# WHEN THE GRID GOES DOWN



EMERGENCY COMMS GO UP

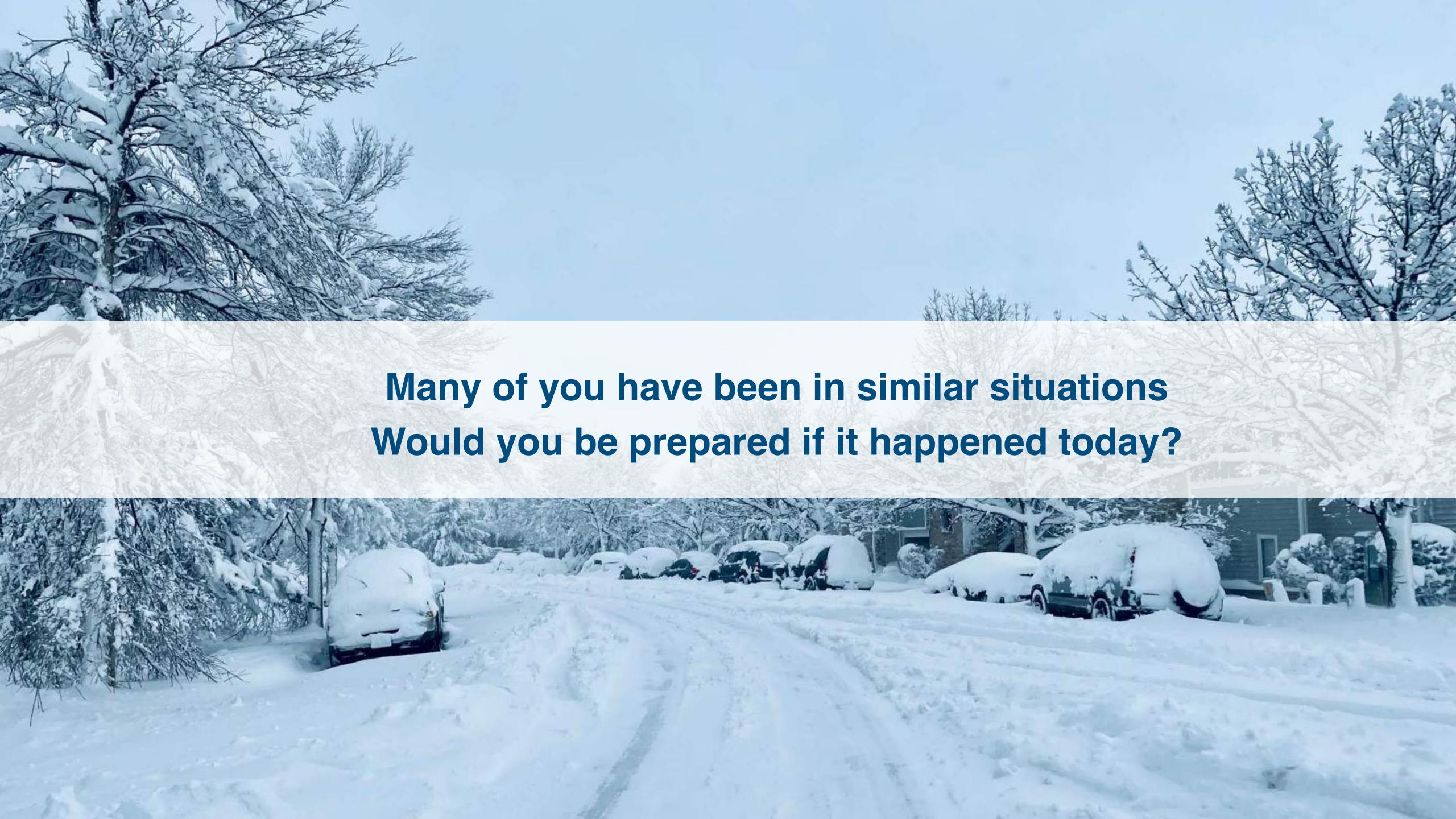
# Bexar County Emcomm

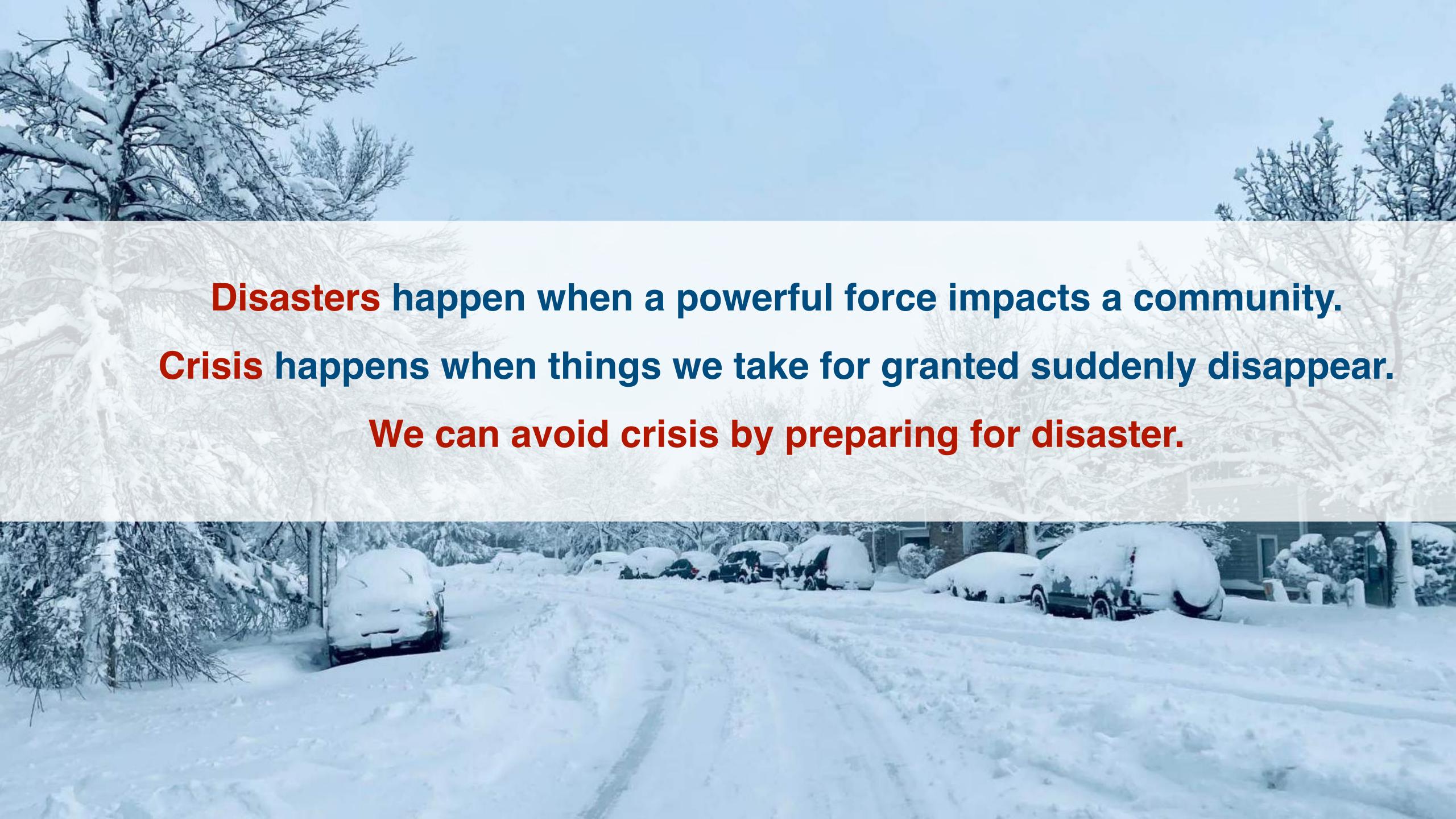
**AARO Presentation May 14, 2025** 

Patricia Colley KI7IEE - Bexar County ARES Emergency Coordinator

Ned Lee KG5US - Bexar County RACES Officer







# ARES and RACES: Problem Solving Partners

#### ARES













"Serving Humanity to Honor God"

