Event timeline

Getting ready for the May 2012 drill

5 April 2012
Jim Oberhofer KN6PE

CARES mission

The mission of Cupertino ARES is to maintain and train Amateur Radio volunteers capable of providing professional emergency communications, increasing the City's emergency response effectiveness, and speeding the recovery effort.

Topics

1. Changes to our response
2. Review the event timeline
3. Talk through the changes and process gaps

What’s changed since the last drill

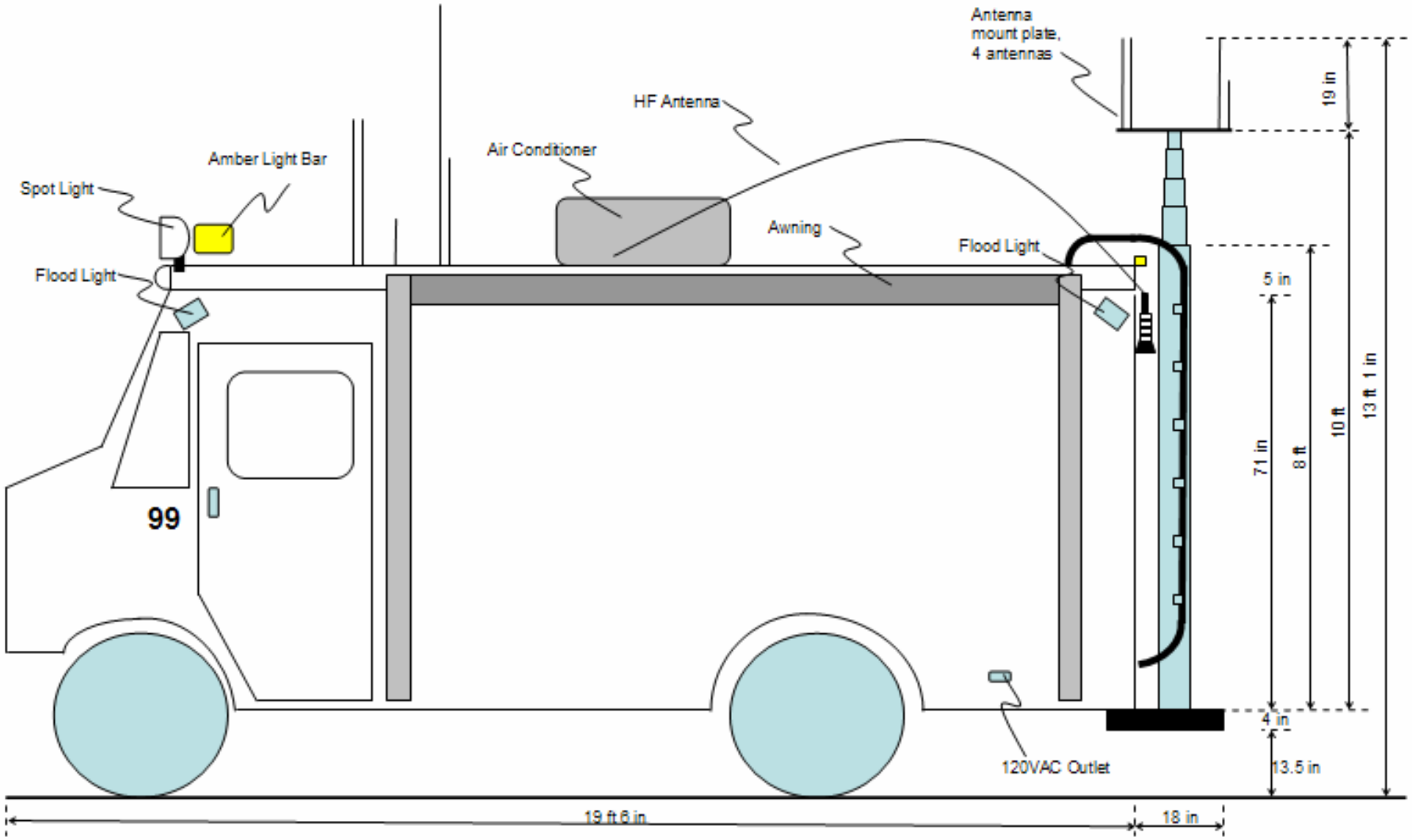
1. **Comm van will replace the EOC Radio Room**
2. **Full packet deployment**
3. **New user for our PSA roll-up**

