

DRAFT

Net Control Station Handbook

Cupertino ARES/RACES

October 2021

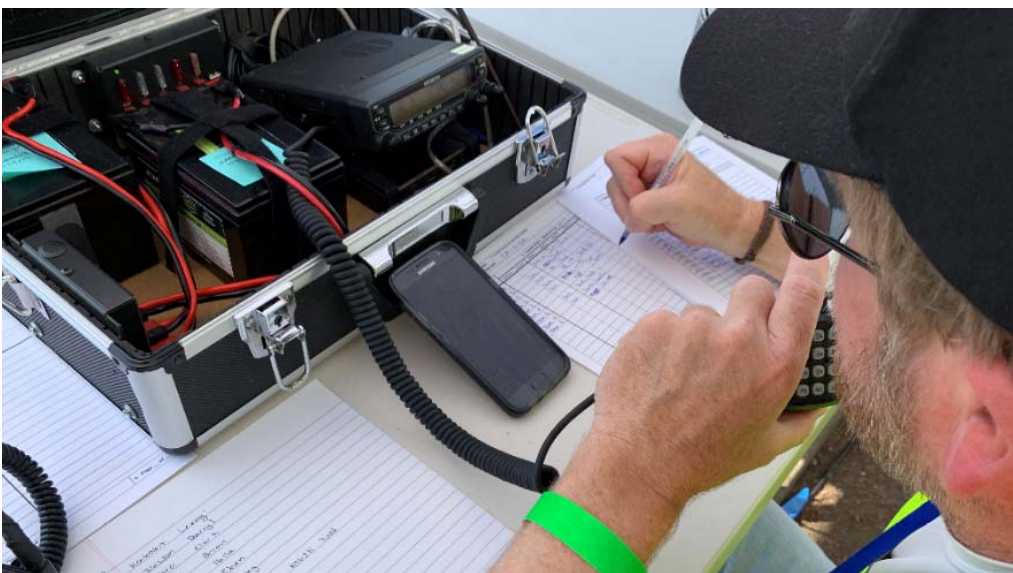


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1 Contact Information

General Contact Numbers

9-1-1 Alt	408-299-3233
Cupertino Public Works Support (After Hours)	408-299-2507

Comm 469 Qualified Operators

Judy Halchin	KK6EWQ	408-533-2517
Ken Foot	KR6CO	408-761-3647
Ken Ericksen	KI6SYY	408-215-8459
Jim Oberhofer	KN6PE	408-839-8798

DOC Notification Priority

Name	Position	Direct (forward)	Cell (texting)
1. Ken Ericksen	CCC Coord, DOC	408-777-3176	408-215-8459
2. Tom Chin	Emergency Manager	408-777-1310	408-495-9234

ISA Document Holders

Comm 469	--	#2	--
Chris Capener	AI6CC	#5	408-813-4168
Bob Cascone	K6IM	#1	408-515-2899
Ken Foot	KR6CO	#7	408-761-3647
Judy Halchin	KK6EWQ	#3	408-533-2517
Steve Hill	KK6FPI	#8	408-693-5794
Jim Oberhofer	KN6PE	#6	408-839-8798
Jerry Tomanek	AF6HY	#4	650-537-5234

Community Information

For Cupertino-specific instructions on an emergency, check this station first:

Cupertino Community Radio	WQGH344	1670 AM
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Emergency Alert System (EAS) Stations

National public warning system; listen to one of the following EAS stations whenever there is an emergency in progress:

Local Primary #1, EAS Station	KCBS	740 AM, 106.9 FM
Local Primary #1s, EAS Station	KSOL	98.9 FM
Local Primary #2, EAS Station	KQED	88.5 FM
Local Primary #2, EAS Station	KJSO	92.3 FM
CA State Primary EAS Station	KFBK	1530 AM

2 Net Control Operator refresher

2.1 Introduction

The Net Control Station (NCS) is managed by a Net Control Operator (NCO) who is responsible for controlling all radio traffic on a repeater or simplex frequency during a directed net. The NCO should view themselves as an emergency dispatcher. The NCO needs to remain professional at all times and maintain a calm collected demeanor.

2.1.1 Guidelines

The following is an excerpt from the *ARRL NCS Standard Operating Guidelines*.

1. The net control station maintains total responsibility and authority in providing a smooth-running net.
2. You are in charge. Your tone of voice is the most powerful part of your speech.
3. State the time frequently.
4. When transmitting on the repeater, be sure to pause after the courtesy tone to give stations a chance to break in.
5. During a critical emergency or a high traffic load, appoint or request a backup net control station or scribe to ensure all information is properly recorded.
6. All your transmissions must be in a controlled and clear voice.
7. Identify your station by call sign every ten minutes if you are involved in constant communications or using tactical call signs.
8. Keep records and logs of all transmissions taking place during the net.