Civic organization founded by ARRL - "When All Else Fails" Serves the City of San Antonio, The Red Cross and Community Partners

#### **RACES**







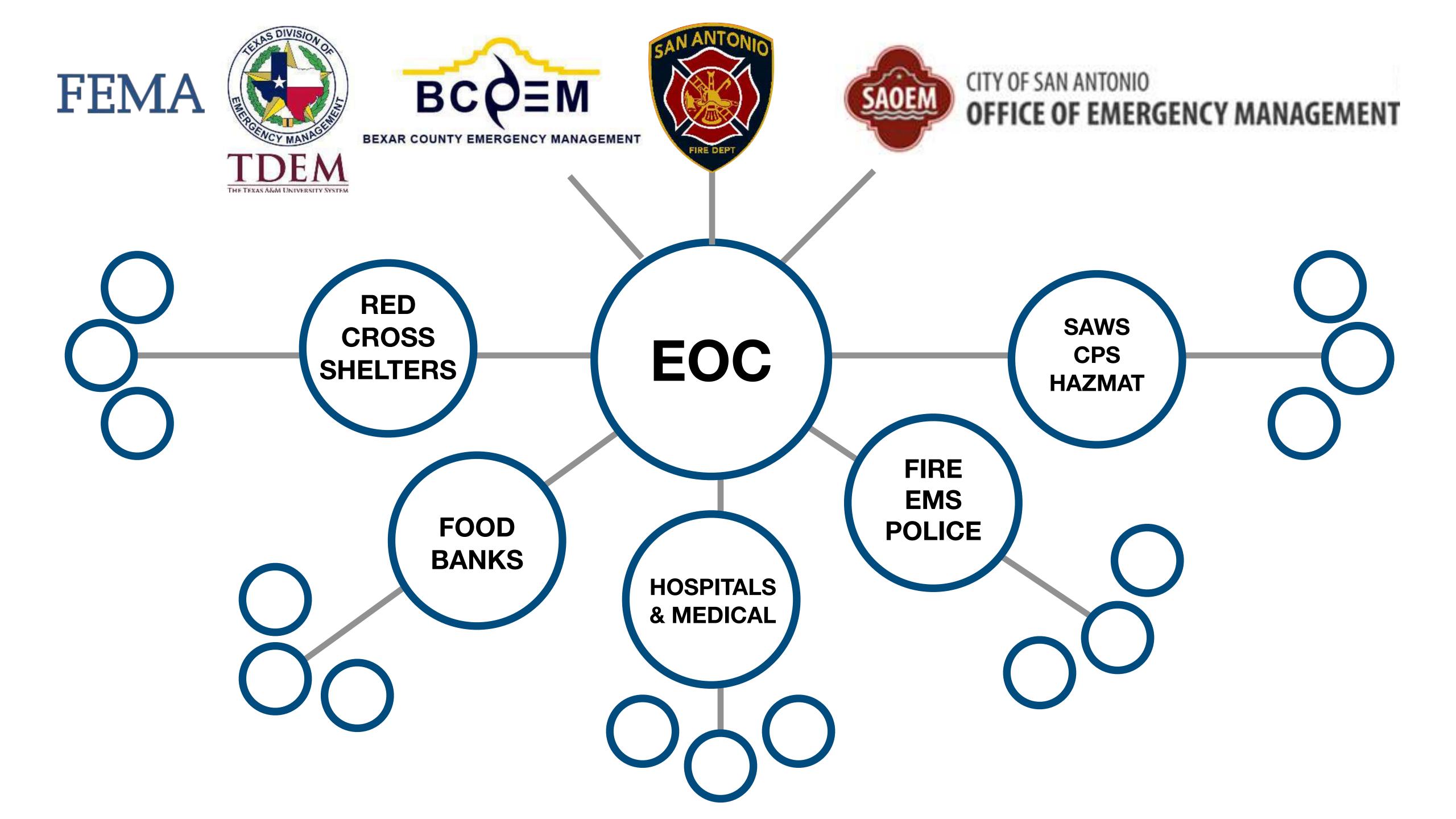








Founded by Congress - "Continuity of Governance" Serves under FEMA, CISA, FCC, TDEM, EOC, Municipal Emergency Managers



#### Other Emcomm Partners

CERT

SKYWARN

AUXCOMM

NTS Traffic Net

Partner Nets

### Benefits to the Community

When the power goes out, people are left in the dark.

