Alachua ARES/NFARC/NF4AC Clubs

MINUTES

January 10, 2024

Attendance: 15. Meeting held in person at the Queen of Peace Catholic Community; and via Zoom.

Gordon Gibby

Leland Gallup

Craig White

Susan Halbert

David Huckstep

Eric Pleace

Dean Covey

Reid Tillery (Zoom)

Mike Hasselbeck (Zoom)

Mike Schaeffer (Zoom)

Jeff Capehart

Rosemary Jones

Earl McDow

Wendell Wright (Zoom)

Lorilyn Roberts

Introductions. From 1830 until 1900 when the meeting commenced. The NFARC/NF4AC radio club met for this month in person at the Queen of Peace Catholic Community and via ZOOM.

- 1. INTRODUCTION/APPROVAL OF DECEMBER 2023 MINUTES. December minutes approved.
- **2. PRESENTATION DECEMBER SECTION HOURS**. For December, 186 hours including 66 hours for the community service event (Operations Santa Delivery).
- 3. ELECTIONS AND MEMBERSHIPS: Current officers listed as below.
 - President: David Huckstep NFARC; Gibby (NF4AC)
 - Vice President: Eric Pleace NFARC; Wendell Wright (NF4AC)
 - Treasurer: Susan Halbert NFARC/NF4AC
 - Secretary: Leland Gallup NFARC/NF4AC

With the exception of Leland Gallup, all current officers of both clubs agreed to stand again for 2024. Gallup said he'd continue as Sec'y until he leaves area. Group proposed nominations for new 2024 officers. Unanimous approval of the current officers for 2024. Same process for membership in both clubs; all present and by Zoom agreed to be members of both clubs for 2024.

4. ANTENNA SIGN-OFFS WITH THREE QUESTIONS. KX4Z discussed three antenna related questions that had been distributed with the meeting agenda. Handed out a multiple choice test. Those who had their Task Books got them signed off as able to deploy and use 80/40 HF antennas.

5. WINTER FIELD DAY REVIEW OF PROGRESS IN PREPARATION. Wendell Wright did the 10 and 20 passband filtersw, which are done and tested at EOC. He is still working on 40. The 80m and 15m are also at the EOC. For ease of WFD operations and to reduce confusion, will prepare signs to indicate which band a station is assigned. Unless you have placard issued by the IC (who has to enforce discipline and oversight here!!), you can't use the band. This is important, because if we use a transceiver on wrong filter you will blow it. New antenna at the EOC: an EFHW. Took nine people to hang it up, as part of Jan 6 work party at the EOC. Tested the antenna today (10 Jan 24) during the EOC activation, and it worked fine. Logging/network...according to Earl McDow, the logging software and network are up and running. Working on documentation with screen shots. Successfully linked JS8 Call's logging utility with N3FJP. Jan 25 is a special Tech Nite for how we're going to manage the process of WFD...how the IC can keep the chickens from biting each others' heads. Timekeeping is the next subject here. In that regard, KX4Z described the timekeeping wi/fi synch system he has devised. He'll take it outside twice during WFD to synch up and it will work. The device will have its own power. Next subject: VHF/UHF contact plan. KX4Z checked with the leadership of WFD on this. We will use Winlink at the beginning of WFD to send out a bulletin message to GARS and the college club, and others we may want to, with time, frequency, and mode schedules. 10 or 15 minutes before, we'll send a Winlink alert/text "beep" alerting the target about what is scheduled. KX4Z went over the action plan for WFD; listed ops who have volunteered. Discussion of equipment stations and how people can bring their own transceivers and how they will be used. KX4Z explained how N3FJP can be used for automated CW contest exchanges, and how they will be auto logged. Phone operators can create canned phone contact messages. There is a utility in N3FJP that is similar to CW...you record the audio on the 7300 and you use N3FJP to send the CAT command to TX. KX4Z talked about CW Decoder, which is ok at 25 WPM. All of this will be practiced on January 20th. Lorilyn asked for volunteers to work a JS8 QSO with her. She'll send out an email for this. Right before we adjourned for the evening, KO4ZSD worked through a scheme that he'd drawn on a dry erase board. The schematic showed how the EOC antennas come through switching and one single coax feedline into the EOC. Right now the coax ends in the EOC and is connected to an antenna tuner. From there, the path goes into a radio switch, so you can use different radios, such as the IC-7300, the Heathkit, and a commercial Yaesu. When using the amplifier, the path goes from the antenna switch to the amplifier, and to the pertinent radio, which is normally the 7300. Not the Heathkit, and not the Yaesu. For WFD, Eric's drawing showed a "quintplexer," -- this is a "constellation" which has outputs for 10, 15, 20, 40, 80/160. These outputs can feed lines to the two radios out in the main EOC, as well as the 7300 already in the radio room. Additional filter boxes are at each output of the quintplexor. So each radio will operate on one quintplexor band output/filter at a time. The EOC radio room 7300 /antenna tuner/antenna switch, etc, remains in place. Critical that the IC retain situational awareness of who is using what band on what transceiver. This is because if an operator wants to operate on a different band there must be reconfiguring of feeds and filter outlets.

