## Marion County Emergency Management

Division of the Marion County Sheriff's Office





# WELCOME

Thank You for attending todays concept meeting for a

Regional AUXCOMM Work Group



Host: Preston Bowlin

Director, Division of Emergency Management

Presenter: Harlan Cook

Coordinator

Marion Emergency Radio Team (MERT)

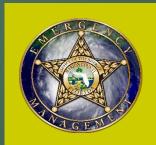


Alachua; Bradford; Citrus; Flagler; Hernando; Lake; Levy; Putnam; Sumter and Volusia

### Participants:

- Directors and Managers of Emergency Management;
- County Communications Leaders responsible for AUXCOMM (or EMCOMM) programs;
- AUXCOMM Leaders (amateur radio) personnel responsible for supporting each EOC during declared emergency events







### Objective:

Explore development of an intra-county AUXCOMM Work Group providing Emergency Management Leaders a new option for regional voice and digital message communications between EOC's



## Outcome:

Propose a designated group of NIMS/ICS task knowledgeable volunteers and personnel with extensive experience in County EOC communications systems for the regional AUXCOMM Work Group.



### The AUXCOMM Work Group could focus on:

- ✓ Create contact lists and establish communications channels between County AUXCOMM teams;
- ✓ Identify, catalog and share regional communications resources and networks available & used by each AUXCOMM team;
  - >Traditional voice and digital messaging (Winlink)
- ✓ Be a resource sharing information and best practices;



- ✓ Develop/share cooperative training resources with each AUXCOMM team in helping achieve each Counties Mission;
- ✓ Provide speakers sharing the benefits of volunteer service by amateur radio operators in support of County EOC's;
- ✓ Develop common EMCOMM procedures used during emergencies;
- ✓ Conduct regular <u>network tests</u> verifying operational readiness of intra-EOC communications by AUXCOMM teams;



✓ Be a <u>regional</u> resource for Emergency Management Leaders in providing information and expertise on AUXCOMM matters

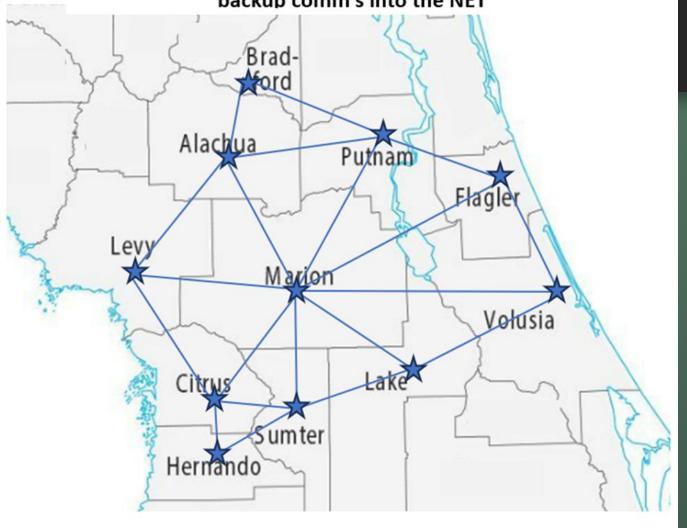


### Task:

- ✓ Foster the creation of a coast-to-coast voice and digital message radio network between EOC's.
- ✓ Provides Emergency Management Leaders a new communications link which is separate and independent of the traditional telecom networks.

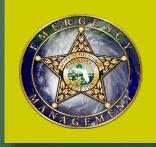
### **AUXCOMM NETWORK CONCEPT**

Every EOC has at least two adjoining EOC's for backup comm's into the NET





Population = 2.6 million residents





### Introducing the Marion Emergency Radio Team (MERT);

- ✓ Created in 2004 by the Division of Emergency Management;
- ✓ All volunteer group of amateur radio operators;
- ✓ Sheriff's Office background vetted w/credentials;
- ✓ICS/AUXCOMM trained;
- ✓ Provides Operators to all open Shelters during Activations;
- ✓ Supports CERT communities, Hospital Radio Team and ARES



Examples of resources available in support of the Work Group from Marion County:

Network Resources:

✓ Marion County AUXCOMM Network



### MERT Emergency Communications (EMCOMM) Network



Marion County Sheriff's Mobile Command Center (MCC)

#### MERT Mobile Radio Unit Truck Height = 12 ft

2 Meter & 70 cm Antenna

Diamond X50A Dual-band (Antenna 5.6 ft tall)

HF Band Antenna

Little Tarheel II Screwdriver (Antenna 4.5 ft tall)



MERT EOC
Tower &
Gateway

Tower Height 50 ft

#### Primary Radio EMCOMM Center

5 - 2 M/70 cm & 3 HF Radio's 7 - 2 M/70 cm & 2 - HF Antennas (OCF & Delta)

KG4NXO-10 Winlink Gateway 145.0300 MHz Dual 200 KW AC Gensets



Marion County Sheriff's Complex 692 NW 30<sup>th</sup> Ave, Ocala, FL 34475

#### **MERT Repeaters & Gateway**

Tower Height = 188 ft AGL

KG4NXO-V 145.1700 MHz D-Star (Antenna 180 ft)

