

# **Field Communications Handbook**

**Cupertino ARES/RACES**

**January 2022**



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**Notes**

Name:	
Call Sign:	
Call Sign/GMRS:	
ARK, Zone Number:	
Zonehaven Zone:	

## 1 Phone Numbers

Fire, Ambulance, Sheriff, other Emergency	9-1-1, or 408-299-3233
Cupertino City Office	408-777-3200
Emergency Manager	408-777-1310
Citizens Corp Coordinator / DOC	408-777-3176
Cupertino Public Works Support (After Hours)	408-299-2507
CARES Emergency Coordinator	408-839-8798
Santa Clara County Radio Room	408-808-7887

## 2 Operating Frequencies

### CARES Frequencies

Resource Alt	TAC1	147.570	Tone=151.4
Message Net	TAC2	146.460	Tone=151.4
Resource Net	TAC3	440.150+	Tone=100.0 W6TDM
Resource Net Direct	TAC 4	440.150	Tone =100.0
Field Tactical	TAC 5	441.000	TSQL=151.4
Field Tactical	TAC 6	147.585	Tone=151.4
Command Net	TAC 7	442.000+	Tone=151.4 WW6HP
Command direct	TAC 8	442.000	Tone=151.4
Resource Alt 2	TAC 11	147.570	TSQL=151.4

### County Frequencies

SCC Message Net	147.360 +	Tone=110.9 W6TI
SCC Message Net Alt 1	145.450 –	Tone=100.0 K6FB
SCC Command	442.500 +	Tone=100.0 WB6ZVW
SCC Command Alt	443.275 +	Tone=107.2 K6SNY
SCC Resource Net	146.115 +	Tone=100.0 AA6BT
SCC Resource North	145.270 –	Tone=100.0 W6ASH
SCC Resource South	444.625 +	Tone=110.9 N6NAC
SCC Hospital Net	145.230 –	Tone=100.0 N6NFI
NTS Net	146.640 –	Tone=162.2 WR6ABD

### Bay Area Emergency Alert System, stations of interest

LP1, National Primary EAS Station	KCBS	740 KHz
LP1S, National Primary EAS Station	KSOL	98.9 MHz
LP2, National Primary EAS Station	KQED	88.5 MHz
LP2, National Primary EAS Station	KSJO	92.3 MHz
Cupertino Community (TIS) Radio	WQGH344	1670 KHz

## 3 Briefing

### 3.1 Incident Briefing

#### 1. DSW requirements

To work this event, you must be registered as a City Volunteer or Disaster Service Worker (DSW) with the City of Cupertino. A DSW registration with any other city or county is insufficient.

A Cupertino DSW registration will provide you with workers compensation coverage while you participate in this event, as long as you operate within the scope of your training and your assigned duties.

#### 2. Required event information

Ensure you have the following information before starting your assignment:

- a. Activation Number
- b. Operational Period
- c. Your supervisor's name or position

#### 3. Tactical calls

Tactical calls will be used for this event. During your assignment, identify yourself with your tactical call sign. Remember to give your FCC call sign at the end of each exchange of traffic or every ten minutes.

#### 4. Event documentation

Start all appropriate logs. At the end of your shift, turn in all reports, logs, and forms your supervisor. Include your ICS 214 Unit Log, ICS 213 Message forms, and ICS 309 Comm Log. Sign all logs before turning them in.

### 3.2 Safety Briefing

The City of Cupertino and ICS requires that we conduct a safety briefing before being assigned with a task, or being sent to on a field assignment.

#### 5. Responsibility for personal safety

The City of Cupertino requires that you pay attention to all safety briefings and maintain a safe operating environment at all times.

If at any time you see unsafe behavior or a safety hazard that affects any responder or the public, you must stay away from the hazard and report it at once to the ICP, safety officer, or an event official.

Keep yourself protected from the elements (seek shade in the summer), and drink and eat as needed.

#### 6. Liability when driving

All responders who operate a personal vehicle must have adequate personal vehicle insurance to cover personal injury and other liabilities.

#### 7. Radio Operations

Check into the appropriate net before leaving for your assignment and stay on the net while traveling to the assignment. Do not leave before confirming you are in contact with Net Control.

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## **8. Health and Welfare checks**

During the event, Net Control will perform periodic Health and Welfare checks. When called by Net Control, answer with your location, tactical call, and FCC call sign.

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## **9. Checking in and out**

When moving to a new site, or arriving and leaving a site, make sure you check in and out of the area with the local ICP staff if present, and Net Control. Your immediate supervisor and buddy need to know where you are at all times.

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## **10. Emergency access**

Before starting an assignment, identify your location and/or address. In the event of an emergency or if an injury is occurring, call 408-299-3233 immediately and then Net Control (unless you have been given other instructions for this event).

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## **11. Medical or other emergency**

In the event of an emergency or if an injury is occurring, take the time to get a description of your location, call 408-299-3233 immediately and then Net Control (unless you have been given other instructions for this event), who will notify any available medical personnel. Do not move the injured person unless they are not in a safe place (such as where traffic could hit them).

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## **12. Compliance with all applicable laws**

All responders are expected to comply with all applicable laws during the course of this event. This includes wearing seatbelts and following all traffic laws, including speed limits, full stops at stop signs, no jay walking etc.

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## **13. Performing a search from vehicle**

If a search by vehicle is needed, the driver must focus on driving.

- Driver only drives.
  - Drive slowly (20 mph or slower) while performing the search.
  - Pull over and allow faster traffic to pass whenever possible.
  - Be especially careful in residential zones.
  - Headlights should be turned on while driving to increase the visibility of your vehicle.
- Passenger performs: Searching, Record keeping, Communications, and Navigation

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## **14. Radio operations when driving**

- Do not operate the radio or cell phone while driving; wait until you are parked or let your buddy talk.
- The passenger will handle radio communications and documentation.

