NFARC Club

MINUTES February 13, 2019

ATTENDING – 14
Gordon Gibby
Jeff Capehart
Rosemary Jones
John Troupe
Gene Culbreth
Lynn Hatker, Gilchrist Couty
David Huckstep
Vann Chesney
Susan Halbert
Leland Gallup
Chris Carr
Alvin Osmena
Mike Shaffer
Tom Gause

Meeting called to order at 18:59
Minutes from January meeting approved
Lynn Hatker (sp?) introduced, two from Gilchrest County present at the meeting.
Attendees roll call

Symposium.
Gordon Giddy, KX4Z, provided a roll-up of the Symposium; 4.6 critique of the Symposium overall.
Cover of the report/book shown on slide; some have been asked to read the AAR for review; sent to 16 for review, but only one has responded so far.
This exercise was written in an HSEEP format; AAR has photos, maps, tasks, all the injects. There was a 39 page document that Gibby and Huckstep attempted to go through in time order everything that was supposed to happen in the four hours.
Another list showed what was supposed to happen by team; KX4Z attempted in real time to follow, but it was very difficult.
Participant evals summarized 90% pretty satisfied
30 messages moved on voice
48 digital messages
78 total transfers
Beats all but three nets in FL for an entire month!
KX4Z listed five pages with the message traffic for the AAR
Showed the matrix of core capabilities; mostly Ps and S's with a few U's.
The consensus is that everyone learned a lot over this past year; a lot higher performance by comparison with last year's symposium.
What was tested: 30 pages of the AAR showed what was tested.
Improvement list. 19 items to be fixed most of which are to be corrected at the section level.
ICS 309s. These were shown – the log shows the date/time created NOT the time the messages were sent. This is important if Winlink's ability to automatically generate a log is used.

Frequencies used in the exercise. HF did not work for the first hour and a half of the conference; part of this is that the SWIC had difficulties resolving RFI issues (touched on below).
Terminology. For commonality of parlance, the SCF EC, Ben Henley, wanted us to use state terminology.
Results/notes of Team activity.

Strike Team One sent two docs and a 214 to SWIC

Strike Team Two sent in a lot of paperwork; they had someone dedicated to doing paperwork – key element is having a scribe.

Next year there may be resident messages (messages from fictitious shelter residents); this year there were none.
Agency cooperation. Agency side this year was good
Other issues.

KX4Z showed slide detailing the SWIC operating station's difficulties with HF because of generator noise. RFI filters are key.

Described the measures taken to overcome the RF noise issue on his generator; chicken wire, grounding, RF filter; this took ¾ hours of experimentation.

Field Day generator creates S3/S5 noise; KX4Z believes that and spark plug noise was an issue for Field Day, and that the abatement solution he's derived will probably solve that problem, too.
Summary of Symposium talks. 29 talks given at the Symposium.
Ocala exercise the same day as the Symposium.

KX4Z showed slides from Ocala for their same-day exercise, showing Dave Welker's HSEEP report for the exercise. The Ocala AAR looks a great deal like Gibby's, because Dave Welker uses HSEEP and 20 people serving their hospitals.

Background checks.

W4UFL, Jeff Capehart, reported on progress, including call to Gabrielle Brady; Keith Goodwin is the program manager who'd worked it before; Capehart asked him to push this on an interim. Alachua County doesn't have a permanent fire chief or EM manager. Capehart has impression that we ourselves need to work out the paperwork themselves; including creation of ID card badges.

COL David Huckstep, Dpty Chief, ASO, (call sign?) discussed.

COL Huckstep reported that he has gotten us exempted from payment for the background checks; Level Two FBI check is required; a fingerprint and form can be done for free by Sheriff's department. If we need to be fingerprinted, the ASO can do that for us for free.

COL Huckstep will call Godwin to facilitate. We don't really understand the logistics of what has to be done. Col Huckstep will talk further with Jeff Capehart after the meeting. We need to make the State FDEM happy; state statute sets level with which we want/have to comply if, for example, we are to be legally deployed to approved shelters.

Our EOC is “dead in the water.” The EOC director reports to the fire chief; the new fire chief is expected to be announced in a couple of weeks. We don't have an EOC up and running that should be able to make this happen, but that's the issue.

As part of the vetting/ARES Connect certification process, Jeff Capehart noted that Clay County is doing an ICS 300 course May 01 through May 03. Sign up on Floridadisaster.org

This is a Wednesday, Thursday, and Friday. Will be at the Clay County EM, on Green Cove Springs.

Miscellaneous.

KG4VWI, Susan Halbert: $526 went to KX4Z for collections at the Symposium with the receipts and cash balance. Halbert gave KX4Z a $100 Amazon gift card; Gibby suggested it be used for a radio. AA3YB contributed to the cost of the card. Up to KX4Z to decide how he wants to use.

School wall pass throughs.

KX4Z showed the slides for pass throughs. They are all built and they're in Tom Cowart's hands (Mr Cowart is with Alachua County schools administration. COL Huckstep has held off calling. COL Huckstep has discussed with Ryan Lee, and charged him with pushing forward. COL Huckstep will now call Cowart; Easton, Waldo, and Senior Citizen are the three that will open first.

