

# After Action Report

## Bay Area Extreme Wind Event

### 1. Overview

<b>Description:</b>	Bay Area Extreme Wind Event
<b>Event Type:</b>	Cupertino ARES
<b>Event Name</b>	Bay Area Wind Event
<b>Activation No:</b>	CUP-23-100
<b>Managing Entity:</b>	Cupertino ARES
<b>Event Date:</b>	14 March 2023
<b>Report Date:</b>	4 April 2023
<b>Report Revision:</b>	v8, FINAL
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### Introduction

The purpose of this After-Action Report (AAR) is to present the outcome of a Cupertino volunteer activation that supported an extreme wind event. This report is submitted to Cupertino OEM as a record of our findings, analysis, and recommendations.

### Summary

On Tuesday 14-March, Cupertino Amateur Radio Emergency Service (CARES) shifted to INCREASED READINESS Operations, then was activated under Activation #CUP-23-100. We were requested by Cupertino Office of Emergency Management (OEM) to report on city damage caused by an extreme wind that followed an atmospheric river.

Due to the risk from blowing debris, there was no intent to deploy CARES members into the field to perform a more detailed damage assessment. Detecting damage was limited to observations made from our respective homes. Any wider area assessment was at the discretion of the CARES member.

### 2. Goals & Objectives

CARES was asked to do the following:

1. Identify and report on wind-related damage and situations involving downed trees, down power poles, access problems, and damage to property in a members' immediate neighborhood.
2. Notify the CARES membership of the above OEM request.

### 3. Analysis of the outcome

#### Report by Time

Over the course of 3 hours, 13 CARES members responded and provided local damage information. This response (23% of the CARES roster) seemed low until it is recognized that the request was made mid-day during regular working hours and power was out in many homes that lead to home internet and email being unavailable for many CARES members.

All damage reports were recorded on an ICS 309 Communications Log. A transcription of the logs is as follows:

Time	Submitter	Severity	Report
1251	SCCSO	Admin	AlertSCC: "This is the Santa Clara County Sheriffs Office. Due to the high winds please STAY..."
1408	KN6PE	Admin	Opened the CARES Emergency Net
1412	KI6LDM	Low	Shadowhill; HF Antenna down on his roof
1416	AI6XM	Low	Bonny Dr; many branches down, no visible damage
1418	N6TAE	Low	Tressler Ct; 3 neighbor fences reported down
1419	KK6EWQ	Medium	Macadam Ln; large tree down, no blockage
1426	KI6LDM	Admin	Shadowhill; Starting neighborhood assessment
	KK6FPI	Admin	Presidio Dr; Starting assessment
1427	WA6VFD	Low	W. San Jose; 2 Fence panels down
1429	KR6CO	None	Farallone Dr; no noticeable damage
1432	KF6UVS	High	Stevens Creek/Portal; tree partially blocking St Creek. DPW on scene
1438	KK6EWO	Medium	Rose Garden; tree blocking road
		Low	Normandy La; tree cleared from road by residents
1441	KK6EWQ	Low	Library; Portion of fence down, not blocking access
1447	KN6PE	Admin	Handed off NCO to KK6EWQ
1511	WA6VFD	Admin	KCBS AM will have a broadcast at 3:20 about the event
1513	KI6LDM	Medium	Report of tree down on a house Garden Oak Road, sender was unable to find this
		Low	Branches down at Three Oaks Park between Shadowhill and Molson, 4 city trucks at scene
		Low	Fence down at 1197 Candelight Way
		Low	Small tree down at 7606 Shadow Hill Lane
1516	KK6FPI	High	Utility pole down at Presidio and Bubb, took out power, phone, fiber; PGE has secured for safety
		None	no problems in 60-home block Presidio Drive
1520	AG6CL	Medium	2 large branches blocking bike lane of Stevens Crk Blvd over creek
		Low	Large branches down Mann Dr. and Phar Lap, not blocking road
1542	N6TAE	Admin	Repeater power status: 12.8vdc
1544	WB2GDQ	High	Cupertino Rd bet Hill crest and foothill; telephone poll down; wires all over the street
		Low	Stevens Creek/Creek; branches down, resident cleared
1601	KR1JOE	None	Checking in, no report
1630	KK6EWQ	Admin	Handed off NCO to KN6PE
	WA6VFD	Admin	Inquiry into the state of the Repeater battery.
1700	KN6PE	Admin	Secured the CARES Emergency Net

