USE AND DISTRIBUTION NOTICE

- Santa Clara County RACES authorization is granted to use and duplicate this material as-is, as long as this page and the copyright notices on each page are included, acknowledging Santa Clara County ARES/RACES as the holder of the copyright.
- Permission is granted to adapt this presentation to your needs as long as you acknowledge our copyright and include a note similar to "adapted with permission from Santa Clara County ARES/RACES."
- For additional information on training or any of our programs, send an email to: info@scc-ares-races.org

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 1

2015 Year End Summary

Updates and Review

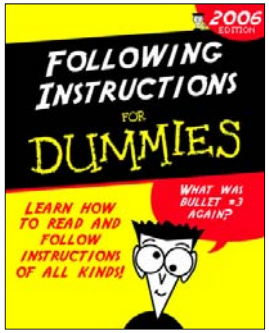
Santa Clara County ARES®/RACES

Revised: 10-Dec-2015

ARES and Amateur Radio Emergency Service are registered servicemarks of the American Radio Relay League, Incorporated and are used by permission.
© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 2

Housekeeping

- Refreshments
- Pen/pencil & paper
- Cell phones & pagers
- Side conversations
- Questions
- Breaks
- Restrooms
- In case of emergency



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 3

Agenda

- An update on changes that have occurred during the past year, plus a review of some key procedures.
- Topics covered:
  - Packet
  - Data Network Infrastructure
  - Net Control
  - Audio Excerpts
  - Forms Review
  - Mesh / Wi-Fi Review
  - Training Updates

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 4

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Packet Review

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 05-Dec-2015

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 5

FCC/User/Personal vs Tactical Calls

- FCC/User/Legal Call Sign
  - Identifies a single person as an operator
  - Follows the person
  - Independent of assignment, function, etc.
  - Used for check-in, check-out, personal requests
- In contrast, a Tactical Call identifies a location or function…

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 6

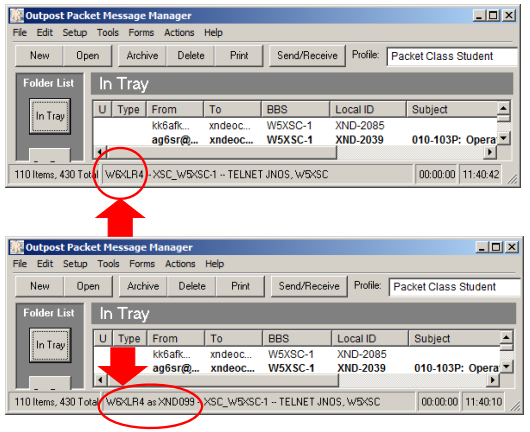
FCC/User/Personal vs Tactical Calls

- Tactical Call Sign
  - Identifies a function or location
    - Shelter, fire station, EOC, Staging
  - Does not change when the operator changes
  - Used for activities of the location/function
  - Six characters long
    - Three letter prefix unique to the Served Agency
    - Three character suffix unique to the location
- Examples for Xanadu Drill City
  - XNDEOC XND001 XNDEV2

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 7

Outpost Shows Which Call Sign is Used

- FCC Call: Only the call sign is shown
- Tactical Call: "… as XXXXXX"



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 8

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Manual Login with Tactical Call

- Call sign of TNC determines call sign that BBS sees for login/connect
  - TNC:
    - *CMD:* MYCALL W6XRL4
    - *CMD:* CONNECT W5XSC-1
  - W5XSC BBS: connects user and places in W6XRL4 mailbox
- To login manually (no Outpost) with a tactical call such as XNDEOC:
  - TNC:
    - *CMD:* MYCALL XNDEOC
    - *CMD:* CONNECT W5XSC-1
  - W5XSC BBS: connects user and places in XNDEOC mailbox

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 9

Manual Login with Tactical Call - ID

- Need to ID every 10 minutes and at end of session. On TNC:
  - Disconnect from BBS
  - In command mode, type
  - *CMD:* CONVerse ← Enters converse mode; whatever is typed is sent out

    FCC ID = W6XRL4; Tactical Call = XNDEOC

    <CTRL-C> ← Returns to command mode

    CMD:

