



INTRODUCTION TO WINLINK

RADIO EMAIL FOR EMERGENCY
COMMUNICATIONS (EMCOMM)

Why

- Accuracy and efficiency
- Rapid transmission to higher/lower EMMCOMM agencies
- Messages stored at each level
- Communication history (thread and documentation)
- Welfare traffic

How

- Global Winlink system
- Access via Winlink Express (user program)

Winlink System (aka Winlink 2000)

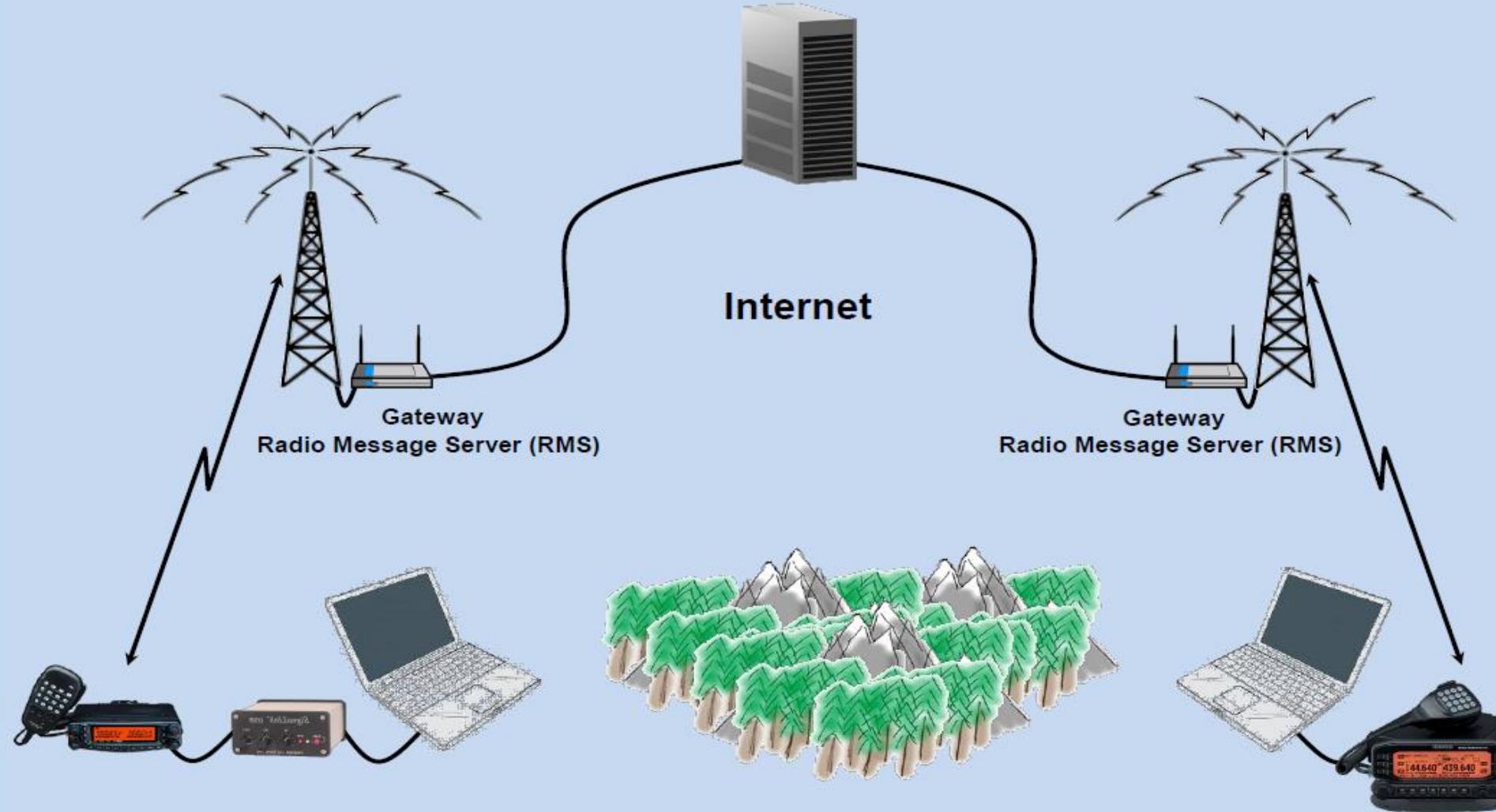
Global system – built by amateur radio operators and widely adopted by government ECOMM agencies

