

MERT

Marion County Emergency Radio Team



Marion County Sheriff's Office
Div. of Emergency Management

COMMUNICATIONS UPDATE

September 2022

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!"

Mark your calendars!

MERT Monthly Meeting

The next Meeting will be on September 17th @ 10:00 am at the MCSO EOC (692 NW 30th Ave, Ocala, FL 34475).

See you there!

MERT Wednesday Check-In's

As more Members are participating in the Wednesday Morning "Check-In's" (0900 to 1200 Hrs.), here's a summary on the many topics and activities last month.

- ✓ August 3rd - Paul Blystone (WB4QQN) taught Winlink basics to new MERT members and guests.
- ✓ Kraig Pritts (KA2LHO) added our new equipment into the MCSO MERT inventory program.
- ✓ New MERT member Pat Davis (KQ4BRW) attended and was introduced and provided a tour of the EOC. Bill Gillespie (KW5BG) and Leon Jurcyszyn (K8ZAG) programmed her radio with the current MERT ICS-205 radio listing.
- ✓ Members discussed best uses, suggested resources and most important ICS-forms should be included in the new storage clipboards that were gifted to MERT for exercises and special events at the EOC (like the "CERT Rodeo").
- ✓ Fldigi software was installed for future digital communications.



Paul Blystone (WB4QQN) instructs new MERT Member Gary Neron on Winlink. Gary passed his Tech Exam and is now studying for his General!

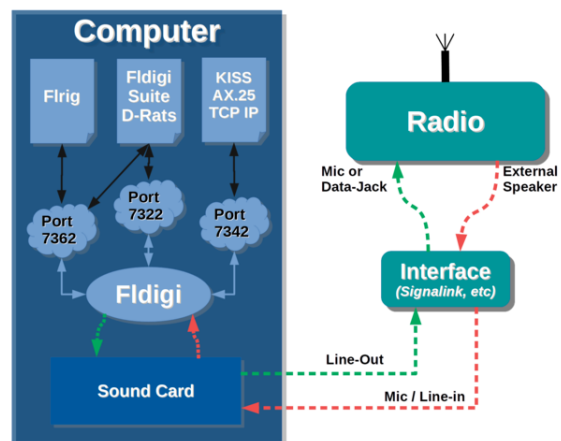
"The broadest, and maybe the most meaningful definition of volunteering:
Doing more than you have to because you want to, in a cause you consider good." ~Ivan Scheier

[Training Note: FLDIGI (short for Fast light digital) is a free and open-source program which allows an ordinary computer's sound card to be used as a simple two-way data modem. The software is mostly used by amateur radio operators who connect the microphone and headphone connections of an amateur radio SSB or FM transceiver to the computer's headphone and microphone connections, respectively.

This interconnection creates a "sound card defined radio" whose available bandwidth is limited by the sound card's sample rate and the external radio's bandwidth.

Such communications are normally done on the shortwave amateur radio bands in modes such as PSK31, MFSK, RTTY, Olivia, and CW (Morse code). Increasingly, the software is also being used for data on VHF and UHF frequencies using faster modes such as 8-PSK. Using this software, it is possible for amateur radio operators to communicate worldwide while using only a few watts of RF power.

Fldigi software is also used for amateur radio emergency communications when other communication systems fail due to natural disaster or power outages. File transfers, emails, and FEMA ICS forms are also possible using inexpensive handheld radios. Thanks to Hayden Kaufman (N2HAY), Marion Co. ARES Coordinator for his assistance.



Fldigi equipment wiring configuration.¹

¹(Wikipedia - "Fldigi" at: <https://en.wikipedia.org/wiki/Fldigi>)

- ✓ August 10th - Leon Jurcyszyn provided an orientation to new applicants and Members (and a review for longer term Members).
- ✓ Bill Gillespie assisted visitors and new Members in explaining the frequencies used in each specific radio within the MERT EOC radio room.
- ✓ Paul Blystone made adjustments to the main Winlink PC machine.
- ✓ Preston Bowlin, Director of Emergency Management dropped in and said "Hello!" All were glad to see him.

- ✓ August 17th - Paul Blystone lead the Wednesday “Check In” meeting with a question-and-answer time on MERT and its operations.
- ✓ Hayden Kaufman Marion Co. ARES Coordinator detailed the Florida Division of Emergency Management “Simulated Emergency Test” (SET) exercise for Saturday, October 1, 2022.

The Exercise event is named “Service Denied” and described as communications conditions locally having “No landline, mobile phone or Internet service available in our area resulting from a Cyber Attack. Stay tuned as more information is pending.

