

A QUICK TRAINER AND FIELD RESOURCE GUIDE FOR THE EMERGENCY COMMUNICATOR

Santa Clara County ARES® / RACES

Santa Clara County Resource Net
146.115 + PL 100.0 Hz
AA6BT



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This manual is intended to serve as a reference for amateurs deployed in the field for emergency services work, primarily through Amateur Radio Emergency Services ARES/RACES. It provides basic emergency communications procedural information, frequencies, officials throughout Santa Clara County and contained cities, equipment lists, operating guides and examples, and regulations. An appendix serves as a quick guide of how to speak on controlled radio nets. There is no substitute for actual training, live, with your own radio.

WHAT TO DO *FIRST* IN CASE OF AN EMERGENCY

1. CHECK THAT YOU AND YOUR FAMILY ARE SAFE AND SECURE BEFORE YOU RESPOND AS AN ARES/ RACES VOLUNTEER.
2. CHECK THAT YOUR PROPERTY IS SAFE AND SECURE BEFORE YOU RESPOND AS AN ARES /RACES VOLUNTEER.
3. MONITOR _____
(PUT YOUR ASSIGNED LOCAL ARES/RACES EMERGENCY NET FREQUENCY HERE). See Appendix C
4. FOLLOW THE INSTRUCTIONS YOU RECEIVE FROM THE ARES/RACES/ACS OFFICIALS IN CHARGE ON THE ABOVE FREQUENCY.
5. CONTACT YOUR LOCAL EMERGENCY COORDINATOR, OR HIS/HER DESIGNEE, FOR FURTHER INSTRUCTIONS.

INITIAL ACTION CHECKLIST

The net control station and/or ARES/RACES officials on the designated emergency net will provide additional instructions, including information on frequencies used for other resource and tactical nets. Normally, a resource net will enroll volunteers and provide information on how you can assist.

- Be prepared to operate. Check all equipment and connections.
- Check-in with your assigned contact. Deploy to assignment with “GO” kit.
- Obtain tactical call sign for your location/assignment.
- Initiate personal event log (*ICS 214 unit log*)
- Enter assigned frequency(s) on log sheet and on emergency/frequency plan. (*ICS 205*)
- Use log form to record messages handled. (*ICS 309 radio log*)
- Use a formal message form when a precise record is required. (Example in back of this manual (*ICS 213*))
- Use tactical call sign for your location, while observing FCC’s ten-minute ID rule.
- Monitor your assigned frequency AT ALL TIMES. Notify Net Control if you have to leave or change location.

BASIC DEPLOYMENT EQUIPMENT CHECKLIST

When responding to an emergency event, or even a training exercise, there is a minimum set of equipment and personal gear you should bring with you to get the job done. Basic items include:

Minimum Equipment List

| | |
|-----------------------------------|---|
| 1. A 2m HT. | 7. An ear/head-phone. |
| 2. A DSW ID card. | 8. An hardhat. and vest (recommended) |
| 3. Radio license. | 9. Appropriate clothing including closed toe shoes or boots |
| 4. Message forms, log books, etc. | 10. Paper and pencil. |
| 5. A 2m magnetic-mount antenna. | 11. County street map. (The Thomas Guide® recommended; assignments may be given in Thomas map coordinates.) |
| 6. Spare batteries. | |

The majority of these items should be kept in a “GO Kit” so that all you need to do is pick up the kit and you will be ready to go. The following is the Santa Clara County approved go kit.

Legend:

X = Required (must have in kit at all times)

R = Recommended (likely useful on many assignments)

O = Optional (useful on some assignments)

2-Hour Carry Kit

Purpose: To be kept nearby at all times for immediate (within minutes) communication of damage reports during Resource Net Level 1 ops. Also used to remain in contact with Resource Net Level 2 while returning home to retrieve 12-hour Go-Kit.

Items:

- X 2m/70cm dual-band radio
 - HT recommended (min. 5W on 12V/2.5W on batt)
 - Mobile 25W optional (if vehicle will not be far away)
 - Programmed with Resource Net frequencies
- X Charged batteries for 2-3 hours operation
- X 2m/70cm dual-band mobile antenna (mag mount, window mount or existing mobile antenna)
- X Modified Mercalli (Mike-Mike) scale
- X Notepad / pens
- R Cigarette lighter adapter
- R Emergency county and city telephone contact list
- R Cell phone
- R Water (16 oz.)

12-Hour Go Kit

Purpose: For fully independent operation; unknown environment (heat, cold, wind, rain); unknown time (day, night, up to 12 hours). Return home to retrieve.

Equipment**Portable Radio:**

- X 2m/70cm dual-band handie-talkie (HT)
 - minimum 5W on 12V/2.5W on batteries [Note 1]
 - dual-receive recommended
- X Radio user manual or cheat sheet
- X Earbud or headphones minimum; headset, earbud/mic, or speaker/mic/earbud, or similar recommended
- R Small backpack, vest, chest harness or other similar method for carrying HT while operating portable

Power Source:

- X Charged batteries for 12 hours (min. 3000 mAh) [Note 2]
- X Power cord adapters – connect to various power sources:
 - Powerpoles
 - Cigarette lighter socket
 - Vehicle battery terminals
- X Spare fuses
- R Powerpole splitter or fused distribution panel
- R Extension cord, 3-wire, 3-6 ft., multi-outlet
- O Extension cord, 3-wire, 50-100 ft.
- O Power Inverter

Antennas:

- X Coax adapters: connect HT to coax, coax to the following:
 - BNC plug (male) & BNC socket (female)
 - UHF plug (PL-259) & UHF socket (SO-239)
 - N-type plug (male) and N-type socket (female)
- X Min. 25 feet of 50 ohm coaxial cable
- X 2m/70cm dual-band magnetic or window mount antenna
- R 2m/70cm high gain HT antenna
- R 2m/70cm dual-band portable base antenna (e.g. roll-up J-pole or other)
- R Portable mast (elevates antenna min. 10 ft.)
- R Tripod or self-supporting base for mast
- R Window clip antenna mount (for non-metallic vehicles)

Other Communications Gear:

- R Cell phone & charger and/or cigarette lighter adapt.
- O FRS/GMRS Radio
- O Satellite phone

Tools:

- R Duct tape
- R Electrical tape
- R Nylon Tie-Wraps/wire ties
- R Utility knife
- R Small multi-tool or tool kit
- O Volt-Ohm meter
- O SWR/Power meter

Operating Position:

- X Sign(s) for operating position
- R Lighting for operating position
- R Rope or Dacron cord (50')
- R Folding chair
- O Magnetic sign for car
- O Folding table
- O Pop-up Canopy
- O Tarp (8' by 8' or larger)
- O Folding cart
- O Safety strobes or flares
- O Caution/flagging tape (for marking cables, antennas, ...)

Documentation**Identification:**

- X CA Driver's license or CA-issued ID card
- X Amateur Radio license
- X County Emerg. Resp. ID card (blue card) or MAC Badge
- X If issued: SCCo ID badge, city badge, MAC Qual card

Maps:

- X Thomas Guide for "Santa Clara County"
- X Compass or GPS
- R Maps of antenna locations (if available)
- R City, county or other detail maps

Forms and Documentation:

- X Modified Mercalli (Mike-Mike) scale
- X ICS 205-SCCo – Communications Plan (min. 5)
- X ICS 211A-SCCo – Communications Check-In (min. 5)
- X ICS 213-SCCo – Message (min. 10)
- X ICS 214-SCCo – Unit Activity Log (min. 5)
- X ICS 309-SCCo – Communications Log (min. 5)
- X ICS 314-SCCo – Windshield Survey (min. 5)
- X Phone message pad (2-part style recommended)
- R County Performance Standards (Required for MACs)

Logging / Note taking:

- X Clipboard (covered type recommended)
- X Notepads (standard or waterproof)
- X At least 2 pens / pencils
- O Highlighters / felt-tip pens

Contact Lists:

- X SCCo Voice and Packet Frequency Lists
- X DEC/ADEC and city EC telephone contact list
- X Police/Fire direct dial phone numbers
- O Repeater directory

Personal Gear**Vehicle:**

- X Reliable operating condition
- X Fueled – minimum ½ full at all times
- R Jumper cables

General Items:

- X Money (paper and coin) – in case ATMs are down
- X Watch or clock
- R Trash bags

Personal Safety Gear:

- X Flashlight or headlamp and spare batteries for 12 hours
- X Safety vest, ANSI standard (lime yellow recommended)
- R First Aid kit
- R Whistle
- R Work gloves
- R Sunglasses
- R Sunscreen lotion
- R Insect Repellent
- R Safety glasses
- R Mask (NIOSH-certified N95 or better)
- O Hearing protection (e.g. foam ear plugs)
- O Hard hat (lime yellow recommended)
- O Chemical light sticks

Clothing:

- X Sturdy, closed-toe shoes (no sandals)
- X Long pants (no shorts)
- X Hat (broad brim recommended)
- X Seasonal jacket / rain gear

Food & Water:

- X Food for 12 hours (make your own list)
- X Water for 12 hours (3-4 quarts recommended)
- R Small cooler or ice chest

Toiletries:

- R Hand soap and/or sanitizer
- R Toilet paper
- O Tylenol
- O Antacid tablets

As Needed / Appropriate:

- Prescription medication
- List of medication used
- Eyeglasses & spare

Miscellaneous (as needed)

- Portable AM radio and spare batteries
- Binoculars
- Baggies to seal/protect items
- Shovel
- Fire extinguisher
- Disposable camera

Mobile Radio Kit (as needed)

- 2m/70cm mobile radio
 - 25W minimum
 - Dual-receive, cross-band repeat recommended
- Radio user manual or cheat sheet
- Headset (stereo recommended for VFO per ear)
- Battery for 12-hours operation (20 AH min.; 26 AH rec.)
- Battery charger
- Power cord adapters – connect to various power sources:
 - Powerpoles
 - Cigarette lighter socket
 - Vehicle battery terminals
- Coax adapters: connect mobile to coax, coax to following:
 - BNC plug (male) & BNC socket (female)
 - UHF plug (PL-259) & UHF socket (SO-239)
 - N-type plug (male) and N-type socket (female)

Packet Equipment (as needed)

- Laptop with Outpost and PacFORMS installed
- USB flash drive (i.e. USB key)
- TNC (may be hardware, software or built into radio)
- Cables: TNC to radio; TNC to PC
- Shade cover for display
- Portable printer
- Entire station can operate for min. 1 hr on battery

Extended Go Kit

Purpose: Additional items for fully independent operation over an extended period of time. Used in situations where returning home after shift is not possible or not ideal.