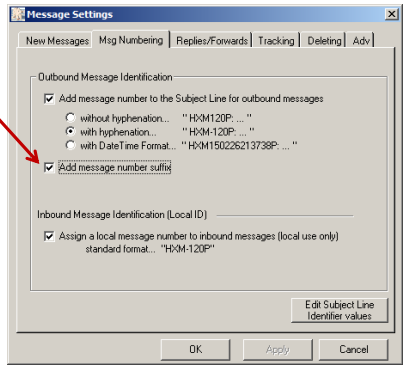
At end of session, switch MYCALL back to normal:

CMD: MYCALL W6XRL4

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 10

Message Number "P" Suffix

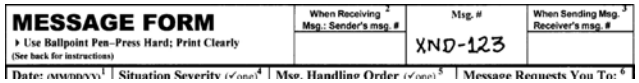
- **The P suffix is added to the message number by Outpost**
- **It does not mean that it was a packet message, it just means that Outpost assigned the number**
- The P was added to reduce the possibility of duplicate message numbers from other message forms
- **Box should be checked**



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 11

Message Numbers

- Don't change the message number you are given!
- If you are given:



- Then type

- It's that simple.

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 12

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

PACKET OPERATIONS

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 13

Packet Operator Field Activities Summary

- **Mobilize to Assignment Location**
  - **Use FCC call for communications**
- **Execute During Operational Period**
  - **Use Tactical Call for location message**
  - **Use FCC call for personal messages**
- **Demobilize and return home**
  - **Use FCC call for communications**

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 14

Mobilize To Assignment

- Upon arrival at the site
  - Sign in on ICS 211 Check In List
  - Check in with site supervisor
  - Update your 214
- Get briefing from previous operator
- Assess packet equipment
  - Radio settings and connections
  - TNC settings
- Check in to assigned voice net

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 15

Prepare/Check Outpost

- Check Outpost settings before transmitting
  - Correct BBS
  - Frequency
  - TNC settings
- If emergency, remove “xsctest” from bulletin list
- If needed, set up your User Identification with your **Tactical Call** for the Served Agency check in message

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 16

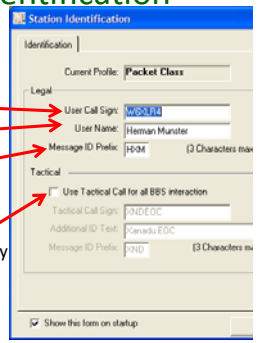
Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Served Agency Check In Message

- Begin the Operational Period with a packet check in message to the Served Agency
- Send a text message using your assigned (Tactical or FCC) call sign with the following information
  - Name and Call of Packet Operator
  - Name and Tactical call of Packet Station, if used
  - Time the packet station was operational
- Update personal 214
- Do a "Send/Receive" to get any pending messages and bulletins
- Begin operations

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 17

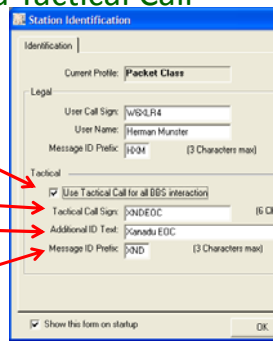
Opening Outpost – User Identification



- Using your FCC call sign
  - User call sign
    - Your FCC call sign
  - Name
    - Your full name
  - Message ID Prefix
    - 3 letter prefix used in message number
    - Set according to your served agency policy
    - Or use your initials
- Unclick - ***Use Tactical Call***
  - When fields are greyed out – using FCC call
- When you take over a shift as a Packet Operator, you will need to change User Call sign and User Name

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 18

Operational Period Using a Tactical Call



- To use a Tactical Call
  - Check "Use Tactical Call …" Outpost will connect to the BBS using this call sign
- Fill in Tactical Call Sign
- Additional ID Text
  - Sent along with FCC call sign and tactical call in final ID packet
- Message ID Prefix
  - 3 letter prefix used in message number
  - Set according to your served agency policy

