

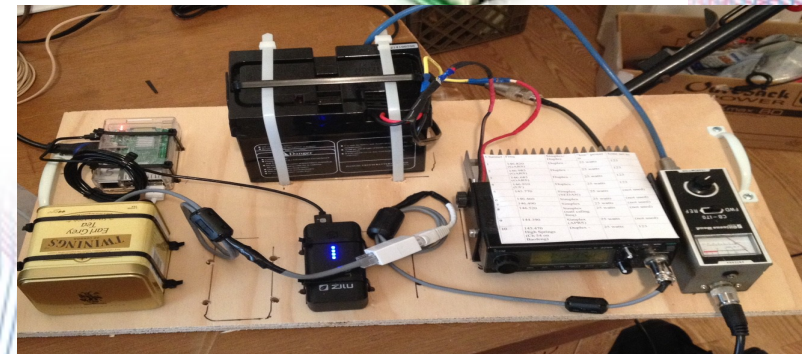
# Depending on ONE digital repeater made me nervous

- Sure would be better to have backup
  - ◆ Under ordinary person control
  - ◆ Able to be fixed quickly
  - ◆ Able to have antenna replaced
  - ◆ Reconfigured easily if necessary (diff freq, etc)
- So a group began to install “residential digital node” --- based on linbpq free software on Raspberry Pi's

*We built our digital repeaters to be TRANSPORTABLE to disaster area if need be.*