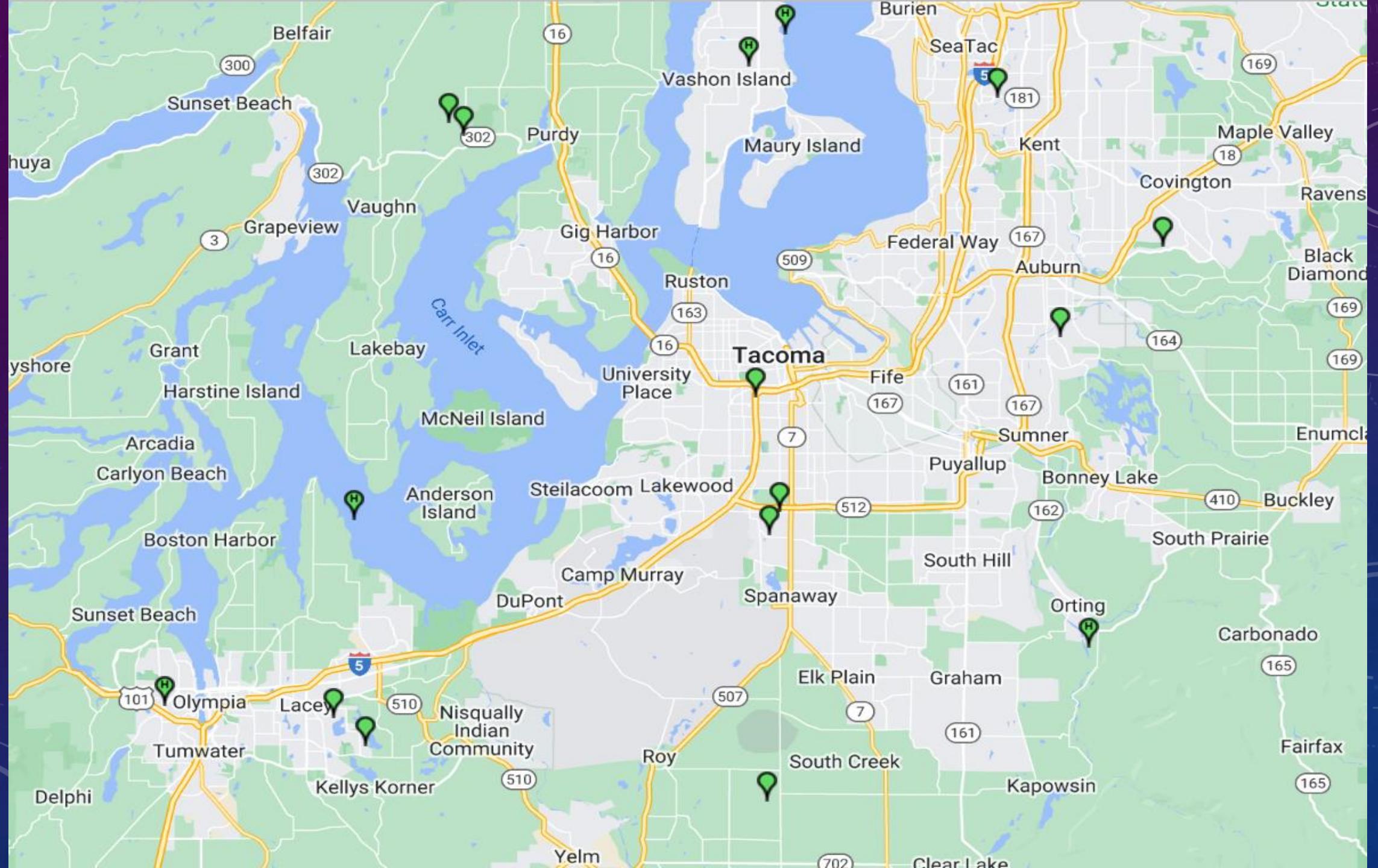
- Radio Message Server (RMS) gateways (VHF/UHF/HF)
- Common Message Servers (CMS) – Amazon Web Services