## 4 Procedures

### 4.1 Field Responder

**Description:** This procedure describes how CARES members respond and operate in a field assignment during a declared emergency.

**Op Phase:** Initial Response, Local Resource Support  
Extended Response, External Services Support

**Participants:** CARES members holding a Field Responder Qualification will be assigned to lead field positions.  
CARES Field Responders assigned a Field Position must perform this procedure.

**Pre-Deployment Check:** Before volunteering to accept a local field assignment, be sure you can answer the following in the affirmative:

1. Is your family and/or home situation secured?  
Your family or any dependents must be able to get along without you for the duration of the assignment.
2. Are you physically able to do the job?  
Do not accept an assignment that will cause you hardship or danger. These include responding to remote locations that require long off-road travel, missing meals, or extended operation without rest.
3. Do you have the right personal protective equipment?  
Depending on the assignment, boots, long pants, hardhat, heavy gloves, and other supplies for whatever else the weather warrants (sun, rain) may be essential.
4. Do you have the right radio equipment?  
Make sure you understand the communication requirements and can operate in this environment at the field site.
5. Do you have a minimum supply of food and water?  
The agency with which you may be working usually will feed you, but the schedule and quality may be erratic. Consider bringing enough to eat and drink during your shift at a local incident.

If you are responding to a mutual aid (distant) assignment, expect to serve anywhere from 12 hours to several days. It is impractical to have short shifts, such as 6 hours, when the work site is many hours of driving time away. If you assume you will be staying long enough to sleep there, assume you will be “camping” and bring a sleeping bag.

## Checklist – Field Responder

This checklist is relevant for assignments associated with all CARES responses to earthquakes, flooding, shadowing, and other non-specific CARES activation.

### Before Checking in:

- \_\_\_\_\_ 1. Pull out this handbook and review its content.
- \_\_\_\_\_ 2. Check in with Resource Net Control. Net control will give you an assignment.

### Departing home: If you are traveling to your assignment, do the following:

- 3. When ready to leave, notify Net Control. Tell them:
  - a. Departing from <your location>
  - b. Odometer Reading (last 3 digits of your Odometer)
- 4. On arrival to your location, notify Net Control. Tell them:
  - a. Arrived at < assignment location >
  - b. Odometer Reading (last 3 digits of your Odometer)

### First Shift: If you are establishing the first shift, do the following:

- \_\_\_\_\_ 5. Inform Resource Net Control that you have arrived. If a message net is in place, check out of the Resource Net before you leave your car.
- \_\_\_\_\_ 6. If a message net is in place, check into the assigned voice net before you leave your car. Start an ICS 309 Comm Log for the voice net.
- \_\_\_\_\_ 7. Make an **ICS 214 Unit Log** entry.
- \_\_\_\_\_ 8. Sign in on the site's **ICS 211 Check-in Sheet**. If you are the first to arrive, start the ICS 211.
- \_\_\_\_\_ 9. Find the supervisor and inform them of your arrival.
- \_\_\_\_\_ 10. Request a safety and assignment briefing; get details on any site- or event-specific conditions that exist. You need to know:
  - a. Supervisor's Name
  - b. Activation Number
  - c. Operational Period
  - d. Your Tactical Call (may be assigned by Net Control)
- 11. Find and establish the workspace to set up your radio operations.
- 12. Begin radio operations. Make **ICS 214 Unit Log** entry

### Incoming Shift Change: If you are relieving someone else, do the following:

- \_\_\_\_\_ 13. Inform Resource Net Control that you have arrived. Check out of the Resource Net before you leave your car.
- \_\_\_\_\_ 14. Check into the Message Net.
- \_\_\_\_\_ 15. Sign in on the local **ICS 211 Check-in sheet**.
- \_\_\_\_\_ 16. Find the supervisor and inform them of your arrival.
- \_\_\_\_\_ 17. Request a safety and assignment briefing; get details on any site- or event-specific conditions that exist.

- \_\_\_\_\_ 18. Find the person you are relieving and receive a shift change briefing (see **Shift Change Information** below).
- \_\_\_\_\_ 19. Make all relevant shift change entries in your ICS 214 Unit log.

**Outgoing Shift Change:** If you are being relieved, do the following:

- \_\_\_\_\_ 20. When contacted by your replacement, provide a shift change briefing (see **Shift Change Information** below).
- \_\_\_\_\_ 21. Complete your **ICS 309 Comm Log(s)** for your shift.
- \_\_\_\_\_ 22. Turn over all assigned equipment to your replacement.
- \_\_\_\_\_ 23. Find your supervisor and inform them of the shift change and your departure.
- \_\_\_\_\_ 24. Make the appropriate shift change entries in your **ICS 214 Unit log**. Complete and sign the form.
- \_\_\_\_\_ 25. Leave your **ICS 309(s)** for the operator who is relieving you, and turn in all other paperwork to your supervisor.
- \_\_\_\_\_ 26. Sign out on the site's **ICS 211 Check-in sheet**.
- \_\_\_\_\_ 27. If there is a Message Net, check out of it. Check into the Resource Net. Inform Net Control what you plan to do (go home, return to EOC, etc.).

**Shift Change**

Before turning over or accepting a shift, both the in-coming and out-going operators should review as much information as possible, including:

- The purpose of this station.
- To whom you are reporting; how to find and recognize them.
- The radio channel or channels in use.
- Any other radio, power, or antenna details.
- All the tactical call signs and where the stations are located; possibly, also names and FCC call signs.
- What is going on in general? What changes are expected?
- Any pending activity: messages you have sent, replies you expect, and who should get them.
- The location of the toilet, food, water, etc.
- Attend the all-hands briefing that occurs during each shift change if offered.