John Wiseman  
G8BPQ





# Emergency Digital Highway





# Local network--backup grows!

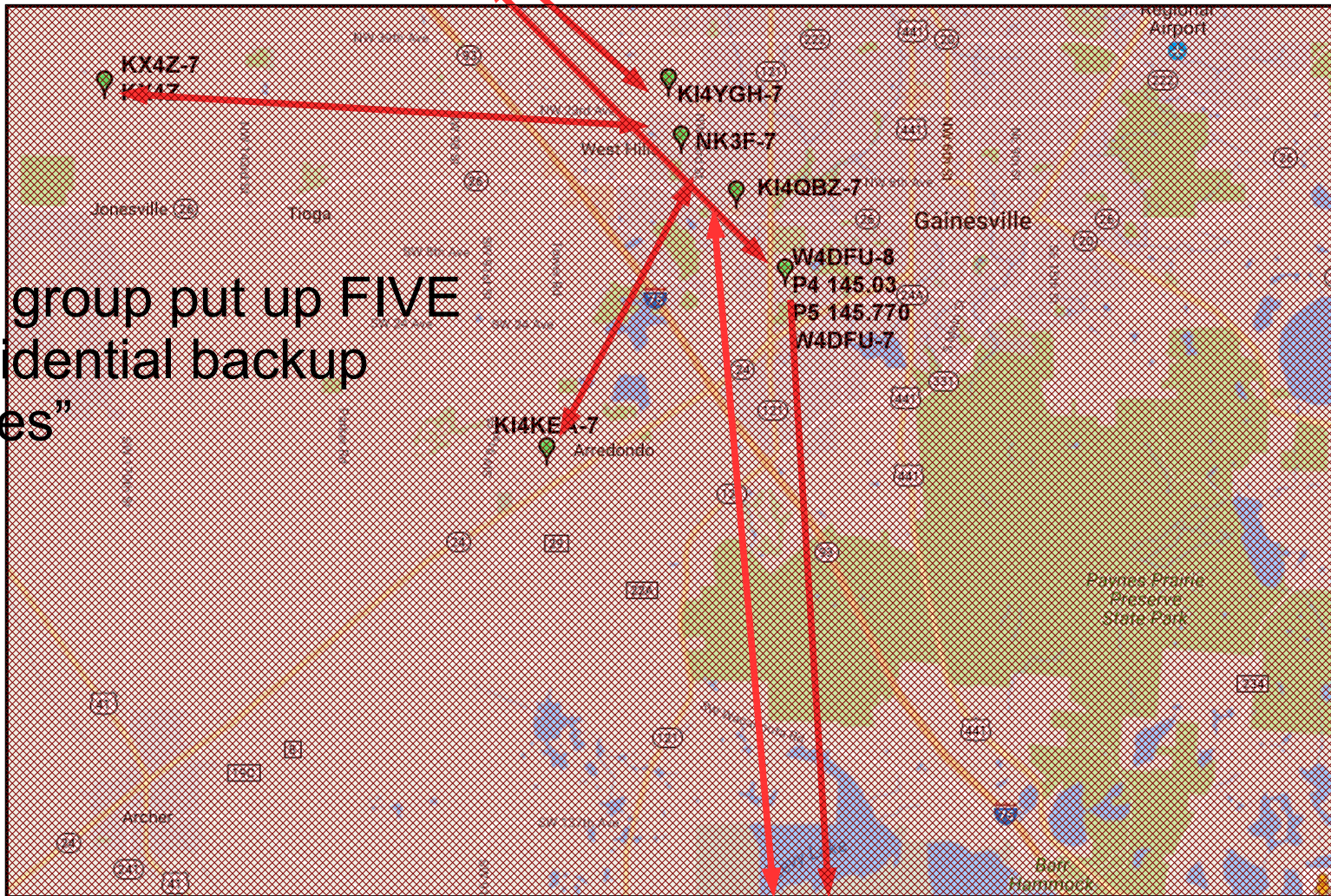


Jim, Rosemary, Art & Cindy, Tom,  
Gordon, Mike; The Ocala HEC /  
ARES / MERT groups



# Redundant Local Network

Our group put up FIVE  
“residential backup  
nodes”

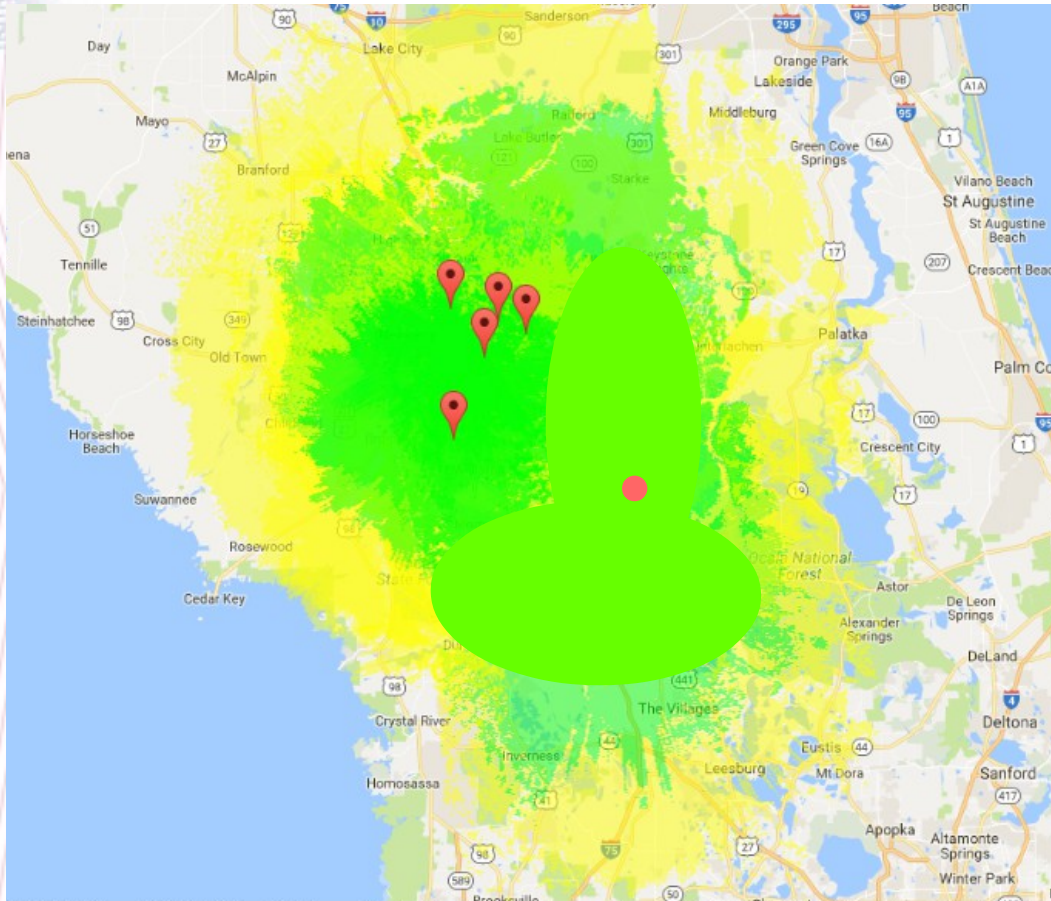


Possible future Nodes -- Williston, Cedar Key, ???

*Williston -- WM3B -- is already up!*



# VHF WINLINK live



VHF communications and catchment area for possible HF relay outward from disaster area now encloses approximately 3,750 sq miles for “good” signal. Likely 1/2 million lives.

Definition: Green = 1.99 uV on 20 foot high antenna at receiving site. This plot is an ESTIMATE, and took some art work to make it readable.

Coverages overlap.  
Green = strong signal  
yellow = iffy signal.