As Needed

Power Source:

- Regulated DC power supply
- Battery charger
- Spare batteries (for charging while operating)
- Portable generator and fuel
- DC distribution panel & cables (Powerpoles recommended)

Clothing:

- Rain gear
- Jacket
- Warm clothing (preferably in layers)
- Under garments (3 sets)
- Socks (3 sets)
- Pants (3)
- Belt
- Shirts (3)
- Alternate boots or shoes
- Sleepwear
- Cold water laundry soap (e.g. Woolite)

Food and Water:

- MREs (self heating) or other non-perishable meals
- Water (1 gal/day recommended, depending on conditions)
- Water purification tablets or devices
- Can opener
- Cooler or ice chest
- Bowl and eating utensils
- Coffee cup

Shower Items:

- Washcloth and towel
- Soap and shampoo
- Razor and shaving cream
- Toothbrush and toothpaste
- Comb and/or brush
- Deodorant/antiperspirant
- Wash basin (in case of no sink)

Shelter:

- Sleeping pad
- Sleeping bag/blanket
- Pillow
- Blanket
- Tent
- Alarm clock

Personal Go Kit Items/Notes:

1. Most recently manufactured hand held radios ARE capable of 5W output when 12-13.8 VDC is connected to the DC-IN jack and at least 2.5W output power using rechargeable battery packs. Check your radio's user manual to be sure your radio outputs at least 2.5W on rechargeable batteries. However, most hand held radios are NOT capable of producing a minimum of 2.5W output power using AA batteries. Some known exceptions are the Kenwood TH-D7 and the Yaesu FT-60. For all other radios, rechargeable battery packs will be needed unless the radio can be shown to have a minimum of 2.5W output on AA batteries (check user manual or test with power meter).
2. A review of the most popular handheld radios was conducted. Receive current, transmit current and rechargeable battery pack capacity were reviewed. 3000 mAH was determined to be the minimum capacity needed for 12 hours of operation. (Some radios may require a little more). Depending on the make and model, this translates to 2 or 3 rechargeable battery packs. This minimum requirement correlates well with real-world experience in drills and real incidents such as Katrina.

ARES and RACES

Although RACES and ARES are separate entities, the ARRL advocates dual membership and cooperative efforts between both groups whenever possible. An ARES group whose members are all enrolled in and certified by RACES operate in an emergency with great flexibility. Using the same operators and the same frequencies, an ARES group also enrolled as RACES can "switch hats" from ARES to RACES and RACES to ARES to meet the requirements of the situation as it develops. For example, during a "non declared emergency," ARES can operate under ARES, but when an emergency or disaster is officially declared by government emergency management authority, the operation can become RACES with no change in personnel or frequencies.

AMATEUR RADIO EMERGENCY SERVICE (ARES)

The Amateur Radio Emergency Service (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public interest when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible for membership in ARES/RACES/ACS. The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve. Because ARES is an amateur service, only amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)

RACES, administered by local/county/state Emergency Management Agencies, with guidance from the Federal Emergency Management Agency (FEMA), is a part of the Amateur Radio Service that provides radio communications for civil-preparedness purposes only, during periods of local, regional or national civil emergencies. These emergencies are not limited to war-related activities, but can include natural disasters such as fires, floods and earthquakes.

NATIONAL TRAFFIC SYSTEM (NTS)

The National Traffic System is designed to meet two principal objectives: rapid movement of traffic from origin to destination, and training amateur operators to handle written traffic and participate in directed nets. NTS operates daily, and consists of four different net levels--Area, Region, Section, and Local--which operate in an orderly time sequence to affect a definite flow pattern for traffic from origin to destination.

TYPES OF EMERGENCY NETS

Open vs Directed Nets

A net may operate as an Open or "free form" net, or as a Directed net where a net control station is used to control the flow of transmissions on the channel. Typically, when the amount of traffic is low or sporadic a net control isn't required, and an Open net is used. Stations merely listen before they transmit. When a net is declared a "Directed" net, then all transmissions must be directed by the Net Control Station (NCS).

The following are all closed or directed NETS unless you are specifically told otherwise.

Message Net

This countywide net's function is to carry traffic between cities and other served agencies to the Operational Area EOC.

Command Net

This Net's function is to provide an intercom for County ARES/RACES Staff, Santa Clara Valley Section Staff, City ECs, and Shift Supervisors. No formal traffic is to be passed on this net. This net also serves Staff, ECs, and Shift Supervisors when in route from one location to another. (Normally not a directed NET)

Packet Data Net

This net's function is to handle message with a lot of data such as damage assessment traffic from cities and other jurisdictions to the Operational Area EOC, and logistics traffic between cities and other agencies to the County EOC. This net utilizes the Santa Clara County distributed BBS operating system.

Other Tactical Nets

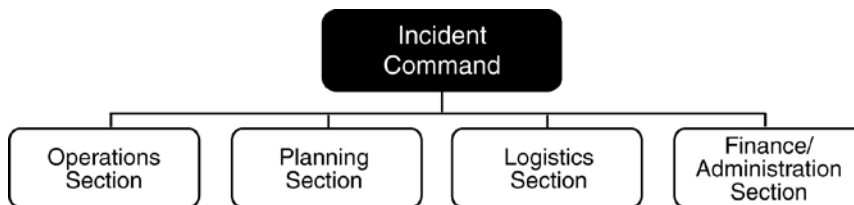
These other nets are created on an as-required basis to handle ARES/RACES operations within a city or other jurisdictions. They may also be created by other agencies, such as the Red Cross, Hospitals, etc; to handle specific kinds of traffic. Tactical Net names are given by the creating jurisdictions or agency. Tactical Net Control from the jurisdiction's or agency's EOC. Tactical Nets will not normally be monitored by the County EOC.

INCIDENT COMMAND SYSTEM (ICS)

The Incident Command System (ICS) is a management tool that has been adopted by professional emergency responders throughout the country. ICS provides a coordinated system of command, communications, organization, and accountability in managing emergency events. Due to the wide spread use of ICS, Amateur Radio operators should be familiar with the system, as well as how they will interface with agencies employing ICS. Integral to the ICS is the concept of *Unified Command*. There is only one boss, the Incident Commander, who is responsible for the overall operation. For any incident, there are a number of functions that must be performed ranging from planning and logistics to handling the press. The functional requirements of planning, logistics, operations, and finance are always present despite the size of the incident. They may be handled by a single individual for a small incident, or a "Command Staff" in a large incident. Another characteristic of ICS is "span of control." In simple terms, any manager should only directly manage a small number of people. ICS uses the number of five for organizational purposes. The number five isn't hard and fast, but provides a useful organizational guide line.

How does the Amateur Radio volunteer fit into the Incident Command System? We are expected to be communicators, and within the ICS, this would normally place us in the Logistics Section as part of the Communications Unit. The communications unit provides all communications services for the operation.

There are five major management functions that are the foundation upon which the ICS organization develops. These functions apply whether you are handling a routine emergency, organizing for a major non-emergency event, or managing a response to a major disaster. The five major management functions are shown in the table below.



Below is a brief description of each ICS function:

- **Incident Command:** Sets the incident objectives, strategies, and priorities and has overall responsibility at the incident or event.
- **Operations:** Conducts tactical operations to carry out the plan. Develops the tactical objectives and organization, and directs all tactical resources.
- **Planning:** Prepares and documents the Incident Action Plan to accomplish the objectives, collects and evaluates information, maintains resource status, and maintains documentation for incident records.
- **Logistics:** Provides support, resources, and all other services needed to meet the operational objectives.
- **Finance/Administration:** Monitors costs related to the incident. Provides accounting, procurement, time recording, and cost analyses.

RULES AND PROCEDURES
ARES/RACES MUTUAL AID RESPONSE
SANTA CLARA COUNTY OES
This version dated 08/20/10, prepared by L.W. Carr

GENERAL RULES:

All responders must be registered as Disaster Service Workers by the Santa Clara County Office of Emergency Services before they are eligible to respond to emergency events in any location as a responder for the county. If you have not yet been registered by Santa Clara County OES, then you must arrange to meet with the Chief Radio Officer, or his designee to sign the DSW registration. At that time, you will be given a copy of the registration, as well as an Emergency Responder Identification Card that may be needed to access the areas associated with your assignment.

All DSWs must be aware that the only type of job for which the DSW regulations will provide coverage is that area for which the responder is registered. As ARES/RACES responders, you are registered only as Communicators. Thus, you are NOT authorized to climb antenna towers, climb trees to install antennas, or work on roofs to fix broken antennas or any other task except a communicator.

You may be dispatched as mutual aid to an agency or jurisdiction not familiar to you. While you are there, we expect you to perform to the best of your abilities, and follow the emergency communicator performance standards (listed in appendix G). NOTE: If you have volunteered to serve during an emergency, but have not had experience in emergency operations in the past, be sure to advise your supervisor – who will make sure that your assignment is such that you will be able to serve without exceeding your capabilities.

You are not required to do any job that is outside your field of registration as a DSW, and if you do such a job, you are NOT covered in the case of accident or injury. You are directed to tell the requesting official that you the task is outside your DSW coverage. NOTE: If a police officer or fire fighter directs you to do a task, you should perform that task. You should tell him or her that you are already on an emergency assignment under ARES/RACES, and ask that you be permitted to do your RACES assignment, However, if they still tell you to do the task that he/she as assigned, do so – direction by a police officer or fire fighter automatically covers you for DSW in the task that he or she assigns you, and the direct instructions by a police officer or fireman who is aware of your assignment will take higher priority than your ARES/RACES task. You MUST immediately notify the ARES/RACES net control that you have been directed to do a new task by a police officer or fire fighter; do so as soon as it is safe to contact your NCO or supervisor.

