

After-Action Report

Fourth of July Fireworks 2022



ARES/RACES

1. Overview

Description: July 4th Fireworks
Event Date: 4 July 2022
Report Date: 16 July 2022
Cupertino Event: CUP-22-27T
Control: Cupertino OEM
Report Revision: 1.0
Submitted By: Steve Hill, Cupertino ARES and CERT

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, section 2900(j)."

Additionally, Cupertino Citizen Corps will use the After Action Report format for documenting training drills and exercises.

i. Introduction and Background

Terms

CARES	Cupertino Amateur Radio Emergency Service, ARES/RACES organization supporting the City of
CCC	Cupertino Citizens Corps, the reference to Cupertino OEM volunteers from the CARES, CERT, and MRC organizations.
CERT	Community Emergency Response Team, Cupertino volunteers who have completed FEMA's CERT training.
CP	Command Post at Hyde Middle School, Gym Room
Creekside	Tactical call abbreviations listed in this report for Creekside Park
EOC	Emergency Operations Center
FRS	Family Radio Service, as defined by the Federal Communications Commission FCC
Hyde	Tactical call abbreviations listed in this report for Hyde Middle School
IC	Incident Commander

ICP	Incident Command Post, Gym Room, Hyde Middle School
ICS	Incident Command System
MAC	Mutual Aid Communicators; volunteers from throughout Santa Clara County who are registered and trained to provide mutual aid support as required.
MRC	Medical Reserve Corps, Cupertino volunteers who have elected to pursue an emergency medical certification.
NCO	Net Control Operator
NCS	Net Control Station
NCU	Net Control Unit
OEM	Cupertino Office of Emergency Management
PW	Public Works Department
P&R	Parks and Recreation Department, Event Sponsor
SCC	Services Santa Clara County; usually used in conjunction to references of County RACES, County OES, or County EOC
Sedgwick	Tactical call abbreviations listed in this report for Sedgwick School
Site	Designated viewing sites: Sedgwick Elementary School, Creekside Park, and Miller Avenue
SO	Santa Clara County Sheriff's Office

Introduction

The City of Cupertino (City) requested communications, logistics, and first aid support from Cupertino Citizen Corps during the 2022 Cupertino Fourth of July Fireworks event. To staff the event, Cupertino Office of Emergency Services activated the Cupertino Amateur Radio Emergency Service (CARES), the Cupertino Community Emergency Response Team (CERT), and the Cupertino Medical Reserve Corps (MRC).

In June, the Cupertino Parks and Recreation held two one-hour event planning sessions via Zoom.

On July 4, the City of Cupertino initiated a Citizen Corps Training Activation under the designation CUP-22-27T.

This report covers the activities undertaken by responding volunteers in support of this event.

ii. Type/location of Event / Drill / Exercise

Event Type:	City Activation
Event Identifier:	CUP-22-27T
Event Name:	Cupertino 4 th of July Fireworks
Location:	City of Cupertino

iii. Description of Event / Drill / Exercise

The City of Cupertino sponsored a Fourth of July Fireworks display for city residents. The fireworks were launched from Hyde Middle School with viewing locations identified at Creekside Park, Sedgwick Elementary School and the southern portion of Miller Avenue. The event was held after a two-year hiatus due to the Covid pandemic.

To maintain the security of the launch site and ensure the safety of the public, the Hyde campus was closed between 4:45 p.m. and 11 p.m., as were the following 16 locations on adjacent streets:

Miller Avenue	Shadygrove
<ul style="list-style-type: none"> • Atherwood • Bollinger • Disney • Howard Court • Phil 	<ul style="list-style-type: none"> • Brookgrove • Ferngrove
Stendhal	Hyde
<ul style="list-style-type: none"> • Phil • Shadygrove 	<ul style="list-style-type: none"> • Bollinger • Shadygrove • Willowgrove
Tantau	Willowgrove / Brookgrove
<ul style="list-style-type: none"> • Phil • Shadygrove 	Finch / Tilson

Event resources were provided from the following organizations:

