Cupertino Amateur Radio Emergency Service

Topic: Cupertino City Drill Debrief
Speaker: various
Date: Thursday, 6 October 2011, 19:30
Event: Cupertino ARES meeting, Orientation Training

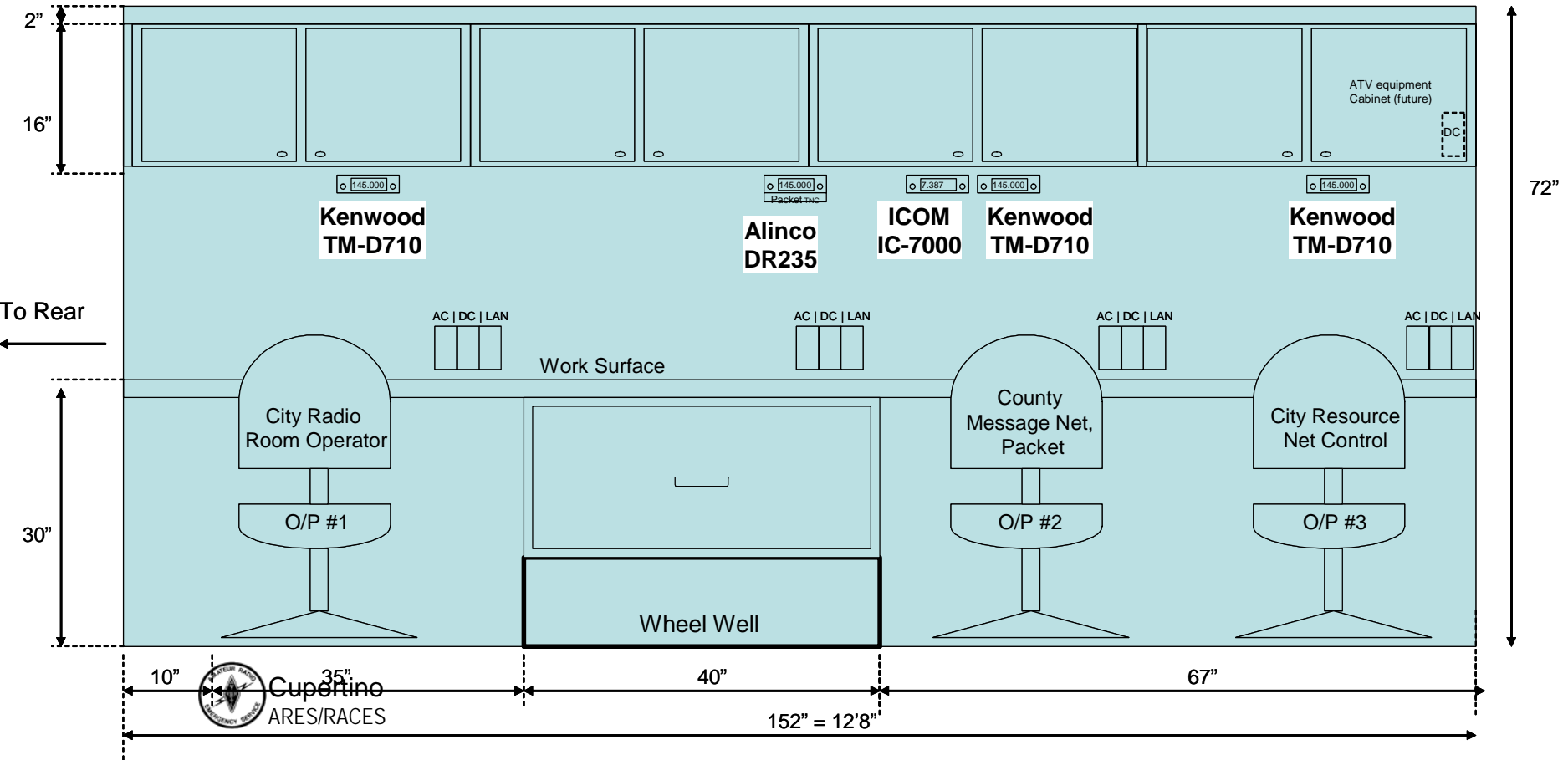# Cupertino City Drill Debrief