KG4NXO-U 443.8750 MHz D-Star

(Antenna 170 ft)

KG4NXO-10 Winlink Gateway 145.630 MHz

(Antenna 160 ft)

Repeater backup AC via 50 KW UPS with natural gas 45 KW genset



Marion County Forest Tower 896 NE 231st Ave, Silver Springs, FL 34488 <u>MERT Repeater</u> Tower Height = 367 ft NA4DA 147.210 MHz (Antenna = 260 ft)

Repeater backup AC via 1 KW

UPS with LP powered genset

(Future KK4AEG)

Marion County Baseline Landfill 5601 SE 66th St., Ocala, FL 34480

#### MERT Repeaters

Tower Height = 350 ft AGL KJ4CLL 145.3300 MHz

(Antenna 300 ft)

KK4DFC 146.7900 MHz D-Star

(Antenna 285 ft) Repeater backup AC via 50 KW

County UPS & LP powered genset



Ocala International Airport

MERT Digipeater

Tower Height = 139 ft

KG4NXO-07 (Ocala)

145.0300 MHz

(Antenna 139 ft on East side)



### Shelter Radio Emergency Kits (SHREK)

14 – 2 M/70 cm D-Star EMCOMM radio

systems w/backup battery & radio equip. inventories

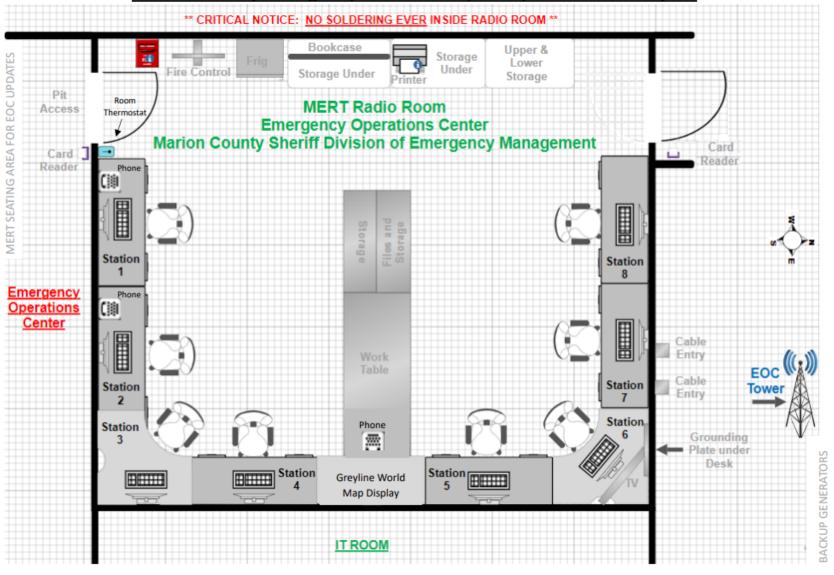




### **Network Resources:**

- ✓ Fully equipped all-band EOC Radio Room
- Experience with network upgrades
  - ✓ New Repeater Sites
  - ✓ HF & NVIS Antennas
  - **✓** SHARES

### Marion County Emergency Radio Team (MERT) Radio Room Layout







Experience with network upgrades increasing resilience and reliability

**EOC & HF Tower rebuilds** 







# Operational Resources:

- ✓ RED BOOK
  - >MERT Incident Commander Action List
    - Pre-activation, Activation and
       Post-activation procedural checklist

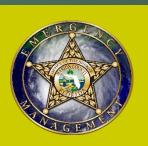




## Operational Resources:

- ✓ Training Skill Book
  - ➤ Comprehensive training resource and New Member Orientation Guide
    - Self-Paced Learning guide
      - 4 Levels

Marion County Emergency Radio Team  TRAINING SKILL BOOK  and  New Member Orientation Guide  Skill Book Assigned To:			
		Name:	Call:
		MERT Member Since:	Position/Assignment:
		Email:	Phone Number:
	Skill Book Initiated By:		
MERT Leader:	Date:		
Position:	License:		
Phone Number:	Email:		
	Radio Team (MERT) is a Volunteer organization created, he Marion County Sheriff's Office (MCSO) Division of		
	cy Management Volunteer Programs along with an Application rionso.com/emergency-management-volunteering		
	les, responsibilities and the materials herein are to be directed to Assistant Coordinator at: <u>KG4NXO@marionso.com</u> .		



# Operational Resources:

- ✓ Shelter Guide and Reference Manual
- ✓ Shelter Radio Go Kits
- ✓ HF Go Kit & NVIS Go Kit



SHELTER GUIDE REFERENCE MANUA

QUICK REFERENCE INSTRUCTIONS
WITH REFERENCE DOCUMENTS LIST







### Personnel Resources:

- ✓ AUXCOMM Trained Leaders
- ✓NIMS/ICS Certified
  - County AUXCOMM Certified Shelter Manager Repeaters/Networks Mgr.
  - Interoperability Agreements Hospital Radio Team Marion County ARES



## Summary:

Each Counties team will bring knowledge, expertise and skills benefiting the AUXCOMM Work Group and the development of the regional network.



Open Discussion and Questions

Thank You for participating today.

Harlan Cook KG4NXO@marionso.com