1. Cupertino Parks and Recreation: Full-time and seasonal staff members were responsible for overall event control, coordination, venue setups, and perimeter control.
2. Santa Clara County Sheriff's Office (SO): 30 Deputies (include Code enforcement) were responsible for overall event security and general law enforcement. SO deployed a mix of patrol cars and motorcycles.
3. Santa Clara County Fire District: One Engine Company was positioned adjacent to the launch site and responsible for fireworks safety.
4. CARES: Responsible for maintaining communications with viewing location staff. Twenty amateur radio operators responded from the following cities: Cupertino, Mountain View, and Milpitas.
5. Cupertino MRC and CERT members were divided among the viewing sites, with a lead at each site that provided on-site coordination. These combined MRC/CERT teams were responsible for event first aid. There were insufficient numbers of CERTs to make venue roving teams.
6. Logistics for the event was managed by Cupertino OEM.
7. The Net Control station shifted back to the way it was done for many years: use a portable antenna, with members sitting at a table. The street closures, issues with access to the Hyde playground and close proximity to the fireworks launch location made it impractical to deploy 469. The longest transmission distance is under 0.75 miles, obviating the requirement for a high mast antenna.
8. All volunteers worked outdoors as a Covid preventative measure.
9. CCC volunteers did not perform barricade duty. Volunteers signed in at 7:00 pm instead of 4:00 pm. This change saved 78 volunteer hours. The 4:00 pm start time was 5.5 hours before the fireworks and about 3 to 4 hours before material numbers of the public arrived.
10. Staffing and assignments are displayed on the following table.

Event Objectives were:

Event objective	Outcome
Exercise informal message passing and message net procedures.	Successful. Reception was good and operators were professional.
Practice unified command operations with the Sheriff's Office, P&R, PW and Fire.	Not done. Each entity was self-managed. The CARES Net Control was set up outside the Hyde gym where the SO had its command post.
Exercise crowd safety and management operations in conjunction with P&R and SO.	Successful. Crowding issues were reported from field to CP, and then passed on to SO or Recreation (using Cupertino trunk radio). There were no material crowd management issues. The public was well behaved.
Exercise first aid operations.	Successful. Each of the three first aid stations rendered first aid for cuts and scrapes. There were two serious medical issues. The Creekside Lead fell and hurt his face. A young girl damaged her wrist playing on Sedgwick's playground equipment. There were volunteer comments about medical kits needing replenishment.
CCC following established mobilization, operating, and demobilization procedures.	Partially successful. Mobilization at Miller and Creekside went smoothly and quickly. Mobilization at Sedgwick was delayed approximately one hour waiting to gain access to the CERT supply trailer. Operating procedures were followed during the event. Some volunteers at field locations left for home without calling the message net.

iv. Chronological Summary of Event / Exercise

Time	Event
Saturday	
	Print T-cards, 211, Volunteer event packet (50); MRC guidelines (5)
	Email to volunteers: assignments, maps, event briefing, safety briefing and parking instructions.
midnight	Eventbrite and County RACES closed for registration
Monday	
4:45	<p>Street closures to traffic begin</p> <p>4:45 p.m. – 5:00 p.m.:</p> <ol style="list-style-type: none"> 1. Atherwood Ave. @ Candlewood Dr. (4) 2. Atherwood Ave. @ Miller Ave. (3) 3. Howard Ct. @ Miller Ave. (5) 4. Stendhal Ln. @ Shadygrove Dr. (7) 5. Finch Ave. @ Tilson Ave. (13) 6. Disney Ln. @ Miller Ave. (2) 7. Miller Ave. @ Bollinger Rd. (1) 8. Miller Ave. @ Phil Ln. (6) <p>5:45 p.m. - 6:00 p.m.:</p> <ol style="list-style-type: none"> 1. Hyde Ave. @ Willowgrove Ln. (9) 2. Hyde Ave. @ Bollinger Rd. (11) 3. Hyde Ave. @ Shadygrove Dr. (8) <p>5:45 p.m. – 6:00 p.m.:</p> <ol style="list-style-type: none"> 1. Stendahl Ln. @ Phil Ln. (14) 2. Phil Ln. @ S. Tantau Ave. (12) 3. Willowgrove Ln. @ Brookgrove Ln. (10) 4. Shadygrove Ln. @ S. Tantau Ave. (15) 5. Brookgrove Ln. @ Shadygrove Ln. (17) 6. Ferngrove Ln. @ Shadygrove Ln. (16)
6:00	CARES set up Net Control on basketball area next to gym
6:30	CARES Resource Net opens
7:00	Volunteers arrive at their venues. Check-in and briefing by venue leads. Mobilization begins
8:32	Sunset
9:30	Fireworks begin.
9:50	Fireworks end.
10:00	Fire marshal checks Hyde for debris and duds Public Works begins removal of street barricades. ARES Resource net opens (offsite)
10:15	Volunteers begin demobilization.
10:30	Event complete. CERT and MRC volunteers at Miller, Sedgwick and Creekside check out at their site. All others check out at Hyde gym. ARES members check into the resource net for drive home.

v. Response at SEMS Levels (as appropriate):

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

Not appropriate for this event.

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.

