After Action Report
2009 May Ark Drill

Cupertino
ARES/RACES

1. Overview

Description: 2009 May CCC Drill
Event Date: 6 June 1009
Report Date: 16 June 2009
CARES Event: CUP-09-24T
RACES Event: CUP-09-24T
Control: Cupertino ARES/RACES
Report Revision: 1.0, **FINAL**
Submitted by: Jim Oberhofer KN6PE, Allan Gontang KD6QPP

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)."

CARES will follow this requirement for reporting the results and recommendations for this Training Event.

i. Introduction and Background

Terms

ARK: Fixed position shipping containers placed throughout the City by Cupertino OES that contain emergency supplies for the purpose of supporting community-based search, rescue, and first aid.

CARES: Cupertino Amateur Radio Emergency Service, ARES/RACES organization supporting the City of Cupertino.

CCC: Cupertino Citizen Corp, the collection of volunteer response organizations made up of CARES, CERT, and MRC

CERT: Community Emergency Response Teams

MRC: Medical Reserves Corp

NCO: Net Control Operator, may be indicated by M-NCO (Message Net) or R-NCO (Resource Net)

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.

RRO: Radio Room Operator

Introduction
CARES participated in a city-wide CCC Drill that included the activation of Cupertino Arks and the deployment of CARES members to support the activation. For CARES, this drill was an abbreviated field communications deployment exercise to test processes specific to CARES in support of the City-sponsored Ark sites. For CERT, this was an Ark activation and introduction of the Arks to Cupertino Block Leaders.

On 6 June 2009, the Cupertino OES Director authorized a training activation under the designation CUP-09-024T. This report covers the activities undertaken by responding CARES members with an emphasis on the interaction with the Ark sites. Other After Action Reports may be developed by other responder organizations.

ii. Type / Location of Event / Drill / Exercise

Event Type: City of Cupertino, CARES Training Activation
Event Identifier: CUP-09-24T
Event Name: 2009 May CCC Drill
Location: City of Cupertino

iii. Description of Event / Drill / Exercise

The Goals of this drill were:
1. Understand the requirements for end-to-end communications from CERT field teams to the EOC
2. Exercise ARES/RACES Communications functions, procedures, and processes that simulate the first 8 hours of an earthquake event

The following CARES objectives were developed for this exercise:
1. Activate communications at all Ark and Neighborhood locations
2. Exercise the CARES Message and Resource Net concepts and procedures
3. Use standard ICS and/or Cupertino OES forms and documentation
4. Deploy to and operate Packet Radio at specific field locations

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. Twenty (20) CARES members participated.

2. CERT: Responsible for activating all city Arks and establish the ICS command structure.

3. Block Leaders: Responsible for performing or simulating neighborhood Preliminary Safety Assessments and delivering these reports to their respective Ark site. An estimate of about 100 Block Leaders participated in the drill.

The simulated event was an earthquake of significant proportion that warranted opening the Arks. Start-of-Drill was at the point that (i) CARES members were checked into the emergency net and completed their PSAs, (ii) CERT members were responding to the Ark sites, and (iii) Block Leaders were performing the PSA in their respective areas. There were no pre-drill conditions imposed on drill participants.

Once the drill was initiated, the following occurred:
1. Member check-ins. CARES members checked into the CARES Emergency Net on TAC-1.

2. Field Response. CARES members were polled for their availability for a field deployment. Field deployment activities were limited to Ark operations.

Performance against Objectives:

1. Activate communications at all Ark and Neighborhood locations

Results: **NEEDS WORK**. The following Ark sites had some level of CERT and Block Leader response: Monta Vista, Seven Springs, Hyde, Garden Gate, Lawson, and DeAnza. Only 4 of the 7 Ark sites had CARES communications coverage: Monta Vista, Seven Springs, Hyde, and Garden Gate. There were no CARES fixed assignments for all Ark sites. Where communications was established, message traffic occurred with the EOC. Additionally, CARES members reported several distractions from the surrounding activities (fire trucks coming and going, CCC responders looking for answers, and insufficient Ark staffing). As a result, maintaining contact with Ark field responders was occasionally spotty.

2. Exercise the Resource Net concepts and procedures

Results: **SATISFACTORY**. CARES operated in a 2-net structure during the drill. Lessons learned from past drills were applied with positive results. Overall net operations were reported to be smooth and efficient. Hand-offs between the two nets occurred without problems. EOC operations initially made field assignments based on "listening in" on Resource Net check-ins and making assignments based on this information. Field Assignments were switched to T-Cards as part of the deployment clean-up.

