

---

# **Earthquake 2018 Communications Exercise Exercise Plan**

Cupertino Office of Emergency Services

CUP-18-34T

November 20, 2018

Revision 1.2



**CUPERTINO**

## Table of Contents

- 1 EXERCISE PLAN ..... 3**
- 1.1 BACKGROUND / GOAL..... 3
  - 1.1.1 Background..... 3
  - 1.1.2 Terms ..... 3
- 1.2 PURPOSE, GOALS AND OBJECTIVES ..... 4
  - 1.2.1 Purpose..... 4
  - 1.2.2 Objectives ..... 4
  - 1.2.3 Concept..... 4
  - 1.2.4 Exercise Schedule ..... 5
- 1.3 ARTIFICIALITIES AND ASSUMPTIONS ..... 6
  - 1.3.1 Artificialities ..... 6
  - 1.3.2 Assumptions..... 6
- 1.4 REFERENCES ..... 6
- 1.5 EXERCISE CONTROL..... 6
- 1.6 COMMUNICATIONS..... 6
- 1.7 SAFETY AND SECURITY..... 7
- 1.8 EVALUATION ..... 7
- 1.9 REPORTS ..... 7
- 1.10 PUBLIC INFORMATION..... 7
- 1.11 INSTRUCTIONS TO PARTICIPANTS ..... 7
- 1.12 OPEN QUESTIONS ..... 7
- 2 DRILL PLANNING..... 8**
- 2.1 BEFORE THE EVENT..... 8
  - 2.1.1 Citizen Corp Content ..... 8
  - 2.1.2 Partner Reviews..... 8
  - 2.1.3 Injects ..... 8
  - 2.1.4 Planning Events..... 8
  - 2.1.5 Related Training Events ..... 9
  - 2.1.6 Action Items ..... 9
- 3 NARRATIVE ..... 10**

### Revision

Rev	Date	Comments
1.0	12 Sep 2018	Initiation of ExPlan
1.2	15 Nov 2018	Comments from AEC 2 <sup>nd</sup> reading

---

# 1 Exercise Plan

## 1.1 Background / Goal

### 1.1.1 Background

The Cupertino Citizen Corp (CCC), made up of the Cupertino Amateur Radio Emergency Service (CARES), Community Emergency Response Team (CERT), and Medical Reserve Corp (MRC), are teams of Cupertino residents who have volunteered their time and resources to support the city during an emergency.

The Cupertino Office of Emergency Service (OES) has developed methods and procedures that leverage this large volunteer pool for the purpose of supporting a city response. This effort is intended to integrate CERT, MRC, and CARES into a seamless response capability that can be deployed during times of emergency at the discretion of the City EOC Staff.

This exercise aligns with this intent and is designed to incorporate this requirement in a single event.

### 1.1.2 Terms

ARK:	City-owned shipping containers located throughout the city that are stocked with emergency supplies to support a field-based ICS field response. Staffed by Citizens Corps.
CARES:	Cupertino Amateur Radio Emergency Services; provides backup and emergency communications to the City.
CCC:	Cupertino Citizen Corps; the Cupertino OES designation for the volunteer pool made up of members from Cupertino ARES, CERT, and MRC.
CERT:	Community Emergency Response Team; trained in light search & rescue, disaster medicine, fire suppression, animal care, and Help Desk.
DOC:	Departmental Operations Center.
DPW	Department of Public Works
EOC:	Emergency Operations Center; the central command and control facility responsible for carrying out the principles of emergency management, or disaster management functions at a strategic level in an emergency situation and ensuring the continuity of operation of the City.
EOP:	Emergency Operations Plan. The document that describes the methods, procedures, and authority for coordinating resources and personnel of a jurisdiction in responding to disasters.
EXPLAN:	Exercise Plan. This document; provides the instructions, guidelines and organizational information to all participants for the conduct of a specific exercise.
FSE:	Full Scale Exercise. An exercise is as close to the real thing as possible. It is a lengthy exercise which takes place on location using, as much as possible, the equipment and personnel that would be called upon in a real event.
IAP:	Incident Action Plan.
ICP:	Incident Command Post. A temporary physical location used for

