

MERT

Marion County Emergency Radio Team



Marion County Sheriff's Office
Division of Emergency Management

COMMUNICATIONS UPDATE

September 2024

MERT's primary role is to support all open Evacuation Shelters throughout Marion County during declared Emergency events. We also support EOC and emergency personnel along with Community Emergency Response Teams (CERT) with voice, image and data communications resources. ***"Call MERT... When all else fails!"***

MERT Monthly Meeting

The next meeting is on September 21st @ 10:00 am.

All Amateur Radio Operators are Welcomed!

Hurricane Debby and MERT Readiness



Harlan Cook (KN4VRM)
MERT Coordinator

Hurricane Debby was a slow-moving and erratic tropical storm which slowly crossed the Caribbean then up the Gulf coast making landfall in the Big Bend region of the panhandle (as a Cat 1 hurricane just 50 miles NW of Marion County). It went on to cross the state then Georgia and on as a huge rain making machine causing widespread flooding across the SE U.S. all the way into the Carolinas and up to New England.

The flooding and wind damages are not new to us living in Florida... but it was a huge wake up call to many living deep inland along the East Coast who rarely experience such significant impacts. The future suggests, regrettably, there will be more of these events ahead for areas not used to them.

For MERT, we did experience something new... our first ever Level 2 activation because of the hurricanes close proximity as it moved northward through the Gulf. This was a precautionary step as MERT is especially capable of monitoring and receiving reports and status conditions from around the state – and reporting those to the EOC IC when appropriate. Please review the article in this month's newsletter sharing the Division of Emergency Managements Activation Levels in detail for your future reference.

"In a world that is filled with challenges and uncertainties, a positive mental attitude is key to always moving forward in life." – Nick Jacobs

I also want to compliment all the Members who responded on short notice to activate supporting the EOC and those participating in the post Hurricane Debby Hot Wash and the multiple training events this month who showed a dedication and willingness to enhance personal skills while learning new ones. Working together, we are raising our capabilities and our ultimate performance... ***“When all else fails. Call MERT!”***

What a team! ***My sincere thanks to all.***



EOC Activation Levels

As Hurricane Debby slowly moved up the Gulf coast of Florida, Preston Bowlin (Director of Emergency Management) requested MERT to activate all resources in support of the Emergency Operations Center Level 2 activation. As this was a first for MERT, let's review the specific description of each activation level to support future events.

Level 1 - Full Scale Activation of Marion County Emergency Response Team

1

In a full-scale activation, all primary and support agencies under the local and state plan are notified. The Marion County EOC will be staffed by Division of Emergency Management personnel and all Emergency Support Teams and Functions, including MERT, are to be fully staffed for emergency operations.

Level 2 - Partial Activation of Marion County Emergency Response Team

2

This is a Division of Emergency Management activation that may not require activation of every section, branch or Emergency Support Functions. All primary, or lead, Emergency Support Functions are notified. The Marion County EOC will be staffed by Division of Emergency Management personnel and necessary Emergency Support Functions. MERT may be activated to support the EOC.

Level 3 - Monitoring Activation

3

Level 3 is typically a "monitoring" phase. Notification will be made to those local Agencies and Emergency Support Functions who would need to take action as part of their everyday responsibilities. The Marion County EOC will be staffed with Division of Emergency Management staff. **MERT** is at normal operations level.

Since MERT communications capabilities can provide unique information resources to the Division of Emergency Management, MERT activations may be precautionary steps allowing monitoring and reporting conditions to the EOC Incident Commander.

"To bring about change, you must not be afraid to take the first step. When you change your thoughts, remember to also change your world". – Rosa Parks

Hurricane Debby Activation

As Tropical Storm Debby moved closer to north central Florida on Saturday, August 4th, MERT was activated while on Level 2 readiness. MERT acknowledges the following members for responding to the EOC and begin activation and full monitoring activities in support of the Marion County Division of Emergency Management.