6. REVIEW OF FIRST FIVE ITEMS FROM OUR 2021 INTEGRATED PREP PLAN. A. Badged EM vols training new vols. Grade? A. Included in 23? Yes, continue.

B. Shelters. Adding antennas to last 7 shelters. Grade? F...but, W4JIR recommends we drop this from our IPP. Reason? Remodeled schools/etc., show that they have inbuilding repeaters BDA, and do not need additional HF/VHF amateur assets. Group agreed. Dropped requirement.

- C. Shelter radio Go Boxes. Purchase/equip 7 more. Grade? F...but W4JIR recommends that we drop this from our list. All agreed. This requirement dropped from our plan.
- D. HF operators: Increase # w/deployable equipment on voice and data. Grade? A. We have more operators than we might have expected (POTA, anyone?)
- E. Solar. One more club/group who can do FD w/ solar. Grade? F...because we haven't evangelized to other groups. Consensus: add 2 additional. Five in the room right now have solar capability. Add to in the next 3 years.
- 7. HAGUE TOWER UPDATE. Susan says Jim Carr knows about this. There is a DStar repeater on this tower. She recited the frequencies. Both VHF and UHF. Looked up in the Repeater.com website but the frequencies are not listed. The group will look into this and report back next month.
- 8. UPDATE ON SIMPLEX/EAST GAINESVILLE/GRMS STRONG WINDS NET. Reid Tillery reported on the squall line that came through this area yesterday, 9 January. Reid got on the .82 repeater after coordinating with the EC. He reported on air and had a few call ins (Earl McDow) during the net. The net lasted until the line got way past Alachua County, but things settled down after about 4:00pm. Lessons learned? Reid learned information NWS sources that he didn't know existed. Asked about the status of neighborhood watch volunteers, his response was a yes/no. Three of "us" have GMRS in their neighborhood, and a tree had come down in his neighborhood, and the three used GMRS to alert that the tree was down. Advantage? Unlike cell phone with is point to point, ANYONE who is on the GRMS channel can hear what is going on. Neighborhood situations really need the ability to talk to more than one person at the same time. Consequently, for neighborhood situational awareness, GMRS has the advantage of minimal licensing, large areal footprint. KX4Z has shown 6 neighborhood vols who have signed up on the NFARC website. How activate these volunteers? No clear answer here. KX4Z discussed in detail with Reid, and cleared up some miscommunication. Reid will talk with the six leaders who have volunteered. Mike Hasslebeck recommended that we monitor SARNET during events; during yesterday's, the reports were very timely and very frequent. W4JIR also recommended that our local NCS during an event listen also to the SARNET for up to date information. SARNET is the latest information. Of course, there is a logistical problem...can't typically talk on VHF while monitoring SARNET critical information flow. Huckstep commended Reid for his excellent performance as NCS. W4UFL discussed the new SARNET rules that will sharply limit the way SARNET will be used. One checkin from a physical EOC. No city checkins. Will not operate along the lines of an amateur net, but rather primarily to establish communication links among counties and with the State EMD.
- **9. EAST GAINESVILLE/GMRS UPDATES.** KX4Z showed some HT GMRS and FRS radios on the screen. FRS allowed TX power is now up to two watts. One needs to place close attention to high and low power, and that'll give you some indication of power. GMRS HT's are 5 watts, and mobile/base stations are 50 watts. Radioddity has a 30\$ radio GMRS that works just fine; that and a magmount on the roof of your car gives you countywide GMRS using the GMRS repeater.
- **10. BRIEF 97.1 TIME.** KX4Z showed a very simple circuit with a transistor. Ohms' Law applies to every component in a circuit. Asked the question by pointing to places on the circuit as to voltage across various components. Using Ohms Law, went through how to calculate voltages

- at various points off of a transistor. Showed how to calculate the max voltage in a transistor before there is max and clipping. The circuit he was using for the demo constituted a very basic amplifier. Used an NPN transistor to as the critical center.
- 11. NEW EOC UPDATE. KX4Z discussed his creation of a 2' piece of wire and how he calibrated it so that he can determine RF ambient noises. KX4Z's view is that his tentative antenna and math calculations can now show professional metrics: E field strengths in microvolts/meter. This information will be developed to give a good overview of ambient noise considerations at the new EOC location. Mentioned that the new County radio hire simply didn't show up for work. So we have no POC.
- 12. SPRING GROUP GROWTH PLANS. KX4Z had on his list of comments...a Mosely Beam. Capehart owns. Put this back together. This would be a YAGI on 20/15/10m. This is the "Junior" version of the Mosely Beam. There are 12 pieces that would need to be reconnected to put this together. It will go on a trailer. If we were to assemble the antenna, we could put in on our own tower trailer. We have a rotator...but we don't know whether it works, or for that matter the controller. The manual is on the net. We would have this for Field Day...with our triplexer we could use this one antenna for three different bands.
- **13. HEATHKIT MODE SWITCH.** KX4Z showed his new creation: a mode switch for older Heathkits, which are problematic because they wear out over time. KX4Z has four such Heathkit radios at home that need this newly invented/devised switch.
- **14. ADJOURN** at 2058 EST, 10 January 2024.