	the purpose of on-scene incident command and management at the tactical level.
ICS	Incident Command System. A people management system with clearly defined roles and functions, and with attributes or system features that are flexible and adaptable to both large and small incidents and events.
NIMS:	National Incident Management System. Federally mandated method of managing emergencies adapted from California's SEMS.
MAC	Mutual Aid Communicators. Santa Clara County communicators who are qualified for a mutual aid response.
MRC:	Medical Reserve Corp. Volunteers that supplement the existing emergency and public health resources
OPAREA:	Operational Area. Intermediate level of government designed to support the local jurisdiction's response to disaster by providing access to the resources of the county, other cities and the state.
SEMS:	Standardized Emergency Management System. California's system for managing responses to multi-agency and multi-jurisdictional emergencies which includes the Incident Command System, Unified Command and the OpArea concept.
Staging:	CAL FIRE: Reporting locations when resources deploy to the fire. For big incidents, each division is likely to have a staging location. Resources go there to await assignment; supplies are dropped off there.

## 1.2 Purpose, Goals and Objectives

### 1.2.1 Purpose

The purpose of this exercise is to test the Cupertino Citizens Corps response functions through a full-scale field deployment in response to a major regional earthquake scenario.

### 1.2.2 Objectives

1. Exercise radio operations on all designated nets.
2. Exercise the ARK activation process to Activation Level 2.
3. Exercise CCC (CARES and CERT) ISA team deployment.
4. Test the End to End Alt911 communications process.
5. Exercise an activation of the Cupertino Alternate EOC.
6. Test resource management over two operational periods.
7. Test initial Demob plan with a focus on forms completeness.

### 1.2.3 Concept

This will be a full-scale communications exercise based on the Bay Area UASI Yellow Command 2018 FSE earthquake scenario.

1. The drill will occur over an 8-hour period on Saturday Dec 15, 2018.
2. The Alternate Cupertino EOC will be activated, but not staffed. The CCC DOC will simulate the EOC response as necessary.
3. Field responders will be deployed to all ARKs and will be activated to ARK Activation Level 2.

4. Field responders will be deployed to perform the ISA. Communicate results to San Jose Water Company and Cupertino Sanitary District.
5. Staffing requirements will be set to accommodate a real-world deployment.
  - a. The Resource Net will be activated to coordinate resource movements and subsequent shift support.
  - b. The Message Net will be activated to manage voice traffic within Cupertino.
  - c. Communications assignments are made based on the typical earthquake response mission, resources, and priority.
6. CERT is integral to a response and participates in partnership with CARES. CERT is a force-multiplier thereby allowing CCC to cover more assignments with fewer radio-redundant teams.
7. Field message traffic will be based on time-triggered scripted messages and simulated interactions with the outside world.
8. An application of a first draft Demob process will focus on event documentation completeness and usefulness as if it were to be applied for cost recovery. Outcomes will drive future training opportunities as necessary.
9. Optionally, simulated OpArea traffic will be developed and sent to County with an SCC RACES resource to simulate radio interactions (voice and packet).

#### 1.2.4 Exercise Schedule

All times are estimates. CARES reserves the right to adjust the schedule during the drill as necessary.

<b>Saturday, Dec 15, 2018</b>	
0645	Drill Begins. Simulated 7.9 Earthquake. Standing Orders #1. On CARES activation, perform PSA. Standing Orders #2. CERT deploys to their local ARKs, start Activation Level 1.
07:00	1. Activate the CARES Emergency Net; start taking check-ins and field assignment availability. 2. Initiate the PSA process 3. Initiate Comm 469 deployment ops (retrieval, staffing)
07:30	Direct Comm 469, staff to the Alternate EOC after receiving a report that the EOC has collapsed.
0745	Decision to deploy to the field. Build field assignment plan. Hand off emergency net to Comm 469 when operational.
08:15	Field Assignments made. Identify Message NCS
09:00	Start Op Period #1
11:30	Start shift change. Shift 1 handoffs off to shift 2. Shift 2 starts setup, Shift 1 packs up.
12:00	End Op Period #1; Shift 1 Demob at Alternate EOC; Start Op Period #2.
14:30	Secure Field Ops; Shift 2 Demob at Alternate EOC.