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 19

During Operational Period

- Send, receive, process packet messages
- Check for new bulletins and follow any new instructions
- Maintain voice radio contact
- Maintain ICS 214 Unit Log
- If prolonged period of inactivity (30+ minutes)
  - Perform a "Send/Receive" operation to verify connection with BBS
  - Message not needed
- Report any problems as instructed
  - Site supervisor
  - Voice net

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 20

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Demobilization

- Send a text message to the Served Agency using your assigned (Tactical or FCC) call sign
  - Name and Call of Packet Operator
  - Name/Tactical call of Packet Station, if used
  - Time the packet station is assigned to a new operator

  Or
  - Time the packet station is being deactivated
- Brief the incoming operator
- Paperwork!
- Check out with site supervisor
- Sign out on the Site ICS 211
- Update your ICS 214

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 21

NETWORK INFRASTRUCTURE IMPROVEMENTS

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 22

Key Focus in 2015

- Backbone redundancy, prep for higher speed access
  - Each site to have at least two high-speed (n * 10 Mbps) links
  - Upgraded link between W2XSC and W4XSC (80 Mbps)
  - ½ competed new link between W2XSC and W1XSC
  - Still looking for new site in NW part of county for W3XSC
- Hardened backbone sites
  - Improved routing infrastructure
  - Improved UPS runtime in the event of a generator failure
    - Result: 6+ hours of battery runtime at Crystal Peak
    - Frazier Peak is next
  - Improved remote sensor infrastructure

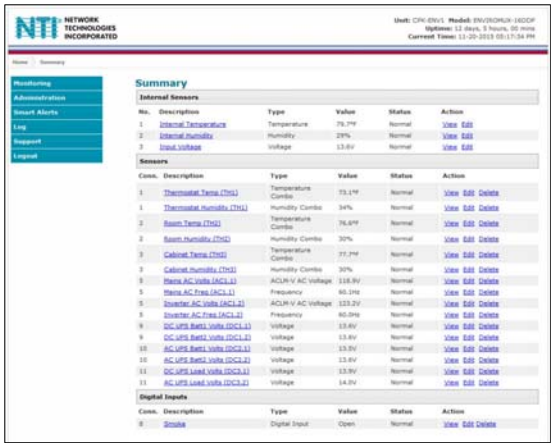
© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 23

UPS Runtime Improvements (6+ hours!)

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 24

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Remote Monitoring Improvements



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 25

New Crystal Peak Cabinet

Side View

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 26

Net Control Review

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 07-Dec-2015

ARES and Amateur Radio Emergency Service are registered servicemarks of the American Radio Relay League Incorporated and are used by permission.

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 27

Relief Briefings

- All defined in the "Performance Standards and Best Practices"
  - Assignment, activation number
  - Served agency, person in charge, how recognized
  - Frequencies, tactical calls, locations, contact numbers
  - Who to contact regularly
  - Radio, power supply, antenna information
  - Nearest telephone: location and number, how to dial out
  - Location of toilet, water, food, first aid, and other supplies
  - Summary of previous operational period
  - Current status of: people, resources, incident
  - Pending issues for next operational period
  - Introduce replacement to rest of team

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 28

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Local Net Transfer/Handing-off

- For local hand-off with single net control operator
  - Relief operator can work as scribe briefly, just prior to hand-off
- For local hand-off with net control & scribe team
  - Replacement arrives early, familiarizes self with location
  - Replacement receives briefing from shift supervisor
  - Net Control runs net solo while scribe briefs replacement with details
  - Scribe catches up on anything missed
  - Net Control announces shift change, stand by for 30 seconds
  - Scribe slides into net control seat; replacement slides into scribe seat
    - Replacement → Scribe → Net Control → Break
  - Announce that net is resumed

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 29

Remote Net Transfer/Hand-off

- You may need to transfer a net to a remote net control
  - Initial resource net control transfer to EOC or event location
  - Hand off to a more experienced net control operator
  - Evacuation of net control location
- Information to transfer
  - Current status of all who are checked into net
    - Resource Net transfer involves current en route status information
  - Any other instructions as may be necessary; see relief briefing list
- Key points
  - Priority One: Maximize accuracy; losing someone is not an option!
  - Priority Two: Minimize transfer time
  - Always use good communications techniques: 5 words at a time; proper pro-words; pause before speaking; eliminate need for repeats

