Field Communications Handbook

Cupertino ARES/RACES

April 2025

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Rev: 250428

Notes

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

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
- Planning – understand the risks to and needs of the city, and align our activities to address these needs
- 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 emergency communications when regular communication systems break down or are overwhelmed.
- Handle message traffic for CARES' served agencies.
- Support the community with two-way communications.
- Establish ad-hoc communications links between officials when necessary.
- 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.
- Have a valid FCC-issued amateur radio operator license.
- 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 (2m/440) necessary to support the CARES mission.
- Complete the CARES Field Responder qualification.

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 CERT teams at City ARKs with communications between the ARK ICP and the City EOC.
- EOC Support. Assigned at the Communications Van as Shift Supervisor/Comm Team Lead, Radio Operator, EOC runner, or other support staff.

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.	Radio user manual or cheat-sheet	
3.	Ear bud or headphones	
4.	Charged batteries or extra batteries for 12 hr operation	
5.	Mobile antenna (mag mount or other mobile antenna)	
6.	Power cord adaptors, Cigarette lighter adaptor	
7.	Spare Fuses	
8.	Coax adaptors (connect HT to coax)	
9.	Notepad, pens	
10.	Clipboard (covered recommended)	
11.	Cell phone and charger, cigarette lighter adaptor	

Documentation, Identification – REQUIRED

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

Forms – REQUIRED (http://www.cupertinoares.org/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	
21.	Incident Report Form 911	

Personal Gear – REQUIRED

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

Personal Gear – Recommended
(Some of the following items may be **REQUIRED** depending on the assignment)

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

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 DPW 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 (repeater output)
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 (repeater output)
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	145.450 –	Tone=100.0 K6FB
SCC Message Net Alt	442.575 +	Tone=100.0 K6FB
SCC Command	442.500 +	Tone=100.0 WB6GGF
SCC Resource Net	146.115 +	Tone=100.0 AA6BT
SCC Resource North	145.270 –	Tone=100.0 W6ASH
SCC Resource North Alt	440.800 +	Tone=100.0 W6ASH
SCC Resource South	443.275 +	Tone=107.2 K6SNY
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
LP1, National Primary EAS Station	KFRC	106.9 MHz
LP2, National Primary EAS Station	KQED	88.5 MHz
LP2, National Primary EAS Station	KSJO	92.3 MHz
LP2, National Primary EAS Station	KZST	100.1 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 NOT sufficient.

_____ 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 Logs. 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 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 always maintain a safe operating environment.

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 stay hydrated.

_____ 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.

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 pipelines 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.

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)

_____
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.

_____
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 always.

_____
10. Medical or other emergency
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). Do not move the injured person unless they are not in a safe place (such as where traffic could hit them).

Optional instructions if operating in a vehicle.

_____
11. Compliance with all applicable laws
All responders are expected to comply with all applicable laws during this event. This includes wearing seatbelts and following all traffic laws, including speed limits, full stops at stop signs, etc.

_____
12. 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

_____
13. 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 field assignment, be sure you can answer **YES** to the following:

1.   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.   You are physically able to do the job.

Do not accept an assignment that will cause you hardship. This includes responding to remote locations that require long off-road travel, missing meals, or extended operation without rest.

3.   You have the right personal protective equipment.

Depending on the assignment, boots, long pants, hard hat, heavy gloves, and other supplies for whatever else the weather warrants (sun, rain) may be essential.

4.   You have the right radio equipment.

Make sure you understand the communication requirements and can operate in this environment at the field site.

5.   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 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.

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.