OES Comm Van

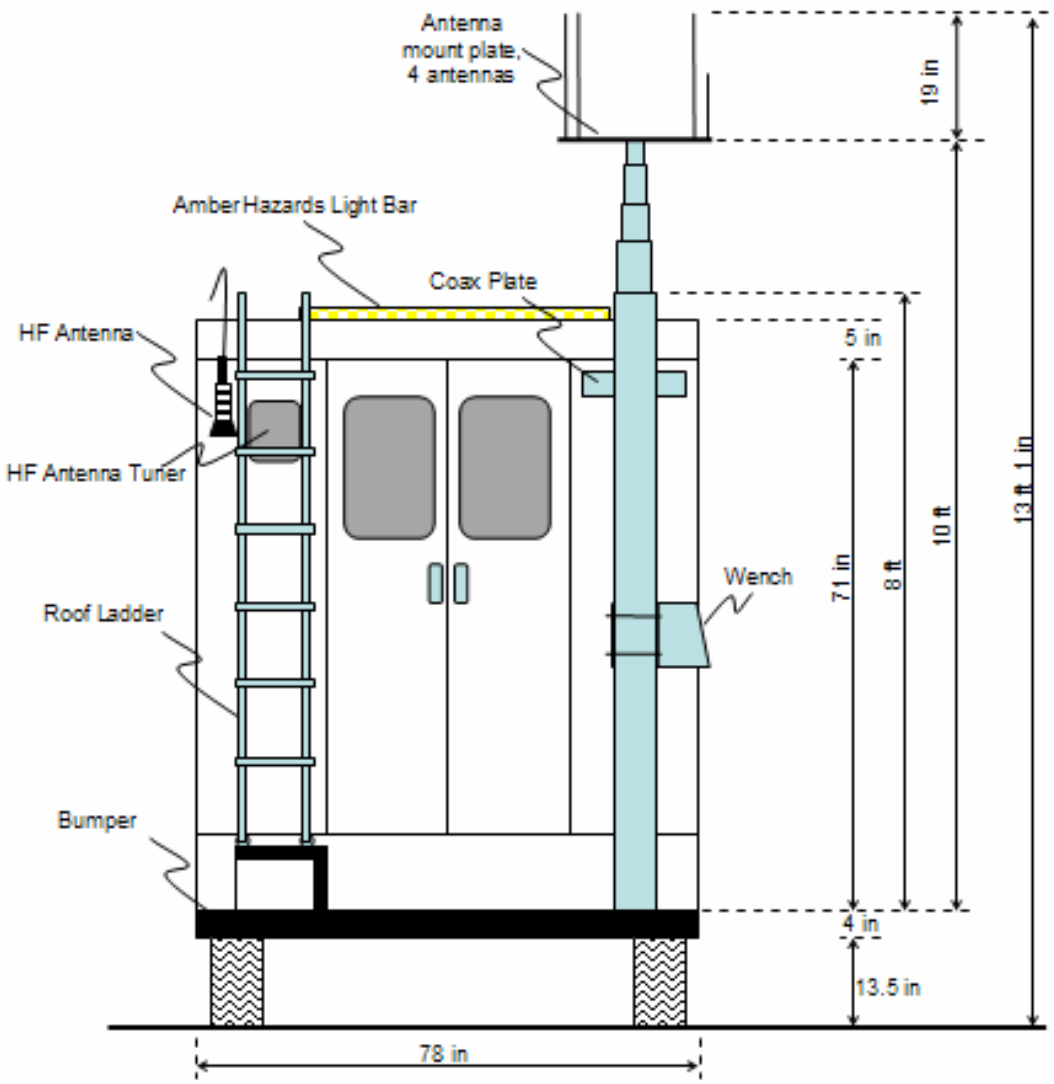
Specification

1. Designed as an EOC Radio room replacement
2. Radio support for
   - Ham bands – HF/VHF/UHF
   - County Low Band EOC-to-EOC
   - City Trunk Radio
   - Scanner
   - Over air DTV
3. 30 ft extendable mast
4. On-board generator
5. Approved for Mutual Aid support

