Alachua County ARES October S.E.T: Rural Digital Disaster Communications Invites Participation by Other ARES Groups

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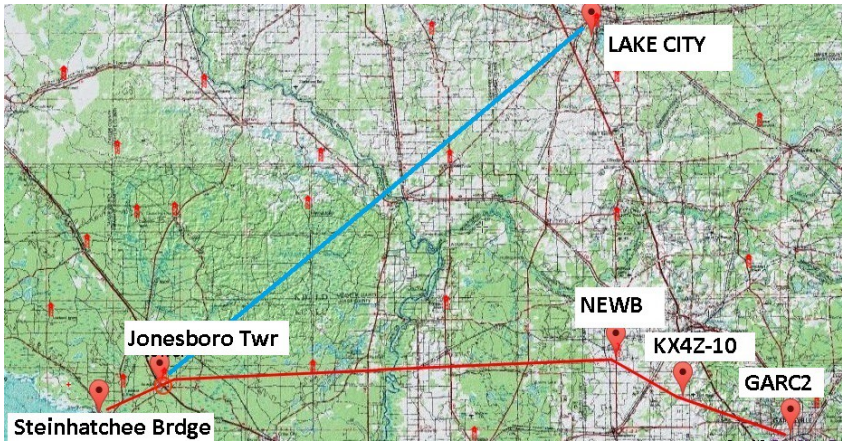

Just last year, Steinhatchee, Florida, a rural coastal community of about 1,000 that swells dramatically during scalloping season, was ***innundated*** by Category 1 Hurricane Hermine. Flooding was very destructive from the storm surge. An employee of my favorite restaurant (Roy's) gestured that the water got chest high in their facility built on stilts well above the river level. They were closed for 3 months to repair the damage. The hurricane's total U.S. damage was half a $Billion.

For this year's ARRL Simulated Emergency Test (S.E.T., Saturday October 7th), Alachua County ARES will practice creating a "digital highway" to carry simulated emergency traffic – rescue arrangements, shelter / food / water information, damage assessments – all the way from the Jena-Steinhatchee area back to Gainesville Florida.

Using some of the many 120-foot fire lookout towers still standing, tests indicate we'll easily make digital connections to our Alachua County AX.25 145.070 MHz packet network, and from there jump onto the vast SEDAN digital network on 145.770 MHz (**red line** on map). An alternate path (**blue line**) takes us directly from the Jonesboro Lookout Tower near Steinhatchee right to the Lake City SEDAN station. Graciously, the Crapps Family has given us permission to use their privately owned Jonesboro Lookout Tower, which already has a VHF antenna with a feedline right to the ground (see photo). Attach the antenna connector of a 2-meter `linbpq` node station, and we have a great ham radio relay that can reach Newberry or Lake City!

If your local ARES group would like to participate & coordinate with Alachua County ARES on Saturday October 7th between 10 AM and 1 PM, we would be delighted to hear from you and assist in any way we can.

We hope to create a 2.4 GHz MESH message catchment input system using amateur radio frequencies and AREDN free software with Ubiquiti and other microwave transceivers, which connect fairly easily to Raspberry Pi-based `linbpq` AX.25 systems. S.E.T. Volunteers would be able to use

either 2 meters or 2.4 GHz to insert and retrieve message traffic from prime rescue and staging areas in the Steinhatchee area, with an intermediate MESH / 2-meter site near the 10th St.SE high bridge connecting Steinhatchee & Jena across the river. The photo below shows a home-made "go-box" with a Raspberry Pi, 2 meter radio/antenna, and a 2.4 GHz Ubiquiti Nanostation. We may also put up an HF WINLINK client or gateway station (NF4RC) near the bridge, to allow direct HF-band simulated traffic flow out of the simulated disaster.

There are many other under-served communities with limited digital amateur radio volunteer assets, that could also be the focus of other Florida ARES groups during the Simulated Emergency Test.

Other ARES groups planning October Simulated Emergency Test outings are welcome to coordinate with our "flooded coastal city" simulation. You might connect to either end of our long-distance VHF digital highway, anywhere in the middle, or to another node on the SEDAN network, or you might wish to create your own connections to some other simulated disaster site. Appalachicola, Everglades City, Okeechobee, and other small towns might offer meaningful practice locations. We could transfer small files or simulated disaster email between our distant ends as a demonstration. Contact either Jeff Capehart (w4ufl@arrl.net) or Gordon Gibby (ggibby@anest.ufl.edu) for more information.