

After Action Report

Preliminary Safety Assessment Exercise

Cupertino ARES
23 January 2021

Version: v1.0 **Review**

Table of Contents

Overview.....	2
Requirements for Reporting.....	2
Terms.....	2
Background and Timeline	3
Introduction.....	3
Summary.....	3
Key Findings.....	3
Responding Resources.....	4
Timeline	4
Observations and Recommendations.....	4
Conclusion	6

Overview

Description:	Preliminary Safety Assessment Exercise
Event Type:	Cupertino ARES Exercise
Event Name:	Preliminary Safety Assessment
Activation No:	CUP-21-31T
Managing Entity:	Cupertino ARES
Event Date:	23 January 2021
Report Date:	23 January 2021
Report Revision:	1.0, DRAFT
Submitted by:	Jim Oberhofer

Requirements for Reporting¹

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

- AAR²: 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.
- Alt911: A packet program that allows the packet operator to collect and hand off a properly formatted packet message to Outpost for transmission to County comm
- CAP: Corrective Action Plan; FEMA; HSEEP³: 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.

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.
- MM Mike-Mike; Modified Mercalli Intensity Scale. This is a verbal report using this scale on observed damage and one of the triggering information to performing a PSA.
- NCO/NCS: Net Control Operator / Net Control Station; the control function that ensures the efficient passing of messages between stations on the frequency.
- PSA: Preliminary Safety Assessment; one of the first things we were asked to do when activated after an infrastructure-shaking event.

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) annual exercise that tests the Cupertino ARES tools and procedures for performing a Preliminary Safety Assessment (PSA). 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

During a major infrastructure-impacting incident, the first thing CARES will do is perform a PSA on behalf of the City. This activity provides the City EOC with an immediate snapshot of the state of the city covering 5 specific categories of potential problems (injuries, structures, fire, utilities, and access) so the immediate City response can be prioritized and planned. This snapshot is possible because of the geographic distribution of CARES members who reside throughout the city.

The PSA Process is exercised each year. CARES members were activated and deployed from their respective homes. Over the course of the exercise, the following objectives were tested:

1. Pass the structured PSA messages.
2. Test data collection methods by Packet Radio for PSA reports
3. First test of passing emergency traffic to an ALT911 station

Key Findings

CARES performed an after-action review of the existing PSA operating procedures and new aspects of the process under test. The lessons learned will drive specific corrective actions or improvements within key areas of the CARES response. Two specific findings gleaned from this exercise are:

1. **PSA reporting process.** The PSA exercise demonstrated a high level of proficiency and structure with passing the PSA traffic. It was evident that CARES members invested time to understand, internalize, and then perform the PSA process as intended. The result was a very efficient collection and handoff of PSA data to the EOC. With this as an annual exercise, *practice makes perfect.*

2. **Voice Emergency Messages.** Our PSA process always deferred collecting emergency traffic due to the lack of a means to disposition it. With the recent introduction of Alt911 into CARES, we now have the means to take emergency messages and pass them to a public safety agency for dispatch. Given this was the first time performing Alt911 message handling for a PSA, it worked well, but not without issues.

Responding Resources

CARES deployed under activation number CUP-21-31T. Event resources came from the following organizations:

1. **Cupertino ARES/RACES.** CARES responded from and operated out of their home locations. Sixteen (16) CARES members participated during the 1-hour exercise. Total CARES volunteer hours were 16.

Timeline

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

Time	Description, Notes, Comments
Saturday 23 Jan	08:30 Emergency Net is open, began taking check-ins. Included field availability and Mike-Mike Reports 08:39 Passed a Mike-Mike summary to the DOC 08:40 Assigned PSA Packet Data Recorder operator and an ALT911 Station 08:42 First PSA report received 09:18 All messages received, End of the exercise. 09:20 Closed Emergency Net

Observations and Recommendations

Observation #1

The Net Control Operator kept the net on task. This needs to be a capability that is developed across the CARES organization.

The exercise NCO's primary tasks included the following:

1. Take check-ins.
 - a. Stated what is expected (call, availability, Mike-Mike report)
 - b. requested check-ins by call sign suffix and MM number.
2. Passed Mike-Mike report summary to the DOC.
3. Passed control to the Shift Supervisor for event/exercise briefing.
4. Asked for a volunteer to take on the PSA Packet Data Recorder role.
5. Asked for a volunteer to take on the ALT911 Call taker role. Directed to set up on TAC2.
6. Directed PSA reports to the PSA Packet Data Recorder.
7. Directed Emergency Traffic to TAC2
 - a. members stated they were "switching"
 - b. reported "back on TAC1" when they returned.

8. Shifted between “drill mode” and “coaching mode” to provide real-time net or message passing corrections or clarifications.

The formality of operating in this role is critical. Unfortunately, a lot of this comes from experience. Good references, lessons learned, and practical examples are missing from the CARES NCS resource pool.

Recommendations:

Cupertino ARES

1. Develop a CARES Net Control Reference Handbook to cover various scenarios that a NCO may encounter.
2. Look for ways to promote involvement and competency in the NCS operations.
3. Adopt a Mike-Mike Report and incorporate the information handoff to the DOC into our process.

Observation #2

The exercise proved that emergency message-passing for things that warrant a Public Safety response is both likely and possible. While we have the tools in place, there are gaps in the CARES Alt911 solution that need to be addressed.

The ALT911cts program lets the user record and format an 9-1-1 message for transmission by Outpost to County Comm. The technical end to end process flow works well. However, there are gaps in implementation and process that need to be sorted out. Two that were highlighted during this exercise are:

1. Call taker needs to drive the 9-1-1 conversation. On calling the real 9-1-1, the 0-1-1 operator will lead the caller through a series of questions.
 - a. What are you reporting?
 - b. What is the address of the incident?
 - c. Who are you (or the reporting person) if we need to reach you?
 - d. What are the details (usually include a set of guided questions depending on the type if call)?
 - e. Attempts to collect all required information needed to improve the 9-1-1 call quality.
2. The ALT911 message *last mile*: Delivering the ALT911 message to *someone* who can actually load into a dispatch system. This is a major gap in the solution.

For our ALT911 submittals to be useful to County Comm, we need to understand the process for interacting with a caller so that the best message can be created.

Recommendations:

Cupertino ARES

4. Develop the call-taking resources to guide the CARES Alt911 packet operator through the process.
5. Enhance ALT911cts to ensure all required fields are identified and filled in.
6. Revisit options for delivering ALT911 messages into a dispatch system
 - a. 24/7 ALT911 receiving station operational at County Comm
 - b. ALT911 receiving station operational at a neighboring jurisdiction with a CAD link to County Comm
 - c. ALT911 receiving station operational at a location with a dedicated communications link to county comm.
 - d. Others?

Conclusion

Overall, this exercise went very well. Net management was formal and efficient. Message handling showed a high level of proficiency and structure. And the introduction of Alt911 to handle PSA-uncovered emergency situations is promising.

Most of the items identified for corrective action are very do-able. The improvements resulting from this exercise will have a positive impact on the effectiveness of the CARES response.