
2016 Communications Outage Exercise Plan... *Packet Edition*

Cupertino Office of Emergency Services

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Revision 1.0, **DRAFT**



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Revision

Rev	Date	Comments
0.1	16 July 2015	First Draft
0.2	8 Aug 2015	Second Draft from 1 st review
0.3	18 Aug 2015	Third Draft from 2 nd review
0.4	2 Sep 2015	Third Draft from various feedback
1.0	18 Nov 2015	Final comments

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 volunteer 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 into a single event.

1.1.2 Terms

ARK:	City-owned shipping containers strategically located throughout the city that are stocked with emergency supplies to support a field-based ICS field response; where the public can report disaster related emergencies when they cannot get through to 9-1-1, or 9-1-1 is unable to send resources. Staffed by CERT.
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.
COSIN:	Control Staff Instructions. A document prepared by the Exercise Design Team for use by the Control Staff (exercise director, simulators, evaluators).
County Comm	Provides Santa Clara County emergency communications services to the public and the public safety community through emergency 9-1-1 call answering and dispatching.
DOC:	Departmental Operations Center.
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.
EXPLAN:	Exercise Plan. The document provides the instructions, guidelines and organizational information to all participants for the conduct of a specific exercise.
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.
PIO:	Public Information Officer. Serves as the coordinator and clearinghouse of information to the public and the media.
VCP	Volunteer Communications Package; radio package deployed at Cupertino Fire Stations

1.2 Purpose, Goals and Objectives

This is a repeat exercise of the Comm Outage exercise executed in November 2015. The key difference is that use of Packet Radio for passing 9-1-1 reports from the field to County Comm.

1.2.1 Purpose of this Exercise

The purpose of this drill is to exercise the CARES communications functions through a field deployment.

1.2.2 Objectives of this Exercise

1. Exercise packet message passing procedures.
2. Exercise message passing and message net procedures.
3. Exercise the amateur radio packet equipment at the SCC Fire Stations located in the City.
4. Exercise full end to end (Field to Dispatch) emergency packet message delivery.
5. Exercise Comm Van to DOC information handoffs.

1.2.3 Concept

This will be a communications functional exercise based on a wide area communications outage event that directly impacts the City.

1. The Exercise will occur over a 4 hour period on Saturday May 7, 2016.
2. The City EOC will be activated with minimal (if any) City staff to receive and originate simulated traffic, log situation status, and oversee the response. The CCC DOC will simulate the EOC response as necessary.
3. Field responders will deploy to County Fire Stations, specific ARKs, and strategic locations throughout the city.
4. Field locations will operate packet off the grid – generator, battery, etc.
5. Assignments are made based on the CARES response model, resource availability, and location priority.
6. Because of the number of field positions that need to be staffed, CERT responders or non-CARES Buddies will be actively promoted.
7. Field message traffic will be based on timed scripted messages and simulated interactions with other responders.
8. Drill 9-1-1 traffic will be originated in the field and sent by packet to SCC dispatch.

1.2.4 Exercise Schedule

All times are estimates. CARES reserves the right to adjust the schedule during the Exercise as they see fit.

Saturday, May 7, 2016	
01:30	All telephone, cellular, and internet communication are simulated out.
07:00	Drill Begins. CARES retrieves the Comm Van.
07:50	CCC members report to EOC and sign in
08:00	Safety briefing at the EOC
08:30	Deploy field responders.
09:00	All responders at assigned area.
11:00	CARES stands down. Field Responders return to the EOC for a debrief session.
11:30	End the Drill. Begin the Debrief at the EOC
12:30	End of Debrief.

1.3 Artificialities and Assumptions

1.3.1 Artificialities

1. Wired, cell phones, SMS, and the internet are not working. No 9-1-1 service. Satellite Phones are working, but no into-the-bay area calling.
2. Power is out throughout the city. The EOC is (simulated) running on emergency generator power. County Fire Stations are (simulated) running on generator power.
3. Cupertino EOC is partially staffed.
4. County EOC is activated.
5. A County Comm packet station is operational.

1.3.2 Assumptions

1. We respond with our current state of readiness and with whoever shows up.
2. Weather is current conditions.
3. All information in the narrative is considered valid.
4. We don't have all the answers.
5. This exercise in no way attempts to portray actual or anticipated events.

1.4 References

1. City of Cupertino Emergency Operations Plan
2. CARES Standard Operating Procedures

1.5 Exercise Control

1. This is a Functional Communications Exercise. The exercise will be driven by scenarios and simulated conditions defined for each field response location.
2. CERT members may act as simulators partnered with Field response teams.

1.6 Communications

1. FRS will be used as needed.
2. A City Trunk Radio test will be performed.
3. Standard County Packet Frequencies will be used to pass simulated emergency 9-1-1 traffic necessary to initiate a simulated Dispatch.

4. CARES will operate on its Resource and Message Net frequencies per the CARES frequency plan listed in the SOP.
5. Comm Van responds to the EOC and supports the EOC with communications contact with all field units.
6. We will bring up the LAN between the Comm Van and the DOC.
7. All radio communications – both voice and packet – will be followed by the phrase "THIS IS DRILL TRAFFIC".

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 at the EOC after the drill. Email submittals will also be accepted as feedback on the drill.

All feedback will be consolidated into an Event 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 release is 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.