We relieve confusion & panic by sharing vital information

We relieve hotline operators / 911 by reducing unnecessary/redundant calls

We report danger, damage and needs across the City to Responders

We help out our neighbors

#### **Benefits to Incident Command**

#### Amateur radio is fallback infrastructure for comms

Manage lower priority comms for mobile command

Free up personnel, bandwidth and signal-to-noise ratio

Relieve hotline operators / 911 by reducing unnecessary/redundant calls

Auxiliary comms connections between served agencies and their partners

Monitor neighborhoods to relay status and needs to aid centers

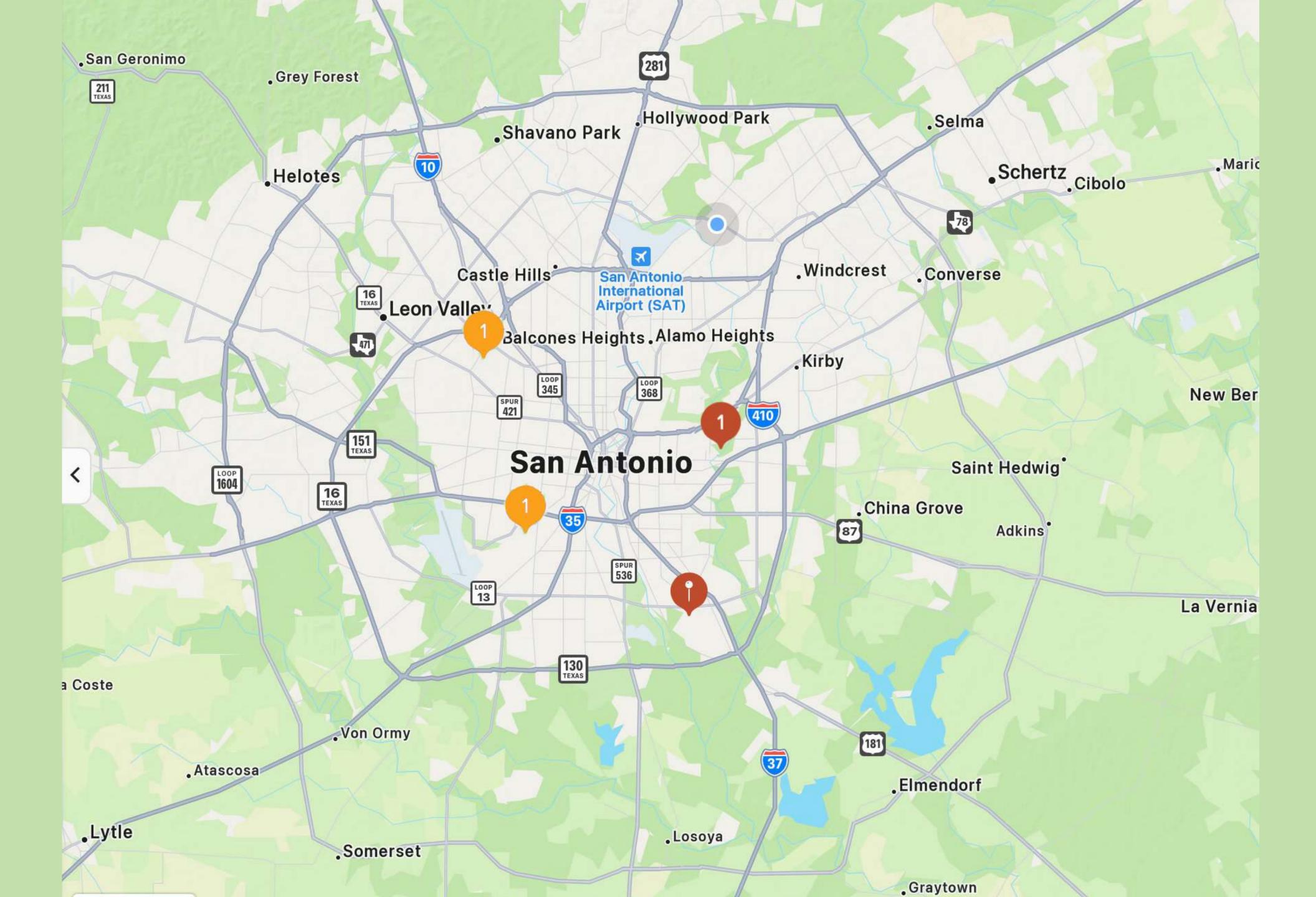
### Current projects

Deploying two additional 2m repeaters for the City of San Antonio

Replacing broken antennas for the EOC radio room

Building relationships with Government & Civic Partners

Reaching out to local clubs and hams



# Preparing San Antonio

### Common & likely events here in SA

Summer heat waves / heat emergencies