WINLINK Packet Path

Cloud Based
Common Message Server (CMS)





WINLINK.ORG

- Account Access
- Tools (system maps, RMS list)
- News
- Downloads
- Support (Book of Knowledge, Web links)

WINLINK EXPRESS

- Computer program – much like a regular email program
- Blank message or message templates (HTML forms), including ICS
- Messages delivered via CMS and/or RF
- Three message types – Winlink, peer to peer (P2P) and radio only
- Send Winlink messages to regular email addresses via CMS (white listing, callsign@winlink.org for reply)

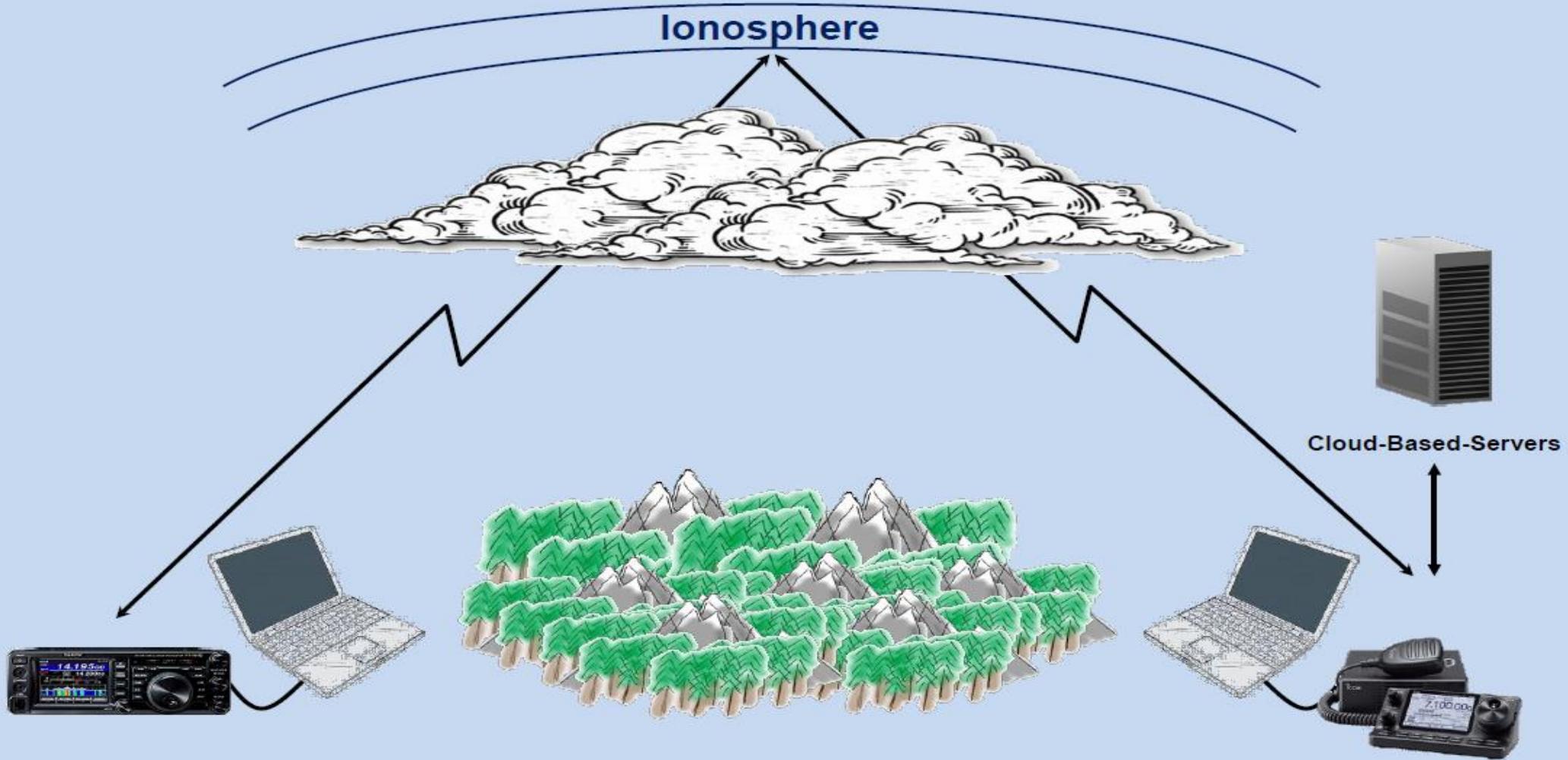
WINLINK EXPRESS (CONTINUED)