3. Use standard ICS and/or Cupertino OES documentation

Results: **NEEDS WORK**. Where standard CARES forms were used, data collection appeared to go smoothly. However, emphasis was not placed on documentation prior to the drill, resulting in inconsistent unit log use. Block Leaders did submit PSA forms for their neighborhoods.

4. Deploy to and operate Packet Radio at specific field locations

Results: **DEFERRED**. This objective was deferred late in drill planning because of the need to focus on Ark communications activities.

The drill ran for about 2-1/2 hours. A debrief was held afterwards with all participating members.

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iv. Chronological Summary of Event / Drill / Exercise

All events took place on Saturday, 6 June 2009. All times listed here are in local time. This summary is a compilation of submitted ICS-214s, net control logs, and other logs.

Time	Description, Note, Comment
0855	EOC: Received permission to activate under Cupertino OES activation number CUP-09-24T.
0903	EOC: Activated the Emergency Net. KD6TQJ became NCS, operating from his home.
0915	The following CARES members checked into the CARES Emergency Net: KI6QXV K6FJC AI6CC KI6LDM WA6VFD KE6UVS KG6HRU KI6SYY WB2GDQ KI6VMX KG6OGA KD6QPP KD6TQJ KN6PE KI6WEI KI6WEJ KC6FGX AA1Q KI6HYS KE6YPK
0920	EOC: EOC began making field assignments
0920	Seven Springs Ark: KI6WEJ arrives at the Ark, 9 Block Leaders already present
0940	EOC: Dispatched Ken KI6SYY to unlock the Seven Springs Ark
0947	Seven Springs Ark: arrived. No access to the Ark
0950	Seven Springs Ark: KI6LDM arrived
0952	Seven Springs Ark: Ark key arrived
0953	Seven Springs Ark: KI6LDM checked into Tac 2

Time	Description, Note, Comment
1000	EOC: All field assignments made as follows: Monta Vista Ark — Paul KI6QXV, Andy AA1Q, Steve WB2GDQ Seven Springs Ark — Chris AI6CC, Darryl KI6LDM, Gerd KI6WEJ Garden Gate Ark — Daniel KI6WEI, Leroy KG6OGA,Hap KI6VMX Hyde Ark — Johnny KI6YPK Rover — KenKI6SYY EOC Operations — Bill KD6TQJ, Johan KC6FGX, Mark K6FJC, Allan KD6QPP, Jim KN6PE
1005	Seven Springs Ark: Urgent drill traffic passed to EOC
1015	EOC: Dispatched Mark K6FJC to unlock the Hyde Ark
1028	Seven Springs Ark: block Leaders going home
1030	Seven Springs Ark: Ark antenna is set up and tested ok
1034	Garden Gate Ark: Radio Check using Ark Antenna, pass
1036	Garden Gate Ark: IC shut down the Ark
1042	Seven Springs Ark: Ark antenna taken down and the Ark is closed up
1109	Hyde Ark: Received report of no communications coverage
1130	EOC: Secured the message net, all participants returning to the EOC for debrief
1130	Seven Springs Ark: Secured the site
1130	Seven Springs Ark: 16 Block Leader PSA forms submitted
1300	EOC: Debrief complete

v. Response at SEMS Levels (as appropriate):
Include a summary, conclusions, the field response, and other local, operational area, regional, state or federal response.

Not required for this event.

vi. 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 Office of Emergency Services (OES)
Marsha Hovey, Cupertino OES Director; Event number was pre-assigned; contact with the OES Director was also made during the drill to provide an update on the event status.

CERT
CERT was to provide all Ark staffing and local Incident Command. For some reason, the CERT activation call did not occur as planned resulting is a low CERT turnout at the Ark sites.

Block Leaders
Block Leaders provide a high level of neighborhood command structure for the purpose of city information dissemination and organization. While their role in an emergency was not clear going into the event, it was subsequently learned that their role is to provide PSA coverage for their area not covered by an organized neighborhood CERT structure. Block Leader participation was high, with plenty of interest in Ark activities.

Communications Systems. The CARES TAC-1 frequency was used as the Resource Net. The CARES TAC-2 frequency was used as the Message Net. The interference from County Fire on CARES TAC-1 continues and is caused by the Cupertino AM Radio Station's 4th harmonic (1.670 MHz x 4 = 6.68 MHz) mixing with County Fire Command 1 (154.250 MHz minus 6.68 MHz = 147.570 MHz), which is exactly CARES TAC 1. Several remediation options are being pursued.

vii. 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?

