## Alachua ARES/NFARC/NF4AC Clubs

## **MINUTES**

## March 12, 2025

Attendance: **16.** The meeting was at Queen of Peace Catholic Community, and via ZOOM. Meeting attendees are not specifically noted as attending live and in person or via ZOOM.

Gordon Gibby Leland Gallup Earl McDow Dean Covey Jeff Capehart David Huckstep Earl Sloane Hugh Minnich Mark Miller **Reid Tillery** Ron Lewis Brian Joy Manish Sahni Mark McDow Mike Hasselbeck Kevin Miller

Introductions/Mini Swap Meet. From 1830 until 1900 when the meeting commenced.

- 1. MINI-SWAP MEET AND INTRODUCTION//MINUTES APPROVED FOR FEBRUARY 2025/PREVIOUS MONTH ARES HOURS REPORT. GARS did a simplex drill the last Tuesday night; eleven or twelve signed up, with fewer participants. Manish said he could hear no one, and David Huckstep said that it was somewhat spotty in execution. So a bit frustrating. February minutes approved. ARES hours for February: 86 hours – we under report because we have not been reporting from the EOC, and we likely have 20 hours more for the month. Hours spent for things at Hamcation such as forums and AUXCOMM are good for hours that can be reported. Hours can be reported in the next month, but not after approximately the 8<sup>th</sup> of the month. 13 out of 39 counties reported in NFL section 1196 hours in January, of which Alachua was 30 percent. February a "lighter" month for business (no Field Day or exercise, for example).
- 2. PROGRAM TOPIC #1 SHOW AND TELL: QRP RADIO AND CLASS E AMPLIFIER EXPLANATION. Ron Lewis handed out paper describing a small QRP radio that he sources from Amazon. It is based on the uSDX radio by DL2MAN and PE1NNZ. It is multi band and Ron reports that he had great success in a recent ARRL contest with QSOs in Europe. The version of the radio Ron uses comes with an inferior hand held mic: but the rig comes with a PPT on the side that is even better. He also showed antennas from "The QRP Guys" that can be

cut to specific lengths and do not require antenna tuner to operate. The antenna he showed is an end fed half wave cut to specific lengths; requires no counterpoise because the coax feedline itself acts as the counterpoise. No line isolator used. He has had success with this radio and antenna combination. Very small and lightweight – easy to pack. Next, Gordon showed the class E amp that is inside the rig that Ron showed. It is a Class E amplifier that is 95% efficient and builds on the concepts underlying the Class D amplifier.

- **3. SUMMER FIELD DAY UPDATES.** Earl Sloane briefly discussed. Question will we be a 5F or a 4F station? Answer: probably 4F. Gordon asked how many participants had never done a FD and for those who said they had not, Gordon briefly described what a Field Day is, and how we are a much better disaster response/tech/operational group because we have participated in Field Days. ARRL says that 2000 clubs participate, with thousands of amateurs. David Huckstep described the points concept, modes, IAPs, etc. Mark McDow talked the ARDEN network that we use for coordinating and logging the contacts. FD is a way to "stress" all the technologies we apply. Mentioned that we can have anyone operate with a licensed person present, so it is an outreach and training opportunity for all ages. The MARC tower and their participation in on the table for development.
- 4. LICENSE CLASS UPDATES. Reid Tillery discussed the concept of a Gainesville licensing class, which could very good for increasing/recruiting new HAMS (a much discussed need, as our group agrees). Need volunteers who can teach on one of the classes, which would be scheduled starting in September for 13 weeks, with the result being the students will get a fullup license class that is much more in depth than the weekend only classes that NF4AC/NFARC has done in the past. Reid recommends a specific book and curriculum, which he passed around for "look-see," Each class is two hours, one every week for thirteen weeks. Reid had a recommended syllabus. Reid doesn't just "teach to the test," as he handles much more material. He does cover the questions/answers in the license pool. There is a 4\$ hamstudy.org app that helps with questions and the answers. Reid also offered other methods for attracting students, such as radio direction finding (this is an aside). The Ham Radio School text is \$29.95, done by Stu Turner, who was in curriculum development at the Air Force academy. The course, if done this fall, will end two days before a test date in Waldo. Leland, Gordon, Ron, Earl, Brett, Hugh all offered to help instruct. [Sec'y note: the day after the meeting, which she could not attend, Susan Halbert said that she would also be willing to teach the course.] Reid talked about how one signs up as an instructor. Gordon showed the slides that have been developed for use by the instructors. Very slick! An instructor signs a non-disclosure/non compete with Stu Turner. In return, an instructor gets to use the full slide sets for the course (and they are nice!) Currently there are three classes being run in the county. We'd like to do one in the fall semester here in Gainesville.
- 5. 2025 FLORIDA S.E.T. Scheduled for three hours exactly at the same time as the GARS tailgate party. 8Am setup. 0900-1200. Saturday, 12 April. Two locations: EOC and at the Trinity United (same place as the GARS tailgate). Seven or more injects (events that have to be responded to) are anticipated for the SET. Gordon has drafted an incident action plan (IAP) that is already on the club's website. The IAP lists objectives. These include comms with no public communications means (phone, etc). Gordon showed a timeline of what happens in the exercise. Gordon is recruiting leaders. Need to print out forms and make sure that we have in the computers all the ICS tools that are going to be needed; the reason, obviously, is that this will be a fictive no Internet and no-electricity event. What we have preprinted or on our machines is what we will be able to use. Informational Zoom tomorrow night (13 March).