Floods / major storms / hurricanes

Power outages / water rationing / water contamination

Man-made disasters

Receiving evacuees from Houston & Corpus Christi

#### Recent events in Texas

2023 South Texas 4.7 Earthquake

2024 South Texas 3.5 Earthquake - Aftershocks were felt in our EOC

2024 Houston Hurricane Beryl & Floods

2024 North Texas Hurricanes & Floods

2025 Bexar County Wildfires

## 2024 Hurricane Beryl - Houston



Category 4 storm with massive flooding

County Judge said

"Hams saved the day"

#### Recent events in the US

#### 2024 Hurricane Helene - Asheville NC

2024 Hurricane Helene - Florida

2024 California Wildfires

2025 Kentucky Tornadoes / Floods

2025 Los Angeles Wildfires

2024-2025 Puerto Rico Hurricanes and Floods

### 2024 Hurricane Helene - Asheville, NC Area



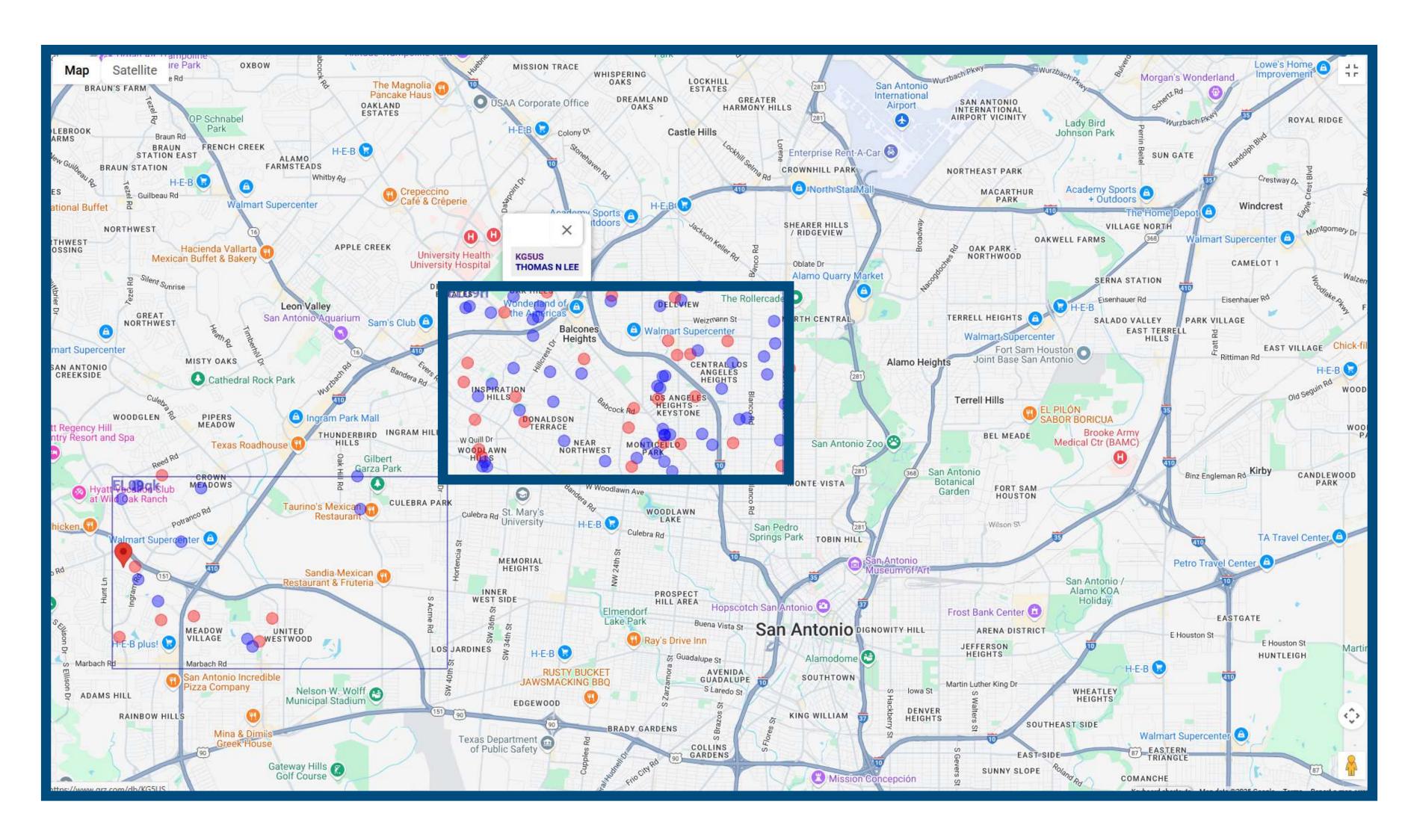
Josh KI6NAZ
interviews local heroes
Dan K2DMG and
Thomas K4SWL

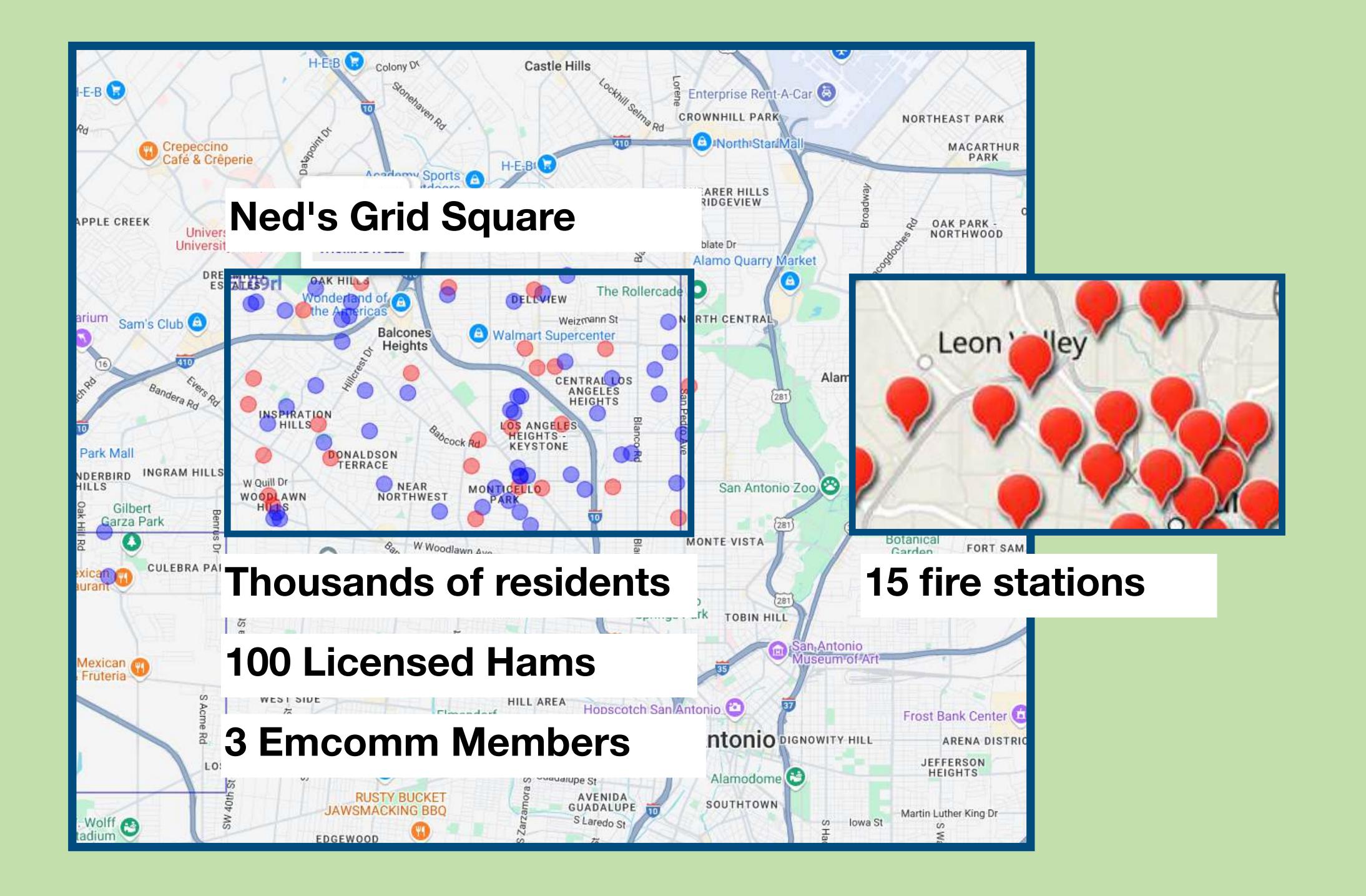
Local hams monitoring a repeater on Mt Mitchell were the only local responders for the first 3 days