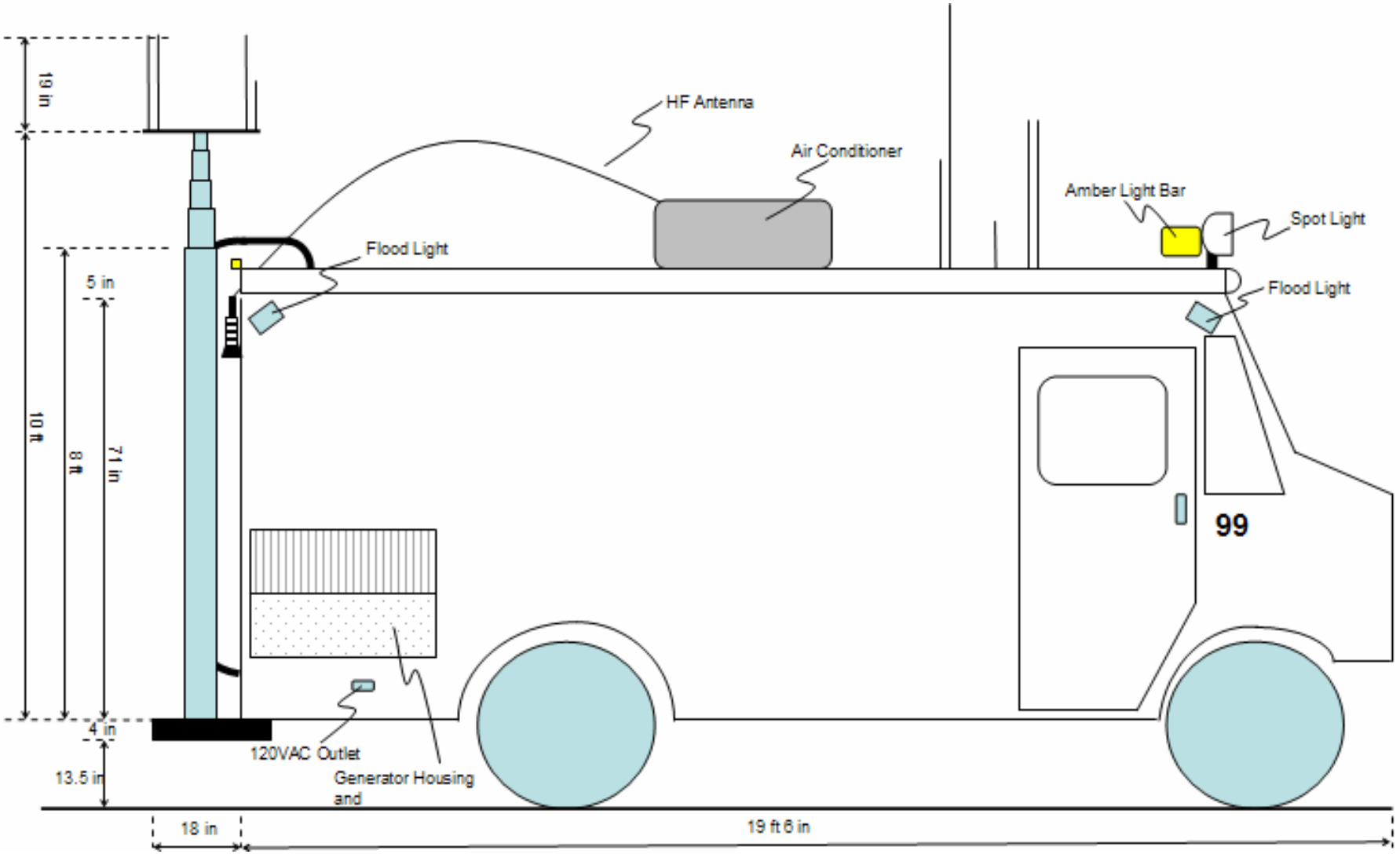
Exterior, Drivers side



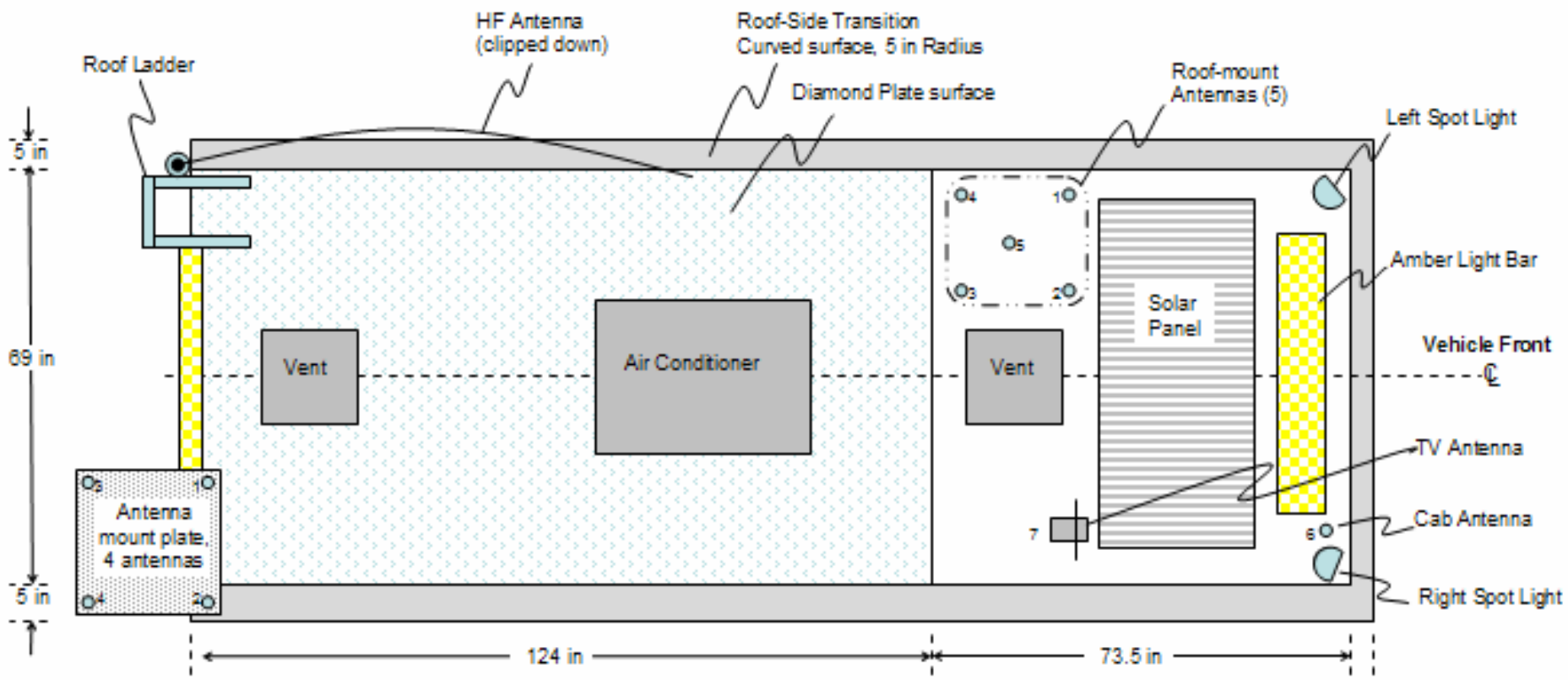
Exterior, Rear



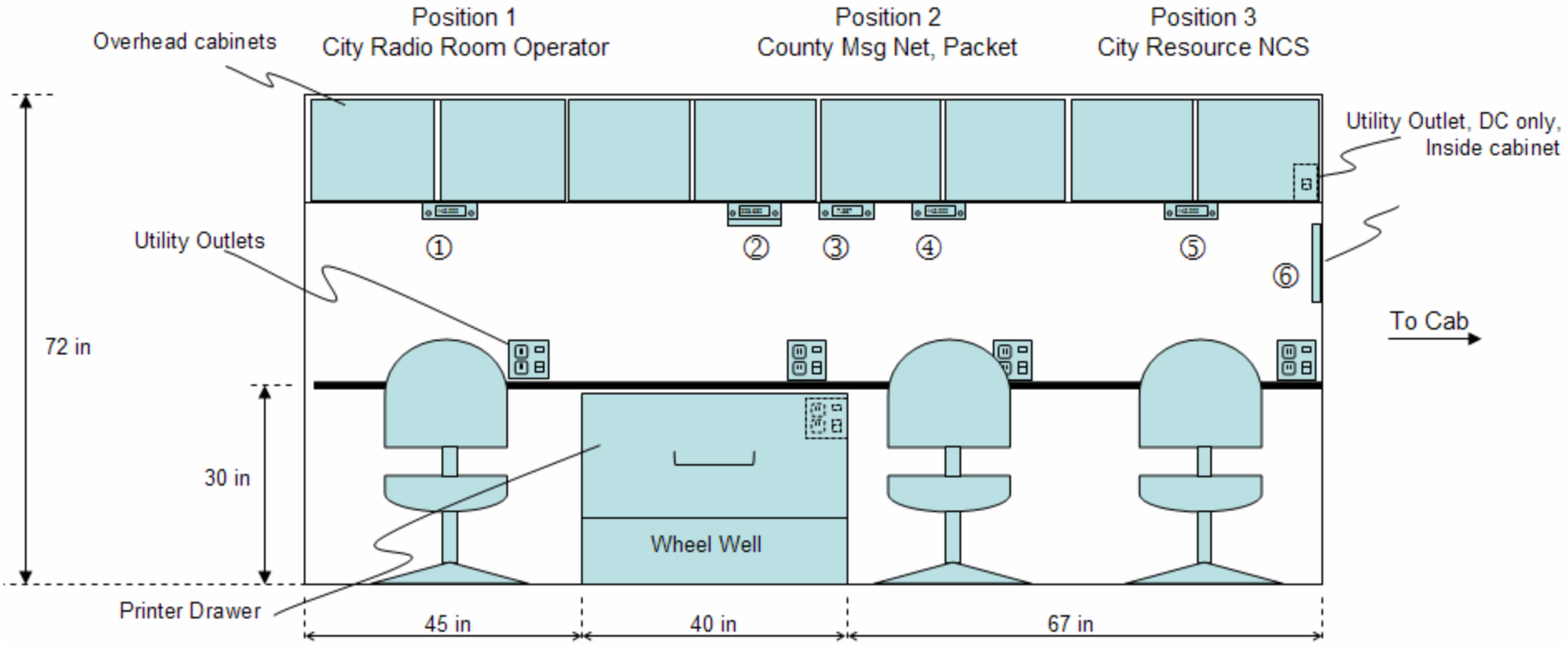
Exterior, Passengers side



Exterior, roof layout

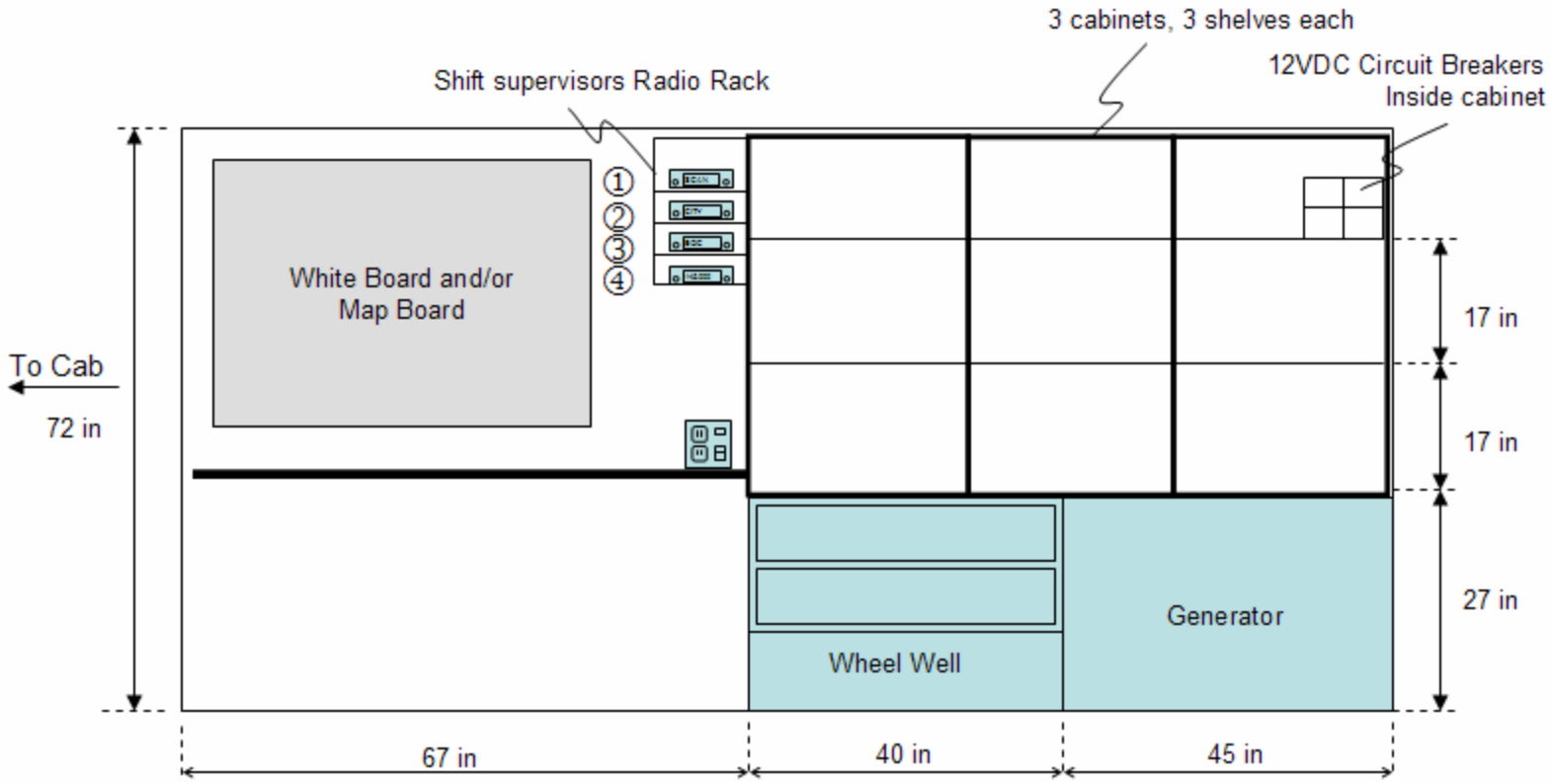


Interior, Drivers side



Radio	Make, Model	Purpose	Circuit Breaker	Antenna Location	Antenna Type	Antenna Position
①	Kenwood TM-710	City Net operator	12vdc CB 10	Mast		3
②	Alinco, DR-235T	Packet Radio	12vdc CB 9	Mast		4
③	ICOM IC-7000	HF/VHF	12vdc CB 6	HF: Roof VHF: Roof		Wip 2
④	Kenwood TM-710	County Message Net	12vdc CB 8	Roof		1
⑤	Kenwood TM-710	City Resource NCS	12vdc CB 7	Mast		2
⑥	Digital TV	Monitor local events, ATV monitor	120vac CB ###	Roof		

