

After Action Report – Preliminary Input

Version 1.0 June 30 2020

Version 1.1 July 4, 2020 – reflecting comments from Jeff, Wendell

Version 1.2 July 4 2020 – additional comments from Leland

File: 2020/FieldDay/IssuesDocument.odt

Item#	Submitter	Things that worked well	Issues	Comments
PLANNING BEFORE DRESS REHEARSAL				
1	GLG	The Incident Action Plan gave an incredibly helpful list of who needed to do what when – most detailed plan for a field day I’ve ever seen.		
2	GLG	There was LOTS of input into the Planning process.	We probably should have come out with a “final” version of the document at some point...	
3	From JC		Perhaps we should have had an executive summary or used an ICS-204 to break out the tasks for each Chief?	Our first time doing this for this large an operation.
4	LG	ICS201 made planning more concrete and people knew who needed to do what.	Would be better still to start this “3 months out”	
DRESS REHEARSAL				
1	GLG	Just HAVING a dress rehearsal was one of the best things we did – championed by John Trites based on his experience out west.		HUGE CONCEPT that made things go far better for us, particularly since we’d never done this before, and were trying SO MANY new things...
2	WW	Went well	HOT TENT –	Tent got moved for the actual Field Day based on this

				observation.
3	GLG	Multiple issues were detected and virtually all were addressed		Some more successfully than others.
4	LG	SWR sweep useful to show the EOC antenna still in good shape, and visual inspection also vital		
5	LG		Need to improve participants' understanding of the RULES and WHY we did certain things.	
PLANNING AFTER DRESS REHEARSAL				
1	GLG	The Incident Action Plan gave an incredibly helpful list of who needed to do what when	1. Some people weren't following it and some items got missed (invites to officials, anyone?) 2. It didn't give enough specifics – like send PDF Files that accurately prove each individual bonus area.	1. Need to get General Staff to review their sections more often. 2. Improve the writing so it is more specific on <u>how to properly document and forward documentation for each area</u> . Elg, need pdf? Need actual database files from N3FJP? 3. Would ICS-204 specific for each Chief be more useful?
2	JC		Documentation lacked bullet points / easier to digest	Consider Appendix with bullet points, or ICS-204 or pre-document Executive Summary??
3	JC	People will only read what is in the TEXT of an email		Put the important stuff in short phrases in text of emails.
4	GLG	We got lots of new people more experienced at HF and digital operations.	We didn't get them in there for a long time, and we didn't get much done on CW or Phone or any other mode than FT8	Need more training on other modes before next time.
5	GLG	There was a HUGE amount of help toting stuff to and from the site – Rosemary brought a ton, Wendel / Bob G. brought the generator trailer	Gordon seemed to have a LOT to bring....	Can we even out these assets some way? Gordon isn't going to be able to keep up this lopsided support effort for long....

6	JC		People had difficulty reading online plan....at the site.	Need the important parts on a BULLETIN BOARD of some sort... Needs to be rain-protected
7	JC	Online training on raspberry pi gateway (Beatty/deployable)	Some participants felt it was over their heads.	?? Spend more time teaching this? ?? Give away copies of the book I wrote on it? ?? Cache the system with Susan / then rotate to new person every 4 months and let several people learn how to deploy?
PUBLICITY				
1	GLG	WE GOT GREAT TV COVERAGE – it is even listed on the ARRL national “media hits” page.		Jim Bledsoe arranged the invites to the media, the press release and WOW! Did he get a response!
2	JC		We didn’t get Gainesville Sun	Wonder why??
3	GLG/ JC	Homemade brochure	Didn’t fold perfectly Paper wilted in the humidity – the GARS brochure was on cardstock and did better	Improve handout, improve printing?
4	JC		Covid-19 may have kept people from visiting	
5	JC		Did have signs along the sidewalk to explain what we were doing	Make real-estate type signs?? Kinkos??

