
Cupertino Amateur Radio Emergency Service

Topic: Preliminary Safety Assessment Process Overview

Speaker: Jim Oberhofer KN6PE, EC Cupertino ARES

Date: Thursday, 04-February-2010, 19:30

Event: Cupertino ARES meeting, Orientation Training

PSA Process Overview



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.

The City's response priorities

- Address immediate life safety problems
- Assess the integrity of and stabilize Cupertino's critical infrastructure
 - Water
 - Sanitary
 - Access
- Perform search and rescue, health and welfare, establish shelters
- Execute recovery operations

Earthquake Scenario

Initial Response Assignments

City Staff	<ul style="list-style-type: none">• Inspect City facilities• Staff the EOC
County Fire	<ul style="list-style-type: none">• Fire suppression• Search and Rescue
County Sheriff	<ul style="list-style-type: none">• Public Safety• Law and Order
CERT, MRC	<ul style="list-style-type: none">• CERT operations (SAR, medical, care and shelter, etc.) and support for:<ul style="list-style-type: none">– Organized neighborhoods– Area Ark ICS, response
CARES	<ul style="list-style-type: none">• Preliminary Safety Assessment• Emergency field communications support• Infrastructure Safety Assessment



Earthquake Scenario

Served Agency	Critical Need
City of Cupertino	<ol style="list-style-type: none">1. Preliminary Safety Assessment2. ARK communications support3. Critical facility staffing4. General communications support
Santa Clara County Fire	Infrastructure Safety Assessment
Cupertino Sanitary District	Infrastructure safety assessment
San Jose Water Company	Infrastructure safety assessment

Other critical agencies	Need
Cupertino Medical Center	Communications with the city
Cal Water	Infrastructure Safety Assessment
Santa Clara Valley Water	Infrastructure safety assessment
Union Pacific RR	Infrastructure safety assessment

Earthquake Scenario

CARES response assignments

Preliminary Safety Assessment	CARES collects and reports information about the state of the city immediately after a city-wide emergency or disaster occurred.
Field Response	CARES members respond and operate at a field assignment during a declared emergency.
Infrastructure Safety Assessment	CARES observes and reports on selected Cupertino critical facilities that are deemed to be important to the City or other Agencies.

Authorization to activate

9.1.2 Self-announcing Natural Disasters

The following direction is authorized per the following reference:
Emergency Operations Plan, City of Cupertino, Part I Basic Emergency Plan, Section XI Volunteers and Disaster Service Workers, page 43.

- During self-announcing natural disasters, CARES members may self-dispatch and commence windshield surveys to provide situation status and Preliminary Safety Assessments provided it is safe to do so.
- CARES members may also respond to Mutual Aid requests and may become part of the Santa Clara County Operational Area ARES/RACES team.
- For all other events (natural and man-made), requests for DSWs will be announced via telephone, courier, radio, and television.
- Volunteers will not respond to any act of terrorism unless specifically requested by the EOC or their City contact person.

Earthquake Scenario

Objective: mitigate further damage to infrastructure and property, preserve life, restore services

	What the EOC needs	CARES	CERT	MRC
Notification		Self-evident	Self-evident	Self-evident
What do you do first	<ul style="list-style-type: none"> • Preliminary Safety Assessment 	<ul style="list-style-type: none"> • Take care of family at home 	<ul style="list-style-type: none"> • Take care of family at home 	<ul style="list-style-type: none"> • Take care of family at home
Activation / Mobilization	<ul style="list-style-type: none"> • Help with the initial EOC staffing 	<ul style="list-style-type: none"> • Activate the CARES emergency net • Check into the net • Preliminary Safety Assessment 	<ul style="list-style-type: none"> • Respond to organized neighborhood • Neighborhood PSA • Respond to local Ark 	<ul style="list-style-type: none"> • Respond to local Ark
Deployment (Help stabilize the situation)	<ul style="list-style-type: none"> • Information on the state of the city • Windshield survey • Rescue assistance to residents • Medical assistance to residents • Help with logistics, distribution of food, shelter, material • Help reassure residents 	<ul style="list-style-type: none"> • EOC Radio Room staffed • Deploy Field Responders (Arks, Fire Stations, Shelter, Medical, etc) • Infrastructure Safety Assessment • Provide served agency support (per plans) • Build staffing plan 	<p>Ark Deployment</p> <ul style="list-style-type: none"> • Activate Ark • Establish, staff ICS • Check in volunteers • Receive, process community assistance requests • Assemble, dispatch SAR, First Aid teams • Support Ark Site staff • Assign to survey teams; verify the Cupertino 100 • Build staffing plan 	<ul style="list-style-type: none"> • Establish First Aid Station at Ark (?) • Deploy as requested • Build staffing plan