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Other Meeting QSTs

1. Field Day Results
2. Tournament of the Bands
3. Habitat for Humanity Walk
4. Comm Van update

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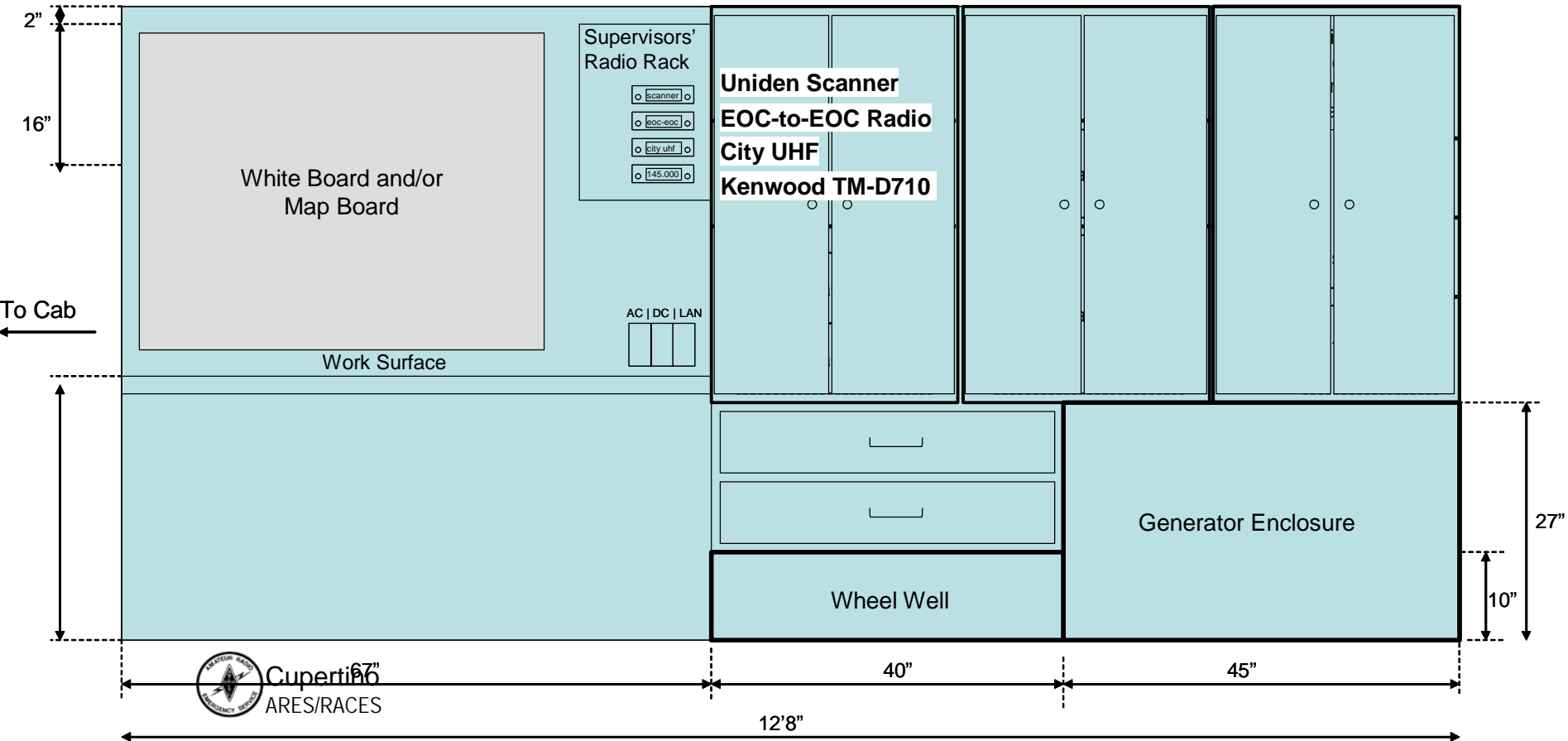# Comm Van Update