- Resource Net handling. We didn't lose anyone and all were able to find their way from resource to message net.
- Resource tracking with T-Cards in the EOC
- Good CARES turnout and participation
- Antenna kits at ARKs improved reception at city hall. HTs with rubber duckies had lots of problems getting into city hall.
- Vests worked. People with vests were identified as knowing what to do and being approached by Block Leaders.

What didn't work / needs improvement?

- Arks were not opened quickly
- Block leaders did not understand their role
- Clarity in responsibilities between what Organized Neighborhoods do versus what the Arks do.
- Ark staff was overwhelmed by questions from Block Leaders who did not know their role
- Mix in experience levels of CARES responders
- No contact with Lawson Ark; no responder sent
- CARES responders reported distractions at Ark sites (people, fire trucks, activities) or were asked to pick up other rules. As a result, some radio queries were missed.
- Turned-in event documentation was not consistent across participants
- Ran out of T-Cards in the EOC

Recommendation

ARK Operations

The Cupertino Ark Structure is still fairly new to the CCC. While the concept is sound and leverages heavily on CERT members to staff and operate Ark-based ICS, each Ark is at different levels of readiness.

1. Work with Cupertino OES to develop criteria for Ark "certification". Certification could mean Arks are properly outfitted and Ark Teams are practiced to support an activation.
2. Clarify pre-assignments for Ark stations, at least 2 CARES members identified. Validate with the City-wide October S.E.T.

Documentation

This continues to be an area that needs attention. Where standard CARES forms were used, data collection appeared to go smoothly. Where forms were not available, logging was not sufficient. It appeared that not all responders had forms on hand.

3. Identify, publish, and encourage CARES members to have specific CARES forms readily available as part of their go-kit. This "admin" package should be part of the CARES go-kit check-out.
4. Resource Net Control Operators ensure that field responders have in their position the necessary CARES forms prior to a deployment: ICS-214, ICS-214pe, Message Forms.
5. Resource Net Control Operators direct responding members to initiate the ICS-214 prior to leaving their point of deployment.

Resource Management

The following are recommended actions to further enhance Resource Management activities:

1. Establish pre-assignments for Ark stations, at least 2 CARES members.

2. Pre-load all CARES members onto T-Cards. Develop Assignment T-Cards. Replace existing T-Card holder with one large enough to support:
    a. 7 Ark Sites
    b. 3 Fire Stations
    c. 1 Shelter
    d. 1 Medical Center
    e. EOC operations (Shift Sup, M-NCO, R-NCO, RRO)
    f. General Field Assignments (Shadows, ISAs, etc)

viii. Training Needs

1. Schedule all new members through the CARES orientation Field Responder training.
2. Augment Field responder training with simulated exercises similar to what we run for the Net Control training.
3. EOC Resource Review. Review how CARES EOC Staff manages resources; address Forms, T-Cards, etc. Planned for Fall 2009.

ix. Recovery Activities (as applicable)

Recovery activities were limited to immediate reset and re-stocking of all EOC deployment forms and ISA packages.

x. References: Maps, charts, training materials, etc.

The following material was developed and provided as part of the Volunteer Briefing Packet:

- Event Summary

End of Report.

NOTES – remove with the final version of the doc.

Monta Vista
- Isabelle was IC, opened the Ark
- Paul started as Block leader/Rancho Deep Cliff, did PSA, 25 minutes for 61 houses, 45 played. 4 white towels. preloaded PSA sheets w /addresses, cut down time
- Ark was locked, secret access, Ark key does not work
- Distractions, fire trucks were coming and going, multiple things going on
- Antenna drop was 60-70 ft away from the Ark; Fire captain requested no access to it; in the way of Fire Station Business; HTs did not work directly to EOC
- 11 block leaders checked in representing 9-210 houses each
- Andy: 9:01: 5-6 block leaders already there, asking what to do, swamped the CARES/CERT folks
- Block leaders do not know their role at the Arks (Subsequently found out from Marsha: their role is to deliver a PSA)
- Answered the same questions over and over again; need an FAQ
- One CARES members may not be enough
- 3 CERT people could not control the 20 people there
- Not obvious what was in the Ark
- Ark did not have any Gas or Water
- Comm: emergency traffic was held off due to status check

Seven Springs Ark
- Arrived 9:20, 9m block leaders waiting, total of 20 showed up. Only 2 trained CERT folks were there
- Gerd took IC
- 9:52, Ken with Key arrived and unlocked the Ark
- People were interested and motivated
- CERT was not activated
- Ark antennas: plan to add SMA adaptor to his kit
- Arks should have ICS vests

