Program

CHANGELOG.txt	05-Dec-19 14:45	9.41K
hs_soundmodem21.zip	18-Aug-18 03:05	453.56K
other-versions.zip	08-Oct-19 21:26	5.24M
ptt-dll.zip	30-Oct-19 22:39	247.22K
soundmodem105.zip	13-Oct-19 03:57	460.45K
user_guide_v045b_FR.pdf	11-Oct-13 19:13	333.12K
user_guide_v105_EN.pdf	03-Dec-19 18:01	504.65K
utils.zip	28-Feb-15 04:59	68.21K

If you like the program and wish to make a donation, just send me an [E-Mail](#) to get more information how to do it.

Many thanks for donations to: VK2HL, EU1XX, G7OMN, VE3NFK, VK6UFO, DK3WN, KA3YAN, NS7C, G7GQW, JA0CAW, KB6BT, VU3TYG, K7TMG, PE0SAT, UZ2HZ, HB9JAQ, SV1UY, KB3IUU, VK2NA, RC8SB, G1ZRN, VU3KAZ, W5PFG, IW0HLG, NM5RM, JR2LLI, VA7RBP, ON6MU, K7MT, W4TTU, SM0TGU, KQ9P, F5FJ, WA4SCA, W7KKE, F4BPP, VK3YEA, G4IRX, F6GIA, PD1AEM, RV3APM, DF2DAN, EW7AS, KA0WFI, IN3GIN, N5MNX, IW1DTU, PD0OXW, N5WOL, DC4DC, VE4RRB, KO4OP, K6DUX, KM4WWX, OE60200755, W7BOT, KC1EFP, KG7EMV, I3EEL, W8MSD, KC4LE, KE0GB, K2MO, SV1WE, "Hellas Radio Club", SV8BUR, HB9AUR, UX5UL, AD7NP, PV8DX, ZR1ADC, KJ4RDP, N0BBD, KK4SHF, KB6LTY, 3B8DU, DS1STU, SK4PB, KE0EE, G7EUV, W0BOQ, Z11WN, VK3HBF, W0RTV, Z12TWS, JJ2WVG, N6REM, KC6H, KE7UAF, VK3CVF, AF6US

SoundModem Settings



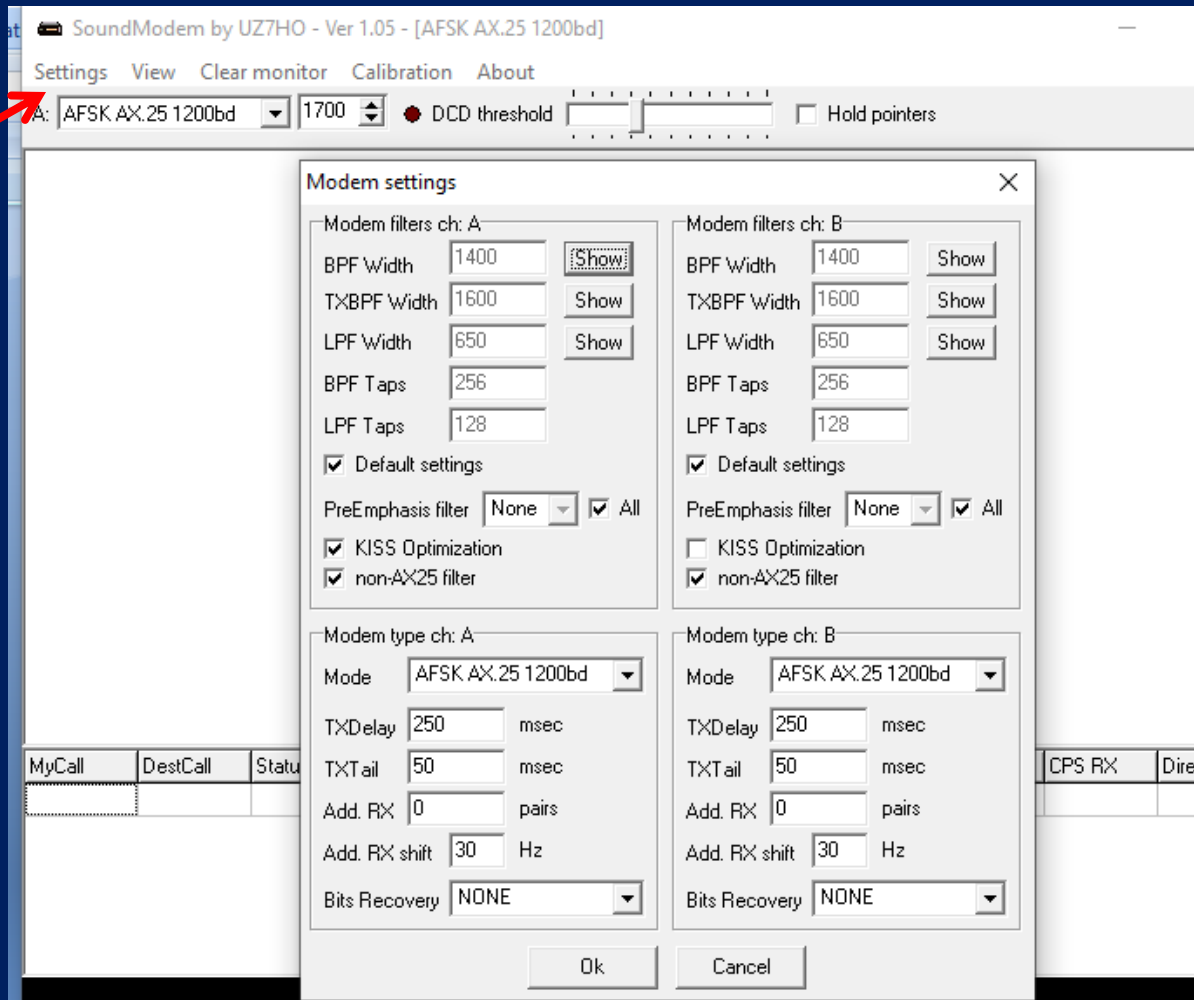
SoundModem Settings - Devices Tab

The screenshot shows the SoundModem Settings dialog box with the 'Devices' tab selected. The background application window shows the 'Settings' menu and a dropdown menu for 'AFSK AX.25 1200bd' with a red arrow pointing to it. The 'Settings' dialog box has the following sections:

- Sound Card**
 - Output device: Speakers (2- C-Media USB Audio)
 - Input device: SignalLink (2- USB Audio CODEC)
 - Dual channel
 - TX rotation
 - Single channel output
 - Color waterfall
 - Stop waterfall on minimize
 - Minimized window on startup
 - TX SampleRate: 11025
 - TX corr. PPM: 0
 - RX SampleRate: 11025
 - RX corr. PPM: 0
 - Priority: Highest
- Server setup**
 - AGWPE Server Port: 8000 Enabled
 - KISS Server Port: 8100 Enabled
- PTT Port**
 - Select PTT port: [NONE]
 - Dual PTT
 - Swap COM pins for PTT
 - Advanced PTT settings

Buttons: OK, Cancel

SoundModem Settings - Modem Tab





WINLINK

Global Radio Email®