Don't know when/how the injects will be put out to the leaders. Objectives of the exercise will include, e.g., that the group has to have the ability to notify group without telephone, texting, email. Participants will have to monitor radios the night before...this will be the clue that people can call in/check in. Another option is to simply turn on your radios to the 82 repeater; another option is Winlink-only email with a bunch of data. More objectives include communicating with the State DEM in Tallahassee using amateur or SHARES. Ability to gather and transmit situational update structured messages by ICS techniques, and health and welfare messages. The ICS form we'll likely be tasked with sending is a 213RR. Injects will probably have a great deal more on what is needed. Gordon, Dean, Manish, Earl Sloane, Reid, Ron, Earl McDow, Jeff Capehart, and Leland have volunteered to help with the SET. April Tech Nite will be further discussion of the SET Thursday the 3d of April is Tech Nite, and April 9<sup>th</sup> is the ARES meeting – and the SET is the following Saturday.

- 6. WINTER FIELD DAY IMPROVEMENT PLAN UPDATES. KX4Z talked about working the issue of interference between the 10m and 15m bands operating simultaneously at WFD. Gordon has ordered additional filtering to resolve this issue. He showed comments on how computer keyboard shortcuts helped greatly with speeding up CW operations. Showed photos of recent work by KZ4KC in winding/soldering new 40m filters.
- 7. AMATEUR RADIO DIRECTION FINDING PROJECT PLANNING. Reid reports that his fox hunting program is still in development. He did a fox hunt a week ago, putting the fox in his back yard and then driving around to use a Yagi to get a general idea of the direction. He described the process as "tricky." More to be done to refine the process. It's a "challenge." A lot of fun when the skill is worked out and put into practice.
- 7. PROGRAM TOPIC #2 INTRO TO FINDING SATELLITES. Ron Lewis and Gordon talked about this. In general, most amateur satellites are in LEO. Dozens have been put in orbit over the past 40 years, but they degrade and have decayed orbits over time. So only a couple of FM sats are in use, but they're really only useful for operators using amplified signals and gain antennas. Linear satellites, on the other hand, are useful for lower power SSB and CW ops. This is because there is 100 kHz of bandwidth that is linked wholly up and down. KX4Z showed screenshot of satellites and their operational footprints, in real time. He also described a program called Gpredict that takes into account the Doppler effects with respect to the satellite. The program feeds into CAT control of alt-azimuth controllers/motors so that the antenna is controlled as it points to the satellite. The rotator system Gordon has built was written by the same ham who did the Winkeyer. The antenna steers and follows, so that not only Doppler shift and location are considered this is very good for tracking the linear satellites. Gordon attempted a demo of how this all works. With his transverter, and his newly assembled altitude assembly. Controls radio, controls antenna, everything (when it is working Sec'y's snippy comment LOL).
- 8. ADJOURNMENT. At 2036 EDT.