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## 4.2 Message Handling

### Types of messages

1. **Third Party, Formal, Official Messages.** 3<sup>rd</sup> Party to 3<sup>rd</sup> Party. These are messages passed on behalf of another person or served agency, and need to be passed exactly as given to you. All official messages are written down (ICS-213), assigned a message number, logged, and tracked. They become part of the official event record. Requires **ICS 309 Log** Entries.
2. **Informational Messages.** Operator to 3<sup>rd</sup> Party. These are short messages initiated by you or on behalf of someone else that do not warrant the formality of an official message. This information may be passed to someone who will act on this information. Sample messages include: Observations of smoke, changing event conditions, material movements, etc. Requires **ICS 309 Log** entries.
3. **Operational Messages.** Operator to Operator. These are short messages initiated by you and are usually not directly related to the event, such as: *“Where is my shift replacement?”*, Health and Welfare, etc. Requires **ICS 309 Log** entries.

### Preparing the Message

1. Do not pass injured person or patient names over the radio. The only personal names that generally belong in a message are the names necessary for the identification of agency officials, if they choose to put them into messages.  
**NOTE:** There may be exceptions to this policy, such as matching up lost children. Make sure the Shift Supervisor approves any exceptions.
2. For Third Party/Formal messages, try to get fully worded and signed messages, not paraphrases.
3. When asked to send a message of any substantial length, agree with the message author on the exact wording of the message.
4. Consider sending long messages by packet if available.
5. Work with the message’s author to create a message that is short, to the point, and uses the minimum number of words.
6. If the message author gives you a verbal message such as “tell them that...,” write down what you think is the entire intended message, and then read it back verbatim to the author for approval.
7. Official messages should be signed with the title (and possibly name) of the author. When sending the message on the radio, you can say, for example, “Signed, Quinlan Shelter Manager.”
8. For messages to the EOC, if the intended recipient is in doubt, address the message to the Planning & Intel Section.
9. Use your judgment whether this much rigor is needed for informational messages. If the person you are shadowing says, “Tell Dr. Smith the supplies are arriving,” you might reasonably not worry about transmitting his exact words.
10. Use the ICS 213 Message Short Form, phone message pad, or something similar when creating your message.

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### 4.3 Passing Written Messages

1. Notify the Net Control Operator that you have a message to pass. For example, "Net Control, I have one Emergency message for the EOC" or "Net Control, I have one Urgent and one routine message for the EOC." The Net Control Operator will ensure that the receiving station is ready, a message number is assigned to you, and then direct you to pass the message.
2. Say the message in phrases of 5 words, without repetitions.
3. Say **Break** after each 5 words and release the PTT key while you wait for the receiving station to tell you to continue. Always release the PTT key when you stop talking.
4. Do not resume transmitting until the receiving station acknowledges the last transmission with something like "GO" or "continue".
5. Speak clearly and slowly. As a pacing guide, *ghost write* the message as you say it (not necessary to actually write it down again).
6. Use the message passing prowords and the phonetic alphabet to spell items that cannot be understood reliably by pronouncing them.
7. The receiving station may ask for repeats or fills until he/she has copied the whole message. The request may be "Say again last word", or "Say again word after ...", or "Say again" to repeat the entire transmission. If they ask you to repeat something, repeat it exactly the same as you first said it; do not paraphrase. Do not use different words (you are creating a "moving target"). If the receiving station heard your words but did not understand and asks you to explain, then it is OK to paraphrase.
8. End the message with "End of Message, <your call sign>".
9. Once all questions are resolved, the receiving station acknowledges receipt of the message (for instance, "Message received").
10. The receiving station SHOULD NOT read the message back to you. Unnecessary read-backs tie up the frequency for other traffic.
11. On completion of this exchange, Net Control will call for the second message if one was previously identified.
12. As soon as you finish sending or receiving a message, complete the operator information at bottom of the message form and sign the message form.

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### 4.4 Passing Unwritten Messages

1. Passing very short simple messages may go a bit differently. You send the entire text, and the receiving station may simply say "copied." Or they may say the text back to you, and you say "affirmative."

## 5 On-Air Exchanges

### 5.1 Checking in to the Emergency Net

#### Example 1

For events where not a lot of information is being gathered and Net Control does not initially expect a lot of check-ins, you may be asked to pass the entire exchange in one transmission. ***Listen to the Net Control for instructions.*** For instance:

WHO SAYS WHAT		NOTES
<b>CHECKING IN</b>		
1	NCS: ... all stations, Check in with an ARK name and Mike-Mike Report. Stations with suffix Alpha through Juliet, go now.	Net Control polls for check-ins and states what additional information is needed.
2	KV6BC: KV6BC, Regnart ARK, Mike-Mike 6. KV6BC.	
3	KD6EF: KD6EF, De Anza ARK, Mike-Mike 6. KD6EF	
4	KD6GJ: KD6GJ, Creekside ARK, Mike-Mike 5. KD6GJ	
2	NCS: I acknowledge KV6BC, KD6EF, KD6GJ. Any other check-ins, Alpha through Juliet?	
		Pass 3 pieces of information and log your check-in on your ICS 214: <ol style="list-style-type: none"> <li>1. your call sign</li> <li>2. ARK location</li> <li>3. Mike-Mike report</li> </ol>
		Log all check-in, Mike-Mike Reports, and availability on the Net Control ICS 309.

