

Alachua ARES/NFARC/NF4AC Clubs

MINUTES

February 10, 2021

Meeting held via ZOOM, instead of in person at the American Red Cross, Gainesville Red Cross, 6th Ave NW and 16th St

Attendance: altogether 16

Gordon Gibby
Jeff Capehart
Leland Gallup
Jim Bledsoe
Brett NH2KW
David Huckstep
Reid Tillery
Mike KN4YGT
Susan KG4VWI
Craig Fugate
Mike KD4INH
Wendell Wright
Vann Chesney
Brad N5CBP
Earl McDow K4SZW
Chris Carr

Introductions. From 1830 until 1859 when the meeting commenced. January 2021 Minutes approved.

1. **UPDATES ON CREDENTIALLED VOLUNTEERS AND PATHWAY FOR NEW VOLUNTEERS (RACES).** KX4Z listed a number of activities upcoming, including every Monday Winlink check in; Feb 16 GARS talk on JS8Call/FT8; Feb 20 Lab n lunch on Windows pass through or transmission lines; Every Wednesday, EOC Nation/State net Chicken ins; Saturday February.....entire list to be placed on the NFARC website after the meeting,
2. **APPROVAL OF JANUARY 2021 MINUTES.** January 2021 minutes approved
3. **BADGED VOLUNTEER COMPLETION PROCEDURES.** Couple of people are close on this; Bret and COL David Huckstep. W4UFL asked if anyone else is perhaps ready or might get done before hurricane season....or wants a badge...silence from attendees. Limited number of badged individuals limits the pool of usable/shelter deployable hams.
4. **TRAINING, HANDS-ON, SOCIALIZING OPPORTUNITIES,** W4UFL talked through how the GARS Zoom account could be used by anyone for training sessions of half hour or more. Emails and notices to get stuff out there on subjects for Zoom meeting/training sessions. Need volunteers to step forward to be an ELMER and/or to host a Zoom session to talk about a subject that might be of interest. Reid Tillery said he would be a Winlink Elmer. Presenters

don't have to be GARS members. Could be a ham round table and social chit chat. If training on Zoom is needed, get with W4UFL. KX4Z mentioned that training is on the ARES Task Book list, and doing one of these Zoom sessions would get you checked off. Zoom makes it easier because it's all on the computer and is ready to go for Powerpoint, YouTube, etc. No limit on how many Zooms you could do, because the Club pays one fee for an entire month. We need to provide more activities. 15 members who participated in the survey said they wanted more than one meeting a month...so step up to the plate! KX4Z showed a screen shot of this week's FL Winlink Net of all the activity. This included checkins by many members of our own Alachua County ARES group.

5. **EOC ANTENNA PARTY OUTCOMES AND EOC RADIO EQUIPMENT**

FAMILIARIZATION. KX4Z showed photos of the work party for rehangng the OCF antenna at the EOC; David Huckstep also shortened excess RG-8X cable to the OCF. KX4Z built and installed a sloping 80m end fed that acts as a backup to the main OCF antenna – which now is hung at 80' high over most of its length and gets out very well, indeed. A great improvement over the EOC antenna situation of even a year ago. This improvement goes along with the enourmous improvement to the EOC's radio capability in general. Given how much has been changed and added, we will have on Saturday March 6 an EOC familiarization day. Start at 0900 and go to 1100 am. We have two UHF/VHF stations, can hit SARNET, have two VHF digital stations. Two amplifies, tuners, power supply, and very capable IC-7300 HF transceiver. The EOC equipment familiarization will include, if we can arrange it, familiarization with the new shelter go boxes, and what to do with the Police public service go boxes and how they are used; More new capability includes large gel cell battery banks on 24/7 trickle chargers, as well as LiFePo4 batteries; the latter have been topped off but do not do well when left on trickle chargers. Consequently they are in boxes on the floor of the radio room, ready for instatnt use.