As a DSW, you are not required to do anything that in your opinion is dangerous or unreasonable. Remember, your safety is the first thing to consider. If you think you are getting into an unsafe area, condition, or task, stop and think about backing out. For instance, if a person that you are shadowing is entering an area that you consider dangerous, you should simply say: “I consider the danger level to be too high for me to continue into this area. I will wait for you here.”

This includes actions that in your opinion may violate your sense of morality or religion.

ONCE YOU HAVE ACCEPTED AN ASSIGNMENT:

The net control station and/or ARES/RACES officials on the designated emergency net will provide additional instructions, including information on frequencies used at the location that you will be assigned, as well as the travel frequency to be used while you travel to and from the assigned location. You should program the travel frequency, and the frequency associated with the assignment check in frequency into your radio, *and test these before you leave home*. Use the RACES assignment form in appendix I

While you are en route to your assignment, you are under the control of Santa Clara County RACES. When you depart, call the resource Net and let us know that you are under way. When you get to your assignment, call the Resource Net again and let us know that you have reported to your assigned agency. If your travel time is more than 15 minutes, advise Net control of your status by giving street you are on and last 3 of odometer and call sign only in 15-minute intervals. NOTE: If at any time you attempt to reach the Resource Net control without success, you should quickly attempt to contact your assignment frequency. If you are not able to reach either of these frequencies, you **MUST TURN BACK**, and check until you can again talk to the Resource Net.

WE MUST BE ABLE TO KEEP TRACK OF YOU – IF YOU DISAPPEAR FROM OUR NET WITHOUT ESTABLISHING CONTACT WITH YOUR ASSIGNMENT, WE WILL HAVE TO ASSUME THAT YOU ARE IN TROUBLE, AND WE WILL HAVE TO BEGIN RESCUE PROCEDURES. SO, DO NOT BECOME PART OF THE PROBLEM – MAKE SURE THAT YOU ARE ALWAYS IN CONTACT WITH the resource or travel nets OR YOUR ASSIGNMENT!!

ONCE YOU HAVE REACHED YOUR ASSIGNED CITY OR JURISTITION:

1. Receive a safety briefing, if none offered ask for any specific safety issues related to you assignment.
2. Be prepared to operate. Check alternate equipment and connections.
3. Check in with your assigned contact. Check out of the Travel Net.
4. Obtain tactical call sign if needed for your location/assignment.
5. Initiate personal event log (use ICS 214 unit log at end of this booklet).
6. Enter assigned frequency(s) on log sheet and on emergency/frequency plan.(ICS 205) if one is not provided
7. Use log form to record messages handled.(ICS 309)
8. Use a formal message form when a precise record is required.(ICS213)
9. Use tactical call sign for your location, while observing FCC's ten-minute ID rule.
10. Monitor your assigned frequency **AT ALL TIMES**. Notify NCS if you have to leave for any reason

PRINCIPLES OF REPEATER OPERATION

1. **Use minimum power.** Otherwise, especially in heavily populated areas, you may run the risk of keying more than one repeater, thus causing unnecessary interference. Low power also conserves batteries.
2. **Observe the "pause" procedure between exchanges.** When it is your turn to transmit, after the transmitting station stands by, count to two or three before pressing your transmit switch.
3. **Listen much, transmit little.** Announce your presence on a repeater when you are certain of being able to assist in an emergency, and don't tie it up with idle chatter.
4. **Monitor local ARES net frequency,** when otherwise not busy.
5. **Think before you talk.** Anyone with an inexpensive public-service-band receiver can monitor. Stick to facts, control your emotions. Remember, during an emergency is the time when you are most apt to act and speak rashly.
6. **Articulate, don't slur.** Speak close to your mike, but talk across it, not into it. Keep your voice down. In an emergency situation one often gets excited and tends to shout. Talk slowly, calmly--this is the mark of an experienced communicator.

PRINCIPLES OF DISASTER COMMUNICATION

1. **Keep the interference level down.** In a disaster, crucial stations may be weak. All other stations should remain silent unless they are called upon. If you're not sure you should transmit, don't.
2. **Monitor established disaster frequencies.** Many ARES localities and some geographical areas have established disaster frequencies where someone is always (or nearly always) monitoring for possible calls.
3. **Avoid spreading rumors.** During and after a disaster situation, especially on the phone bands, you may hear almost anything. Unfortunately, much misinformation is transmitted. Rumors are started by expansion, deletion, amplification or modification of words, exaggeration or interpretation. All addressed transmissions should be officially authenticated as to their source. These transmissions should be repeated word for word, if at all, and only when specifically authorized.
4. **Authenticate all messages.** Every message which purports to be of an official nature should be written and signed. Whenever possible, amateurs should avoid initiating disaster or emergency traffic themselves. We do the communicating; the agency officials we serve supply the content of the communications.
5. **Strive for efficiency.** Whatever happens in an emergency, you will find hysteria and some amateurs who are activated by the thought that they must be sleepless heroes. Instead of operating your own station full time at the expense of your health and efficiency, it is much better to serve a shift at one of the best-located and best equipped stations, suitable for the work at hand, manned by relief shifts of the best-qualified operators. This reduces interference and secures well-operated stations.

6. **Select the mode and band to suit the need.** It is a characteristic of all amateurs to believe that their favorite mode and band is superior to all others. However, the merits of a particular band or mode in a communications emergency should be evaluated impartially with a view to the appropriate use of bands and modes. There is, of course, no alternative to using what happens to be available, but there are ways to optimize available communications.
7. **Use all communications channels intelligently.** While the prime object of emergency communications is to save lives and property (anything else is incidental), Amateur Radio is a secondary communications means; normal channels are primary and should be used if available. Emergency channels other than amateur which are available in the absence of amateur channels should be utilized without fear of favoritism in the interest of getting the message through. Use plain English no 10 codes or Q codes etc.
8. **Don't "broadcast."** Some stations in an emergency situation have a tendency to emulate "broadcast" techniques. While it is true that the general public may be listening, our transmissions are not and should not be made for that purpose.
9. **DO NOT EVER use the names of people who are injured or deceased on the air.**

Santa Clara County - MESSAGE PRECEDENCES

(Situation Severity)

EMERGENCY—Any message having life and death urgency to any person or group of persons.

URGENT—Any Message involving a threat to property only

OTHER—All other message not involving a threat to life or property

(Message Handling)

IMMEDIATE—This type of message must be handled as soon as possible without delays

PRIORITY—This type of message should be handled in less than one hour.

ROUTINE—This type of message is handled as the time and situation allow

A message marked as EMERGENCY and IMMEDIATE should never be put down until after it has been delivered.

***Santa Clara County, California
ARES/RACES***

Emergency Coordinators/Radio Officers

| | | | |
|---|------------------------------|--|----------------------------------|
| <i>Campbell</i> | <i>Barton Smith, N6HDN</i> | radiocampbell-svecs @ yahoo.com | <i>(408) 379-2875</i> |
| <u><i>Cupertino</i></u> | <i>Jim Oberhofer, KN6PE</i> | kn6pe @ arrl.net | <i>(408) 839-8798</i> |
| <i>Gilroy</i> | <i>Pat Moore, K6PMM</i> | k6pmm @ arrl.net | <i>(408) 842-7873</i> |
| <i>Loma Prieta</i> | <i>George Smith, AE6KE</i> | ae6ke @ arrl.net | <i>(408) 353-1384</i> |
| <u><i>Los Altos</i></u> | <i>Tom Smith, KD6SOJ</i> | kd6soj @ arrl.net | <i>(650) 967-9548</i> |
| <u><i>Los Altos Hills</i></u> | <i>Edwin Jones, W7WPO</i> | ed_jones @ pacbell.net | <i>(650) 941-2991</i> |
| <i>Los Gatos</i> | <i>Tom Campbell, K6KMT</i> | tcampmail @ sbcglobal.net | <i>(408) 377-1845</i> |
| <u><i>Milpitas</i></u> | <i>Tim Howard, KE6TIM</i> | ke6tim @ arrl.net | <i>(408) 891-0045 (cell)</i> |
| <i>Monte Sereno</i> | <i>Tom Campbell, K6KMT</i> | tcampmail @ sbcglobal.net | <i>(408) 377-1845</i> |
| <i>Morgan Hill</i> | <i>Woody Salyer, K6WWS</i> | k6wws @ arrl.net | <i>(408) 828-4429</i> |
| <u><i>Mountain View</i></u> | <i>Jerry Haag, K6GAC</i> | K6GAC @ arrl.net | <i>(650) 949-3827</i> |
| <u><i>NASA-Ames</i></u> | <i>Mark Allard, KD6CWM</i> | mallard @ mail.arc.nasa.gov | <i>(408) 267-3688</i> |
| <i>Palo Alto</i> | <i>Rich Hyde, KD6WYK</i> | KD6WYK @ ARRL.NET | <i>(650) 858-2829</i> |
| <u><i>San Jose</i></u> | <i>Chris Swartout, N6WCP</i> | cas30 @ pacbell.net | <i>(408) 272-6835</i> |
| <u><i>Santa Clara</i></u> | <i>Howard Califf, W6HOC</i> | w6hoc @ arrl.net | <i>(408) 247-3465</i> |

| | | | |
|-------------------------|-----------------------------------|----------------------------------|----------------|
| <i>Saratoga</i> | <i>Robert Vance, N6ROB</i> | n6rob @ arrl.net | (408) 872-0815 |
| <u><i>Stanford</i></u> | <i>Kenneth Dueker, KB6BPM</i> | kdueker @ post.harvard.edu | (650) 208-2580 |
| <u><i>Sunnyvale</i></u> | <i>Bob Gundrum, K6RWG</i> | RGundrum @ ci.sunnyvale.ca.us | (408) 734-0169 |