LOGISTICS				
1	GLG/ JC	Porta Potty and cleaning worked well. – handwashing worked WELL. Rosemary got some attachments, Judy provided the hose (THANKS to both!!)		Should we cache these kinds of things with Rosemary for the next Logistics Chief to use?
2	GLG	Rosemary had a wireless mouse that made a huge improvement for the logging computer in the Trailer	The ACER logging computer and occasionally the HP communications computer touchpads wouldn't work when RF was flowing.	Probably need to get some more wireless mice....
3		The PIO tent was a HUGE HIT		Provided by Rosemary –
4		The FAN in the PIO tent was absolutely fantastic		We need FANS!!
6		The LIGHT in the PIO tent worked extremely well – LED		Provided by Rosemary – she seems to have a KNACK for thinking of everything needed “furniture-wise” for a deployment. GO ROSEMARY!!
7		The little generator that ran the fan and light in the pio tent did very well		?? whose generator?
8		A LOT of people brought gasoline – we had an abundance! And we had extra generators!	But... Gordon ended up having to bring an enormous amount of equipment – so much that I couldn't even remember where I had put the voltmeter and grounding lug connections later.... It was so much that if Earl hadn't taken on multiple computers	How can we spread out the load of RADIO ASSETS so that we have a more balanced distribution of assets to bring to the mission? Deployable winlnk gateways Mesh gear Go-box radios Amplifiers Travel Trailers Trailers Voltmeters Chargers Solar power charging equipment

			<p>and mesh gear off my load it would have been nearly impossible to even track.</p> <p>This is a real problem for me....I just can't keep providing multiple trailer loads of gear, even with the incredible help people provided to trailer it there for me... merely packing and unpacking is LOT of work.</p>	<p>Inverters Power measuring equipment tuners SWR meters Coax Antennas Slingshot gear</p>
9	JC		Inadequate table space for brochure – Jeff had an extra table	<p>?? Next year plan for 3 or more tables for this important function? Distribute the load – Rosemary CANNOT bring everything?</p>
10	JC	PLACARDS for the stations and others were useful – made by Jeff		Capture the FILES used to make these as PDF and store them on a thumbdrive for next Field Day??
11	JC		SPACE during thunderstorm was limited – forced people very close.	?? more options for next year? Go into vehicles?
12	JC		Signage got wet during rain	Water-protected signage?
13	JC	AC in the travel trailer was very welcome		
14	JC	We had plenty of chairs!!		Good job, Logistics!!
15	JC		Difficult to measure power usage	<ol style="list-style-type: none"> 1. kill-a-watt device? 2. Gibby finish 12V power measuring/backup system? 3. LABEL AC devices with their power usage?
16	WW	Pickup/delivery of Generator utility trailer went well.	Minor problems with LEFT REAR TRAILER LIGHT – doesn't engage bulb properly.	Needs fixing....

17	LG	Logistics provided coffee & snacks for Day 1, worked very well		
OPERATIONS				
1	GLG	Logging software worked flawlessly except when the wifi at the EOC burped. The backup system appeared to be well done		Earl did a fantastic job setting all this up.
2	GLG	MESH SIGNAL LEVELS Inside building transceiver, pointed toward trailer and outside pointed toward trailer (NOT at each other) – BOTH had detectable signal, and despite being off the SIDE of each other’s antenna, they also had fine signal to each other.		The mesh was a huge success.
3	GLG	The microwave MESH system worked INCREDIBLY WELL	The wifi connection into the radio room failed when the power jiggled during the thunderstorm and had to be reset	Think we need either large capacitor or batteries on the Tenda WIFI power lines and/or the mesh POE power lines – there was a UPS on those systems and we STILL had disconnections at the WIFI level (not at the MESH level)
4	GLG	RADIO FREQ QRM I really didn’t hear any RFI from even the inverter generator with the MIF23 filter added-- we may have made a major step forward here.		Unfortunately I didn’t test this extensively either, but I’m pretty sure I ran 80 meter digital from 5AM onward and I think I was on the inverter generator
5				
6		Solar panel charging worked, but couldnt get past about 10 Amps on each battery (20 A total and only when STRONG SUN available)	We needed more charging capability. The little MPPTs did ok at 10A but we had more power than that available from the panels, that never got	Buy better MPPT or additional of existing units???