- Send messages to amateur radio call signs via CMS or RF
- Local post office
- Communication protocols:
 - Telnet – direct to Internet
 - Radio – packet (1200 baud), Vara FM, Vara HF, Ardop, Pactor
- Digipeaters – simplex digital relay station



WINLINK Distant Gateway Path

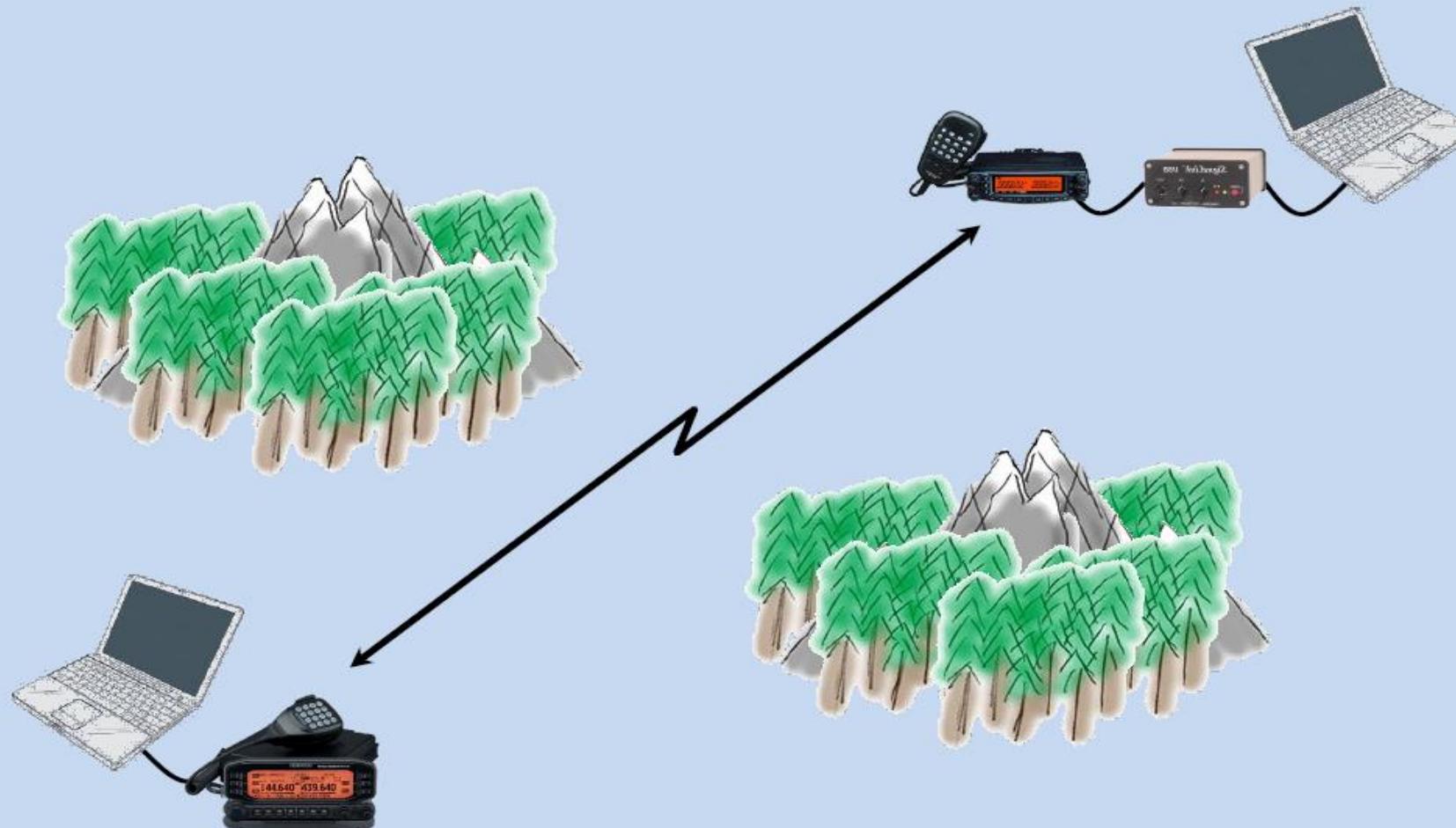
Cloud Based
Common Message Server (CMS)





