

UTAH COUNTY WINLINK



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AGENDA

Winlink System
Gateways
Winlink Express
Practical Operation

Introduction

Why Winlink? Is Winlink just another passing digital mode that will go the way of packet? Why is Winlink so complicated? How do I get started? What equipment do I need to get started? How does Winlink fit into Utah county's communications plan?

These are all questions that I have been asked.

I have been asked these same questions.



INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

1. Incident Name:			2. Date/Time Prepared:				3. Operational Period:			
			Date:				Date From:		Date To:	
			Time:				Time From:		Time To:	
4. Basic Radio Channel Use:										
Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode (A, D, or M)	Remarks
5. Special Instructions:										
6. Prepared by (Communications Unit Leader) Name: Signature:										
ICS 205			IAP Page			Date/Time:				

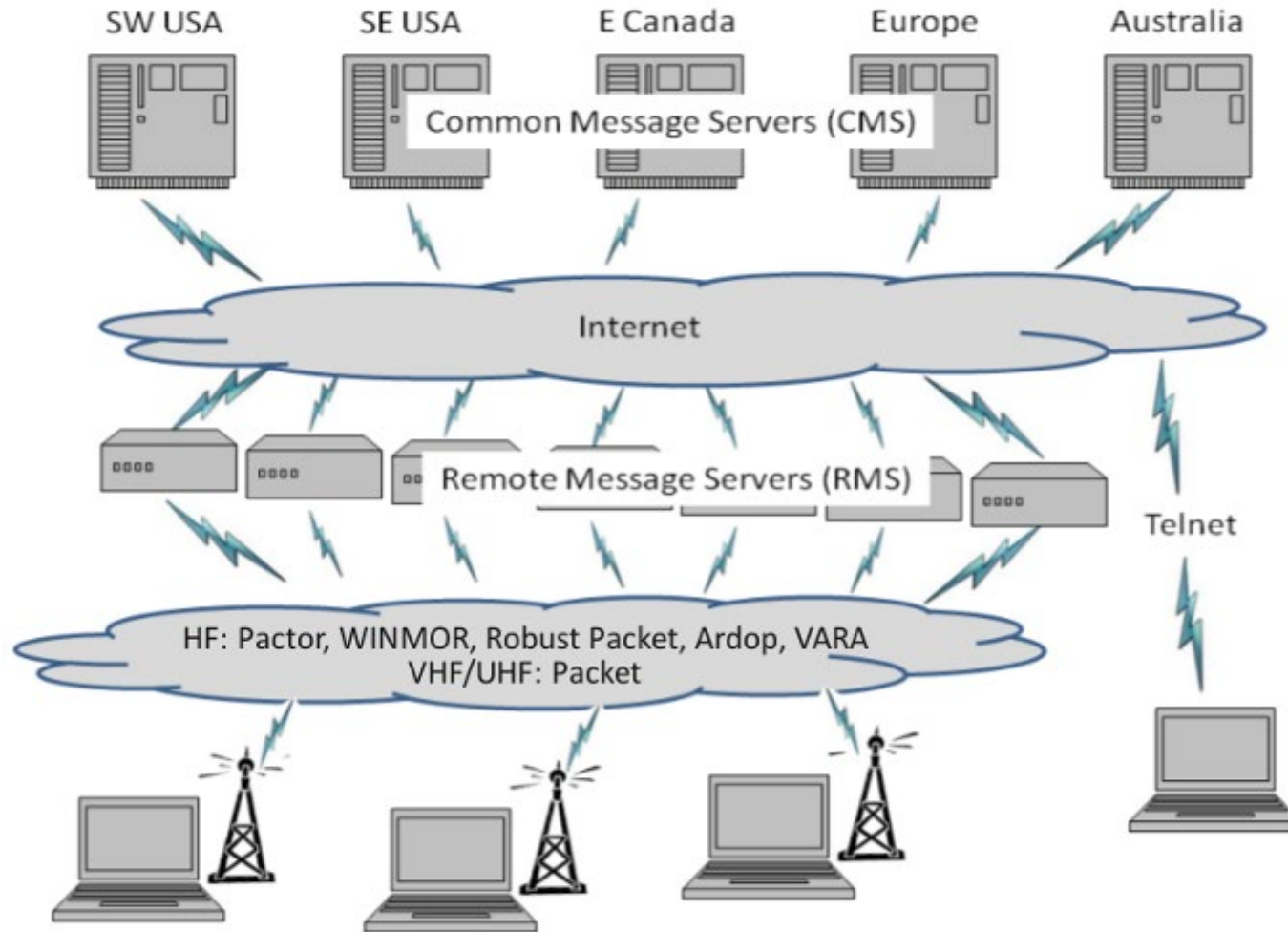
Yes, winlink uses ics forms very well. I think ECS should use these forms much more often. But this is just my opinion.



