



# Alachua County EOC AUXCOMM: NF4AC

## A Brief Overview of Our Operation with a Vision for Future Interoperability

<https://www.nf4rc.club/>

Brett R. Wallace

FCC: NH2KW, GMRS: WSDJ298

Owner: PACE Resiliency Training and Consulting

Contact: [NH2KW@gmx.com](mailto:NH2KW@gmx.com)





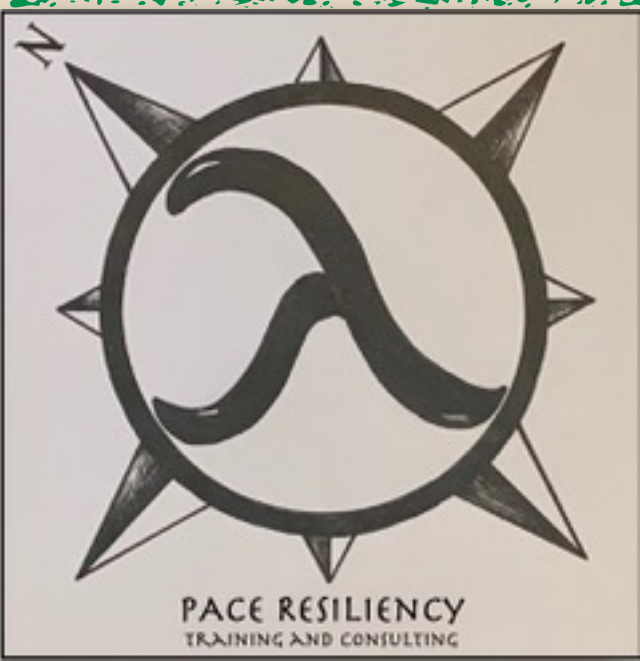


# Disclosure Statement

I have no conflict of interests to disclose.  
I am retired Active Duty Military, a former  
contractor, and now independent consultant  
(1099 contractor)

Brett R. Wallace  
FCC: NH2KW, GMRS: WSDJ298  
Owner: PACE Resiliency Training and Consulting  
Contact: [NH2KW@gmx.com](mailto:NH2KW@gmx.com)

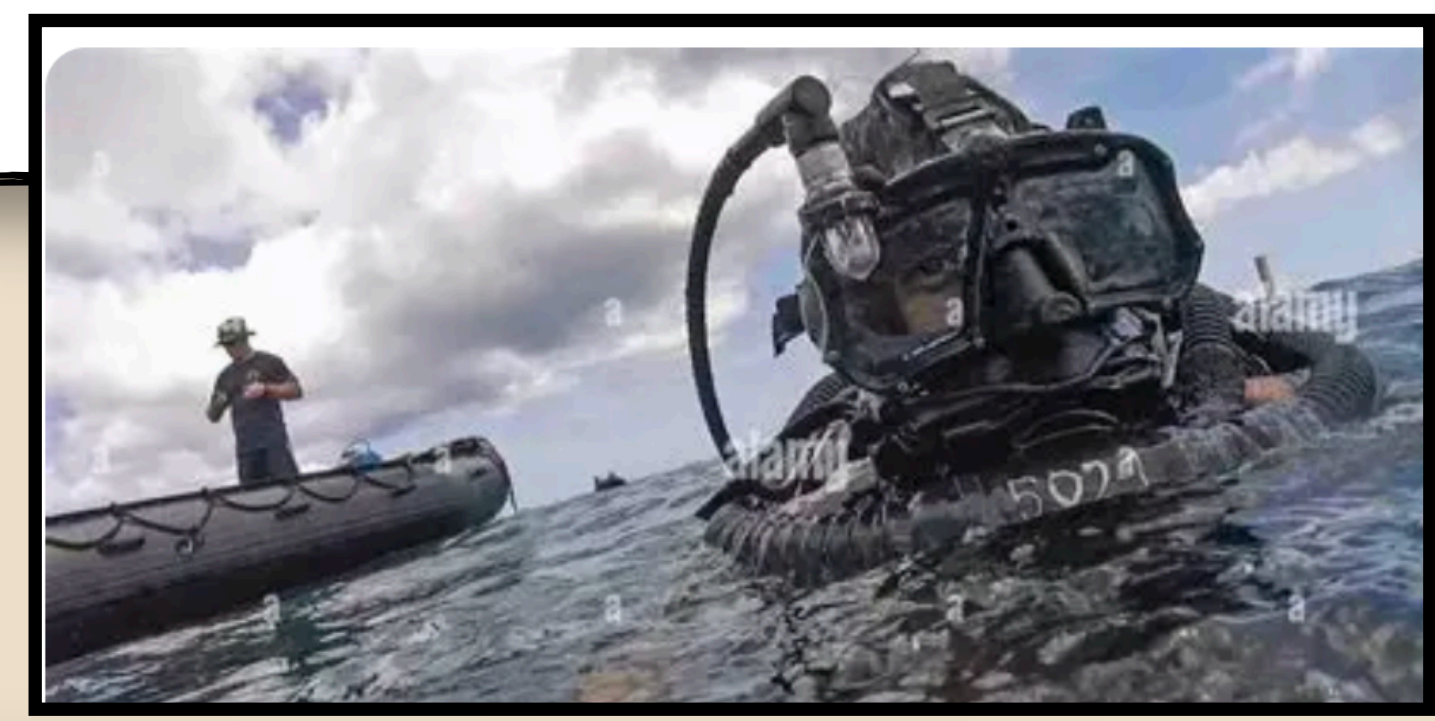
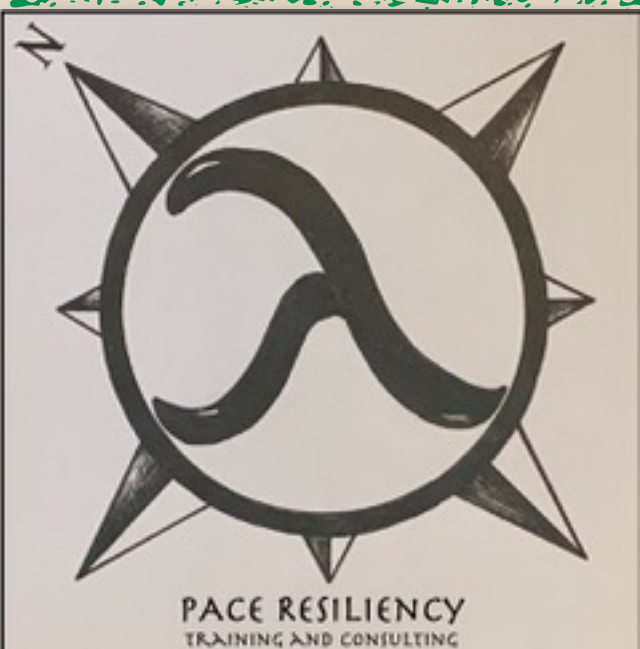