Interior, Passengers side



Radio	Make, Model	Purpose	Circuit Breaker	Antenna Location	Antenna Type	Antenna Position
①	Uniden Scanner	General Purpose	12vdc CB 3	Roof		3
②	Kenwood Low Band	EOC-to-EOC radio	12vdc CB 3	Roof		4
③	Motorola CDM1250	City Trunk Radio	12vdc CB 11	Roof		5
④	Kenwood TM-710	CARES Command	12vdc CB 12	Mast		1

Comm Van Update

Where are we, what's left

1. First round of supplies purchased by the City.
2. City Service Center working through a mechanical check-out.
    - Leveling jack installation
    - Front hitch receiver installation
    - Vehicle battery and electrical integrity check
    - Fuel and hose line integrity check & replacement
    - Gas gauge
    - Cabinet finishing touches
    - Initial CARES driver check-outs
3. CARES work to do
    - Operator Qualification
    - System documentation (develop as-built's)
    - VAN-EOC interconnectivity network definition
    - Final outfitting
    - Field Test (May Drill)
    - Commissioning and City open house
    - County RACES open house

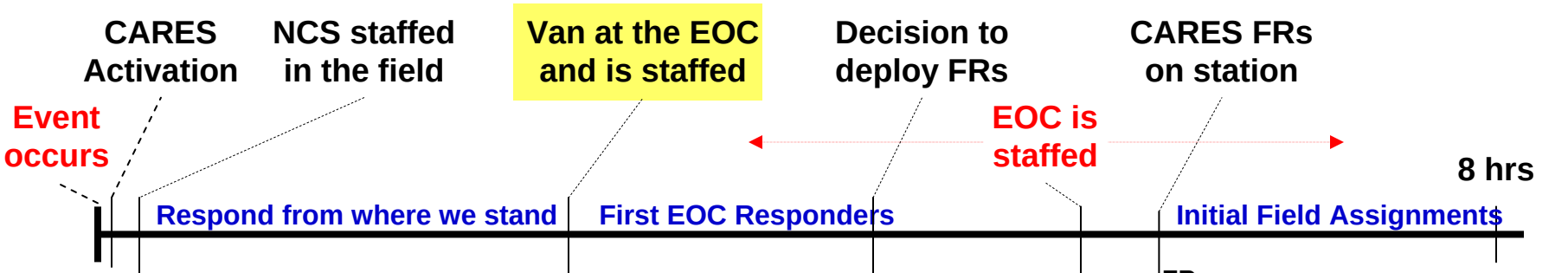
ARCs want our PSA data

1. ARCs see the PSA data as an initial starting point for their response.
2. Today, we deliver it to the EOC
3. Need to define how we would roll up and distribute it to the ARCs… packet?

Looking at the Event Timeline

… and how these new changes impact what we do

Initial Response Ops



NCO
-Take CARES check-ins
-Establish frequency guard
-Direct PSAs
-Queue Life-threatening traffic
-Queue Property-threatening traffic
-Queue PSA traffic
-Check for FR availability

Shift Supervisor
-Request a Spot-check
-Assess need for field deployment
-Direct a Driver to retrieve the Van
-Direct RRO to the EOC

NCO, RRO, all CARES
-Direct Life-threatening traffic to EOC
-Direct PSA traffic to the EOC

Shift Supervisor
-Decision to deploy to the field
-Make field assignments, Voice & Packet
-Get the Packet Kits to the ARCs

Shift Supervisor
-Confirm additional Information requirements
-Direct Responders
-Resource Planning
-Pass PSA Traffic to the ARCs by Packet

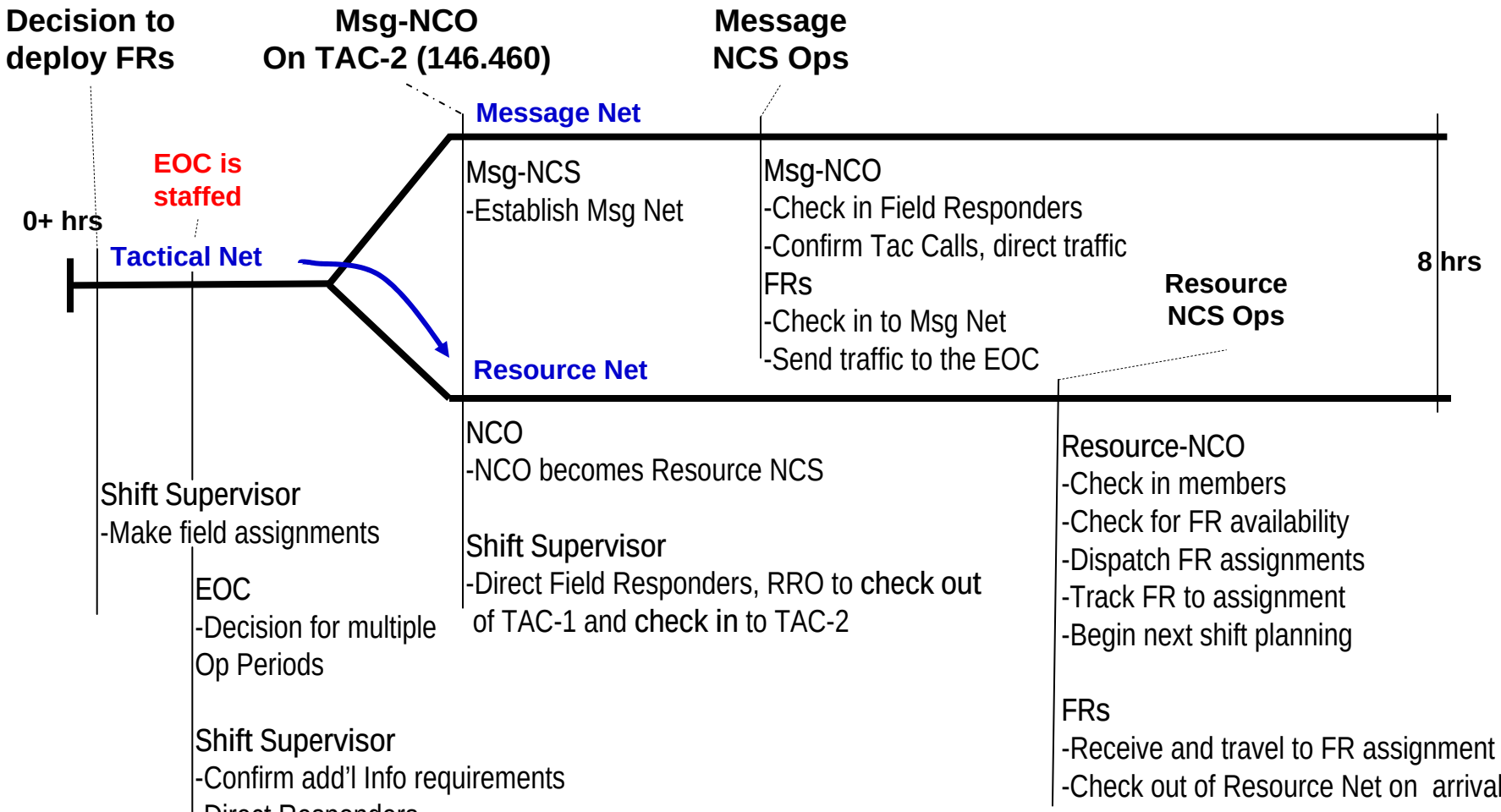
FRs
-Setup at the ARC, Field locations
-Set up Packet Kits
-Receive, Send ARC traffic
-Sort, prioritize, and send traffic

