


NPSTC

NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL


FCC
Deployable Aerial Communications

Interference Concerns for Voice Communications using Part 90 Public Safety Frequencies

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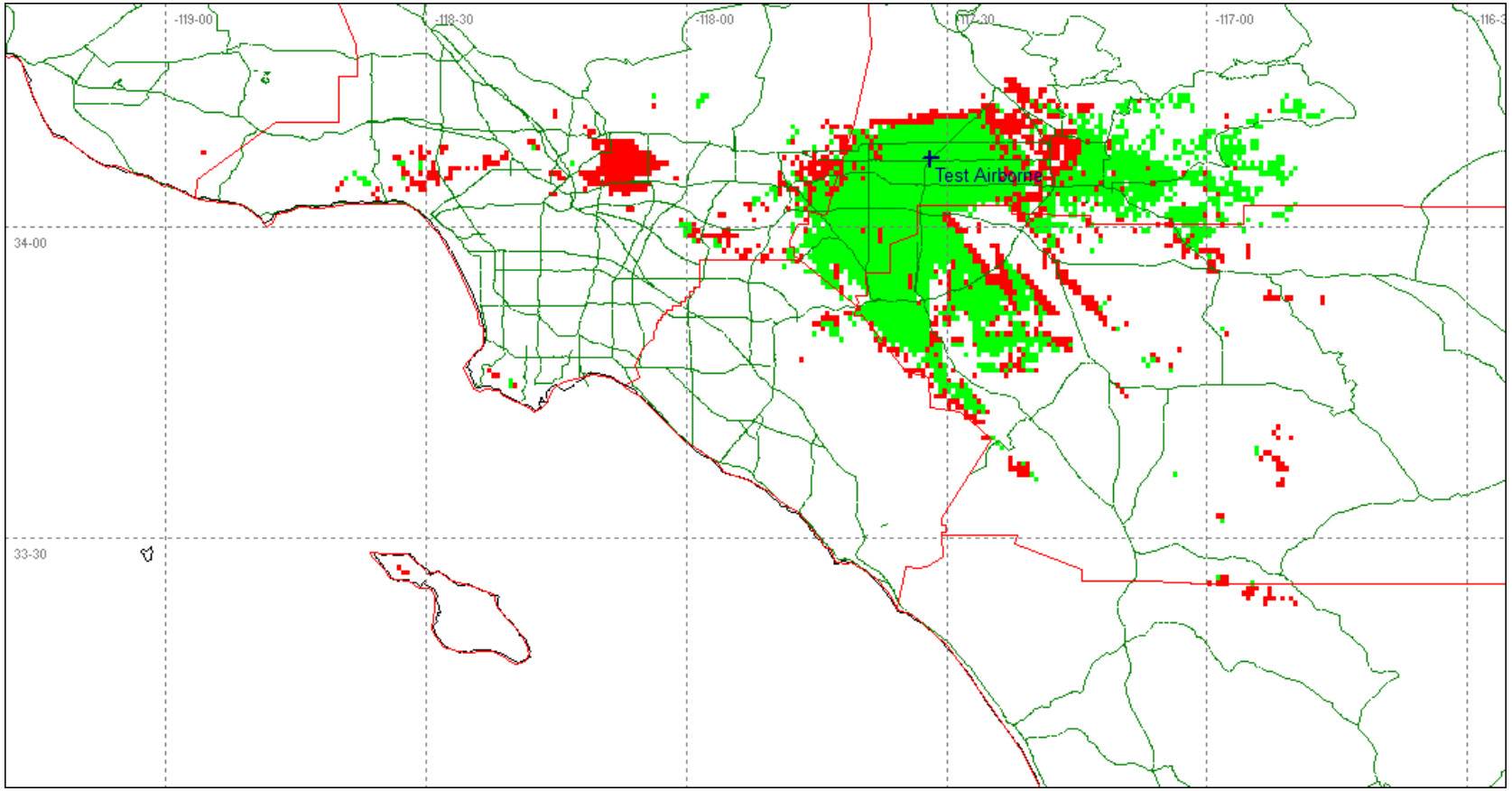
NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