Operating Environment
Inside – drivers side

Operating Environment
Inside – passenger side

2"

16"

Supervisors'
Radio Rack

scanner

eoc-eoc

city uhf

145.000

Uniden Scanner
EOC-to-EOC Radio
City UHF
Kenwood TM-D710

White Board and/or
Map Board

To Cab

AC | DC | LAN

Work Surface

Wheel Well

Generator Enclosure

27"

10"

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67"

40"

45"

12'8"

Installation Status

Category	Component	Location	Install Status	Notes
Radio	Kenwood TM-710, #1	Pos #1	installed	
Radio	Kenwood TM-710, #2	Pos #2	installed	
Radio	Kenwood TM-710, #3	Pos #3	installed	
Radio	Kenwood TM-710, #4	Sup Position	installed	
Radio	Alinco DR-235	Pos #2	installed	
Radio	ICOM IC-7000 HF	Pos #2	installed	
Radio	City Trunk Radio	Sup Position	installed	
Radio	EOC Net Radio	Sup Position	installed	
Radio	Scanner	Sup Position	installed	CARES provides
Radio	2m/440	Dash		CARES provides
Radio	TV Monitor	Pos #3	installed	
Antenna	Mast			Pending receipt from supplier
Antenna	2m/440, #1	Mast		
Antenna	2m/440, #2	Roof		connector installed, cables pulled
Antenna	2m/440, #3	Mast		
Antenna	2m/440, #4	Mast		
Antenna	2m/220/440 (packet)	Mast		
Antenna	HF Antenna	Roof	installed	
Antenna	HF Antenna Tuner	Roof	installed	
Antenna	City Trunk Radio	Roof		connector installed, cables pulled
Antenna	EOC Net Radio	Roof		connector installed, cables pulled
Antenna	Scanner	Roof		connector installed, cables pulled
Antenna	2m/44, Dash	Roof		connector installed, cables pulled
Antenna	TV	Roof		

