After Action Report
2006 S.E.T. Infrastructure Safety Assessment

Cupertino Citizen Corps
Cupertino ARES/RACES

1. Overview

Description:	Simulated Emergency Test
Event Date:	4 November 2006
Report Date:	18 November 2006
CARES Event:	CUP-06-29T
RACES Event:	CUP-06-29T
Control:	City of Cupertino OES
Report Revision:	1.0
Submitted By:	Jim Oberhofer/CARES

Requirements for Reporting

Completing an After Action Report is part of the required SEMS reporting process. The Emergency Services Act, Section 8607 (f) mandates that the Office of Emergency Services (OES) in cooperation with involved state and local agencies complete an After Action Report within 120 days after each declared disaster. Section 2450 (a) of the SEMS Regulations states that, "Any city, city and county, or county declaring a local emergency for which the governor proclaims a state of emergency, and any state agency responding to that emergency shall complete and transmit an after action report to OES within ninety (90) days of the close of the incident period as specified in the California Code of Regulations, section 2900(j)."

Additionally, CARES will use the After Action Report format for documenting training drills and exercises.

1. Introduction and Background

Terms

ARK	Fixed position shipping containers placed throughout the City that contain emergency supplies for the purpose of supporting community-based search and rescue, and first aid.
CARES:	Cupertino Amateur Radio Emergency Service, ARES/RACES organization supporting the City of Cupertino.
CCC:	Cupertino Citizens Corps, the reference to Cupertino OES volunteers from the CARES, CERT, and MRC organizations.
CERT:	Community Emergency Response Team, Cupertino volunteers who have completed FEMA's CERT training.
ISA:	Infrastructure Safety Assessment, procedure performed by City volunteers to confirm the state of key structures throughout the city.
MRC:	Medical Reserve Corps, Cupertino volunteers who have elected to pursue an emergency medical certification.
NCO:	Net Control Operator
PSA:	Preliminary Safety Assessment, a home-based assessment that develops a quick snapshot of the state of the city based on the distribution of CARES members.

Introduction

The Simulated Emergency Test is an annul exercise in which CARES and other members of the Cupertino Citizen Corps participate. CARES participated in the 2006 S.E.T. with a full field communications

deployment to test new processes specific to the CARES mission. The purpose of this exercise was to perform an Infrastructure Safety Assessment, and test the Resource Net Management procedures.

An Infrastructure Safety Assessment (ISA) is a cursory check of key facilities and structures within the City of Cupertino that are deemed critical to the EOC. Infrastructure assets of interest include (but not limited to) water, sanitation, power, overpasses, etc. The list that is ultimately surveyed by Cupertino Volunteers will be identified ahead of time by the OES Director.

Additionally, the S.E.T. supported CCC members to set up the ARKs (container-based equipment and supply caches) as a familiarization exercise.

On 4-November, the City initiated a Training Activation under the designation CUP-06-29T.

This report covers the activities undertaken by responding CARES during this event and the associated findings.

2. Type/location of Event / Drill / Exercise

Event Type: City of Cupertino, CARES Training Activation
Event Identifier: CUP-06-29T
Event Name: 2006 Simulated Emergency Test
Location: City of Cupertino

3. Description of Event / Drill / Exercise

The following 3 CARES objectives were developed for this exercise.
1.   Test the Infrastructure Safety Assessment (ISA) procedure.
2.   Test the Resource Net concept and procedures.
3.   Test the field responder tracking procedures.

All 3 objectives were satisfied, and are further described below.

Event resources came from the following organizations:
1.   Cupertino ARES/RACES: Responsible for staffing the City's EOC radio room, resource net control position, message net control position, and field communications resources. Fifteen (15) CARES members participated.

2.   CERT: Responsible for staffing and opening the ARKs. An unknown number of CERT members participated.

The simulated event was a 7.5 earthquake that occurred in the San Francisco South Bay with the drill starting 3 hours into the event. Prior to starting the drill, the following assumptions were stated:
▪ CARES members just completed and reported their PSAs
▪ the EOC Radio Room was staffed with a Radio Room Operator and Shift Supervisor
▪ the balance of participating CARES members were at their homes
▪ CARES members previously checked into the Emergency (Resource) net

Once the drill was initiated, CARES members were polled on the Emergency (Resource) Net for their availability for a field assignment.