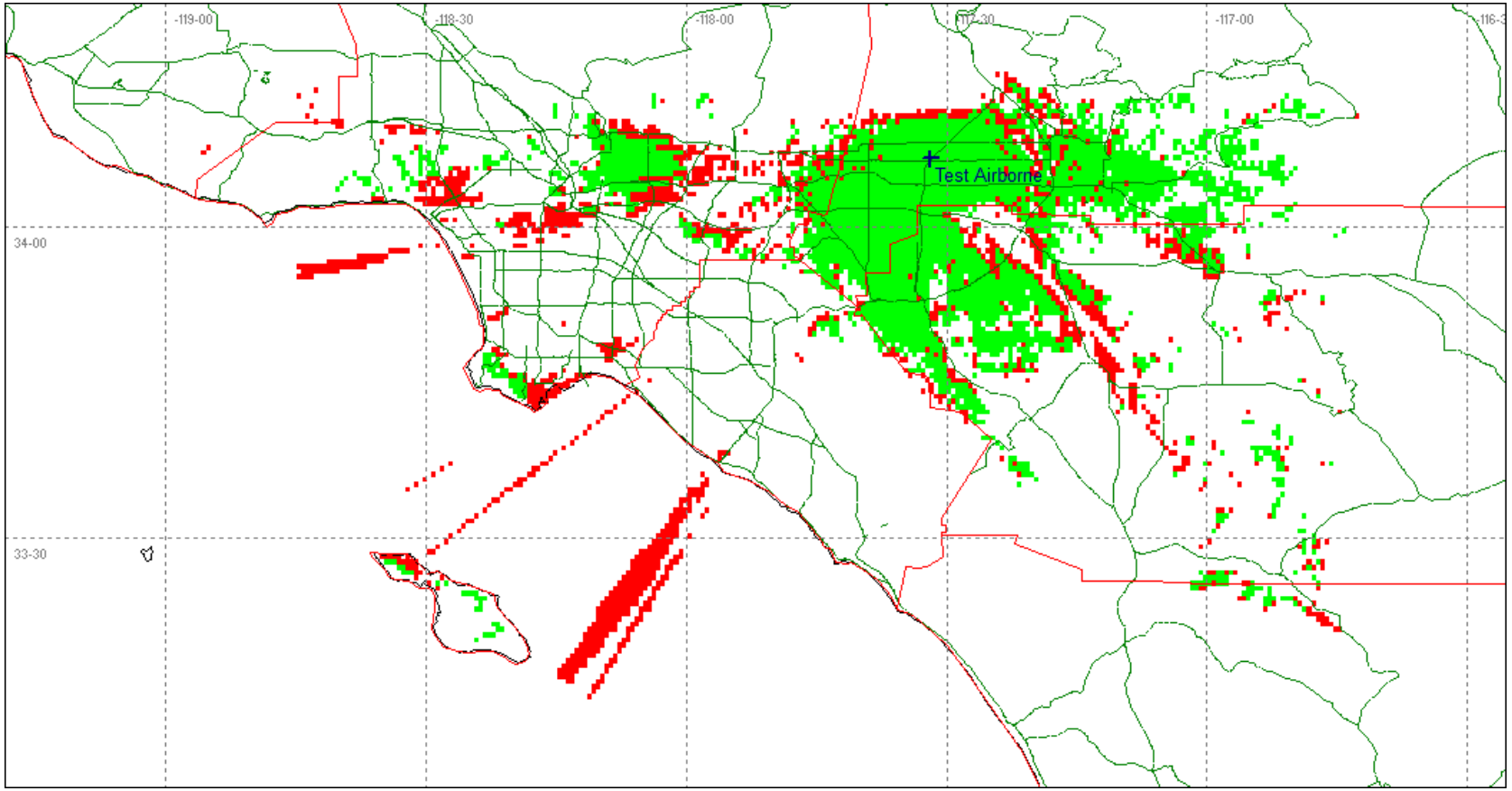
Disaster – Impact to Communications

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

Coverage Prediction – 150 Meters



Coverage prediction 300 Meter AGL



Ideas for Frequency Coordination

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

Aerial Deployment Can be Good

- 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