6. **LAB 'N LUNCH.** Window line transmission systems and pass-through build. This is scheduled for Saturday, February the 20th. We will meet at Burger King, and from their proceed to KX4Z's house; where we will make window transmission systems; can use the built pass throughs to have a weatherstripped way to get an antenna inside and outside house. Get with KX4Z by this Friday so that Gordon can order parts.
7. **ANTENNA RAISING HELP – APPLICATIONS. Competition** to see who has the worst antenna situation (HOA, apartment, etc). Form on our website. Print out and send to Gordon, so who makes the argument that their situation is THE WORST so that we might be able to solve the antenna issue. So you and your neighbor are happy. Here is your chance! The appication form is on the NFARC web site.
8. **NANO VNA ANTENNA ANALYZER AND MORE – DESCRIPTION.** KX4Z did an excellent presentation on the Nano VNA. These might put antenna analyzers out of business. KX4Z bought a cheap one without case for \$35. Showed photo of the device. It has a small screen, three loads and two inputs. Althought it has its own screen it can be connected to a PC. Think of it as an AC Ohmmeter. Plus a filter to measure gain/loss. Includes an antenna analyzer but has a lot more. Is able to measure loss through a network Can tell capacitance from inductance. How does it work for \$40? It uses a square wave generated by an Si5351 chip There are three separate independent square wave generators. Use fundamentals and third harmonics to get to 500mHz. Cheapest goes to 900 MHz. Includes a programmable receiver. Directional bridge (SWR bridge with f/reverse waves separated out). Limitations: limited ability to reject other signals; spectrum analyzers don't have this issue. Has 80-90 dB dynamic range

which is amazing. Can use to tune duplexers. Spectrum analyzer at \$1k have 110 dB range. Will tell SWR. Can do TDR...can see length of cables and from that indicate points of cable/connector failure. Output signal is not large and is not adjustable, so this is a limitation. Not perfect for \$45 but it's amazing. Programmable TX and RX for cheap; not rugged. But able to do many more things than “old fashioned” antenna analyzer.

9. **BEGINNER'S CORNER: JS8 CALL REVIEW AND DEMO.** AA3YB and KN4TWS talked through use of JS8 Call and attempted live demonstrations. Gave overview of what JS8Call is, what is needed to get it running, and where to find training videos. Then discussed new developments in the JS8Call world. These included a larger user base – AA3YB attempted to show live on Zoom the screen for JS8Call, which was running. It showed about 10 “conversations” taking place real time on the 40m band. AA3YB covered JS8's ability to do beacoining “heartbeats.” From this the user can see who can hear him, and who they can hear. This is the basis for JS8Call's utility as a relay system for getting messages to stations one cannot hear directly, but an intermediate relay station can. Talked message store and forward, and groups. Finally, AA3YB talked about a recent “app” that can plug in to JS8Call – this is JS8Call Utilities. This app permits TX of Mainhead grid square locations to APRS I-gates. Also permits sending SMS texts and emails to any JS8Call receiving station which, if that station is also an APRIS I-gate, can automatically inject the email in to APRSIS for consequent transmission in to the Internet for delivery as an email or SMS text to the ultimate destination. Potentially augments Winlink as a messaging system for EMCOMM. More research needed on the utility, but it is very promising.
10. **BEGINNER'S CORNER: SIMPLE HF/VHF/UHF ANTENNA.** KX4Z showed how to make a very simple VHF antenna with a mag mount on a steel pie plate with connectors. Slim Jims also work just fine, Also described how it is easy to make HF antennas. Get as much wire as you can given your circumstances, as high as you can. But do whatever is necessary to get on the air. Can feed with coax, window line, etc. Can use house wire, bell wire; at least try to get 10' off the ground. The home brew 80 meter end feds work fine
11. **BEGINNER'S CORNER: RASPBERRY PI == BOTH 3B AND 4.** Not enough time to talk this
12. **TECH CLASS COURSE AT SANTA FE COLLEGE.** Has to be on Zoom, not sure that this will work. It will be in April, but will need people to sign up...and Santa Fe will charge money. Givent the constraints presented by Santa Fe's course methodology, this course may not happen...will have to see.
13. **INTEROPERABILITY EXERCISE: MARCH 19.** Florida Baptist Disaster Relief, SHARES, ARES, and traffic nets. This will be Friday. Scenario is Super Tornadoes. Needs EOC staffing, home staffing, local nets, check ins.
14. **WCF TECHCON 2021.** Saturday, February 21, 2021.
15. **ADJOURN** at 2055 EST. Many stayed on afterwards to chat on the live Zoom feed.