#### Example 2

For events where Net control needs to gather more information from each person and/or initially expects a lot of check-ins, you may be asked to pass your call sign only, and net control will come back and ask for details. ***Listen to the Net Control for instructions.*** For instance:

WHO SAYS WHAT		NOTES
<b>CHECKING IN</b>		
1	NCS: ... all stations, stations with a suffix Alpha through Juliet, go now, call-signs only.	Net Control polls for check-ins and state what additional information is needed.
2	KV6BC: KV6BC	
3	KD6EF: KD6EF	
	NCS: KV6BC, what is your availability and ARK zone?	Log each check-in and ask for the availability.
	KV6BC: I am available, ARK zone is Lawson ARK. KB6BC	
	NCS: KV6BC, Copy. KD6EF, what is your availability and ARK zone?	Log each check-in and ask for the availability.
	KD6EF: I am not available until noon. ARK zone is Monta Vista. KD6EF	
	NCS: KD6EF, Copy.(	Net Control will continue to poll for check-ins

## 5.2 Operating on the Resource Net

WHO SAYS WHAT		NOTES
<b>CHECKING IN</b>		
1	KV6BC: Net Control, KV6BC checking in, ready to depart.	You are checking into a travel net. Check-in gets logged on your ICS 214.
2	NCS: KV6BC, acknowledged. K6KP, Net Control.	Check-in gets logged on the Net Control ICS 309.
3	KV6BC: Net Control, KV6BC. Departing from Prospect Road and Stelling. Odometer: 125.	Net control monitors your progress to your destination. Odometer reading is the last 3 digits. Log on your ICS 214.
<b>HEALTH and WELFARE CHECKS</b>		
3	NCS: KV6BC, Health and Welfare Check.	Net Control will call each station on the net every 15 or 20 minutes for a Health and Welfare check. Log on the Net Control ICS 309.
4	KV6BC: Net Control, I-280 and 10 <sup>th</sup> Street, San Jose. Odometer: 136. KV6BC.	Answer with your current location and odometer
<b>CHECKING OUT</b>		
5	KV6BC: Net Control, KV6BC. Arrived at <destination>. Odometer: 142. Checking out. KV6BC.	On arriving, check out of the resource net and check into the message net or whatever net to which you are instructed to move. Log your arrival.
6	NCS: OK, you are checked out. K6KP, Net Control.	Log all check-outs on the Net Control ICS 309.

## 5.3 Operating on the Message Net

WHO SAYS WHAT		NOTES
<b>CHECKING IN</b>		
1	KV6BC: Net Control, KV6BC checking in at De Anza ARK.	You are checking into the message net. Check-in gets logged on your ICS 214.
2	NCS: KV6BC, acknowledged. Your <b>Tactical Call</b> is <b>De Anza ARK</b> . K6KP, Net Control.	Check-in gets logged on the Net Control ICS 309.
<b>CHECKING OUT</b>		
3	KV6BC: Net Control, KV6BC. I have been relieved by <call sign> or <shutting down>. Checking out of the net. KV6BC.	Check out of the message net and check into the resource net. Check-out gets logged on your ICS 214.
4	NCS: KV6BC, acknowledged. K6KP, Net Control.	Check-out gets logged on the Net Control ICS 309.

## 5.4 Message Passing – Third Party message example

WHO SAYS WHAT		NOTES
1	KV6BC: Net Control, this is <b>De Anza ARK</b> with <b>Urgent Traffic</b> for the <b>EOC</b> .	Station identifies the message priority and destination in one transmission.
2	NCS: De Anza ARK acknowledged. EOC, are you ready to copy traffic?	
3	EOC: EOC is ready.	
4	NCS: De Anza ARK, your <b>message number is 2 8</b> . Send your traffic to the EOC.	Net Control <b>assigns</b> the message numbers.
5	KV6BC: <b>EOC</b> , this is <b>De Anza ARK</b> . Message type is <b>ICS 213 Short Form</b> . <b>Break</b> .	<b>Field Station</b> has a filled-out ICS 213SF (See page 20). <b>EOC</b> grabs the appropriate Form: could be ICS 213SF, Smoke Report, PSA, etc.
6	EOC: Continue.	
7	KV6BC: <b>Priority: Urgent, Message Number: 2 8.</b> <b>TO: Initials Echo Oscar Charlie</b> Logistics. <b>FROM: De Anza ARK</b> Logistics. <b>Break</b>	Passes Header information.
8	EOC: Continue.	Use Proword “Initials” to spell out “EOC”.
9	KV6BC: <b>Subject: Transport Request.</b> <b>Date: 12/15/2021. Time: 9:13 Break.</b>	Use a consistent format for date and time. Use <b>BREAK</b> to separate transmissions.
10	EOC: Continue.	
11	KV6BC: <b>Message: Need light duty truck to... Break.</b>	Send the message in 5-word blocks. Use <b>Break</b> to split a long sentence.
12	EOC: Continue.	
13	KV6BC: ...transport supplies to Monta Vista ... <b>Break</b>	Continue the sentence where you left off.
14	EOC: Continue.	
15	KV6BC: ...ARK <b>Period</b> . Signed: <name>. Position: <position> <b>End of Message.</b> KV6BC.	Continue the sentence where you left off. Say “ <b>Period</b> ” at the end of the sentence. Use <b>End of Message</b> and then identify yourself.
16	EOC: Acknowledged. K6XYZ, EOC, back to net control.	Message is logged on the EOC Operator’s ICS 309.
17	NCS: This is K6KP, Net Control for the Cupertino Emergency Net. Stations with any traffic, identify now.	Message is logged on the Field Operator’s and Net Control’s ICS 309.

