

After Action Report 2013 Infrastructure Safety Assessment Drill



Cupertino
ARES/RACES

1. Overview

Description: Infrastructure Safety Assessment Drill
Event Date: 18-May-2013
Report Date: 8-June-2013
CARES Event: CUP-13-15T
RACES Event: CUP-13-15T
Control: Cupertino ARES/RACES
Report Revision: 1.1, **FINAL**
Submitted by: Jim Oberhofer KN6PE

Requirements for Reporting

Completing an After Action Report is part of the required 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)."

CARES will follow this requirement for reporting the results and recommendations for this Training Event.

i. Introduction and Background

Terms

CARES: Cupertino Amateur Radio Emergency Service, ARES/RACES organization supporting the City of Cupertino.
CCC Cupertino Citizen Corp; the City umbrella organization for CARES, CERT, and MRC.
CuSD Cupertino Sanitary District, a CARES Served Agency
ISA: Infrastructure Safety Assessment, a CARES Process.
PSA: Preliminary Safety Assessment, a CARES Process.
SJWC: San Jose Water Company, a CARES Served Agency
Served Agency An agency, special district, or other recognized organization with which CARES has a signed Memorandum of Understanding.

Introduction

The City of Cupertino supports testing the community emergency response plans and ongoing disaster preparedness training as an essential component to a successful community disaster response. One element of the CARES response is the Infrastructure Safety Assessment (ISA).

The Infrastructure Safety Assessment (ISA) is an activity where CARES observes and reports on selected Cupertino critical facilities that are deemed to be important to the City or our agencies. Specifically, there are 35 assets owned and operated between SJWC and CuSD. These served agencies have requested an eyes-on assessment of these assets because they may not have the manpower to inspect them all immediately after a disaster occurs. We perform the ISA to:

- Develop a picture on the state of the city’s critical infrastructure.
- Help the EOC focus attention on problem areas that may only get worse or impede the recovery if not immediately addressed.
- Provide an early report of asset status for our Served Agencies.

The purpose of this exercise was to test the ISA Process as performed by CARES.

The City of Cupertino authorized this drill with training activation number CUP-13-15T. This report covers the activities undertaken by CARES and the findings from that drill.

ii. Type / Location of Event / Drill / Exercise

Event Type: City of Cupertino, CARES Training Activation
 Event Identifier: CUP-13-15T
 Event Name: Infrastructure Safety Assessment
 Location: City of Cupertino

iii. Description of the Event / Drill / Exercise

CARES drill objectives:

1. Foster coordination between CCC members.
2. Test the Infrastructure Safety Assessment (ISA) Process.
3. Update the ISA Assignment sheets as necessary.
4. Test the Resource Net concepts and procedures
5. Use standard ICS and/or Cupertino OES documentation.

Event resources came from the following organizations:

1. Cupertino ARES/RACES: Responsible for checking into the CARES emergency net, responding to the field to perform the ISA process, rolling up the results, and transmitting the results to the Cupertino EOC Staff. Seventeen (17) CARES members participated in the test.

<u>Name</u>	<u>Call Sign</u>	<u>Assignment</u>
Fari Aberg	KF6UVS	ISA Field Responder, Team 6
Hela Bluhm-Stieber, KJ6OHF		ISA Field Responder, Team 4
Dave Butler	KD7VKU	ISA Field Responder, Team 1
Bob Cascone	KJ6WBF	ISA Field Responder, Team 2
Margret Cascone	--	ISA Field Responder, Team 2
Gerd Goette	KI6WEJ	ISA Field Responder, Team 4
Allan Gontang	KD6QPP	ISA Field Responder, Team 6
Phil Harris	WA2KDX	Shift Supervisor
Bill Klein	KD6TQJ	ISA Field Responder, Team 5
Dick Mincher	W6RWM	ISA Field Responder, Team 1
Janet Motha	Kf6PUQ	ISA Field Responder, Team 5
Jim Oberhofer	KN6PE	ISA Staging
Darryl Presley	KI6LDM	Message Net Control Operator
Grace Romero	KJ6ANV	ISA Field Responder, Team 6
Dick Sherman	N6IK	ISA Field Responder, Team 3
Mark Taylor	AG6CL	Radio Room Operator
Leroy Wilkinson	KG6OGA	ISA Field Responder, Team 3

The drill was initiated as a pre-announced event with CARES members knowing to check into the CARES Emergency Net at the appointed time.

Performance against Objectives:

1. Foster coordination between CCC members

Results: **NOT ASSESSED.** Cupertino OES recommended this drill be run as a CARES-only drill. Other CCC participation was not solicited.