WINLINK SYSTEM



Standard Winlink System

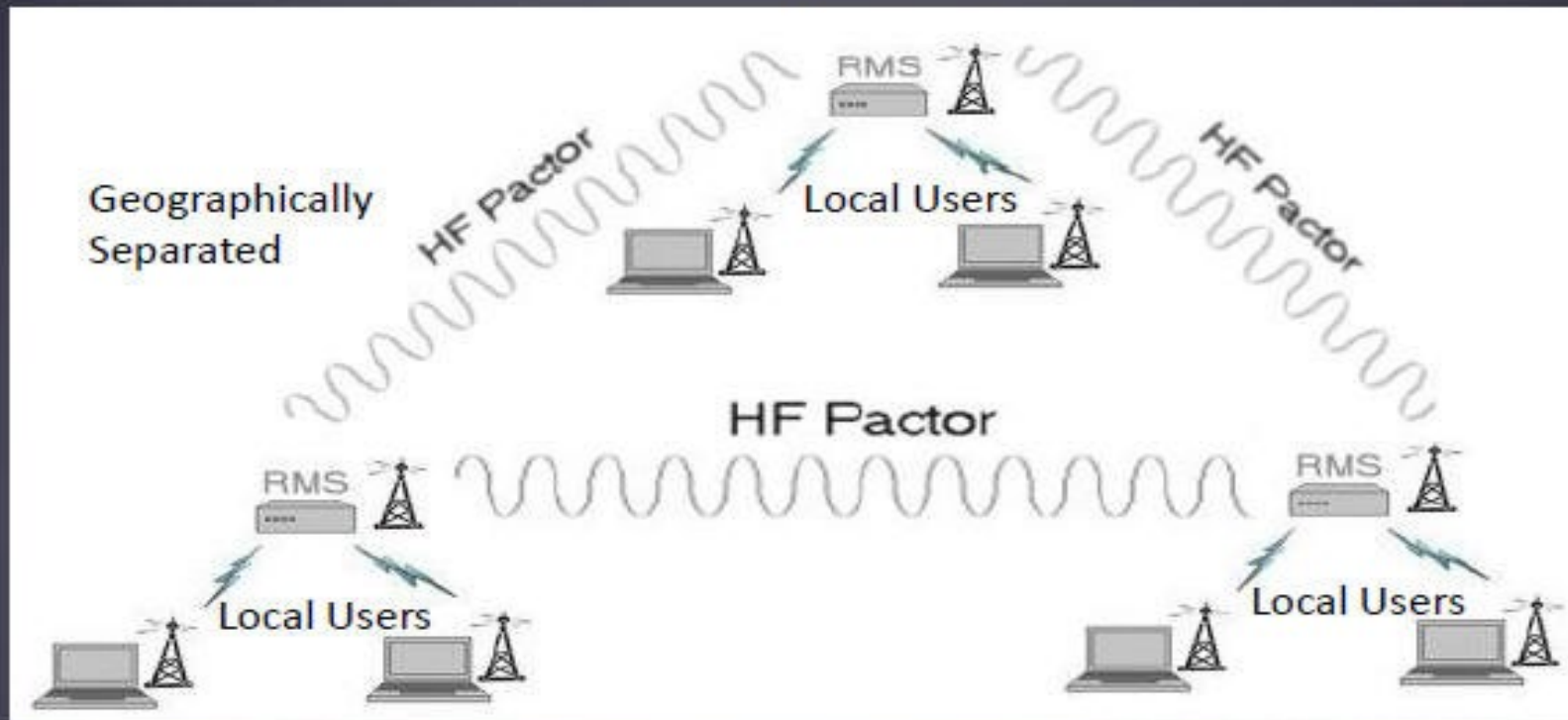


Hybrid Network

Yes, it is important to understand how this backbone fits into the whole system.