## 5.5 Message Passing – Informational message example

WHO SAYS WHAT			NOTES
1	NCS:	Is there any EMERGENCY Traffic for the net?	Net Control calls for traffic.
2	KV6BC:	Net Control, <b><u>De Anza ARK</u></b> with <b><u>EMERGENCY Traffic</u></b> for the <b><u>EOC</u></b> .	Operator previously received this information and used an ICS-213SF (Short Form); identifies the message priority and destination in one transmission.
3	NCS:	De Anza ARK acknowledged. EOC, are you ready to copy traffic?	
4	EOC:	EOC is ready.	
5	NCS:	De Anza ARK, your <b><u>message number is 29</u></b> . Send your traffic to the EOC.	Net Control <b><u>assigns</u></b> the message numbers.
6	KV6BC:	<b><u>EOC, De Anza ARK</u></b> , Message type is <b><u>ICS 213 Short Form. Break.</u></b>	<b><u>EOC</u></b> grabs an ICS-213 Short form.
7	EOC:	Continue.	
6	KV6BC:	<b><u>Priority: EMERGENCY, Message Number: 29. Break.</u></b>	Station first passes the essential elements of a message.
7	EOC:	Continue.	
8	KV6BC:	<b><u>Message:</u></b> House fire at FIGURES 5 4 1 Windmill... <b><u>Break.</u></b>	Sends the message in 5 words blocks, natural phrases.
9	EOC:	Continue.	
10	KV6BC:	... Court <b><u>Period</u></b> . One person trapped inside <b><u>Period Break.</u></b>	Say " <b><u>Period</u></b> " at the end of the sentence. Use <b><u>BREAK</u></b> to separate transmissions.
11	EOC:	Continue.	
12	KV6BC:	Area water pressure is low <b><u>Period End of Message.</u></b> This is De Anza ARK, KV6BC.	Say " <b><u>Period</u></b> " at the end of the sentence. Use <b><u>End of Message</u></b> and then identify yourself.
13	EOC:	Acknowledged. K6XYZ, EOC back to net.	Message is logged on the EOC Operator's ICS 309.
14	NCS:	This is Net Control for the Cupertino Emergency Net. Other stations with traffic, identify now.	Message is logged on the Field Operator's and Net Control's ICS 309.

## 5.6 Message Passing – ALT-911 message example

WHO SAYS WHAT		NOTES
1	KV6BC: <b>Net Control</b> , this is <b>KV6BC</b> with <b>Emergency Traffic</b> for the <b>EOC</b> .	Station identifies the message priority and destination in one transmission.
2	NCS De Anza ARK acknowledged. EOC, are you ready to copy traffic?	
3	EOC EOC is ready.	
4	NCS De Anza ARK, your message number is 4 1. Send your traffic to the EOC.	Net Controls <b>assigns</b> the message numbers.
5	KV6BC EOC, De Anza ARK, Message type is ALT 911. <b>Break</b> .	The EOC Radio Room Operator pulls out an ALT-911 form to record this data.
6	EOC Continue	
7	KV6BC <b>Message Number</b> : 4 1 <b>What are you reporting</b> : House fire <b>Break</b>	
8	EOC Continue	
9	KV6BC <b>Location</b> : <i>figures</i> 1 2 4 5 Evergreen Road <b>City</b> : Cupertino <b>Break</b>	Use the <i>figures</i> proword for passing numbers
10	EOC Continue	
11	KV6BC <b>RP Name</b> : John Smith <b>RP Address</b> : <i>figures</i> 1 7 4 0 Evergreen Road <i>comma</i> Cupertino <b>Break</b>	Use the <i>comma</i> proword to separate the address
12	EOC Continue	
13	KV6BC <b>RP phone</b> : <i>telephone figures</i> 4 0 8 5 5 5 1 2 1 2 <b>Break</b>	Use the <i>telephone figures</i> proword to pass a phone number
14	EOC Continue	
15	KV6BC <b>Time last seen</b> : 14:30 <b>Event Details</b> : Heavy smoke venting from <b>Break</b>	Passing in 5-word groups. Only count the words the recipient will write down
16	EOC Continue	
17	KV6BC the second floor. Fire is circled <b>People inside?</b> No End of Message This is KV6BC	Message is logged on the Field Operator's and Net Control's ICS 309.
18	EOC Acknowledged. K6XYZ, EOC, back to net.	
19	NCS Any other traffic for the net?	





## ICS 214 Unit Log (continued)

**Purpose.** The Unit Log records details of the team’s activities. These logs provide a basic reference from which to extract information to be included in any after-action report.

**Preparation.** The Unit Log is initiated and maintained by the unit leader or the individual (for a single person unit). Completed logs are submitted to the supervisor who forwards them to the Documentation unit.

**Distribution.** The Documentation Unit maintains a file of all Unit Logs. The original of each log must be signed and submitted to the Documentation Unit.

1. Incident Name/  
Number: The name assigned to the incident. Include the Activation Number.
2. Operational Period: The start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
3. Unit Name: **For individuals:** Enter your tactical call.  
**For teams:** Enter the name of the organization unit or tactical call sign or resource designator
4. Unit Leader: **For individuals:** Enter your name and call sign.  
**For teams:** Enter the name, call sign and ICS position of the individual in charge of the unit.
5. Personnel Roster: **For individuals:** Leave blank.  
**For teams:** List the name, call sign, ICS position and home base/city of each member assigned to the unit during the operation period.
6. Activity Log:
  - **Time:** Enter the time in 24-hour format.
  - **Activity:** Briefly describe each significant activity or event (e.g. task assignments, task completions, injuries, difficulties encountered, etc.).
  - Occasional message traffic can be logged here. For more than occasional traffic, use a **ICS 309**.
7. Prepared By: Enter the name, call sign and ICS position of the person completing the log.  
Sign the Form before turning it in.
8. Date, Time Prepared: Enter date (month/day/year) and time prepared (24-hour clock). This can be the time this form is completed.
9. Page Numbers: Enter the page number and total pages.

**NOTE:** If you do not have a printed **ICS 214** form, you must create one and make all appropriate entries.



## ICS 213SF Message Form (continued)

**Special Note.** An operator may run out of message forms due to the volume of messages that could be generated. Therefore, it is critical that all field operators be able to **improvise** a message form. The two examples on the bottom of the previous page are ways of using a spiral note-book or index cards.