## Reports by Severity

The following is a re-sort of the above log by Severity:

- HIGH – Major impact to a structure or access of a major roadway within the city.
- MEDIUM - Impact to a structure or access on a secondary route.
- LOW – Minor impact with little or no structural damage or access impact, but requires a cleanup such as tree removal.
- NONE – No damage or impact reported.

Severity	Submitter	Report	
<b>High</b>	<b>KF6UVS</b>	Stevens Creek/Portal; tree partially blocking St Creek. DPW on scene	
	<b>KK6FPI</b>	Utility pole down at Presidio and Bubb, took out power, phone, fiber; PGE has secured for safety	
	<b>WB2GDQ</b>	Cupertino Rd bet Hill crest and foothill; telephone poll down; wires all over the street	
<b>Medium</b>	<b>AG6CL</b>	2 large branches blocking bike lane of Stevens Crk Blvd over creek	
	<b>KI6LDM</b>	Report of tree down on a house Garden Oak Road, sender was unable to find this	
	<b>KK6EWO</b>	Rose Garden; tree blocking road	
	<b>KK6EWQ</b>	Macadam Ln; large tree down, no blockage	
<b>Low</b>	<b>AG6CL</b>	Large branches down Mann Dr. and Phar Lap, not blocking road	
	<b>AI6XM</b>	Bonny Dr; many branches down, no visible damage	
	<b>KI6LDM</b>	Shadowhill; HF Antenna down on his roof	
		Branches down at Three Oaks Park between Shadowhill and Molson, 4 city trucks at scene	
		Fence down at 1197 Candelight Way	
		Small tree down at 7606 Shadow Hill Lane	
	<b>KK6EWO</b>	Normandy Lane; tree cleared from road by residents	
	<b>KK6EWQ</b>	Library; Portion of fence down, not blocking access	
	<b>N6TAE</b>	Tressler Ct; 3 neighbor fences reported down	
	<b>WA6VFD</b>	W San Jose; 2 Fence panels down	
	<b>WB2GDQ</b>	Stevens Creek/Creek; branches down, resident cleared	
	<b>None</b>	<b>KK6FPI</b>	no problems in 60-home block Presidio Drive
		<b>KR6CO</b>	Farallone Dr; no noticeable damage
<b>KR1JOE</b>		Checking in, no report	
<b>Admin</b>	<b>KI6LDM</b>	Shadowhill; Starting neighborhood assessment	
	<b>KK6EWQ</b>	Handed off NCO to KN6PE	
	<b>KK6FPI</b>	Presidio Dr; Starting assessment	
	<b>KN6PE</b>	Opened the CARES Emergency Net	
		Handed off NCO to KK6EWQ	
		Secured the CARES Emergency Net	
	<b>N6TAE</b>	Repeater power status: 12.8vdc	
	<b>WA6VFD</b>	KCBS AM will have a broadcast at 3:20 about the event	
		Inquiry into the state of the Repeater battery.	
<b>SCCSO</b>	AlertSCC: "This is the Santa Clara County Sheriffs Office. Due to the high winds please STAY..."		