15:00	End of 2 <sup>nd</sup> Op Period. End the Drill.
16:30	Comm 469 back at the Service Center

## 1.3 Artificialities and Assumptions

### 1.3.1 Artificialities

1. The EOC will not be staffed. Simulated command and control will be executed by named exercise participants.
2. County EOC will not be activated.
3. Wired and cell phones are not working.
4. Damage is per the scenario.

### 1.3.2 Assumptions

1. We will staff 2 Operational Periods.
2. In the event we cannot gain access to County Comm, we will simulate County Comm operations somewhere else.
3. We respond with our current state of readiness and with whoever shows up.
4. Weather conditions are current. The drill will not be postponed in the event of rain.
5. All information in the narrative is considered valid.
6. We don't have all the answers.
7. This exercise in no way attempts to portray actual or anticipated events.

## 1.4 References

- City of Cupertino Emergency Operations Plan
- CARES Standard Operating Procedures

## 1.5 Exercise Control

This is a Full-Scale Exercise that will be driven by scenarios and simulated conditions defined for each field response location.

## 1.6 Communications

1. The CARES ICS-205 will be referenced.
2. City Trunk Radio/TalkGroup=OES will be used for passing CuSD ISA traffic.
3. CARES members will be dispatched on various field assignments throughout the city.
4. CARES will operate on both the Resource Net and Message Net.
5. Comm Van responds to the Alternate EOC and supports the Alternate EOC with information passed in from field units. A

network connection will be established between the Comm Van and the DOC.

6. All radio communications will be followed by the phrase "THIS IS DRILL TRAFFIC" or "THIS IS AN EXERCISE".

## **1.7 Safety and Security**

1. Safety and security issues will be handled in accordance with established policies and procedures.
2. The two-person rule (buddy system) will be followed at all times.

## **1.8 Evaluation**

Participants will have an opportunity to critique the exercise during a post-exercise debrief session after the drill. Email submittals will also be accepted as feedback on the drill.

All feedback will be consolidated into the exercise's After-Action Report.

## **1.9 Reports**

An After-Action Report will be completed as a result of the critique and evaluation of the exercise

## **1.10 Public Information**

1. No press releases are planned.
2. No broadcast of test messages on Radio Cupertino 1670 AM.

## **1.11 Instructions to Participants**

1. THIS EXERCISE IS NOT A TEST OF PERSONNEL! This is a training exercise designed to test capabilities, procedures, and processes.
2. Actions and decisions should be consistent with the procedures and training that has been conducted.
3. REMEMBER, this is an exercise and NOT a test!

## **1.12 Open Questions**

1. none

---

## 2 Drill Planning

### 2.1 Before the event

#### 2.1.1 Citizen Corp Content

1. Review the need for standing Orders. For instance:
  - a. Standing Orders #1. Self-activation occurs for Earthquake events, based on agreed-to triggers. When activated, CARES will perform PSA. CERT will respond to the ARKs and Activate to Level 1.
  - b. Standing Orders #2. CCC Coordinator directs no initial field deployment at night.
  - c. Others?
2. Develop ICS 204 Assignment Sheet, Earthquake incident.
3. Decision on the use of Sparrow, and the plan on how to test.

#### 2.1.2 Partner Reviews

4. Meet with Cupertino OES; brief them on the exercise plan; Ken Ericksen, Claire Francavilla ... **DONE!** 11/07/18
5. Meet with Cupertino OES and DPW; confirm the Alternate EOC plan. Clare Francavilla, Ken Ericksen, Roger Lee ... **DONE!** 11/07/18
6. Meet with County Fire; review the scenario and the exercise plan; Batt 72 ... PENDING
7. Meet with County Sheriff; review the scenario and the exercise plan; Captain Rick Urena ... **Done!** 11/15 (at CDC)
8. Meet with San Jose Water; review the scenario and the exercise plan; Jim Wollbrinck ... PENDING
9. Meet with Cupertino Sanitary District; review the scenario and the exercise plan; Frank Quach ... PENDING

#### 2.1.3 Injects

10. Develop or update the canned messages to be used at the different locations. Describe either something the Field Responder will observe, or someone with whom they interact that wants a message passed.
11. Use the concept of "timed release" messages from each location so everyone has a several opportunities to pass traffic.