Cupertino Office of Emergency Management (OEM)

OEM Citizen Corps Coordinator, Ken Erickson, supported the event as an advisor to the Cupertino Citizen Corps Incident Command staff and as Event Logistics and authorized activation of volunteers under event number CUP-22-27T.

Santa Clara County Sheriff's Office

Sheriff's Office was in charge of area security and overall public safety. Citizen Corps staff acted as eyes and ears for the Sheriff's Office by providing on-site information to the deputies. CARES, acting as Planning and Intelligence Section, established an information flow between CARES Net Control, Volunteer Groups, and the SO.

Parks and Recreation

Parks and Recreation provided regular paid and summer interim staff for the event. Interactions with all staff were smooth. Parks and Recreation uses cell phones to communicate with each other. P&R provide venue maps and arranged for volunteer parking at each venue.

Medical Reserve Corps

MRC volunteers staffed three first aid stations and were tightly integrated into the overall event command and control. Each site reported responded to first aid requests from the observing public.

Communications Systems

CARES TAC-2 (146.460) Simplex was the primary communications frequency that was used for all volunteer wide-area coverage.

FRS radios were not used by CERT volunteers between site ICPs and roving field teams due to insufficient number of CERT volunteers.

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 Improvements, Conclusions, and Recommendations.

What worked:

- Overall, radio operation went well; Net control was very professional
 - Single Spreadsheet with multiple tabs for sorting information was very useful
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List of volunteers continuously updated and available to leadership team

- The check-in, check-out process was decentralized from Hyde to each venue.
 - 211B DSW forms were prepopulated with information about volunteers assigned to each venue.
 - T-cards were pre-printed but not used.
- Event briefing and safety documents were sent to volunteers prior to event, so they could read and absorb it before reporting for duty.
- Volunteer assignments were sent to volunteers on July 3.
- Pre-deployment briefing documented and included Communication section as in past years
- Comprehensive Sheriff's presence at all critical locations
- No reported problems with dogs at venues
- Copied the Eventbrite sign-in menu from 2019 event (there were no July 4 fireworks in 2020 and 2021).

What needs improvement?

- Training for operators to reinforce checking out on the message net before going home
- Cupertino did not have enough MRC volunteers to staff three first aid stations (6 positions). CERT volunteers were used to fill the gaps.
- Communications between the venue leads and the Incident Commander
 - The most serious operational failure was lack of electricity for the rope lights on the MRC canopy at Creekside. The receptacle we intended to use was powered off and no one from Parks and Recreation had a key to open the hut and flip the switch. The result is the MRC team operated by the dim light of a camping lantern brought by one volunteer. The first aid station became almost invisible during the fireworks show when the field lights are turned off. The legs of the canopy became a tripping hazard for the public.
This problem was not brought to the attention of the Incident Commander, who knew how to trouble shoot the problem: contact Public Works to go the Creekside with a master key to open the hut.
- Another operational problem was a communication gap between Logistics and the Sedgwick site lead. The site lead needed the combination code to access the key to open the supply trailer. This problem was not brought to the attention of the Incident Commander, who had the code numbers in his wallet. He could have texted the site lead with the numbers.
- There are feedback comments about deficiencies with the supplies in the MRC first aid kits. This suggests there should be a review of the kit replenishment and inventory management process.
- Review the staffing needs for each site to determine staffing needs.

Recommendations for Future Events

Parks and Recreation

1. P&R should identify a position and responsibilities for an Event Safety Officer.

Citizen Corps

1. CERT needed volunteers who were capable of leadership positions
2. Create a forms tub for events, to ensure adequate supply of all forms (ARES, CERT and MRC).
3. Scope out fire extinguishers at the schools and parks. Supply a fire extinguisher where no local ones are available.

4. There was an excess of amateur radio operators. We had 16 ARES members, including one from Milpitas, and two from Mountain View. The need is for 10 ARES members. At the next July 4 event, we should not recruit from the County if there are enough CARES members signed up.
5. Develop a written Logistics plan for the venue leads to communicate the process to provide site equipment and how to open the supply trailer. Provide a process to communicate a logistics issue.

Medical Reserve Corps (MRC)

1. Place a first aid kit from a Go-Pack in the command post.
 2. Ensure medical kits are fully stocked
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viii. Training Needs

1. 4th of July Execution Plan. Update all sections to incorporate learning's from feedback derived from this event.
 2. Reinforce the checkout procedures to CARES volunteers
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ix. Recovery Activities (as applicable)

Recovery Activities were limited to securing equipment and command center shutdown.

x. References: Maps, charts, training materials, etc.

The following material was developed and provided as part of the Volunteer Briefing Packet:

- Maps, including volunteer field locations
- Operations briefing
- Safety briefing
- Communications plan
- Venue assignments and tactical call signs