August 20th Monthly Meeting update.....

**MERT ARES HEC CERT MONTHLY MEETING
AGENDA
August 20, 2022
10:00 am**

- **Welcome!** Bill Gillespie (KW5BG) MERT Assistant Coordinator
- **Pledge of Allegiance**
- **Attendee Introductions** (Name, Call Sign and Organization)
- **Silent Key Acknowledgements**
 - A moment of silence for all our friends who are affirmed or past.
- **MERT Coordinator Update** Bill Gillespie (KW5BG)
MERT Assistant Coordinator
 - New MERT Repeater Review
 - No Information yet from Clay Electric on MERT’s submitted Technical Information on possibly adding a new repeater on their tower in Salt Springs
 - MCC Equipment Update
 - GO Kit review
 - Guest Speaker Introduction – Elbert Wilkinson (KQ3K)
Silver Springs Radio Club
 - Elbert will show a video of MERT’s new RigExpert antenna analyzers’ many new functions.



Training Update Leon Jurcyszyn (K8ZAG) MERT Technical Advisor

- Noise – Learning more to improve your HAM experience
 - Identifying, Locating and Mitigating Noise
- SHREK Kit Update – PowerPoint on the setup and use of the Mobilinked TNC3 for sending/receiving Winlink digital messages



• **New Member Administrator** – Clint Stockton (AGOK)

- New Member Update
- New Member Introductions



• **ARES Coordinator Update** Hayden Kaufman (N2HAY)

- MERT SHARES Update
 - First Net Check In – Information on the Processes required.
- ARES October SET (Simulated Emergency Test) Update –
 - Information regarding the new Marion County VHF Traffic Net, which is not yet affiliated with the NTS, however, we are beginning to pass traffic and are looking for participants to either originate traffic or relay traffic.
- Update on “Hearts for our Hospital” Bike Run



• **HEC Update** Bruce Twiss (KI4NFA) HEC Liaison

- HEC August Training Update
- HEC Net Activities



• **Attendee’s Suggestions, Questions & Answers**

- **ALL Recommendations for the Good of our Organization Invited**

Monthly Meeting Summary:

Bill Gillespie (KW5BG) Assistant MERT Coordinator presided over the meeting.

Updates: MERT's Technical Information Update to the Clay County COOP was provided for permission to add a new repeater on their communications tower. Reply pending.

Discussion of possible addition of two IC-7100 radios.

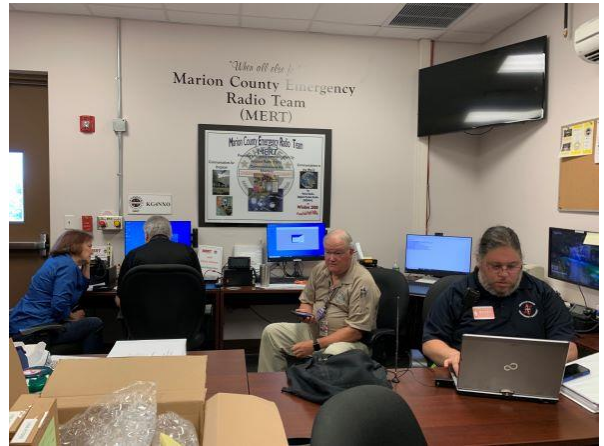
Elbert Wilkinson (KQ3K) and Silver Springs Radio Club provided a training update on the new MERT "Rig Expert" antenna and coax analyzer. It was an excellent demonstration and explanation on the uses of this outstanding test unit. Elbert also shared the possible interfaces that may be required along with the software available to detail and document test results.

Leon Jurcyszyn shared a great video of two seasoned HAM operators tracking down noise from various devices around the house. He also shared a PowerPoint deck on setting up Winlink for new Users.

Hayden Kaufman, Marion Co. ARES Coordinator provided an update on the new SHARES capabilities and the three new frequency privileges assigned to ARES, MERT and EOC by the Cybersecurity and Infrastructure Security Agency within the Dept. of Homeland Security. Hayden also reviewed the current draft details of the Florida Division of Emergency Management "Simulated Emergency Test" (SET) exercise for Saturday, October 1, 2022.

The Exercise event is named "Service Denied" and described as communications conditions locally having "No landline, mobile phone or Internet service available in our area resulting from a Cyber Attack.

Special Thanks to Gray Moffet (KC3DWY) MERT Secretary for his meeting reports and photographs!



August Wednesday "Check In" and "Monthly Meeting" photos courtesy of Gray Moffett, MERT Secretary.