YouTube: Ham Radio Crash Course
Video: "Emergency Communication
Lessons Learned From Hurricane Helene"

# We're better together!

## Local hams are an untapped resource





### Be proactive, not reactive

The time to organize is now, not after disaster strikes

Establishing relationships ahead of time is essential

Joint partnerships, nets and exercises to build the network

Participate according to your ability and interest

You and your family always come first!

No self deployment

## In an emergency, any ham can help

You know what's happening in your neighborhood

Anyone with a radio can relay life saving information

Any private repeater can host a life saving net

We invite you to join us in our mission

Be part of the next generation of helpful hams

### Emcomm Gear for Portable Comms

#### Comms: VHF/UHF - HF NVIS - Winlink

Field portable radio station

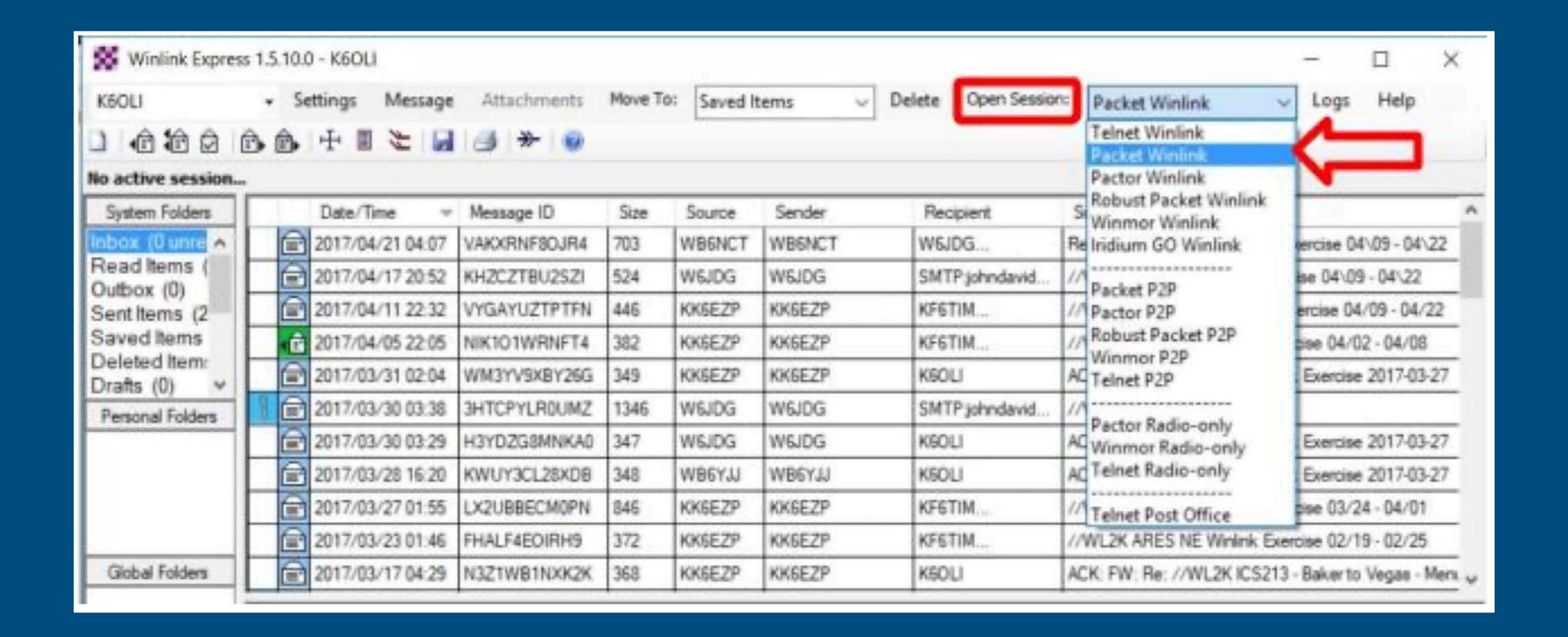
Suitable vehicle - for hauling gear & quick station setup

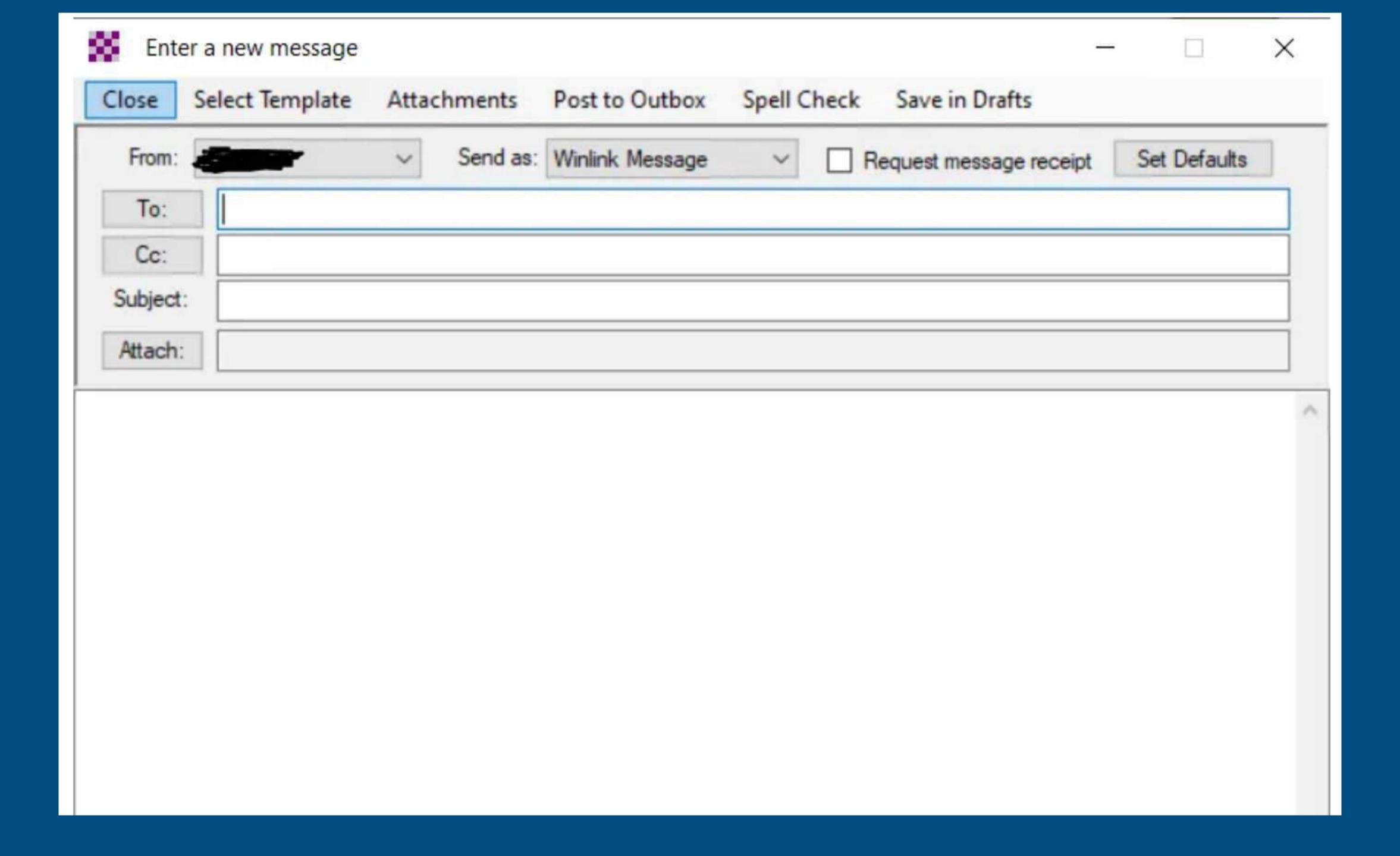
HF NVIS Antennas - primarily 40m, sometimes 75 / 80

