

Alachua ARES/NFARC/NF4AC Clubs

MINUTES

September 11, 2024

Attendance: **15**. The meeting was held in person at the Queen of Peace Catholic Community (after a summer at the EOC) and via ZOOM. Meeting attendees are not specifically noted as attending live and in person or via ZOOM.

Gordon Gibby
Leland Gallup
Dean Covey
Susan Halbert
Jeff Capehart
Rosemary Jones
Earl McDow
Mark McDow
David Huckstep
Earl Sloan
Brian Joy
Manish Sahni
Reid Tillery
Hugh Minnich
Eric Pleace

Introductions. From 1830 until 1855 when the meeting commenced.

- 1. INTRODUCTION/APPROVAL OF AUGUST 2024 MINUTES/ARES HOURS.** KX4Z displayed a listing (! Wow !) of the achievements by this ARES group in the recent past. These included: 1. Learning about towers and directional antennas; 2. Gaining expertise with filters and RF measurement equipment; 3. Working together as a team – POTA events, FL QSO party, Field Day; 4. Serving the community – We staffed the EOC, operated command nets, and staffed three shelters during Hurricane Debby; 5. Continuing to learn about electronics – Lab N’Lunches and building of electronic keyers. KX4Z talked about how we’ll have a high FD score, and this is because the team has resolutely pursued improvements noted in After Action Reviews. Woohoo! KX4Z discussed 9/11, in which there were repeaters on the Two Towers, which went down -- this is why the need for simplex is so urgent. Jeff Capehart says we have eight new ARES members in the recent past. KX4Z asked for show of hands on who is EOC qualified. Reason? We need more people qualified to act independently in the EOC. Jeff passed Eric Pleace’s offer to train folks at the EOC. Jeff said that we had 319 hours recorded in August. Emergency operations (Debby) were a big part of that, as well as meetings, Lab N’Lunches, ARES Simplex nets, etc. Hours unreported are unrecorded. Go to our web site for the link to record hours. ARRL systems are still impacted by the outage caused by the ransomware attack. For example, our ARES hours can’t be collected at HQ. Section Emergency Coordinator link is down. Jeff walked through how the ransomware attack unrolled. Mark

McDow said these attacks can be very slow to develop and show. Engaged discussion by participants of this ransomware attack. August 2024 minutes approved.

2. **NOVEMBER VETERANS' DAY EXHIBIT – NOV 11 AT VETERANS' PARK.** KX4Z listed a number of items needed: canopy; two folding tables; HF winlink go box (Gordon will provide); VHF go box with Winlink capability (Gordon); Forms for the public to send themselves emails; ARES Banner (Jeff?): 2d Banner – EOC or Gordon's. What to do with the banner(s)? Hoist on the canopy or on mast. KX4Z will bring generator trailer; HF on the trailer mast as an inverted Vee? VHF Slim Jim as well? Brochures and Business cards (Gordon); Gordon asked for show of hands for vol to help – five or six raised hands. Jim Carr will be working with helicopter, and Susan will help him
3. **UPDATE ON 6M AMPLIFIER REFURBISHMENT.** The amp was a freebie which is in much worse condition than we were hoping. New circuit breakers installed by Mike Hasselbeck. Looked as if it had been dropped. Mike Hasselbeck is working with the power supply, and the probable need for new capacitors. Harbach makes kits for \$184 to recap the amp, and Harbach does in fact sell a kit for this. So it turns out that refurbishing this amplifier is not going to be a “free” thing for us to do. If working, this is a 1.5kw amp. We also don't know if the tubes work. So, if the tubes are working but old, then the output may be 1.1kw, say. Wouldn't notice the difference in operation.
4. **UPDATE ON ADDING DIGITAL MODES WIRING TO EOC GO BOXES.** W4JIR talked about what the group did today at the EOC; we installed switches allowing rapid selection of phone (via a hand mic) and digital modes, as well as the cabling required for almost everything. The team completed these additions on a number of Go Boxes that are currently stored in the EOC generator room. One difficulty we encountered is that several of the boxes had not been closed correctly, and this caused problems with getting the removable lids off the boxes. As of now, and as a result of the inventory of these boxes (which, with the exception of Box One that is in the radio room), we have a total of 10 working Go Boxes, in that they have the switches and wiring for use of Signalinks and computers. The Signalinks and computers have to be supplied by the deployed operator W4JIR stressed how important it is to ensure the lids are properly installed, and that all equipment that should be in the box is in fact in the Box. Boxes are numbered. The number in white Sharpie markings on the tops of the boxes. Boxes 1-11 have polarity protectors. Boxes 12, 13, and 14 have neither the Signalink cabling nor polarity protectors (we just ran out of stuff). We have two spare computers and two spare Signalinks that can be issued to deployed operators. The manuals that are in the boxes can get hung up on too long sheet metal screws that were used to assemble these boxes, and as a consequence many of them are rather torn up. AA3YB talked the Statewide Law Enforcement Radio system go kit that is in the EOC radio room. The old v. 1.0 SLERS will be taken away next week, and a SLERS 2.0 will be issued to us in the next month. Mr David Peaton of the EOC is working this issue with the SWIC, Roger Lord, in Tallahassee. When we get our SLERS v. 2.0 kit, this will allow digital interoperability with a number of law enforcement, public safety, and other emergency services comms equipment.
5. **SIMPLEX DISASTER NET TECHNIQUES.** KX4Z explored this disaster net technique. Chattanooga Group wrote up a manual some ten years ago on how to do simplex nets in an area where mountains prevent contact among separated valleys in that metro area. Chattanooga's concept uses main and area hubs. The main hub is location of of the main net control; this is the stations responsible for providing info from and to the entire simplex system. This station feeds

