

RESULTS OF 2017 ALACHUA ARES FULL SCALE EXERCISE HURRICANE TEST

by Gordon Gibby, using input from evaluation and comment sheets.

Updated: May 7 2017

METHOD:

Saturday May 6th 2017. 4 site exercise with secret envelopes opened roughly every hour with new instructions, messages to be sent. See Participant Workbook.

ASSIGNMENTS:

OVERVIEW: Situation & Assignments

	0830 Day 1 Noon	0900 Day 1 MN	1000 Day 2 Noon	1100 Day 2 MN	1200 Day 3 Noon
Countywide issues		duplex rpters out	duplex rpters out	SARNET & 146.91 work	everything works
EOC	send ICS-213 to state EOC	9 tactical 2 ICS-213 1 Bulletin	Antenna down (if fixed antenna) 8 tactical 1 ICS-213 1 Bulletin	5 Tactical 1 ICS213 1 Bulletin	
RED CROSS	send ICS-213 to state EOC	pwr out 1 ICS-213 1 Roundtable	pwr out ant down 1 Bulletin	pwr out 1 ICS-213	
NEWBERRY	send ICS-213 to state EOC	Antenna down (if fixed ant) 8 Tactical	pwr out 2 ICS-213	pwr oout 2 Tactical	
SR CENTER	send ICS-213 to state EOC	1 ICS-213	pwr out 1 ICS-213	1 Tactical	

TOTAL OF 48 PRE-DEFINED MESSAGES TO BE TRANSFERRED + 4 status ICS213's to state eoc

Additionally; outside requests from adjoining counties were welcomed; and further messages were forwarded to mock state EOC

RESULTS:

So far, we count 39 messages sent + an additional 14 caught in a queue on WINLINK RELAY waiting to go out of town -- went happened in the afternoon --- so approximately 53 messages transferred.

Participation included 1 Exercise Designer, 10 amateur radio participant volunteers, 1 EOC and 3 Amateur Radio evaluators, 1 Div Forestry communications technician, 1 Red Cross volunteer, for a total of 17 persons involved. We did not detect additional home-based ARES participation.

ISSUES NOTED

No.	Issue	Suggestion	Actual Action Taken
1	RMS_RELAY 3.0.37.0 will not even start without internet access		<p>RESOLVED Upgraded to RMS_RELAY 3.0.38.0 which DOES start without internet. Does not need authorization code. Now works perfectly: a) boots even if internet down b) automatically switches to radio mode if internet lost c) automatically goes back to internet if it becomes available.</p> <p>Good job, Winlink development team!</p>
2	RMS_RELAY 3.0.36.0 ceased actually transferring email after about 9 messages transferred	Upgrade	<p>RESOLVED Upgraded to RMS_RELAY 3.0.38.0 which did transfer the messages.</p>
3	RMS_RELAY 3.0.38.0 crashed in early evening	Possibly due to erroneous listing of AC4QS as MPS?	<p>RESOLVED Crash posted to WINLINK program development google group for analysis/fix There were no actions taken there.</p> <p>NOTE: Has not recurred. Software has operated for > 7 days without problems. Considered resolved.</p>
4	Art & Cindy unable to make soundcards connect for digital at Red Cross	Gordon to meet with them and try to figure out.	<p>RESOLVED FIXED! There were several issues with soundmodem configuration: a) needed "single channel output" b) needed "1200 baud AX.25 VHF"</p>

			<p>c) needed center frequency set back to 1700 Hz (had gotten bumped)</p> <p>Made a “cheat sheet “ envelope for them...need to make more for other people...</p>
4A	Make cheatsheet soundmodem setup helps for other people to avoid problems.		<p>RESOLVED DONE, and posted to the web. http://www.qsl.net/nf4rc/UnderstandingAudioChannelConfiguration.pdf</p>
5	ICS-213 messages not being transferred word-perfect	Further training on this important issue will be held.	<p>RESOLVED Further training on this was held at the ARES meeting on Wednesday, May 10th, and everyone present indicated they understood the importance of word perfect transmission of record traffic.</p>
6	Even with 50 foot tower, EOC unable to reach Senior Center & Newberry Sports complex		<p>Un-resolved. Jeff Bielling says they are at the mercy of the Sherriff's department as to when ham radio antennas at the EOC will be raised to 50 feet. We don't have a firm date on when VHF antennas at the Newberry shelter will be installed. Best solution remains digital connections, and slingshots to emplace temporary antennas. EOC volutneers should be ready to place antennas in the trees south of the facility.</p>
7	Newberry sports complex could HEAR the simp repr at Dental Tower, but couldn't SEND to it	Replace the Baofeng transceiver with a transceiver with better receiver sensitivity	
8	After about 11AM, the packet gateways at KX4Z started to fail at receiving emails	Not sure what caused this, no one was home to observe. Figure out a way to investigate this, or make a way to have that part of the system reboot on command??	<p>Possibly related to the RMS-RELAY that got replaced. Testing not yet accomplished. May require human oversight at KX4Z.</p>
9	EOC needed more VHF receivers--unable to		<p>Proposal for EOC to purchase additional transceivers is being</p>