Earthquake Scenario

Objective: mitigate further damage to infrastructure and property, preserve life, restore services

	What the EOC needs	CARES	CERT	MRC
Recovery	<ul style="list-style-type: none">• Field Status Reports	<ul style="list-style-type: none">• Operational period reports	<ul style="list-style-type: none">• Operational period reports	<ul style="list-style-type: none">• Operational period reports
Demobilization	<ul style="list-style-type: none">• List of supplies to be replenished	<ul style="list-style-type: none">• Personal Equipment inventory• CARES asset inventory	<ul style="list-style-type: none">• Personal Equipment inventory• Ark asset, supplies inventory	<ul style="list-style-type: none">• Personal Equipment inventory• Ark First Aid asset, supplies inventory

Preliminary Safety Assessment

What is it?

Situation

- The Cupertino EOC needs a rapid assessment of the state of the city so that response resources can be assigned to have the maximum impact.
- During city-wide disasters, regular communications channels may be disrupted, leaving EOC decision-makers with little information to go on.

Preliminary Safety Assessment

What is it?

Response

- CARES is chartered to provide Preliminary Safety Assessment (PSA) information when a disaster occurs.

Definition

- A PSA report occurs early in an emergency. While information may be fragmented and incomplete, whatever data is available will provide the City with a preliminary assessment of the damage so the EOC can determine the best response to save lives, protect property, and speed the recovery.
- Early Safety Assessment reports should not be delayed by getting mired in detail in an effort to obtain more extensive assessment information.



Preliminary Safety Assessment

When do we do it?

Self-evident Events

- Earthquakes... These events have the potential for significant damage throughout the Bay Area.

Non-evident Events

- Flooding... May be localized to a specific area
- Man-made disasters...
- Whenever requested by the EOC

The PSA Process

1. Once the shaking stops...

Take care of yourself...

... your family

- Determine the condition of your family; apply first aid if necessary.
- Determine the structural soundness of your home; evacuate if necessary.

... 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.

The PSA Process

2. Collecting the data...

Collect information on...

- Injuries
- Structure damage
- Fires
- Hazards
- Access

using...

- COES 105 Situation Status / PSA (Preliminary Safety Assessment) Form

COES 105 Situation Status / PSA Form

Rev 090519 For use by Organized Neighborhoods, CARES Preliminary Safety Assessment

Assessment Date/time:			Street:	
Performed by:			Between: _____ and _____	
Command Post Location:			Map Grid (Chamber Map): _____	
			Number of Units Surveyed: _____	
Ref	Category	Subcategory	Count	Notes/Addresses (use back of page if n
1.1	Injuries, Minor	Able to walk away from the incident		
1.2	Injuries, Delayed	Regular breathing, and Capillary refill <2 sec, and Answers questions, responds to commands		Address: _____
1.3	Injuries, Immediate	Rapid Breathing >30/min, or capillary refill >2 sec, or Confused, disoriented OR TRAPPED		Address: _____
1.4	Injuries, Presumed Dead	Unconscious, no respiration		Address: _____
2.1	Structure, Light Damage	• Superficial Damage • Broken Windows • Cracked or fallen plaster • Main damage is to contents		
2.2	Structure, Moderate Damage	• Large amount of cracking on exterior • Small cracks around doors and foundations • No outward sign of structural damage		Address: _____
2.3	Structure, Heavy Damage	• Partial or full collapse • Building is off foundation • Structural damage to the building		Address: _____
3.1	Fire	Fire, Any situation, note if extinguished		Address: _____
4.1	Hazards	Gas Leaks		Address: _____
4.2	Hazards	Sewer Leaks		Address: _____
4.3	Hazards	Water Main Breaks		Address: _____
4.4	Hazards	Electrical Power, Lines Down. Power in the neighborhood?		
5.1	Access	Roads blocked Other Obstructions		
Status Report Logged? (Initials)			Rollup _____	
Doc Unit Logged COES103 _____	OPS Desk Logged COES104 _____	Doc Unit Completed COES103 _____		