Four shelters altogether will be provided the pass throughs. ARES needs 2m antenna and pass throughs for the HF. At the shelters any LEO needs to be close to where people are sheltered. ARES needs its representatives/operators to be located co-located with LEO, because the LEO radios don't work in the shelters.

ASO and Ryan Lee will put together four go boxes for use this coming season. We want to permanently install the public safety and 2m antennas at the designated shelters; ARES operators will put up their HF antennas as we bring them. ASO will pay for the 2m and public safety antennas to be installed.

Senior Center has issue; LEO and hams should work together and so will approach the shelters in conjunction. COL Huckstep asked Rosemary to talk with him about specific concerns there so we can advance the issue.

Five Points of Life Marathon/Half-Marathon Race.

AC4QS, Vann Chesney, talked about the results of ARES/GARS support for the race, held the previous Sunday in Gainesville. AC4QS summarized the race by talking from a route map. He showed the medical tents and ham assignments (four med tents and the race start/finish). Various fixed locations, and “rovers,” were manned by amateur volunteer radio operators.

The west-most med stations was manned by KX4Z, with was farthest from the repeater; AC4QS had asked KX4Z to bring his portable repeater.

AA3YB and KM4JTE were at station #18 in Haile Plantation.

AC4QS showed the locations for all four of the med tent sites with fixed ham support. AC4QS used a spreadsheet to show the locations. Shannon Boal and Bub Guertin acted as net controls at various times. AC4QS and Larry Rovak acted as liaison with the event organizers.

This year's race had many fewer runners than previous years; perhaps this is because the route was new. Although all were able to communicate by use of the .820 repeaters, the point was made that more information about the management of the race from the organizers would be helpful to the amateur operators, as well as a specific task list of times/check-in requirements. As it was, the first and last bib

numbers were reported as they left the farthest west station, and this was helpful to, for example, #18 in reporting the actual end of the racer throughput.

EOC RFI detection party.

February 22, Friday, after the GOAT breakfast. This has to be OK'd with EOC so that we can locate the location of the interference. Gallup, Troupe, and Chesney volunteered to assist/help.

145.770 repeater issue.

KG4VWI reported on steps to fix the 145.770 repeater; she tried Monday night (11 February) to contact, and was completely successful. Seemed to be working fine. This is East Beatty Tower.

Intro to Internet.

W4UFL, Jeff Capehart, provided a presentation on the basics of the internet. He began with an excellent five minute video off as he pulled it off a link. After resolving an issue, the video was successfully shown.

Terminology. Jeff covered the terminology used on the internet, which is key to understanding out it works, and is similar to the concept of the VHF packet and nodes; not surprising, since amateur operators were instrumental in developing the methodology of the Internet.

TCP is transmission protocol. Also defined the TCIP. When you are dealing with client applications like CoffeCup, and others, you'll use these protocols and their "stacks." W4UFL had a nice series of slides showing the terminology and how protocol stacks and routers work together; then he described the Ethernet and its payloads; showed the mapping of an Ethernet packet and its IP headers; how addresses for source and destination are encoded. When you deal with TCIP there is information about source and destination ports.

Next he covered network protocols such as the DHCP and how it is configured for creation of a local net such as a MESH network. The "MAC" is machine address, and the DHCP assigns an IP with the MAC for that network. IP addresses can change and are assigned automatically or by manual stacking.

Jeff illustrated the difference between public and private IP addresses. Addresses are "leased" for periods of time. IP addresses have to be harmonized with a network or things won't move. Checking your own computer will show when your "lease" was obtained. These are listed at the "network connection details" which display the address on the local area network. Subnets and gateways are showed. Gateways are typically the routers.

A computer that wants to communicate with the Internet needs to know a Domain Network (DNS) Service. These are the public IP addresses, such as that for google, amazon, etc. Domain Name Service is what the computer is assigned – DNS translate to numbers.

Google.com is, e.g., 172.217.10.174 will get you Google's page even if the DNS is down. But you have to know the public IP addresses to get around the DNS – this is your "Miniature phonebook" if "the net is down." Just enter the actual public IP address. The "router table" shows where things are

going; in essence, a map. MESH networking uses OSPF routing to auto determine the best way to go. Not fixed pathways. If node goes off line, adjacent nodes will update tables. Version 4 of the Internet protocol is subject of a presentation by Gibby; URL listed. Private networks can have unlimited number of addresses, but will still have to route through a public IP.

REFLECTIONS 3.0.

In this, the third in a series dealing with antennas, KX4Z discussed how to add conductance and susceptance. Goal: find the SWR of an antenna that has a known resistance and reactive series components; understand why impedances will change after a few feet of feedline
find the flip size of any impedance

The presentation is at the NFARC website and so is not summarized here in the NFARC Feb minutes.

KX4Z Gibby walked through all thirteen pages of the PDF (no point in reciting here).

COMML course.

Discussion of the COMML course; need ICS 300 in order to be eligible to take it. Capehart will work with EOC to see if/when they'll be able to do. In the meantime, AA3YB and KM4TE, among others, may be taking the course in early May at the Clay County EOC (see above).

Extra Class course.

Date: when shall we do it? Suggestion was August. We'll get the date pinned down and teachers.

Next ARES meeting.

Next exercise is 30 March; AA3YB will discuss at the next ARES meeting as KG4VWI will be out of the area for professional/work requirements.

Meeting adjourned at 2039 hours.