ONE POSSIBLE GROWTH PLAN

by Gordon Gibby KX4Z

Some have asked for a "training plan" to advance their knowledge through as much of emergency communication as possible. There are so many different, and diverse, ways to gain the knowledge and experience, that you just can't say that this or that is the "way." However, to satisfy the curiosity of those who would like a laid-out plan, I attempted this one.

The Taskbook referenced is the ARRL version 3.0 @ https://www.arrl.org/files/file/ARES%20Taskbook%20July%202024%20(improved).pdf

Just as "Rome wasn't built in a day" -- this list isn't something that most people can accomplish in a week or even a month. Typically we see operators taking 1-2 years to get through all the experiences and knowledge base in the entire sequence. But we have had great success having people work their way all the way through and our group even has multiple "evaluators" to check people off. https://arrl-nfl.org/ares-task-book-evaluators/

START HERE: "Level One"

No.	Step	Accomplishes this goal		
	The initial steps get you on the air on VHF and UHF and somewhat acclimated to using line-of-sight communications to serve communications needs of your local area.			
1	Study and/or take classes to gain the Technician amateur radio license	Level 1 - Tech License		
2	Read and pass IS-100 Into to ICS (This explains how America approaches disasters)	Level 1 IS-100		
3	Read and pass IS-700 Into to NIMS (This gives further insight to American response to disaster)	Level 1 IS-700		
4	Join our ARES(R) group -- this requires a bit of Internet sleuthing to find the FSD-98 form and filling it out and getting it to the Alachua County EC (currrently Jeff Capehart W4UFL)	Level 1 - Participation		
5	Print out a copy of the Task Book and begin filling it out. While you're at it, print out a copy of our Alachua County specific requirements, that go along with each Level.	Level 1 - Participation		

	You can find that here: https://www.nf4rc.club/how-to-docs/county-ares-docs/alachua-county-comms-taskbook/			
6	Get onto the ARRL web site (arrl.org) and find their ARES training platform, create a username/password (write it down!) and complete their Basic Emcomm Course. You can do this in several sittings, and it provides useful introductory information and takes about 3 hours.	Level 1 - Education		
7	Attend training on the Alachua County shelter go-box (which includes VHF/UHF radios) and learn how to get it connected up and how to program in frequency, tone, and offset into the shelter go-box radio. This is available most Wednesdays from volunteers OR we carry it out each year during the summer to get ready for hurricane season	Alachua County specific Level 1 Items 2 and 3		
8	Attend training from Col Huckstep or another person explaining how we assist deputies with their radio communictions.	Alachua County Specific Item #4		
9	Use local resources, or youtube, or ask for help on our ARES Thursday Night net or any other NTS net and demonstrate accurately sending and receiving a formal voice message as either radiogram or ICS-213	Alachua County Specific Item #5		
10	Congratulations! You can now find our Alachua County EC and get signed off on LEVEL 1! This is AMATEUR Radio, not "government radio" so part of the growth and fun is getting to know lots of friends and acquaintances in our local area. Every Thursday night at 8PM we have the ARES(R) net on the 146.820 repeater (or other channels or frequencies as appropriate) and this is a great way to build your knowledge and grasp of local hams involved in organized ARES(R) service.			
11	This would be a great time to start getting a tiny bit acquainted with our local ARES(R) Communications Plan, which has all the			

	frequencies that we us (on all bands) listed in a portion known as the "205". You can find our Communications Plan here: https://www.nf4rc.club/comms-plan-2/			

LEVEL TWO

Level Two of the national ARES(R) Taskbook moves you toward experience not only with point to point local communications on VHF/UHF, but also handling longer-distance and more specialized communications on bands including HF (the traditional birth-frequencies of amateur radio, still a hotbed of activity). It also gets you ready for very significant service at multiple levels of a community volunteer communications response to a disaster.