	monitor all necessary frequencies		considered. Otherwise, volunteers should bring additional system.
10	EOC couldn't service all their requests -- unable to dispatch team to Shands	We needed more volunteers at the EOC.	RESOLVED Volunteers from Red Cross will be moved to the EOC to increase their number.
11	EOC HF station simply couldn't be heard, while HF from elsewhere was easily getting into KX4Z gateway on 80 meters	<ol style="list-style-type: none"> 1. need observable wattage output in line at EOC 2. EOC crew needs more experience at HF 3. EOC crew needs more antenna experience 4 EOC crew needs to be able to rapidly test WINLINK automated connections as a way to know their output success and propagation success 	PROGRESS: <ol style="list-style-type: none"> 1. Don't yet have a wattmeter 2. 7 hours of training completed on 6/10/2017 with significant improvement in performance on EOC gear 3. Four different antennas temporarily raised on 6/10/2017 with significant improvement in volunteer understanding 4. EOC crew got much better at moving to new frequencies, learned how to use the pushbutton frequency entry.
12	HF difficulties at newberry	Difficulty getting antenna to match with tuning system.	Consider additional practice/training with random length tuning system. PARTIALLY RESOLVED: One volunteer gained significant additional experience with automated matching systems 6/10/2017. Consider obtaining auto-matching system. .
13.	Have Breakfast FIRST	Probably better to have group meet together before start, and delay the start to allow better setup time/completion	RESOLVED Future plans will include a get-together meeting at the start.
14	Frustrating not to get acknowledgement of receipt of winlink digital messages	? Consider read receipts? ? Consider YAPP for local transfer?	Further training in EASYTERM is planned....
15	Newberry building casts a huge radio shadow -- needed way to move antennas well away from building	<ol style="list-style-type: none"> 1. Expected VHF antenna on top of building will go a long way. 2. Possible way to hang HF antenna from top of building to stretch outward might help 	

		3. Finding a way to connect to the light pole rung might allow for an antenna a long way from the building -- but need considerable feed line available	
16	Senior Center -- people wandered into the building!	Need signs or caution tape to explain and protect	
17	EOC needed longer ladder line to reach their antenna	Get more ladder line	RESOLVED Gordon ordered additional ladder line. Now we have to remember this or station some there.
18	Troupe found 40 meter digital spots full of QRM	(FCC allows only narrow range) -- <i>consider using other winlink gateways out of the auto-slice</i>	RESOLVED Use other gateways out of the auto slice.
19.	Newberry needed a LADDER		RESOLVED next time recommend ladders for people who will need to work on higher antennas.
20	Newberry -- stuck outside -- needed more time to set up survival "field day" paraphenalia -- couldn't read monitor screens in sunlight	Delay start of radio portion Find some way to get inside or find cover -- that shed?	RESOLVED 1. Provide more defined "set up time" after thebreakfast next time. 2. Make presentation to authorities in Newberry to gain increased coopertion.
21	when net control duties passed to Newberry, it hampered their setup	Shortage of trained helpers. Ask if someone can realistically take on a task. (KX4Z might could have done it)	PARTIALLY RESOLVED: Traffic handling on ARES net practice began on 6/8/2017.
22	Note: EOC was able to reach the SARNET		(No action needed but note successful SARNET connection)
23	Even with 50 foot tower, the best simplex from EOC to Newberry was S0 not workable	Even with proposed EOC VHF antenna height improvement, repeaters of some sort are still needed to reach Newberry. Expect same problem to High Springs	Considerable HF training was provided at the General/Extra Class course, but other issues not yet resolved. Additional HF Training (7 hours) completed on 6/10/2017

		- harden repeaters (NEWB and 146.91 worked very well) - develop HF skills/assets	
24	EOC & Senior Center used varying call signs on digital	Better advertisement of expected call signs, and better sticking to announced call signs.	RESOLVED Was discussed at the May 10 th ARES meeting so that people will stick to published call signs a bit better.
25	Unfamiliarity with EASYTERM		Group requested more training on Easyterm. Jeff Capehart is scheduling this.
26	No training so far on peer to peer WINLINK		Group requested training on WINLINK peer to peer at May 10 th meeting Jeff Capehart is scheduling this.
27.	Didn't need so many USB drives -- possibly more copies of same thing?	Discuss best solution	RESOLVED Agreed that we'll just send ONE usb drive to each center in future tests.
28	Could have used more participation from home ARES members to help relay messages	? Practice transferring ICS213 and ARRL Radiograms on Thursday night net??	Jeff Capehart is working up plans to practice message passing. Message passing training STARTED on ARES net on 6/8/2017.
29	Make Eval sheets more understandable		Devote some training time to this aspect with volunteer evaluators before next Full Scale Exercise.
30	Antenna analyzer would have helped the newberry crew	As part of increased HF emphasis, work on procuring more antenna analyzers	Training for Gen/Extra was held that includes training on tuning antennas....