2.1.2 Before even thinking of taking the net

1. **Station** – Make sure you have a station that can hear everyone on the net. If you cannot hear or be heard by all stations AND there is a NCO on the channel who can, then transfer the net to that individual.
2. **Experience** – Volunteer often to run the CARES Weekly Nets as practice or act as Net Control during a CARES exercise.
3. **Confidence** – The NCO sets the tone for the net. Having an on-air command presence instills confidence in net participants during the activation.

2.1.3 Before starting the net

Be Prepared – All NCOs should be ready to assume the net at any time.

In preparation for taking the net, do the following:

- _____ 1. Familiarize yourself with this handbook.
- _____ 2. Have the following forms available:
 - ICS214 log (Unit Log)
 - ICS309 Communications log
 - Custom 'Form 1' list of who is on the net, or a pre-populated named list... to be finalized. See Judy.
 - ICS213 Message form (Short Form)
 - For Roll-call check-ins, have the latest roll-call form available.
- _____ 3. Make sure you know how you will use these forms for managing the net.

2.1.4 During the net

Remember to do the following:

1. **Listen** – The best NCOs know that communications is 50% listening.
2. **Think before you speak** – use specific words to ensure that your precise meaning is conveyed.
3. **Speak** – Hold the mic 3-4 inches from your face and just off the side of your mouth. Talk across, rather than into, the microphone.
4. **Keep your transmissions brief** – unnecessary chatter wastes time and slows the pace of the net. Transmissions should be crisp and professional. Refrain from non-essential conversation.
5. **Clarity** –Your communication should consist of only the information necessary to get the message across clearly and accurately.
6. **Plain Language** – All messages are passed in plain English; no Q-Codes or 10 codes.
7. **Phonetics** – when in doubt, spell it out using standard ITU phonetics. Avoid non-standard phonetics; they cause additional mental translation.
8. **Using the Repeater** – Keying up your radio - Press PTT, PAUSE, and then talk. This makes sure that the other stations can hear your entire transmission.
9. **Identify every 10 minutes** – be sure to say your FCC callsign on the air at least every 10 minutes while you are operating. If you have not handled any traffic over a 10-minute interval, just announce your callsign "net control for <event>" or something similar to indicate that the frequency is under net control.

10. **You are in Charge** – ... of the net. If it's going too fast for you, slow it down. Do not respond until you're ready (including keeping up with your logging).

2.2 General Net Operations

2.2.1 Basic Template for the Net Control Script

The following is an excerpt from the SCCo RACES NCO 3A Class. The net can be broken down to series of parts:

Start / Introduction

- Check for a clear frequency.
- Identify yourself, including the tactical call sign of net control.
- Identify the purpose of the net, and whether it will be operated as open or directed.
- State whether or not you have the ability to dispatch resources.
- State what to do if immediate help is needed (e.g., call 911 or city tactical).
- Ask if there is any emergency traffic.
- Ask if there is any traffic for net control.
- Be sure to say your FCC callsign on the air at least every 10 minutes.

Reports/Check-ins

- Describe how people should make reports or check-in.
- May include when to use Tactical and FCC call signs.

Field Assignments

- If directed, turn the net over to the Shift Supervisor to make assignments.
- Record the assignments made. This will help you track field responders later.

Update

- NCO must remember to ID with FCC call sign every 10 minutes.
- Purpose of net and operating mode (directed/open) as appropriate.

Close

- Thank owners and operators of repeater(s) (if used).
- Announce that the repeater/frequency is returned to normal use.

2.3 Terms

- C469: Comm 469, Public Safety Communications Vehicle
- NCO: Net Control Operator
- NCS: Net Control Station
- SS: Shift Supervisor

3 Procedure: Emergency Net Operations

3.1 Introduction

This section covers the three different types of net control startup activities that CARES may encounter. These are:

1. **General Net Startup.** This approach is for a non-earthquake event that warrants CARES to come up on the net. It may be at the request of the city or other served agency who needs communications support. A full field deployment may or may not be the outcome of this type of net.
2. **Planned Net Startup.** This type of net occurs when a plan is previously developed on what CARES needs to do and how we should do it. This approach may be used after the net was previously shut down and planned to be re-activated during a later Operational Period. An **Incident Action Plan** is the document that will lay out our course of action.
3. **Remote Net Startup.** This net is specific for an Earthquake where the net is likely to be started from home, and specific actions are identified. CARES will maintain a standing plan for this initial type of response.

