ISA Communications Exercise

Exercise Plan

Cupertino Office of Emergency Services

CUP-21-24T

May 14, 2021

Version 1.3

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Revision

Rev	Date	Comments
1.0	4/7/2021	Initial Draft
1.2	4/29/2021	Updates from the AEC review
1.3	5/14/2021	Final Update

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 emergency response. This effort is intended to integrate CARES, CERT, and MRC into a seamless response capability that can be deployed during times of emergency at the discretion of the City EOC Staff.

CARES periodically exercises specific Capabilities[1] to ensure on-going familiarity by its membership and Served Agencies[2], as well as provide opportunities to look for process improvements. The Infrastructure Safety Assessment is one such task and a driver for this exercise. This exercise also plans to incorporate a portion of the CERT organization into the communications mix.

This Exercise Plan addresses how we would execute on this procedure.

1.2 Purpose, Goals and Objectives

1.2.1 Purpose

The purpose of this exercise is to test existing and new Cupertino ARES tools and procedures for the Infrastructure Safety Assessment (ISA).

1.2.2 Objectives & Measures

Objectives	Measures
1. Execute the response per the CCC IDR Plan protocols.	1. C469 is confirmed IDR compliant. 2. Number of members willing to take solo or home-buddy assignments.
2. Exercise the Mike-Mike reporting process.	1. Ability to roll up and provide a reasonable picture (with seeded MM numbers)
3. Test the ISA process using the restructured asset grouping.	2. A sufficient number of ISA teams are deployed to perform the assessment within a 2-hour period. 3. All assigned ISA assets are found. 4. Status reports to Served Agencies are made every 30 minutes by packet.
4. Test the ISA data collection c469 web app.	1. Ability to maintain report visibility by all connected computer systems.

[1] CARES Task List, http://www.cupertinoares.org/docs/cup-ctl.pdf, November 2019
[2] Served Agencies, https://www.cupertinoares.org/index.php?content=about#whoweserve

	2. Feedback received on usability and functional fit.
5. Perform a GMRS test with one or more ARKs and Field teams.	1. Communications is maintained between C469 and participating ARKs by GMRS.
6. Test the DOC Operational Checklist and JIT training.	1. All elements of the checklist are performed. 2. All elements of the JIT training are performed.
7. Test the Demob Process.	1. All paperwork returned and complete

1.2.3 Concept

This will be a communications operational exercise based on an earthquake scenario.

1. Existing and new aspects of the ISA process will be tested, including:
   a. New SAN assets, updated WATER assets.
   b. Restructured ISA grouping; merges elements of ISA with First Look Area (FLA)/Pass 1 (major boulevards and arteries) assessment
   c. C469 data collection and reporting web application.
   d. Creation and transmission of ISA results by packet to CARES Served Agency partners.
   e. ISA Assignments will be distributed from the following locations:
      - Parking lot, 21801 Stevens Creek Blvd, west of Starbucks, Post Office
      - Jollyman Park
      - EOC
      - Forum
   f. Real-time visibility of the results by the DOC for inclusion into the City's SITSTAT report.
2. Mike-Mike Reporting values will be suggested to participants with the intent of assessing the ability to roll up a geographic view of the reports.
3. A test of field communications by GMRS from C469 to participating Cupertino ARKs and other CERT members.
4. CARES responders will deploy from their homes.
5. All IDR Plan protocols will be in effect.
6. Voice message traffic will be informal and based on completion of a task, discovery of a problem, or trigger from the assignment scenario.
7. This drill will be coordinated on standard CARES nets.
8. Field Responders will be deployed either with Home Buddies or as solo assignments.
9. The CC DOC JIT guide will be tested for the first time. This will be run by the Cupertino OEM staff to review and evaluate.

1.2.4 Exercise Schedule

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

Saturday, May 15, 2021	
07:00	Drill begins. Retrieve C469, proceed to City Hall.
07:30	Begin C469 setup at City Hall per IPR Protocol.
08:15	(NOTE: check-ins are spread out over a 20-minute period) Activate the CARES Resource Net; start taking check-ins, Mike-Mike reports, and field assignment availability.
	Assume sufficient MM results to warrant deploying the ISA. Deploy ISA doc holders to distribution locations.
08:45	Begin deploying field responders to: ~~a.~~ ISA doc distribution sites
09:00	First ISA reports received
10:00	GMRS Radio Test to Field CERT teams
10:30	All ISA reports received First field teams through Demob
11:15	End the exercise.
12:00	C469 is secured.