No.	Step	Accomplishes this goal		
1	Now you're ready to do some more operating! Learn how to program the tone, frequency and offset into YOUR radio and get signed off on that. Easy to do at any of our meetings or at a Wednesday EOC training day.	Level 2 Proficiency/Skill, tone, frequency, offset.		
2	If you don't already know what it is, read up on what an ICS-213 form is and how to fill it out. Write one and send it either by voice or even by DATA and get signed off on that.	Level 2: Proficiency/skill		
3	Start checking into our VHF net (or some other net) one or more times per month and get used to the lingo and the procedures	Level 2: Participation		
4	Now you're ready to dive into more detailed information on how amateurs can service in disasters -- so go back to the FEMA IS site and complete IS-200 -- for single resource (you!) IS-800 -- the National Response Framework IS-802 -- a dive into the communications function of ESF#2	Level 2 Education		
5	This would be a GREAT tie to get a much broader understanding of all the different kinds of RADIO that help our communities get through disasters -- so take and complete the ARRL Intermediate EmComm Course	Level 2 Education		
6	I hope you are now studying for your GENERAL CLASS LICENSE -- so to get some practical experience, join with the team on a Wednesday, or on a POTA exercise, or on a Winter Field Day or Summer Field Day and learn how to operate on HF, both voice and data!			
7	To give you even more experience as your work on that General Class License, get	Level 2 - Proficiency / extra		

	with your ARES mentors and build a simple dipole antenna and show how to make it work, using both a radio and an SWR meter.			
8	It isn't required, but right here would be a GREAT TIME to pass your General Class License -- and beg, or borrow or purchase a real HF rig and set up your antenna and learn about propagation on the HF bands.			
9	One one of your visits to the Alachua County EOC, get some experience on HF radio using both voice to check into a net, and WINLINK to make a radio email connection.	Alachua County Level 2 specific requirements.		
10	While you're there, also get on one of the VHF/UHF radios, and use it both for local and on the SARNET system.	Alachua County Level 2 specific requirements.		
11	Also while you're there, get them to show you and have you succeed at VHF Winlink connections. Make sure that you become comfortable with both "peer to peer" and ordinary ("client-server") "winlink" connections and message passing. You'll need to get your own WINLINK password as well -- this is easy! Download the software and install it and simply use the SETTINGS to create your own password. This youtube may be of help: https://www.youtube.com/watch?v=qSLghO6RgFU And this page provides more input: https://winlink.org/content/quick_start_amateur_radio_and_shares_stations	Alachua County Level 2 specific requirements.		
12	Jump back on the FEMA site and take IS-2200 -- a really useful course that help you understand what an EOC really is, and now it differs from the ICS system at times.	Alachua County Level 2 specific requirements.		
13	By now you should easily know how to set	Alachua County Level 2		

	up a quickie VHF antenna, so build one and demonstrate its use with a good SWR -- wonderful thing to do at Field Day, LabNLunch, one of our meetings, or a POTA effort.	specific requirements.		
14	Jump one one of our amateur or federal nets and move some formal traffic -- easy to do on Wednesdays or on the morning or evening phone traffic nets in Florida.	Alachua County Level 2 specific requirements.		
15	We use keyboard-to-keyboard type digital communications frequently in SHARES, often MT63 1KLong . Learn how to configure and use FLDGI to receive and send these kinds of communications -- you're going to want to set it up on your own home station as well! We use PSK31 (another modulation type) extensively during Winter Field Day, and it can be a very useful technique in many disaster settings. Here is a "beginner's guide" to FLDGI from the site of the original creator: http://www.w1hkj.com/beginners.html	Related to Level 2 specific requirements.		
16	Get the Wednesday crowd to get your through sending WINLINK emails three different ways.	Alachua County Level 2 specific requirements.		
17	Learn how we charge up our batteries at the EOC.	Alachua County Level 2 specific requirements.		
	CONGRATULATIONS -- You're ready to get signed off on LEVEL TWO, including Alachua County specific trainings!			
	BEING MORE INVOLVED To emphasize again, this is "amateur" radio! If you haven't tried this already, now is a GREAT time to get involved in some of our more "organized" exercises such as ARRL FIELD DAY, or the WINTER FIELD DAY. FIELD DAY has been going on for scores of years, and was created by the ARRL to emphasize being ready to assist local			

	communities experiencing disaster, so it emphasizes operations "in the field" or in an EOC, more-so than just operations at home. These are GREAT chances to get exposure to all kinds of ways of setting up antennas, transmission lines, more complicated kinds of radios and interconnections. Further, there is a "contest" aspect to these to provide some competitive aspects -- usually the goal is to make as many contacts as possible (and that fits well with amateur radio!) -- and sometimes to make specific kinds of contacts. There are 3 major modulation categories in amateur radio, so these exercises expose you to all three -- voice, Morse Code (still exciting to many!) and newer "digital" communications that extend our receiving sensitivity ever farther beyond voice than Morse Code can. These are also great opportunities to get to know our local volunteers better and better, and get used to working with each other in different and slightly more "stressful" circumstances, because of the limited-time nature of these exercises			

LEVEL THREE

The ARRL specifies Level Three training to bring you to an even fuller understanding of public volunteer disaster service. In our Alachua County training, we use this level to get you comfortable with many more aspects of management of disasters, and also facility with all of the varied techniques that we have present at our Alachua County Emergency Operations Center (EOC). Since the revamping of the ARES training sequence many years ago, this level has been a requirement for anyone in formal leadership of an ARES(R) group, by the ARRL. ARES(R) is not a "club" -- it is a "program" of the ARRL and their Board of Directors makes the "rules" so we abide by them.