3.2 General Net Start (new event)

A *General Net Start* is for exercise or emergency events that includes time to perform pre-planning tasks such as identifying staffing requirements, making staffing assignments, deploying C469, and identifying field assignments.

Types of events that can be managed by a General Net Start include discovery of a power or communications outage or flood risk.

3.2.1 Opening the Net

The following is a sample script of the general information and actions taken by the NCO. While the NCO is encouraged to adjust (personalize) the content based on the situation, they must keep the basic elements in place.

_____ 1. **Start your ICS214 Unit Log.**

_____ 2. Check if a Net Control is already on frequency.

"This is < your call >; is there an active net on this frequency?"

If YES, listen for NCO instructions. If NO, continue with the following step.

- _____ 3. **Start the net** on TAC3 / W6TDM Repeater.

“This is < your name >, < your call >. Attention all stations. Please stand by for [drill | emergency] traffic.”

“This is < your name >, < your call >, net control for the Cupertino ARES Emergency Net. This is [a drill | an actual emergency]. This is a directed net. All stations not connected with the emergency are asked to stand by.

If appropriate: *“I am NOT able to dispatch help for any reported situations.”*

“All CARES member stations are asked to stay on frequency until the close of the net. Please give your current availability when you are polled.”

- _____ 4. **NCO calls for the Shift Supervisor** to briefly describe what is known. If no SS is present, then make the announcement yourself based on what you know.

“CARES has been activated by < REQUESTING AGENCY >. There is < brief description and location of the emergency >.”

- _____ 5. **Check for Emergency Traffic.** *“Stations with any immediate emergency traffic, that is **Life Threatening**, please go now.”*

- _____ 6. **NCO call for members check-ins.** Describe how to make check-ins.

“We will take check-ins by suffix ranges. Say only your call sign.

(i) CARES Stations, Alpha through Golf, check in now.

(ii) CARES Stations, Hotel through Oscar, check in now.

(iii) CARES Stations, Papa through Zulu, check in now.”

Be sure to call for more check ins until you get no more responses.

- _____ 7. **If operating on simplex:** **NCO calls for check-ins by RELAY.**

“CARES members who tried to check in but were not acknowledged, please announce your call and say RELAY. Please go now.”

<pause>

“Are there any relays?” Log all check-ins by RELAY.

- _____ 8. **NCO calls for the SS** to make announcements on the net; special instructions, follow-up action, assignments.

- _____ 9. If directed to do so, **NCO establishes a Frequency Guard.** Ask for one (1) volunteer to listen to one of the Emergency Alert System (EAS) Local Primary (LP) stations for information. Direct them to report to the net after 5-10 minutes on what they hear.

- _____ 10. **NCO calls for the SS** to make pass any additional announcements,

special instructions, follow-up action, assignments.

SS: Decides to either initiate an Initial Response Ops (field deployments) or stand down.

- _____ 11. If directed to do so, **Check for stations not available.** It is likely that everyone who checked in is available for a field assignment. However, we will check for stations **not** available... it could be a shorter list.

“Checked in stations that are not available, I repeat: not available, for a field assignment, please identify now.”

SS deploys Field Responders; Asks NCO for permission to go direct, begins assigning available field responders based on their location and need.

- _____ 12. NCO records assignments made.

3.3 Planned Net Start (on-going event)

A *Planned Net Start* is for exercise or emergency events where a plan is developed on how the net should operate. This would be typical after the net was previously shut down and planned to be re-activated during a later Operating Period, or for a Public Service Event.

An ***Incident Action Plan*** is the document that defines the Operational Period objectives and activities to be performed. Minimally, elements that would be defined include, but are not limited to,

1. Command staffing plan identified
2. Assignments to be made
3. Field staffing requirements
4. Op Period (and net) start date, time, frequency

3.3.1 Opening the Net

The following is a sample script of the general information and actions taken by the NCO. The NCO is encouraged to adjust (personalize) the content based on the situation, but must keep the general elements in place.

- _____ 1. **Start your ICS214 Unit Log.**
- _____ 2. **Start the net** on TAC3 / W6TDM Repeater.

“This is < your name >, < your call >. Attention all stations. Please stand by for [drill | emergency] traffic.”

“This is < your name >, < your call >, net control for the Cupertino ARES Emergency Net. This is [a drill | an actual emergency]. This is a directed net. All stations not connected with the emergency are

asked to stand by.

