



CARES
Cupertino
Amateur Radio Emergency Services



**CARES Drill CD-0004
Final Report**

October 10, 2000

Summary

This report covers the results of the CARES Drill #CD004 on the Functional Field Communications Drill. Fourteen CARES members participated on October 7th. All feedback has been collected and logged for action as appropriate.

1 Plan for the Drill

Background

The possibility of earthquakes and the failure of the utility and services infrastructure in Cupertino is very real. For the Cupertino ARES (CARES) organization, participating in drills to understand how well we perform to support the overall city response is critical for our effectiveness and the community.

While CARES has been practicing to perform activities associated with INITIAL RESPONSE OPERATIONS, it has not had a recent drill to practice actual field deployment and experience the dynamics of actual field-based operations. This drill is the first of several to practice activities associated with EXTENDED RESPONSE OPERATIONS.

Goal

CARES members are confident with their abilities to operate effectively when deployed on field assignments

Approach

This will be a Functional Field Communications Drill. This includes:

- Scripted drill traffic will be developed for different field assignments
- CARES members will be deployed to the field
- Field and EOC assigned CARES members will originate and respond to drill traffic

Purpose

The purpose of this drill is to give CARES members field assignment practice and experience.

Objectives

- Practice the logistics of field assignment, physical deployment, and traffic handling
- Test personal equipment in the field
- Evaluate coverage and connectivity between the EOC and field locations
- Develop the requirements for future Functional EOC Drills

Schedule

Saturday, October 7, 2000

| | |
|---------|--------------------------|
| 9:00am | EOC Opens |
| 10:00am | Drill begins |
| 12:15pm | Drill ends |
| 12:30pm | Drill Debrief / Critique |

General Drill Plan

1. At 10:00am, listen for the CARES net on 147.570 s
2. The scenario will be read, then check-ins will be taken
3. CARES members will be polled for their availability for a field assignment
4. Simulated requests for field communications staffing will be received
5. The EC will make field assignments and dispatch members
6. Assigned CARES members will proceed to their field assignment
7. Members will be directed to a CARES envelope with your simulated traffic
8. Transmit your traffic per the instructions you find
9. Around 12:15p, we will secure the drill and request all members return to City Hall for a debrief.
10. During the debrief, help identify what worked, what didn't work, and what would we do different next time.
11. We should be done by about 1:00p

Assumptions

- The event happened 8 hours prior to this drill
- The weather is as it is that morning
- All the power is out
- The EOC is staffed, the CARES EC is present, and the radio operators are ready for a shift change

References

CARES Standard Operating Procedures

Exercise control

The exercise will be controlled by the sequence of events outlined in the individual scripts.

Evaluation

The drill will be evaluated immediately afterwards. All members are encouraged to return to City Hall for the debrief.

2 Preparation

Orientation

The September CARES meeting was orientation session that described the Total Earthquake Response Scenario to establish the context of the drill. The October CARES meeting was orientation session that walked CARES members through what would be expected.

Drill Material

Drill material was prepared in the form of individual scenarios for each field assignments. Each script described a scenario to which the reader would respond. In most cases, the scenario required a transmission of information or a request to the EOC.

Scripts were developed for the following assignments:

- City Manager
- Emergency Coordinator
- Seven Springs Fire Station
- Monta Vista Fire Station

- Cupertino Fire Station
- Cupertino Medical Center
- Quinlan Center
- Public Works Shadow
- PG&E Shadow
- Rover #1
- Rover #2
- SVECS County Net

Sealed envelopes containing the drill material were given to representatives at all Fire Stations, Quinlan Center, and the Medical Center, with instructions to hand them to the CARES member on request. This material was placed within at each site within ½ hour of the beginning the drill. Rover and Shadow drill material were given to assigned members at the EOC.

Drill material was very detailed and provided sufficient information for the assigned CARES member to initiate radio traffic.

Logistics

A white-board was installed at the CARES radio room at City Hall. This was used to support all field activities (resource tracking, communicator requests, and assignments).

3 Results

Participants

The following members participated in the Drill:

| | |
|--------|--------|
| Al | K6AB |
| Andy | W9BJX |
| Ken | KR6CO |
| Greg | WD6EHB |
| Bill | KF6MCG |
| Jack | W6MGL |
| Jim | KN6PE |
| Janet | KF6PUQ |
| Eileen | KF6PUT |
| Vince | K6TEN |
| Bill | KD6TQJ |
| Bob | KD6US |
| Bryn | N1UZW |
| Skip | WA6VFD |

Narrative

The drill started at 10:00a with the activation of the CARES emergency net.

Jim KN6PE opened the net as NCS and read the drill scenario. All drill assumptions were restated and net check-ins were taken. 14 CARES members checked in and participated for the duration of the drill. NCS then requested status and location of each member.

Ken KR6CO assumed the role of EC for this drill and recorded the name, call, and map grid location of each checked in member on a post-it. These were posted on the CARES resource and assignment board.