Bill Gillespie,
KW5BG
Assistant
Coordinator -
MERT IC on
08/04/24

Harlan Cook,
KN4VRM
Coordinator -
MERT IC on
08/04 –
08/05/24

Gary Neron,
KS4TSX
MERT IC on
08/05/24

Phil Lewis,
W4EVV
Radio
Operator
08/05/24

Leon
Jurcyszyn,
K8ZAG
Winlink
Gateway
repairs on
08/03/24

Hayden
Kaufman,
N2HAY
ARES
Coordinator
on
08/04 –
08/05/24

MERT Appreciation Visit

During the Wednesday, August 7th “Check In” meeting, Director Preston Bowlin visited with members in thanking them for their support during the Level 2 activation on August 4th/5th. He shared that due to the slow speed and erratic path of the hurricane, he wanted MERT operational... as a precautionary step, just in case it took an unplanned and sideward path cutting across central Florida.



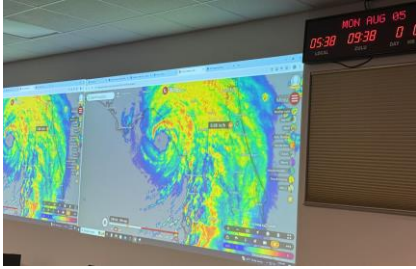
Preston Bowlin,
Director of Emergency
Management

We sincerely thank him for the visit and his constant support of our dedicated commitments of service. Harlan Cook, Coordinator and Bill Gillespie, Assistant Coordinator added their thanks to all members for their training, readiness and willingness to respond when called upon.

Hurricane Debby Hot Wash Update

The “Check In” meeting on Wednesday, August 7th was very focused on discussing the preparations and events leading into and during the Hurricane Debby activation. As members are encouraged to provide honest and important feedback during all Hot Wash’s, the discussion was a model for all future conversations.

"Every accomplishment starts with the decision to try. Do what you can, with what you have, where you are". – John F. Kennedy



The MERT IC's, radio operators and members experiences of our LEVEL 2 radio room activation resulted in a very valuable HOT WASH output detailing several revisions, changes and additions needed to the **Incident Commanders RED BOOK** (See KG4NXO.com "RED BOOK" tab) They included:

- ✓ Inclusion of the detailed EOC Activation Levels as a Resource.
- ✓ Inclusion of the MERT Radio Room Layout as a Resource.
- ✓ The addition of the specific information details to be announced on KK4DFC, KG4NXO and KJ4CLL on an hourly basis for MERT Members, CERT Operators and other local amateur radio operators monitoring MERT repeaters.
- ✓ Inclusion of conducting MERT Shelter Operator Roll Call on KK4DFC each hour.
- ✓ Procedures for conducting Shelter Operator support when any Roll Call response is not received by the MERT Radio Room.
- ✓ Inclusion of a Member Roll Call announcement at regular times (8 am, 12 Noon and 4 PM) each day during activations.
- ✓ Inclusion of informing MERT Members of all open Shelters prior to MERT activations.
- ✓ NVIS antenna information and Construction Guide for the MERT NVIS Go Box kit.
- ✓ Deletion of the MCPS PC User and Password sections.
- ✓ Addition of the Division of Emergency Management checkout, testing, use and check in procedures for the laptops for Shelter Operators.
- ✓ Creation and inclusion of the "Resolving MERT Communications Failures at Shelters Guide".
- ✓ Updates to the MERT member Personal Go Bag supplies list.

The input resulted in many revisions, updates, changes and deletions to the **Incident Commanders RED BOOK** making it even a more important and valuable resource for the future. Thanks to all who contributed!

Shelter Emergency Radio Kit (SHREK) Update



MERT SHREK Kit

Coordinator Harlan Cook (KN4VRM) led a training event on the Wednesday, August 14th "Check In" meeting reviewing many key steps to undertake when a MERT Operator experiences a communications failure while on duty at a Shelter.

He created and shared "**Resolving MERT Communication Failures at Shelters**" which details activities for Shelter Operators to perform in restoring radio communications with the MERT Radio Room.

"You have not lived today until you have done something for someone who can never repay you." – Ruth Smeltzer

The document will be included in the “MERT Shelter Reference” 3-ring binder provided all Shelter Radio Operators and is available online at KG4NXO.com under the “MERT Shelter Reference” tab.