"All CARES member stations are asked to stay on frequency until the close of the net. Please give your current availability when you are polled."

- _____ 3. **NCO calls for the Shift Supervisor** to briefly describe the plan for this operational period. If no SS is present, then make the announcement yourself based on what you know.

"This net is a continuation of an activation requested by < REQUESTING AGENCY > for the < brief description and location of the emergency >."

- _____ 4. **Check for Emergency Traffic.** *"Stations with immediate emergency traffic, that is **Life Threatening**, please go now."*

- _____ 5. **NCO call for members check-ins.** Describe how to make check-ins. Call each group twice. If on simplex, ask for relays.

"We will take check-ins by suffix ranges. Say only your call sign.

(i) CARES Stations, Alpha through Golf, check in now.

(ii) CARES Stations, Hotel through Oscar, check in now.

(iii) CARES Stations, Papa through Zulu, check in now."

Be sure to call for more check ins until you get no more responses. Log all check-ins.

- _____ 6. **If operating on simplex: NCO calls for check-ins by RELAY.**

"CARES members who tried to check in but were not acknowledged, please announce your call and say RELAY. Please go now."

<pause>

"Are there any relays?" Log all check-ins by RELAY.

- _____ 7. **NCO calls for the SS** to make announcements on the net; special instructions, follow-up action, assignments.

SS: Decides to either initiate an Initial Response Ops (field deployments) or stand down.

SS identifies which field responders are to be deployed to each assignment.

- _____ 8. If directed to do so, **Check for stations not available.** It is likely that everyone who checked in is available for a field assignment. However, we will check for stations not available... it could be a shorter list.

"Checked in stations that are not available, I repeat: not available, for a field assignment, please identify now."

SS deploys Field Responders; Asks NCO for permission to go direct, begins assigning available field responders based on their location and need.

9. NCO records assignments made.

3.4 Remote Net Start (new earthquake event)

1. For an earthquake, it is likely that the CARES Emergency Net will start from a home location with the initial response being managed in a remote manner.
2. If a Shift Supervisor is not available, then NCO should perform all Shift Supervisor tasks or delegate specific tasks to individuals on the net.
3. Each activation is different, and the NCO should use their best judgement on how to run the net.

This is not a script, but a general sequence of actions that the NCO should perform. The following describes the things that the Remote Net NCO should do during the Remote Net Start.

3.4.1 Opening the Net

1. **Start your ICS214 Unit Log.**
2. **Start the net** on TAC3 / W6TDM Repeater.
 - If the repeater is available, start the net on (R1) WW6HP Repeater 440.150+, Tone=100.0.
 - If the repeater is NOT available, then start the net on (C1) WW6HP 442.000+, Tone=151.4.
 - If that repeater is NOT available, start the net on (T1) 147.570 Simplex, Tone=151.4.
3. **NCO calls the Shift Supervisor (SS)** to briefly describe what is known or make the announcement yourself. Also establishes that we have leadership on the frequency.
4. NCO asks **SS** if they are ready to record MM reports.

SS records the call sign, MikeMike reports, and ARK zone.
5. **NCO calls for check-ins.** State the format for net participants to pass the Mike-Mike Report:
“<call sign>, Mike-Mike ###, <ARK Name>, <call sign>.”
6. **If on Simplex: NCO calls for relays.** Ask a loud station to call for check-ins as well.

SS: Within 30 minutes of establishing the net, Shift Supervisor will:

- Evaluate MM reports

- Decide to either initiate an Initial Response Ops (ISA, C469 deployed, ARK deployments) or stand down.
- Attempt contact the CCC Coordinator or EM on the situation and our response intentions.
- Pass (or delegate passing) the Mike-Mike summary report to County RACES.

_____ 7. **NCO calls Shift Sup** to make announcements about our next steps.

3.4.2 Secure the Net

If the decision is to secure, then NCO should do the following:

- _____ 8. **NCO asks for volunteers**, one per ARK, to proceed to their local ARK and secure any CERT responders who may be present. Make an assignment if necessary. Use Activation No: **CUP-<YY>-08T** where “YY” is the last 2-digits of the year.
- _____ 9. **NCO tracks each volunteer** to the ARK and back home.
- _____ 10. **NCO secures the net** when all are confirmed back home.

3.4.3 Initiating Initial Response Ops

If the decision is to initiate an Initial Response Ops, then NCO should do the following:

- _____ 11. **NCO tells Shift Sup** they are standing by for assignments.

SS identifies the C469 Operator.

_____ **SS assigns the C469 Op.** Asks NCO to go direct, assigns the C469 operator to retrieve Comm 469, proceed to City Hall.