#### 2.1.4 Planning Events

12. 19-Sep-2018: First reading, feedback of ExPlan, CARES... **Done!**
13. 24-Sep-2018: Drill introduction to CCC Steering Committee... **Done,**  
29-Oct-2018
14. 7-Nov-2018: Second ExPlan reading, feedback, CARES... **Done!**  
11/14/18



15. 5-Dec-2018 (week of): Third reading, feedback of ExPlan

### 2.1.5 Related Training Events

16. 06-Sep-2018: CARES General Meeting, Topic: Forms... **DONE!**
17. 4-Oct-2018: CARES General Meeting, Topic: ARK Overview... **DONE!**
18. 1-Nov-2018: CARES General Meeting, Topic: Packet and ALT911...  
**DONE!**
19. 15-Nov-2018: Alt911 Orientation, Session 1, EOC, 6p-8p ... **DONE!**
20. 17-Nov-2018: ARK Open House, MVA, RSA, HYA... **DONE!**
21. 18-Nov-2018: Alt911 Orientation, Session 2, EOC, 1p-3p... **DONE!**
22. 1-Dec-2018: ARK Open House, DZA, LSA, GGA... **DONE!**
23. 6-Dec-2018: CARES General Meeting, Topic: Drill Prep: the CARES EQ2018 response scenario; message handling, net operations

### 2.1.6 Action Items

1. Determine if there is a Public Works individual that will be monitoring the City Trunk Radio System... Ken T ... **DONE!**  
ANS: No. DPW does not monitor this channel.
2. Complete development, review, and adoption of ICS-205 radio/frequency plan. AEC Staff
3. Hold HW/SW checkout of ALT911 ... all... **DONE!**
4. Invite Claire Francavilla, City Manager, Sheriff, SCCFD, Dana Reed to the Drill, ~10:30am... Jim
5. Invite City Council to the drill. Ken to be the Liaison for any visitors. Ken to get on the list of Interesting topics... Jim, Ken, Items of Interest
6. Request access to County Comm... Jim to Trisha Adcock, pending
7. Develop Demob Plan v1.0. ... Bob
8. Create, introduce 9-1-1 paper form at Alt911 Sessions. Form could be handed out to a 'line' of folks requesting help... Jim... **DONE, 11/14/18**
9. Review the ISA Process.
  - a. Define SJWC Packet Message Format process, instructions... Jim
  - b. Define CuSD Message Format process, handoff instructions... Jim
10. Define PSA Recorder spreadsheet process... Jim, **DONE, 11/20/18**
11. Develop Cupertino Communications Outage Plan... Jim, team

---

### 3 Narrative

**NOTE:** *This scenario is based on what could be a plausible request for emergency communications support by the City. While strictly fictitious, its primary purpose is to support the goal of practicing communications traffic handling.*

**2100 PDT, 14-Dec-2018, SF Bay Area**

A major earthquake occurs along the San Andreas Fault, rupturing approximately 300 miles of the northern segment of the fault, from the San Juan Bautista area in the south to Cape Mendocino in the north. The epicenter is west of the Golden Gate Bridge. The main shock lasts 45 to 60 seconds and was preceded by a foreshock of 20 to 25 seconds. There was no other warning. Shaking is felt in Oregon to the north, Los Angeles to the south, and Nevada to the east.

The estimated magnitude is M 7.9 with reports of (Modified Mercalli Intensity, MMI VIII) severe to violent shaking with heavy damage in widespread areas of the most severely affected counties. Pockets in the affected counties experience extreme shaking and very heavy damage, particularly areas immediately adjacent to the fault and areas where liquefaction occurred.

In Cupertino, the impact from shaking, surface fault rupture, and liquefaction included:

1. Power is out across most of the City.
2. Several city roads are blocked from fallen trees or power poles.
3. Several residential house-fires.
4. Extensive residential structural damage to homes in the vicinity south of City Hall due to homes shifting off their foundation or chimney collapses.
5. Landslides along Regnart Road.
6. Chemical leaks from chlorine tanks falling over at De Anza and Cupertino High School swimming pool.
7. Observed Stevens Dam face cracks after reservoir water was ejected out and eroded some of the northern face.
8. About 70% of Cupertino households are without potable water.
9. Unknown reports of injuries or fatalities.
10. City employees and volunteers are focusing on personal and family safety.

What's going right:

11. Radio Cupertino 1670 is still broadcasting.
12. City Manager issued a proclamation of an emergency late at night.

END OF SCENARIO