<http://www.cupertinoares.org/ccc/forms.html>



[About Cupertino Citizen Corps](#) | [Links](#) | [Forms](#) | [Training](#) | [Pandemic](#)

The following forms are used by Cupertino ARES/RACES, Cupertino's CERT, and MRC teams when responding to events throughout the city. All forms below are in PDF format. For a source copy of the forms, please contact kn6pe @ arrl.net.

Form Name	Version
CERT / Ark Forms	
COES100 - Org Chart	May-2008
COES101 - Assistance Request	080519
COES102 - Help Desk Control No Assignment Log	8.080405 ... UP
COES103 - Planning & Intel Section Event Log	080519
COES104 - Operations Section Event Log	080519
COES105 - Situation Status / PSA	080519
COES106 - Situation Status Rollup / Tracking	080519
COES107 - T-Card (Cupertino version)	
COES108 - Missing Person Form	6.060504
COES121 - Check-in/Check-out	
COES122 - Inventory Form	
COES123 - Logistics Order Form	
COES134 - Logistics Receipt Form	



<http://www.cupertinoares.org/ccc/forms.html>



[About Cupertino Citizen Corps](#) | [Links](#) | [Forms](#) | [Training](#) | [Pandemic](#)

The following forms are used by Cupertino ARES/RACES, Cupertino's CERT, and MRC teams when responding to events throughout the city. All forms below are in PDF format. For a source copy of the forms, please contact kn6pe @ arrl.net.

Form Name	Version
ARES/RACES Forms	
COES201 - Net Control Log	060722
COES105 - Preliminary Safety Assessment, Field	080519
COES204 - Preliminary Safety Assessment, Rollup	060722
COES205 - Infrastructure Safety Assessment, Rollup	071114
COES210 - After Action Report Format	060722
MRC Forms	
COES109 - Patient Registration Log	090801
COES110 - Patient Care Report	0508 ... 
COES111 - Minor Injury Form	090801
COES112 - Logistics Report	1.0608 ... 
COES113 - Secondary Assessment Worksheet	1.0508 ... 
ICS206 - Medical Plan	BASARC 3/98
NHAMCS-100 - Ambulatory Medical Care	8-18-2004



<http://www.cupertinoares.org/ccc/forms>



[About Cupertino Citizen Corps](#) | [Links](#) | [Forms](#) | [Training](#) | [Pandemic](#)

The following forms are used by Cupertino ARES/RACES, Cupertino's CERT, and MRC teams when responding to events throughout the city. All forms below are in PDF format. For a source copy of the forms, please contact kn6pe @ arrl.net.

Form Name	Version
General Use Forms	
ICS201 - Incident Briefing (short form)	060307
ICS201 - Incident Briefing (page 1 , page 2 , page 3 , page 4)	BASARC 3/98
ICS202 - Incident Objectives	7/06
ICS204 - Assignment List	7/06
ICS205 - Incident Radio Communications Plan	060307
ICS207 - Organization Chart	BASARC 3/98
ICS211B - Check-in Log	080521
ICS213 - Message Form	
ICS213 - Message Form, Santa Clara County RACES	06/28/07 ... 
ICS214 - Unit Log (print 1st 2 pages only)	060722
ICS214a-OS - Personal Unit Log (print 1st 2 pages only)	000601 ... 
ICS219 - T-Card	
SAR100 - General Briefing, Generic Incident	BASARC 1/96
SAR100a - General Briefing, Missing Person	BASARC 1/96
SAR104 - Team Assignment	BASARC 1/96
SAR110 - Team Debriefing	BASARC 1/96
SAR132 - Urban Interview Log	BASARC 1/96