SS decides to staff the Remote Packet Op position, informs NCO.

- _____ 12. **If directed to do so: NCO assigns a Remote Packet Op.** Ask for one (1) volunteer to setup as a Remote CUPEOC packet station to poll for County Bulletins and receive ISA reports as they come in.

SS identifies at least 1 ISA data holders and ISA staging locations.

_____ **SS deploys ISA Staging;** Asks NCO to go direct, assigns up to two ISA data holders, one each to designated ISA staging locations.

SS identifies which field responders are deployed to ISA and/or ARKs. This is done per the assignment priority sheet.

_____ **SS deploys Field Responders;** Asks NCO to go direct, begins assigning available field responders to either ISA Staging based on their location (tactical calls as Team 1, Team 2, etc.) or ARKs.

SS departs from their location to meet up with C469; maintains

communications with Net Control while in transit.

- _____ 13. **If directed to do so: NCO establishes a Frequency Guard.**
Resources permitting, NCO asks for one (1) volunteer to listen to one of the Emergency Alert System (EAS) Local Primary (LP) stations for information. Direct them to report to the net after 5-10 minutes on what they hear.
- _____ 14. **NCO updates assignments.** NCO receives assignment reports from ISA Staging; records what assignments were made by team.
- _____ 15. **Take ISA Reports.** Acknowledge ISA reports. Either record them directly or assign and pass to the designated Remote Packet Operator station.
- _____ 16. **Take all other reports** as they come in.

3.4.4 Command Transfer

All steps must be performed to complete the command transfer from the Remote Start activities to Comm 469.

- _____ 17. When **C469** reports they are ready to accept command, **NCO** passes the following traffic.
 - Response tasks in progress (ISA, ARK Level 2, Fire Stations, etc.)
 - What nets are in operation
 - Types of traffic coming in (ISA Reports)
- _____ 18. **NCO** conduct a Health & Welfare check of stations on the net. Field stations should respond with their Tactical Call (if assigned) and FCC call.

469 acknowledges each report to confirm it is recorded correctly.
- _____ 19. **NCO** announces that the *Health & Welfare* check is complete. Ask **C469** if they are ready to accept the Net.

C469 NCO confirms and accepts the net.
- _____ 20. **When instructed, Remote Packet Operator** proceeds to Comm 469 to transfer ISA reports into the C469 ISA Web app.
- _____ 21. **NCO** secures and proceeds to Comm 469; delivers net paperwork. Answers questions on the state of the net or specific assignments.

3.5 On-going Net Operations

3.5.1 General Traffic Handling

- _____ 1. **NCO answers calls for traffic.**
 - a. Check if the RECEIVING station is ready to received traffic.
 - b. Direct the SENDING station to pass their traffic to the RECEIVING station.
 - c. Assign the next message number.
 - d. Record the traffic on your ICS 309 Comm Log.
- _____ 2. During periods of high traffic volume, call for traffic in priority order: EMERGENCY, then Priority.
 - a. EMERGENCY – Life Threatening
 - b. URGENT – Property Threatening
 - c. Routine – routine resource requests, shift planning, etc.
 - d. Health and Welfare
- _____ 3. Give your FCC callsign every 10 minutes.

3.5.2 Every 30 minutes

- _____ 4. Make this announcement:

“This is Net Control for the Cupertino ARES Emergency Net. This is a directed net. Permission to pass traffic is required by Net Control. All stations not participating in this activation are asked to stand by. The time is <hh:mm>. This is <your_call>.”

NOTE: If the Net is being interfered by non-CARES members, then consider ID'ing the net more often, such as when you ID yourself every 10 minutes.

- _____ 5. Perform periodic health and welfare checks of all checked in CARES members, time and traffic permitting.

“Starting a Health and Welfare Check. Please acknowledge with your call sign and location.”

 - Call each checked in station and wait for an acknowledgement.
 - Call for any other new check-ins.

3.5.3 Shift Change

- _____ 6. When contacted by the next shift CARES member, review all relevant information and status (see topics below).
- _____ 7. Check on battery levels or generator/gas levels during a hand off.
- _____ 8. Make the appropriate shift change entry on your Unit Log.
- _____ 9. The person being relieved informs the SS of the shift change.

Review the following information during a shift change.

- The radio channel(s) in use.
- Any other radio, power, or antenna details.
- List of checked in members; call signs, tactical call signs, and location.
- Review Logs – ICS309, ICS214
- What is going on in general; what changes are expected.
- Any pending activity: messages, replies, and action items.

4 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)

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