Terms

FR – Field Responder
NCO – Net Control Operator
RRO – Radio Room Operator

Extended Response Ops

Tactical, Message & Resource Net



How will we respond?

1. **Staff the critical positions first – EOC, Prioritized Ark sites.**
2. ***"Leverage the license"* of CARES members in Ark ICS positions**

   FCC-licensed ICS staff act as control operators for a non-hams

3. **Dedicated packet kits at each Ark.**
4. **Field Communications handbook – used by CARES (refresher) and SUVs (training manual) for how we respond.**
5. **Deploy an emergency PBBS for city-wide packet traffic as necessary.**
6. **Understand the rules… FCC Part 97.403:**
   No provision of these rules prevents the use by an amateur station of any means of radio communication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

Event – 1 minute

Event + 1 minute

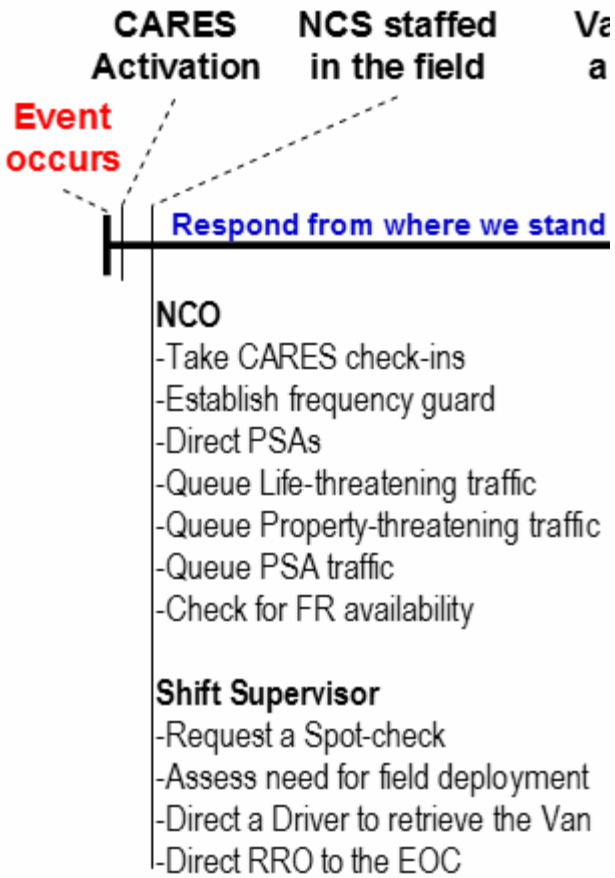
Once the shaking stops,

1. **take care of yourself…**
2. **your family**
   - Determine the condition of your family; apply first aid if necessary.
   - Determine the structural soundness of your home; evacuate if necessary.

3**. your neighborhood**

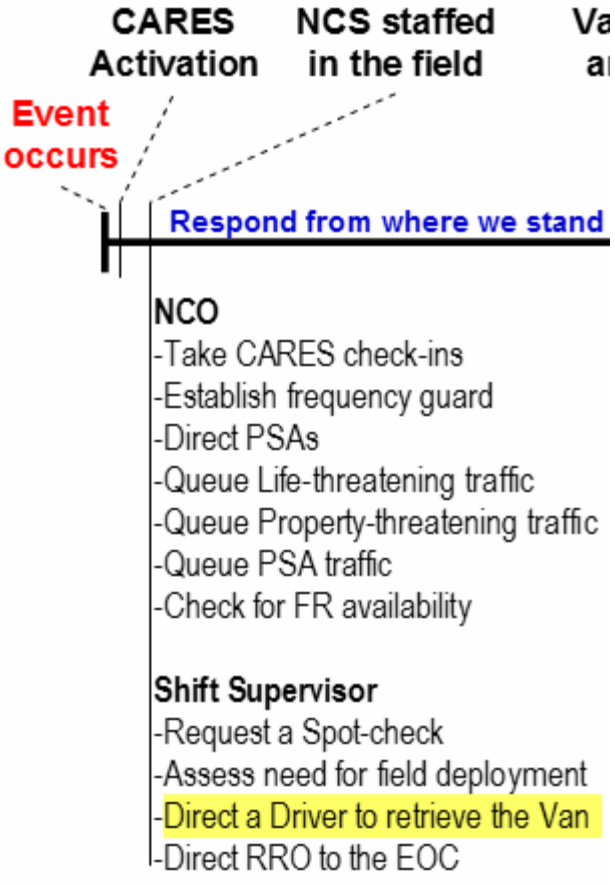
   - Perform the Preliminary Safety Assessment…
   - What you do depends on your situation.
   - Do not put your personal safety at risk.
   - Do not exceed your physical ability to perform the assessment.