Operating Environment
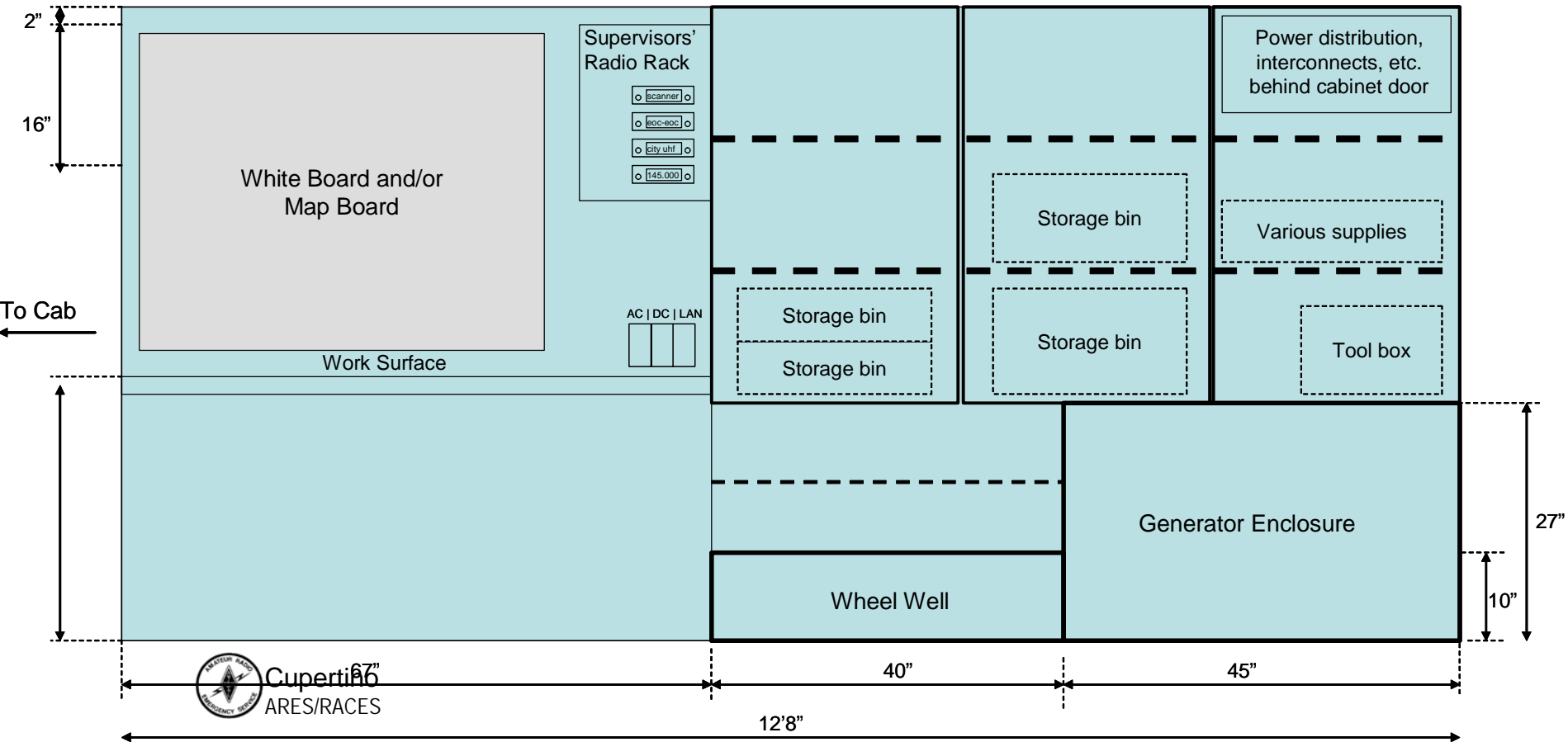## Radio Installation

Operating Environment
Antenna Installation

Operating Environment
Inside – passenger side

Supervisors' Radio Rack
- scanner
- eoc-eoc
- city uhf
- 145.000

White Board and/or Map Board

Work Surface

AC | DC | LAN

To Cab

Power distribution, interconnects, etc. behind cabinet door

Storage bin

Various supplies

Storage bin

Storage bin

Tool box

Storage bin

Storage bin

Wheel Well

Generator Enclosure

2"

16"

27"

10"

67"

40"

45"

12'8"

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Installation Status

Category	Component	Location	Install Status	Notes
Cabinetry	Operating surface		Installed	
Cabinetry	Overhead Cabinets			frames, doors installed, waiting for lock mech
Cabinetry	Supervisors surface			Pending lamination
Cabinetry	Stoarge Cabinets			frames, shelves installed
Lighting	Operating Positions		installed	
Lighting	Isle Lighting, 4		installed	
Lighting	Rear Bar Safety Light		installed	
Power	Battery		installed	City Provided
Power	Battery, Charger		installed	
Power	Battery, Inverter		installed	
Power	12vdc distribution	top cabinet	installed	labeling pending
Power	120vac distribution	generator area		wiring cleanup pending
Power	Rewire Accessory Panel	Dash	installed	labeling pending
Power	120VAC Outlets, 6			Boxes in place, some wiring pulled
Power	12VDC Outlets, 7			Boxes in place, wiring pulled, PowerPoles
Network	Network switch			Boxes in place
Network	Lan Cable connectors			Boxes in place
Vehicle	Vehicle Alarm		installed	
Vehicle	PA System w/ Speaker		installed	
Vehicle	Backup camera, Monitor		installed	
Vehicle	GPS Unit, Display			

