Alachua ARES/NFARC/NF4AC Clubs

MINUTES

December 9, 2020

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

Attendance: altogether 20

Craig Fugate Gordon Gibby

Jeff Capehart

Leland Gallup

Bob Guertin

Mike KD4INH

Alvin John Ch Osmena

Earl McDow

David Huckstep

Reid Tillery

Jim Bledsoe

Vann Chesney

Wendell Wright

Brett Wallace

Robert Cooper KL4IOG

Rosemary Jones

Susan Halbert

John Trites

Emily Wallace

Amy Woods

Introductions. From 1830 until 1859 when the meeting commenced. November 2020 Minutes approved.

- 1. UPDATES ON CREDENTIALED VOLUNTEERS AND PATHWAY FOR NEW VOLUNTEERS (RACES). Jeff Capehart referred to the Alachua County ARES/RACES document in the meeting agenda and the website; this includes check boxes for the requirements to join ARES/RACES. Discussion of what RACES is, and how to load documentation in to SERTRAC. Discussion, too, of the utility of SERTRAC for signing up for courses. Badges require background checks. County will pay (ACSO) for the background checks; ACSO will waive the fee the individual has to pay for. Can't go to shelters without background check, and can't respond to statewide deployments. ARRL is not the agency having jurisdiction, so badging is done through counties/local government. Brett Wallace and Dave Huckstep need badges. Also Robert Cooper and Emily Wallace.
- 2. **APPROVAL OF NOVEMBER 2020 MINUTES**. November minutes approved Also discussion of RACES and the history, for recognition of amateur radio volunteers and for liability. We (meaning AA3YB) intends to redo/refresh the Alachua RACES MOU.

- 3. **BEATY TOWERS REPAIR TRIP.** Susan Halbert, Earl, and Gordon worked at Beaty towers to check out the digital station. 030 was working and 070 was not; when they left it was the other way around. Probable issue is the Pi used as the basic computer; Pi will need to be reprogrammed. Possible fix is getting Mike Ridlon to free up 030. Transmitters work fine; soundcard isolator was replaced. The Raspberry may have to be replaced as the 2 USB ports are non functional.
- 4. **GENERAL CLASS RESULTS.** Four students; three took test and passed. Spouse passed Tech also, and two new people interested in our group.
- 5. **BRAINSTORMING AND DECISIONS...NFARC/ARES GOALS FOR 2021**; KX4Z led discussion of a number of possible goals; developed ballot for voting on the possible goals. Secret ballots distributed live during the meeting. 16 ballots counted. Described the results of the balloting. Most ideas got "yes" by significant margins. All the topics listed were briefly set out and explained.

TECHNICIAN LICENSE CLASS COURSE

EXTRA CLASS LICENSE COURSE

FIELD DAY 2020. Our group in 2020 did in the top 30% for F2 stations; very well considering al factors.

FL EMERGENCY CONFERENCE AND HSEEP EXERCISE (APR/MAY) Not until vaccine is in widespread use. Dates possible in conjunction with FL Baptist Disaster Relief (FLBDR) and at one of two sites.

SIMULATED EMERGENCY TEST (OCT 2) We do fairly small scale SETs and this is an annual ARRL led task.

SHELTER GO BOX AND ANTENNA TESTING/SIMPLEX NETWORK Rosemary has taken this on and is working the project. 14 shelters have connection boxes for go box connections. Careful thought on each location. \$100k spent by County on these boxes; David Huckstep talked about the "plug and play" aspects of the shelter go boxes. Law enforcement is assigned with the amateur radio volunteers when deployed, and the go boxes do not have to be picked up and positioned by our volunteers. This is done for us by the County. COL Huckstep has 90% confidence that the logistics will be successful. LiFePo4 batteries (three) have been ordered and will be used for the go box systems. Our assets are way more than what we've seen in the past.

LUNCH N LAB SOUNDCARD CONSTRUCTION

LUNCH N LAB 49:1 HIGHER POWER END FED We are developing better 49:1 baluns; nine were built at the General Class course

DIGITAL 101: HARDWARE. This is to help people get up and running on common digital modes such as Winlink and FT8/

EOC EQUIPMENT FAMILIARIZATION. This is important because the EOC radio room now has not only a new transceiver, the Icom IC-7300, but also a new amplifier.