Event + 5 minute



- Activation is automatic per the City's emergency plan (Section 9.1.2 *Self-announcing Natural disasters*).
- When the event occurs, we respond…
  - from where we are,
  - with what we have, and
  - with what we know.
- Turn on your radio and listen.
- If you are the first person on the frequency and can perform as an Net Control Operator, establish the CARES Emergency Net, or…
- Check in to the net when check-ins are called.
- If directed, perform the PSA

Event + 10 minutes



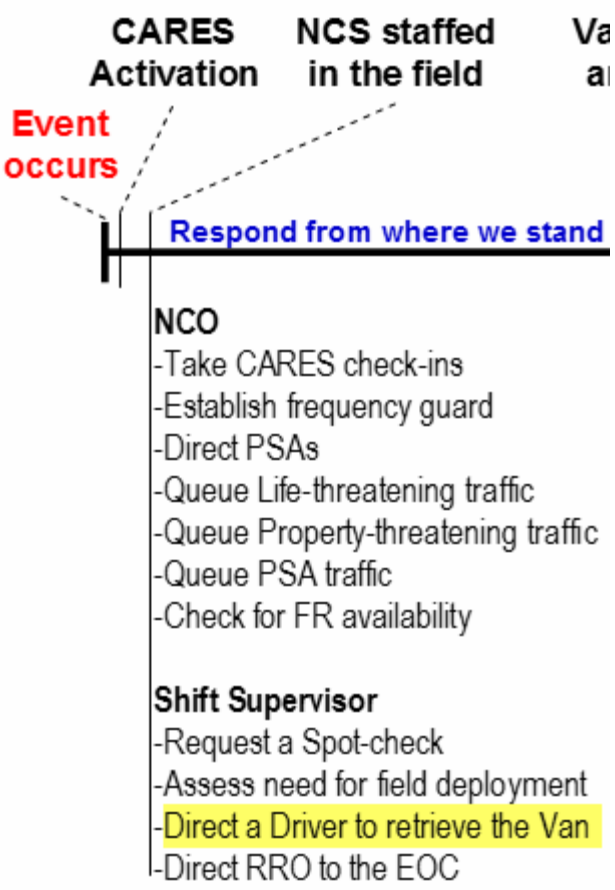
Retrieve the Van

- Comm Van is parked at a secure location.
- There will be 10 key-holders authorized by the City to drive the van .
- The goal is to get it to City Hall as safely and expeditiously as possible.
- Assuming traffic lights are out throughout the city, this may take time to get to City Hall.

Initial Van Staffing

- Direct a RRO to the EOC to meet up with the Van on its arrival

Event + 30 minute



4 Pre-Departure Checklist

This checklist is performed every time the vehicle is driven.

Vehicle Interior Inspection

_____	1.	Front cab curtains are OPEN and tied back.
_____	2.	All 12vdc breakers are OFF except for **CB4** (dash control panel).
_____	3.	Operating position chairs are stowed and secured.
_____	4.	Under-counter equipment is secured.
_____	5.	All radio operating gear is stowed (headphones, foot switches, etc)
_____	6.	Operating positions are clear of loose objects.
_____	7.	All interior cabinet doors and drawers are CLOSED and secured.
_____	8.	All cab control switches are OFF.

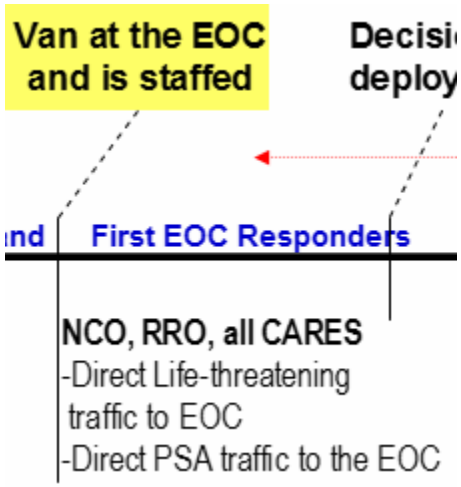
Vehicle Exterior Inspection

_____	9.	Mast is nested.
_____	10.	Mast antenna cable is coiled and secured.
_____	11.	Mast control cable is disconnected and stowed.
_____	12.	HF antenna is down and secured.
_____	13.	Television antenna is down and secured.
_____	14.	Awning is retracted and locked.
_____	15.	Shore power cable is disconnected and stowed.
_____	16.	All exterior cabinet doors are secured.
_____	17.	Vehicle Leveling Jacks are raised.
_____	18.	Walk around, walk away, look up
_____	19.	Check behind you for obstacles
_____	20.	Visual check headlights and turn signals.

Startup

_____	21.	Enter Mileage in Van Operations Log.
_____	22.	Enter Battery Voltage in the Van Operation Log.
_____	23.	Cab radio ON.
_____	24.	Backup monitor is mounted, power ON.
_____	25.	GPS is mounted, power ON.
_____	26.	Gear shift to NEUTRAL, use clutch.
_____	27.	Ignition ON. Apply choke as necessary.
_____	28.	Parking Break RELEASED.
_____	29.	Check Fuel levels. Refuel if necessary.