I Spell	**Spelling a word that's ambiguous or difficult to spell** Message says: sine You say: "sine, I spell *Sierra India November echo*"
Figure or Figures	Message says: Call 911 You say: call, *figures niner one one* Message says: Date: 11/20/24. Time: 10:25 You say: "*Date, one one slash two zero slash two four, Time, one zero colon two five*"
Telephone Figures	Message says: (408) 555-1212 You say: "*telephone figures four zero eight, five five five, one two one two*"
Initial(s)	Message says: Position: PGE Supervisor You say: "Position, *initials Papa Golf Echo* Supervisor"
Say again…	If you need the sender to repeat some words, say one of the following **Say Again** all after… **Say Again** word after… **Say Again** word before… **Say Again** between … and …
Mixed Group	Message says: CUP-201 You say: "*mixed group Charlie Uniform Papa dash two zero one*"
Mixed Group, Figures	Message says: Form 211b You say: "*Form, mixed group figures two one one Bravo*"

6.6 Informal Ad Hoc Message Forms (Form "1")

Replies are a new message and reference the original message.

Spiral Notepad

From ___
To ___
Msg # **29**
Pri **R**
Date/Time **0913**

Message:
This is the message that needs to be written down. Watch the details.

Is there an update to Cupertino's curfew hours? / The Facility is preparing the night shift schedule

Post-it / Index Card

From ___
To ___
Msg # ___
Pri ___
Date/Time ___

Message:
This is the message that needs to be written down. Watch the details.

Use the Half-Page Message Form (pads) for informal messages

1. Incident Name (Optional): **CUP-24-14T**		Priority (E, U, R): **R**	Message No: **29**
2. To (Name and Position):			
3. From (Name and Position):			
4. Subject:		5. Date:	6. Time: **0913**
7. Message: **Is there an update to Cupertino's curfew hours?**			

USE SEPARATE MESSAGE FORM FOR SENDING A REPLY. REFERENCE THIS MESSAGE NUMBER

8. Approved by: Name:	Signature:	Position/Title:

9. Operator Use Only (do not transmit this section with the message):

Action: Sent / Received (circle one) **Operator Call Sign:** **KV6BC**

Method: Telephone / EOC Radio / Courier / **Operator Name:** **D. Jensen**

Amateur Radio / Packet / Other ___ **Date/Time:** **8/24/21 0914**

CUP ICS 213SF Short Message Form   v180909

4.2 Checklist – Field Responder

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

0. Traveling to your assignment: If you are traveling to your assignment, do the following:

_____ 1. Start your **ICS 214 Unit Log**.

_____ 2. Check in with Resource Net Control. Net control will give you an assignment.

_____ 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 at your assignment, notify Net Control. Tell them:
   a. Arrived at < assignment location>
   b. Odometer reading (last 3 digits of your odometer)

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

_____ 1. Inform Resource Net Control that you have arrived. If a separate message net is in place, then check out of the Resource Net and check in to the Message Net before you leave your car.

_____ 2. Make an **ICS 214 Unit Log** entry.

_____ 3. Start an **ICS 309 Comm Log** for the voice net.

_____ 4. Sign in on the site's **ICS 211 Check-in Sheet**. If you are the first to arrive, start an ICS 211.

_____ 5. Find the served agency contact or supervisor and inform them you arrived.

_____ 6. 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)

_____ 7. Find and establish the workspace to set up your radio operations.

_____ 8. Begin radio operations. Make **ICS 214 Unit Log** entry.

_____ 9. Notify Net Control that you are operational.

2. Voice Operations: Managing the message flow

_____ 10. Maintain voice radio contact on the designated voice net.

_____ 11. Make **ICS 214 Unit Log** entries as appropriate.

_____ 12. Make **ICS 309 Comm Log** entries for all sent and received messages.

_____ 13. Report any issues or problems to your supervisor.

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

_____ 14. Inform Resource Net Control that you have arrived. If a separate message net is in place, then check out of the Resource Net and check in to the Message Net before you leave your car.

_____ 15. Sign in on the local **ICS 211 Check-in sheet**.

_____ 16. Find the served agency contact or supervisor and inform them you arrived.

_____ 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**.

4. 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 a separate Message Net is in place, then check out of the Message Net and check into the Resource Net. Inform Net Control what you plan to do (go home, return to EOC, etc.).