**Purpose.** The Message Form is used to record originated and received messages by a station. The form is used to record all formal traffic between two parties where records of the message are required. Message forms are not required for passing short, simple traffic or inquiries.

**Preparation.** The Message Form is used by each member of a communications team who has responsibility for passing formal radio message traffic. All messages are recorded on ICS 309 Communications Log.

**NOTE:** If you do not have an ICS 213 Message Form, you must create one. See the **Special Note** above and examples on the previous page.

**Distribution.** All messages still in the possession of the operator are signed and turned in along with all other paperwork at the end of the shift.

The following is the minimum information to be captured on a message form:

Incident Name:	The name or activation number for this event.
Priority:	The priority of this message. See <b>Message Priorities</b> below.
Message Number:	This is a sequential message number to be assigned by the Message Net Control Operator.
To:	The person to whom this message is to be delivered.
From:	The originator of the message. This is an individual with formal traffic for the EOC or some other station.
Date/Time:	The date and time that this message was created.
Message:	The message to be sent or received.
Approved By:	The person requesting and authorizing this official message to be passed.

### Message Priorities:

- Emergency: **LIFE-THREATENING**; situations, reports, and updates that might directly result in deploying or prioritizing resources for an incident involving life-saving efforts.
- Urgent: **PROPERTY-THREATENING**; situations, reports, and updates that describe threats to property; such as, revised flood projections, wind direction changes in a major fire, and reports of additional damage from an earthquake aftershock.
- Routine: Includes normal PSA and ISA reports; correspondence between agency representatives, material and logistics messages, routine resource requests, shift planning, relief requests, etc.

## 6.3 ICS-213SR Smoke Report

# SMOKE REPORT

Message Number: <b>31</b>		Location (Tactical Call Sign, usually): <b>Main Street</b>
Bearing: <b>228.5</b> degrees	Is it a column?: (circle one) yes <input type="radio"/> <b>no</b> <input checked="" type="radio"/>	Size: (circle one) small <input type="radio"/> <b>medium</b> <input checked="" type="radio"/> large <input type="radio"/>
Color: (circle one) white <input type="radio"/> <b>gray</b> <input checked="" type="radio"/> black yellow _____		Is it building?: (circle one) <b>yes</b> <input checked="" type="radio"/> no <input type="radio"/>
Other: (optional) <b>Drifting west</b>		

(Circle one) <b>Sent</b> <input checked="" type="radio"/> Received <input type="radio"/>	Date and Time: <b>5/12/18, 10:45</b>	Name and FCC Call Sign: <b>Mike KJ6ABC</b> <i>Mike Miller</i>
---	---	--

### Ember watch

A field assignment where lookouts are stationed at elevated locations to view an area of interest; the task is to watch for and report possible fires that may arise from air-borne ember drops. This can also be implemented as an Ember Patrol, where the observations are made from a vehicle. Responders are looking for...

- first signs of smoke as an early indicator of a fire, and
- signs of air-borne embers.

Reports are passed to the City EOC.

**Smoke**, described in terms of color, thickness, and vertical rise.

1. Color: can indicate the temperature.
  - i. **Light Smoke**
    - Indicates the fire is just starting, or is burning light or damp fuels.
    - This smoke tends to reflect light, making the smoke look white.
    - As long as the fire gets lots of oxygen, the smoke stays light in color.
  - ii. **Dark or Black Smoke**
    - Indicates a hotter fire.
    - The fire does not get enough oxygen, thereby produces smoke that contains a lot of unburned particles that absorb light.
    - A column of smoke, especially dark smoke, indicates a high potential for the fire to grow.
2. Thickness: Light, Medium, Heavy
3. Vertical Rise: in columns, drifting, blowing, leaning

### Ember

1. A glowing, hot coal made of greatly heated wood, coal, or other carbon-based material that remains after, or sometimes precedes, a fire.
2. Blowing embers are tough to detect during the day, and may be more visible against a dark sky.

## ICS 213SR Smoke Report (continued)

**Purpose.** The ICS-213SR Smoke Report form is used to record observations of a fire threat to the city.

**Preparation.** For Fire Watch assignments, CARES members will be issued ICS-213SR message forms to record their observations.

**Distribution.** The originals of all message forms, logs, and other generated paperwork must will be signed and turned in at the end of each shift to the IC or Shift Supervisor.

1. Message Number: Assigned by Net control
2. Location: Usually the Tactical Call for your location
3. Bearing to the smoke: In degrees, take 2-3 bearings to average the reading.
4. Is it a column? Indicate if the smoke is raising straight up
5. Size of the smoke: Use your judgement: Small, Medium, Large
6. Color of the smoke: White, gray, black, yellow, other
7. Other: optional information to pass such as:
  - Direction the smoke is blowing
  - Vertical Rise: in columns, drifting, blowing, leaning
  - If you see flames
  - If it is a structure or vegetation fire
  - If you can approximate the distance from your location
- 8 Sent/Received Circle whether you are sending or receiving this message.
- 9 Date/Time The date and time that this message was created
- 10 Name, FCC Call Sign Name of the person originating this message. Sign the form before turning it in.