1.12 Open Questions

1. none

2 Logistics

2.1 Before the event

2.1.1 Procurement Requirements

1. A-Frames
2. Signage:
 - a. “Emergency Communications”
 - b. “Radio Cupertino 1670 AM for Emergency Information”

2.1.2 Background development

1. Identify and qualify CARES members for SCCFD Station Access; AEC Staff... AECs, Ken. **UPDATE:** County Program pending.
2. Define joint Field Team R&Rs: CERT and CARES... Ken

2.1.3 Canned Messages

1. Develop the canned messages to be sent at the different locations. Describe a message from the public to be passed.
2. Use the concept of “timed release” messages from each location so everyone has a several opportunities to pass traffic... **DONE**

2.1.4 Planning Events

- 2-April-2016: First discussion on Van/DOC connectivity options ... Gerd, Bob, Judy, Ken, Jim... **DONE**
- 18-Apr-2016: 2:00pm to 5:00pm, EOC. Tabletop walk-through of using Ics213mm for passing messages between the VAN and the DOC... **DONE**
- 29-April-2016: Final check-out of Van/DOC connectivity; Comm Van at the EOC... Allan, Jim, Bob
- 2-May-2016: Review & feedback of ExPlan, County Fire
Meet with Capt Tim Maguire, Bat Chief Tony Bowden; review Fire Station Access requirements, procedures and training; ... Jim
- 2-May-2016: Review & feedback of ExPlan, Sheriff’s Office;
Meet with Sargent Jeff McCoy; confirm the plausible reasons why and locations where we might be asked to deploy; ... Ken, Jim
- 2-May-2016: Brief City staff on our plans; Ken Ericksen, Tom Walters... Jim, Ken

2.1.5 Training Events

- 3-April-2016: General Meeting: Packet Overview; CARES... **DONE**
- 12-April-2016: Hands-on Packet Training ... **DONE**
- 17-April-2016: Hands-on Packet Training ... **DONE**
- 5-May-2016: General Meeting: Drill Prep; CARES

3 Narrative

NOTE: This deployment scenario is based on what could be a plausible request for emergency communications support by the City and/or our Public Safety partners. While strictly fictitious, its primary purpose is to support the goal of practicing communications traffic handling.

Thursday, 8:00am. Almost all of the Bay Area woke up (late) to no power. As people scrambled to find and turn on their battery-powered AM Radios, they learned that as massive power failure occurred sometime early Friday morning, about 2:15am that took out most of northern California's power system. PG&E and CAISO issued press releases saying that finding and fixing the cause of the outage is in progress.

Thursday, 1:00pm; 10 hours into the blackout. PG&E holds a press conference and stated that some unidentified fault was hampering them from bringing up the grid per their usual procedures. The good news was that they isolated the source of the problem to the Cortina Substation, about 73 miles North of Sacramento. The cause is still unknown.

Friday, 8:00am; 30 hours into the blackout. County OES holds a press conference and reports the following: Essential services remain in operation in some of the bay area. In others, backup generation systems failed. Telephone networks are operational, but the increased demand triggered by the blackout left many circuits overloaded. Water systems in a few cities lost pressure forcing boil-water advisories to be put into effect. Cellular service was spotty as mobile networks were overloaded due to the increase in call volume. Major cellular providers continued to operate on standby power. Several television and radio stations remained on the air, with the help of backup generators, although some stations were knocked off the air and have not been seen since.

Friday, 3:00pm; 38 hours into the blackout. A joint press conference was held with County OES, PG&E, and several telephone/internet carriers. The news is not good. There still is no cause for the problem yet (although there is suspicion of a software defect); attempts to bring up the grid have failed, and PG&E thinks this could go on for another 24 hours. AT&T and other carriers stated that the network continues to be overloaded, long delays getting a dial tone, and some backup power failures have started to occur. Wireline services may work, but most VRAD batteries that support digital phone service will run down tonight. At that point, home phone service for a most of the County will be out.

Friday, 4:00pm; 39 hours into the blackout. The City Manager requested CARES and CERT to activate Saturday if they wake up to no telephone service at home. The request is to do the following:

1. Set up communications outreach points throughout the City to receive and report on any resident requests for help.
2. Support the EOC with the CCC DOC.

A CAS message sent to all CARES members with instructions to be at the EOC by 8:00am for field assignments.

Saturday, 1:30am; almost 48 hours into the blackout. Wireline and cell phone communications are lost through all of Santa Clara County. No dial tones were heard on picking up the handset. 9-1-1 calling was impossible.

END OF SCENARIO

4 Control Staff Instructions (COSIN)

4.1 Overview

The following are the instructions to be used as part of this drill.

4.1.1 Instruction #1 – Field Deployments

In reality, defining field response locations will occur based on the needs of the City and our Served Agencies. For the purposes of this drill, the following locations are identified as possible deployment destinations. Each Field Responder will receive a written scenario sheet specific for their location that describes events that they see, simulated observations that they make, or information that is told to them. This input will form the basis for creating and passing message traffic to the EOC.

Suggested (and minimal) staffing is indicated by the number in parenthesis.

1. DOC staffs EOC (1)
 - a. DOC will be the primary interface between the deployed CCC members and the EOC. DOC will receive inbound message traffic, and originate requests and instructions as necessary.
2. Comm Van to EOC (4)
 - a. Manages the field resources.
Staffing: (i) Shift Supervisor, (ii) Message NCS, (iii) Radio Room Operator, (iv) EOC-to-EOC operator.
3. Public Sites
 - a. Post Office (2)
 - b. Senior Center (2)
 - c. Cali Mill Plaza (2)
 - d. Sears Parking Lot (2)
 - e. Main Street (2)
 - f. City Hall (2)
 - g. Blackberry Farm (2) (operation at this site is in conjunction with a public outreach intent)
4. ARK Sites
 - a. Hyde Middle School ARK (2)
 - b. Garden Gate ARK (2)
 - c. De Anza ARK (2)
 - d. Monta Vista ARK (2)
5. SCC Fire Stations
 - a. Cupertino Fire Station (2)
 - b. Seven Springs Fire Station (2)
 - c. Monta Vista Fire Station (2)
6. 911 Automatic Packet Station