

# Alachua ARES/NFARC/NF4AC Clubs

## MINUTES

**AUGUST 12, 2020**

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

Attendance: altogether

Earl McDow K4ZSW

Gordon Gibby

Jeff Capehart

Leland Gallup

Mike Ridlon M4MVR

Mike Shaffer KD4inh

Susan Halbert

Bob Guertin W1GL

Tommy Boyd

David Huckstep

Eric Hansen

Judy Gardner K4DF

John KJ4PZ

Craig Fugate KK4INZ

Wendell Wright KN4TWS

Vann Chesney

Brad N5BCP

John Trites NO5X

John, KJ4YPZ

**Introductions.** From 1830 until 1900 when the meeting commenced. Dr Gibby recommended everyone take a look at the NFARC website. July 2020 Minutes approved.

- 1. UPDATES ON CREDENTIALLED VOLUNTEERS AND PATHWAY FOR NEW VOLUNTEERS (RACES).** KX4Z showed a list of the current badged volunteers provided by W4UFL. We need more volunteers. Dr. Gibby showed slides with the requirements for background checks and how that process works. Discussed the need to actually commit to service and do things such as take basic load of ICS courses. Dr Gibby discussed his email list and advised folks that they can ask to be added or be dropped. Leland, AA3YB, discussed efforts to coordinate RACES and ARES for our operators; Craig Fugate, KK4INZ, briefly described the background of RACES and how RACES operators are viewed: as “unpaid county employees” for purposes of Workmen's Compensation, etc. Gallup and Fugate will explore this offline as part of Gallup's task of revising/putting in place a Statement of Understanding between Alachua ARES and the EMD, Alachua County
- 2. INTEROPERABILITY EXPLAINED.** KX4Z showed portions of a 20min video discussing what interoperability is and how this applies to us in the amateur radio community as we work with our served agencies. Personal relationships key to interoperability and the five elements of

interoperability. Gibby reiterated how the events of Hurricane Michael showed us that building relationships is key if we're ever going to be effective in times of disaster. Craig Fugate said that the key is not technology, but rather personal relationships and working governance structures. Who needs to talk with whom, by what technology. People willing to communicate is the key; the tools are things that are provided. Amateur radio is part of this. We hams enable served agencies with comms for their governance. Not about tech...it is about what information needs to be passed to whom in what governance structure. Amateurs can offer services to fill gaps in comms ability. We need to know who the POCS are that we'd need to reach to in the governance structures; this has to be done in advance of disaster. COL Huckstep underscored that building relationships is crucial...this was shown by failures/weaknesses in Michael. Even here in Alachua, we can't really get the leaders of government to realize that there should be one EOC for all functions, even though we have joint comms center. Leadership side is where the frustrations are, since turf protection can get in the way of efficient interoperability. Earl McDow related that the same issue was presented when he was with Santa Fe officials helping them reestablish amateur radio comms. COL H said: why does the City, the University, the County, Santa Fe...why do each need to "do their own thing," when we should be doing things in a coordinated and joint fashion, and even recently this has not really happened. These are the real issues getting in the way of interoperability.

3. **FLORIDA GRANT APPLICATION UPDATE.** KX4Z put twelve hours of work in to writing a grant proposal; but this was abortive, since the cost/benefit was such that it really wouldn't make it worth the effort.
4. **GENERAL CLASS COURSE FOR NOVEMBER 2020 PLANNING.** November 14/21 is target date for the course's second weekend day. Gallup and Gibby appealed for folks to sign up to help teach the license modules...silence.
5. **ALACHUA COUNTY G-300 REPORT.** No one seems to have taken the July course.
6. **ALACHUA COUNTY G-400 SIGN UP FOR OCTOBER 2020.** The G 400 course for Alachua County has been canceled. KX4Z showed how to use SERTrac to find out what is required to take the courses, where they are offered, the dates, and how to sign up. Showed how to upload training certificates for the G courses and AUXCOMM. SERTrac even allowed upload of the ARES Task Book!
7. **EOC GO KITS PROGRAMMING AND TESTING UPDATE.** AA3YB described the programming of three additional Go Kits, the revisions with the Paradan power strips that will allow concurrent connection to DC and AC sources, that the radios are not only programmed but also fully tested. Moreover, we learned from COL Huckstep that the connection/antennas at the first 7 shelters have in fact been tested and validated. Wendell, KN4TWS as part of the today's team work at the EOC activated the SARNET using Go Kit 10 as programmed. Also discussed the modification to the EOC IC7300 to permit SHARES operation; that the 7300 has been configured and was used to make successful SHARES and ARS Winlink email connections. Excellent work at the EOC by Dr Gibby and Wendell Wright.
8. **ARRL NATIONAL CONVENTION FEB 2021 EMCOMM TRACK.** Dr Gibby showed the draft agenda for the EMCOM track at the ARRL Convention/Hamcation. Has been in discussions with the Winlink development team, with traffic experts from around the nation and the state. We are showing ARRL HQ what we are intending to do so they can bless this in

advance. KX4Z said that ARRL announced today the hiring of a very seasoned and experienced EMCOM expert...more to follow, if ARRL approves; well, better said is that the ARRL is letting us do what we will, but this awaits the imprimatur by the newly hired EMCOM person at ARRL. Gibby wants stakeholders involved.