1.3 Artificialities and Assumptions

1.3.1 Artificialities

1. The Cupertino EOC will simulate staffing to Level 1.
2. Wired and cell phone services stop working immediately after the event occurred.
3. C469 will be pre-staged to support the exercise. Its retrieval and deployment would normally be run concurrently with the initial team deployments.
4. Packet Operations will be pre-staged to ensure a new setup outside of C469.

1.3.2 Assumptions

1. The FLA Pass 2 assessment (residential streets) is not in scope.
2. Confirmed delivery method for ISA docs to CARES field responders.
3. Forum participation in the ISA.
4. Comm 469 will be deployed to the EOC.
5. The DOC will be staffed and will set up inside the EOC.
6. DOC will also simulate command and control for the field activities.
7. There are no plans for a CERT response and/or activating the ARKs to Activation Level 2.
8. County EOC will not be activated. However, a County RACES exercise will be run at the same time. We will deliver a Mike-Mike roll-up to SCC RACES.
9. We will staff one operational period.
10. We respond with our current state of readiness and with whoever shows up.

11. Weather conditions are current. The drill will not be postponed in the event of rain.
12. No public interaction is planned or expected.
13. All information in the narrative is considered valid.
14. 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
- Revised ISA procedures
- Field Communications Operations Handbook, CARES, Dec 2019
- Amateur Packet Radio Field Reference, CARES, Dec 2019
- *USGS Haywired Project*, https://pubs.usgs.gov/fs/2018/3016/fs20183016_.pdf

1.5 Exercise Control

This is an Operational exercise that validates our plans and procedures. It 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. Field Responders will check in from their home locations.
4. All radio communications will be followed by the phrase "THIS IS DRILL TRAFFIC"
5. In the event of an actual emergency, radio communications will be preceded with, "THIS IS REAL WORLD 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 on Radio Cupertino 1670 AM are planned.
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, and new 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

1. Resolve approach to handle ARK Level 2 activations.
2. Refine the criteria between CARES, DOC, and ESC for initiating field deployments.

2 Drill Planning

2.1 Before the event

2.1.1 OBJ#1: Execute the response per the CCC IDR Plan protocols

1. Resolve and test the C469-DOC network connectivity… ***DONE!***
2. We believe we have worked out all issues with the Nov 2020 exercise.

2.1.2 OBJ#2: Exercise the Mike-Mike reporting process.

1. Confirm adoption of the SCC RACES Mike-Mike Report... ***DONE!***
2. Develop the process for handing off the MM report summary to the DOC... ***DONE!***

2.1.3 OBJ#3: Test the ISA process using the restructured asset grouping.

1. Develop the revised ISA grouping… ***DONE!***
2. Develop the City Facility asset sheets… ***DONE!***
3. Confirm the ISA packet distribution points… ***DONE!***
4. Notify ISA Served Agencies of the exercise, sent test message so they know what to expect... ***DONE!***

2.1.4 OBJ#4: Test the ISA data collection c469 web app.

1. Load the C469 Web app with the city facilities…
2. Hold C469 web app familiarization session with AEC Staff… ***DEFERRED***

2.1.5 OBJ#5: Perform a GMRS test with one or more ARKs and Field teams.

1. Request CERT GMRS radio holders to participate from their respective ARKs…
    a. Regnart ARK
    b. Marianist Center
2. Develop and distribute exercise message traffic for them to pass (2 or 3 messages)…
3. Determine the need for staffing a GMRS radio position at C469…

2.1.6 OBJ#6: Test the DOC Operational Checklist and JIT training.

4. DOC Operational Checklist is complete… ***DONE!***
5. DOC Just in Time Training is complete… ***DONE!***

2.1.7 Other work

1. Develop standing Earthquake IAP… Deferred
2. Develop ICS 204 Assignment Sheet, Earthquake, 1st Op Period… Deferred

2.1.8 Partner Reviews

1. Meet with Cupertino OES; brief them on the exercise plan; Ken Ericksen, Bob Cascone, ~~Katy,~~ Tom… ***DONE!***
2. Meet with Cupertino DPW; brief them on the exercise plan; Chad, Ken E…