# Presentation Outline

1. Personal Background
2. NF4AC History
3. NF4AC Layout
4. Concept of Operations (CONOPS)
5. Training and Exercise
6. Vision of Integration





# Personal Background

**I realize this presentation is NOT all about me.** I thought it might be helpful to understand where I'm coming from and how that shaped my understanding of radio communications and priorities:

## 28 years in the field of disaster preparedness and emergency management

- Military: 23 years Navy Special Operations. 7 years as a Deep Sea (hard hat) diver, 16 years with the bomb squad (Explosive Ordnance Disposal, Naval Parachutist, and Diver). Subject matter expert (SME) in Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNe or WMD) response, Anti and Counterterrorism, Weapons Technical Intelligence (WTI), and tactical communications at headquarters and non-permissive field environments. Combat tours in Iraq ('05/'06, awarded the Bronze Star Medal) and Afghanistan ('07).
- Government Civilian Contractor: 12 years in Disaster Preparedness and Emergency Management. Five years as the Emergency Manager (GS-12) of US Naval Hospital Guam. Major involvement in the development of the Guam Healthcare Coalition and integration of ESF #8. Seven years as a contract Emergency Management SME, policy writer, and Training and Exercise Coordinator for the US Naval Bureau of Medicine and Surgery. Traveled to Navy hospitals and clinics around the world to advise and assist the Emergency Managers with their programs and participation in major exercises.
- Current: Owner of PACE Resiliency Training and Consulting, LLC, with the goal of bridging the gap between faith-based organizations and government response/recovery efforts. Currently working with Grindstone Ministries, the Alachua Community Organizations Active in Disasters (COAD), and a local community sharing organization. Prospective contracts with the National Disaster Medical System (NDMS).
- Adjunct Faculty with the Defense Medical Readiness Training Institute teaching Public Health Emergency Management; four times a year at Joint Base San Antonio and once a year at the US Uniformed Health Service University (USUHS).





# History of NF4AC

NFARC is an ARES-based organization. The current group has been working with the Alachua County EOC for over 8 years, which moved from the Red Cross. Jeff Capehart is the Emergency Coordinator (EC), Dr. Gordon Gibby and Col(RET) Huckstep are the presidents.

2. ELECTION OF OFFICERS FOR NFARC AND NF4AC CLUBS 2025.		
Officer	NFARC	Alachua EOC
1. President	David Huckstep	Gordon Gibby
2. Vice President	Judith Jones	Manish Sahni
3. Secretary	Leland Gallup	Mark McDow
4. Treasurer	Susan Halbert	Susan Halbert

- 2017 Hurricane Irma staffed **9 shelters** (Most common is 2 - 3). 3 Shelters = 10 volunteers.
- 2018 Hurricane Michael
- 2019 Hurricane Dorian

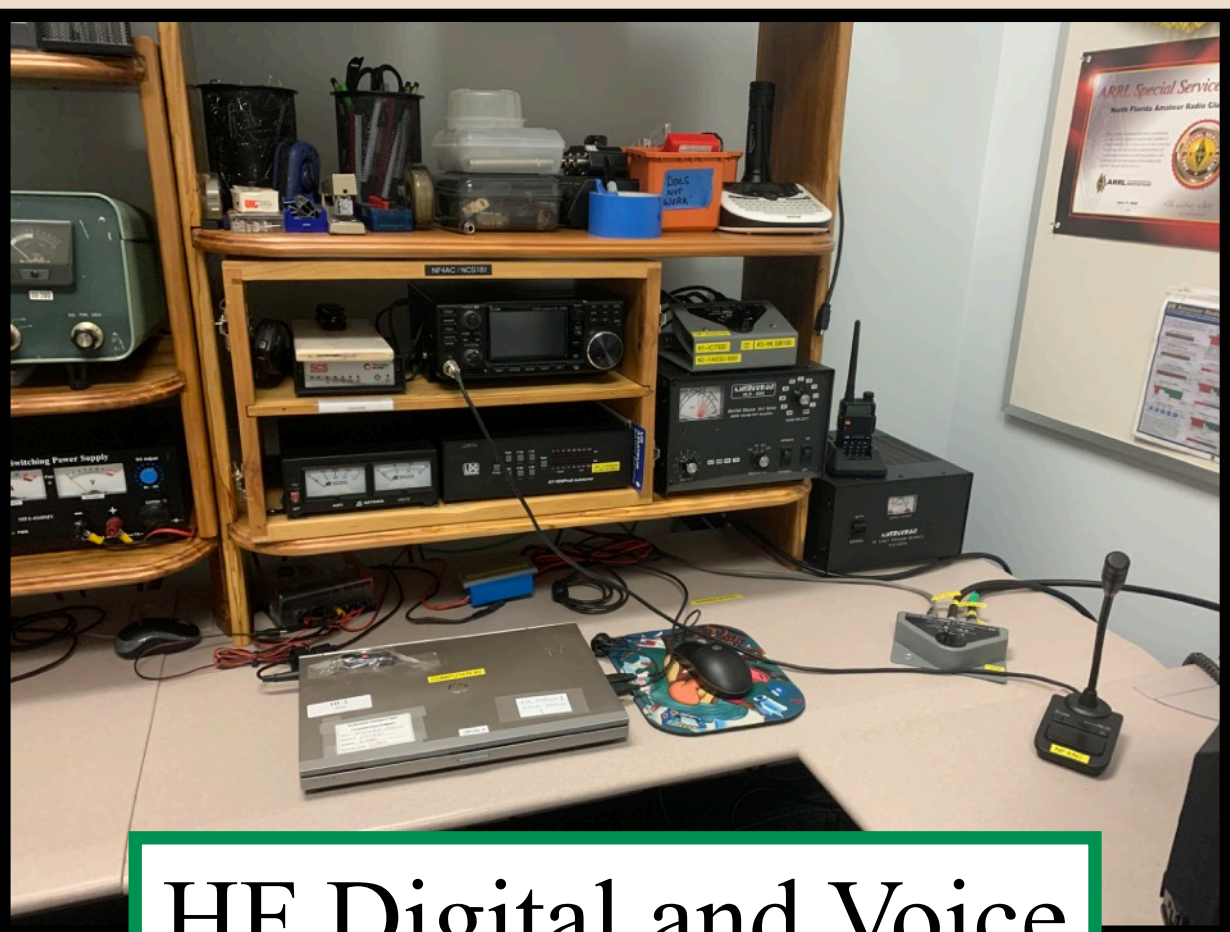
#	Incident	Deployed Hours	Estimated Reimbursement
1	2022 Hurricane Nicole	72 deployed hours	\$ 8,640
2	2023 Hurricane Idalia	41 deployed hours	\$ 6,500
3	2024 Hurricane Debby	165 deployed hours	\$24,000
4	2024 Hurricane Helene	178 deployed hours	\$28,480
5	2024 Hurricane Milton	138 deployed hours	\$22,080
TOTAL ESTIMATE		456 deployed hours	\$89,700

ICS Form 214's  
Very Important!





