Pandemic, Power Loss, & Comm Outage Communications Exercise

Exercise Plan

Cupertino Office of Emergency Services

CUP-20-39T

May 15, 2020

Version 2.4 -- *REVIEW*

CUPERTINO

EST. 1955

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Revision

Rev	Date	Comments
1.0	3/4/2020	Initial Draft
1.1	3/6/2020	Feedback from the first reading, AECs
2.0	4/4/2020	Accounting for COVID-19 Shelter-in-place orders
2.2	4/20/2020	Updates from the 1st CARES AEC reading
2.3	4/23/2020	Updates from the 2nd CARES AEC reading
2.4	5/13/2020	Updates from review with Cupertino Emergency Services Coordinator

1 Exercise Plan

1.1 Background

1.1.1 Introduction

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.

What CARES has not done is look at a compound emergency, such as an earthquake or PSPS that occurs during a pandemic. The COVID-19 pandemic and associated shelter-in-place order set by Santa Clara County Public Health has presented us with an opportunity to evaluate just such a scenario, and dictates that we adjust our plan accordingly. Our intent is to still provide CARES members with an exercise that offers practice with various aspects of emergency communications.

This Exercise Plan (Revision 2) attempts to accommodate this situation by addressing a compound event.

1.1.2 Terms

AFN:	Access and Functional Needs; refers to individuals who are or have: physical, developmental or intellectual disabilities; chronic conditions or injuries; limited English proficiency.
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.
COVID-19:	Coronavirus 2019, SAR-CoV-2
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.
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
NWS:	National Weather Service
NIMS:	National Incident Management System. Federally mandated method of managing emergencies adapted from California's SEMS.
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.
PSPS:	Public Safety Power Shutoff
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.

1.2 Purpose, Goals and Objectives

1.2.1 Purpose

The purpose of this exercise is to test the Cupertino ARES communications capabilities through a full-scale field (home) deployment in response to a region-wide power and communications outage scenario during an actual pandemic. While the power and comm outage is simulated, the pandemic is not a drill.

1.2.2 Objectives & Measures

Objectives	Measures
1. Pass actionable 9-1-1 traffic from the field to County Comm.	(i) Messages are addressed correctly (ii) Message content reflects the intent of the message (iii) 100% of originated messages are correctly received.
2. Pass Alt911 voice message from the field to the EOC.	
3. Pass general voice message traffic from the field to the EOC.	(i) New members learn and practice message passing procedures through on-air coaching. (ii) All planned messages are passed using correct techniques for requesting permission to send a message and for properly communicating the sender, recipient, priority, and type of the message. (iii) Message content reflects the intent of the message
4. Receive and print city announcements and notices in the field for the community.	(i) Packet users deploy printers into the field. (ii) packet messages are received, printed.
5. Pass ALT911 information to EOC as SitStat input for MARPLOT processing	(i) TBD

1.2.3 Concept

This will be a full-scale communications exercise based on a scenario involving the loss of power and communications during a pandemic.
1. The drill will occur over a 3-hour period on Saturday May 16, 2020.
2. CARES responders will operate from their homes, simulating a local neighborhood message taking and passing station. No actual public interaction is planned.
3. Packet message traffic will be based on time-triggered scripted messages and simulated interactions with the public. They will be coordinated on a voice net for packet operators.
4. Voice message traffic will be based on time-triggered scripted messages and simulated interactions with the outside world. This will be coordinated on a voice message net.

5. This voice message net is more of a training net and will support message passing introduction and practice.
6. CARES will participate in the County-wide RACES exercise running from 10:00am to 12:00pm.
7. Simulated ALT911 traffic will be developed and sent to the XSC911 County Comm packet address.
8. Operate voice message net on 2 nets.

1.2.4 Exercise Schedule

All times are estimates. The schedule for the drill will be adjusted as necessary.