5. Securing Operations: when you are directed to shut down, do the following:

_____ 28. Get permission from your supervisor to shut down.

_____ 29. Complete and sign your ICS 214 Unit log.

_____ 30. Shut down and pack up all assigned equipment.

_____ 31. Turn in all paperwork to your supervisor.

_____ 32. Sign out on the site's ICS 211 Check-in sheet.

_____ 33. If a separate Message Net is in place, then check out of the Message Net and 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.
- What is going on in general? What changes are expected?
- Any pending activity: messages you sent, expected replies, and who gets them.
- The location of the toilet, food, water, etc.
- Attend the all-hands briefing that occurs during each shift change if offered.

Incident Report 911 Field Data Collection (continued)

Purpose. The incident report is to record citizen reports/requests for services that would normally be made by the 9-1-1 system. <u>This form is only to be used in the event telephone communications are not working and personnel have been assigned to a field location to collect this information.</u>

Preparation. Collect the data on the incident/request as appropriate. Inform the reporting person that you will forward the information to the EOC as soon as practical but make no commitment as to how quickly it will be acted upon.

Distribution. The Document Unit maintains a file of all forms/messages. All completed forms MUST be turned into the Supervisor and forwarded to the Documentation Unit.

Instructions for the person collecting the report: Fields shown in red, bold, or outlined in red on the form are REQUIRED. For information that is unknown, leave the field blank.

Field#	Field Name	Instructions
1.	**Date:**	Enter the date the incident was observed.
2.	**Time:**	Enter the Time the incident was observed.
3.	**Incident Address:**	Enter the address of the incident, including the city.
4.	Common Name:	e.g., Home Depot, Main & Curtis, Randal Park, etc.
5.	**Bried Description:**	What happened, why is help needed, be specific.
6.	Reporting Person:	Name of the Reporting Party (RP).
7.	Phone:	Phone Number of the RP where they can be contacted.
8-15.	Victim/Patient:	Info about the victim of a crime or person needing medical help. Use Field 36 for details.
16-25.	Suspect/Subject:	Info about the suspect (crime) or subject (missing person or patient). Use field 36 if necessary.
26-31.	Vehicle:	Record information about a vehicle involved.
32-35.	Fire:	Information about the structure type, trapped persons, if flames or smoke are visible.
36.	Additional Details & City Service req's:	Additional Details and other 911 Hazard Reporting, such as electrical wires down, gas leak, etc.
37.	Reporting Location:	Where is the report being taken.
38.	Person taking report:	The name of the person taking the report.

Instructions for radio operators: if sending by voice, send field number and data. Do not send fiend name or blank fields.

	Origin Msg #:	Message number of the sending station.
	Destination Msg #:	Message number of the destination station.
	Relay:	Call sign or time, or other remarks on the status.
	Name:	First Initial and last name of operator handling this message.
	Call Sign:	Call Sign of operator handling this message.
	Date/Time:	Date and time the message was sent or received, Use 24hr time.

6.5 Incident Report (911) Form

Fire Incident Example

Incident Report (911)
Field Numbers Correspond to Instructions on Back of Printed Form
PDF 0.5

Date:¹ 4/12/2024 | Time when incident was observed:² 8:30

Incident Address:³ 1245 Evergreen Rd, Cupertino

Common Place Name:⁴

Brief Description:⁵ House Fire

Reporting Person Name:⁶   Phone:⁷

Victim / Patient

Gender:⁸ ☐ Male ☐ Female   Age:⁹ ☐ Adult¹⁰ ☐ Child¹⁰

Is Patient Conscious:¹¹ ☐ Yes ☐ No   Is Patient Breathing:¹² ☐ Yes ☐ No

Injury / Medical Condition:¹³

Name¹⁴   Phone:¹⁵

Suspect / Subject

Race:¹⁶   Gender:¹⁷ ☐ Male ☐ Female   Age:¹⁸

Height:¹⁹   Weight:²⁰   Hair:²¹

Build:²²   Clothing:²³

Last Known Location:²⁴

Weapon Seen:²⁵

Vehicle (e.g. hit-and-run or suspect's vehicle. Not neccessary for most traffic accidents.)