# NF4AC/NCS181 Layout



HF Digital and Voice

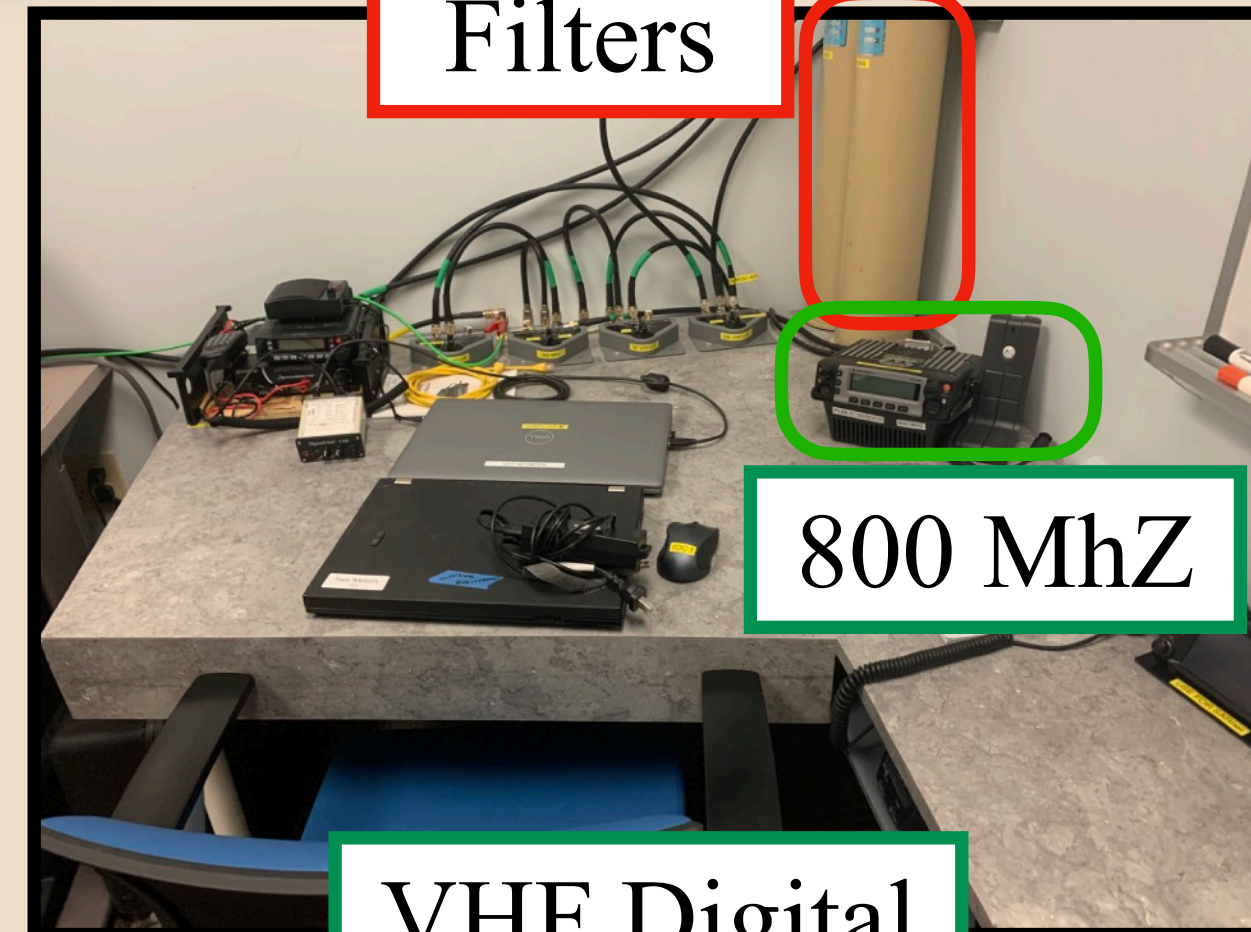
- VHF Voice: 2x Yaesu FDM-400 XDR
- VHF Digital: Yaesu FT-7900 w/ Signalink (VARA, AX-25)
- SLERS
- Public Service 800 Mhz
- Satellite Phone
- HF Capability:
  - Icom 7300
  - Yaesu System 600
  - Ameritron ALS-606 600W Amp
  - Heathkit SB-100 with Heathkit SB-200 ~700W Amp
- HF Antennas: Only one at a time
  - Horizontal EFHW
  - Horizontal OCFHW (works better for SHARES)



Vintage Tube Radio



COOP Go-Kit



Filters

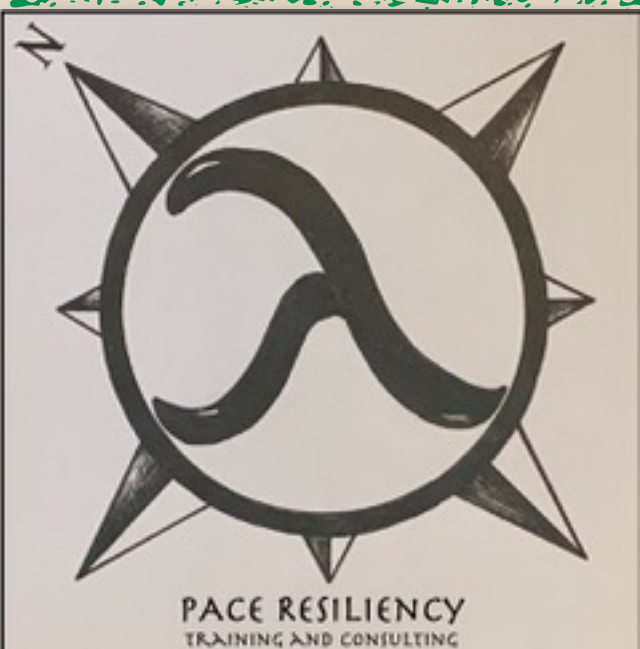
800 Mhz

VHF Digital



VHF Voice





# A Closer Look at the Equipment



Heathkit SB-100



Heathkit SB-200 (700W)