6.4 ALT-911 Alternate 9-1-1 Report

9-1-1 Field Data Collection Form

<b>COMMON</b>	1. What are you reporting? <b>House Fire</b>		5. RP Name: <b>John Smith</b>	
	2. Location, Address <b>1245 Evergreen Road</b>		6. RP Address (optional): <b>1740 Evergreen Road, Cupertino</b>	
	3. City: <b>Cupertino</b>		7. RP Phone (optional): <b>408-555-1212</b>	
	4. Other Location Details (optional):			
	8. Time last seen? (HH:MM) <b>14:30</b>			
	9. Event / Incident Details <b>Heavy smoke venting from the 2nd floor</b>			
<b>MED</b>	10. Age:	11. Gender:	12. Conscious? (Yes/No)	13. Breathing? (Yes/No)
<b>FIRE</b>	14. If a FIRE, people inside? <b>No</b>			
<b>LAW</b>	15. Person Description:			
	16. Direction of Travel:		17. Weapon Involved?	
	18. Vehicle Description:	19. Lic:	20. State:	
	21. RP Requests Contact? (Yes/No)			
<b>LGOV</b>	22. <no specific details required>			
<b>Operator Use Only</b> (do not transmit this section with the message):				
Action: <b>Sent</b> / Received (circle one)		Operator Call Sign: <b>KJ6ABC</b>		
Method: Telephone / EOC Radio / Courier / <b>Amateur Radio</b> / Packet / Other		Operator Name: <b>Mike Jensen</b> <i>Mike Jensen</i>		
		Date/Time: <b>04/30/20 14:40</b>		
CUP ALT-911 Field Data Collection Form				v200506

The above example is for a FIRE request.

## ALT-911 Alternate 9-1-1 Field Data Collection (continued)

**Purpose.** The 9-1-1 Field Data Collection Form is used if regular 9-1-1 phone service is unavailable and field teams are tasked with taking and transmitting 9-1-1 requests.

**Preparation.** Fill in the Common Area of the form, and **CIRCLE** at least one of the 4 respond types: MED, FIRE, LAW, LGOV (Local Government). More than one response type can be circled. Fill in all associated fields for each circled response type. Note what fields are required.

**Distribution.** The originals of all message forms, logs, and other generated paperwork must be signed and turned in at the end of each shift to the IC or Shift Supervisor.

- |       |                         |   |
|-------|-------------------------|---|
| 1.    | What are you reporting? | Brief description of problem: house fire, auto accident, tree down.                               |
| 2.    | Location/address:       | Provide an address if possible.   |
| 3.    | City:                   | City where this problem occurred.   |
| 4.    | Other location details: | Optional; cross-street, direction of travel, lane, etc.   |
| 5.    | Time last seen:         | Time that this problem was observed in HH:MM.   |
| 6.    | Event Incident Details: | More description. Be succinct, focus on the key elements; you may have to read this over the air. |
| 7.    | RP Name:                | Reporting Person.   |
| 8.    | RP Address:             | Optional.   |
| 9.    | RP Phone:               | Optional, required if RP requests a contact.  |
| <hr/> |                         |   |
| 10.   | Age:                    | MED. Required. Age of the individual needing help   |
| 11:   | Gender:                 | MED. Required.  |
| 12.   | Conscious?              | MED. Required. Yes or No. Do not leave blank.   |
| 13.   | Breathing?              | MED. Required. Yes or No. Do not leave blank.   |
| <hr/> |                         |   |
| 14.   | People inside?          | FIRE. Required. Yes, No, Unknown. # if known.   |
| <hr/> |                         |   |
| 15.   | Person Description:     | LAW. Required if the problem warrants it.   |
| 16.   | Direction of Travel:    | LAW. If a perpetrator is fleeing, if known.   |
| 17.   | Weapon Involved:        | LAW. If a perp is involved, Yes/No/Unknown.   |
| 18.   | Vehicle Description:    | LAW. If a perp is fleeing or a vehicle is involved.   |
| 19.   | Lic:                    | LAW. If a vehicle is referenced, Plate number or unknown.   |
| 20.   | State:                  | LAW. If a vehicle is referenced, state of reg.  |
| 21.   | RP Requests Contact:    | LAW. Yes, No. If Yes, ensure the RP name and address or phone number is provided.                 |
| <hr/> |                         |   |
| 22.   |                         | LGOV. This is local government. This request usually goes to a jurisdiction's Public Works Dept.  |





## ICS 309 Communications Log (continued)

**Purpose.** The Communications Log is a summary of all messages handled by this operator.

**Preparation.** A Communications Log is initiated and maintained by each member of a communications team with responsibility for passing radio message traffic.

**NOTE:** If you do not have an ICS 309 Communications Log, you must create one and make all appropriate entries.

**Distribution.** The originals of all message forms, logs, and other generated paperwork must be signed and turned in at the end of each shift to the IC or Shift Supervisor.

1. Incident Name/Number: The Name and City Activation Number assigned to this event as provided by the IC or EOC.
3. Operational Period: The time interval for which the form applies. Record the start and end date and time.
4. Net Position Name: **For NCOs:** Enter the name of the radio net.  
**For Others:** Enter the name of the position or tactical call
5. Comm Log
  - **Time:** Enter the local time in 24-hour format.
  - **From:** Enter the From call sign or ID and the message number.
  - **To:** Enter the To call sign or ID and the message number.
  - **Message:** enter the message.
6. Prepared by: Enter the name and call sign of the person completing the log. Sign the form before turning it in.
9. Date & Time Prepared: Enter the date and time the form was prepared (24-hour clock).
10. Page Numbers: Enter the page number and number of pages,

## 7 Prowords

To keep voice transmission as short and clear as possible, radio operators use procedure words (PROWORDS) to take the place of long sentences.

<b>I Spell</b>	<b>Spelling a word that's ambiguous or difficult to spell</b> Message says: sine You say: sine, I spell <i>sierra india november echo</i>
<b>Figure or Figures</b>	Message says: Call 911 You say: call, <i>figures niner one one</i> Message says: Date: 11/20/21. Time: 10:25 You say: Date, <i>one one slash two zero slash two one</i> Time, <i>one zero colon two five</i>
<b>Initial(s)</b>	Message says: Position: PGE Supervisor You say: Position, <i>initials papa golf echo</i> Supervisor
<b>Say again...</b>	If you need the sender to repeat some words, say one of the following <b>Say Again</b> all after... <b>Say Again</b> word after... <b>Say Again</b> word before... <b>Say Again</b> between ... and ...