Color:²⁶   Year:²⁷

Make:²⁸   License:²⁹   State:³⁰

Model/Type:³¹

Fire

Structure Type:³² House   Number of Stories:³³ 2

Visible:³⁴ ☑ Smoke ☐ Flames   People Inside:³⁵ ☐ Yes ☑ No

Additional Details & City Service Requests

³⁶ Heavy smoke venting from the second-floor window

Reporting Location:³⁷

Person Taking Report:³⁸

Radio Operator Only:

Message Numbers:	Origin:		Destination:	
Relay:	Rcvd:		Sent:	
Name:		Call Sign:	Date:	Time:

4.3 Message Handling

Types of messages

1. **Third Party, Formal, Official Messages.** 3rd Party to 3rd 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 Comm Log** Entries.
2. **Informal Messages.** Operator to 3rd 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 Comm 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 Comm Log** entries.

Preparing the Message

1. Do not pass any person's or patient's names over the radio. The only personal names that generally belongs in a message are the names necessary for the identification of agency officials, if they choose to put them into the message.

   NOTE: There may be exceptions to this policy, such as matching up lost children with parents. Make sure the Shift Supervisor approves any exceptions.
2. For Third Party/Formal messages, get written down and signed messages, not verbal.
3. When asked to send a message of any substantial length, agree with the message author on the exact wording of the message. Consider sending it by packet if available.
4. Consider sending long messages by packet if available and 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 confirmation.
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 informal messages. If the person you are shadowing says, "Tell Dr. Smith the supplies are arriving," you might not worry about sending his exact words.

10. Use the ICS 213 Message Short Form, phone message pad, or something similar when creating your message.

4.4   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. State the message type (Informal, ICS 213, DEOC-9, Incident Report, etc.) on first contact with the receiving station.

3. Say the message in phrases of 5 words, without repetitions.

4. 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.

5. Do not resume transmitting until the receiving station acknowledges the last transmission with something like "*GO*" or "*continue*".

6. Speak clearly and slowly. As a pacing guide, *ghost-write* the message as you say it (not necessary to actually write it down again).

7. Use the message passing prowords and the phonetic alphabet to spell items that cannot be understood reliably by pronouncing them.

8. 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.

9. End the message with "*End of Message, <Tac call and your call sign>*".

10. Once all questions are resolved, the receiving station acknowledges receipt of the message (for instance, "*Message received*").

11. The receiving station SHOULD NOT read the message back to you. Unnecessary read-backs tie up the frequency for other traffic.

12. On completion of this exchange, Net Control will call for the second message if one was previously identified.

13. 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.

4.5   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*."

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 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

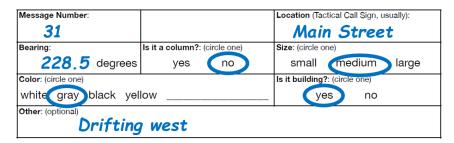|		
8	Sent/Received:	Circle whether you are sending or receiving this message.
9	Date/Time:	The date and time that this message was created
10	Name, FCC Call Sign:	Name of the person originating this message. Sign the form before turning it in.

6.4 COES-213SR Smoke Report

SMOKE REPORT

Message Number: **31**		Location (Tactical Call Sign, usually): **Main Street**
Bearing: **228.5** degrees	Is it a column?: (circle one) yes **(no)**	Size: (circle one) small **(medium)** large
Color: (circle one) white **(gray)** black yellow _____		Is it building?: (circle one) **(yes)** no
Other: (optional) **Drifting west**		

(Circle one) **(Sent)** Received	Date and Time: **5/12/18, 10:45**	Name and FCC Call Sign: **Mike KJ6ABC** *Mike Miller*

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**
        o Indicates the fire is just starting or is burning light or damp fuels.
        o This smoke tends to reflect light, making the smoke look white.
        o As long as the fire gets lots of oxygen, the smoke stays light in color.
    ii. **Dark or Black Smoke**
        o Indicates a hotter fire.
        o The fire does not get enough oxygen, thereby produces smoke that contains a lot of unburned particles that absorb light.
        o A column of smoke, especially dark smoke, indicates 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.