2. Test the Infrastructure Safety Assessment (ISA) Process

Results: **SATISFACTORY.** The overall ISA Process worked well:

1. Identify Field Responders for the ISA process and respond to an ISA Staging area.
2. Receive the ISA Assignment Sheets. Using a central Staging area allowed for all ISA responders to team up with a response buddy and ask questions on their assignments. This also helped clarify any specific conditions of which the responders needed to be aware.
3. With your buddy, proceed to each ISA location. The assignment was to drive to and report on assigned ISA asset. Responders checked out of the resource net and into the message net. There were no driving incidents or concerns reported.
4. On arrival at an ISA location, inspect the asset per the assignment sheet. All assets were readily found with the exception of 2 that required clarification from the Comm Team Lead. Directions to assets and the description of what constitutes nominal conditions were reported as satisfactory.
5. Record your findings. Most ISA teams recorded their findings on the ISA control sheet that accompanied their assignments.
6. Report to the EOC the results of your assessment. All message reports were made in a clear and concise manner.
7. When done, proceed to the next ISA location. Prior to leaving for their first assignment, ISA Teams developed the route they would take to find and report on their assigned assets. This worked well and resulted in an expeditious report.
8. If this was your last assignment, check out of the Message Net and back into the Resource Net. All Field Responders were tracked to and from their assignments and homes.

3. Update the ISA Assignment sheets as necessary

Results: **SATISFACTORY.** Good and relevant feedback was provided on changes and recommendations to all ISA Asset sheets.

4. Test the Resource Net concepts and procedures

Results: **SATISFACTORY.** Resource Net procedures were limited to tracking Field Responders to and from their assignment.

5. Use standard ICS and/or Cupertino OES documentation

Results: **SATISFACTORY.** Good details on submitted forms from the field.

See form specimens in the Section *viii Logs, Attachments*

The drill ran for 3.0 hours.

iv. Chronological Summary of Event / Drill / Exercise

CARES ran this test under activation number CUP-13-15T. The following is a summary of the activities as reported on ICS-214s that were submitted after the test. All times listed here are in local time. The following is a very high level summary.

Time	Description, Notes, Comments
0703	Retrieve the Comm Van, Drive to City Hall (KD6QPP)
0715	Comm Van at City Hall (KD6QPP)
0800	CARES Emergency Net was activated, taking check-ins and field assignment availability (KD6QPP)

Time	Description, Notes, Comments
0826	Field responders arriving at City Hall/ISA Staging
0830	KI6LDM assumed Message Net Control
0847	Field responders checking out of TAC-1 Resource Net and into TAC-2 Message Net
0900	Health and Welfare Check, all ok
0905	Radio Room Operator in position, first ISA Report received
0930	Health and Welfare Check, all ok
0934	First Packet message to SJW #CUP102
0950	Second Packet message to SJW #CUP112
1000	Health and Welfare Check, all ok
1020	Third Packet message to SJW #CUP103
1025	Last ISA Report received; Radio Room Operator secured
1028	TAC-2 Message Net secured
1100	TAC-1 Resource Net secured
11:15	Drill concluded; Full debrief at City Hall

v. Response at SEMS Levels (as appropriate):

Include a summary, conclusions, the field response, and other local, operational area, regional, state or federal response.

Participating CARES members responded from their home locations to perform the ISA per the actual Served Agency asset locations. The following specifics are noted here:

- The Two-Man Rule (buddy system) was in effect for all ISA responders.
- Six field teams were deployed, each evaluating about 5 assets per team.
- 34 of 35 assets were located and reported generated. The remaining asset was intentionally excluded due to additional requirements needed to perform the survey.
- Radio packet messages containing ISA summaries were originated and transmitted to one served agency as a test of the ISA asset status delivery report.
- It took 1 hour 35 minutes for the 6 teams to perform the ISA (from time of ISA assignment to the time of the last message).

No other organizations or entities participated in this drill.

vi. Interacting Systems, Agencies, and Programs:

Include mutual aid systems (law enforcement, fire/rescue, medical, etc.); cooperating entities (utilities, American Red Cross, Sheriff's Office, City Departments, etc.); telecommunications and media interactions.

ISA Process

A review of the ISA process was presented to the membership at the April and May 2013 CARES General Meeting with the intent of running a field-based ISA drill shortly thereafter. The key success factors for this drill were:

1. CARES members can operate in the field in ad hoc teams (one driver and one radio operator).
2. The ISA Assignment sheets are clear on where to find the asset and what to look for.
3. The message handling of ISA reports is clear and succinct.
4. ISA status can be delivered to the EOC and appropriate served agencies.
5. While a six-team ISA deployment could complete the ISA in less than 2 hours in a non-emergency, it is recognized that the time it takes during an actual emergency may be longer due to event impacts to roads and access conditions.

Communications Systems

All radio systems performed as expected.