Winlink Radio-Only Network

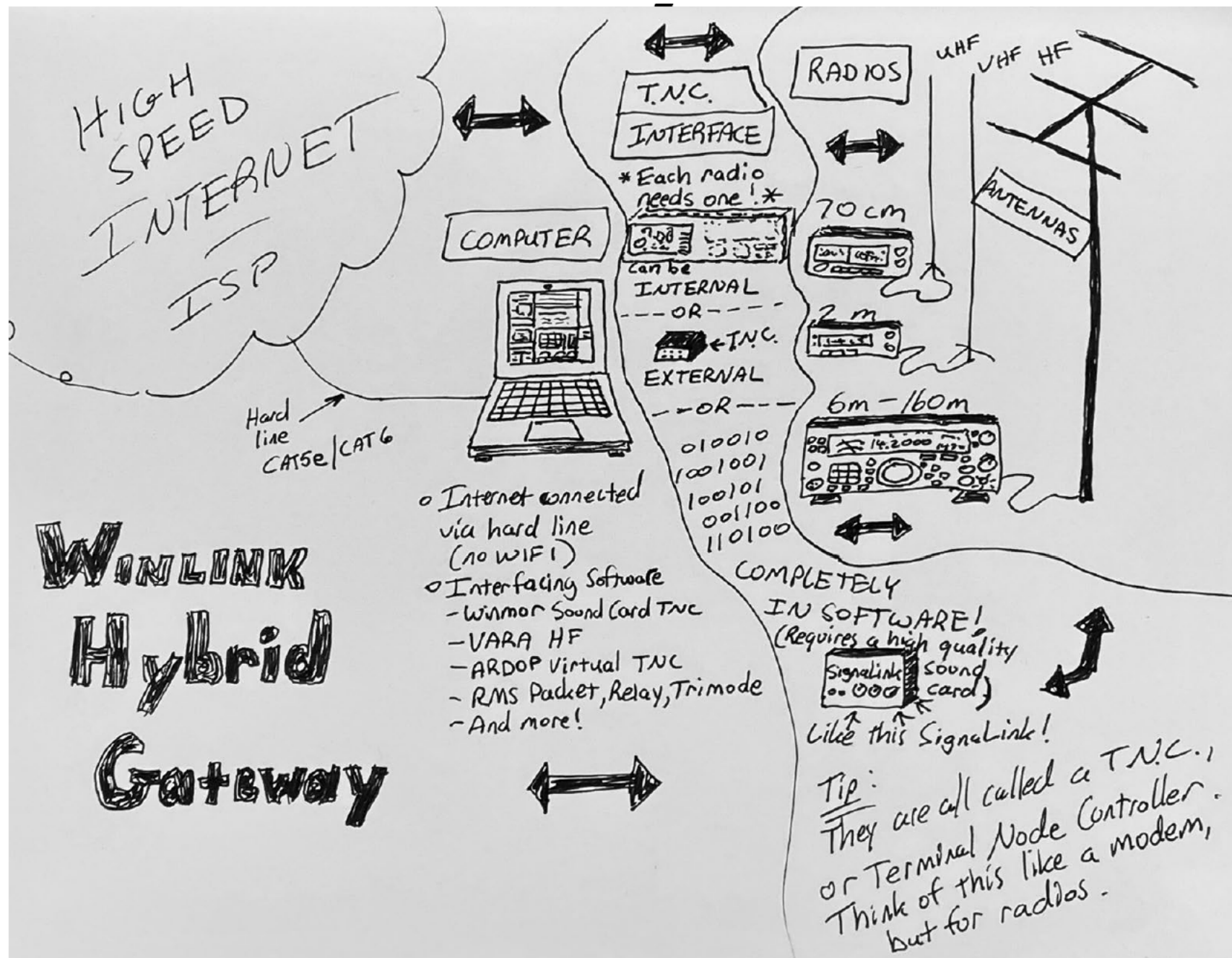
Local networks connected by HF, regional or long distance