MERT's Icom IC-718
HF Transceiver

IC-718 MARS Mod for SHARES Operations

MERT's radio has been modified and returned which provides MERT a backup transceiver to the IC-7100 which was modified in June for SHARES communications.

MERT Members Leading the Way.....

Bruce Twiss (KI4NFA) who resides in the community of On Top of the World shares he assisted his CERT group in conducting an exercise on damage reports and setting up teams to survey community neighborhoods. A handout was also distributed with various disaster scenarios challenging members on how to respond effectively and safely.

Thanks, Bruce, for sharing your support for your local CERT!

For MERT Members.....if you are also a CERT Member, your reports on helping your local group are invited.

Hospital Emergency Communications Team Update

To keep all MERT, ARES and CERT Members up to date on HEC, Dave Welker (W2SRP) HEC Team Coordinator provides the following report on the hospital teams current activities.

The Hospital Team is working on our regularly scheduled on-site Exercises and training meetings to prepare for the hospitals loss of communications by working toward the goals of the HEC Team under the directions of the hospitals.

New Administration Update

"Ensure that the hospital in Marion County have communications in an emergency"
I want to share the administrative changes at the hospitals now have full time Emergency Preparedness Managers. Michael O'Connor, EMS Relations and Emergency Management is Emergency Preparedness Manager for Advent Health Ocala, which includes Timberidge and their satellite ER facilities.

John Barattini, is the new Manager Emergency Preparedness and Safety for HCA Hospital Ocala and HCA Hospital West Marion and their satellite ER facilities.

Policy & Procedure Reviews

With the new Managers reviewing past policies and preparing new guidance, it may possibly include providing communications support at those ER and satellite medical facilities. If HEC's role is expanded, we are prepared to do that with our personal portable go-kits if necessary.

Training Focus

Our training focus is directed towards providing VHF voice operators in simplex mode primarily and using Winlink P2P as well as Winlink e-mail both VHF and HF. We hope we won't lose our repeaters or gateways, but we practice as if they weren't available. We want to "Train to operate so we operate like we trained."

Equipment Inspections and Testing

Since the COVID lockout, we have found issues with equipment, because of not performing the regularly scheduled on-site communications tests. In addition, access to our cabling and antennas requires significant approvals and coordination.

For example, we found the Timberidge ER antenna did not have good signal propagation to Advent Health (HEC's main ham station) or to West Marion using Simplex. The SWR was higher than should have been from the Cushcraft dual band, VHF/UHF antenna installed more than 16 years ago. A visual inspection found there were many physical issues. The antenna not grounded, no lightning arrestor, antenna mast mounted too close to another radio mast, antenna improperly installed and when we took the antenna apart, the aluminum elements were caked with corrosion.

HEC has learned it is imperative to test equipment continuously to be ready for Hurricane season or any other event. Antennas and coax cable are subject to break down in the Florida climate. For example, we found that a whole section of LMR 400 solid conductor coax was bad at Timberidge even though it seemed to test ok with Volt Ohm Meter. It wasn't shorted. Bill Boyer, WA3YOX suspected the cable right away and I think the dielectric property of the cable was compromised by old age. It was replaced but proves all amateur radio HAM's must perform routine systems and communications tests.

Importance of Weekly Net's

HEC, MERT, ARES and CERT Ham's must continue exchanging signal reports using VHF voice in Simplex and Winlink P2P forms exchanges between us. Let's keep it simple and nothing complicated or formal.... just simple testing much like we do on Wednesdays HEC voice and Winlink check ins from home only we should do it from locations using the ham equipment we would use during an actual emergency event.

Summary

I want to encourage that all Ham operators continue practicing and participating in all the local Net's. HEC, MERT, ARES have them weekly so let's all do a better job of joining each other's Net's. For HEC.... "Train to operate so we operate like we trained."

73's

Dave Welker (W2SRP)
HEC Team Coordinator



Dave Welker
HEC Team Coordinator

A Special Thanks to Bill Gillespie and Leon Jurcyszyn

Harlan Cook, MERT Coordinator wants to acknowledge Bill Gillespie, Assistant MERT Coordinator and Leon Jurcyszyn, Past MERT Coordinator and current Technical Advisor for leading MERT activities while he was out of state.

Thank you, Bill and Leon, for your leadership and support of MERT!

Invitation to Attend

MERT meetings are open to all interested Amateur radio enthusiast, CERT, ARES, Skywarn members and the General Public who are interested in learning more about participating in this important volunteer Amateur radio organization.

[Interested in learning more about MERT..... Visit https://kg4nxxo.com/](https://kg4nxxo.com/)