Wednesday, May 13, 2020	

1200	Ensure all Packet Ops have the following installed on their PCs:
	    1. Outpost SCC, latest version
	    2. Outpost Patch where required
	    3. ALT911
	    4. PublicNotice HTML

Thursday, May 14, 2020	
1200	NWS issues a Red Flag warning PG&E issues 48-hour notice of a PSPS event Cupertino OES meets and develops the response plan
Friday, May 15, 2020	
1200	City requests CCC activation to support community information sharing beginning Saturday AM. Develop IAP, OP period #1, 16-May 6:00am thru 12:00pm
2320	Power is simulated out throughout the South Bay Area.
Saturday, May 16, 2020	
0400	Drill Begins.
08:00	Activate the CARES Resource Net; start taking check-ins and home assignment availability.
08:20	Briefing over the air
08:40	Home Assignments are logged (who is operating packet vs voice only). Identify Message NCS
8:45	Start Op Period #1
10:30	Secure Field Ops. Demob. Start Debrief
11:00	End the exercise.

1.3 Artificialities and Assumptions

1.3.1 Artificialities

1. The Cupertino EOC will simulate staffing to Level 3.
2. Wired and cell phone services stop working 8 hours after the power goes out.
3. Packet with printing is operational at County Comm.

1.3.2 Assumptions

1. Comm 469 will not be deployed.

2. The DOC will be staffed. DOC will also simulate command and control for the field activities.

3. County EOC will be activated; will be doing their own exercise.

4. We will staff 1 operational period.

5. We respond with our current state of readiness and with whomever shows up.

6. Weather conditions are current. The drill will not be postponed in the event of rain.

7. No public interaction is planned or expected.

8. All information in the narrative is considered valid.

9. We don't have all the answers.

1.4 References

- City of Cupertino Emergency Operations Plan
- CARES Standard Operating Procedures
- CARES Task List v2.1
- Alt911 Documentation
- Field Communications Operations Handbook, CARES, Dec 2019
- Amateur Packet Radio Field Reference, CARES, Dec 2019
- Cupertino Communications Risk Assessment and Report, Feb 2017

1.5 Exercise Control

This is a functional exercise that will be driven by scenarios and simulated conditions defined for each field response location.

1.6 Communications

1. Standard message passing procedures will be followed.

2. The CARES ICS-205 will be referenced.

3. Comm Ops will operate from their home locations.

4. Five nets will be staffed:

Net	Channel	Purpose	Use	Staffing
Resource Net	VTAC1 / UTAC3	handles check-ins, briefing, instructions, and make assignments	TAC1 and TAC3 are linked.	
Packet Command Net	UTAC4	for packet operations; perform H&W checks and packet support		NCS: Jim
Message Net #1	VTAC2	Field responders with mobiles and external antennas at home	Higher power home stations are able to talk by simplex	NCS: Chris RRO:
Message Net #2	VTAC1 / UTAC3	Field responders who only have HTs	HT-only responders can access the repeater	NCS: Judy RRO:
County Voice, Packet Net		Maintain contact with SCC EOC.		Voice: Brian Packet: Jim

Staff Command	UTAC8	CARES Command Staff back-channel	WW6HP 442.000 + PL=151.4	

5. The DOC is an FCC licensed operator who can operate on both voice or packet.
6. All radio communications will be followed by the phrase "THIS IS DRILL TRAFFIC"
7. In the event of an actual emergency, radio communications will be preceded with, "THIS IS REAL TRAFFIC".

1.7 Safety and Security

1. Safety and security issues will be handled in accordance with established policies and procedures.
2. For home deployments, the two-person rule (buddy system) is suspended.

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 test messages planned for Radio Cupertino 1670 AM.
2. No press releases are planned.

1.11 Instructions to Participants

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

1.12 Open Questions

2   Drill Planning

2.1   Before the event

2.1.1   OBJ#1: CARES can collect and pass actionable 9-1-1

1. Complete ALT911 modifications and testing by 13-Mar-2020…
   Done!

2. Develop signage for community emergency assistance (ASSIST) stations, such as "REPORT AN EMERGENCY HERE". Separate Arrow signs… ***Deferred***

2.1.2   OBJ#3: Message passing

1. Include message passing training as part of the Drill Prep session. Use the field Comm Reference as the guide.

2.1.3   OBJ#4: Notification Message Push/Post

1. Complete development and test of PublicNotice.html (PacFORMS) by 13-Mar-2020… ***Done!***

2. Develop ARK printing environment plan by 27-Mar-2020… ***Deferred***

3. Purchase one Laser printer for testing by 27-Mar-2020… ***Done!***

2.1.4   OBJ#5: MARPLOT

1. Ensure event addresses are real and loadable in MARPLOT… ***Done!***

2.1.5   Other work

1. Develop Standing ALT911 IAP

2. Develop ICS 204 Assignment Sheet, ALT911 incident… **DEFERRED**

3. Decision on the use of Sparrow, and the plan on how to test.
   ANS: 2/6/2020: NO. Sparrow is out of scope for this exercise.

