



# FCC

## Deployable Aerial Communications

### Interference Concerns for Voice Communications using Part 90 Public Safety Frequencies

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*NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.*

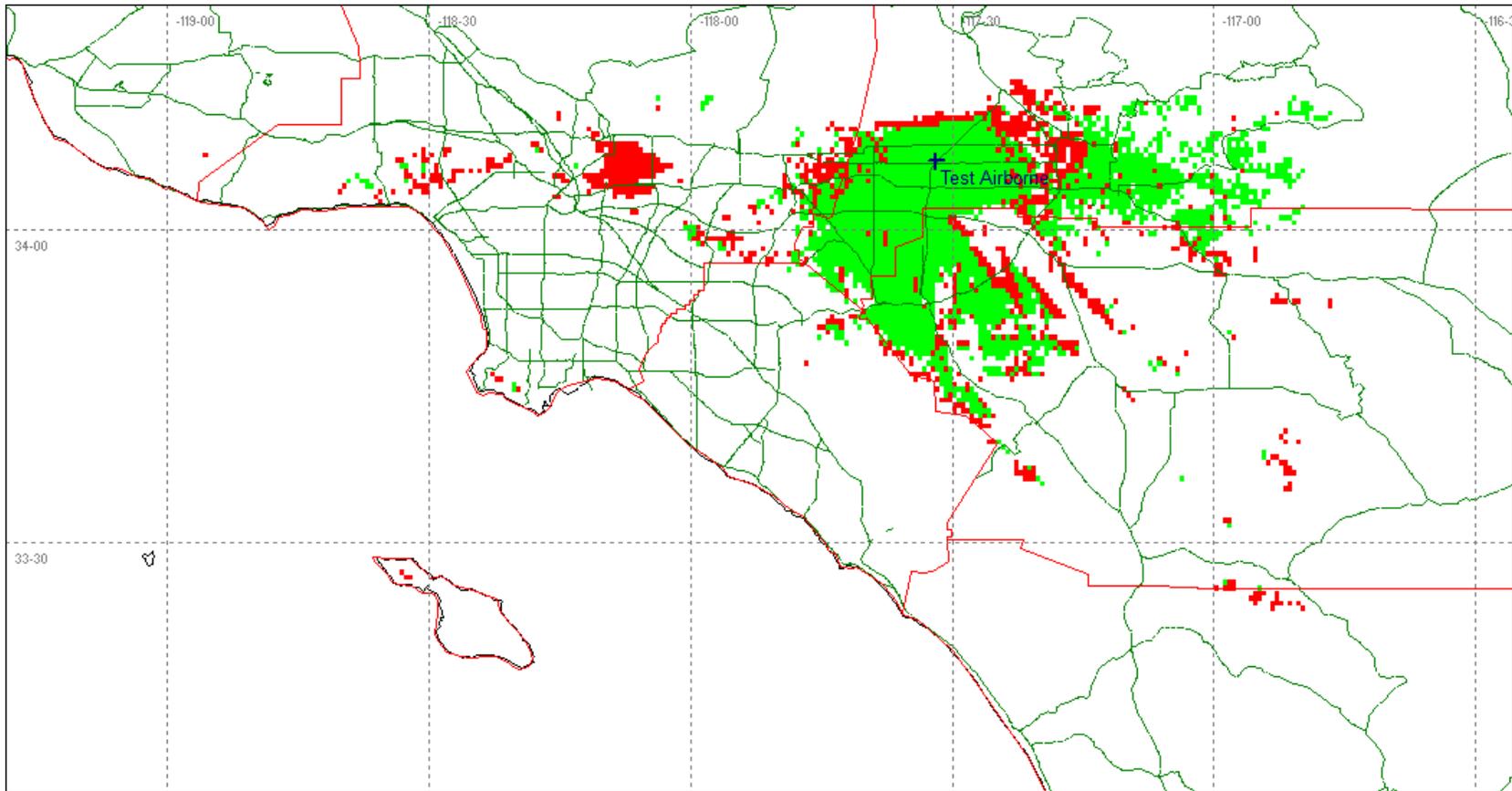
# Disaster – Impact to Communications

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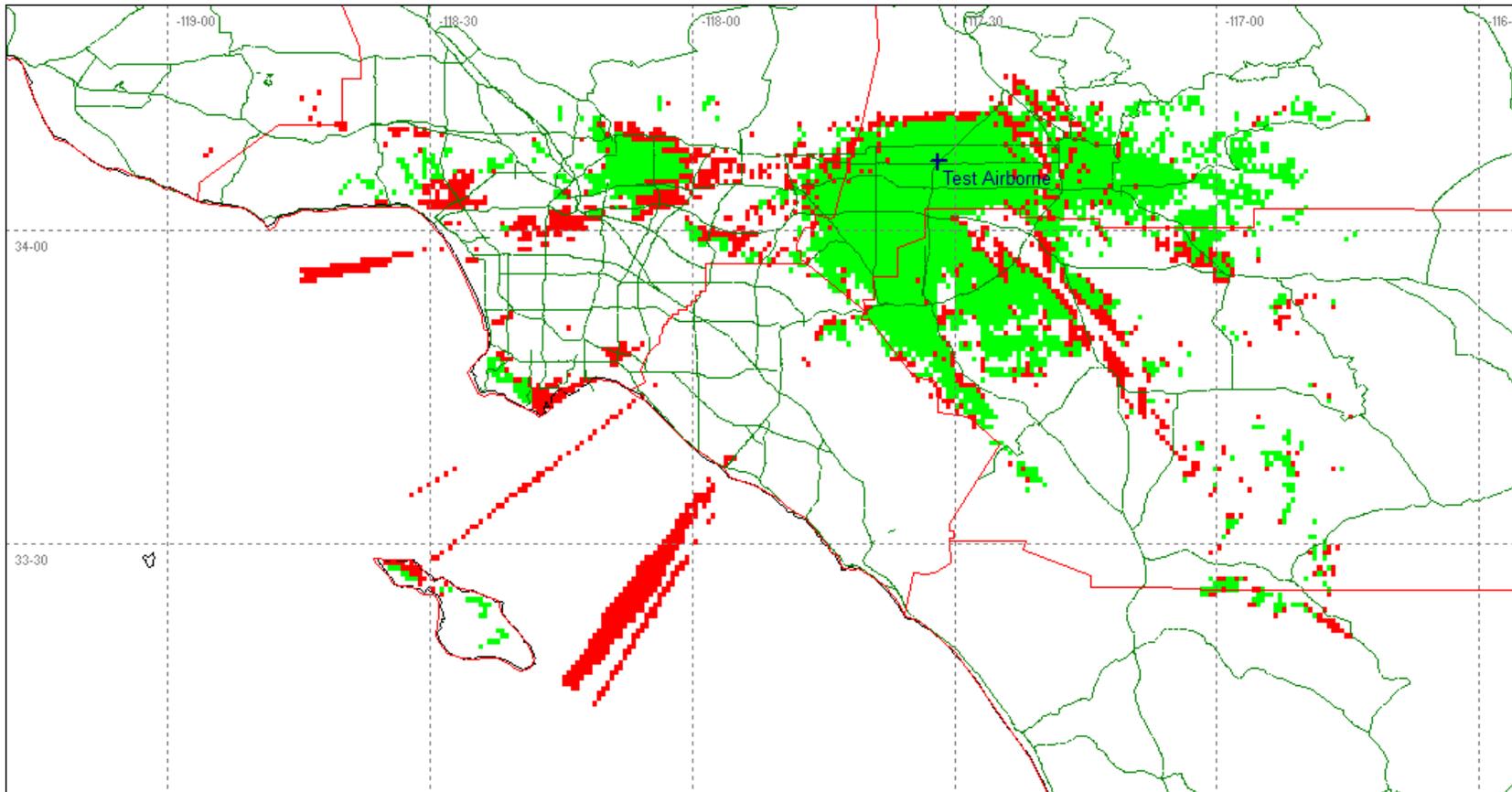
- Ø Most disasters do not result in wide spread outages to Public Safety LMR networks
- Ø All Public Safety Part 90 frequencies are shared/reused sometimes with very close spacing
- Ø Any airborne deployment must not interfere with other licensees
- Ø Frequency preplanning will be vital to successful aerial deployment at an incident

# Coverage Prediction – 150 Meters



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# Coverage prediction 300 Meter AGL



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# Ideas for Frequency Coordination

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- Ø Limit height above ground of aerial vehicle
- Ø Limit use to interoperability channels
- Ø Limit power
- Ø 700 MHz interoperability channels are the best to use as there are enough of them to preplan usage over a wide area
- Ø The paired VHF interoperability Channels are also a good choice
- Ø Involve Regional planning or SIEC committees for planning
- Ø Require a preplan before allowing aerial deployments

# Aerial Deployment Can be Good

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- Communications support for large incidents benefit from having varied tools to support the incident
- Some current tools
  - Portable repeaters
  - Cell on wheels (COW)
  - Truck mounted repeaters or trunked transportable sites
  - Amateur Radio
  - Trailer mounted generators
  - Trailer mounted towers

It would be good to add the option of aerial deployable communications to this list – but carefully