Appendix B update

Santa Clara County, California ARES/RACES

The County ARES/RACES Staff

| | |
|--|---|
| <p>Larry Carr KE6AGJ KE6AGJ @ arrl.net <i>ARES District Emergency Coordinator RACES Chief Radio Officer</i> <i>Phone: (650) 941-2567 Cell: (650) 269-9638</i></p> | <p>Michael Fox, N6MEF n6mef @ arrl.net <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer, Cell Phone: (650) 279-2553</i></p> |
| <p>Scott Morse, KC6SKM kc6skm @ gmail.com <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone: (408) 985-5971 Cell: (408) 799-4597</i></p> | <p>Doug Kalish, KA3L dougalish @ bohling.com <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone: (650) 328-9009 (Temporarily not Active)</i></p> |
| <p>Andreas Ott, K6OTT k6ott @ arrl.net <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer, Cell: (408) 431-8727</i></p> | <p>Al Whaley, KV6U awscoco @ sunnyside.com <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone (H) (650) 947-6542</i></p> |
| <p>Steve Gore, KI6HFU KI6HFU @ arrl.net <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone (H) (408) 334-3394</i></p> | <p>David Chamberlin, N6DWC dwc @ n6dwc.com <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone (H) (650) 224-0989 Phone (W) (408) 519-9219</i></p> |
| <p>Mark Laubach, K6FJC K6FJC @ arrl.net <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone (C) (650) 996-2219 Voicemail (408) 867-4806</i></p> | <p>Logan Zintsmaster, KZ6O kz6o @ arrl.net <i>ARES Assistant District Emergency Coordinator</i> <i>RACES Deputy Chief Radio Officer</i> <i>Phone (408) 838-3712</i></p> |

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Appendix C

Santa Clara County ARES/RACES Frequencies Page 1 of 5

Silicon Valley Emergency Communications System Santa Clara County OES ARES/RACES Frequency List

This list is courtesy of Jim Oberholzer, KMPJE of [Cupertino ARES](#).
Items in red have been added or changed since 5/26/2010.
Click [HERE](#) to get an Acrobat file of this table, 4 pages per page, for your Go-Kit.

| COUNTY | | | | | | | | | |
|------------------|---------------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| County | Message Net | WMT1 | R | 147.360 | + 110.9 | | | Apr-10 | |
| County | Message Net A1 | WB00G | R | 148.780 | - 151.4 | A | | 1-May-05 | |
| County | Message Net A2 | WBPB | R | 145.450 | - 100.0 | | | 1-May-05 | |
| County | Link | WB00G | R | 254.280 | - 100.0 | | | 9-Sep-05 | |
| County | Command | WB02VW | R | 442.500 | + 100.0 | | | Apr-10 | |
| County | Command A1 | WB0RNH | R | 444.300 | + 182.2 | C | | 1-May-05 | |
| County | Command Net A1 | WBNY | R | 443.275 | + 107.2 | | | Apr-10 | |
| County | Resource, Primary | AK8BT | R | 148.115 | + 100.0 | D | | Apr-10 | |
| County | Resource, North | W6ASH | R | 145.270 | - 100.0 | E | | Apr-10 | |
| County | Resource, South | W6PAC | R | 444.625 | + 110.9 | | | Apr-10 | |
| County | Hospital Net | W6NFI | R | 145.230 | - 100.0 | F | | Apr-10 | |
| County | Hospital Net Packet | Simplex | S | 144.950 | - | | | Jul-08 | |
| County | NTS | W6SABD | R | 148.540 | - 182.2 | | | 1-May-05 | |

For packet frequencies, see: <http://www.scc-ares-races.org/faq/faq-05.htm>

| RED CROSS SJ | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Red Cross SJ | Command | WB00G | R | 148.780 | - 151.4 | A | | 1-May-05 | |
| Red Cross SJ | Link | WB00G | R | 254.280 | - 100.0 | | | 1-May-05 | |
| Red Cross SJ | Command A1 | WB00G | R | 444.600 | + 141.3 | | | 1-May-05 | |
| Red Cross SJ | Talk Around | WB0RNH | R | 444.300 | + 182.2 | C | | 1-May-05 | |

| CAMPBELL | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|----|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Campbell | Tactical | Simplex | S | 148.585 | - | | U | Jul-08 | |
| Campbell | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |
| Campbell | Packet 440 | Simplex | S | 433.530 | - | | | Jul-08 | |

| CUPERTINO | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Cupertino | Tactical-1 | Simplex | S | 147.570 | - 151.4 | 2 | | Jul-08 | |
| Cupertino | Tactical-2 | Simplex | S | 148.480 | - 151.4 | | | Jul-08 | |
| Cupertino | Tactical-3 | WPTDM | R | 440.150 | + 100.0 | | | Jul-08 | |

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Santa Clara County ARES/RACES Frequencies Page 3 of 5

| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Milpitas | Primary | W6MLP | R | 254.220 | - 100.0 | S | | Jul-08 | |
| Milpitas | Primary | W6MLP | R | 145.430 | - 85.4 | S | | Jul-08 | |
| Milpitas | Secondary | Simplex | S | 147.525 | - | | | Jul-08 | |

| MORGAN HILL | | | | | | | | | |
|------------------|---------------|---------------|----|-----------|----|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Morgan Hill | Tactical-1 | Simplex | S | 144.345 | - | | | Jan-10 | |
| Morgan Hill | Tactical-2 | Simplex | S | 145.790 | - | | | Jan-10 | |
| Morgan Hill | Tactical-CERT | Simplex | S | 148.580 | - | | | Jan-10 | |
| Morgan Hill | Packet 2M | Simplex | S | 144.910 | - | | | Jan-10 | |

| MOUNTAIN VIEW | | | | | | | | | |
|------------------|----------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Mountain View | Resource North | W6ASH | R | 145.270 | - 100.0 | E | | Jul-08 | |
| Mountain View | Command | W6ASH | R | 440.800 | + 100.0 | | | Jul-08 | |
| Mountain View | Tactical | Simplex | S | 148.535 | - | | | Jul-08 | |
| Mountain View | Tactical A1 | Simplex | S | 148.415 | - | | | Jul-08 | |
| Mountain View | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| NASA ARES | | | | | | | | | |
|------------------|----------------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| NASA Ares | Tactical | Simplex | S | 148.585 | - | | | Jul-08 | |
| NASA Ares | Tactical A1 | Simplex | S | 148.710 | - | | | Jul-08 | |
| NASA Ares | Tactical A2 | Simplex | S | 147.585 | - | J | | Jul-08 | |
| NASA Ares | Event 1 | Simplex | S | 148.185 | - | | | Jul-08 | |
| NASA Ares | Event 2 | Simplex | S | 144.985 | - | | | Jul-08 | |
| NASA Ares | Command | W6NFI | R | 145.250 | - 123.0 | | | Jul-08 | |
| NASA Ares | Packet 220, Primary | Simplex | S | 223.880 | - | | | Jul-08 | |
| NASA Ares | Packet 2M, Secondary | Simplex | S | 144.910 | - | | | Jul-08 | |

| PALO ALTO | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Palo Alto | Command | W6ASH | R | 145.270 | - 100.0 | E | | Jul-08 | |
| Palo Alto | Command A1 | W6NFI | R | 145.230 | - 100.0 | F | | Jul-08 | |
| Palo Alto | Tactical | Simplex | S | 147.540 | - | | | Jul-08 | |
| Palo Alto | Tactical | Simplex | S | 147.480 | - | 1 | | Jul-08 | |
| Palo Alto | Tactical | Simplex | S | 147.585 | - | 1 | | Jul-08 | |
| Palo Alto | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| SAN JOSE | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|
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|-----------|--------------|---------|---|---------|---|--|--|--------|--|
| Cupertino | ATV EOC Feed | Simplex | S | 427.250 | - | | | Jul-08 | |
| Cupertino | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| GILROY | | | | | | | | | |
|------------------|---------------|---------------|----|-----------|----|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Gilroy | Tactical-1 | Simplex | S | 144.450 | - | | | Jan-10 | |
| Gilroy | Tactical-2 | Simplex | S | 144.470 | - | | | Jan-10 | |
| Gilroy | Tactical-CERT | Simplex | S | 148.585 | - | | | Jan-10 | |
| Gilroy | Packet 2M | Simplex | S | 144.910 | - | | | Jan-10 | |
| Gilroy | Packet 440 | Simplex | S | 433.530 | - | | | Jan-10 | |

| LOMA PRIETA | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|--------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Loma Prieta | Tactical | AD8VS | R | 442.550 | + 94.8 | | | Jul-08 | |
| Loma Prieta | Tactical | AD8VE | R | 148.835 | - 94.8 | | | Jul-08 | |
| Loma Prieta | Packet 2M | Simplex | S | 144.910 | - | | | Jul-08 | |

| LOS ALTOS | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Los Altos | Command | W6ASH | R | 145.270 | - 100.0 | E | | Jul-08 | |
| Los Altos | Command A1 | W6ASH | R | 440.800 | + 100.0 | | | Jul-08 | |
| Los Altos | Tactical 1 | Simplex | S | 148.585 | - | | | Apr-10 | |
| Los Altos | Tactical Alt | W6NFI | R | 145.275 | + 100.0 | | | Apr-10 | |
| Los Altos | Tactical 2 | Simplex | S | 145.570 | - | | | Apr-10 | |
| Los Altos | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| LOS ALTOS HILLS | | | | | | | | | |
|------------------|-----------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Los Altos Hills | LAH Simplex | Simplex | S | 147.425 | - | | | Jul-08 | |
| Los Altos Hills | LAH Repeater | W6LAH | R | 148.745 | - 113.9 | | | Jul-08 | |
| Los Altos Hills | Resource, North | W6ASH | R | 145.270 | - 100.0 | E | | Jul-08 | |
| Los Altos Hills | Packet 2M | Simplex | S | 144.910 | - | | | Jul-08 | |
| Los Altos Hills | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |
| Los Altos Hills | Packet 440 | Simplex | S | 433.530 | - | | | Jul-08 | |

| LOS GATOS | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Los Gatos | Command | W6PHY | R | 147.360 | + 151.4 | | | Jul-08 | |
| Los Gatos | Tactical | Simplex | S | 147.480 | - | | | Jul-08 | |

