

## A Well-Running Disaster Net

A few minutes in the life of a fictional emergency communications net somewhere in Florida --to illustrate how voice, non-error-corrected, and error-corrected digital communication tools can be effectively used to meet various communications goals.

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The radio crackled to life with the voice of the Net Control Station at the EOC (Emergency Operations Center) --

**EOC:** “Good afternoon, this is EOC, it is 2 PM and time for reports and updates. This is a directed emergency net. Is there anyone with emergency communications, this is W4EOC”

*Silence*

**EOC:** “Hearing none, we'll first get check-ins and reports. As usual, please use MT63 2000L centered on 1500 Hz. Shelter No. 1, I'm ready to copy.

A 3-second BRRRRRR of digital erupted from the speaker and 20+ lines of text spilled over the screen of the EOC net control operator's FLDIGI screen, giving him all the report data on occupancy, situation, current issues, staffing, and all other pertinent details for Shelter #1, including an identification from W4AAA.

**EOC:** “Great, got it, Jim. Any other special issues?”

**JIM:** “EOC, Shelter1, No, Bob, we're doing fine here and just finished a great lunch. W4AAA”

EOC turned next to Shelter #2 and the process repeated, with detailed data sent from the shelter in only seconds. Next Shelter #3 reported it, and the process continued.

Then, out of the blue, “**BREAK! EMERGENCY!**” crackled over the radio right after the 3<sup>rd</sup> report.

**EOC:** “Go ahead, emergency.”

**JIM:** “EOC, Shelter1, ambulance needed urgently, elderly patient just had a seizure and fell with injuries. Medical personnel are in attendance and requesting immediate transfer to Regional Hospital.”

**EOC:** “Shelter 1, EOC, got it. Standby.”

Although most of the cell towers were out, power was out through much of the city and several major streets were impassable due to downed trees & power lines, the 800-MHz trunked system was still functioning, though one of its towers was down. The EOC operator quickly arranged for the ambulance.

**EOC:** “Shelter 1, EOC, ambulance on the way, estimated arrival time 14 minutes. W4AAA, W4EOC”

After Shelter1 thanked the EOC for the help, the remainder of the reports were received (all over broadcast, non-error-corrected MT63, but the repeater signal to noise ratio was excellent for most of the stations the there were really no errors). Now it was time for the briefing.

**EOC:** “All Shelters, I'm going to now send you the details on the most recent briefing. Standby for MT63”

All the briefing material -- lists of which gas stations had gasoline, where trees were down, the latest weather briefing, the status of food, water, and other supplies, the status of local hospital, and a large treasure-trove of information extracted from coastal areas by one of their group who had special techniques for gathering long-distance information ---- was preloaded onto the transmit screen of the EOC computer and with a touch of the “TRANSMIT” function key, all the information began to buzz forth on the same radio, same frequency as the voice back-and-forth had been going on.

Both digital TNC transmit audio and voice microphone were “mixed” together with simple resistor mixing so that either could be instantaneously utilized, without any switching of cables. All the Shelter stations were built the same way, a simple connection interposed between ordinary microphones and the transceiver mic connector. The ARES group built those in just an hour in a very early construction project a couple years ago.

**EOC:** “Anyone have any trouble copying that?”

Everyone got it perfectly, so EOC continued:

**EOC** “All shelters, EOC. The same information is now being emailed to your WINLINK account as an attachment in both PDF and WORD format, so you can grab it any way that you wish. Our city-wide packet digipeater is still functioning perfectly, and the residential backbone backup system is also completely intact all the way to both our local WINLINK VHF/HF stations, so it should be easy for you to retrieve your mail even tho the Internet has been severed for the last 4 hours. We don't have a timeline on repairs to the cable yet, unfortunately. I'll get that information to you as soon as it becomes available. This concludes the formal part of the net, I'll open the frequency for anyone to pass along anything of interest. Anyone with emergency situation, break in at any point. W4AAA, W4BBB, W4CCC, W4DDD this is W4EOC concluding the 2 PM formal directed net.”