WINLINK P2P Packet Path

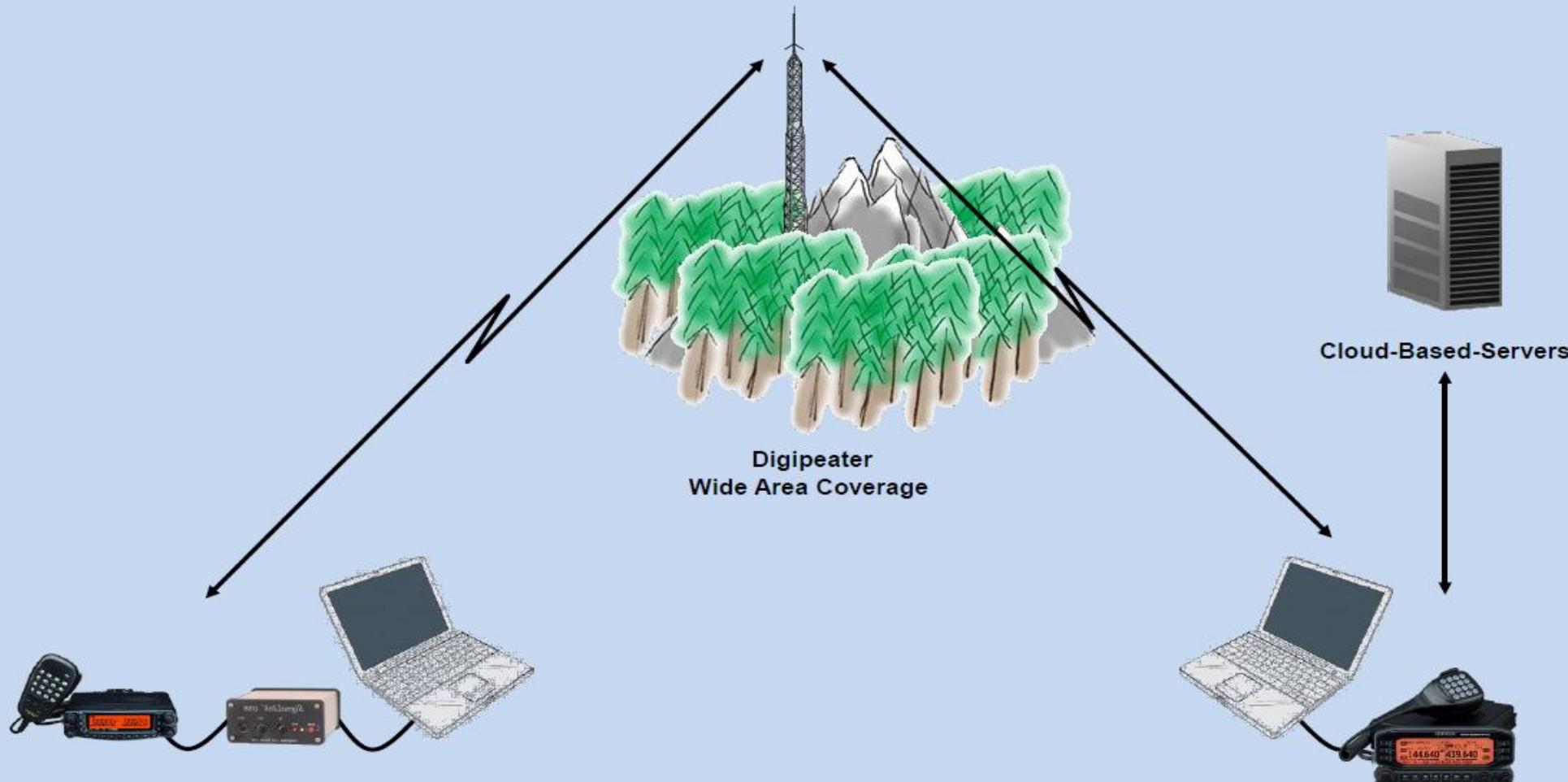
Direct





WINLINK Packet Path

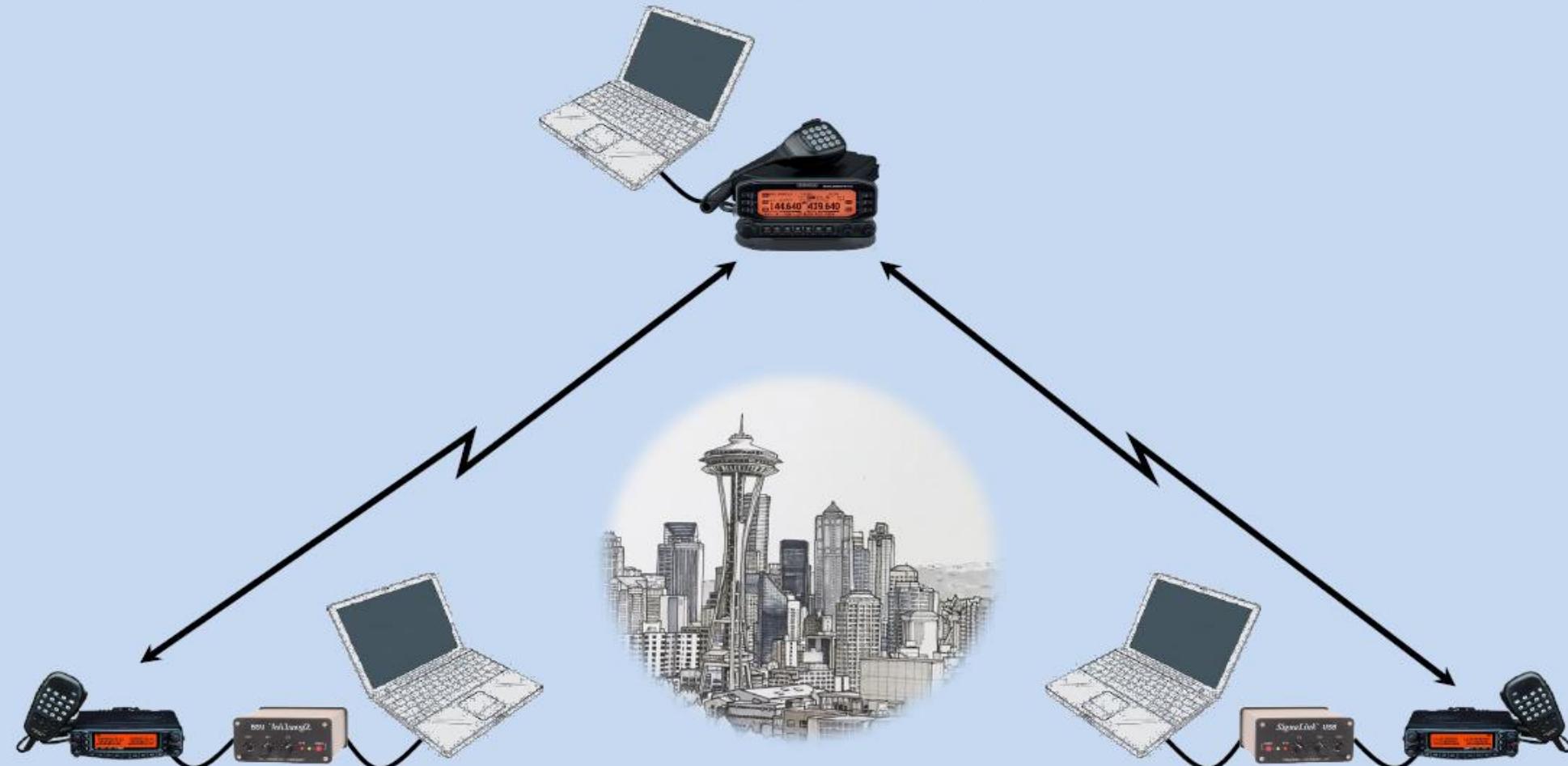
Digipeater Access to distant Gateway





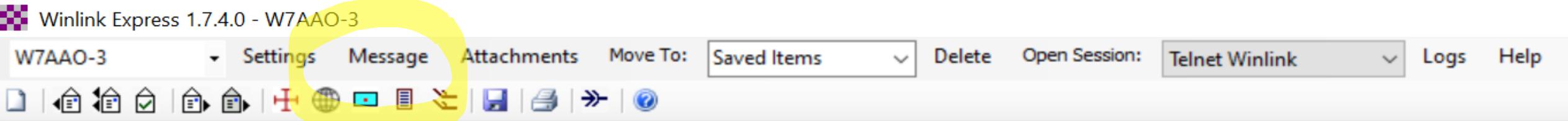
Radio Only Packet Path

Message Pickup Station (MPS)



WINLINK MESSAGE CREATION & TRANSMISSION

- Open new message (Message Menu – “New Message”)
- Create message
 - Select Winlink, P2P or Radio Only message type in “Send as” field
 - Address – amateur call sign or full address for regular email
 - Subject
 - Message Body
- Post to Outbox (no continuous comms session)
- Open communications session window (select protocol from drop down menu)
- Start comms session



	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
	2023/01/27 04:09	Q0R8FINS8BFV	12088	SMTP	SMTP:cruiser55n...	W7AAO-3	Class Prep

Message ID: Q0R8FINS8BFV
Date: 2023/01/27 04:09
From: cruiser55n@gmail.com
To: W7AAO-3
Source: SMTP
Downloaded-from: Telnet:cms.winlink.org
Subject: Class Prep

--000000000000292f4a05f33708ab