Garden Gate
- Leroy; could not get into the Ark
- Dropped radio, changed channel; could not hear CARES net
- Adaptor for the antenna was sticky hard to load
- For message handling, as filtering messages sent to the EOC
- 6-7 people showed up: CERT and block leaders
- Hap: dropped radio on concrete, passed
- Put Ark antenna kit instructions on the outside of the tube. Also, Mark the ends of the polls as to which gets inserted into which end

Hyde
- Johnny, plus 4 block leaders
- Took over the IC
- Mark opened the Ark
- 20 block leaders reported at Lawson

Johann
- Confusion with Fairgrove neighborhood structure
- Hyde Ark Assignment

- Need clarification between Arks and organized neighborhoods
- Block leaders looking to CERT for leadership

Resource Net/EOC
- Worked ok
- Message NCS and RRO… a lot of work
- CERT did not show up
- At Hyde, CERT folks asked to take on Operations Section role, but no one volunteered
- Need dedicated focus on communications at the Arks, not a shared role
- Tac1 interference

Allan's comments
More did not work than worked, but that was to be expected since this is the first time CARES/CERT/ARKs/Block Leaders and Organized neighborhoods were supposed to work together!

View as seen in the EOC and from debrief:

General:
- The participants were supposed to be CERT/CARES/ARKs, Block Leaders (BL) and organized neighborhoods (ON).
- ONs never showed up and were apparently not informed of the exercise. It was clear from the debrief that the OES and Block Leaders had no knowledge of what was expected of the other in this exercise, and by extension, what would be expected during a real emergency.
- Goal: Education of the all the organizations and what is expected of them and the others in an emergency. This can be done by opening dialogue between the organization- e.g. CARES showing up to BL meeting and explaining what we are supposed to do. (Who would speak for BLs at a CARES or CERT meeting?)

CARES:
What Worked:
- Resource net worked well (Bill). We didn't lose anyone and all were able to find their way from resource to message net.
- Antenna kits at ARKs improved reception at city hall. HTs with rubber duckies had lots of problems getting into city hall.
- People with vests identified as knowing what to do and being swamped with questions from BLs and others at ARKs. i.e. the Vests work.

What didn't work:
- Experience of responders we sent out. Need to get newer members oriented and into Field Responder training asap. This means adding additional exercises (table tops or exercises similar to net control operator training) where new members get lots of PTT time. Field responders need to be able to filter messages and requests that are being sent.

- Conflict of OES people with multiple Identities. What does the person with CERT, MRC and CARES qualifications (or any two) do in an exercise like this? Does a person who is assigned to an ARK, self-activate and goes there? CARES needs to identify who goes to ARKs on activation without needing to check into the CARES net.

- EOC had NO contact with Lawson!!! We should have sent CARES members from sites with people to sites with no Contact. Alternatively, have a roving CARES team canvas all ARKs that have not contacted EOC.

- Antenna Kit needs labels/directions on how to open. Also needs SMA to BNC connector in kit.

Recommendations:
- A dedicated CARES person at each ARK with plans for second person and/or relief.
- Number of people in Radio room needs to be at least 3 to start, and add a shift supervisor (SS) to that as soon as possible.
- Augment Field responder training with simulated exercises like the Net Control training.
- All ARKS should be contacted and send CARES/CERT recon if not contacted.
- Brought up by Mark K6FJC - if he is working the message net and has a medical message that needs clarification he, as an EMT, would want to work with the people at the site, thus tying up the channel to help the one person. Should he/she do that? An alternative is to have a 3rd frequency and radio to talk with people in the field and help them.

From: Paul [RGPaul@comcast.net]
Sent: Saturday, June 06, 2009 9:35 PM
To: Marsha Hovey; Kenneth Ericksen
Subject: 6 June Safety Assement Exercise

Marsha,

Some thoughts about today's' exercise.

Isabel did an outstanding job in communicating with the Zone 1 block leaders and acting as the Incident Commander for the Monte Vista ARK.

I started the day with the activation announcement from CARES by doing the "windshield Survey" (on my 2 meter radio equipped Harley motorcycle) of Rancho Deep Cliff. I informed the CARES EOC that I was going to do the "Windshield Survey" and then transit to the Monte Vista ARK. I had taken the Survey Form and filled it out with all the addresses within Rancho Deep Cliff. Previously I wrote an informational letter and delivered it to each household, explaining what would be happening during the drill.About 40 of the 60 houses joined in the drill by placing a white marker of some type on their front door.

It rapidly became apparent that I had seriously underestimated how long it would take under a "real world" scenario to survey 61 houses. Rushing as fast as possible, even with preparation, it still took half an hour to just "windshield survey" the 61 houses. Now the question becomes, "How long would it take if a real emergency occurs?". My estimate that it will take about one hour to do the "windshield Survey" of Rancho Deep Cliff.