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
CHECKING IN		
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.	Pass 3 pieces of information and log your check-in on your ICS 214: 1. your call sign 2. ARK location 3. Mike-Mike report
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?	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
CHECKING IN		
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. KV6BC	
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
CHECKING IN		
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 Comm Log.
3 KV6BC:	Net Control, KV6BC. Departing from Prospect Road and Stelling. Odometer: 1 2 5.	Odometer reading is the last 3 digits. Log this on your ICS 214.
HEALTH and WELFARE CHECKS		
3 NCS:	All Stations, stand by for a Health and Welfare Check. Reply with your approximate location and the last 3 digits of your odometer. 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 10th Street, San Jose. Odometer: 136. KV6BC.	Answer with your current location and odometer
CHECKING OUT		
5 KV6BC:	Net Control, KV6BC. Arrived at <destination>. Odometer: 142. Checking out. KV6BC.	On arriving, check out of the resource net and in to 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.	Check-outs get logged on the Net Control ICS 309 Comm Log.

5.3   Operating on the Message Net

WHO SAYS WHAT		NOTES
CHECKING IN		
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 **Tactical Call** is **De Anza ARK**. K6KP, Net Control.	Check-in gets logged on the Net Control ICS 309.
CHECKING OUT		
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.

6.2   SCC ICS 213 Message Form (continued)

1. Date and Time:	When receiving or sending any message, complete the date and time (in the format shown).
2. Original Msg #:	Message number of the original sending station.
3. Dest Msg #:	Message number of the ultimate destination station.
5. Message Handling Order:	Indicate the handling order of the message, (Immediate: As Soon As Possible; Priority: Less Than One Hour; Routine: Less Than Two Hours).
6. Message Requests You To:	If the sender is expecting the receiver to "Take Action" check "Yes" otherwise "No". If a "Reply" is required check "Yes, by" and specify the Time, otherwise "No". If both are "No" then the message is intended as "For Your Information".
7. TO: ICS Position:	State the ICS position to which the message is to be delivered. This will generally be Command, or one of the Section Chiefs (e.g., Operations, Planning, Logistics, Finance/Admin.). If unsure, address the message to Planning.
8. FROM:	ICS Position: indicate what ICS position is sending the message - you also can note a name, but an ICS position is needed since the person staffing the position may change.
9. Location:	Enter the location of the addressee in the "To" box and the location of the sender in the "From" box (for example, To: Cupertino EOC, From: Santa Clara County EOC).
10. Subject:	Note the subject of the message.
11. Reference:	If the message is a response to an earlier message, indicate the original message number if available.
12. Message:	Be as brief as possible.
13. Action Taken:	This section is for use of the message originator or recipient to record pertinent information regarding action taken in response to the message. Space is also provided to indicate copy to other ICS positions that may need the information.
14. Operator Use:	The person who handled the message is to record the net used in the area at the bottom of the message form and records the name and call sign in the appropriate box. If the message is being sent, the date and time that the message actually was sent is to be noted in the relevant box.
15. Forms Disposition:	Once the message is complete, copies of the message are distributed according to the script shown. If the message is an IMMEDIATE message, it should be placed in the hands of the supervisor. For other messages, it is permissible to place the message in the appropriate message box slot.

6.3 SCC ICS 213 Message Form

MESSAGE FORM
▸ For paper: use ballpoint pen – blue or black ink only (See back for instructions)

Origin Msg #: [2]

Destination Msg #: [3]

Date [1]: _____ (mm/dd/yy)   Time (24hr): _____ (0001 to 2400)

Handling [5] (✓one): ○ Immediate (ASAP) ○ Priority (< 1hr) ○ Routine (< 2hr)

This Message Requests You To [6]:
TAKE ACTION (✓one): ○ Yes   ○ No
REPLY (✓one): ○ Yes, by ____   ○ No

TO
ICS Position: (required) [7]
Location: (required) [9]
Name: (optional)
Telephone #:(optional)

FROM
ICS Position: (required) [8]
Location: (required) [9]
Name: (optional)
Telephone #: (optional)

SUBJECT: [10]

REFERENCE (e.g., Number of earlier msg.): [11]

MESSAGE: [12] (what, when, where needed; how long; contact name and phone number - KEEP MSG BRIEF)

ACTION TAKEN: [13] (For use by Originator / Recipient) ▸ USE SEPARATE MESSAGE FORM IF SENDING REPLY!

