

SEPTEMBER S.E.T. TABLE TOP DRILL AFTER-ACTION NOTES

A table top drill was conducted on Saturday September 16th, with 4 teams co-located at KX4Z's house. The goal was to carry out the scenario of the planned Alachua County ARES 2017 S.E.T, which is well documented in the Exercise Plan and multiple ICS documents on the web site

<http://www.qsl.net/nf4rc/>

<http://qsl.net/nf4rc/ExercisePlan.pdf>

0900: briefing

http://www.qsl.net/nf4rc/0900_ICS201_INCIDENTBRIEFING.pdf

http://www.qsl.net/nf4rc/0900_ICS201_SituationInformation.pdf

http://www.qsl.net/nf4rc/0900_ICS201_Sketches.pdf

1030: briefing

http://www.qsl.net/nf4rc/1030_ICS201_INCIDENTBRIEFING.pdf

http://www.qsl.net/nf4rc/1030_ICS201_SituationInformation.pdf

http://www.qsl.net/nf4rc/1030_ICS201_Sketches.pdf

The first two+ hours were nearly a fiasco due to multiple problems, but by the end considerable improvement had been made, and problems continued to be resolved hours after the Table Top was concluded. I would like to say that the group assembled exhibited stellar patience and cooperation!

No.	Issue	Resolution
1	Contrived scenario	Best I could do. Mexico City just had a 7.1 Earthquake which collapsed > 40 buildings, destroying a lot of communications infrastructure. We could pretend we were in Mexico and have the exact same communications needs. Exercise scenarios are always somewhat less than perfect because we practice things that RARELY HAPPEN....just like militaries prepare for nuclear war....which has NEVER happened....yet.

		<p>Puerto Rico currently has nearly ZERO utility power for the entire island --- never happened before. Strange things happen.</p> <p>Improvement: Sending WEATHER BULLETINS to the Incident Commander may be an important thing to retrieve; may be able to use CATALOG features of WINLINK for this.</p> <p>Improvement: Puerto Rico is sending out Health and Welfare spreadsheet info to Red Cross...maybe we should do this ?</p>
2	Defective PACTOR modems	<p>RESOLVED. New bluetooth modem purchased –pactor III. By being BLUETOOTH, yet another chance for crashing a USB card is removed.</p>
3	NF4RC emergency WINLINK gateway was not accomplishing HF forwarding – and actively refusing connections.	<p>Believed resolved. Testing continues.</p> <p>This was several problems, took > 6 hours to resolve.</p> <p>1. NF4RC's setup was derived from a previous temporary server originally configured for KX4Z. The call sign was correctly changed to NF4RC in the top level configurations of both RMS_RELAY and RMS_TRIMODE.....but not in the frequency assignments of RMS_TRIMODE. This error causes the system not to display on WINLINK MAPS, or exist in WINLINK Channel lists.</p> <p>2. NF4RC's setup was accomplished, in part, while out of connection with the Internet (both due to spotty internet access post IRMA, and due to an erroneous understanding of setup requirements). As a result, a couple of CHANNEL FORWARDING screens failed to load with available RMS's for forwarding options</p> <p>3. A crucial error was setting an “Extra Time To Forward” setting to 0 minutes by accident, instead of the default 10 minutes.</p>

		<p>4. Firewalls on one or both computers tested were improperly configured and refused incoming tcp/ip connections to RMS_RELAY; this made it impossible for COMM UNIT 2 to access using WINLINK TELNET.</p> <p>5. CMS FORWARDING was not properly configured. All checkboxes on the HF Forwarding to CMS need to be checked!</p>
4	KX4Z-7 was having problems connecting to NEWB	<p>RESOLVED.</p> <p>The reason was that NEWB was dying with a dead marine 12V battery; the reason for that was that electrical wiring in the panel box at the base of the Forestry Lookout Tower was loose in the screws of the GFCI breaker in the panel box.</p> <p>Once this was discovered, the screws were tightened, and 120VAC again was available to run the battery charger / battery maintainer and NEWB came back alive.</p>
5	Packet Storm	<p>Ameliorated.</p> <p>Possibly because of the dying node NEWB, there was a huge amount of repetitive packets in an attempt to get packets through. I had asked TWO users to make a complicated and lengthy set of VHF packet connections:</p> <p>Station → Bridge → Tower → NEWB → KX4Z-10</p> <p>Making FOUR packet relays in and of itself causes a lot of packets to fly about, but having two stations attempting it simultaneously – and then having NEWB dying and requiring multiple multiple repeats as its signal disappeared (the 12V battery was down to 9 volts; the power output from NEWB was down to 3 watts) caused complete packet storm on the channel, with every available time slot taken.</p> <p>The solution to this was to drop NEWB out of the loop, and to have one station at a time try to</p>