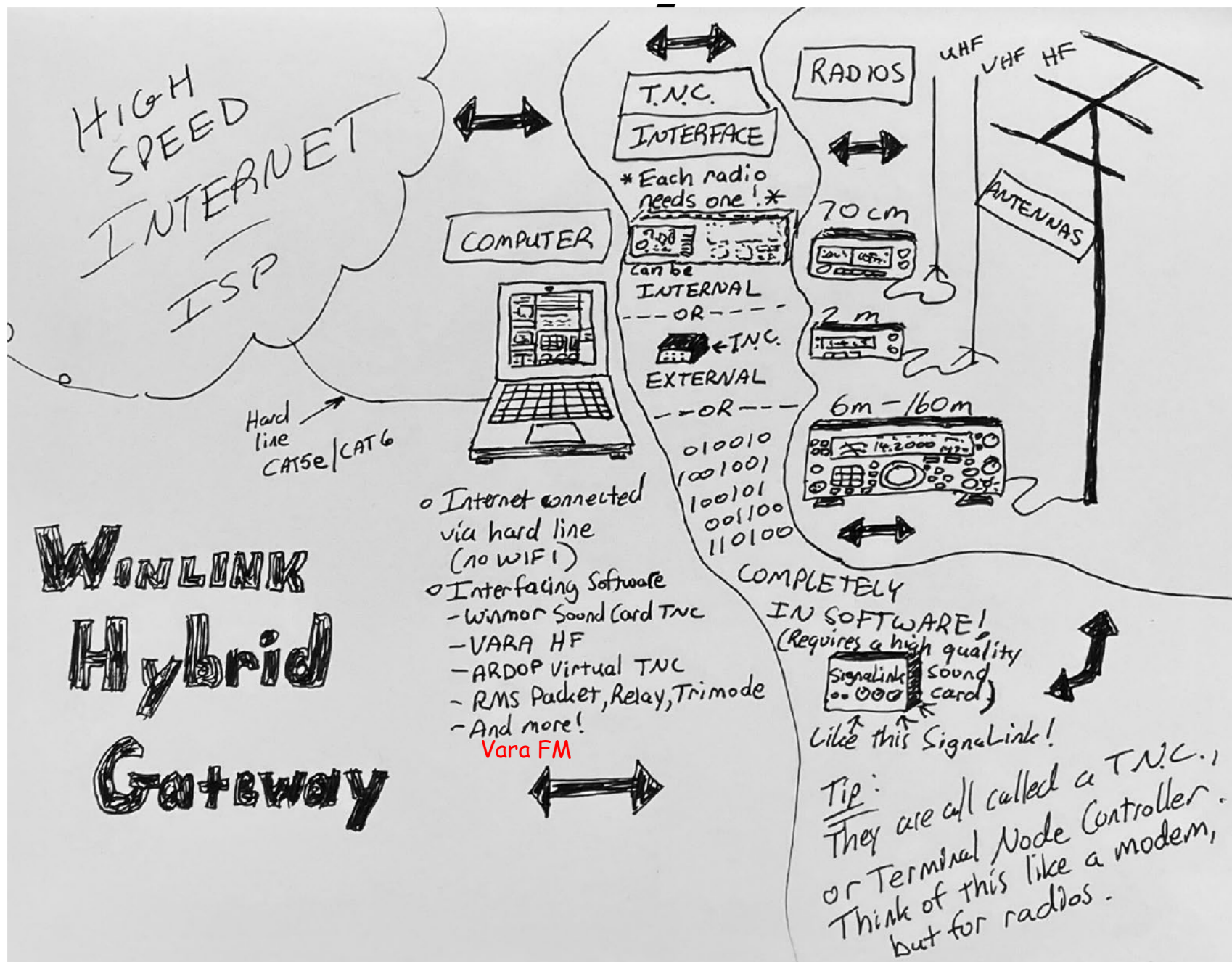
WINLINK GATEWAYS

What are they, and how do they work?



This is a wonderful diagram.
This is what the user will see.

I hope this will allow
questions to be asked. You
know like what about my
radio or my situation.



Gateway Software

- RMS = gateway
- Relay
- Vara FM
- Hybrid software
 - Trimode = HF RMS = HF gateway

K7UCS-10, UCSO-EOC Notes

- Normally gateway machines are dedicated devices.
- Due to constraints imposed on us by the IT department we have some issues to be aware of:
 - Must stay logged in
 - RMS and Relay must be running
 - Gateway laptop does not automatically restart on power bump.
 - The laptop has a battery
 - We can use Winlink express on the gateway but the operator must be considerate of the issues. If the operator pokes around, or makes a mistake the function of the gateway can be blocked.