9. **SUPCOM PROGRAM DEVELOPMENT.** FDEM, Mr. Little, is proponent of a program to get SHARES capability pushed in this state to the county level. This is a suggestion for a program with no funding and no mandate (home rule state). SHARES operators don't have to be hams; just approved by governmental organization (e.g., the EOC). NTIA, not FCC, regulates frequencies used by, eg. DoD and DHS (hence SHARES). Goal is to not pit SHARES against other comms tools – for example, amateurs using amateur frequencies. SHARES permits comms that ARS operators are not authorized to conduct...and vice versa. So the uses of SHARES and ARS can be complementary tools in the EM tool kit. No necessary competition between and among RACES, ARES, SHARES, etc. SHARES does not replace ham radio! Parallel. There may be money to set up systems if there's demand for it. Doug Lynch, an amateur in Volusia County, is driving ahead to communicate with SECs and State, etc., to deconflict this capability and amateur radio. Craig Fugate noted that the state has lost the ability to use non-commercial means to connect counties with the State...this was shown during Michael. “Back to the Future,” in the sense that SHARES and similar capacity existed until the 90's, but satellite comms caused interest in these non-commercial means to be lost. Craig Fugate related history...that fiber links to the state from the counties were in place in the 90s. Double redundancy, it was said, meant that the system “could not be taken down.” Until it was, by one backhoe cutting a fiber, and one fire department turning off took the entire system off line. Counties did not realize for 24 hours that they'd lost connection to the State. Hence, a good idea to have non-commercial backups that can't be disrupted by a backhoe operator.
10. **TRAILER BUILD STATUS UPDATE.** Mike Ridlon talked to the status of the tower trailer build that he'd working on. There has been limited development since last status briefing. Ridlon can offer a SWAG on completion as soon as he receives a bid on an essential part that is out for a quote.
11. **LAB N LUNCH SATURDAY AUGUST 15.** This is for building interface cables and for beginning work on soundcards (alternative to SignalLinks). RSVP by Friday to KX4Z
12. **SANTA FE COLLEGE SUPPORT UPDATE.** Earl McDow showed a PPT deck that began with a photo from Google Earth of the Ham Shack location at Santa Fe, K4EAC. Chief Book of Santa Fe College Police Dep't wants back EOC amateur radio comms for their public safety needs. Earl conducted inventories of equipment and got feedback from Chief Book. Need faculty advisor to reactivate the club. Objective to draw/develop new hams. Showed photos of the ham shack and its equipment. Trying to get the station RMS back on line. Showed photos of the state of the tower connections and equipment, and what needs to be done to bring the system on line. Mike Ridlon talked about his attempts to use another location as a backup location with new antenna system in Bldg D with a room set aside and approved. Recommends asking Ed Book; Ridlon sought funds from Chuck Clemons (Book may remember the meeting). Bldg much closer to Police Dept with much better a/c and better generator/backup power. The backup generator uses LNG, and could operate off line almost indefinitely. Room D105 is the location he'd been focusing on. Ridlon contacted Sherrell a couple of months ago about bringing the repeater back; photo seems to show that it has been put back in place. This means the 2m repeater has been put back.

13. **BATTERY BACK UP/AUTO SWITCH UPDATE.** The battery switch allows very fast connection between battery and ac sources. Can charge all types of batter. Ah size from 5 to 50. Measures battery internal resistance every 10 minutes to detect sulfation (battery warms). Temperature compensated charging! Gibby described the improvements, with improved power transistors and heat sinks are on the way. Better heatsinks coming from Amazon. Autoshut-off at low voltage protects lead acid batteries.

14. **AUTO-TUNER PROJECT UPDATE.** This was a project on the 2020 list of things to do. Gibby ordered on line, and all the parts are their for a theoretical 100 watt kit. KX4Z offered to loan kit for build; Earl McDow agreed to build the kit. Gibby looked at the internal tuner in the 7300 and this kit appears to be of equivalent quality. Cost is \$30....we need to see if it works.

15. **BEATY TOWER REPAIR UPDATE.** Issues currently with the port 8 radio on .030. This is a poor antenna for NW Gainesville. KX4Z uses PUTTY and microwave to try to access the rasp.pi in the beat tower. Problem: soundcard doesn't see another soundcard. Microwave from offsite can connect to DFU-001 and should be able to get in to pi using SSH (PuTTY). Bottom line: packet systems are complicated; in disaster, if you can't get to HF RMS system "outside," unclear you'll be able to access any RMS at all! Packet is iffy, and very fiddly. Better if you can to access RMS for EMCOMM by HF.

16. **FL BAPTIST DISASTER RELIEF SATELLITE UPGRADE/TRAINING SYSTEM.** Gibby showed a video of the FBCDR ECOM Team setup, for full quickly deployable HF system, with digital PACTOR, and antennas. These all with the go boxes on a rapid deployment trailer, and with Chameleon MPAS vertical antenna. Showed SATCOM systems by TracStar that they have, with antenna controllers, etc. Impressive satellite capability that KX4Z has helped them with.

17. **DIGIPEATER NODE STATUS UPDATES.** KX4Z went through an inventory of local digipeaters and their status, as well as Rasp.pi 3Plus and Buster...the latter free on their website. Offered a teaser on the upcoming talk on refurbish the SB-200 at the GARS talk.

Meeting adjourned at 2050.