

AMATEUR RADIO FACT SHEET / DISCUSSION POINTS

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Marching Orders

- ◆ If everything failed, EOC would hope for help from hams
- ◆ FEMA / amateur collaboration in Cascadia Rising Full Scale Exercise exemplary: <http://www.qsl.net/nf4rc/CascadiaRising2016.pdf>
- ◆ Katrina – virtually all comms systems wiped out, trunking systems down, inadequate satellite access (20-page excerpt from Congression report: <http://www.qsl.net/nf4rc/KatrinaComms.pdf>)

Risks – multiple

- ◆ Weather (hurricanes here, ice (northern states), tornadoes, flooding)
- ◆ Power grid failure of any type
- ◆ Cyberwarfare to grid or information systems <http://www.qsl.net/nf4rc/Cyberwarfare.pdf>
- ◆ EMP attack <http://www.qsl.net/nf4rc/CongressionalEMP.pdf>
<http://www.qsl.net/nf4rc/USEMPDefenses.pdf>
- ◆ Natural solar CME (coronal mass ejection)
- ◆ Pandemics (natural influenza or human-inspired)
- ◆ Nuclear, biologic or chemical attack
- ◆ Miscellaneous, such as FEMA Cascadia subduction zone

Tools – several, with various applications

- ◆ <http://www.qsl.net/nf4rc/HF-VHF-FACT-SHEET.pdf>
- ◆ VHF voice – rapid tactical information
- ◆ VHF digital – bulletins, emails, detailed lists, requests for supplies, databases, organizational information
 - <http://www.qsl.net/nf4rc/DigitalThroghputVersusVoice.pdf>
- ◆ HF digital – to communicate detailed requests/responses to state, regional or federal resources outside region of disaster. SHARES: military, national guard, FBI, CDC etc.
 - <http://www.qsl.net/nf4rc/WINLINK.pdf>
 - <http://www.qsl.net/nf4rc/WINLINKDigitalGateways.pdf>
 - SHARES map of digital gateways (*non-disseminated*)
 - <http://www.qsl.net/nf4rc/DHSSHARES.pdf>
 - <http://www.qsl.net/nf4rc/HFPropagation.pdf>

Equipment – much improved in last year, but lacking in following areas

- ◆ EOC HF antenna inadequate
 - <http://www.qsl.net/nf4rc/EOCHFAntennaPerformance.pdf>
 - <http://www.qsl.net/nf4rc/EOCHFAntennaRecommendations.pdf>
- ◆ EOC HF power eventually needs to go up
- ◆ EOC VHF antennas inadequate

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- <http://www.qsl.net/nf4rc/EOCVHFAntennaPerformance.pdf>
- <http://www.qsl.net/nf4rc/EOCVHFAntennaRecommendations.pdf>
- Emplaceable voice repeaters at beginning stage

Training – great strides in past year

- ◆ Hundreds of man hours training / building to create digital skills
- ◆ Local group has put up antennas at
 - Gordon Gibby WINLINK HF public original
 - Gordon Gibby SHARES HF
 - Jim Bledsoe VHF omni
 - Rosemary Jones HF vertical
 - Rosemary Jones VHF omni
 - Rosemary Jones 80 meter
 - Tom Cox 145.770 omni
 - Tom Cox 145.070 omni
 - Repaired tower antenna GARC Beaty Towers 145.770
 - Installed NEW tower antenna GARC Beaty Towers 145.030
 - Mike Brogan WM3B
 - Gordon Gibby (Yagi pointed at Beaty Towers)
 - Gordon Gibby (Omni to connect to NEWB)
 - Art & Cindy VHF pine tree antenna
 - Art & Cindy HF vertical
 - Art & Cindy root top VHF
 - Connected to Forest Grove Lookout Tower VHF to create NEWB digital repeater
 - Roughly 17 antennas/stations
 - Approximately 5 known go-boxes constructed so far.
- ◆ Full scale exercise / 4 locations completed
 - <http://qsl.net/nf4rc/AlachuaCountyARES2017HurricaneTestAfterActionReport.pdf>
- ◆ Steinhatchee digital highway planned for October S.E.T.
- ◆ Beginning to develop MESH microwave skills
- ◆ Timeline document (very slow to load, photos): <http://www.qsl.net/nf4rc/TIMELINE.pdf>