**Pages 45 & 50  
discuss WINLINK**



# VHF email access--go box





**So we built this backup for the  
solitary SEDAN node.....and  
sure enough, the SEDAN node  
*fails***





# Art&Cindy: Roof Work!



1 broken  
antenna.....  
OUTCOME:  
New tower mount;  
TWO new anten-  
nas  
TWO digital re-  
peaters (node)



Joe D -- professional! (RFEngineers)



# HF Email--legacy/modern





# Our local **WINLINK EMAIL SERVERS**

- **KM4YGH-10** Art & Cindy (packet 1200)
- **NK3F-10** Tom (packet 1200)
- **KX4Z-10 / KX4Z** Gordon (packet 1200, WINMOR, PACTOR 1/2/3; HF HYBRID Forwarding)
- One government station.
- Probably more on the way!



# Hurricane Test - May

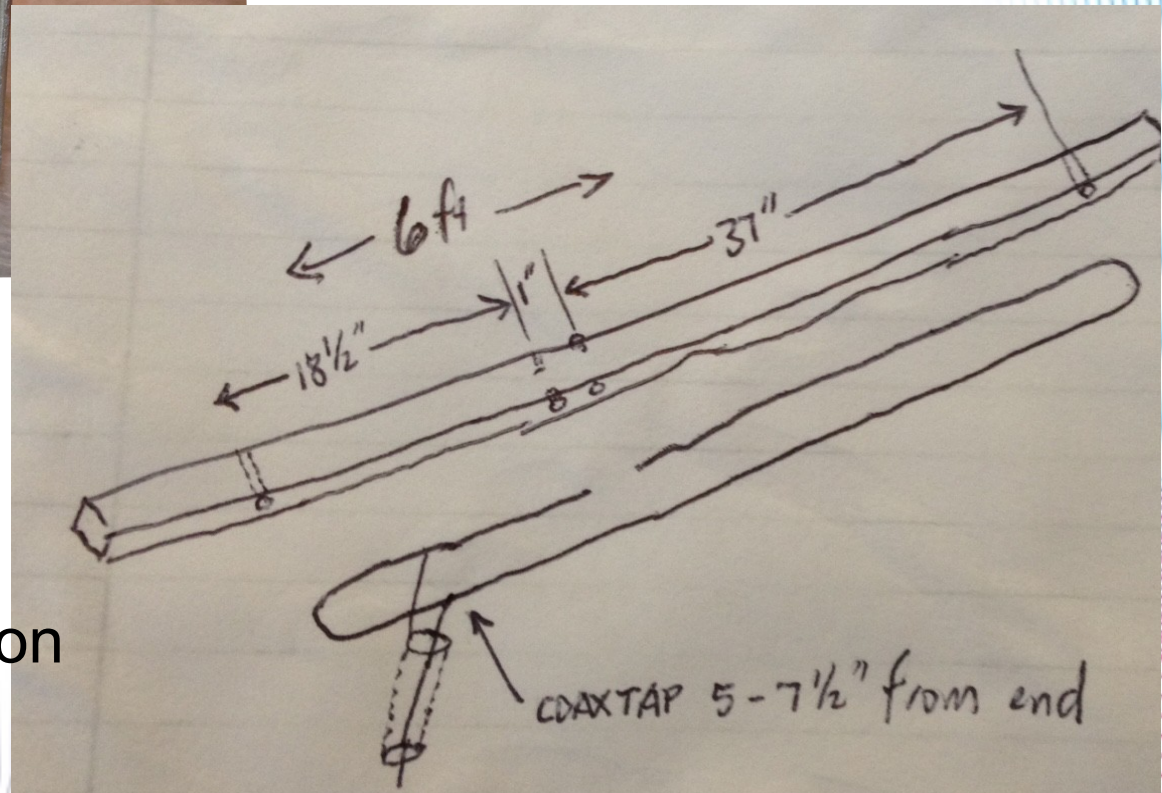
- New skills & new assets make possible far more active and “interesting” Hurricane Test.
- Draft Alachua District Emerg. Comm. Plan based on Marion County -- evaluation / improvement ongoing.
- Possible Hospital support.
- Prep for Hurricane Test: backup power, backup antenna, the 3 comm modes, have your wits about you!!



# Jeff: ARES GROUP activity



Training: simple circuit construction skills



Training: antenna construction



# Dental Tower: Latest New Antenna (HF 80/40/30)





# Upcoming....

- 2<sup>nd</sup> Ed. of Book
- Build hospital qualified group of volunteers
- Radios Eqpt. hospitals
- Williston gateway
- Addn'l WINLINK Hybrid Servers



Amateur Radio  
Digital & Voice  
Emergency Communications  
Gordon L. Gibby KX4Z BEE MS MD