After completing the survey of Rancho Deep Cliff, I rode down to the Monte Vista Fire Station. The Saturday morning traffic on Stevens Canyon Road was very slow. When a real earthquake hits, I would assume that the major roads will quickly become parking lots. When I got to the Monte Vista Fire Station, as we agreed, Isabel had assumed the Incident Commander role. The ARK was not open because at about 8:50 AM there had been a call to the Fire House and they had left to respond to the emergency, leaving no one in the building and the building locked.

After finding out that no one else had an ARK key, I attempted to open the ARK. My universal ARK key did not work in the door of the fire station. Additionally, the early responders had attempted to use the external antenna outlet located in the doorway of the Fire Station and had been requested to not "block the entrance" to the fire house.

We will need about 100' of coax to move the antenna attachment point from the doorway of the fire station over to where the ARK is located.

The one watt and five watt handi talkies could not do reliable communications between Monte Vista and City Hall / EOC. my 50 watt motorcycle mobile was the only radio that could be relied upon to communicate with, so Andy and I split communications duties using that one radio. Additionally, there was a lot of background electrical noise on both the Tac 1 and Tac 2 frequencies.

There was a continuous flow of Block Leaders and visitors arriving at the ARK. Most of them were not cross trained CERT or CARES or MRC people and had many questions. Wearing the CERT helmet and vest made one a "target" for questions. Several times both Andy and I were either delayed or prevented from accomplishing a requested duty on the radio due to the press of people asking questions. As they were Block Leaders and had no other training, they were not aware of the time value of task completion. A two or three page, laminated FAQ at the ARK would be a big help. We could just give the SUV's the FAQ to read and then be allowed to accomplish our time sensitive tasks. Even better would be to have limited cross training of the Block Leaders / CERT / CARES / MRC people in the duties of the other specialties.

The vast majority of people, having only Block Leader training had no awareness of the existence of the various reporting forms (such as the 501, 101, 201 etc) much less how to properly fill them out. I think that adding some CERT / CARES / MRC awareness training to the basic Block Leader course would be a very big help to facilitating understanding.

The "Span of Control" among Block Leaders varies massively. For example, Isabel took care of 9 homes and was able to get to the ARK almost immediately, I took care of 61 homes and one lady took care of 201 homes. She activated at 9:00 AM and did not get to the ARK until almost 11:00 AM. Even then I highly commended her for covering 201 homes in two hours. Amazing. I would suggest that, if possible, each Block Leader only have to care for 50 to 60 homes. (Yes, I know, there is a GREAT difference between the Ideal world and the Reality we have to work with)

We originally set up in the parking lot in front of and along side the ARK. However, as we soon found out, when the firetrucks come back to the station, due to their size and large turning radius, they come down through the middle of the parking lot. We had to move the cars out to parking in the streets and only use the parking areas to set up the tables for the ARK, CARES, CERT and MRC needs. Additionally, this driving of fire trucks through the area would not give a usable Triage space.

There needs to be a "standard" way to stock the ARK. Things have to be in the same place in each ARK. Things like batteries need to be kept in a cool storage. A "plug in" cooler could be placed in the ARK to take care of items like this. There were several generators in the ARK. There was a five gallon gasoline can in the ARK. The generators and the gas can were empty. This could be a real problem in a real emergency. Sanitary facilities were not available. When the firemen are on a call, the building is locked up.

The mixing of Block Leaders who knew almost nothing about CARES or CERT, with CARES people who knew almost nothing about Block Leaders or CERT, along with CERT people who knew almost nothing about Block Leaders or CARES, and last but not lease the appearance of a number of SUV's, provided an

interesting view of what will occur in the event of an actual emergency. It should be noted that there is an apartment complex across the street from the fire station and there was continuous interest from the residents. I would assume that in the event of a true emergency, there could be a large number of people that would walk across the street to find out what was going on. This would be especially true if the electricity was out and the ARK was operational with lights, radios etc.Some type of physical, mass crowd control will be needed.

There is probably a lot of other stuff that went on that I have not included. If you have any questions about anything else, let me know and I will try to answer. It would be good to also get Andys' and Isabels' views on how the day went.

Bottom line, I learned a LOT today, it took a LOT more time to prepare, Isabel did yeoman work on getting things done and over all I considered it time well spent. We have to do this type of combined drill again and again. There is much more learning in the combined drill than in the individual Block Leader / CERT / CARES / MRC drills.

Of course ALL of the above is just my 0.002 cents of what I remember and may or may not have ANY relation to what really happened today. It was a good day.

Paul Petach
KI6QXV=