NURSING HOME VHF STATION. This is outreach/service for folks in nursing homes who are isolated and for whom having a VHF station would be good for "getting out" in more than one way.

EOC ANTENNA REHANG/ADDITIONAL END FED. When the weather is cool – rehang the EOC OCF antenna which has considerable droop on the long leg. Also put a supplemental 49:1 end fed to be back up for the OCF.

ANTENNA BUILDING ROLLUP J POLE. This is a "down and dirty" quick ladder line antenna build that will allow folks to get a good VHF antenna up in to trees. Much better than HT antenna, and an opportunity for people to actually build their own equipment.

SANTA FE COLLEGE STATION REESTABLISH

EXTRA HELP ON BASICS. This is "Beginner's Corner" stuff to help people master some of the simpler things that may challenge them.

TRAILER BUILD FOLLOW UP

"LOFTEN" PEOPLE INCLUDED IN THE TECHNICIAN COURSE. More hands on expertise

- 6. **SDR: MODERN INEXPENSIVE TRANSCEIVERS.** KX4Z showed photos of circuit board of an SDR radios; even cheap Baofengs are really SDR radios. Other than power and pre amp all operations are done in math mod and demod, etc. Can pretty much make any frequency or any bandwidth you want. Modern radios such as IC-7300 are SDR. Experimenters have looked at the possibilities and have come up with amazingly inexpensive SDR HF transceivers; one is a single band that was able to do all the mod/demod thru an Arduino processor...a simple Arduino controller that nevertheless can do the math for SDR radio. Very little power use and very efficient...great for battery op. You can build your own 5watt SSB transceiver with simple through mount circuit board and as much as possible is done inside mathematics. Barb (call sign?) has expanded to three band 5watts. Still in development phase. Transmitter not bug free but receiver is good. Others are now pushing the "blue pill" or "teensy" which use 32 bit processors and things like FT8 built in. KX4Z thought this is quite amazing. Commercial implementations coming.
- 7. SHARES LECTURES AND FLBDR GROWTH. KX4Z gets monthly lectures from the SHARES people; he gets slide decks. Lectures by really knowledgeable and interesting people. Recently heard a great talk on what happens when propagation really "goes south." Causation can be by EMP, CME, you name it. The actual outcome of what can happen with serious events was examined for one of these lectures by a world class expert. Extremely interesting and KX4Z will try to get this slide deck released so we can see. Also had heard a lecture by a GA emergency manager on relating to amateurs. KX4Z works with the Florida Baptist Disaster Relief; by working with them he has gained a lot of experience on Part 90 business radios, duplexers, and the Form 601 (Industrial Business Frequency group). Gordon has brought duplexers from this FLBRD people and has them at the EOC for testing the equipment, The

FLBDR is applying for five business licenses under Part 90. Also KX4Z talked about the extent of Florida Baptists' radio capabilities and personnel, including leadership issues. Things getting better with them in many ways.

- 8. **EOC HF RADIO UPDATES**. KX4Z described "L" shaped table on the west wall that he (with help) has built and installed. Replaces the wire racks used for the VHF/UFH Yaesu rigs and which had held the battery and charger bank. The new table allows for much better operations at the VHF/UFH side; can actually be working space so two people can operate. Showed picture of new operating area. New amplifier installed as was used 9 December to make contacts. A very nice addition to the EOC!
- 9. **NFARC/EOC CLUB.** Will look at elections for both clubs next month.
- 10. **INTRODUCTIONS.** Brett Wallace introduced himself; has come here from Guam where he was the emergency manager for the Guam naval hospital. Reid Tillery introduced himself; General Class and is interested in QRP. Amy, KO4IDO, introduced herself; has Technician license. Brett's wife got Tech license and also was recognized. KX4Z encouraged all to attend the GARS meeting too. Susan asked whether GARS needed donations

ADJOURN MEETING AT 2050.