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Power, Accessory Panel

Plan

Task	Who performs	Description	Start	End
Various	Almaden RV…	1. Awning 2. Two vents 3. Solar panel and batteries 4. Passenger Seat 5. Bumper mount for additional generator	15-Sep	*Done!*
Floor insulation	City supplier	1. Spray-on protective lining, all floor surfaces	26-Aug	*Done!*
Comm Installation	TelePath	1. All work surfaces and cabinets 2. All wiring and cabling 3. Power systems and controls 4. Radios, antennas, mast systems	6-Sep	29-Sep
Driver Quals	City Risk Mgr, CARES	1. Approval of qualification procedures 2. Identify the list of candidates 3. Initial qualifications	22-Aug	4-Nov
City Outfit, supplies	CARES, City Service Center	1. Finish city implementation 2. Identify comm van supplies 3. Identify packaging, placement 4. Acquire containers, supplies	??	
Network implementation	CARES, CERT, SCEWN, City IT	1. Implement Van WiFi Hotspot 2. EOC connectivity 3. SCEWN connectivity	??	
Operating Procedures	Telepath, CARES, City	1. Develop 1st release of operating procedures, checklists, etc	??	
Open House	CARES	1. Invitation to CARES, City staff, County RACES	??	

Debrief of the October 2011 City Drill

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Drill Overview

Goal

- The purpose of this exercise is to test earthquake response procedures. The expected outcome is to identify additional training, planning and supply needs and develop a stronger community based response support network.

Participants

- CERT, CARES, MRC, Animal Shelter

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Drill Overview

CERT Objectives
- Open all ARKs, 3 each day
- Stand up each ARK based on the new procedures developed from 2010 exercise.
- Set up public information station and charging area.
- Report ARK, Zone status to EOC via amateur radio
- Signage at all ARKs

MRC Objectives
- Stand up Medical treatment area at one ARK
- Process patients for a defined time period (Scouts)

CARES Objectives
- Exercise CARES response procedures -- message handling, net control, resource planning
- Deploy packet to the ARKs
- Test the Field Communications Handbook

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Event schedule

Friday, 21-Oct

1000   Earthquake occurs. Activate the CARES Net, CARES members check in. Perform the PSA and report.

1100   Begin 1st Shift. Field Responders assigned and in route.

1330   Shift relief arrives, hold turnover

1400   1st shift relieved. 2nd shift starts the watch.

1700   End of 2nd shift. EOC is secured.

Saturday, 22-Oct

1000   Aftershock? Activate the CARES net. CARES members check in.

1100   Begin 1st Shift. Field Responders assigned and on assignment.

1330   Shift relief arrives, hold turnover

1400   1st shift relieved. 2nd shift starts the watch.

1700   End of 2nd shift. EOC is secured.

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1. Citizen Corp Liaison to the EOC

- Stories
- What worked?
  - Working side by side with Fire and Sheriff rep
  - Fire rep was mentoring the rest of the city staff
- What didn't work? What needs improvement?
  - Message form sizes from the RR to the EOC
  - Priority clarification between CERT R/Y/G and CARES/ICS Emergency/Urgent/Routine
  - Quality of the message (*so-what* factor); enough detail to make it actionable in the EOC: opportunity for CERT message creation training. Don't send nice-to-know. If you send a message, what are you asking EOC to do?
  - Uncertainty of the field resource levels in the EOC; add poll as part of H&W check?
  - Need tour of Arks for City staff so they understand what Arks can do.
  - Webcam at the Arks for feeds to the EOC to get a sense of what is going on, or put the city-feed of traffic cams to the EOC.

2. Preliminary Safety Assessment

- Stories
- What worked?
  - ...
- What didn't work? What needs improvement?
  - ...