The EC requested Andy W9BJX report to the EOC as the next shift NCS operator.

Al K6AB played the role of Director of Emergency Services, and began making requests for field communications to the EC. Ken began to assign pairs of CARES members to the Fire Stations. However,

as more requests came in, some individuals were re-assigned to other assignments. Additional resources were dispatched as shadows for PG&E and Public Works, and two Rover units.

Andy arrived at the EOC and assumed the role of NCS after receiving a turnover from KN6PE.

All members reported arriving at their field assignments and retrieving the drill material. CARES members began initiating radio traffic per their respective script.

Over the next 1.5 hours, about 120 messages were initiated and completed between field units and the EOC. Where appropriate, responses to requests or information were generated from the EOC or the field unit.

The Drill was terminated at 12:15pm and all members were requested to return to City Hall for a debrief.

What worked

During the debrief, the following comments were made on what worked well.

1. All signals received at the EOC were loud and clear.
2. The drill tested a lot of what we wanted to test.
3. Members liked the physical aspect of the drill... logistics of driving, testing personal gear, operating in the field.
4. The Monta Vista Fire Station crew went out of their way to ensure the CARES drill material was made available when the crew was dispatched on a call.
5. We moved a lot of traffic, about 100-120 messages passed.
6. We should do this more often... It was suggested that we plan quarterly drills, pick all dates well in advance and schedule for the year.

What didn't work / needs improvement

During the debrief, the following comments were made on areas that didn't work or need improvement.

1. It wasn't clear when to repeat or just acknowledge traffic. Unnecessary repeats delayed the ability to pass other traffic
2. There was traffic passed that was spoken too fast.
COMMENT: This is an artifact of the excitement of the moment.
3. Messages weren't prioritized before passing.
COMMENT: Need to ensure NCS calls for message in priority order. Also, need to ensure field responders know when/how to notify NCS when they have higher priority traffic.
4. We need the list of shelters in the SOP to understand where we may be dispatched.
5. We need better directions of where all antenna drops are located (figures or pictures?).
6. Some transmissions were stepped on (doubles) by members because not everyone could hear everyone else. Need to use external antennas where available. Need to determine how to address non-external antenna locations.
COMMENT: Doubles will be a fact of life. We will not be able to totally avoid them.
7. CARES can expect that requests sent to the EOC will be acknowledged (received), but not necessarily replied with an answer as to how the City or EOC will address the request.
COMMENT: Depending on the magnitude of the problem, CARES may be one of many sources of requests pouring into the EOC. EOC may not get back to us. This will be a major point of frustration for whomever we are passing traffic.
8. Need to assign message numbers to help speed replies and subsequent references to the same message.
9. Need to revisit the use of PL.

10. Need to have a session on personal equipment usage.
11. Need to remember to perform health and welfare checks of all field assignments.
12. Need to pre-determine the minimum number of respondents need to be sent to each type of fixed field assignment (Fire Station, Shelter, Quinlan center, etc)
13. Need to remember to ID with your FCC call-signs
14. Need to lower the clock in the radio room to operator eye level.
15. EOC message forms were not effective as is.
COMMENT: Need to rework the message forms. Also, need to determine how traffic is recorded and tracked for field responders.
16. We need to develop alternate channels to ensure CARES has sufficient information passing capacity.
17. Consider using two people for NCS and scribe.
COMMENT: The task of NCS is tough enough. Need to explore how a separate scribe would help. Also, need to develop “hand-free” operations for NCS (foot switch PTT, boom mike, etc)
18. Scribes, runners, and non-operating field responders can be non-hams. Consider getting your spouse involved.
COMMENT: Great idea! This will further extend the CARES resource pool for field assignments. If not spouses, CARES needs to make arrangements for Cupertino volunteers to be assigned with field responders.
19. The CARES map didn’t have the Water Tank on it.
COMMENT: Need to ensure all members have key structures marked on their maps, or replace our choice of (free) maps.
20. Need personal follow-up on inactive members.

Conclusions / Recommendations

All drill objectives were met. Additionally, there was overall agreement by those who participated in the drill that the time spent was well worth it. The following recommendations will be acted on prior to the next drill.

1. CARES to host a second neighborhood leaders meeting. Topic is to present the 9-1-1 system and a discussion on expectations about what can be expected as replies from the EOC (Comment #7).
2. Rework message forms. Practice at the next Functional EOC Drill. Include message logging, numbers, etc (Comment #8, 15).
3. Ensure CARES has agreements with all served agencies to where we will respond. Ensure we understand the staffing needed for each response site (Comment #12, 18).
4. Need to develop the capability for NCS “hands-free” operation at the EOC (Comment #17).
5. Begin marking all CARES maps with key sites (Tanks, PG&E substations, Fire Stations, Schools, etc) (Comment #19).

END OF REPORT