| MILPITAS | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|
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| | | | | | | | | | |
|----------|------------|---------|---|---------|---------|--|--|--------|--|
| San Jose | Command | W6JUU | R | 148.285 | - 114.8 | | | Jul-08 | |
| San Jose | Tactical-1 | Simplex | S | 148.475 | - 100.0 | | | Jul-08 | |
| San Jose | Tactical-2 | Simplex | S | 148.400 | - 100.0 | | | Jul-08 | |
| San Jose | Tactical-3 | Simplex | S | 148.880 | - 100.0 | | | Jul-08 | |
| San Jose | Tactical-4 | Simplex | S | 147.540 | - 100.0 | | | Jul-08 | |
| San Jose | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| SANTA CLARA | | | | | | | | | |
|------------------|---------------|---------------|----|-----------|----|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Santa Clara | Tactical | Simplex | S | 147.510 | - | | | Jul-08 | |
| Santa Clara | Tactical A1 | Simplex | S | 147.470 | - | | | Jul-08 | |
| Santa Clara | Tactical A2 | Simplex | S | 148.585 | - | | | Jul-08 | |
| Santa Clara | ATV Broadcast | ATV | R | 434.000 | - | | | Jul-08 | |
| Santa Clara | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| SARATOGA | | | | | | | | | |
|------------------|--------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Saratoga | Command | W6SA | R | 148.885 | - 114.8 | | | Jul-08 | |
| Saratoga | Tactical A1 | Simplex | S | 148.585 | - | | | Jul-08 | |
| Saratoga | Tactical A2 | Simplex | S | 148.585 | - | | | Jul-08 | |
| Saratoga | Tactical HF | USB | S | 38.400 | - | | | Jul-08 | |
| Saratoga | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| SOUTH COUNTY | | | | | | | | | |
|------------------|----------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| South County | SoCo InterCity | W6GGP | R | 147.825 | - 100.0 | | | Jul-08 | |
| South County | Packet 2M | Simplex | S | 144.910 | - | | | Jul-08 | |

| STAMFORD U | | | | | | | | | |
|------------------|-------------------|---------------|----|-----------|---------|----|-------|----------|--|
| Operational Area | Channel Name | Resource Name | RS | Frequency | OS | PL | Notes | Reviewed | |
| Stamford U | Primary | W6BOE | R | 440.300 | + 123.0 | | | Jul-08 | |
| Stamford U | Tactical-1 | Simplex | S | 148.480 | - 123.0 | | | Jul-08 | |
| Stamford U | Tactical-2 | Simplex | S | 144.325 | - 123.0 | | | Jul-08 | |
| Stamford U | Tactical | W6YX | R | 1282.500 | - 88.5 | P | | Jul-08 | |
| Stamford U | Tactical | W6BTW | R | 1282.500 | - 88.5 | O | | Jul-08 | |
| Stamford U | Packet tcp/p 1200 | W6YX-4 | R | 148.750 | - | | | Jul-08 | |
| Stamford U | Packet tcp/p 9600 | W6YX-10 | R | 433.400 | - | | | Jul-08 | |
| Stamford U | Packet 220 | Simplex | S | 223.880 | - | | | Jul-08 | |

| SUNNYVALE | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|
|-----------|--|--|--|--|--|--|--|--|--|

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APPENDIX D

FCC Rules: Subpart E—Providing Emergency Communications

§97.401 Operation during a disaster.

- (a) When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, in an area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential communication needs and facilitate relief actions.
- (b) When normal communication systems are overloaded, damaged or disrupted because a natural disaster has occurred, or is likely to occur, in an area where the amateur service is not regulated by the FCC, a station assisting in meeting essential communication needs and facilitating relief actions may do so only in accord with ITU Resolution No. 640 (Geneva, 1979). The 80 m, 75 m, 40 m, 30 m, 20 m, 17 m, 15 m, 12 m, and 2 m bands may be used for these purposes.
- (c) When a disaster disrupts normal communication systems in a particular area, the FCC may declare a temporary state of communication emergency. The declaration will set forth any special conditions and special rules to be observed by stations during the communication emergency. A request for a declaration of a temporary state of emergency should be directed to the EIC in the area concerned.
- (d) A station in, or within 92.6 km of, Alaska may transmit emissions J3E and R3E on the channel at 5.1675 MHz for emergency communications. The channel must be shared with stations licensed in the Alaska-private fixed service. The transmitter power must not exceed 150 W.

§97.403 Safety of life and protection of property.

No provision of these rules prevents the use by an amateur station of any means of radio communication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

§97.405 Station in distress.

- (a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.
- (b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a), of any means of radio communications at its disposal to assist a station in distress.

§97.407 Radio amateur civil emergency service.

- (a) No station may transmit in RACES unless it is an FCC-licensed primary, club, or military recreation station and it is certified by a civil defense organization as registered with that organization, or it is an FCC-licensed RACES station. No person may be the control operator of a RACES station, or may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.

- (b) The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates the invoking of the President's War Emergency Powers under the provisions of §706 of the Communications Act of 1934, as amended, 47 U.S.C. §606, RACES stations and amateur stations participating in RACES may only transmit on the following frequencies:
- (1) The 1800-1825 kHz, 1975-2000 kHz, 3.50-3.55 MHz, 3.93-3.98 MHz, 3.984-4.000 MHz, 7.079-7.125 MHz, 7.245-7.255 MHz, 10.10-10.15 MHz, 14.047-14.053 MHz, 14.22-14.23 MHz, 14.331-14.350 MHz, 21.047- 21.053 MHz, 21.228-21.267 MHz, 28.55-28.75 MHz, 29.237-29.273 MHz, 29.45-29.65 MHz, 50.35-50.75 MHz, 52-54 MHz, 144.50-145.71 MHz, 146-148 MHz, 2390-2450 MHz segments;
 - (2) The 1.25 m, 70 cm and 23 cm bands; and
 - (3) The channels at 3.997 MHz and 53.30 MHz may be used in emergency areas when required to make initial contact with a military unit and for communications with military stations on matters requiring coordination.
- (c) A RACES station may only communicate with:
- (1) Another RACES station;
 - (2) An amateur station registered with a civil defense organization;
 - (3) A United States Government station authorized by the responsible agency to communicate with RACES stations;
 - (4) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- (d) An amateur station registered with a civil defense organization may only communicate with:
- (1) A RACES station licensed to the civil defense organization with which the amateur station is registered;
 - (2) The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:
 - (i) A RACES station licensed to another civil defense organization;
 - (ii) An amateur station registered with the same or another civil defense organization;
 - (iii) A United States Government station authorized by the responsible agency to communicate with RACES stations; and
 - (iv) (iv) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- (e) All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only civil defense communications of the following types may be transmitted:
- (1) Messages concerning impending or actual conditions jeopardizing the public safety, or affecting the national defense or security during periods of local, regional, or national civil emergencies;

- (2) Messages directly concerning the immediate safety of life of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;
- (3) Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and
- (4) Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organizations served. Such drills and tests may not exceed a total time of 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State, Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.

Appendix E

SOME POSSIBLE TYPES OF ASSIGNMENTS

Shadow Duty

A Shadow is an amateur radio operator that is providing a communications channel between the person he or she is “shadowing” and other stations on the net. You have two duties here — one is to stick like glue to the person you’re shadowing without getting in their way. The second duty is to be prepared to communicate successfully from any place that your assignment might travel. You need to ensure that you have the proper equipment to communicate on behalf of your shadow. As you take the assignment make sure that you ask Resource NCS about any special equipment you might need. Quite often a shadow will have to talk from a moving vehicle as well as be able to move around in the field with the VIP. If this is the case then appropriate equipment would include a several watt HT with alkaline batteries, ear phone or ear bud is a must, as well as a mag-mount that can be placed on the exterior of the vehicle. If the official is expected to travel into very remote areas then a mobile 2m rig with 10- 25 watts is also appropriate. Powering the larger 2m mobile rig can be tricky so you might also have to provide a 12 to 24 Amp-hour gel-cell if the vehicle doesn’t have a cigarette lighter where you might obtain power. The last consideration and perhaps the most substantial is whether you have the appropriate training for the shadow assignment. Inquire with the Resource NCS as you take the assignment about such special circumstances. You should also make the VIP you are shadowing aware of your level of training so that you aren’t exposed to dangerous situations. An example might be shadowing the Incident Commander of a wildlands fire into the field. You should take this type of assignment only if you have had a formal fire line safety class.

Duties of the Net Control Station (NCS)

The main duty of the NCS is to insure the ARES/RACES nets are run in an orderly fashion, and properly documented (ICS309) to help eliminate confusion on communication networks, provide information regarding the disaster to ARES/RACES member stations and to coordinate the flow of traffic as required. All traffic shall be written in a message format as deemed fitting by the served agency or department. See Appendix __ for a sample of this message format. All messages must carry the name of the person originating the message and their ICS Position or office. (Example: John Smith, Logistics manager)

The NCS is responsible for taking check-ins as needed to meet the needs of the disaster operation and/or ARES/RACES activation requirements. Traffic shall be categorized by precedence and moved as soon as possible, with Emergency and Urgent traffic taking top precedence.

The phrase "BREAK" will only be used in an emergency. NCS will recognize emergency traffic immediately and handle the emergency traffic.

The NCS shall keep a log of the net and member check-ins. This log will be provided to the supervisor as soon as possible following the emergency closure.

Before starting an ARES/RACES net, make sure someone records a list of participating ARES/RACES member stations who are available for deployment and/or assignment. Preferably, this should be performed by the Net Scribe.

PRINCIPLES OF AMATEUR RADIO NET CONTROL

By Jerry Haag, KF6GAC, EC Mountain View

Types of Net

| | |
|---------------------|---|
| <u>Open Net</u> | Stations call each other directly to pass traffic |
| <u>Directed Net</u> | Stations call only net control directly, go direct only with net control permission |

Net Control...

