After Action Report
First Look Area Assessment Exercise

Cupertino ARES
16 December 2020
Version: v1.1 **Review**

Table of Contents

Overview

Description:	Comm Outage Functional Exercise
Event Type:	Cupertino ARES Exercise
Event Name	First Look Area Assessment
Activation No:	CUP-20-40T
Managing Entity:	Cupertino ARES
Event Date:	14-November-2020
Report Date:	27-November-2020
Report Revision:	1.0, **DRAFT**
Submitted by:	Jim Oberhofer

Requirements for Reporting[1]

Completing an After-Action Report is part of the required California 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, Title 19, s2900(q)."

Terms

AAR[2]:	After Action Report; a document intended to capture observations of an exercise and make recommendations for post-exercise improvements. The final AAR and Improvement Plan (IP) are printed and distributed jointly as a single AAR/IP following an exercise.
AAR/IP:	Improvement Plan; identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion.
CAP:	Corrective Action Plan; FEMA; HSEEP[3]: actions identified during activations or exercises that are tracked to completion, ensuring that exercises yield tangible preparedness improvements.
CARES:	Cupertino Amateur Radio Emergency Service is a volunteer organization of FCC-licensed amateur radio operators who will respond to requests from the city during times of emergencies. Their focus is on understanding risks facing the city and putting plans, communications processes, and tools in place to respond to these risks.
CCC:	Cupertino Citizen Corps; the City's umbrella organization for CARES, CERT, and MRC.
Comm 469: C469:	City of Cupertino Public Safety Communications Vehicle #469.

---

[1] http://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/after-action-corrective-action-reporting;
http://temp.caloes.ca.gov/PlanningPreparednessSite/Documents/01%202450.pdf
[2] https://training.fema.gov/programs/emischool/el361toolkit/glossary.htm
[3] https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf

DOC: Department Operations Center; manages the overall field CCC deployment; aggregates data to be passed to the EOC. Advices EOC Staff on CCC capabilities, readiness, and activities.

DPW: Department of Public Works

FLA: First Look Area. A specific selection of streets in Cupertino on which an FLA Assessment will be made.

H&W: Health & Welfare; used within the context of a Health & Welfare Check. Usually check of field teams to sure they are OK.

NCO/NCS: Net Control Operator / Net Control Station; the control function that ensures the efficient passing of messages between stations on the frequency.

OES: Office of Emergency Services.

Background and Timeline

Introduction

The purpose of an After-Action Report (AAR) is to analyze the management and response to an incident, event, or exercise by identifying the strengths to be maintained and promoted, as well as the potential areas for improvement.

The focus of this AAR is on the Cupertino Amateur Radio Emergency Service (CARES) exercise to test the Cupertino ARES tools and procedures for performing the First Look Area (FLA) assessment. This report is submitted to Cupertino OES and Cupertino DPW by CARES as a record of our findings, planned follow-up actions, and recommendations to the City.

Summary

Cupertino DPW performs several functions for the City including Environmental, Services, Capital Improvement, Engineering, and Transportation. The Service Center is home to a good portion of the Public Works function and is tasked with managing City streets, public spaces, right of way, trees, facilities, and its vehicle fleet. The Service Center is staffed with about 70 employees who live throughout the Bay Area with commute times ranging between 10 minutes to 30 minutes.

Ideally, the best time for an earthquake to strike would be during working hours when Service Center staff would be in house. However, this represents about 25% of the total week (7h*24d), meaning the chances that an earthquake could occur when Service Center staff is not present is greater. Assuming an earthquake occurs during non-working hours, CARES proposes to perform an initial city-wide access assessment during the period immediate after an earthquake to ensure city streets are clear for Sheriff, Fire, and EMS access. The intent is for all 142 miles of City streets be visually inspected, with problems identified and reports submitted to the Service Center to jump-start any City access repair activities.