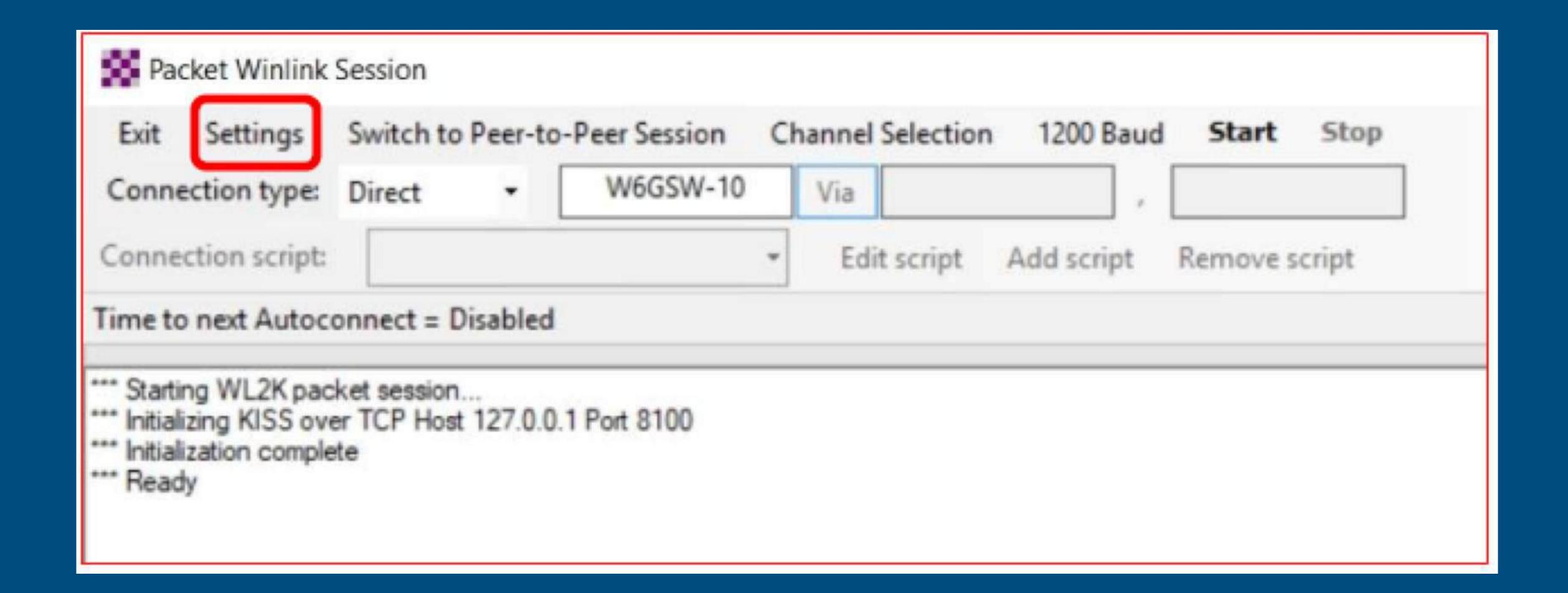
Winlink with VARA HF & FM to pass traffic / FEMA ICS forms

HT - with aftermarket antenna and/or magmount

Backups of everything







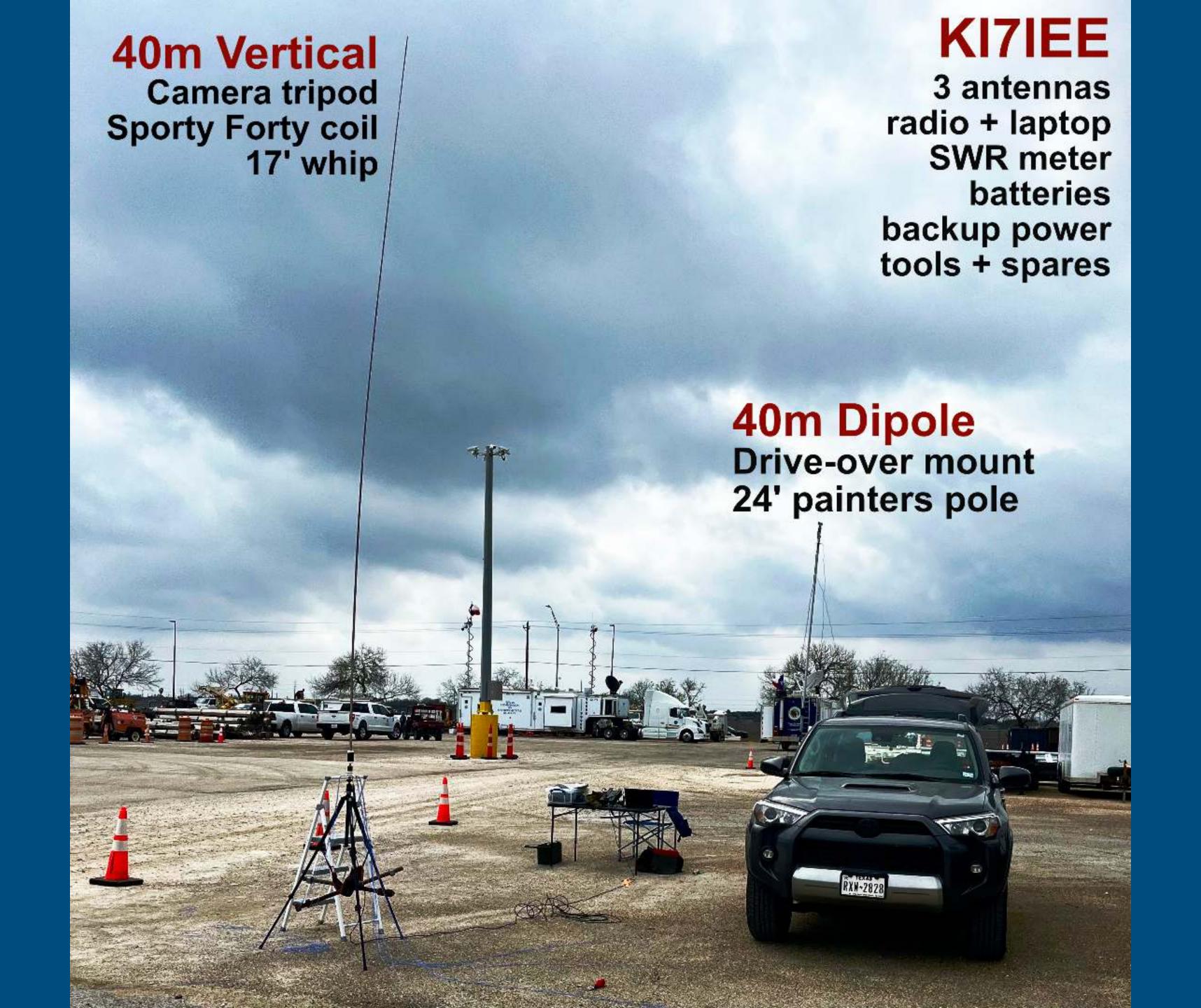
# TDEM Comms Exercise 2025 Corpus Christi - State Aquarium





