- o must have a commanding signal
- o is in charge of the net
- o activates and assigns resources
- o must keep track of resources
- o assigns tactical calls
- o keeps a good log
- o has a clear speaking voice
- o controls his or her tone of voice
- o has good command of the English language
- o can handle physical and mental stress for long periods
- o can listen and respond in a noisy/chaotic environment
- o has good hearing
- o writes legibly
- o enforces net discipline
- o uses tactical calls
- o uses plain English - no "10" codes or "Q" signals
- o uses standard phonetics
- o performs welfare checks
- o thinks before keying
- o is as concise as possible
- o knows how to operate the radio
- o frequently identifies name and reason for the net
- o transmits only facts, not conjecture
- o takes frequent breaks
- o when transmitting, key up, take a breath, then talk

Red Cross Operations

Amateurs have a long tradition of helping the Red Cross with their communications needs. In keeping with that tradition the ARRL formalized the relationship between the two organizations by signing a Memorandum of Understanding with Red Cross. In providing communications for Red Cross you are most likely to operate either at a shelter, or at the Red Cross chapter headquarters. There is a different set of considerations for each of these assignments. When operating at a shelter site be aware of what are appropriate communications for amateur frequencies. Any message dealing with logistical or Health and Welfare is appropriate for amateur channels. Keep in mind that amateur frequencies are often monitored by news agencies. Traffic of a sensitive nature should be handled by a more secure communications medium such as the telephone. Equipment requirements for shelter duty may vary depending on whether the net is operating on a repeater or a simplex frequency. You should be prepared to bring:

Red Cross Net on a Repeater

1. ARES Minimum Equipment List.
2. Gain antenna for the handheld.
3. Lots of blank message forms.

Red Cross Net on Simplex

1. ARES minimum equipment list.
2. Base or mobile radio with a 10 to 25 watt output.
3. Portable antenna, such as a J-pole.
4. Lots of blank message forms.(SCCo RACES ICS 213)

Meals are usually provided at Red Cross shelter sites, so bringing your own food is usually not necessary. When reporting for duty at the shelter, inform the shelter manager or amateur radio site supervisor of your level of training. This is to prevent being assigned a task for which you may not be qualified. If you encounter any medical situations make sure that you notify the appropriate personnel instead of trying to deal with it yourself. Again, your responsibility is communications only.

Red Cross Shadow, or Other VIP Shadow

Shadow duty for the Red Cross will usually involve either providing communications for a Red Cross official, or acting as a radio operator for a Red Cross mobile unit such as a mass feeding station. You will probably need both a mobile AND a handheld radio when shadowing a Red Cross official. If you are providing radio capability for a mobile unit a mobile radio system should be adequate.(Note: many of the Red Cross ERV's are mostly fiberglass with little metal (try the hood) for a mag mount) When using a mobile amateur radio in a Red Cross vehicle remember that a 12 Volt source may not be available, and you may need to supply your own power source such as a gel-cell battery. Mobile unit duty is also likely to be a longer than average shift since you will be operating on the vehicle's shift assignment. It is conceivable to work as long as eight to ten hours on one of these assignments

Duty at an Emergency Operating Center (EOC)

The government operates from an Emergency Operations Center (EOC) during an emergency, staffing the EOC with senior government officials to help administrate the event from one location. EOC's operate according to Incident Command System Guidelines and Procedures (In simplest form, messages to titles at identified positions, with date, time and degree of urgency notes. Other details about ICS are available from every city manager.

The EOC may be in a governmental building, at a police or fire department or other location. Amateur radio resources may also be operated from this location, and an Emergency Coordinator or other ARES/RACES official may operate from here. As an emergency responder you may be asked to be a Net Control Station, a messenger, or a channel monitor. The Net Control Station may be handling one of the nets originating from the EOC. Messengers move traffic between Red Cross or other officials and the EOC, or as spare hands as needed during the shift. The channel monitor position listens to public service frequencies to keep officials informed on the status of the incident. The Net Control Station should utilize a fairly experienced operator. Special training should be taken before attempting this position during a

major event. The best background for someone filling a Messenger's position is a good knowledge of traffic handling. You can expect to take messages that are destined to go out via radio, and to deliver messages that have arrived from the radio net. It is also your responsibility to put any originating messages into proper format before they are sent. For more information, review the section on traffic handling earlier in this handbook. A channel monitor listens to a public service frequency on behalf of the DEC/Shift Supervisor. You can expect to be briefed on the type of information to monitor as you start your shift. Generally anything that will help officials keep abreast of the event as it develops is of interest.

Equipment at the EOC

There generally isn't any required equipment other than perhaps a handheld that might be used on a local intercom frequency. The EOC will normally be equipped fairly early in the event and the equipment can be expected to stay in place for the duration of the event.

MCIP Operations (Santa Clara County)

The Multiple Casualty Incident Plan (MCIP) has been developed in Santa Clara County to deal with medical emergencies where there are many casualties. Management of such an event is expected to require multiple jurisdictions and mutual aid operations. Amateur Radio is a method used within the plan to allow responding agencies to communicate with each other. There are three primary nets that will be used during an MCIP event. These are our standard Resource net, a Hospital Tactical Net, and an on-scene Tactical Net.

A Resource Net is established to begin the process of gathering amateur operators and equipment for response to the MCIP staging area. Under the MCIP plan the Resource net automatically has a set of amateur radio positions to be staffed. This will include sending two amateur radio operators to each of the area hospitals and a number of well equipped operators to respond to the MCIP staging area. A NCS will also be required for the Hospital Net. This position can be staffed by any qualified amateur and operated from any convenient location. The Hospital Nets will coordinate information flow between the incident and the area hospitals. As stated previously the MCIP calls for two member teams to staff each of the area hospitals. The first member of the team will operate a radio on the Hospital net while the second member of the team should position themselves near the emergency room. Locate the hospital net radio wherever the antenna drop is located. The second team member should notify the head of the Emergency Room that he is present and to what services can be provided, and ask where he may be located to provide communications in a place out of traffic. Both members of this team should choose a convenient intercom frequency that they can use within the hospital. It is suggested that 220, or 440 MHz is a good choice for this intercom channel.

Appendix F

General Phraseology Training and Examples.

What to say and how to say it on a controlled net. “TALKING ON A NET”

PLEASE REMEMBER THAT WHEN YOU ARE PASSING MESSAGE TRAFFIC SOME ONE ON THE OTHER END MUST WRITE IT DOWN EXACTLY AS YOU GIVE IT. SPEAK SLOWLY AND PAUSE ABOUT EVERY 5 WORDS TO INSURE THE RECEIVING STATION IS COPYING YOUR MESSAGE EXACTLY. WHEN YOU ARE FINISHED WITH THE MESSAGE SAY END OF MESSAGE AND THEN BE QUIET. THE RECEIVING STATION WILL FINISH WRITING THE MESSAGE DOWN AND THEN WILL READ IT BACK TO YOU TO INSURE IT WAS COPIED EXACTLY AS SENT.

Identifiers and Conversation

Use your tactical call sign during conversation to conserve air time and to make things easier. Please remember to keep call signs and other qualifiers out from your identifiers. Net control will be known simply as “*Control*”. A shelter may be known by their one-word name, for example “Meyer Shelter” rather than “Fred J. Meyer Junior High School shelter”

Always call by saying the identifier of the station you are calling first, then your identifier. So, for example, if you are Meyer Shelter calling control you would say simply “*Control, Meyer Shelter*”. If you are Net Control and you want to call Meyer Shelter you would say “*Meyer Shelter, Control*”.

Answering:

For all of you in the field, you should answer calls with just your tactical call sign. For example, if Control calls Meyer Shelter, Meyer Shelter should answer by saying simply “*Meyer Shelter*”. Note that excess baggage like “this is”, or “go ahead” are not really needed (although these two examples are short enough that they are not really a problem). But please try to avoid long strings like: “This is Meyer Shelter, go ahead Net Control” (11 syllables!). Short and sweet should be the rule!

Control answers calls the opposite way. Control always answers with the other station’s identifier. For example, if Meyer Shelter calls Control, Control, answers by saying “*Meyer Shelter*”, *not* “*Control*”. Why? Because there is only *one* Control running the net, so answering with the identifier “Control” does not add much useful information. More importantly, Control needs to specify which mobile is being acknowledged. There may be more than one mobile unit trying to call Control at the same time, so if Control were to answer with just “Control” or “Go ahead” then all the stations who were trying to call would think that Net Control is talking to them. So Control answers with the *mobile’s* identifier, which indicates clearly which mobile is being invited to talk. This is common practice these days in public safety nets, and it is becoming more common in ham nets as well.

Acknowledging

The plain text radio acknowledgement to indicate that you have heard and understood is the word “*copy*”. For example if you are Meyer Shelter and you are acknowledging that you have heard and understood, you should say simply “*Meyer Shelter copies*”. If you didn’t understand, just say “*Meyer Shelter repeat*”. You don’t need to give a long explanation like “Net Control this is Meyer Shelter, I’m sorry, I wasn’t able to get your last transmission, I’m getting a lot of background noise here, could you repeat please?” (36 syllables)

Location

If Control asks for your ‘location’, you are probably being asked just to provide your general whereabouts so that Control can decide whether you are in position to be dispatched to an event. So you should give your general whereabouts without taking time to try to pinpoint your exact location. For example you might answer, “Metcalf Canyon” or “Uvas reservoir area” or perhaps “Monterey near Bailey”. Your answer should make reference to major roads or landmarks that are likely to be recognized by Net Control. If you answer giving an intersection of two tiny streets, then Control will probably not recognize them and will probably have to follow up with “Okay, and approximately where is that on the route?” If Control asks for your “exact location”, then Control is probably trying to help someone meet up with you. In this case go ahead and describe your location as precisely as you can.

Giving Information

Think before keying the mike, then say the fewest number of syllables that will get the information across. The biggest problem with many ham operational nets is verbosity of transmission. Verbosity is great on ragchew nets, because that is what you are there for. But on an operations net it should be pruned as much as possible. . For example, if you want to take a restroom break, just say “I’ll be off the air for 5 minutes”. This is better than giving a lengthy discourse about how long it’s been since you had been to a restroom and so on. Another good example would be for a rest stop operator to say “The Meyers Shelter is asking for 50 more cots if they are available” rather than a long explanation about how many cots they have now and how there has just been a flood of new arrivals in the past few minutes. Always make it short, and transfer only the information that the other station needs to be able to fulfill the request.