This exercise was designed to test the feasibility of deploying Cupertino Citizen Corps (CCC) members – CARES specifically – to perform the assessment. Procedures and mapping tools were developed that would essentially create 'bite-size' sections of the city so that a given First Look Area (FLA) could be completed and not left as incomplete.

Complicating this exercise were the specific City and County restrictions required to address the on-going COVID-19 pandemic. The CCC Infectious Disease Response (IDR) Plan was invoked allowing us to use both household-buddies as well as deploying solo field operator.

CARES members were activated and deployed from our respective homes. Over the course of the exercise, all objectives planned were tested:

1. Execute the response per the CCC IDR Plan protocols.
2. Execute the First Look Area assessment.
3. Report First Look Area findings to the DOC and DPW.

A general summary of exercise results are:

1. Total FLA Assessments made: 20 out of 33 areas
2. Average time per FLA: 37 minutes
3. Ave reported miles per FLA: 6
4. Average Speed: 10.8 mph (median range: 7.5 - 13.5)
5. CARES Participants: 18
6. Field teams w/ household-buddies: 7
7. Field responders going solo: 5

Key Findings

Following the exercise, CARES performed an after-action review of our existing operating procedures and new aspects under test. The lessons learned from this review will drive specific activities within key areas of the CARES response. Two specific findings from this exercise are:

1. ***Infectious disease response plan.*** The IDR plan worked well with 7 of the 12 field teams using a household non-CARES 'buddy' to participate in the field exercise. Additionally, 5 members agreed to go 'solo'. As a side note: leading up to the exercise, 20 CARES members stated they will use a household-buddy for field deployments; 21 CARES members stated their willingness to accept a solo assignment. This is encouraging and offers CARES and CCC greater flexibility with its field resourcing.

2. ***First Look Area Assessment Process***. Given the limited definition for this process, 12 field teams completed 20 of the 33 defined First Look Areas over a 2-hour period. With this level of staffing, it is plausible that the entire city could be checked in about a 3-hour time period. However, this work needs to be prioritized with other response activities with some FLA coverage handled by CERT and Block Leaders.

Responding Resources

CARES deployed under activation number CUP-20-40T. Event resources came from the following organizations:

1. ***Cupertino ARES/RACES.*** CARES staffed both Comm 469 and field positions. Eighteen (18) CARES members participated during the 3-hour exercise. Total CARES volunteer hours were 44.

2. ***Household buddies.*** Another six (6) individuals were recruited from member households as a field buddy. These individuals logged an additional 11.25 hours.

Timeline

The following timeline is a compilation from ICS-214s submitted as part of this event.

Time	Description, Notes, Comments
Saturday 14 Nov	07:30 Comm 469 is retrieved from the Service Center 08:00 Comm 469 arrived at City Hall, begin setup 08:49 Resource Net is open, begin taking check-ins 09:09 Message Net is open 09:30 All first round assignments made 09:38 First FLA assessment report received 10:00 Started second round assignments 10:43 Shutting down the exercise at the end of the current round 11:12 End of the exercise. Begin Demob 11:17 Closed Message Net 11:30 Comm 469 departs City Hall 12:00 Comm 469 back at Service Center

Observations and Recommendations

Observation #1

The First Look Area Assessment process essentially worked as intended.

The main intent of this exercise was to check the feasibility of looking at all 142 miles of city streets. A rough estimate is that CARES covered about 100 mi of streets in a 2-hour period. With another hour of field time at this resource level, it is plausible that CARES could have completed the city review.

This process works sufficiently as is such that it could be deployed now if required. However, the following recommendations are made to enhance the overall process.