2.1.9 Injects

1. Identify 1 or 2 critical issues per each Assessment Area… will be at the discretion of each responder… Instructions given
2. Develop method to stagger the check-ins to make it more realistic… AI: Judy to define… ***DONE!***

2.1.10 Planning Events

1. 16-Apr-2021: First reading, feedback of ExPlan, CARES… **DONE!**
2. 13-Apr-2021; Test network set up of c469 at City Hall… ***DONE!***
3. 29-Apr-2021: First reading, feedback of ExPlan, CARES… ***DONE!***
4. 3-May-2021: Introduction to CCC Steering Committee… ***DONE!***
5. 11-May-2021: Final reading, feedback of ExPlan… ***DONE!***

2.1.11 Training Events

1. 4-Mar-2021: CARES General Meeting, "Cupertino Sanitation System Overview"… ***DONE!***
2. 1-Apr-2021: CARES General Meeting, "San Jose Water System Overview"… ***DONE!***
3. 6-May-2021: CARES General Meeting, Drill Prep… ***DONE!***

2.1.12 Action Items

1. …

3 Narrative

3.1 Scenario

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.*

This scenario is based on the *USGS HayWired* earthquake scenario that was designed to model and study impacts on the San Francisco Bay area from a magnitude 7 earthquake on the Hayward Fault. The USGS study builds on understanding of the last large earthquake to occur on the Hayward Fault in 1868, but with the realization that modern urban infrastructures are made vulnerable by multiple layers of interdependencies between lifelines, with a major reliance on the Internet.

14-Nov-2020; COVID-19 restrictions are still in place.

Saturday, 0600 PDT. Major earthquake shakes the Bay Area.

The initial shaking felt like a 3 or 4 magnitude, with not much damage. Within 15 seconds, significant shaking was felt throughout Cupertino. This could only mean that the Hayward Fault ruptured.

While would could only imagine the extent of damage on the Hayward fault, our own local shaking was also considerable and from individual at home observations, there has been moderate damage. Fortunately, the timing of this resulted in almost no traffic on city streets.

End of Scenario.

3.2 Response

NOTE: *This describes how the response is anticipate to unfold. It is a view based on discussions. Actual activities may be different as we encounter real situations. All times are estimates.*

0600 PDT. Hayward fault ruptures with a 7.2 earthquake.

0700. **C469 Operator** Retrieves C469, proceeds to City Hall.

C469, Shift Supervisor, and staff at City Hall. Initial set up is limited to standard vehicle and radio operations. No external operating positions will be setup at this point. This should the same of what we would actually do for the First Op Period.

Packet Ops will set up outside of C469. They will be responsible for their setup and operations, c469 staff will help if available. Network connectivity is established between the Packet Station and C469 WiFi.

0815: Open the Resource Net.

NCO takes check-ins. For each operator, they record the following information (recording method is at the discretion of the NCO):

1. Call sign
2. Availability for a field assignment
3. Local ARK name

4. Mike-Mike Report
5. If they have a home buddy

Check-ins include CARES members, DOC, CCC coordinator, and Cupertino ESC. Anyone else on the frequency will be asked to stand by.

> **AAR:** we use the ICS211B Check in List for in-person check-ins. Need to determine if we need a ICS211x Net Check in form (different info).

DOC: When DOC shows up, they proceed to establish the DOC desk inside City Hall, set up the network kit and confirm network connectivity with C469 by phone and the c469 Web App.

0830: **Shift Supervisor** and NCO evaluate the received Mike-Mike reports and determine that MM reports (MM-5 or greater) support initiating the ISA procedure. They attempt to relay this situation to the DOC or ESC. If not available, then they proceed with their recommendation.

> ***AAR:*** Need to determine the MM criteria to trigger an ISA… only one MM5 report? Some percentage? Average of all city reports?

Shift Supervisor directs two ISA staging locations to be set up and assigns ISA Staging Supervisors to respond.

1. 21801 Stevens Creek Blvd
2. Jollyman Park

ISA Staging Supervisors acknowledge and travel to these locations using standard Resource Net Protocol (Notify on departure/OD, notify on arrival/OD).

Shift Supervisor starts to make assignments for members to proceed to either ISA Staging location. This could be done either by:

1. The bulk of the Solo responders proceed to 21801 Stevens Creek Blvd and home-buddy assignments proceed to Jollyman Park, or
2. Responders proceed to the ISA Staging Location closest to their starting location.