Thanks to the Sheriff Office Department for sponsor this new technology.

Other Utah County Gateways

- K7UCS-10 – 145.03MHz, UCSO, Vara FM, Vara FM Wide
- KE7AU-10 – 144.95MHz, Orem, Utah, Vara FM, Vara FM Wide
- WA7FFM – 144.95MHz, Pleasant Grove, Utah, Vara FM, Vara FM Wide
- WN7I-10 – 144.93MHz, Highland Utah, Vara FM, Vara FM Wide

Do we need to have a UHF Gateway? Maybe not.

It would be nice to have one in Eagle Mountain or Saratoga or South County, Santiquin, Goshen, Elberta?
Can we install one on top of a mountain?



WINLINK EXPRESS

How do I send messages? What are forms?

Yes, everyone needs to see how to send a message and forms.
Perhaps I could reply to one while we are in this presentation.

Email vs. Winlink Express

- Traditional email clients are always connected to internet.
- Winlink Express, assumes that you are not connected in real time to the radio network to compose your message
- Winlink Express = pop3 email client
- Some different knobs, but same principals with the assumption that the message is being transported by a limited bandwidth channel

Winlink Express – How To

Remember to show them the maps.

- Compose a message
- Address a message
- Send a message
- Send / receive a form
- Request information – i.e Radar, weather, etc.
- Tactical IDs
- Who is sending the message
- How to post message to servers
 - Telnet
 - Gateway

HOW TO USE THIS IN PRACTICE

How do we effeicently send messages? What procedures/ processes that we need to use?

Tactical ID Nomenclature

I would like to create a list of all the J locations.

- ECS stations
 - ECS-1
 - ECS-2
- EOCs
 - City callsign-EOC (UCSO EOC = 1J-EOC)
- Hospitals
 - City callsign-Hosp(AF hospital = 5J-HOSP)
- Utilities
 - Facility city callsign-PWR(Rocky mountain power AF = 5J-RCKYPWR)

These are good procedures to establish.

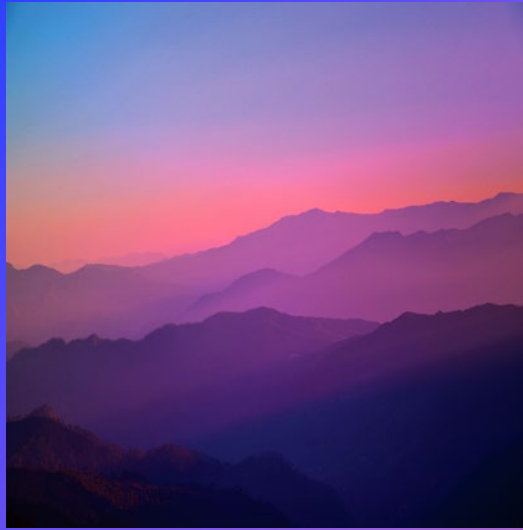
I also worry about a good GPS Location.

Operating Procedures

- Don't request read receipts
- Batch data in small batches
- Don't setup short automatic periodic radio connections
- Use fastest medium to transmit data. It is okay to use telnet!
- Listen before transmitting
- Set receive messages to be approved before receiving
- CC incident backup email on each message. (incident@ecsteam.org)
- If you are changing shifts and changing computers export messages from previous shift computer and import messages into new shift computer. (USB Thumb drives are your friend)
- Update new computer shift with tactical callsign.

Caveats, Provisos

- Telnet is okay to use. You don't have to go via radio.
- SO gateway is shared
- Gateway radio has speaker unplugged
- You can print by printing to a file on a USB stick and inserting the usb stick into the printer. Ugg. Can we fix this?
- Multiple people can operate in the EOC using telnet and a computer.
- Remember once a message is received it is removed from the system.



Summary

Who the Winlink team is:

Jeff Ballif, Trent Snyder, Gary Hutton, and any additional people who are interested and willing to get to know the system and help provide support and maintenance.

If you have an issue: Send an email, fill out a form.

Winlink@ecsteam.org

[Gateway issue form:](#)

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THANK YOU

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