CC: ☐ Management ☐ Operations ☐ Planning ☐ Logistics ☐ Finance

Operator Use Only: [14]
Relay: Rcvd: _____   Sent: _____
How: ○ Received   or   ○ Sent   (✓one):   Operator Call Sign: _____
○ Telephone   ○ Dispatch Center   Operator Name: _____
○ EOC Radio   ○ FAX   ○ Courier
○ Amateur Radio   ○ Other _____   Date: _____   Time: _____

Outgoing (Sent): [15]
  Message Originator: Send the original to radio. Retain a copy for your reference.
  Radio: After sending, complete Operator Use Only and file in radio.
Incoming (Received): [15]
  Radio: Complete Operator Use Only then route to the Addressee. Retain a copy in radio if directed by Supervisor.
  Addressee: Take appropriate action.

5.4 Message Passing – Third Party message

	WHO SAYS WHAT		NOTES
1	KV6BC:	Net Control, this is **De Anza ARK** with **Priority Traffic** for the **EOC**.	Station identifies the priority & destination in one transmission.
2	NCS:	De Anza ARK, Acknowledged. Your message number is 2 8. What is the message type?	Net Control **assigns** the message numbers.
3	KV6BC:	Message type is **ICS 213 Message Form**. **Break.**	**Field Station** has a filled-out ICS 213. NCS grabs the appropriate form
4	NCS:	Continue.	
5	KV6BC:	**Date:** < date>, **Time:** <24 hr time> **Handling:** Priority **Msg Request:** <say fields and options> **Break**	Passes Header information.
6	NCS:	Continue.	
7	KV6BC:	**To Position:** <as listed> **To Location:** <as listed > **From Position:** <as listed> **From Location:** <as listed> **Break.**	Send all for fields as part of one transmission. Use **Break** when done.
8	NCS:	Continue.	
9	KV6BC:	**Subject:** <subject text> **Break**.	
10	NCS:	Continue.	
11	KV6BC:	**Message is:** <5-word groups at a time, break in between> **Break**	Send the message in 5-word blocks. Say "**Period**" at the end of the sentence. Use **Break** to split a long sentence.
12	NCS:	Continue.	
13	KV6BC:	…**End of Message**. KV6BC.	Message is logged on the Field Operator's ICS 309.
14	NCS:	Acknowledged. This is K6KP, Net Control for the Cupertino Emergency Net. Stations with any traffic, identify now.	Message is logged on the Net Control's ICS 309.

5.5 Message Passing – Incident Report (911)

	WHO SAYS WHAT	NOTES
1	**KV6BC:** **Net** Control, this is **De Anza ARK** with **Emergency Traffic** for the **EOC**.	Station identifies the message priority and destination in one transmission.
2	NCS: De Anza ARK acknowledged. Your message number is 4 1. What is your message type?	
3	KV6BC: Message type is **Incident Report 911**. **Break**.	The EOC Radio Room Operator pulls out an Incident Report (911) form to record this data.
4	NCS: Continue	
5	KV6BC: **Message Number**: 4 1 **Field 2**: *figures* 0 8 colon 3 1 **Field 3**: *figures* 1 2 4 5 Evergreen Road, Cupertino **Break**	If the Date is today, skip it. Use the *figures* proword for passing numbers
6	NCS: Continue	
7	KV6BC: **Field 5**: House Fire **Field 32**: house **Field 33**: two story **Field 34**: Smoke **Field 35**: No **Break**	Space out the fields to give the recipient time to find it on the form.
8	NCS: Continue	
9	KV6BC: **Field 36:** Heavy smoke venting from the… **Break**	Passing in 5-word groups. Only count the words the recipient will write down
10	NCS: Continue	
11	KV6BC second floor. **Field 37:** De Anza ARK **End of Message** This is KV6BC	Message is logged on the Field Operator's and Net Control's ICS 309.
12	NCS: Acknowledged. This is K6KP, Net Control for the Cupertino Emergency Net. Stations with any traffic, identify now.	