Ten ISA Assignment Packages were staged at the 3 city-based Santa Clara County Fire Stations. Each ISA Assignment Package contained between 1 and 5 specific assignments (a description of an infrastructure asset to be assessed).

CARES members were dispatched in teams of 2 to retrieve an assignment package and perform the assessment based on the package's contents. On completing an assessment, the results of each assessment was radioed back to the EOC. On completion of the final assessment, the field assignment was completed.

As a member was assigned to pick up an ISA Assignment Package, they remained on the Resource net until arriving at the fire station to which they were directed. At that point, the field team was directed to check out of the Resource Net and Check into the Message Net. The field team stayed on the Message Net for the duration of the Assignment. On completion of the assignment, the field team was directed to check out of the Message Net and check back into the Resource Net for further assignment.

CARES Field Responders used the following information as part of the drill:
▪ ISA Assignment Packages – Contained the following: (i) ICS-214 Unit Log, (ii) ISA Control Log, (iii) ISA Field Assignment Checklist, and (iv) one or more ISA Assignment Sheets. Ultimately, the ISA Assignment Packages will be permanently staged in secure locations throughout the City.

4. Chronological Summary of Event / Drill / Exercise
Describe the sequence of events, and note-worthy occurrences, and other relevant information.

All events took place at the dates and times listed. All times are in local time (PST). The list of events described here was derived from various event logs maintained by emergency responders.

Saturday, 4-November-2006

Time	Description, Note, Comments
0830	Jim KN6PE requested permission from Marsha Hovey/Cupertino OES Director to activate CARES for the SET. Marsha granted permission under activation number CUP-06-29T.
0900	Bill KD6TQJ opens the drill and took member check-ins. All check-ins complete. The following members checked into the net. Andrew KI6DRD Paul KI6DRN Carl KI6FGR Leroy KG6OGA Jack K6OQO Jim KN6PE Chris KC6PJJ Allan KD6QPP Eric KG6QPT Kevin WB6S Bob KD6US Fari KG6UVS Skip WA6VFD Phil KD6WG
0910	KN6PE provided the background to the event (a 7.5 earthquake event took place 3 hours ago, all members just completed and transmitted their PSAs).
0912	KN6PE assumed Shift Supervisor. KC6PJJ assumed the role of Radio Room Operator. KN6PE requests that another Radio Room Operator be dispatched to the EOC, and directs NCO to poll for field availability.
0920	First Assignments are made on the Resource Net.
0935	KG6QPT reports for Radio Room Operator Duty. KC6PJJ assumes the Message NCO position.
0936	KG6OGA arrives at Cupertino Fire to pick up ISA Assignment package #7
0938	WB6S arrives at Monta Vista Fire to pick up ISA Assignment package #1
0938	WA6VFD arrives at Monta Vista Fire to pick up ISA Assignment package #10
0938	K6OQO arrives at Monta Vista Fire to pick up ISA Assignment package #9. Pairs up with WA6VFD to handle both packages

Time	Description, Note, Comments
0940	KD6QPP arrives at Monta Vista Fire to pick up ISA Assignment package #2. Pairs up with WB6S to handle both packages.
0945	KI6DRN arrives at Cupertino Fire to pick up ISA Assignment package #6. Pairs up with KG6OGA to handle both packages.
0953	KI6FGR assigned the frequency guard on KCBS 740 AM
1001	ISA Assignment Packages: ISA#1, 2 Report sent
1010	ISA Assignment Package: ISA#6 Report sent
1011	ISA Assignment Package: ISA#10 Report sent
1014	KI6DRD and KI6FGR arrives at Cupertino Fire to pick up ISA Assignment package #8.
1015	Sent Packet message to County announcing CARES ARES/RACES Earthquake Drill.
1021	ISA Assignment Package: ISA#4 Report sent
1021	ISA Assignment Package: ISA#7 Report sent
1022	ISA Assignment Package: ISA#8 Report sent
1026	KI6DRD and KI6FGR assigned to pick up ISA Assignment package #4.
1028	ISA Assignment Package: ISA#9 Report sent
1035	WA6VFD and K6OQO assigned to pick up ISA Assignment package #3.
1038	ISA Assignment Package: ISA#3 Report sent
1038	Processed simulated special request from School District to check out Monta Vista High School, Kennedy Middle School.
1045	KD6QPP assigned to check out Monta Vista High School, Kennedy Middle School.
1050	Resource Net directed all participants to return to City Hall for Debrief
1051	School checkout complete, Report sent
1055	Secured the Message Net. Secured the Resource Net.
1100	Secured the Drill
1110	Begin debrief
1220	Debrief complete