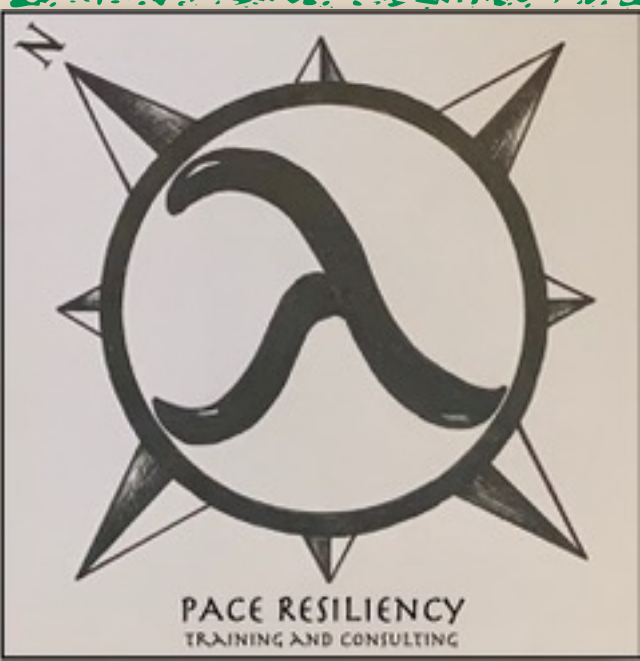
Harris SLERS



COOP Go-Box

Additionally the county has 9 Go-Boxes with VHF and Public Service Radios. All have back up batteries.  
**All 13 of the county's shelters have installed antennas and coax (at a cost of \$5k each)**





# Concept of Operations (CONOPS)

SITUATION: Communication Failure. Any event which may cause traditional methods of communication to fail (i.e. a hurricane).

MISSION: Provide voice and digital communication with:

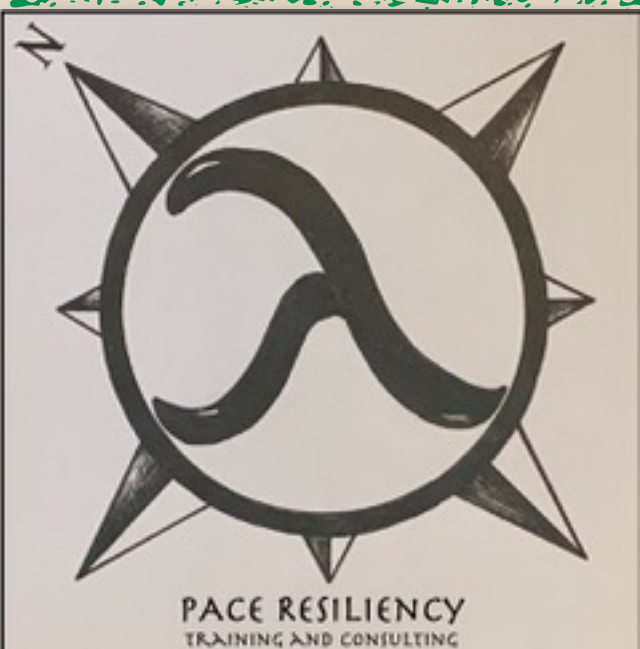
- The county EOC and other EOCs within the state.
- SHARES National and Regional Nets.
- The Shelters or other locations the county has directed the group to operate from
- A local net control located outside of the EOC.

EXECUTION: The **EOC** is staffed with a minimum of one qualified radio operator, ideal is three. Each **shelter** activated is staffed with a minimum of one operator. A **net control station (NCS)** works from their home to coordinate traffic from. The “Rural Net” and other HAMs can connect at this node.

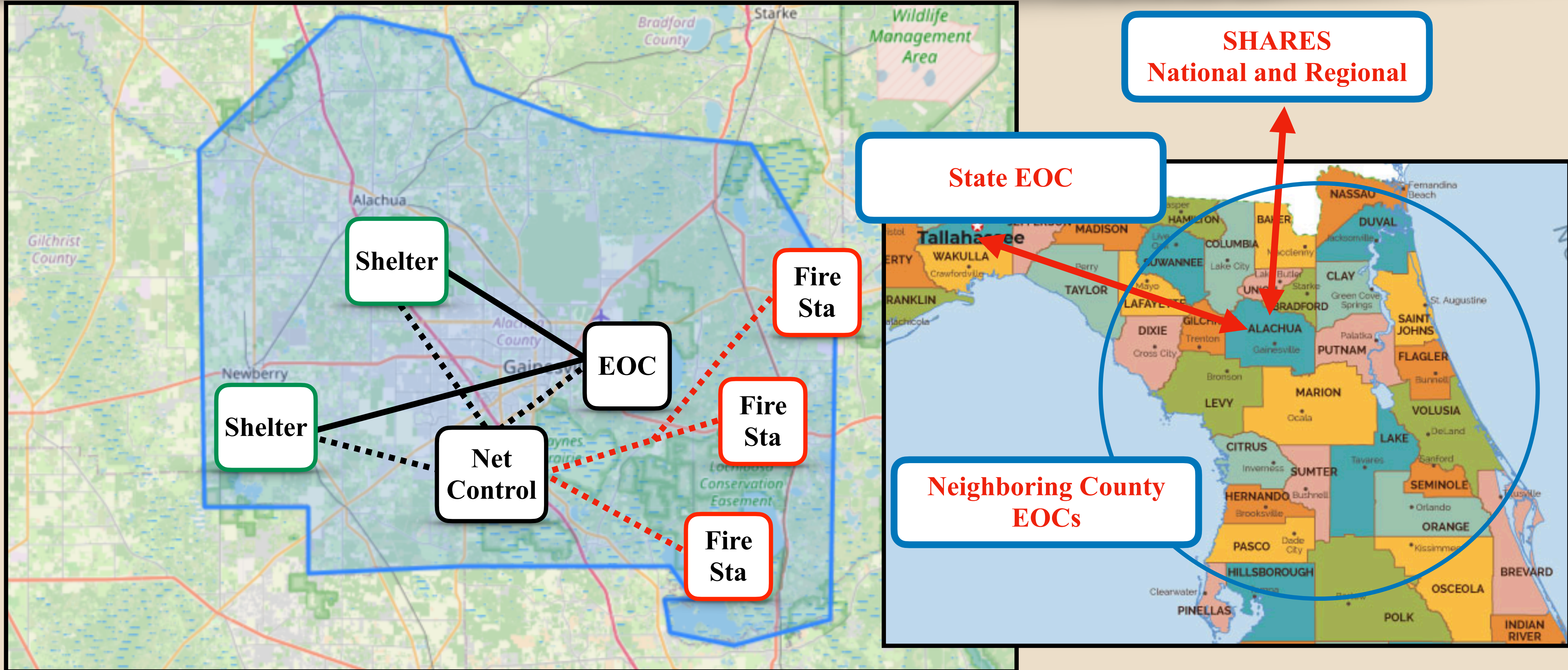
ADMIN: Recall is managed with Everbridge notifications, SMS, etc. If the cell and internet are out, the team can be recalled via the VHF repeater or Winlink over HF and VHF. Radiograms *not* handled in the EOC.