Event + 60 minutes



6 Deployment checklist

This checklist is performed every time the vehicle arrives at a deployment site. Whenever deployed, do not leave the Van unattended.

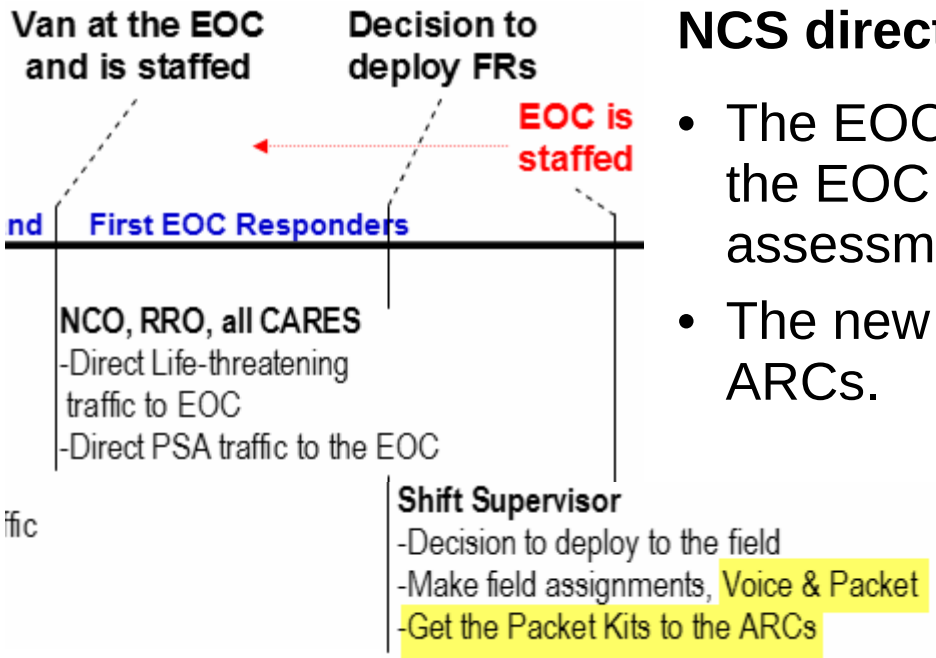
On Arrival

_____	12.	Choose a location 25 ft from overhead lines or other obstructions.
_____	13.	Choose a location that is well lighted with little traffic.
_____	14.	Choose a location as flat as possible.
_____	15.	Ignition OFF.
_____	16.	Parking Break to PARK.
_____	17.	Enter Mileage in Van Operations Log.
_____	18.	Enter Battery Voltage in the Van Operation Log.

Operations Set up

_____	19.	Start ICS 214 Unit Log.
_____	20.	All 12vdc circuit breakers are ON.
_____	21.	Leveling jacks are lowered.
_____	22.	Deploy the Antenna Mast (see section ###)
_____	23.	Confirm all radios are powered up and operational.
_____	24.	Plug in the shore power cable to on-board generator. Start the on-board generator (see section ###).
_____	25.	Log in Comm Van staff as they arrive.

Event + 75 minutes



NCS directs PSA traffic to the EOC

- The EOC (CC Liaison) uses this data to brief the EOC staff with an initial gross assessment of damage to the city.
- The new user requesting PSA data are the ARCs.

Packet at the ARCs

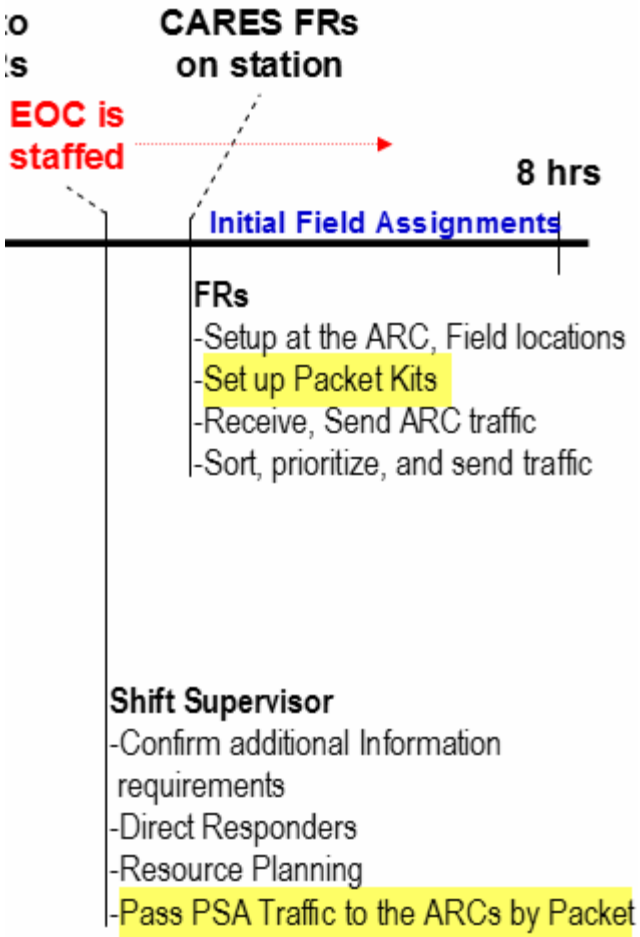
- field assignments need to cover voice and packet operations.
- Logistics for getting the Packet Kits to the ARCs

Staffing Priorities

Staff the critical positions first – EOC, Prioritized Ark sites.

Deploy these positions during the night	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, 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
Stand-by											1	2	3	4	5	6	7	8	9	10

Event + 90 minutes



Set up Packet

- Currently, the packet kits (radio, TNC, PC) are at the EOC, implying *someone* needs to run them out to the ARCs (not a good long-term option).
- The ARCs want the PSAs. Our current collection form is paper-based. Need to get all PSA data to the ARCs.
  - Need to look at a different collection option… spreadsheet capture makes sense
  - Outpost can send .csv files

Thank you

Any Questions?