2.1.6   Partner Reviews

1. Meet with Cupertino OES; brief them on the exercise plan; Ken Ericksen, Bob Cascone, Katy, Tom… ***Done!***

2.1.7   Injects

1. Develop or update the canned messages to be used at home locations. Describe either something the Field Responder will observe, or someone with whom they interact that wants a message passed. Reference injects from:
   a. CUP-16-34T, 2016 Earthquake Comm Exercise
   b. CUP-16-40T, Comm Outage Exercise, Packet Edition
   c. CUP-15-26T, Communications Outage Exercise

2. Use the concept of "timed release" messages from each location so everyone has a several opportunities to pass traffic.
   PACKET… ***Done!***
   VOICE… ***Done!***

2.1.8 Planning Events

1. 06 Mar-2020: First reading, feedback of ExPlan, CARES… ***Done!***
2. 30-Mar-2020: Drill introduction to CCC Steering Committee… ***Done!***
3. 16-Apr-2020: Second ExPlan reading, feedback, CARES… ***Done!***
4. 22-Apr-2020: Third ExPlan reading, feedback, CARES… ***Done!***
5. 14-May-2020: Final reading, feedback of ExPlan… ***Done!***

2.1.9 Training Events

1. 05-Mar-2020: CARES General Meeting, Topic: Packet Intro… ***Done!***
2. 14-Mar-2020: Hands-on Packet Intro… Canceled
3. 02-Apr-2020: CARES General Meeting, Topic: ALT911 Intro… ***Done!***
4. 25-Apr-2020: Hands-on Packet ALT911… ***Done!***
5. 07-May-2020: CARES General Meeting, Topic: Drill Prep… ***Done!***

2.1.10 Action Items

1. Complete development, review, and adoption of ICS-205 radio/frequency plan. AEC Staff… ***Done!***

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.

Feb-2020; COVID-19 has started to infect country and looks like the next pandemic. By March 7th, Santa Clara County has issued shelter-at-home and social distancing orders. By March 30th, all shelter-in-place were extended May 3rd.

01-May-2020; COVID-19 shelter-in-place orders were extended to June 1st. AND, it looks like the Fire Season is off to an early start in Northern California with CAL Fire has already attacked two moderate-sized wildland fires in Shasta County. The City of Cupertino took no chances this year and U.S. mailed all residents an information card on the things they should do now to prepare for a power shutoff. It included where to find help, resources, and how to sign up known AFN individuals for follow-up.

Tuesday, 0900 PDT. An NWS email notification issued an increased fire weather concern through Thursday and an extended wind advisory for the North Bay Mountains and East Bay Hills until Thursday morning.

Wednesday, 0900 PDT. Winds have not abated over night with off-shore winds continue to build. PG&E has issued notices to North Bay communities that a PSPS event will likely start within 24 hours.

Wednesday, 1400 PDT. Winds across the Central Valley have picked up with gusts reaching 35-45 miles per hour over the entire Diablo Range. PG&E issues an advisory for much of the Bay Area jurisdictions for a possible massive PSPS event. If it does occur, it will start very early Friday morning. Elsewhere, power was turned off in most of Napa and Sonoma Counties. A city-wide PSPS event looks inevitable.

Friday, 1400 PDT. The NWS reports that the winds have not died down, and a heat advisory is now compounding the problem. Fires have occurred in the Santa Cruz Mountains. Power outages started for the east bay cities and communities along all foothills area. PG&E put all Bay Area cities on notice that power will be out for much of the Bay Area by Saturday.

The City Manager requests CARES and CERT to activate Saturday if we wake up to no telephone service at home. The request is to do the following:

- Set up communications outreach points from home locations to provide neighborhood observations.
- Receive and transmit resident requests for help.
- Provide information to residents from the city.

Saturday, 0200 PDT. Power throughout Cupertino went out.

End of Scenario.

Discussion
Field, assigned
Bob   Packet CUPEOC
Jim   Packet XSC911 (sim)
Brian County Voice Net