## 4. Analysis of the capability to perform critical tasks

The notable aspects of the CARES response are:

1. Time to engage. CARES received the request at approximately 13:45. The essence of the request and urgency to engage were clear; see the **Goals and Objectives** section above. There was no expectation by OEM for when and how the data collection process would occur. An email was sent to all CARES members stating that the CARES Emergency Net would be activated, and the net was opened at 14:08. The first field responder checked in 5 minutes later. Thirteen members checked in over the next 3 hours.
2. Extent of the problems. The problems discovered were as expected: downed trees, downed utility poles, blocked access, and power outage.
3. Effectiveness of the response. Two CARES members took shifts as Net Control Operators (NCO) during the 3-hour period. Message passing was unstructured. The '*spur-of-the-moment*' nature of this event was a good test of CARES' emergency response capabilities.
4. Completeness of the incoming reports. All damage report submitters were clear on what information was needed and were ready with the appropriate details.
5. Adapting to the information needs. The initial assignment was to report on damage and access problems. After securing the net, an additional request was received to check of cellphone coverage. Subsequently, more information was requested on the cellphone carrier and whether home landlines were operational. This was performed later after the CARES regular weekly net.
6. Repeater power and net coverage. The W6TDM repeater was on AC power the whole time because of an emergency generator at Verona Homes. This was indirectly confirmed by queries of the repeater voltage being steady during the entire operational period.

## 5. Recommendations

The following are recommendations for Cupertino OEM and Cupertino Citizens Corps:

1. Encourage the membership to check TAC3 W6TDM repeater, TAC1 (147.570s), Radio Cupertino 1670, or their email and text messages during evident emergency situations when the city may need information about the state of the city that CARES could provide. This implies we are monitoring both CARES TAC1 and TAC3 for an indication that the CARES emergency net has been established or someone is looking to contact CARES.  
**ACTION:** (i) Include in CARES training. (ii) Check with OEM and radio 1670am to loop a broadcast for Citizen Corps for any action during events where we might lose power etc. Actions might be, report 311, QuickCapture, radio nets, etc.
2. AlertSCC was another method for pushing out notices to members on an activation request. Unfortunately, this access is not available to CARES staff.  
**ACTION:** Request CARES staff be granted access to AlertSCC for sending alert notifications to CARES members. If this is not possible, identify the process for sending such a notification.
3. QuickCapture is the city's tool for entering problems observed by the community that would help the city and Cupertino OEM develop its overall situation status. From this activation, it was clear that QuickCapture has not been widely deployed.  
**ACTION:** Refine the use plan and arrange for QuickCapture training and integrate into an

exercise to build familiarity with this tool. This should also be called out as part of the CCC activation process.

4. This wind event pointed to some obvious information needs that could be pre-defined and practiced in an exercise.

**ACTION:** Work with OEM to develop a base list of information needs that can be used in similar situations.

5. While CARES members do a good job composing and passing messages, a focus on Operator-to-Operator message passing is needed. This should also be built into our standard message passing training topics and future exercises.

**ACTION:** (i) Check if there is a need to adjust any reporting requirements. This essentially was the Neighborhood Safety Assessment (PSA). (ii) Look for opportunities to reinforce the use of this type of message passing.

6. The need to generate and collect reports was clear, but the need for a data handoff was not. This may have been reasonable given that the event took place during working hours with city DPW and utility services already on site at most problem areas.

**ACTION:** Define methods for handing off reports to OEM as part of similar missions in the future. Look at integrating this requirement into the activation process.

7. With the limited response, the CARES-reported view of the situation was not comprehensive. The city does have the start of two-way communications resources with CERT and Block Leaders. A larger pool of reports coming in would help define a clearer city-wide situation.

**ACTION:** Further develop the Citizen Corps communications capability (FRS/GMRS) including training and practice through drills and exercises. Stress the need to check for localized damage and the state of home communications (landline, cell service, internet).

8. Confirm with the Verona Homes Homeowners Association that the repeater was on generator power the times of power outage.

**ACTION:** Extend our thanks and appreciation to the Verona Home HOA for their continued support and for hosting the repeater at their site. Emphasize that we used the equipment successfully during this event.

--- END OR REPORT ---