COMMAND and CONTROL: A member acts as net control from their home to disseminate info from the EOC and maintain contact with the other HAMs in the area. The group has been developing helpers stations and a “Rural Radio” network to connect the volunteer fire stations with HAM operators. These are “eyes and ears” around the community to provide situational reports that would be impossible to relay without radio.

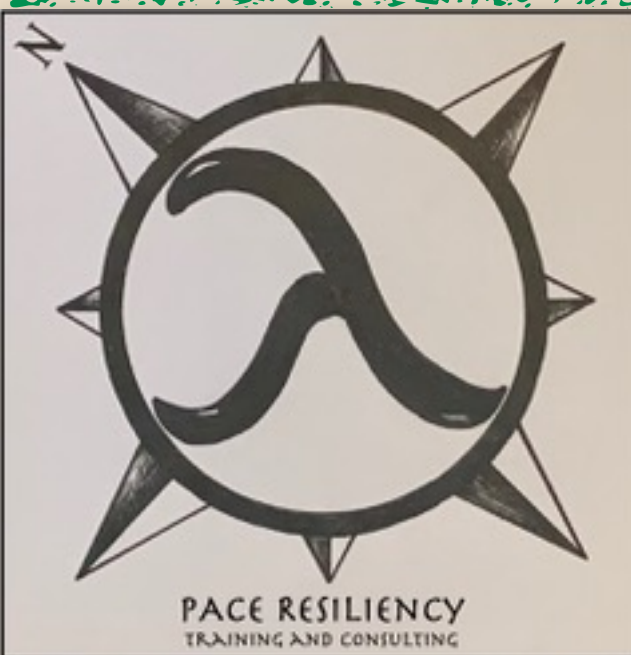




# Concept of Operations (CONOPS)







# Training and Exercise

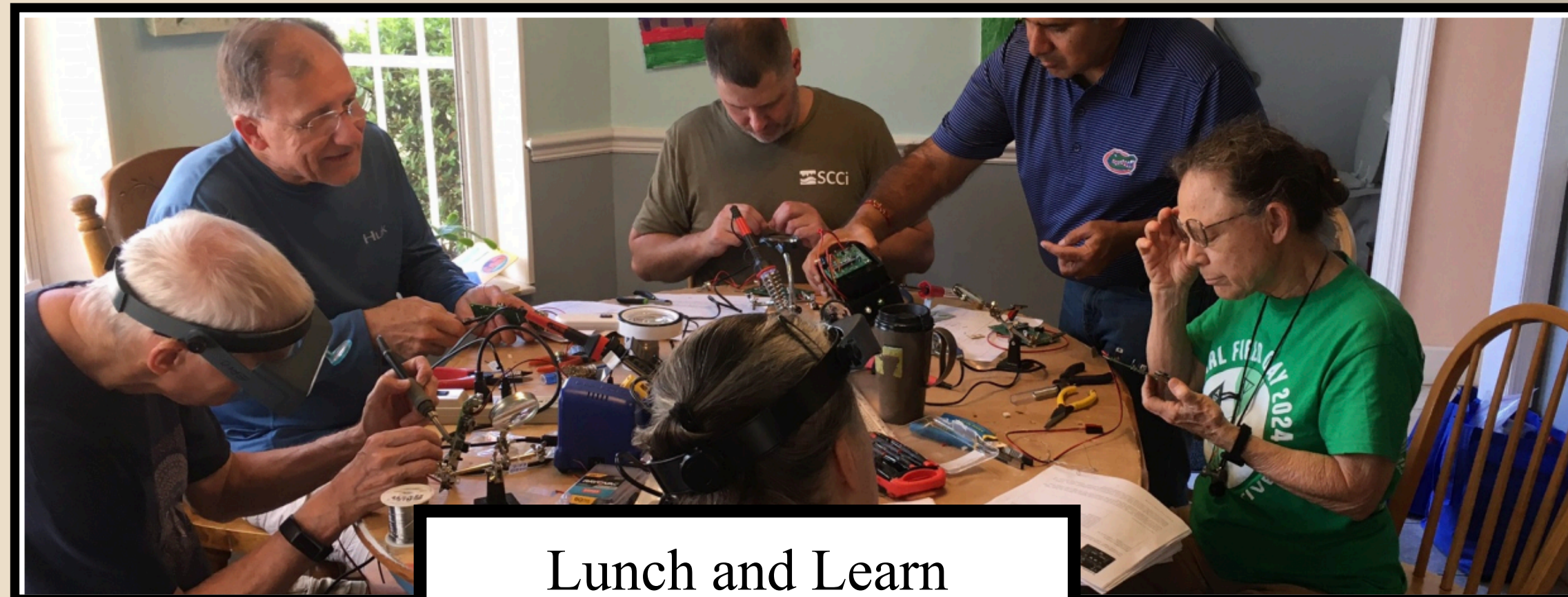
All exercises are NIMS compliant. We participate in the ARES Simulated Emergency Tests (S.E.T.), as well as Summer and Winter Field Days.