New NVIS ANTENNA Resources

MERT completed a series of classes on the theory, EMCOMM importance, setup and actual operation of Near Vertical Incidence Skywave (NVIS) antennas during July. The training classes culminated in the setup and operation of MERT’s NVIS antenna on 40 meters with a contact to Ryan Salom’s father 60 miles north of Ocala in just 30-minutes!

From the events and training activities, three new resources were created in August to simplify the training, setup and operation in the future.

1. “NVIS 101” – This is a training resource explaining the theory, HF band limitations, radiation patterns and operational tips of NVIS antennas.
2. “NVIS Setup Instructions” – This resource provides detailed guidance in the safety precautions, construction details for the specific NVIS antenna MERT owns, and radio room procedures for operation.
3. NVIS ANTENNA GO BOX – This resource is designed for rapid deployment ensuring all components are available for setup/operation anywhere MERT is deployed.

NVIS activities will be an annual training and operations event for MERT in the future.



**(Photos L&R)
MERT members
constructing the 40/80
Meter NVIS antenna
MERT owns on July 17th.**



**Members constructed
and made a 40 Meter
contact within 30-
minutes!**



MERT’s NVIS antenna and support hardware are now available in a GO BOX stored in the warehouse.

"It doesn't matter what others are doing. It matters what you're doing". -Mother Teresa

Sheriff's Office Complex Tower and New Communications Building Update



MERT's equipment in the new Marion County Communications building at the Sheriff's Office Complex.

As we all know, "moving" is usually a challenging event that can have some "surprises" along the way. As reported last month, MERT completed the move of all its equipment into the new state-of-the-art communications building at the Sheriff's Office Complex with both KG4NXO repeaters (2 Meter & 70 cm) and our Winlink Gateway (145.0300 MHz) supporting Packet and VARA FM digital communications.

However, electronic equipment can be fidgety and this was the case over the past few weeks as the Gateway PC & software was a major challenge. The great news is MERT's Technical Advisor (and Past Coordinator) was dedicated to get the root cause.... Please thank **Leon Juncyszyn (K8ZAG)** who was dedicated in solving the programming problems in bringing this MERT Gateway reliably online.

New Volunteer Services Coordinator Announced

MERT members had a very special guest on Wednesday, August 21st when Lt. Paul Bloom visited our meeting and introduced the new Volunteer Service Coordinator, Sarah Jenkins.

MERT sent a congratulatory note and Ms. Jenkins replied:

"Good morning,

Thank you for your kind words. I am ready to get moving and look forward to working with you.

As soon as I get settled, I will be in contact with you to get more information regarding MERT.

I look forward to learning about all of our volunteer opportunities in depth.

Please do not hesitate to reach out to me in the meantime. If I don't know the answer, I will get it.

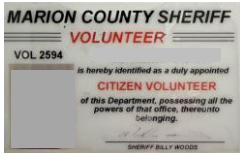
My numbers are below in my email signature.

Thank you again!

Sarah"



(L-R) Sarah Jenkins, new Volunteer Services Coordinator & Lt. Paul Bloom, Director of the Public Information Office



Level 2 MCSO Identification Badge

This is a very important position for the Marion County Sheriff's Office supporting all the Volunteer organizations... and especially MERT. A key resource for us is completing/approving the Level 2 background applications allowing our personnel access to the school shelters during activations. We look forward to working closely with Ms. Jenkins and congratulate her on her new position!

August 21st Training Topics

Focusing on Level 1 and 2 Tasks in the TRAINING SKILL BOOK and New Member Orientation Guide, Coordinator Harlan Cook presented two topics for review. First was the explanation and background of Anderson Power Poles followed by a document on Anderson Powerpole Assembly Instructions which included practical "Do's & Don't" construction experience from several members having decades of experience.

The second topic was sharing the two most common programming software resources for programming amateur radios – CHIRP and RT Systems. A detailed presentation of each was presented along with major differences and overviews on the resources and procedures to get started. It concluded with a summary by Bill Gillespie, Assistant Coordinator (KW5BG) who leads MERT's support in this area to our members and all amateur radio operators.