5. Response at SEMS Levels (as appropriate):

Include a summary, conclusions, the field response, and other local, operational area, regional, state or federal response.

Specific objectives that were met were:

Objective #1. Test the Infrastructure Safety Assessment (ISA) procedure.… **successful**.
Ten CARES members were deployed into the field it teams of 2. They all found their assigned ISA Assignment Packages, confirmed the integrity of the package envelopes, found their assignments, and reported the conditions to the EOC. On average, it took less than a minute for each ISA report to be passed. The ISA Control Log provided a history of their findings. Some ISA Assignment Sheets were updated with logistical information.

Objective #2. Test the Resource Net concept and procedures... **successful**. Four members staffed 2 net control positions, 1 Radio Room Operator position, and the Shift Supervisor. The Shift Supervisor passed assignment requests to the Resource Net Operator who, in turn, assigned eligible CARES members on the Resource Net to an assignment. The Field Responders stayed on the Resource Net until they arrived at one of the 3 fire stations, checked out of the Resource Net, and Checked into the Message Net. Field Responders then stayed on the Message Net until their assignment was complete at which point, they returned to the Resource Net for subsequent assignment.

Objective #3. Test the EOC field responder tracking procedures … **marginal success**. While the Resource NCO had a good understanding of what resources were assigned where, the EOC listened to the resource net as a means for understanding what assignments were being made. Updates to the EOC resource tracking board was not smooth, and the general information flow around resource tracking was not correctly followed.

6. Interacting Systems, Agencies, and Programs:

Include mutual aid systems (law enforcement, fire/rescue, medical, etc.); cooperating entities (utilities, American Red Cross, Sheriffs Office, City Departments, etc.); telecommunications and media interactions.

Cupertino OES. While the Cupertino EOC was not activated, CARES interacted with the Cupertino OES Director during the drill on drill and simulation issues. Message Traffic was passed on behalf of the City.

San Jose Water. CARES interacted with the San Jose Water Company Emergency Preparedness Superintendent during the drill to provide a briefing on the S.E.T.

County OES. County OES was not activated; No participation was required.

Communications Systems. CARES operated the Resource Net on CARES TAC-1 (147.570s) and the Message Net on CARES TAC-2 (146.460s). Test packet messages were sent to Santa Clara County EOC on 226.230. No other channels were used.

7. Improvements, Conclusions, Recommendations:

As applicable, include a description of actions taken, assignments, associated costs or budget, timetable for completion or correction, and follow-up responsibility.

The following is a summary of the key Improvements, Conclusions, and Recommendations.

What worked well?
- Good cross-net resource management. We didn't loose anyone with the field responder handoffs between the nets. Field Responders returned to the Resource Net after the Message Net.
- Good understanding of what it really takes to do real people movement and the time/effort to perform ISAs.
- Tactical calls worked well.
- Good best practices developed to perform the ISAs

What didn't work or needs improvement?
- Some messages were sent too fast. Had to be reminded about using Breaks, 5 words per transmission.
- Field Responders were not initially assigned in teams.
- Several comments on the requirements for 2 person field teams including: "didn't know a buddy was required", "could have brought his spouse as his built-in buddy". Also, 2-person team assignments need clarification, such as one driver and one record/radio operator.
- Could not find an ISA site (a power station) from the picture and map.

Recommendation
1. Infrastructure Safety Assessment. Overall, the exercise demonstrated that the ISA methodology will work. Additional process refinements need to be developed to improve field responder efficiencies and access to the ISA assignment locations.