No.	Step	Accomplishes this goal		
1	All new employees at an EOC typically start off right where you are -- learning more about how our nation manages disasters. They complete the "Professional Development Series" and ARRL follows suit getting you that same level of understanding. So plan on a fair number of sessions and get all of these done! IS-120 An introduction to Exercises IS-230 Fundamentals of Emergency Management IS-235 Emergency Planning IS-240 Leadership and Influence IS-241 Decision Making and Problem Solving IS-242 Effective Communications IS-244 Developing and Managing Volunteers (This one gives you a much better grasp of how volunteers are viewed.) IS -288 Role of Voluntary organizations in Emergency Mgt IS-220 Basic Emergency Operations Center Functions IS-802 Emergency Support Function (ESF) #2 -- Communications	Level 3 Education		
2	The ARRL has updated their prior EC-016 course to a newer ARES Advanced EmComm Course This is great for giving you more of the "big	Level 3 Education		

	picture" of how volunteers fit into all the available emergency communications.			
3	Keep being involved in our local ARES(R) net plus any others that you find helpful	Level 3 Participation		
4	Participate in a Public Service Event (e.g. bike ride communications, helicopter communications help, parades, etc)	Level 3 Participation		
5	Join in our annual Simulated Emergency Test or any other Exercise that we carry out (such as an HSEEP exercise or a Field Day or Winter Field Day)	Level 3 Participation		
6	Learn how the business of being "net control" works and participate as a net control in some local or more distant radio net.	Level 3 Participation		
7	Put together a TRAINING SESSION on some topic and hold it at one of our meetings, LabNLunches, TechNite, or Field Day efforts	Level 3 Leadership		
8	Join in the leadership of our group and hold a leadership position such as AEC, or EC	Level 3 Leadership		
9	Help out with the PIO duties of one of our Exercises (such as Field Day or Winter Field Day or a License Class). An alternative is to take PR-101 from the ARRL	Level 3 Leadership		
10	Learn how to use the ICS-214, ICS-309 forms properly -- and learn how to affix a bitmap of your signature as well so your form can be accepted over radio to our County	Level 3 Proficiency		
11	You have likely already done this, but demonstrate skill at VHF messaging over peer-to-peer (either keyboard-to-keyboard such as PSK31 or MT63 or other modulation, or Winlink messaging peer-to-peer)	Level 3 Proficiency		
12	Do the same on HF, and also exercise your skills at sending Winlink emails	Level 3 Proficiency		
13	(Alachua County specifics did not previously require the Professional Development Course, but as we are now			

	directed by the ARRL and NFL SEC, they will reappear as requirements of the base Level III.)			
14	Study up on the impact of the D-layer in HF communications and be able to explain the maximum frequency usable for (a) NVIS communications and (b) communications to approximately 1000 miles based on data from an ionosonde. (This is a key knowledge piece for making HF communications in a disaster)	Alachua County Level 3 specifics.		
15	Check-in experience at both southeast and national SHARES nets	Alachua County Level 3 specifics		
16	Gain experience at running a traffic net at least once in either (a) high stress educational simulation or (b) actually traffic nets that are part off the NTS or RRI (such as the Florida Phone Traffic Net)	Alachua County Level 3 specifics		
17	Get experience operating all of the power amplifiers in our EOC, all of the HF antenna tuners, all of the HF transceivers, and all of the VHF/UHF voice and data transceivers. Our other Level III operators will be happy to help you with all of these at any EOC exercise or training opportunity.	Alachua County Level 3 specifics		
18	Join in the Region3 Region 5 monthly exercises at least twice	Alachua County Level 3 specific		
19	Send radio email traffic over five different amateur RMS and five different SHARES RMS stations.	Alachua County Level 3 specific		
20	Demonstrate how all the power connections work to each radio in the EOC station.	Alachua County Level 3 specific		
21	Demonstrate ability to switch between our various EOC HF antennas	Alachua County Level 3 specific		
	CONGRATULATIONS ! You're now ready for sign off at the highest level we have in Alachua County volunteer amateur radio communications!			