MERT's "Check In" meeting on August 21st presented topics relevant to expanding MERT members skills and knowledge in amateur radio basics. Thanks to everyone joining in the event and sharing their personal experiences!

HF QRP Radio Update

Leading off our August 21st “Check In” meeting, Kraig Pritts (KA2LHO) presented an update on his newest passion to create his personal very low power HF “Go Bag” radio. In last month’s MERT newsletter “Communications Update”, Kraig shared details on his efforts to design and construct a low power HF radio. This is called “QRP” operation and refers to digital transmissions at a very reduced power output level while attempting to maximize one's effective propagation and contact range.



(L-R) Kraig Pritts (KA2LHO) sharing his extremely compact and very portable HF antenna along with his amazing QRP HF radio.

MERT thanks Kraig for sharing his efforts designing and perfecting his compact and extremely well-designed digital QRP HF radio he will be using around the state and the U.S. making contacts with hams around the world!

August 28th Training Topics



Top – DC power cable with Anderson Power Poles and older style “glass tube” fuse holders on both leads.

Bottom – DC power cable with new style ATO type fuse holders.

* **Anderson Power Poles (APP)** - Our weekly Check In meeting started with a follow up to last week’s presentation on APP’s which missed sharing a key element for all DC power cables having APP’s ... ***don’t forget the fuses!***

While having a fuse on the +DC power lead has been a common practice for decades, fusing the negative will lead protect your radio of the possibility of a faulty ground in your shack. The same is true whenever using your radio in your vehicle. Nearly all radio manufacturers now recommend the dual fuse method as well.

* **CHIRP & RT Programming Systems** - Members were shown examples on why the programming instructions for both systems are important to follow. Shown was a radio memory bank with over 80 entries of resources in the NE U.S. which

could have resulted in a very confusing and difficult radio operation.

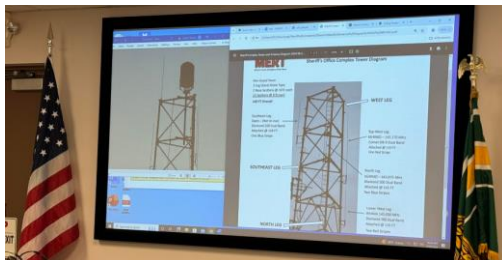
Bill Gillespie, (KW5BG) MERT Assistant Coordinator shared his considerable knowledge with members on using CHIRP and RT Systems radio programming software. His key input was that skipping steps will result in programming errors and the inability to load your preferred personnel local repeater resources.



Bill Gillespie, MERT Assistant Coordinator shares his experiences with Do's and Don'ts using CHIRP & RT Systems programming software.

* **MERTrak** – The class described what it is, why it is important and methods to complete it weekly in detailing your volunteer hours. Members also learned all Sheriff Office Volunteers contribute from \$ 1,500,000 to \$ 2,000,000 in savings annually to the residents of Marion County.

* MERT's website **KG4NXO.com** review – A review of the many sections and resources along with the specific sections having key information needed during activations for all MERT members. The website has a wealth of resources specifically focused on our EMCOMM activities that all need to be aware of.



The Check In meeting included a detailed look into the improvements and upgrades at the Sheriff's Office Complex tower. A new state-of-the-art communications building will add significant quality and reliability to MERT's network for decades to come.

* **New Sheriff's Tower Upgrade Review** – The completed Sheriff's Office Complex tower upgrade was reviewed. A number of key details and improvements have raised the quality and reliability of MERT's communications network for decades into the future. We thank the Division of Emergency support in making the MERT network as reliable as possible!

WE NEED NEW AND ACTIVE MEMBERS TO FULFILL OUR MISSION IN SUPPORTING ALL THE OPEN SHOOLS WHENEVER ACTIVATED FOR CITIZENS SHELTER AND SAFETY.

**Please join us in helping others... *when they need help!*
Learn more about MERT at.... KG4NXO.com**