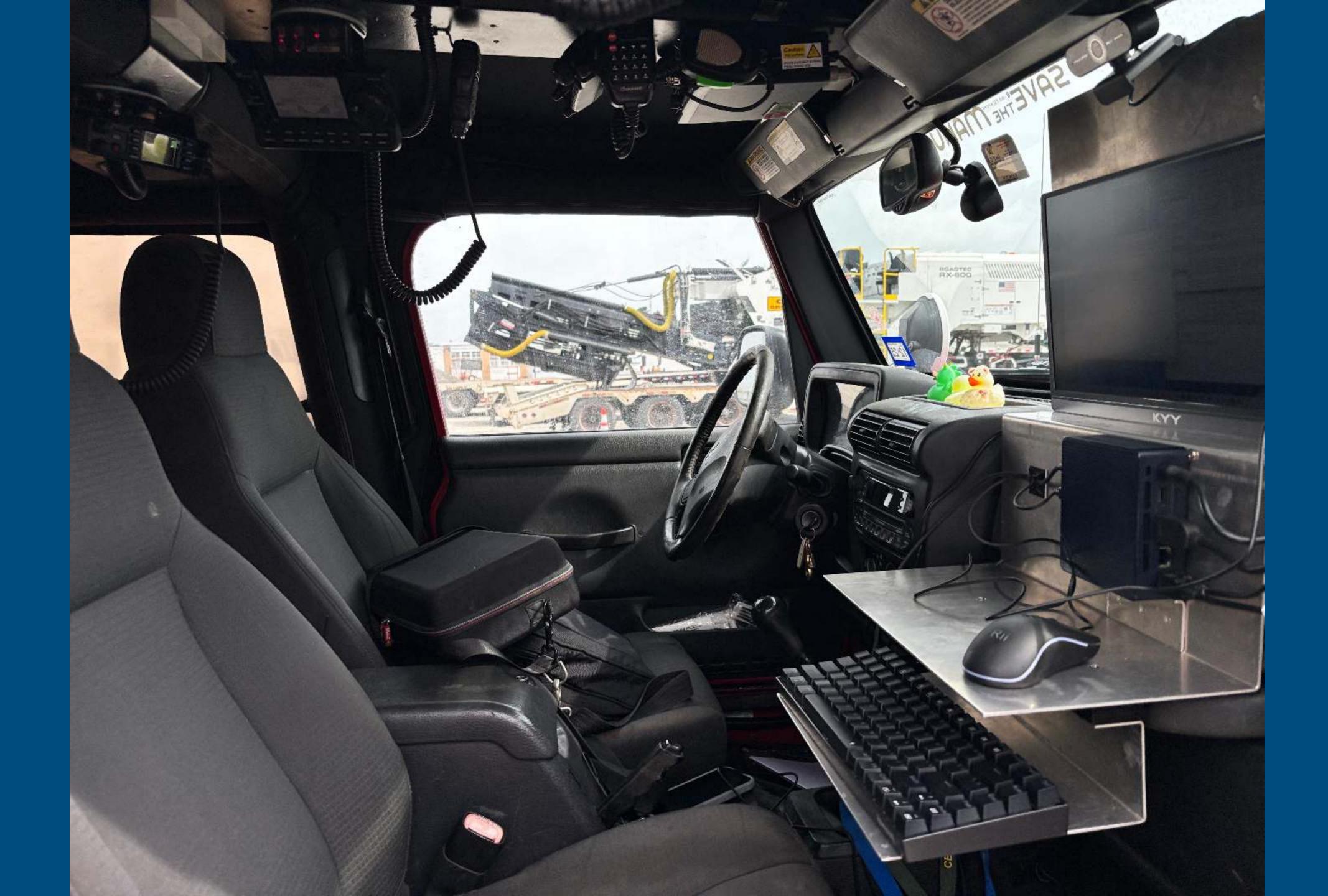














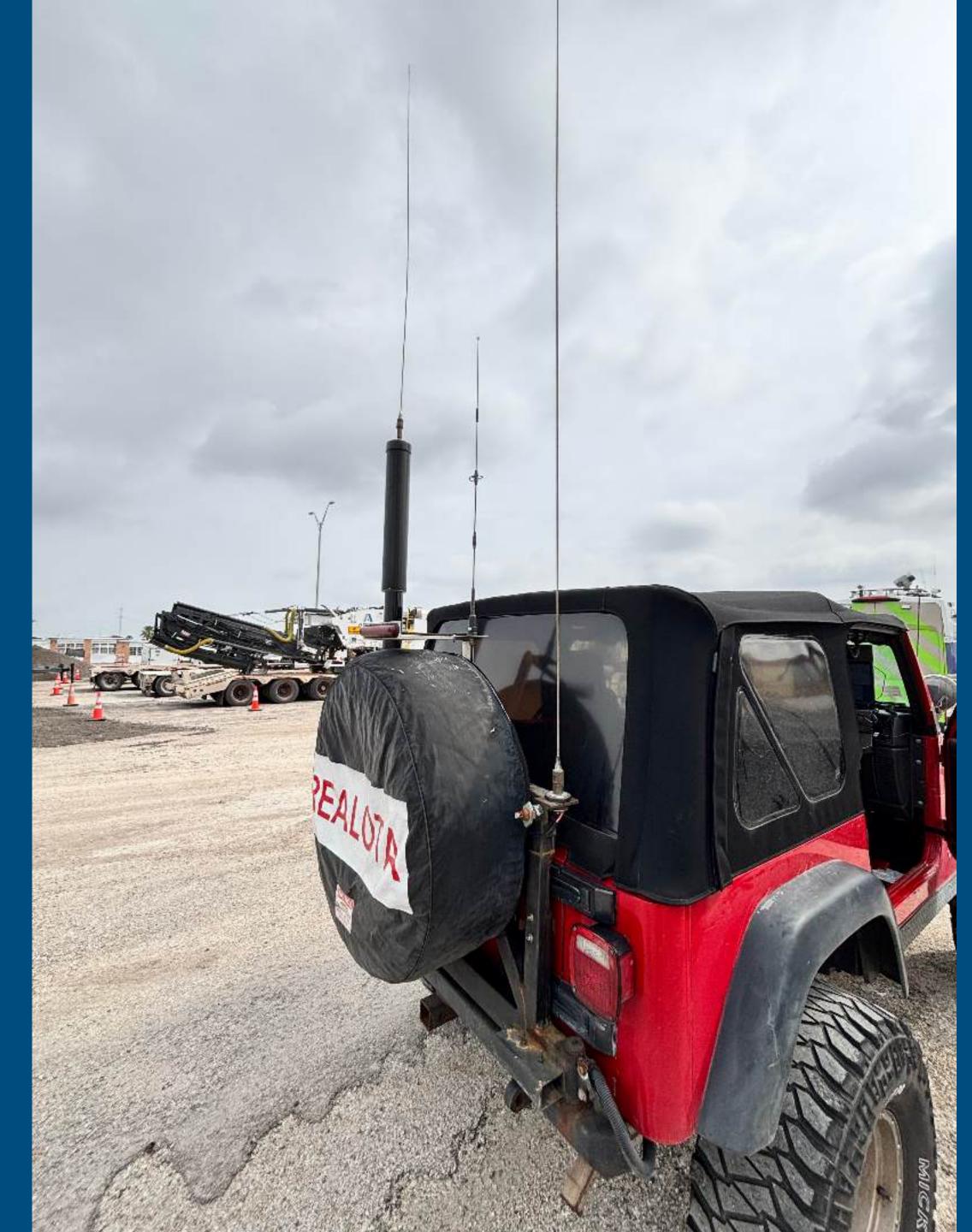






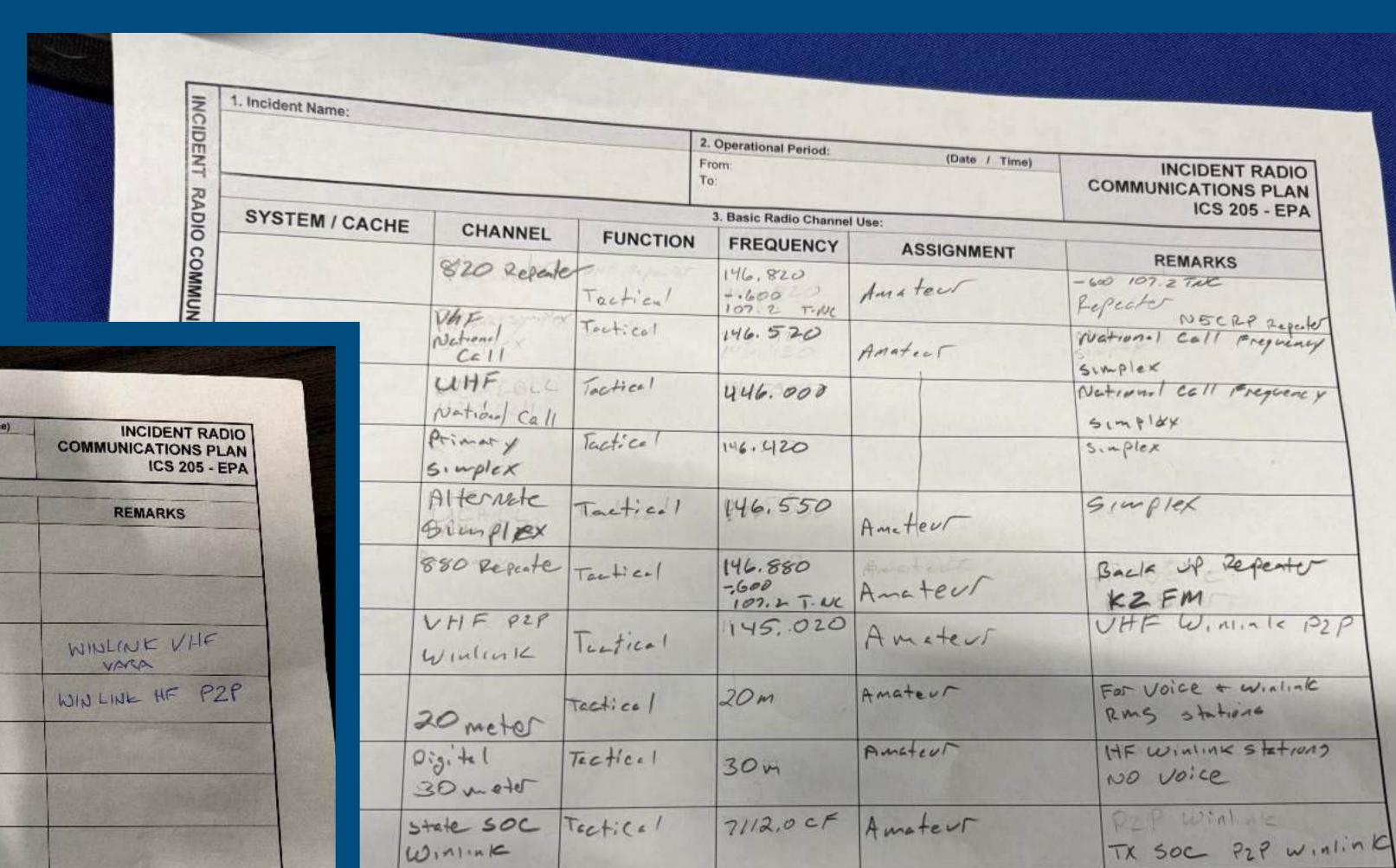








## ICS 205 Comm Plans For Ham Teams



State SOC

Voice

cations Unit)

Tactical

TX SOC Voice

(Date / Time)