		<p>We had about 3 other working chargers total of max 30 A</p> <p>The industrial strength charger that Duke brought could do one battery at 30A and this added huge to our capabilities</p>	used...	
7		<p>The homemade panel mounts on the truck worked well,</p>	<p>But they take a bit to assemble!!!</p> <p>And I couldn't get into the truck storage compartment with the forward solar panel installed so I couldn't get to the jumper cables</p> <p>Also difficult to reach things that shifted forward into the truck bed.</p>	<p>How can we make this more simple / more durable?</p> <p>??Mount on our Tower Trailer??</p>
8	JC		Multitude of DIFFERENT Chargers	?? how to standardize or train?
9	JC		Limited ability to know which batteries were charged	?? Have a Charged/ InUse/ Discharged tag??
10	JC		Very limited number of voltmeters available	Provide voltmeters or have every deploying ham bring one??
11	JC		WEATHER WATCH RADIO – only jeff thought to bring one – and it had a dead battery	<ol style="list-style-type: none"> 1. Arrange for batteries to be checked before hand? 2. Add weather radios to planning? 3. Purchase additional one?
12	GLG/ WW	<p>GENERATORS</p> <p>Gasoline usage for the entire period to operate the trailer was somewhere around 13 gallons</p> <p>Plenty of gas provided by</p>		Much less than what I had expected. I think the inverter generator helped with this.

		lots of people.		
13		We had TWO generators, and we needed them!	The conventional generator occasionally would “glitch” even tho new fuse added.... Temp. failure of automatic voltage reugulation? – Circuit breaker had already been changed to 30A and was NEVER popped when this happened...	May need a 5kw conventional generator.... Can we get SOMEONE ELSE to provide assets for this next time??
14		WINLINK DEPLOYED GATEWAY	VERY FEW HOTSPOTS AVAILABLE – <u>having to use mine for the gateway hotspot meant it was much more difficult for me to take photos and keep in touch with people trying to reach me (listed as media contact!)</u> When I’m the only one with a particular resource it can be a problem...	How can we solve this? AT&T has pay-as-you-go plans that are as cheap as \$25 for hotspots... should we get this going and then just activate for field day?
15	GLG/ JC	WINLINK DEPLOYED GATEWAY	Not Waterproof	How to protect from the elements??? Pelican Case?? Get it inside a vehicle next time?
16	JC	WINLNK DEPLOYED GATEWAY	No way to easily turn all on and off	Add ON/OFF switch? Add inverter to provide 120 AC? Add 24V output for mesh?
17	JC	WINLINK MESH	Problems with DHCP delivery – required turning on MESH well in advance, then wifi,	Can this be improved? Two switches, or instructions, or some way to make it more reliable?
18	JC		Limited range of VHF station – Beaty still	Needs higher antenna? Might could have used EOC

			down	antenna,? Not enough people skilled at high perch placement?
19	JC		Sheriff GoBox has N Connector for ham radio output – makes for more loss or risk of not having right thing (box does include a cable, but no barrel connector)	?? Add adapters or barrels double-females? Add mag mobile antenna or something with each box?
20	GLG	Introducing new operators. We did pretty well at this with about 9-10 total operators – required a LOT of urging – Wendell is very good and non-threatening mentor	Need training BEFOREHAND on things like SSB procedure and FT8 software.	?? More meeting time allocated next year beforehand to training techniques?
21	GLG	Wendell's Icom 746Pro worked VERY well in the travel trailer		Thanks for volunteering it!
22	GLG	Two smaller laptops fit on the table in the trailer. WIRELESS MICE were essential and touchpads were sometimes affected during transmitting with bad results.	Had to run cables across the floor, cover with a rug.	
23	GLG		Entry stairs to trailer were dangerous. Gordon did a complete somersault hitting the ground.	Replacement set of stairs ALREADY ORDERED.
24	WW	Col. Huckstep provided additional LARGE fire extinguisher (small one was on trailer)	5 gallon size is difficult to handle; recommend 2.5 gallon sizes for all if possible.	
25	WW	HF Stn 2 antenna moved without much difficulty to a tree away from the drainage pond, required much less	VHF antenna required a bit of training for some persons less experience with	We need to have more PRACTICE with slingshots or related devices (Leland and others know LOTS of ways)