		<p>make their required connections.</p> <p>The LEARNING POINT is that listening to the packet channel can warn you when the channel is being overloaded. Unlike analog voice duplex repeaters, packet channels CAN handle more than one user “simultaneously” --- but once you crowd the channel, the throughput drops DRAMATICALLY...and in our case, to zero.</p> <p>For the S.E.T:</p> <p>1. COMM UNIT 1 has a 40 watt transceiver – and thus probably can skip the BRIDGE and make their connections much simpler:</p> <p>AC4QZ → TOWER → NEWB → KX4Z-10/7</p> <p>2. COMM UNIT 2, if they utilize VHF packet by gaining telnet access (PuTTY) to NF4RC-3....should LISTEN to the channel and avoid overloading the channel if COMM UNIT 1 is trying to get a message across. Gentle sharing of the channel should work much better this way, and COMM UNIT 2 can still make keyboard to keyboard connections</p> <p>COMM UNIT 2 – PuTTY to NF4RC-3 NF4RC-3 → TOWER → NEWBERRY → proxy station in Gainesville</p> <p>Huge learning point: every station that is using a packet channel would do well to either listen to the channel or to watch their soundmodem or other display of all channel traffic so as to avoid packet storm overloading of the channel. Packet can handle SOME simultaneous users (unlike analog voice) but not a LOT of simultaneous users.</p>
6	Unfamiliarity with ICS forms; some General Staff didn't have forms for their functions	RESOLVING: We are all new at these and learning all at the same time. I think each General Staff member knows which forms are “theirs” now. A new printer has been procured for the Safety Officer who was having problems printing things.
7	COMM UNIT 2 go-box was not fully	RESOLVED: Go-Box is now fully assembled

	assembled.	and delivered to Susan Halbert. Battery needs overnight charging to be fully charged.
8	12V power from the truck is not yet arranged. Need to add connections directly to the battery system as the power required exceeds what should be drawn from the cig. lighter.	RESOLVED. Powerpole as well as cig lighter socket attached to main battery wiring through a 25A fuse. . Power pole “extension cord” also built.
9	Contact with the local sheriff has been attempted on two occasions but the deputy has never called back.	Will mail them paperwork.
10	Need to discuss with local press	Have called a couple of newspapers in the area but not reached anyone yet. Will also try to find the local radio stations.
11	Need brochures about ham radio	RESOLVED: G. Gibby found some on the ARRL web site and ordered them
12	Need some sort of POSTER for each station	RESOLVED I got in ARRL handouts and I made color 8.5x11 placards that can go in sheet protectors and be affixed to each table.
13	Try and get new people interested in ham radio for the Dixie County Amateur Radio Club	Have emailed the leadership to suggest that they join us for the event. Response back was encouraging but not yet committal. Sunday 10/1/17: Emailed Dixie leadership to ask them to declare their intentions.
14	Proxy for the COAST GUARD	RESOLVED: Ohio ARES group is willing to do this.
15	Proxy for the EOC	Have not yet identified this person. Suitable volunteer needs: a) any normal email account (does not have to be WINLINK) b) ability to carry on 146.82 voice communications c) ability to do packet keyboard to keyboard contact. If we cannot find anyone, i'll find a way to telnet into KX4Z-7 at home and simulate the (c) function and the (a) function. Finding someone who can do (b) should be easier.
16	BADGES	??

	There were plans to take photos of members – but these don't seem to have happened.	
17	EOC Involvement John Shaw indicated we would have EOC involvement but I haven't made any contact since except for getting Jeff B. to answer several questions for me.	Emailed John Shaw morning of 9/22/2017. Awaiting response. Response: appreciated the After Action Report; made no comment on EOC Involvement. Repeat Email Oct. 1
18	Difficulty remembering IP numbers	RESOLVED – IP numbers are now pasted on both the COMM UNIT 3 board and the COMM UNIT 2 go-box
19	Limited access to ethernet from ACER computers....have only 2 usb-adapters; and multiple people were connecting on COMM UNIT 2's microwave connection (which is good example of unexpected increased learning)	RESOLVED: purchased 2 more USB toether adapters
20	Identifying Automobiles as “official”	RESOLVED: Extra “AMATEUR RADIO COMMUNICATIONS” magnetic signs were purchased. <i>REMEMBER they CANNOT be on the car at highway speeds....keep them inside and post them only when arriving at location.</i>
21	Caution Tape for Bridge Unit	RESOLVED: Caution tape purchased
22	Support system for BRIDGE microwave	RESOLVED: 12 pound tripod system purchased (Amazon) to hold the microwave system
23	Securing Permission	RESOLVED Permission has been secured for all facilities. Next need to send confirmatory mail to each facility.