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,

6.2 ICS 309 Communications Log

COMM Log ICS 309-SCCo ARES/RACES	1. Incident Name and Activation Number Saratoga Fire CUP-24-14T		2. Operational Period (Date/Time) 8/20/24 8/20/24 From: 0800 To: 1600	

3. Radio Net Name (for NCOs) or Position/Tactical Call
DeAnza ARK

4. Radio Operator (Name, Call Sign)
D. Jensen KV6BC

5. COMMUNICATIONS LOG

Time (24:00)	FROM Call Sign/ID	Msg #	TO Call Sign/ID	Msg #	Message
0900			NC		Check-in, Message net
0913			NC	28	[213] Transport Request
0915	NC				H&W
0945	NC			47	request next shift staffing plan
0955			NC	51	[213] site status report
1015	NC				H&W
...					
1600			NC		Check-out

6. Prepared By (Name, Call Sign) Dave Jensen KV6BC *Dave Jensen*

7. Date & Time Prepared 08/20/2024 1600

8. Page __1__ of __1__

5.6 Message Passing – Informal message

	WHO SAYS WHAT		NOTES
1	NCS:	Is there any traffic for the net?	Net Control calls for traffic.
2	KV6BC:	Net Control, **Golden Years Retirement** with **Routine Traffic** for the **EOC**.	Operator received information; identifies the message priority and destination in one transmission.
3	NCS:	Golden Years, acknowledged. Your <u>message number is **2 9**</u>. What is the message type?	
4	KV6BC:	Message type is **Informal**. Priority: **Routine, Break.**	This gives NCO time to pull the appropriate form.
5	NCS:	Continue.	
6	KV6BC:	**Message is:** Is there an update to... **Break.**	Sends the message in 5 to 7 words blocks or as natural phrases. Use **BREAK** to separate transmissions.
7	NCS:	Continue.	
8	KV6BC:	… Cupertino's Curfew hours **Question Mark End of Message.** This is Golden Years, KV6BC.	Say "**Period**" at the end of the sentence. Use **End of Message** and then identify yourself.
9	NCS:	Acknowledged. This is K6KP, 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.

6 Forms

See the Website www.CupertinoARES.org > Forms for all relevant CARES field forms.

6.1 ICS 214 Unit Log

UNIT LOG ICS 214-SCCo ARES/RACES	1. Incident Name and Activation Number Saratoga Fire CUP-24-14T	2. Operational Period (Date/Time) 8/20/24 8/20/24 From: 0800 To: 1600
3. Unit Name / Tactical Call / Designators De Anza ARK		4. Unit Leader (Name, Call Sign, ICS Position) D. Jensen, KV6BC

5. Personnel Roster Assigned

Name	Call Sign	ICS Position	Home Base/City
<< This section only used by team leaders. >>			
<< Used when a group is dispatched together. >>			

6. ACTIVITY LOG

Time (24:00)	Major Activities & Events / Occasional Messages (indicate From / To / Msg# / Msg Text)
0715	Checked into the CARES Resource Net
0745	Received assignment: De Anza ARK
0755	Departed home, Prospect and Saratoga Avenue, San Jose, odometer 234
0810	Arrived at assignment, OD 236
0811	Checked out of the Resource Net, checked into Message net
0830	Station set up complete; see ICS-309
...	(other activities, decisions, observations)
1600	Shift complete; checked out of Message net, checked into Resource net
1615	Departed assignment, odometer 236
1630	Arrived home, OD 238; checked out of Resource Net

Dave Jensen

7. Prepared By (Name, Call Sign, ICS Position) Dave Jensen, KV6BC	8. Date & Time Prepared 8/20/2024 1630	9. Page __1__ of __1__

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.