Amateur Call Signs

We are all proud of our calls, and when we are working the bands we let our call signs announce to the world who we are. However, for net communications your call sign serves no purpose other than to meet your legal requirement to identify. So please don’t clutter the net with 10 or 15 syllables of call sign as part of your identifier or at the end of every transmission. If you are pretty sure that you are finished talking for a while, then give your call sign at the end. But if you think from the context of the conversation that you will likely be talking again in just a few minutes, then leave your call out for now, and give it later when you are done. It doesn’t matter if you miss your opportunity to identify and Control starts talking with someone else. You can just wait for a lull in traffic and just say “K6AAAor(tactical call) and K6AAA”. Everyone will know that you are just IDing because you didn’t get an opportunity to do so before.

Hypothetical Example of Informal Traffic

So to conclude, here is a hypothetical few minutes on the air using these principles. I know, it never turns out to be as clean as we would like it. Let's try to get into a nice rhythm of short transmissions without clutter.

Control: Meyer Shelter, Control, new message

Meyer Shelter: Meyer Shelter, ready to copy (he adds ready to copy because it's for a new message)

Control: New message, It's a request to find out if the Red Cross ERV has been there yet?

Meyer Shelter: Meyer Shelter copies message, I'll research and advise (He doesn't ID because he knows that he will be talking again in a couple minutes.)

(some silence)

Los Gatos Mobile one: Control, Los Gatos Mobile one

Control Los Gatos Mobile one

Los Gatos Mobile one: We're transporting a male from the community center to Meyers Shelter. He's not injured just needs transportation.

Control: Copy, transporting one to Meyers shelter, advise when clear.

Los Gatos Mobile one: Los Gatos Mobile one copies will advise when KF6AAA (Los Gatos Mobile one IDs because he knows that he is finished talking).

Control: Red Cross one, Control, your location?

Red Cross one: Red Cross one, I'm in Metcalf canyon.

Control: Red Cross one Disregard. Break. Gilroy Mobil, your location? (Notice that Red Cross one did not get a chance to ID, no problem, he just waits.)

Gilroy Mobil: Gilroy mobile on Monterey, at about Cochran. (He may not know the exact tiny cross street, but he was at Cochran a few minutes ago)

Control: Okay, Gilroy mobile, Can you pick up w6you at Santa Teresa and Bailey. I think he needs a ride to the Gilroy EOC

Gilroy Mobile: Gilroy Mobile copies, enroute to Santa Teresa and Bailey, N6YYY.

(a bit of silence)

RedCross one: KA6YYY, ID. (He's just IDing now because he didn't get a chance to ID earlier. Notice that he added "ID" so Control doesn't think he is trying to call in with something.)

Meyer Shelter: Control, Meyer Shelter

Control: Meyer Shelter

Meyer Shelter: Red Cross ERV just arrived here at Meyer Shelter.

Control: Copy, thank you, I'll close the message . N6DRB, Resource Net Control. (Control IDs because it has been about 10 minutes since Control's last ID.

Meyer Shelter: Meyer Shelter, WB6UUU

Appendix G

Santa Clara County ARES®/RACES Performance Standards and Best Practices is available on line at http://www.scc-ares-races.org/operations/docs/SCCo_Perf_Std_v1.0.3_rev100721.pdf

Santa Clara County ARES®/RACES website has a great deal of information available including all the forms mentioned in this document it is found at: www.scc-ares-races.org

Appendix H

**CITY HALL LOCATIONS FOR ALL CITIES IN
SANTA CLARA COUNTY (version dated 51005, 1010 hrs)
PLUS REFERENCE LOCATIONS FOR OTHER JURISDICTIONS
SANTA CLARA COUNTY ARES/RACES verify & update**

Note: lower case map locations are a-upper left, b-upper right, c-lower left, d-lower right

| CITY | ADDRESS | Thomas Bros Map Page |
|---------------------|--|----------------------|
| Campbell | 70 N. First St, Campbell, CA 37 17 18.31 N 121 56 38.60 W | 853E6a |
| Cupertino | 10300 Torre Ave, Cupertino, CA 37 19 08.14 N 122 01 43.55 W | 852E1c |
| Gilroy | 7351 Rosanna St, Gilroy, CA 37 00 14.40 N 121 34 16.73 W | 978A3c |
| Los Altos | 1 N. San Antonio Rd, Los Altos, CA 37 22 57.26 N 122 06 48.83 W | 811E6c |
| Los Altos Hills | 26379 Fremont Rd, Los Altos Hills, CA 37 23 00.62 N 122 08 21.01 | 811B6a |
| Los Gatos | 18041 Saratoga Ave, Los Gatos, CA 37 13 57.40 N 121 09 59.46 W | 872J6d |
| Milpitas | 455 E. Calaveras Blvd, Milpitas, CA 37 25 58.38 N 121 53 56.61 W | 794B7a |
| Morgan Hill | 17555 Peak Ave, Morgan Hill, CA 37 07 28.60 N 121 39 42.40 W | 936J1a |
| Mountain View | 500 Castro Street, Mountain View, CA 37 23 23.50 N 122 04 56.55 W | 811H5d |
| NASA Ames | | 812A3b |
| Palo Alto | 250 Hamilton Ave, Palo Alto, CA 37 26 39.76 N 122 09 35.54 W | 790J4c |
| Palo Alto Red Cross | Mitchell Lane, Palo Alto, CA 37 26 36.42 N 122 09 58.63 W | 790H5b |
| San Jose | 801 N. First St, San Jose, CA 37 21 04.15 N 121 54 11.01 W | 834A4a |
| San Jose Red Cross | 2731 N. First, San Jose, CA 37 23 24.98 N 121 55 55.67 W | 813G5c |
| Santa Clara | 1500 Warburton Ave, Santa Clara, CA 37 21 18.52 N 121 57 17.05 W | 833D3d |
| Saratoga | 13777 Fruitvale Ave, Saratoga, CA 37 16 02.56 N 122 00 53.57 W | 872F1d |

| | | |
|---------------------|---|--------|
| SCCo OES | 55 W. Younger, San Jose, CA 37 21 18.34 N 121 54 21.38 W | 834A3c |
| SCV Water District, | 5750 Almaden Expressway, San Jose, CA | 874D4b |
| Stanford University | 711 Serra, Stanford, CA 37 25 39.24 N 122 09 29.72 W | 790J7b |
| Sunnyvale | 700 All America Way, Sunnyvale N 37 22.2412 W 122 2.4012 | 832D1b |

EXAMPLE of Santa Clara County Forms- available from website- <http://www.scc-ares-races.org>

Appendix I

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Santa Clara ARES / RACES

RACES ASSIGNMENT FORM

| | |
|---|----------------------------------|
| RACES ACTIVATION NUMBER: | |
| ASSIGNMENT TASK: | |
| ASSIGNMENT ADDRESS (Street, City): | |
| THOMAS GUIDE MAP INFO: | Page: Grid: |
| LOCAL CONTACT: Name | |
| LOCAL CONTACT: Phone Number | |
| LOCAL CONTACT: Frequency, PL | |
| START TIME: | |
| LENGTH OF ASSIGNMENT: | |
| STARTING ODOMETER READING: | |

TRAVEL FREQUENCY (RESOURCE NET)

| REPEATER | FREQUENCY (offset) | TONE (PL) |
|--------------------------------|--------------------|-----------|
| AA6BT (Primary) | 146.115 (+) | 100.0 |
| LINKED TO W6ASH (North Valley) | 145.270 (-) | 100.0 |
| LINKED TO N6NAC (South Valley) | 444.625 (+) | 110.9 |

INSTRUCTIONS:

1. Before contacting the Santa Clara County RACES Resource Net Control, contact your city EC to verify that you can respond to the County call for assistance. If this is a training event, you should contact your EC before the event to be sure that you have been released to respond to this call.
2. Before contacting the County Resource Net Control, install your magnetic mount antenna on your vehicle, connect your radio, put your go-kit in your vehicle, record the last three digits of your odometer on the line above, and be ready to start your vehicle upon receiving your assignment.
3. Be prepared to provide the highway or street you are on, and the last three digits of your odometer when asked by the Resource Net Control during Health and Welfare checks.
4. Advise the County Resource Net Control when you have arrived at the assignment location, telling the net control where you have parked your vehicle. **REMAIN IN YOUR VEHICLE UNTIL YOU HAVE CONTACTED THE ASSIGNMENT TACTICAL NET CONTROL AND HAVE RECEIVED INSTRUCTIONS.** Once you have established radio communications with the assignment tactical net control, follow the instructions that you are given. You do not need to return to the County Resource Net to check out of that net – they know where you are. **NOTE:** If you are unable to contact the assignment tactical net control, return to the resource net for further instructions. **DO NOT LEAVE YOUR VEHICLE UNTIL YOU ARE TOLD TO DO SO.**
5. Reverse this procedure when you have completed your assignment and are ready to return home.
6. **Use other side for special instructions**

SPECIAL INSTRUCTIONS:

Unit Log (ICS Form 214-SCCo ARES/RACES)

Purpose: The Unit Log records details of unit activity, including team activity or individual activity (a unit of one). These logs provide the basic reference from which to extract information for inclusion 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. All completed original forms **MUST** be forwarded to the Documentation Unit.