CARES activated both voice nets on VHF TAC-1 and TAC-2. The CARES UHF repeater TAC-3 was not used.

Radio coverage from the van was sufficient to maintain radio contact with all mobile field units. The only location where contact was lost was in evaluating xxx-T4 when ISA Responders were on foot approaching the asset. This was expected given that this location is situated behind the hills west of the City.

As a first test, CARES generated three packet messages to one served agency and passed the current state of the Agency's specific assets. While the format of the message did provide the details of the ISA, it has not been confirmed to be an optimal format. This has to be further reviewed with the Served Agency.

vii. Improvements, Conclusions, Recommendations:

As applicable, include a description of actions taken, assignments, associated costs or budget, timetable for completion or correction, and follow-up responsibility.

The following is a summary of the key Conclusions and Recommendations.

What worked

- ISA assignment sheets
- Mobile teams of 2 field responders
- Health and Welfare Reports

What didn't work / needs improvement

- Spotty radio coverage in remote locations.
- Form COES 205A log is organized for reporting, not message capture.
- Unclear on how to handle buried assets (pipes in overpasses).
- New County GIS Map coordinates are still new to many.

Recommendation

Updates to ISA Assignment Sheets

There were a few ISA sheets that required clarification. Updates to pictures, descriptions, and additional cautions were noted and reported.

1. Update all ISA sheets as appropriate including: new Grid Locations, updated pictures, updated maps.

Marginal radio coverage of some areas

There were reports of some marginal coverage during this drill. This should be addressed in one of 2 ways.

1. TAC-3 Repeater Use. EOC uses CARES TAC-3 (UHF Repeater) as a Command Channel. This repeater will also be used for reports when a field responder cannot make contact on the simplex nets.
2. Cross-Band Repeat. Investigate how well mobile cross-band repeaters can be deployed. For instance, a higher power mobile radio can be set up in a parking lot configured for Cross-Band Repeat to support field responders that cannot make contact to the EOC Radio Room directly.

Message Handling

Incoming messages were captured directly on COES 205A ISA Control Log. This approach was determined to be incompatible with the standard message handling procedures since it is likely that ISA message traffic will be received along with other regular traffic. Revise the Radio Room information flow as follows:

1. ISA messages are transmitted to the EOC Radio Room from the Field. Radio Room Operator records the message on a standard Message Form.
2. Message Form with ISA content is passed to the Comm Team Lead for entry onto the COES 205A ISA Control Log. This log forms the basis for distributing information as appropriate.
3. Add ISA traffic to the NCS/RRO simulations scripts.
4. Add COES 309 Comm Log procedure into the NCS/RRO simulations

Additionally, packet messages were generated based on an intuitive understanding of what may be needed by the served agency/asset owner.

1. Review the format for delivering ISA asset status with our served agencies. Adopt one format if possible.

Clarify the role of Health and Welfare Checks

Maintaining an accurate accountability of personnel assigned to the emergency incident is a primary responsibility of the Incident Commander or Team Lead, and an essential component for safe and effective emergency operations.

The Health and Welfare Check (also known as Personnel Accountability Report (PAR)) is a roll call procedure initiated by the Comm Team Lead to confirm that all personnel assigned to an emergency incident are physically accounted for.

1. Develop, leverage, and/or clarify a procedure for the Health and Welfare/PAR Checks.
2. Incorporate this procedure into the Shift Supervisors Playbook; review with CARES Staff.

viii. Logs, attachments:

As applicable, include a description of actions taken, assignments, associated costs or budget, timetable for completion or correction, and follow-up responsibility.

The following reports are attached:

1. ICS 214 Event Unit Log
2. COES 201 Net Control Station Log
3. Packet Message, Printed ISA Report

ICS-214 Event Unit Log

UNIT LOG ICS 214-SCCo ARES/RACES	1. Incident Name and Activation Number	2. Operational Period (Date/Time)	
	CARES ISA	05/18/2013 From: 0645 To:	
3. Unit Name / Tactical Call / Designators		4. Unit Leader (Name, Call Sign, ICS Position)	
5. Personnel Roster Assigned			
Name	Call Sign	ICS Position	Home Base/City
DILAN CONTACT	EDL6PP	RESOURCE NET	CAPT
PHIL HARRIS	WAZKDX	SUPR IN TRAINING	"
DARREN	WAZLDR	MESSAGE NET	"
TJMO	KN6PF	SUPR	"
6. ACTIVITY LOG			
Time (24:00)	Major Activities & Events / Occasional Messages (indicate From / To / Msg# / Msg Text)		
0703	Drove to City Hall. THREE copies of Dispatch THOMPSON		
0714	ARRIVE CITY HALL & STREET SET UP		
	STATION SECURED		
0810	CHECK-IN COMPLETE (2) - NET OPENED 0800		
0812	VERIFIED AVAILABILITY - REQUESTED RESPONDER TO COME TO EOC-ALT		
0826	MEMBERS STARTING TO ARRIVE AT EOC-ALT + CHECK-IN		
0830	BRIEFING OF VOLUNTEERS + DIST. ASSIGNMENTS FOR ISA		
0845	BRIEFING COMPLETE - VOLUNTEERS DEPLOYED		
0847	TEAM SHIFTING FROM TAC1 TO TAC2 → 0900		
0900	HEALTH + WELFARE CHECK (H+W CHECK)		
0905	RADIO ROOM OPERATIONAL + RECEIVING ISA REPORTS		
0930	H+W CHECK - OK		
0934	PACKET MESSAGE SENT TO SJW # CUP102		
0950	" " " " " # CUP112		
1000	H+W CHECK - OK		
1020	PACKET MESSAGE # CUP103 SENT TO SJW EOC		
10:25	RADIO ROOM SECURED		
10:28	MESSAGE NET SECURED TAC 2		
11:00	FULL DEBRIEF		
11:00	TAC1 SECURED		
11:15	DRILL CONCLUDED AT 11:15		
7. Prepared By (Name, Call Sign, ICS Position)		8. Date & Time Prepared	9. Page <u>1</u> of <u> </u>
PHIL HARRIS WAZKDX SUPR		5/18/2013	

ICS 214-SCCo ARES/RACES (rev. 2009-Sep-25)

COES 201 Net Control Station Log

COES 201 Net Control Station Log

Rev 060722

COES 201 NCS LOG		1. INCIDENT NAME		2. DATE	
		ISA Drill		05/18/2013	
(3) Msg ID	(4) Priority	(5) Time in	(6) Originating Station	(7) Receiving Station	(8) Time Ack
001	Routine	9:06	TEAM 3	EOC	9:07
002	Routine	9:08	TEAM 2	EOC	9:08
003	Routine	9:10	TEAM 4	EOC	9:10
0004	Routine	9:16	TEAM 3	EOC	9:16
005	Routine	9:18	TEAM 5	EOC	9:18
006	Routine	9:20	TEAM 2	EOC	9:20
007	Routine	9:22	TEAM 6	EOC	9:22
008	Routine	9:27	TEAM 3	EOC	9:29
009	Routine	9:33	TEAM 5	EOC	9:34
010	Routine	9:35	TEAM 2	EOC	9:36
011	Routine	9:39	TEAM 1	EOC	9:40
012	Routine	9:46	TEAM 6	EOC	9:46
013	Routine	9:46	TEAM 5	EOC	9:47
014	Routine	9:47	TEAM 4	EOC	9:48
015	Routine	9:48	TEAM 3	EOC	9:50
016	Routine	9:54	TEAM 2	EOC	9:58
017	Routine	10:03	TEAM 6	EOC	10:04
018	Routine	10:06	TEAM 1	EOC	10:06
019	Priority	10:08	TEAM 4	EOC	10:09
	Routine		TEAM 5		
020	Routine	10:10	TEAM 3	EOC	10:11
021	Routine	10:14	TEAM 4	EOC	10:15
022	Routine	10:15	TEAM 5	EOC	10:15
023	Routine	10:16	TEAM 1	EOC	10:17
024	Routine	10:18	TEAM 6	EOC	10:19
025	Routine	10:20	TEAM 4	EOC	10:20
026	Routine	10:22	TEAM 1	EOC	10:23

Darryl Presley 1c16LOM
NCS: Message Net

Packet Message, Printed Report

KN6PE

From: cupeoc@w1xsc.ampr.org
To: SJWEOC; K6KP
Sent: 5/18/2013 09:54
Received: 5/28/2013 19:58
Subject: CUP102: ISA.SJW Snapshot <<CUP-13-15T DRILL TRAFFIC>>
Local Msg ID: GAR116P

ISA.SJW Update @ 09:50

SJW-T1 Pending
SJW-T2 Problem
SJW-T3 OK
SJW-T4 OK
SJW-T5 Pending
SJW-T6 OK
SJW-T7 Problem
SJW-T8 OK
SJW-T9 Problem
SJW-T10 Pending
SJW-T11 Pending
SJW-T12.1 Pending
SJW-T12.2 OK
SJW-T12.3 OK
SJW-T12.4 Pending
SJW-T12.5 OK
SJW-T12.6 Pending
SJW-T12.7 OK
SJW-T12.8 OK
SJW-T12.9 OK

DESCREPERNCIES -----

SJW-T7 09:23 Heavy water leak
SJW-T2 09:35 New construction at site
SJW-T9 09:34 Power pole down on top of steps

NOTES -----

08:55 Initiated Cupertino ISA

End of Report -----

End of Report.