		rope. Higher too.	slingshots. RIGHT LINE important (low drag, high strength, low weight)	Gordon was running out of ORANGE braided 60-80 # fishing line, ordered more from amazon.
26	WW	Good checkin	People weren't paying attention to the ICS205, hard to reach by any method	Need better coordination of people being accessible....either by radio or by cell phone Operations Distribute ICS-205 for hard copy or email.
27	WW	Tent placement BETTER at actual field day.	OPERATIONS: noted during rain storm that better ties for the top fly would be beneficial to help keep the rain out, maybe add a couple Velcro ties to each side, does anyone sew? Possibly add a few screw anchors, we were literally holding it down. Note; move gear to an available vehicle with sapce	
28	WW		After rainstorm, mesh crew had confusion re-establishing winlink system; need more practice	
29	WW		Recommend more hands-on training and familiarization on actual setting up go-boxes for shelters and mesh, maybe one on one or 2-3 persons at a time.	Jeff Capehart is taking on getting a training set up for the go boxes.
30	WW	Hf stations went up well and lots of training was provided to newer folks with EXCELLENT outcomes.		
31	WW	Jeff Capehart had weather alerts covered!	Problem disseminating...	Might be done over 146.550 and also over LOGGING SYSTEM

				intercommunications?
32	WW		Confusion over what constitutes a completed FT8 contact	Recommend that Operations conduct classes to make this uniform.
33	WW		Inconsistent logging – confusion on requirements meant some contacts didn’t get logged	
34	WW	Special thanks to all those that stepped up and filled the Section Chiefs positions. Going to specifically point out John Trites with a Fantastic and detailed ICS-201 and Leland Gallup and the ops team Super Job on all those measurements and pre testing, so many things they did, too much to list. Both did an amazing job with Planning and Operations. As did the other Chiefs with their Sections. Thanks to all those that participated, helped out in so many ways, provided training in so many areas and last but certainly not least, SPECIAL THANKS to Gordon for providing and brining so much need equipment and the RV, and all the training leading up to this.		
35	GLG		Absolutely NO one filled out any of the elaborate charging records I had come up with – so reality is, the only thing we are going to get is people connecting up the batteries and checking the voltage to see when they aare done	Best to just come up with a simple way to mark what is dead and what is charged, and make voltmeters readily available at both the stations and the charging locations. People need to know that when a flooded battery reaches 13V under charge, it is nearly full, and when it reaches 11.8 under load, it is nearly dead.
36	LG	Amplifiers were easy to use and gave us plenty of signal strength	Barefoot at EOC worked acceptably when they had to do it	
37	LG	All four station setups worked together well		

38	LG	Predetermined band plan not necessary due to easy of communication between stations via the logging system		
39	LG	“NFARC now has a good cadre of skilled FT8 operators!”	We missed out on more PSK31 or using the extra class portion of phone bands for easier phone QSO’s	
40	LG	RFI was “reduced to virtually nil” by all the FILTERS that gordon/earl had constructed.		
41	LG	Bandpass filters made it easy to work on nearby bands		GLG: not certain they were necessary,, but we certainly had no difficulties!! We didn’t really test the 80 digital/75 phone for the real contest
42	LG	Excellent training and mentoring of newer operators.		
43	LG		Had to run to home depot to get pvc pipe for a Yagi mast for the MESH at the parking lot.	Need to remember and plan for every part
44	LG/ GLG		Power drain from batteries at EOC, running amplifiers	Multiple solutions: 1. House amplifier in vehicle OUTSIDE, run from generators 2. Switch to solid state amplifiers (no tuning needed) and run outside 3. Create remote way to operate the antenna tuner and get it and power monitor out there also – camera on them? Or control through WIFI digital stream?? 4. Or just have a helper? 5. You could put the OPERATOR outside, and control the INSIDE rig by remote over the mesh....
45	LG		Solar charging was	The MPPT controllres were

			still not huge....	limiting to about 10 AM P each. We might need heftier ones.
46	LG		Need more familiarity with how to send radiograms	Training needed.
47	LG		The EOC antenna needs to be raised higher throughout its length....in the winter when the chiggers aaren't out	

FINANCE & ACCOUNTING

1		Our “donations accepted” method of paying for items appeared to work well.	I worry that some hyper-responsible types feel they are personally responsible if donations don't show up	NEVER FAIL TO ASK FOR WHAT YOU NEED!! “Ask and ye shall recieve” – good advice.

PLANNING AFTER EVENT

1	GLG	John Trites got everything organized very efficiently and dealt very well with the confusing ARRL interface. He was very clear on exactly what he needed.	We had some difficulties getting people to send in the format he requested (PDF). Mainly a lack of practice with free office software	?? Shall we have a training session on PDF? ?? Worth it for us to purchase one copy of ADOBE so we can edit PDFs and give to the Planning Chief each year?