> 1.1 RECOMMENDATION: Need update to EOC forms:
> (i) EOC/ISA Assignment Tracking Form: manages what ISAs were assigned and completed
> (ii) Add a map with all Assignments in an Assignment package listed. Included a suggested route to approach
> (iii) Update all forms with official COES reference designators

> 1.2 RECOMMENDATION: For a truly devastating event, roads may be impassable (I-280, Rt-85 overpass collapses). Need to determine the feasibility and potential of deploying ISA (and others) responders by bicycle.

> 1.3 RECOMMENDATION: Determine if there is a set of infrastructure assets that should not be controlled by ISA (low security: i.e.: overpasses, etc).

2. Message Net Management. Overall, resource handoffs between nets worked out very well. The next step is to look for opportunities to improve resource management around planning resources and making assignments.

> 2.1 RECOMMENDATION: Resource Management is more than the net. Need to determine the staffing required to manage all aspects of resource management (Resource Manager scribe/admin support, etc.).

> 2.2 RECOMMENDATION: Refine Resource Net procedure to help determine the closest Field Responder to an assignment. What questions to ask, what tracking tools are needed, etc.

> 2.3 RECOMMENDATION: Need to deploy in at least teams of 2. Determine if a "built-in buddy" is available. Tools for developing pairs of responders based on their location. Need procedure to allocate CERT members from the City volunteer pool.

> 2.4 RECOMMENDATION: Need procedure to allocate CERT members from the City volunteer pool.

> 2.5 RECOMMENDATION: General procedural improvements:
> (i) Develop better system to assign and track teams
> (ii) determine need for net scripts, announcements, etc.

3. Test the EOC field responder tracking procedures. We haven't spent enough time on this in the EOC. While the general concepts are understood, we have not had enough practice tying it all together.

> 3.1 RECOMMENDATION: hold a table-top review of EOC Resource Tracking.

> 3.2 RECOMMENDATION: in the EOC, the flexible resource tracking card-holder is .too tight for the cards. Also, need hooks for the holder, not tacks. Need to change cards, card-holder, or approach.

4. Other General recommendations.

> 4.1 RECOMMENDATION: EOC Shift Supervisor radio, receive is desensed when message NCO transmitted. Investigate increasing the separation on these antennas.

8. Training Needs

> 1. Plan a table-top exercise for EOC Resource Management and tracking.

9. Recovery Activities (as applicable)

Recovery Activities were limited Emergency Net and EOC shutdown.

10. References: Notes, maps, charts, training materials, etc.

The ISA EOC Control Log, ISA Field Control Log, EOC Assignment Log, and Message Net Log are attached for reference.

End of Report

ISA Field Control Log

Cupertino Amateur Radio Emergency Service   Standard Operating Procedures
PART 5 Checklists

COES xxx ISA CONTROL LOG	1. Incident Name ISA6		2. Incident Date : 11-4-06	
3. ISA Assignment Set Number: 6		4. Setup Date: 11/3/06		
ISA Assignment ID	5. Assigned to:	6. Assigned Date/Time	7. Condition (OK/Discrepancy)	8. Reported Date/Time
TRANS-93	I.S.A.6	0947	OK	1012
TRANS-94	,,	0949	OK	,,
TRANS-95	,,	0950	OK	,,
TRANS-96	,,	0959	OK	,,
TRANS-97	,,	1010	OK	,,

9. **Discrepancy** (List ISA Assignment, description of deviation)

None

ICS XXX	PREPARED BY	APPROVED BY	DATE	TIME

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EOC ISA Roll-up Log

Cupertino Amateur Radio Emergency Service   Standard Operating Procedures
PART 5 Checklists