COES 105 Situation Status / PSA Form

Rev 080519 For use by Organized Neighborhoods, CARES Preliminary Safety Assessment

Control No: _____

Assessment Date/time: _____ Street: _____
 Between: _____ and: _____

Performed by: _____ Map Grid (Chamber Map): _____

Command Post Location: _____ Number of Units Surveyed: _____

Ref	Category	Subcategory	Count	Notes/Addresses (use back of page if necessary)
1.1	Injuries, Minor	Able to walk away from the incident		
1.2	Injuries, Delayed	Regular breathing, and Capillary refill <2 sec, and Answers questions, responds to commands		Address: _____
1.3	Injuries, Immediate	Rapid Breathing >30/min, or capillary refill >2 sec, or Confused, disoriented OR TRAPPED		Address: _____
1.4	Injuries, Presumed Dead	Unconscious, no respiration		Address: _____
2.1	Structure, Light Damage	<ul style="list-style-type: none"> • Superficial Damage • Broken Windows • Cracked or fallen plaster • Main damage is to contents 		
2.2	Structure, Moderate Damage	<ul style="list-style-type: none"> • Large amount of cracking on exterior • Small cracks around doors and foundations • No outward sign of structural damage 		Address: _____
2.3	Structure, Heavy Damage	<ul style="list-style-type: none"> • Partial or full collapse • Building is off foundation • Structural damage to the building 		Address: _____
3.1	Fire	Fire, Any situation, note if extinguished		Address: _____
4.1	Hazards	Gas Leaks		Address: _____
4.2	Hazards	Sewer Leaks		Address: _____
4.3	Hazards	Water Main Breaks		Address: _____
4.4	Hazards	Electrical Power, Lines Down. Power in the neighborhood?		
5.1	Access	Roads blocked Other Obstructions		

Status Report Logged? (Initials) _____ Rollup _____
 Doc Unit Logged _____ OPS Desk Logged _____ Doc Unit Completed _____
 COES103 _____ COES104 _____ COES103 _____