the area hubs. If repeaters are not available, start or continue the Net Control by monitoring the input frequency of the repeaters to hear operators attempting to access the “dead” repeater, and who will be told to go to a designated simplex area hub for the quadrant of the particular operator. Through practice and drills, ops will be trained on how to function when the repeaters are down, and then they switch to simplex main and area hubs. Chattanooga recommends not using the national emergency calling frequencies (e.g., 146.520). Net checks are conducted by the main and then area hubs, with checkins to the Area Hubs, and the Area relaying to the Main Hub (each area hub has to hear and be heard by the Main Hub). Ops must be trained to recognize when a station is not being heard by his/her Area Hub and “relay” the traffic to the Area Hub. If the NCS does not acknowledge an operator, it is a safe assumption the NCS can’t hear that op. Ad-Hoc relays are exactly what we do on HF nets, which by definition are always simplex. KX4Z talked about the very recent local 6m SSB simplex net, which is very promising for all season/all day local comms. KX4Z reported that the noise floor was very low and he was able to hear many people. KX4Z asked whether it would be worth pursuing 2m simplex nets along the lines of Chattanooga’s experience. Gordon stresses that the issue isn’t connections, but actual nets. Gordon walked through how a simplex checkin net would actually work, and that operators who can’t hear the NCS will just blindly have to key their mics and ask for relays. Techniques for working relays, and an alternate NCS, were discussed. Mark McDow offered how folks can work relays more effectively by knowing the geographic proximity of other operators.. Group decided to do a “Chattanooga” drill on Thursday, October 24, in place of the “normal” ARES net. We’ll have a person at the EOC. The alternate can mirror what the main NCS does, and works with relays. More to be decided, as we have a month to work details.

6. **MSK144 SOUND DEMO.** KX4Z demo’d the actual sound of MSK144 – exceptionally obnoxious digital noise. 15 sec TX and RX cycles, with a digi signal repeated many times in the cycles. The repetition helps with getting contact information through on a very “iffy” mode. We’ll set up a 6m meteor scatter even in December, coinciding with the Geminids. Having the number of meteors that go with a major shower means that even phone connections with a “talk time” window of more than a minute are possible. As for our event, we will deploy with a full tower and 6 meter BEAM. And...if our amp is working...the amp. This will be at San Felasco on ~~Wed Dec 11~~. [GLG correction: Saturday Dec 14 / POTA]
7. **SEPTEMBER LAB’N LUNCH AND 7\$ PADDLE BUILD.** KX4Z reports that the group put together eight of the Winkeyers, with the next Lab N’Lunch to complete them. Gordon showed what the Winkeyers look like. Demoed how they work and sound. Sept Lab N Lunch will cover adding parts, such as buttons, drilling holes for mounting and cut openings for displays; mounting boards, adding labels, and helping people with keyer output connections. Gordon also showed a home brewed paddle made of left over stainless steel.
8. **FIELD DAY FIXES – STATUS.** KX4Z said there’s “lots still to go.” Showed a chart with a horizontal axis showing the items that needed to be fixed, and a vertical axis with 0 being undone, ½ equals partial, and 1 being completed. These notes will not go over each of the items. See the website for updates.
9. **TREASURER NOTES.** Susan accepting donations for reimbursement of the insurance. Many members gave Susan money to reimburse the \$200 she’s already paid.
10. **MAP TRAINING.** Jeff Capehart showed a number of the local Convention bureau maps of Alachua County. One of these would be with deployed Go Boxes; users of the maps can record

where, for example, would be the road blockages, etc. These maps are detailed and allow a good spatial picture of the County, and will be useful in deployments. Jeff actually drilled the meeting participants using actual data reports from Hurricane Debby. Great exercise and the crew had a good time with a “hands on” effort that would be useful in real emergency activation and deployment.

11. ADJOURNMENT. At 2035 EDT.