Recommendations:

Cupertino ARES
1. Review these findings with Cupertino DPW to confirm their interest in the FLA Assessment.
2. Rework the data collection form for better activity tracking.
3. Renumber the FLAs to make them contiguous within a CCC Zone.
4. Review and clarify the field process in terms of what to look for, what to report, and coverage overlap of boundary streets.
5. Develop a two-pass methodology to first cover Arterials and Major Collectors, and then Minor Collectors, Neighborhood Collectors, and Neighborhood streets.
6. Determine the method for disseminating information to DPW, EOC, OES, City Manager, others?
7. If adopted, develop a CARES Critical Task List entry for First Look.
8. If adopted, Introduce First Look to CERT and Block Leaders. Work with CCC Coordinator on a field exercise in 2021.

Observation #2

While the intent was to look at road access issues, it raised the question on how First Look fits within the context of the other assessments that CCC has developed over the years.

Currently, CCC has defined and practiced several types of assessment that focus on different things:

1. Preliminary Safety Assessment, CARES: An initial snapshot by CARES members of their immediate surroundings with the goal to provide the EOC with a quick look at the city.
2. Preliminary Safety Assessment, CERT/Block Leaders: a detailed assessment of an individual's neighborhood.
3. Infrastructure Safety Assessment, CARES: Under MOUs with 2 utilities that provide retail water service and domestic/municipal wastewater service to Cupertino residents, CARES visually inspects the integrity and soundness of critical assets owned by these utilities.
   a. A problem with water delivery could impact fire suppression and public health.
   b. A problem with wastewater services could impact public health and the environment.
4. First Look Area Assessment, CCC: Intended to identify access issues with city streets that could impact a response by Fire, Sheriff, EMS, and other city services.
5. Rapid Needs Assessment, CCC: Also referred to as a Windshield Survey, it is intended to provide the city with a more detailed look at the state of the city including bridges, schools, high density housing, churches, city buildings, hotels, medical facilities, retail food stores, Stevens Creek Dam, transportation (signals, main thoroughfares), and infrastructure (water, sewage, electricity, gas).

The primary recommendation is to perform a comprehensive look at all known CCC assessments with the goal to optimize our efforts and ensure their value add to our served agencies.

Recommendations:

Citizen Corps, OES

9. Develop a profile for each type of assessment that CCC performs, including but not limited to: scope, staffing, time to run the assessment, information provided, and recipient.
10. Develop an activity timeline and criteria that describes when a specific assessment should be initiated.
11. Consider integrating street-level ISA assets into First Look.

Observation #3

The CARES deployment depends on the number of available resources. The priority to staff various positions needs to be set within consideration for the needs of the community.

Adding the FLA Assessment to the CARES task essentially places an additional resource load on the organization, on top of field assignments to cover ISA, ARK Level 2, Fire Stations, C469 support, and other ad-hoc mission requests.

Recommendations:

CARES

12. Develop a list of objectives to guide the discussion on CARES task priority-setting.
13. Develop the assignment order for deploying resources given the task priorities and number of responders available for assignment.

Observation #4

We tend to staff our exercises for the best-case resource scenario that requires a full EOC and Field deployment. Like this exercise, a smaller management infrastructure could have worked.

Our typical exercise may not reflect how we might actually respond when activated for a big event. With an earthquake in mind, we run our exercises assuming: (i) all CARES members are not impacted and will be available to respond, (ii) we have more than enough members covering all assignments with others on the resource net waiting for an assignment, (iii) we have a continuous message passing load, and (iv) we staff the EOC and C469 to manage all of the above. In short: it's all about maximizing training.

In the case of the ISA and FLA tasks, these processes require actual drive-time to find, inspect, and report on specific things. The message passing timing is most likely realistic based on the number of field teams deployed. If these were the only tasks at play during an actual activation, then, per the exercise's Shift Supervisor and Net Control Operator, they could have handled all radio operations with 2 persons.

Recommendations:

CARES

14. Review the types of message CARES passes (PSA, ISA, FLA, ICS213, etc.) and the requirements for handling each type of message.
15. Develop the activity trigger level to add C469 staffing (may be part of Obj#3.13).

Conclusion

<< to be written after discussion with Cupertino DPW >>