The PSA Process

2. Collecting the data... filling out the form

COES 105 Situation Status / PSA Form

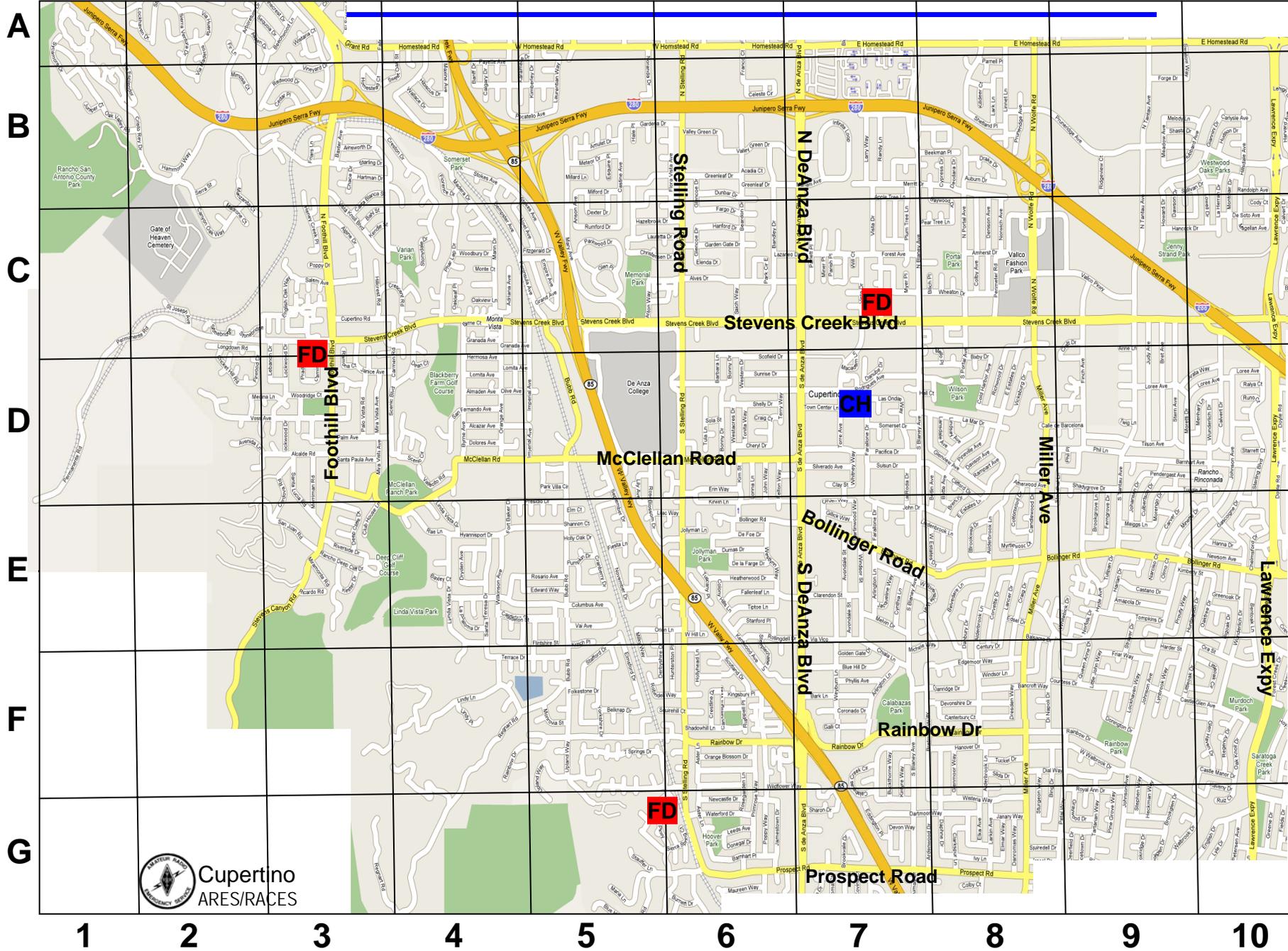
Rev 080519 For use by Organized Neighborhoods, CARES Preliminary Safety Assessment

Control No:

Assessment Date/time: <i>2/6/10 8:45am</i>	Street: Between: _____ and: _____
Performed by: <i>Jim o kn6pe</i>	Map Grid (Chamber Map): <i>G5</i>
Command Post Location:	Number of Units Surveyed: <i>24</i>

Header

Date/Time	When you performed the PSA
Performed by:	This is you
Command Post Location:	Use if you are part of an Ark deployment. Otherwise, leave blank
Street: Between... and:	Use if you are part of an Ark deployment. Otherwise, leave blank
Map Grid:	Use your Chamber of Commerce map for the grid where you are operating
Number of units.	This is the survey size of the houses you checked.
Control No:	Use if you are part of an Ark deployment. Otherwise, leave blank



 Cupertino
ARES/RACES

The PSA Process

2. Collecting the data... Category refresher

- **Simple Triage and Rapid Treatment – START**
- RPM..
 - Respiration
 - Profusion
 - Mental status
- Hand-marking status...
 - M – minor
 - D – delayed
 - I – Immediate
 - X – presumed dead

Ref	Category	Subcategory
1.1	Injuries, Minor	Able to walk away from the incident
1.2	Injuries, Delayed	Regular breathing, and Capillary refill <2 sec, and Answers questions, responds to commands
1.3	Injuries, Immediate	Rapid Breathing >30/min, or capillary refill >2 sec, or Confused, disoriented OR TRAPPED
1.4	Injuries, Presumed Dead	Unconscious, no respiration

The PSA Process

2. Collecting the data... Category refresher

- **Damage Assessment**

- Light damage
- Moderate damage
- Heavy damage

2.1	Structure, Light Damage	<ul style="list-style-type: none">• Superficial Damage• Broken Windows• Cracked or fallen plaster• Main damage is to contents
2.2	Structure, Moderate Damage	<ul style="list-style-type: none">• Large amount of cracking on exterior• Small cracks around doors and foundations• No outward sign of structural damage
2.3	Structure, Heavy Damage	<ul style="list-style-type: none">• Partial or full collapse• Building is off foundation• Structural damage to the building