COES xxx ISA EOC ROLLUP LOG	1. Incident Name CUP-06-29T		2. Incident Date: 11/4/2006			
Assignment ID	Assignment Set Number	3. Report By:	4. Reported Date/Time	5. Condition (OK/Discrepancy)		
1. POWER-43	3				CUP	F
2. POWER-44	3				CUP	F
3. POWER-45	2	WB6S	10:31	OK Limited Vis	MV	P
4. SAN-47	3				CUP	F
5. SAN-50	4	KI6FGR	10:38	OK	SEVEN	S
6. SAN-52	7	K6GOGA	10:21	OK	CUP	F
7. SAN-53	3				CUP	P
8. SAN-54	1	WB6S	10:00	OK	MV	F
9. SAN-55	1	WB6S	10:00	OK	MV	F
10. SAN-56	1	WB6S	10:00	OK	MV	F
11. SAN-57	2	WB6S	10:00	OK	MV	F
12. SAN-58	2	WB6S	10:00	OK	MV	F
13. SAN-59	9	K6OQO	10:28	OK	MV	F
14. STREAM-84	10	WA6VFD	10:11	OK	MV	F
15. TRANS-93	6	KI6DRN	10:10	OK	CUP	F
16. TRANS-94	6	KI6DRN	10:10	OK	CUP	F
17. TRANS-95	6	KI6DRN	10:10	OK	CUP	F
18. TRANS-96	6	KI6DRN	10:10	OK	CUP	F
19. TRANS-97	6	KI6DRN	10:10	OK	CUP	F
20. TRANS-98	8	KI6FGR	10:22	OK	CUP	F
21. TRANS-99	8	KI6FGR	10:22	OK	CUP	F
22. TRANS-100	2	WB6S	10:30	OK	MV	F
23. TRANS-101	8	KI6FGR	10:22	OK	CUP	F
24. TRANS-102	4	KI6FGR	10:39	OK	SEVEN	S
25. TRANS-103	4	KI6FGR	10:39	OK	SEVEN	S
26. TRANS-104	3				CUP	F
27. WATER-121	5				SEVEN	S
28. WATER-122	5				SEVEN	S
29. WATER-123	5				SEVEN	S

MVHS
Kennedy

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                                    "   "   "

ISA / EOC Assignment Log
(Improvised)

Cupertino Amateur Radio Emergency Service
PART 5 Checklists

Standard Operating Procedures

30. WATER-124					
7. Discrepancy (List ISA ID, description of deviation)					

1   MV FIRE   (3)   UBES   ✓   Done

2   MV FIRE   (3)   QPP   ✓   Done

3   CUP FIRE   (4)   DRD

4   SEVEN SPRINGS   (3)   DRD/FGR   Done

5   SS FIRE   (4)

6   CUP FIRE   (5)   DRD   ∕   Acvl

7   CUP FIRE   (1)   G6A   ✓   Done

8   CUP FIRE   (3)   OVERPASS   DRD/FGR   Done

P   MV FIRE   (1)   SAN   QQ0   ✓   Acvl   Acvl

10   MV FIRE   (1)   DAM   VFD   ✓   Acvl   Done

Told 7 stations, 5 cal.

FGR

MV HS -
KENNEDY.

ICS XXX	PREPARED BY	APPROVED BY		DATE	TIME

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Message Net Control Log

Cupertino Amateur Radio Emergency Service   Standard Operating Procedures
PART 6 Forms

0200F NCS LOG	1. INCIDENT NAME CUP-06-29T			2. DATE 11/4/06	
(3) Msg ID	(4) Priority	(5) Time in	(6) Originating Station	(7) Receiving Station	(8) Time Ack
1	URGENT	0947	OQO	RR	0951
2	ROUTINE	0955	RR	VALLCO ARR	0956
3	ROUTINE	1000	RR	VALLCO ARK	1001
4	JSA	1004	JSA1	RR	1005
5	~~UUS~~	1008	UUS	RR	1008
6		1009	SS	UFD	1009
7		1000	SS	WBGS	1011
8	ROUTINE	1011	RR	UUS	1012
9	R	1012	JSA6	RR	1013
10	R	1014	JSA10	RR	1015
11	R	1023	JSA6	RR	1025
12	R	1027	JSA8	RR	1028
13	R	1030	UUS	UUS	1034
14	R	1032	JSA10	RR	1032
15	R	1033	JSA1	RR	1036
16	R	1043	JSA4	RR	1043
17	R	1055	RR	VALLCO	1055
18	R	1055	QPP	RR	1056

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