Instructions for completing the form:

| Field # | Field Title | Instructions |
|---------|------------------------|--|
| 1 | Incident Name / Number | Enter the name of the event or incident and the activation number assigned to the incident |
| 2 | Operational Period | Enter the time interval for which this form applies. Record the start and end date and time. |
| 3 | Unit Name | For individuals: Enter your tactical call (e.g. Checkpoint 3, Rover 1, County EOC, etc.) or position name 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 local time 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 309. |
| 7 | Prepared By | Enter the name, call sign and ICS position of the person completing the log. |
| 8 | Date & Time Prepared | Enter the date and time the form was prepared (24-hour clock) |
| 9 | Page Numbers | Enter the page number and total pages. |

Submit this form to your supervisor at the end of your shift.

| | | | |
|--|--|--------|---|
| <h1 style="margin:0;">MESSAGE FORM</h1> <p>▶ Use Ballpoint Pen—Press Hard; Print Clearly (See back for instructions)</p> | When Receiving ² Msg.: Sender's msg. # | Msg. # | When Sending Msg. ³ Receiver's msg. # |
|--|--|--------|---|

| | | | |
|--|---|---|--|
| Date: (MM/DD/YY) ¹ ____/____/____ | Situation Severity (✓one) ⁴ <input type="checkbox"/> EMERGENCY (e.g., Life Threat) <input type="checkbox"/> URGENT (e.g., Property Threat) <input type="checkbox"/> OTHER (All others) | Msg. Handling Order (✓one) ⁵ <input type="checkbox"/> IMMEDIATE (As Soon as Possible) <input type="checkbox"/> PRIORITY (Less Than One Hour) <input type="checkbox"/> ROUTINE (More Than One Hour) | Message Requests You To: ⁶ TAKE ACTION (✓one) <input type="checkbox"/> Yes <input type="checkbox"/> No REPLY (✓one) <input type="checkbox"/> Yes, by _____ <input type="checkbox"/> No <input type="checkbox"/> FOR YOUR INFO. (no action required) |
|--|---|---|--|

| | | | |
|--|--|--|--|
| | To: | | From: |
| | ICS Position: (required) ⁷ | | ICS Position: (required) ⁸ |
| | Location: (required) ⁹ | | Location: (required) ⁹ |
| | Name: (optional) | | Name: (optional) |
| | Telephone #: (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

| | |
|--|---------------------------------------|
| How Received <input type="checkbox"/> or Sent <input type="checkbox"/> (✓one) | Operator Call Sign: |
| <input type="checkbox"/> Telephone <input type="checkbox"/> Dispatch Center | Operator Name: |
| <input type="checkbox"/> EOC Radio <input type="checkbox"/> FAX <input type="checkbox"/> Courier | |
| <input type="checkbox"/> Amateur Radio <input type="checkbox"/> Other _____ | Date: _____ Time: _____ |

INSTRUCTIONS FOR USING THE MESSAGE FORM

1. **Date and Time:** When receiving or sending any message, complete the date and time (in the format shown) in the top upper left of the form.
2. **When Receiving Message:** note the sending organization's message number in the box labeled "When Receiving Msg.", located to the left of the Msg. # at the top right of the message form. (*Normally entered by radio operator*)
3. **When Sending Message:** obtain the receiving organization's message number, and record this in the "When Sending Msg." box located to the right of the Msg. # at the top right of the message form. (*Normally entered by radio operator*)
4. **Situation Severity:** indicate the Severity of the message - For example, is it a life threat, a property threat, or just information?
5. **Message Handling Order:** indicate the handling order of the message, (Immediate: As Soon As Possible; Priority: Less than an Hour; Routine: More Than an Hour).
6. **Message Requests You To:** state what the message type is - for example: is the sender expecting the county OES to "Take Action", to "Reply", or "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. **Locations:** enter the location of the addressee in the "To" box and the location of the sender in the "From" box (for example, To: Mountain View EOC, From: Santa Clara County EOC).
10. **Subject:** Note the subject of the message (e.g., Request for Type 5 Engine Strike Team).
11. **Reference:** If the message is a response to an earlier message, indicate the original message number if available.
12. **Message:** If the message is a request for support, supply detailed instructions about what, when, how long needed and where the support is to be delivered, contact person and phone number. 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. (e.g., "Request for Type 5 Engine Strike Team passed to Region on OASIS Net."). 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 **EMERGENCY** message, it should be placed in the hands of the shift supervisor. For other messages, it is permissible to place the message in the appropriate message box slot.

Communications Log (ICS Form 309-SCCo ARES/RACES)

Purpose: The Comm Log records the details of message traffic and is used by either an individual or a Net Control Operator (NCO). These logs provide the basic reference from which to extract communications traffic history.

Preparation: The Comm Log is initiated and maintained by the Net Control Operator (NCO) or the individual operator (e.g. a field communicator). Completed logs are submitted to the supervisor who forwards them to the Documentation Unit.

Distribution: The Documentation Unit maintains a file of all Comm Logs. All completed original forms MUST be forwarded to the Documentation Unit.

Instructions for completing the form:

| Field # | Field Title | Instructions |
|---------|------------------------|--|
| 1 | Incident Name / Number | Enter the name and activation number assigned to the incident |
| 2 | Operational Period | Enter the time interval for which the form applies. Record the start and end date and time |
| 3 | Net / Position Name | For NCOs: Enter the name of the radio net For Others: Enter the name of the position or tactical call |
| 4 | Radio Operator | Enter the name and call sign of the radio operator |
| 5 | Communications Log | Time: Enter the local time in 24-hour format From: Enter the <i>From</i> call sign or ID and the message number To: Enter the <i>To</i> 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 |
| 7 | Date & Time Prepared | Enter the date and time the form was prepared (24-hour clock) |
| 8 | Page numbers | Enter the page number and number of pages |

Submit this form to your supervisor at the end of your shift.

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|--|----------------------------------|-------------------------|-------------------|-----------------------------------|------------------------------|
| ICS 205 RACES COMMUNICATIONS PLAN | | 1. INCIDENT NAME | | 2. DATE/TIME PREPARED | 3. OPERATIONAL PERIOD |
| 4. COMMUNICATIONS RESOURCE UTILIZATION | | | | | |
| TYPE USED (check) | FREQUENCY/PL | FUNCTION | ASSIGNMENT | REMARKS | |
| <input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER _____ | | | | | |
| <input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER _____ | | | | | |
| <input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER _____ | | | | | |
| <input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER _____ | | | | | |
| <input type="checkbox"/> AMATEUR RADIO <input type="checkbox"/> ATV <input type="checkbox"/> PACKET <input type="checkbox"/> OTHER _____ | | | | | |
| ICS 205 SCCo RACES | 5. PREPARED BY (planning) | | | 6. MISSION NUMBER XSC - | |

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|--|--|--|----------------------------|-----------------------------|-----------------------------------|----------------|
| ICS 211A CHECK IN LIST (COMMUNICATIONS) | 1. INCIDENT NAME: | 2. DATE: | 3. INCIDENT NUMBER: | 4. CHECK IN LOCATION | | |
| 5. INFORMATION | | | | | | |
| PERSONNEL NAME | CALL SIGN | AGENCY | TIME IN | TIME OUT | HOURS | REMARKS |
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| ICS 211A SCCo RACES | 6. NUMBER OF PAGES: _____ of _____ | 7. PREPARED BY (RESOURCE UNIT): | | | 8. MISSION NUMBER XSC - | |

Conclusion

In this manual we have attempted to cover the basic requirements of being an emergency responder and how to go about that task. As in any other endeavor the basis skills you need to develop require time and practice. It is our hope the information presented herein will assist you in this endeavor. We hope that you take the time to read and understand the contents.

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This work is based on the *Amateur Radio Emergency Communications Manual* and the Santa Clara *Santa Clara County ARES/RACES Performance Standards and Best Practices* and the input and assistance of many Many HAMs in the Santa Clara Valley, Thank you all for you input and efforts.

## Santa Clara County ARES/RACES/ACS Spontaneous Volunteer Questionnaire (version 62205)

This questionnaire is to find out your level of skills and experience. There is no "pass/fail" grade, only an attempt to get to know you so we can use your skills in the most effective way.

Name (print) \_\_\_\_\_ Call \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Cell \_\_\_\_\_ Pager \_\_\_\_\_

Do you have transportation to get to a remote assignment?  Yes  No

Drivers License # \_\_\_\_\_ Expires \_\_\_\_\_

Do you have liability insurance for your vehicle?  Yes  No

Are you registered as a Disaster Service Worker?  Yes  No

If so, in what jurisdiction? \_\_\_\_\_ What function? \_\_\_\_\_

Amateur radio license level:  Tech  General  Extra

How long have you been licensed as a HAM? \_\_\_\_\_ years Code speed \_\_\_\_\_ wpm

Have you ever participated in a radio net?  Yes  No

Net experience? \_\_\_\_\_

Are you a member of any amateur radio or emergency organizations (RACES, Volunteers in Policing, etc.)?  Yes  No

If yes, please specify which organization(s): \_\_\_\_\_

What formal emergency communications training have you had? \_\_\_\_\_

Have you ever participated in an emergency drill?  Yes  No In what role? \_\_\_\_\_

Have you ever participated in a real disaster incident (fire, earthquake, etc.)?  Yes  No

How: \_\_\_\_\_

Are you familiar with Windows-based computers? If so, what programs?  MS Word  Excel  Power point  
 Packet radio Which ones? \_\_\_\_\_ Other \_\_\_\_\_

What radio equipment do you have with you right now (on your person or in your car)? \_\_\_\_\_

What personal protective equipment do you have with you? \_\_\_\_\_

Do you have a change of clothing, toiletries, etc., that would allow you to work for more than one shift without going home?  Yes  No

If given four hours to prepare, what equipment, etc., will you have available? \_\_\_\_\_

Do you have any particular handicap or dislikes that might affect your ability to work in a disaster environment? (fear of heights, fire, sight of blood, lifting, walking climbing, sitting restrictions, etc.)  Yes  No

What kinds of things would you like to do as an emergency communicator? \_\_\_\_\_

- Mobile field work  Working in a shelter  Running a net
- Other: \_\_\_\_\_  As needed, I can do it all

Do you have any medical or health conditions we should be aware of?  Yes  No

If yes, please explain \_\_\_\_\_

What is your availability? Which days are you available and during what hours?

| Hours    | Sun | Mon | Tue | Wed | Thur | Fri | Sat |
|----------|-----|-----|-----|-----|------|-----|-----|
| 8a-4p    |     |     |     |     |      |     |     |
| 4p-mid   |     |     |     |     |      |     |     |
| Mid – 8a |     |     |     |     |      |     |     |

Other: \_\_\_\_\_

ACKNOWLEDGEMENT: I have read this quick trainer, and have been given an opportunity to review it and ask questions. I agree to the rules and procedures found in this document.

Date: \_\_\_\_\_ Signed: \_\_\_\_\_