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3. Message passing, voice traffic

- Stories
- What worked?
  - ...
- What didn't work? What needs improvement?
  - Prioritization of messages
  - Call for higher priority messages
  - Need to more message handling practice; work on consistency and flow
  - Messages with subjects repeated it in the message body
  - NCS had to prompt for the details
  - Message passing delay due to the NCS shift change

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4. Message passing, packet

- Stories

- What worked?
  - Package worked first time out of the box
  - Tried to and easy to teach CERT how to send packet
  - Field comm handbook, antenna kit instructions worked with a real SUV

- What didn't work? What needs improvement?
  - Sorting packet messages by the real subject excluding DELIVERED or READ
  - Equipment required 2 power cords; need power strip in the kit
  - Need Packet

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5. Net Control Management

- Stories
- What worked?
  - ...
- What didn't work? What needs improvement?
  - ...

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7. ARK deployment

- Stories
- What worked?
  - Packet was useful at the Ark sites

- What didn't work? What needs improvement?
  - CERT Request for standardized message form
  - Responses to message requests from the Arks
  - Getting PSA reports to the Arks

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6. Resource Management

- Stories
- What worked?
  - ...
- What didn't work? What needs improvement?
  - ...

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Deployment Matrix

If we only had ____ people during the day…

Deploy these positions during the day	If you have this many people																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RRO (NCO), CARES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shift Supervisor		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, DeAnza			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Garden Gate				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Hyde Middle School					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NCO, Resource						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Lawson Middle School							1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Monta Vista Fire								1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Seven Springs									1	1	1	1	1	1	1	1	1	1	1	1
NCO, Message										1	1	1	1	1	1	1	1	1	1	1
ISA													1	1	2	3	3	3	3	3
RRO, County																				
Stand-by																				

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Deployment Matrix

If we only had ___ people during the night…

Deploy these positions	If you have this many people																			
during the night	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RRO (NCO), CARES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shift Supervisor		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, DeAnza			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Garden Gate				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Hyde Middle School					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NCO, Resource						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Lawson Middle School							1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Monta Vista Fire								1	1	1	1	1	1	1	1	1	1	1	1	1
Ark, Seven Springs									1	1	1	1	1	1	1	1	1	1	1	1
NCO, Message											1	1	1	1	1	1	1	1	1	1
Stand-by												1	2	3	4	5	6	7	8	9	10

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Summary – Observations

- The role of Citizen Corp Liaison holds much promise in providing an effective interface between the City's volunteers in the field and the EOC.

- This drill is close to what we could actually experience when we have an event.

- Staffing constraints on Friday (a work day for most people) could be representative of what we may experience during the initial hours of a real event.

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Summary – What worked?

- Packet Operations went very smooth.

- Net Control and Net Management was executed very well and were responsive.

- The station relay process worked well when invoked for an outlier station.

- Checkout of the packet kits prior to the drill.

- We completed net operations – message and resource – with only one net due to a small number of field stations deployed.

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Summary – What needs improvement?

- Shift changes could be shorter and more efficient.

- Packet message management in the EOC could use a full-time person.

- Resource management processes (tracking and assignment) is not well defined.

- The radio in Operating Position #1 failed. The power subsystem needs to be reviewed.

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Summary – Recommendations

1. Resource Management

We did not have enough staff on Friday, and can anticipate this situation during the opening hours of a real event.

1. Need to review, refine, and commit to the CARES Deployment Matrix.

2. Develop and test the procedures for planning future shift coverage.

3. Refine procedures for resource/assignment tracking and shift scheduling.

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Summary – Recommendations

2. Packet Operations

CARES' second packet deployment met expectations for operating packet in the field. The following recommendations are made:

1. Complete the City Packet kit build-out (cases, PCs, printers, power strips, ambient light screens, operating procedures, supplies, etc.)

2. Consider the need for a Packet Operator at the EOC.

3. Work with CERT to identify what messages are best to go by packet, and then develop the tools and forms for collecting and sending this information.

4. Look for opportunities to train CERT members as packet operators.

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