Content-Type: text/plain; charset="UTF-8"

PowerPoint Link -
<https://support.microsoft.com/en-us/office/create-a-presentation-in-powerpoint-422250f8-5>

--000000000000292f4a05f33708ab
Content-Type: text/html; charset="UTF-8"



Enter a new message

Post to Outbox

Select Template

Attachments

Spell Check

Save in Drafts

Close

From: W7AAO-3

Send as: Winlink Message

Request message receipt

Set Defaults

To:

Cc:

Subject:

Attach:



Enter a new message

Post to Outbox

Select Template

Attachments

Spell Check

Save in Drafts

Close

From: W7AAO-3

Send as: Winlink Message

Request message receipt

Set Defaults

To:

Cc:

Subject:

Attach:

W7AAO-3

Settings

Message

Attachments

Move To:

Saved Items

Delete

Open Session:

Telnet Winlink

Logs

Help



No active session.

System Folders	
Inbox (0 unread)	
Read Items (0)	
Outbox (0)	
Sent Items (1)	
Saved Items (0)	
Deleted Items (0)	
Drafts (0)	
Personal Folders	
Global Folders	

	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
	2023/01/27 04:09	Q0R8FINS8BFV	12088	SMTP	SMTP:cruiser55n...	W7AAO-3	Class Prep

Message ID: Q0R8FINS8BFV

Date: 2023/01/27 04:09

From: cruiser55n@gmail.com

To: W7AAO-3

Source: SMTP

Downloaded-from: Telnet:cms.winlink.org

Subject: Class Prep



Telnet Winlink Session

[Exit](#)[Settings](#)[Start](#)[Stop](#)

Time to next Autoconnect = Disabled



Telnet Winlink Session

Exit Settings **Start** Stop Time to next Autoconnect = Disabled

*** Connecting to a CMS...

*** Connected to CMS-SSL at 2023/01/27 20:21:32

[WL2K-5.0-B2FWIHJMS\$]

;PQ: 40328428

CMS>

;FW: W7AAO-3

[RMS Express-1.7.4.0-B2FHM\$]

;PR: 16787038

; WL2K DE W7AAO-3 (CN87SF)

FF

FQ

*** -- End of session with WL2K at 2023/01/27 20:21:33 --

*** Messages sent: 0. Total bytes sent: 0. Time: 00:00, bytes/minute: 0

*** Messages Received: 0. Total bytes received: 0. Total session time: 00:00, bytes/minute: 0

*** Disconnected at 2023/01/27 20:21:33

FOLLOWING COMMS SESSION

- Check Inbox for received messages
- Completed traffic stored in Sent folder