## 8 Phonetic Alphabet & Numbers

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-Ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu
0	zero (ZEE-row)	5	five (Fife)
1	one (Wun)	6	six (Sicks)
2	two (Too)	7	seven (SEV-vin)
3	three (Tree)	8	eight (Ate)
4	Four (FOH-wer)	9	nine (NINE-er)

## 9 Modified Mercalli Intensity Scale (MMI)

I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved or overturned. Dishes, glassware, knickknacks, and books fall off shelves. Weak plaster, adobe buildings, and some poorly built masonry buildings cracked. Damage slight.
VII	Very Strong	Negligible damage in buildings of good design and construction. Slight to moderate damage in well-built ordinary structures. Considerable damage in poorly built or badly designed structures. Some chimneys broken. Fall of plaster, loose bricks, stones, tiles, cornices, unbraced parapets and porches. Some cracks in better masonry buildings.
VIII	Severe	Considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Wood-frame houses moved on foundations if not bolted; loose partition walls thrown out. Tree branches broken.
IX	Violent	General panic. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations. Wood-frame structures rack, and, if not bolted, shifted off foundations. Underground pipes broken.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rail bent. Water thrown on banks of canals, rivers, lakes, etc.
XI	Extreme	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Extreme	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Ref: <https://pubs.usgs.gov/gip/earthq4/severitygip.html>

## 10 Minimum Field Deployment Equipment (Go-Kit)

**Purpose:** Fully independent operation, Cupertino ARK or field location, unknown environment (heat, cold, wind, rain), unknown time of day, 12-hour operation. You must have the following to participate in a CARES field response.

### Equipment – REQUIRED

1.	2m/440 HT	
2.	Mobile antenna (mag mount or existing mobile antenna)	
3.	Ear bud or headphones	
4.	Radio user manual or cheat-sheet	
5.	Coax adaptors	
6.	Charged batteries or extra batteries for 12 hours operation	
7.	Power cord adaptors	
8.	Notepad, pens	
9.	Clipboard (covered recommended)	
10.	Cell phone and charger, cigarette lighter adaptor	

### Documentation, Identification – REQUIRED

11.	CA driver's license or CA-issued ID card	
12.	Amateur radio license	
13.	City of Cupertino Identification Badge	
14.	Cupertino City Map, County Grid; off-line maps OK	
15.	SCCo RACES Message Handling Procedures	

### Forms – REQUIRED (<http://www.cupertinoares.org/ccf/forms/>)

16.	ICS 211 Check-in Log	
17.	ICS 214 Unit Log	
18.	ICS 213 Message Forms, Short Form	
19.	ICS 309 Communications Log	
20.	COES 105 Preliminary Safety Assessment Form, Field	

### Personal Gear – REQUIRED

21.	Watch or clock	
22.	Flashlight, headlamp, spare batteries for 12 hours	
23.	Safety vest, ANSI standard, City-issued	
24.	Long pants	
25.	Sturdy closed-toe shoes	

### Personal Gear – Recommended

(Some of the following items may be **REQUIRED** depending on the assignment)

26.	Roll-up J-Pole, 2M and 440	
27.	Fueled vehicle (always keep your fuel tank at least ½ full)	
28.	Hat (broad-brim recommended)	
29.	Seasonal jacket / rain gear	
30.	Food for 12 hours, Water for 12 hours	
31.	Leather Gloves, Eye Protection	
32.	First Aid Kit	
33.	N95 breathing mask	
34.	Compass (Ember Watch)	
35.	Whistle	
36.	FRS/GMRS radio	



## 11 About CARES

### **The CARES Mission**

The mission of Cupertino ARES is to recruit, maintain, and train Amateur Radio volunteers capable of providing professional emergency communications, increasing the City's emergency response effectiveness, and speeding the recovery effort.

### **Our objectives**

- Preparedness – CARES members train to respond to a local emergency with our equipment, training, and experience.
- Response – CARES members deliver backup and emergency communications to our city, various served agencies, and our neighbors in times of need.

### **What we do**

- Provide backup communications when regular resources fail or are overwhelmed.
- Provide the city with an early assessment of damage and casualties from Cupertino neighborhoods to help the City focus their response during a disaster.
- Handle message, information, and command radio traffic for our served agencies.
- Provide communications for community service events and activities.
- Conduct training and drills as necessary to accomplish our objectives.

### **Criteria to become a Cupertino Citizens Corps Volunteer**

- Must be 16 years of age.
- Must be sworn in as a City volunteer or Disaster Service Worker.
- Must be able to follow instructions.
- Must be able to work in teams toward a common objective.

### **Criteria to become a CARES Associate Member (under 18 years old)**

- Registered Cupertino Citizen Corps Volunteer.
- Under 16 years: Participates in classroom meetings and training only.
- 16-17 years: Participates in meetings and training; exercises with parent/guardian.

### **Criteria to become a CARES Member**

- Registered Cupertino Citizen Corps Volunteer, at least 18 years old.
- Have a valid FCC-issued amateur radio operator license.
- Have your own radio equipment necessary to support the CARES mission.
- Complete the CARES Field Responder qualification.

### **A successful CARES Field Responder can do the following:**

- Program your radio
- Operate in a radio net
- Operate packet radio
- Pass a radio message
- Follow instructions

### **Types of CARES Field Operator assignments:**

- Radio Operator, Field. Assigned to various field positions for the purpose of collecting and passing information to the City EOC.
- Radio Operator, ARK. Supports the Cupertino OES ARKs with communications between the ARK ICP and the City Emergency Operations Center (EOC).
- EOC Support. Assigned at the Communications Van as Shift Supervisor/Comm Team Lead, Radio Operator, EOC runner, or other support staff.

**Cupertino ARES/RACES**  
**10300 Torre Avenue**  
**Cupertino, CA 95014-3255**