

# Alachua ARES/NFARC/NF4AC Clubs

## MINUTES

**July 10, 2024**

Attendance: 16. The meeting was held in person at the Alachua County Emergency Operations Center and via ZOOM. Meeting attendees are not specifically noted as attending live and in person or via ZOOM.

Gordon Gibby  
Leland Gallup  
Jeff Capehart  
Earl McDow  
Mark McDow  
Sharon Dietz  
George Dietz  
Earl Sloan  
David Huckstep  
Manish Sahni  
Reid Tillery  
Brian Joy KQ4BWH  
Ken Miller KF4ULO  
Rosemary Jones  
Wendell Wright  
Eric Pleace

**Introductions.** From 1830 until 1900 when the meeting commenced.

- 1. INTRODUCTION/APPROVAL OF JUNE 2024 MINUTES/ARES HOURS.** Jeff Capehart discussed the local organization of ARES (for the benefit of new visitors). Introductions. Described the various ARES Levels, as with I, II, and III. We “actually follow the ARRL prescribed ARES Growth plan rules.” Did NOT move to approve the June minutes. Must do this, as well as move to approve the July minutes, at the August 2024 meeting.
- 2. PREVIOUS MONTH HOURS REPORT.** Total hours: 520.5. This included Field Day. Lots of training events!
- 3. EOC EQUIPMENT FUNDING REQUEST TO AFCR.** David Huckstep talked to how he put together a proposal for a complete backup go-box version of our EOC radio room HF set. He talked with the AFCR chief and directly coordinated a request for this complete go-box supplement to our current EOC gear. AFCR approved funding for the buy. When procured, this will get our ARES/EOC support volunteer group a completely deployable HF system with amplifier. Also discussed the need for a new tilting/telescoping tower for the new EOC location (operational sometime in the next 18 months). The new system is identical with our current system so there is no retraining or familiarization. Only exception is the new UHF/VHF transceiver, which will be an upgraded version of current equipment. Total authorization: \$6800

dollars. Gigaparts will supply all this equipment (bid went out last week). Tower also approved. Radio equipment will be coming almost immediately, but the tower will happen during the renovation of the new EOC. W4JIR will go back to AFRCR to clarify that we need a beam/rotator on the tower. Will have VHF/UHF antennas. Fantastic news!

4. **HOME BREW MPPT SOLAR CONTROLLER.** W4JIR loaned the club a Bioenno MPPT controller. This allows 15-20 amps charging. KX4Z built a board and mounted it with chokes and what not. KX4Z then talked about the four most important specs for an MPPT controller: type; battery (LiFePo4, etc); VOC (max open circuit voltage). David's unit is set for 70VDC; current is 100V; last spec is AMPS: output amps to the battery. In combining panels, always stay below your max VOC. Easy to put panels in series to increase charging. Every cell is .6v...multiply to get. For example, household panels are 250-300 watts and generate on average 36 volts (VOC). Next, KX4Z showed an easy 20A ammeter that can be built for \$12. KX4Z then showed a current Bioenno MPPT controller which can handle different kinds of batteries. These use MC4 connectors. These make RFI. Genesuns do not generate RFI, but they handle less power. We set the solar arrays away from our gear, with the controller and battery in the shade. Bioenno is a good one, and costs \$89.
5. **FIELD DAY RESULTS OF ADJACENT COUNTIES.** Gilchrist county, with Amy and Mike Schaeffer, ran a 2F operation this FD. They beat our original 2F scores from 2020. Outstanding news and shows the value of "distributed competence." Also talked Columbia County's problems in trying to operate a 2 station out of an un-air conditioned RV. Wasn't satisfactory! We've encouraged them to get an ARRL grant to improve their operation facility. No numbers yet for GARS or Columbia County.
6. **GIS MAPPING: NEW SKILL FOR DEPLOYMENT TRAINING.** This is a Winlink feature. It's a Winlink template under Mapping-GPS forms. You send the template filled out to the EOC, and this will build a map that shows graphically all kinds of stuff. The information is .kml file, and can be immediately used by county GIS systems. This is a potentially amazing force multiplier for the value we bring to collecting and forwarding information. KX4Z then showed a live demonstration. The form is called "Field Status Report" under the Mapping template. He asked that we do a homework assignment: send a test Field Status Report by Winlink to KX4Z. Use Telnet if necessary.
7. **SHELTER GO BOX TRAINING: DIGITAL CONNECTIONS.** KX4Z then conducted training for connecting digital wiring for the County go-boxes. This will further our ability to use our shelter Go-Boxes for digital traffic.
8. **FIELD DAY 2024 FINAL RESULTS ANNOUNCED.** "The most amazing Field Day!" KX4Z estimates we'll be in the top 15-10% of the nation. 15 participants. Power was solar and generator; power multiplier was 2x. We got bonus points for a variety of things, such as emergency power, messages to SM; copying ARRL bulletin; served agency participation; educational activities; safety officer; social media – total of 1500 bonus points. Total QSOs were 6340 points. Most active band was 20m. Network we used for logging and situational awareness among the four stations was almost perfect, thanks to Earl and Mark McDow. KX4Z showed band results, and W4UFL showed graphs on operation by band and time. Addressing the issue of logistical complexity for Field Day, KX4Z showed that instead of transporting 183 items, if we were 4F it would be only 113(!). Showed operator totals, and highs for various operators. KX4Z showed graphics that really showed in detail how things were working, broken

down by station counts. Amazing FD and a true demonstration of how far the Alachua ARES group has developed in skill and cohesion since our initial Field Day.

- 9. OUTREACH OPPORTUNITY.** KX4Z raised the issue that we need outreach to attract younger people – we are getting older and thicker. KX4Z suggests that we do Veteran’s Day and for the Santa Delivery at Santa Fe college. KX4Z has been in touch with the Vet’s Day POC. Also the same with Santa Delivery. POC there was very excited. ARES is good at radio email...we could have kids sending emails. Discussion of three alternatives for an HF station. Suggested: also set up a GMRS station. Mark McDow suggested coordinating with a local list of groups/events. Motion: we do Santa Delivery. Motion to do both: 7; Motion to do Santa Delivery....no. We will support both. Secretary’s suggestion that we limit to just the one Santa Delivery event was shot down in flames. Secretary still dousing the smolder on his tail feathers.
- 10. FIELD DAY 2024 AAR/IP: DISCUSSION OF DRAFT IMPROVEMENT PLAN.**  
See the detailed list from the draft AAR/IP, which is located on the NFRC website. Earl Sloan recommended that we use a white board so that we know what things need to be done immediately. Etc. This should be added to AAR. Next suggestion. Each station should have a list of all needed to make a particular station operable. Lists will help identify what equipment should go with what (computers, monitors, etc.). Another suggested improvement – reduce logistical complexity by “outsourcing” feeding at next FD, and by going as an F operation (already item 5 on the list). Needs to be added to AAR/IP. Motion to accept AAR – this will include our operation as an F operation at the EOC.
- 11. KX4Z’s TRIUMPH.** KX4Z reported that at his school every student who took an AP test passed it – every AP test student who took AP tests passed. Congratulations!
- 12. ADJOURNMENT.** At 2044 EDT.