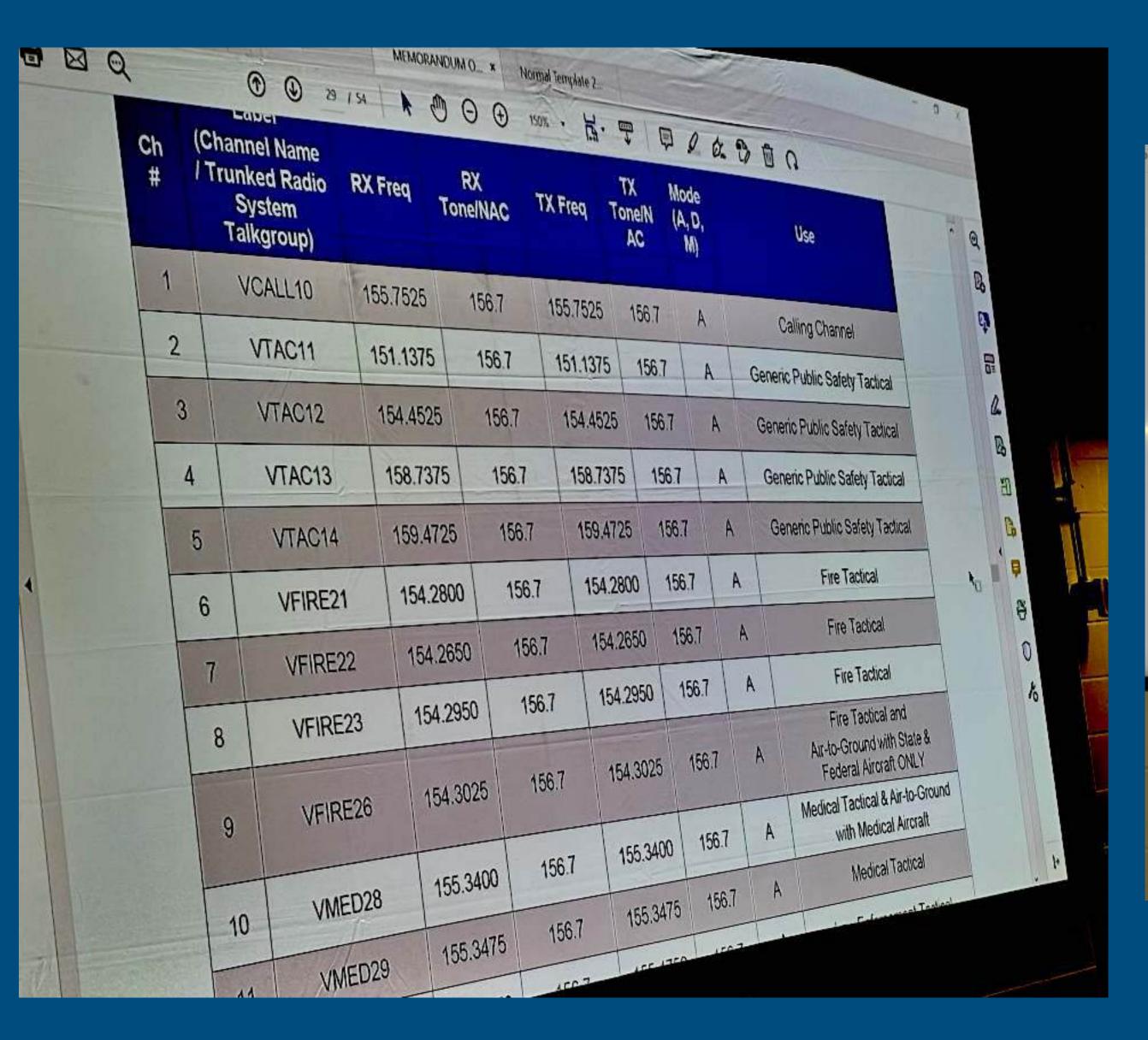
Awaretrat

7255

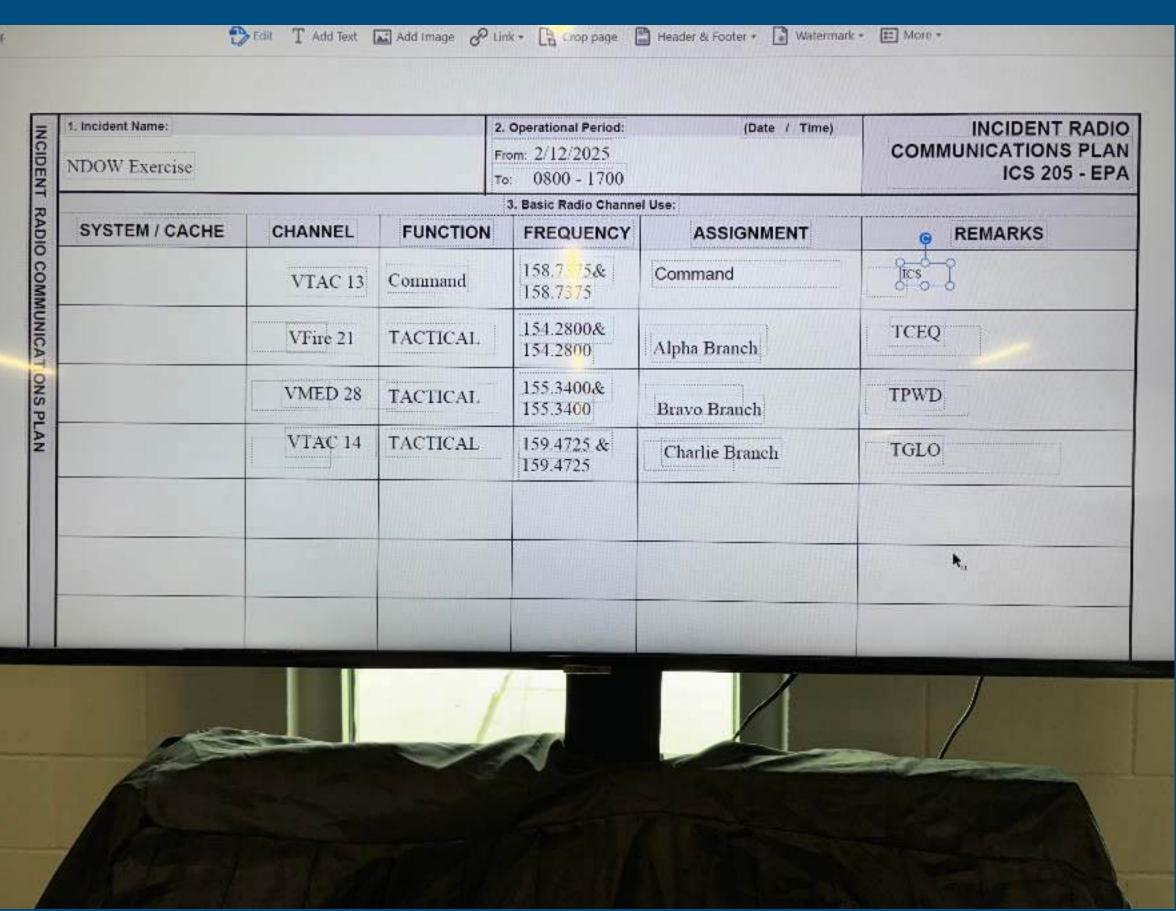
Signature:

COMMEX/NOOW CC 25			From 2/13/25 0700 To		COMMUNICATIONS PLAN ICS 205 - EPA
SYSTEM / CACHE CHANNEL FUNCTION FREQUENCY ASSIGNMENT					
- CAOILE	CHARREL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
	HAM	TACTICAL	146.420 SIMPLEX	ALL TEAMS	
	HAM	TACTICAL	146.820-	ALL TEAMS	
	HAM	TACTICAL	145.020	ALL TEAMS	WINLINK VHF
	HAM	TACTICAL	7112	ALL TEAMS	WIN LINE HE PZP

2. Operational Period:



## ICS 205 Comm Plans For Emergency Responders



## TDEM Comms Exercise 2024 Brownwood State Park





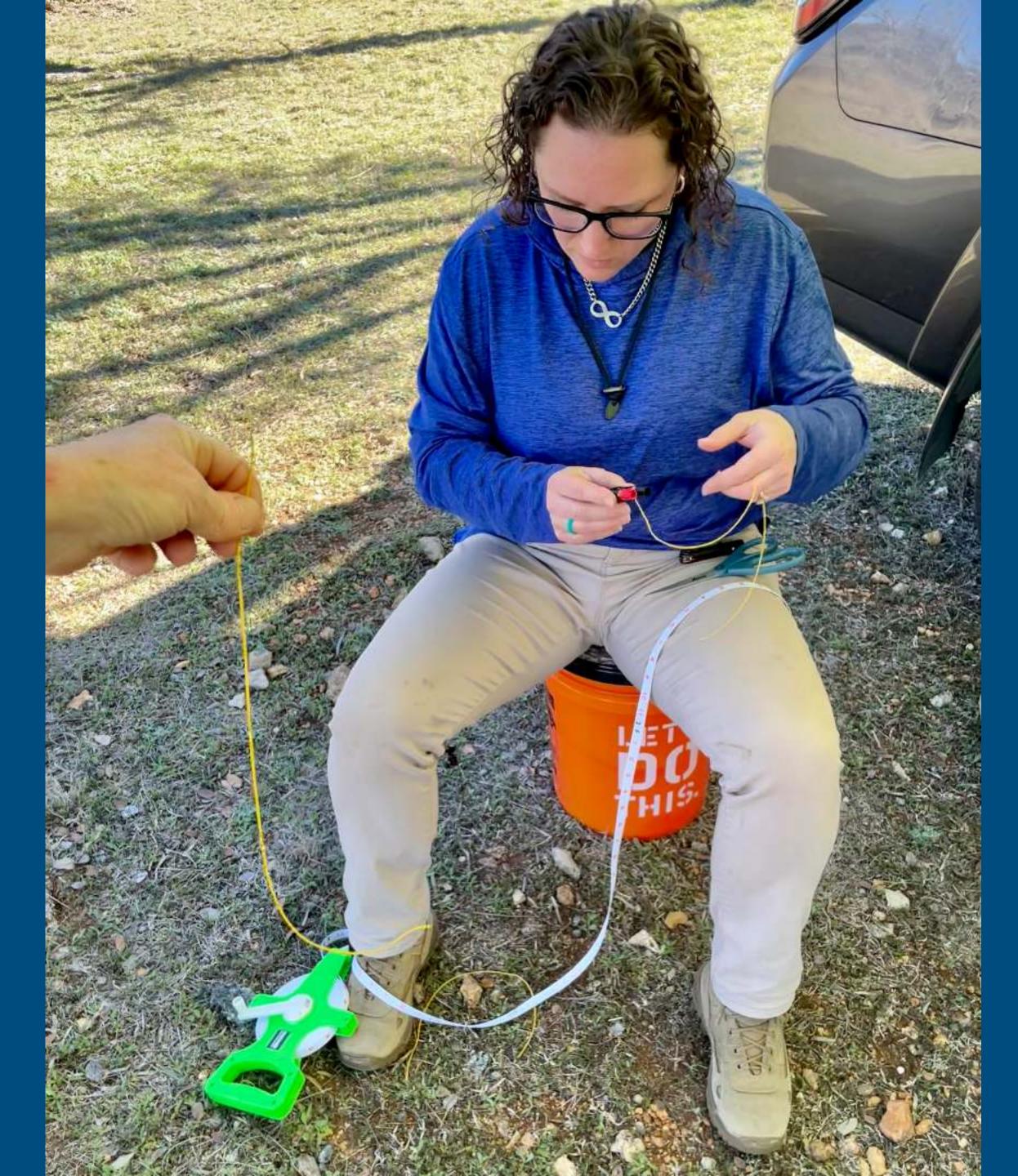














Field Expedient 2m Dipole Build time: 5 minutes













## To learn more, contact us:

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Thomas "Ned" Lee KG5US - Bexar County RACES Officer (CRO) nedlee@alumni.rice.edu / 210-391-8258

ARES New Member Registration Link:

<a href="https://www.arrlstxvps.org/vault-area/vault-gateway/site-gateway/vault-profile.php">https://www.arrlstxvps.org/vault-area/vault-gateway/site-gateway/vault-profile.php</a>