- We use Incident Action Plans (IAPs) and create comprehensive after action reports (AARs)
- Weekly COMMS check with SHARES National, Regional, and SARNET
- Monthly communication drill with Flagler County and seven other counties
- Monthly: meetings, “Tech Night” (Zoom), and “Lunch-and-Learn”

Lunch and Learn examples:

“Three Step Process To Get Started with Radiograms in WINLINK”, Jeff Capehart. PDF at: [https://qsl.net/nf4rc/2022/Radiogram\\_Challenge\\_3-STEP.pdf](https://qsl.net/nf4rc/2022/Radiogram_Challenge_3-STEP.pdf)

“Wiring to Your Radio”, Gordon Gibby, Sept 1, 2022. PDF at: <https://qsl.net/nf4rc/2022/WiringToYourRadio.pdf>



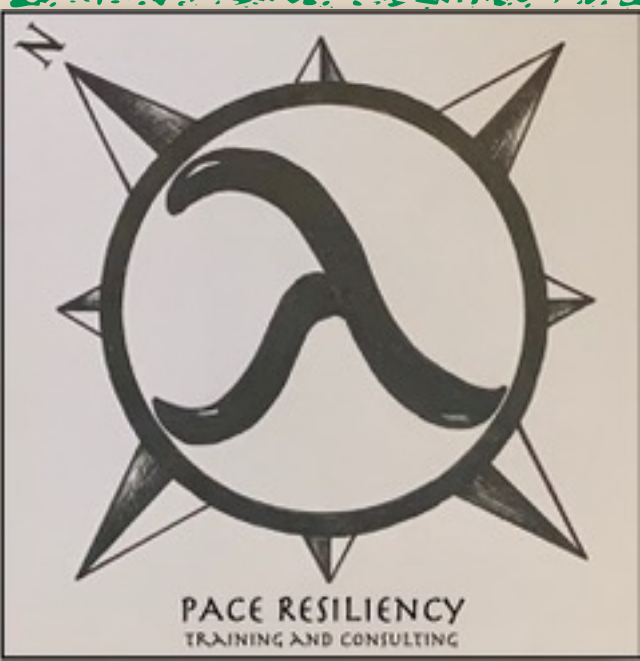
Lunch and Learn



2025 S.E.T.  
Field TOC

- HF Voice and Digital
- VHF Voice and Digital
- GMRS
- CB





# Vision of Integration

*Disclaimer: The thoughts and views expressed are those of the author and not necessarily those of NFARC, the Alachua County EOC, or any other organization.*

Let's start with what we don't want: a social club that works well within itself but  
"Does not play well with others."

Vision: A group of radio operators that can augment the county EOC to provide essential communication with the state and other county EOCs when no other means of communication is available, as well as bridging the gap with rural fire stations and other interested radio operators, to include GMRS (and maybe even CB).





# What is an EOC

The EOC is the point where the elected officials gain situational awareness to support decision making, determine priorities, allocate assets, and request support. A request for assistance (RFA) is two categories; a request for information (RFI) and resources (RFS, e.g. ICS Form 213RR).

How can we assist in this effort?

The more reliant the state is on technology, the more likely our services will be needed

RESOURCE REQUEST MESSAGE (ICS 213 RR)									
1. Incident Name:			2. Date/Time			3. Resource Request Number:			
Requestor	4. Order (Use additional forms when requesting different resource sources of supply.):								
	Qty.	Kind	Type	Detailed Item Description: (Vital characteristics, brand, specs, experience, size, etc.)			Arrival Date and Time		Cost
							Requested	Estimated	
5. Requested Delivery/Reporting Location:									
6. Suitable Substitutes and/or Suggested Sources:									
7. Requested by Name/Position:				8. Priority: <input type="checkbox"/> Urgent <input type="checkbox"/> Routine <input type="checkbox"/> Low			9. Section Chief Approval:		
Logistics	10. Logistics Order Number:				11. Supplier Phone/Fax/Email:				
	12. Name of Supplier/POC:								
	13. Notes:								
Finance	14. Approval Signature of Auth Logistics Rep:				15. Date/Time:				
	16. Order placed by (check box): <input type="checkbox"/> SPUL <input type="checkbox"/> PROC								
	17. Reply/Comments from Finance:								
	18. Finance Section Signature:				19. Date/Time:				

ICS 213 RR, Page 1

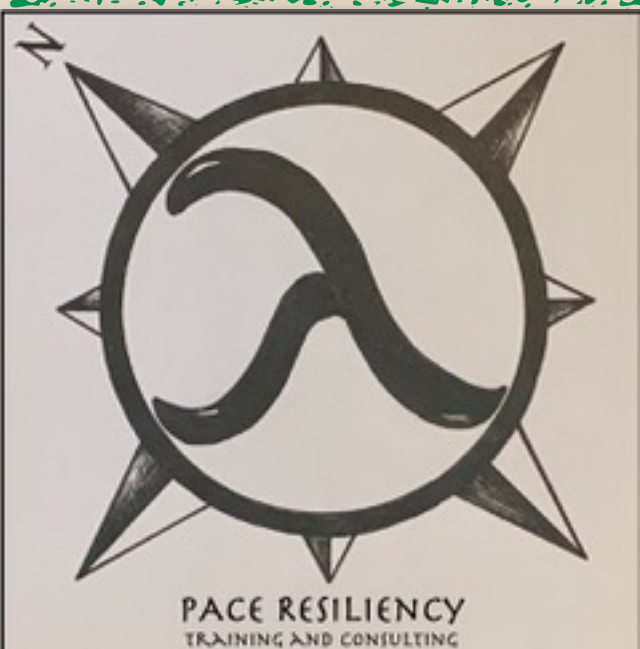


DEMES Mutual Aid Job Aid  
Create & Submit Claim

## Streamlining the Digital FDEM Processes | Project Grey Sky

FDEM is continuously looking for ways to **improve and scale our mission and emergency operations**. Modernizing our processes is part of a larger steppingstone to digitizing and driving efficiencies in the way we operate and serve people.





# Communication in HF Digital Modes

## FLDIGI

- Keyboard to keyboard
- Variable speeds
- Text history can be saved
- SHARES can be encrypted

## Cons

- Broadcast = no privacy
- Short Messages

## FLMSG

- Drop down for message templates (ICS and Radiogram)

## FLAMP

- Forward Error Correction. Can send fills in blocks

Winlink for P2P or RMS

## JS Call

- Weak signal, keyboard to keyboard
- Variable speeds
- Direct messages sent will display a pop-up box
- Ascertain who can hear you and how well (SWR).
- Receive multiple simultaneously