The PSA Process

2. Collecting the data... Category review

- **Fire, Hazards, Access**

- *What you see*
- *What you hear*
- *What you smell*

3.1	Fire	Fire, Any situation, note if extinguished
4.1	Hazards	Gas Leaks
4.2	Hazards	Sewer Leaks
4.3	Hazards	Water Main Breaks
4.4	Hazards	Electrical Power, Lines Down. Power in the neighborhood?
5.1	Access	Roads blocked Other Obstructions

The PSA Process

2. Collecting the data... filling out the form

Ref	Category	Subcategory	Count	Notes/Addresses (use back of page if necessary)	
1.1	Injuries, Minor	Able to walk away from the incident	### ///		8
1.2	Injuries, Delayed	Regular breathing, and Capillary refill <2 sec, and Answers questions, responds to commands		Address:	0
1.3	Injuries, Immediate	Rapid Breathing >30/min, or capillary refill >2 sec, or Confused, disoriented OR TRAPPED	///	Address: 541 Woodhill court 2671 Pinebrook Ct 965 Evening Springs Court	3
1.4	Injuries, Presumed Dead	Unconscious, no respiration		Address:	0
2.1	Structure, Light Damage	<ul style="list-style-type: none"> • Superficial Damage • Broken Windows • Cracked or fallen plaster • Main damage is to contents 	### ### /		11

Main Section

The Count	Indicate the number of encounters that meet this criteria
Notes/Addresses	For Life-threatening or property-threatening, list the addresses

Note: When done, total up each block and write the number “somewhere” for easy reporting.



The PSA Process

2. Collecting the data... filling out the form

5.1	Access	the neighborhood: Roads blocked Other Obstructions		
Status Report Logged? (Initials)		Doc Unit Completed		Rollup _____
Doc Unit Logged COES103		OPS Desk Logged COES104	COES103	

Footer

Status Report Logged?	Use if you are part of an Ark deployment. Otherwise, leave blank.
Roll-up	Use if you are part of an Ark deployment. Otherwise, leave blank

The PSA Process

3. Check into the Net

- Turn on your radio and listen.
- If you are the first person on the frequency and have the capability to perform as an Net Control Operator, establish the CARES Emergency Net, or...
- Check in to the net when check-ins are requested.

The PSA Process

4. Prepare your Message

- *Message ID* -- Assigned by the Net Control Operator
- **Precedence** -- determines the urgency of the message (Emergency, Urgent, Routine, Health & Welfare)
- *Destination* -- If omitted, deliver to EOC Planning or Ops Section
- *Date/Time* -- Time the message was created. If omitted, receiving station enters the Date/Time the message was received.
- *Subject* – If omitted, “PSA”
- **The Message** -- PSA Report... numbers only
if you have Emergency Traffic... nature and location

Message Handling

4a. Precedence (Priority)

- **Emergency** -- Life-threatening: Situations, reports, and updates that might directly result in deploying or prioritizing resources for an incident involving life-saving efforts. When in doubt, **DO NOT** use this designation.
- **Urgent** -- Property threatening: Situations and reports of new threats, revised flood projections, wind direction changes in a major fire, and reports of additional damage from earthquake aftershocks suggesting additional rescue efforts or surveillance.
- **Routine** – PSA reports, correspondence between agency representatives, material and logistics messages, routine resource requests, shift planning, relief requests, etc.
- **Health & Welfare** -- Includes welfare inquiries

Message Handling

4b. Precedence (Priority)

Handling Mixed Urgency Messages

- If you have a mix of different message priorities, deliver the specific message priority (EMERGENCY and URGENT) when called.
- Deliver the balance of the report (ROUTINE and Health and Welfare) when called.

