

Ham 82 – What is an emergency?
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1. What is an emergency?
2. The definition depends on whether “it” is happening to you or you are observing. Emergency communications is one of the significant reasons many give for getting their ham license.
3. In a related vein, I was asked recently why do we spend time on other things and not practicing emergency communications. That brings us back to the definition. We practice for emergencies every time we key the mic.
4. The philosophy of emergency communications generally gets to ‘when the lights go out.’ We take a different tack.

DO NOT PLAN FOR SOMETHING, PLAN FOR EVERYTHING!

5. Too often, anticipation is for the situation no one can handle, which moves hams to look to **SIMPLEX** radios.
 - a. Touted as the only dependable, reliable communications, for most situations, it is the least effective.
 - b. Simplex is radio to radio. If Brett needed to talk to Dan via simplex, there would be no communications.
 - c. They cannot talk through the dirt between them.
6. So, let’s look at the Evergreen emergency communications protocol. The protocol depends on the you, the user, to develop the most reliable communications for her/his need.
7. **DIGITAL RADIO**: An AllStar digital node allows connection to any radio or repeater in the world with a node.
 - a. As many nodes as desired can be linked.
 - b. In other words, every ham you know can be connected digitally together at the same time.
 - c. The repeater and digital node are permanently linked. Talk on either and you are on the other. It’s a party-line.
8. **DIGITAL SIMPLEX** is the epitome of emergency communications.
 - a. A very small, simple, inexpensive (~\$25) handi-talkie can be carried or used anywhere in the house, around the neighborhood, or across the park.
 - b. The portable talks back to another simple radio connected to your node. Now your connection is to the world.
9. **DIGITAL RF-LESS** is a mic and an inexpensive speaker connected to the node. Why not just a radio?
 - a. This is much less expensive, better audio quality and gives the flexibility of an independent node.
 - b. We each have our own node.
 - c. A separate radio would be much more expensive and create potential RF overloading.



10. What if the power goes out or the internet is lost?
11. **REPEATER** is a radio which receives from one station, then retransmits to another. This allows extending the range of both other radios.
 - a. Our repeater is set up with battery backup and automatically switches if power is out.
 - b. The repeater solves the Brett to Dan issue, since each can talk to the repeater, then the repeater talks to the other.
 - c. We are in the process of increasing the repeater power to hit more of our hams who have moved to the edge.



12. **SIMPLEX** is one radio talking to another radio. Its range is restricted by terrain, noise, and interference.
 - a. It is the bulwark.
 - b. Simplex is the last, not the first methodology of emergency communications.
 - c. Much more dependable, broad range, multiple use methods are preferred, if available.
 - d. Because of its reserve position, get the best radio for the money that you can afford. An Icom 2730 is great bang-for-buck and the most used by Evergreen. The website discusses numerous antenna options.
13. **HIGH FREQUENCY** simplex is the ultimate barricade to loss of communications, but there are trade-offs.
 - a. A higher-level license of General or Extra is required, so people without the license have a barrier to entry.
 - b. The cost of radios is considerably greater, again, restricting access to some.
 - c. The antenna system is much more complex and difficult to manage in a HOA restricted location.
 - d. Nevertheless, still get your license. Get a great, less-expensive HF radio like the Icom 7300. Learn to use it.
14. With the numerous options, there is something that fits everyone’s budget and skill set. Elmers will help your skills. For emergency, have multiple options, if the credit card allows.
15. Why not just cellphone? It is the first to go in an overloaded system. Second, it is primarily a one-person-to-one-person vehicle. Emergencies usually involve many people, so radio options are much more robust.



16. We want to give you as many options and capabilities as possible. Only you control the most crucial component.
YOU MUST TALK TO AND LISTEN FOR OTHERS for the system to work.
17. Website for more articles: www.evergreencg.org Social Media: <https://gab.com/groups/62710>
18. Life is good. Enjoy!