## Cons

- Broadcast = no privacy
- Short Messages

## FLRIG

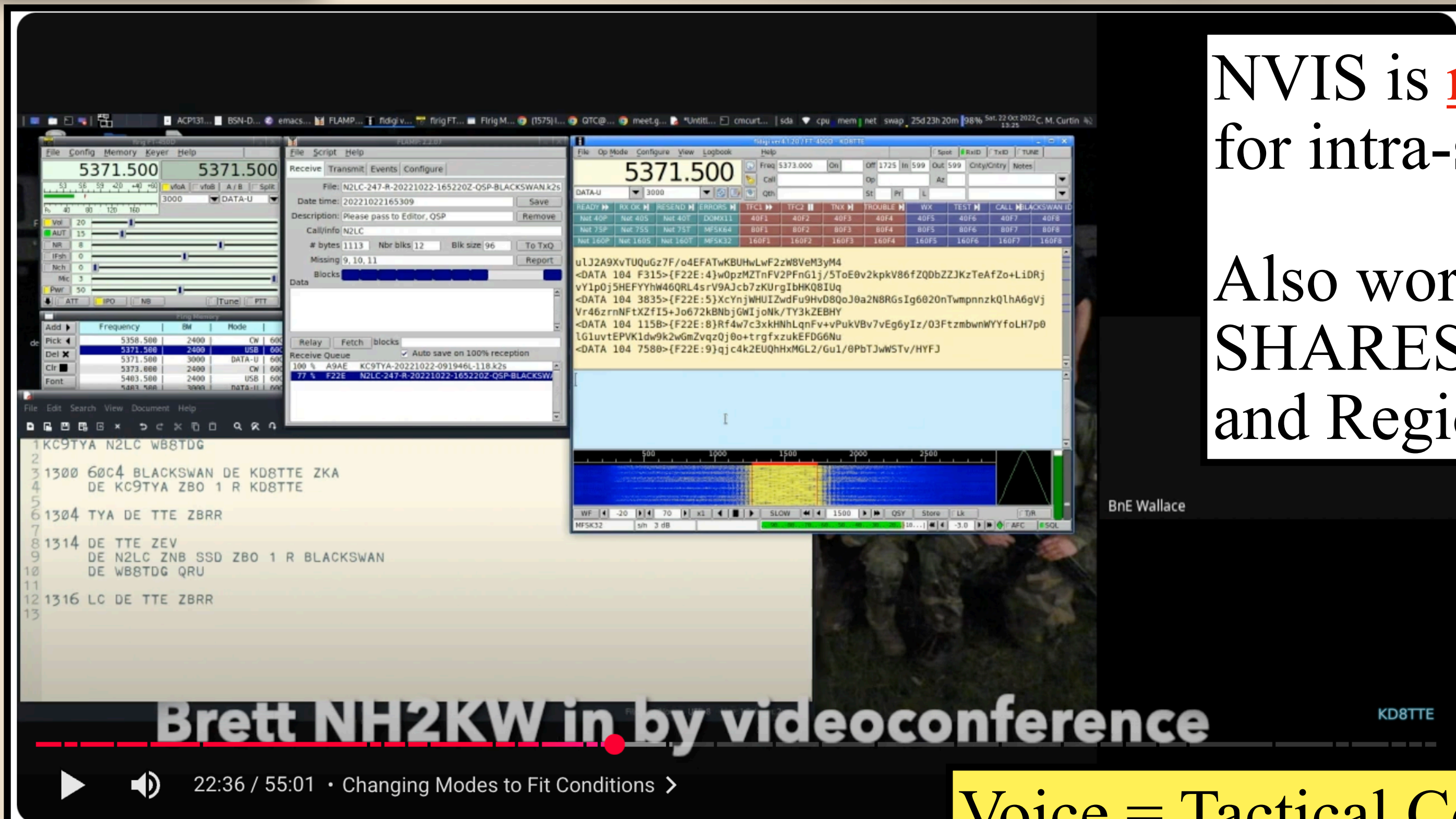
- Runs both FLDIGI and JS8 Call

Encryption is legal on SHARES





# How to Run a Digital Net

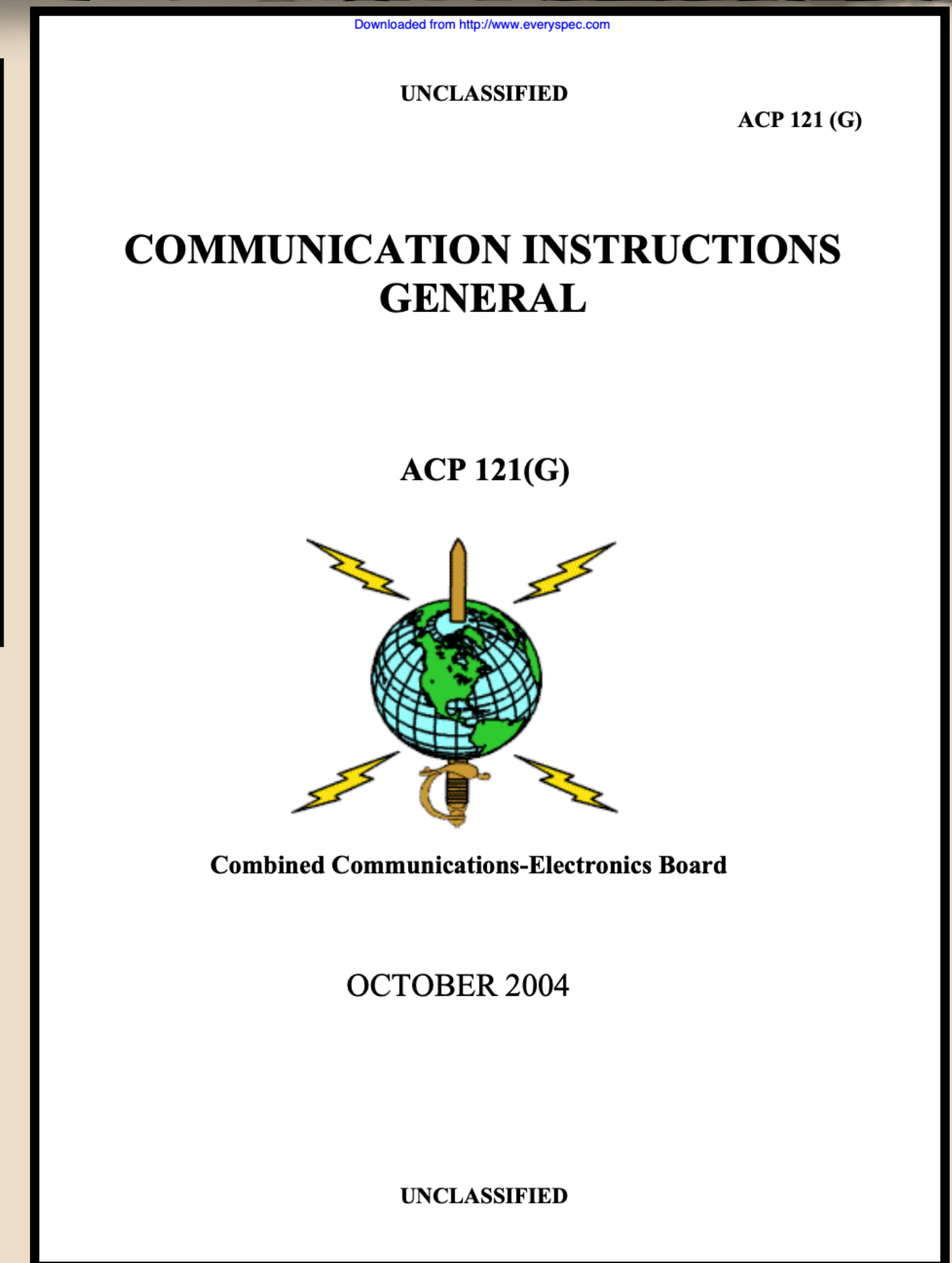


Digital Radio Net Demonstration (Radio KD8TTE Episode 86)

NVIS is necessary for intra-state.