Message Handling

What it sounds like - *Sending Emergency Traffic*

- NCS:** *Is there any EMERGENCY Traffic for the net?*
- KN6PE:** “Net Control, this is KN6PE with EMERGENCY Traffic for the EOC”
- NCS:** *KN6PE acknowledged. EOC, are you ready to copy emergency traffic?*
- EOC:** “EOC is ready”
- NCS:** *KN6PE, your message number is 29. Send your traffic to the EOC.*
- KN6PE:** “EOC, This is KN6PE with EMERGENCY Traffic, message #29. Break”
- EOC:** “OK, Continue”
- KN6PE:** Message is: House fire at numerals 5 4 1 Woodhill Court. Break”
- EOC:** “OK, Continue”
- KN6PE:** “One person trapped inside. Break”
- EOC:** “OK, Continue”
- KN6PE:** “Area water pressure is low. End of Message. This is KN6PE”
- EOC:** “Acknowledged. This is EOC, K6FJC back to net.”
- NCS:** *This is KD6TQJ, Net Control for the Cupertino Emergency Net. Other stations with emergency traffic, please identify now.*

Message Handling

What it sounds like - *Sending a PSA Report*

- KN6PE:** “Net Control, this is KN6PE with PSA Traffic for the EOC”
- NCS:** *KN6PE acknowledged. EOC, are you ready to copy PSA traffic?*
- EOC:** “EOC is ready”
- NCS:** *KN6PE, your message number is 30. Send your traffic to the EOC.*
- KN6PE:** “EOC, This is KN6PE with PSA Traffic, message #30. Break”
- EOC:** “OK, Continue”
- KN6PE:** PSA Message is: Section 1 is 8, 0, 3, 0. Break”
- EOC:** “OK, Continue”
- KN6PE:** “Section 2 is 11, 5, 1. Break”
- EOC:** “OK, Continue”
- KN6PE:** “Section 3 is 1. Break”
- EOC:** “OK, Continue”
- KN6PE:** “Section 4 is 1, 0, 3, 1. Break”
- EOC:** “OK, Continue”
- KN6PE:** “Section 5 is 0. Number of houses surveyed is 24. Map coordinate is G5. End of Message. This is KN6PE”
- EOC:** “Acknowledged. This is EOC, K6FJC back to net.”
- NCS:** *This is KD6TQJ, Net Control for the Cupertino Emergency Net. Other stations with any traffic, please identify now.*

COES 106 Situation Status - PSA Rollup/Tracking Form

Rev 090519 For use by Organized Neighborhoods, Cupertino Arks, CARES EOC

Closed Date/Time:										
Submitted by:										
Call Sign:		<i>kd6gpp</i>	<i>kn6pe</i>							
Report Control No:										
Message ID:		<i>28</i>	<i>30</i>							
Time Received:		<i>0912</i>	<i>0915</i>							
Map Grid:		<i>B3</i>	<i>G5</i>							
Number of homes surveyed:		<i>12</i>	<i>24</i>							
Ref	Category									
1.1	Injuries, Minor	<i>3</i>	<i>8</i>							
1.2	Injuries, Delayed	<i>2</i>	<i>0</i>							
1.3	Injuries, Immediate OR TRAPPED	<i>1</i>	<i>3</i>							
1.4	Injuries, Presumed Dead	<i>0</i>	<i>0</i>							
2.1	Structure, Light Damage	<i>5</i>	<i>11</i>							
2.2	Structure, Moderate Damage	<i>1</i>	<i>5</i>							
2.3	Structure, Heavy Damage	<i>0</i>	<i>1</i>							
3.1	Fire, Any situation	<i>0</i>	<i>1</i>							
4.1	Gas Leaks	<i>3</i>	<i>1</i>							
4.2	Sewer Leaks	<i>1</i>	<i>0</i>							
4.3	Water Main Breaks	<i>1</i>	<i>3</i>							
4.4	Electrical Power,	<i>0</i>	<i>1</i>							
5.1	Roads blocked	<i>0</i>	<i>5</i>							
Info passed to City by:				Date/Time						
Received by:										

What happens at the EOC?

1. Net Control Operator directs PSA traffic to the RRO
2. Radio Room Operator receives and records the PSA reports
3. Rolled up reports are delivered to P&I Section in the EOC
4. The EOC uses this data to assess if there are particular portions of the city worse off than others.

Preliminary Safety Assessment

How do we do it? - Initial Response Ops