NOTE: C469 staff has the latitude to make the ISA Staging assignments as they set fit.

> ***AAR:*** This approach ultimately needs to be discussed and finalized after the exercise.

NCO logs all Assignments made.

ISA Staging Supervisors notify NCO when arrived at Staging, and when set up. Setup minimally includes a table, clipboards, forms, pens.

> ***AAR:*** Confirm that the goal is not to drag out the ISA process over hours. With whomever shows up, the plan should be to make all assignments in this first pass. If 6 members respond, then most or all assignments would be made at this first pass. If more of less members respond, assign as accordingly.

Field Responders proceed to their assigned ISA Staging location using standard Resource Net Protocol (Notify on departure/OD, notify on arrival/OD).

On arrival, they fill in the ICS 211B Check-in Sheet and ICS211D Drivers Info if they will be a driver.

AAR: Need to determine that a ICS211D Drivers Info form satisfies the city's requirement to capture driver information. Using T-Cards here does not make sense since (i) the responder will not return to Staging, and (ii) T-Cards are managed at c469, the main point of resource control.

ISA Staging Supervisor confirms driver eligibility, assigns one or two individuals to an ISA group, logs all assignments on the ISA Staging ICS 214

ISA Staging Supervisor notifies NCO of which responders (call signs) were assigned to what ISA assignments.

NCO contacts assigned responders and confirms their Tactical Call (either the Assignment name, such as 'Homestead', or Team # if multiple assignments were made.

ISA Field teams proceed to perform their assignment.

NCO notifies ISA Staging supervisors when all assignments are made and directs ISA Staging to secure. ISA Staging Supervisors secure their operations. NCO directs them what to do next.

ISA Field teams make reports to the NCO on the status of assigned assets per the ICS field checklist. ISA Field Teams record their findings on their ISA Asset Control Log.

NCO records their reports on the ISA C469 Web App, and ICS 309.

Shift Supervisor monitors changes in reported status as repeated on the Position 4 copy of the ISA C469 Web App.

DOC monitors changes in reported status as repeated on the DOC copy of the ISA C469 Web App. Creates reports or sends updates to the EOC.

Packet Op monitors changes in reported status as repeated on the Packet copy of the ISA C469 Web App. Packet Ops selects Packet Report and creates ISA packet messages to Served Agencies.

09:15: **CARES member** is dispatched to Regnart ARK to open for GMRS Test.

Shift Supervisor assigns a Demob Manager and prepares for Demob.

10:00: C469 initiates GMRS radio test with Field CERT teams.

ISA Field teams complete their assignment. NCO directs them to return to the EOC for Demob.

ISA Field teams arrive at City Hall, NCO directs them to proceed to Demob. ISA Field team checks out of the net.

Demob Manager processes returning members using COES 211 Demobilization Check Out form (DRAFT).

All **ISA Field teams** are back.

Shift Supervisor secures the exercise.

C469 Operator secures C469 operations, returns C469 to Service Center.

End of response.

A Appendices

A.1 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.
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.
FLA:	First Look Area. A specific selection of streets in Cupertino on which an FLA Assessment will be made.
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.
IDR	Infectious Disease Response, used to refer to the IDR plan and protocols in place during the COBVID-19 pandemic.
MRC:	Medical Reserve Corp. Volunteers that supplement the existing emergency and public health resources
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.
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.

A.2 Types of Exercises

For the purpose of this document, CARES will use the following definitions when considering training activities:

Tabletop Exercise (TTX):	A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures.
Operations-based Exercises	Validates plans, policies, agreements and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment. Types of operations-based Exercises include: • Drill: A coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity (e.g., a fire department conducts a decontamination drill).
Functional Exercise (FE):	Examines and/or validates the coordination, command, and control between various multi-agency coordination centers (e.g., emergency operation center, joint field office, etc.); does not involve any "boots on the ground" (i.e., first responders or emergency officials responding to an incident in real time).
Full-Scale Exercises (FSE):	A multi-agency, multi-jurisdictional, multi-discipline exercise involving functional (e.g., joint field office, emergency operation centers, etc.) and "boots on the ground" response (e.g., firefighters decontaminating mock victims).