Also works well for SHARES National and Regional

Voice = Tactical Comms (i.e. dispatch, call for backup, etc.)



And this is how it's done... <https://www.youtube.com/watch?v=SXEynQMA4sM>



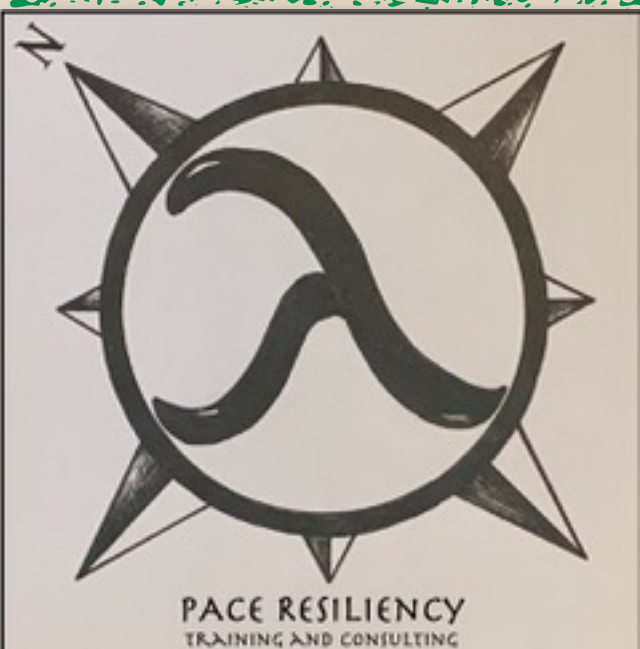


# Bringing it All Together

**Monthly communication exercises!**

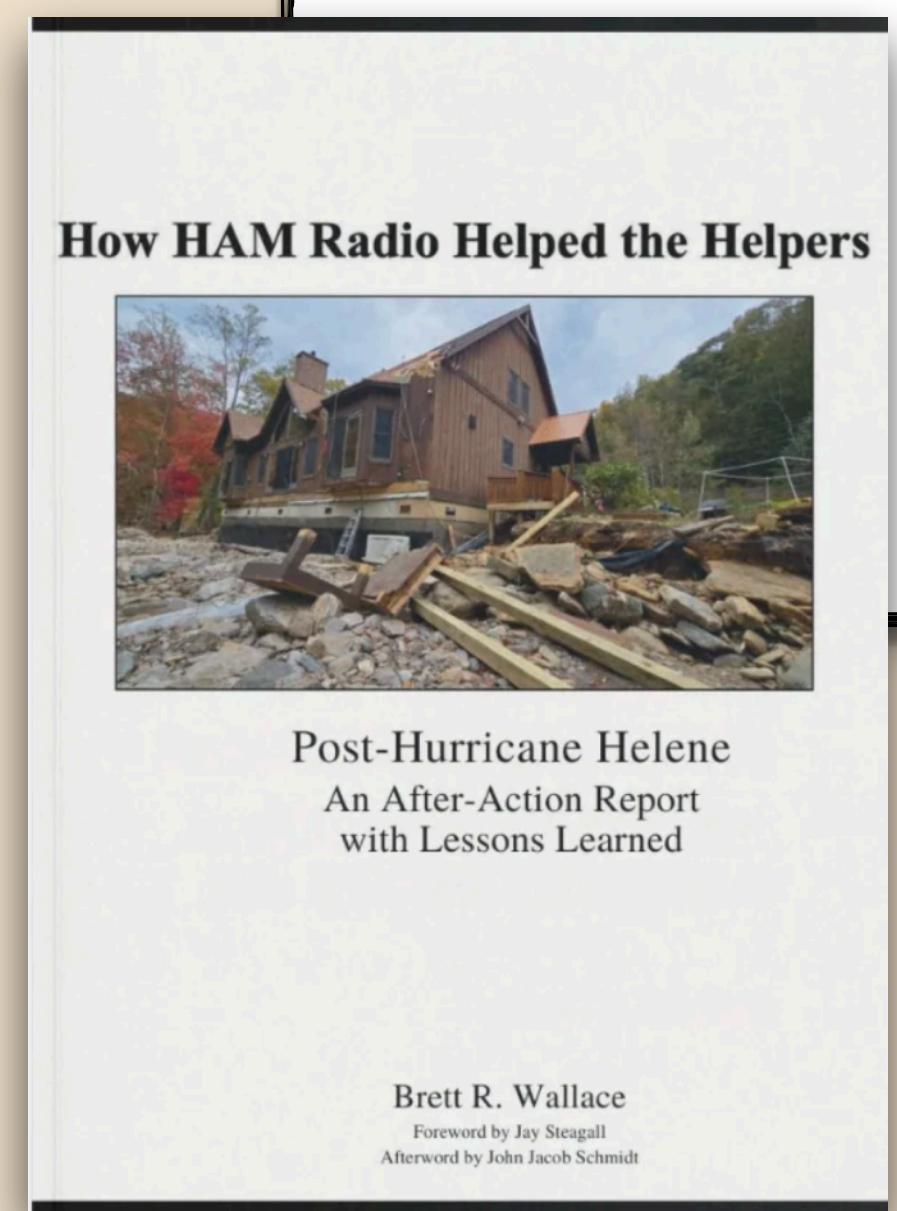
**Flagler County** has monthly comms drills. No need to reinvent the wheel, just support what is already in place.





# Alachua County EOC AUXCOMM: NF4AC

## Questions?



Brett R. Wallace  
FFC: NH2KW, GMRS: WSDJ298

Shameless plug for my book on a Hurricane Helene response  
All proceeds go to Grindstone Ministries