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 30

Procedure for Transfer of Net

NC1 = Current Net Control NC2 = Replacement Net Control

Who	What
NC2	Announces presence; ready for net control transfer
NC1	Acknowledge; announce start of H&W; requests NC2 to acknowledge each response with a tactical call such as "net2" (or similar)
NC1	Calls each person, one at a time, phonetically
Individuals	Respond as usual (for resource net: street location, odometer, call sign)
NC2	"acknowledged, net2" or "roger, net2"; or "say again …"
NC1	Acknowledges; repeats process for rest of people on net
NC1	Fills in NC2 on any other pending issues; asks if ready to take net
NC2	Acknowledges all info; confirms ready
NC1	Announces transfer of net
NC2	Announces self as net control

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 31

Exercise: Transfer of Level 3 Resource Net

- Need 5 volunteers
  - Net control 1
  - Net control 2
  - Scribe for net control 2 (optional)
  - Traveler 1
  - Traveler 2
- Before you start:
  - Net Control 1: write down traveler call signs
  - Travelers: make up a street location and odometer reading
- Follow the script …
  - "<…>" indicates where you substitute your actual information
  - Example: <NC2 call sign> means you say Net Control 2's call sign
  - Net Control 2: fill in ICS-309 as you go
  - Scribe for NCO2: fill in Travel Tracking Form as you go

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 32

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Exercise: Transfer of Level 3 Resource Net

Who	What
NC2	Net control, this is <NC2 call sign>, ready for net control transfer
NC1	<NC2 call sign> roger; Break; I will now conduct a H&W check; when I call you, respond with street location, odometer and your call sign; <NC2 call sign> I want you to acknowledge each response as tactical call "net2"
NC2	Roger, net2
NC1	<traveler 1 call sign spelled phonetically>, health and welfare
Traveler 1	<Respond with your street location, odometer, call sign>
NC2	Roger, net2
NC1	Acknowledged. <traveler 2 call sign spelled phonetically>
Traveler 2	<Respond with street location, odometer, call sign>
NC2	Say again odometer
Traveler 2	<Respond with odometer>
NC2	Roger, net2
NC1	Health and welfare check complete

Continued on next page …

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 33

Exercise: Transfer of Level 3 Resource Net

Continued from previous page …

Who	What
NC1	Net2 did you need any other fills?
NC2	Negative
NC1	O.K. Additional information follows: You need to contact Jenny at 867-5309 to unlink the repeaters after you close the net.
NC2	Acknowledged.
NC1	Are you ready to take the net?
NC2	Affirmative.
NC1	This is <NC1 call sign> turning over net control to <NC2 call sign>; <NC1 call sign> clear.
NC2	This is <NC2 call sign>, net control for the Santa Clara County Resource Net. This is a directed net…

Copyright © Santa Clara County ARES®/RACES. All rights reserved. 34

Performance Review

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 10-Dec-2015

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 35

Note: Examples from actual nets and ICS forms will be used to illustrate areas that we all need to work on.

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 36

On-Air Performance Review

2015 Year End Summary

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 37

Instructions

- Listen to each recording
- Give a thumbs-up if it was properly done
- Give a thumbs-down if it could be improved
- Be ready to justify your opinion
- If it can be improved, how would you say it better?

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 38

Resource Net

- Net Control Instructions
- Check-In
- Check-Out

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 39

Tactical Net – Dealing with Tactical Call Signs

- Net Control ID
- Tactical Call Sign Check-in/Assignment
- Tactical Call Assignment Change
- In Position
- Check-Out

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 40

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Tactical Net – Gathering Information

- NCO pre-announce info request, format
- NCO instructions before gathering reports
- Info Reports
- Health & Welfare

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 41

Tactical Net – Other Directed Net Activities

- NCO Instructions
- Directed Net
- Status Update
- Dead Air
- Temporarily Leave Net / Return
- Ask/Receive Info

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 42

Shadow Net – Open Net

- Prowords
- Listen up!
- Status Reports
- Radio configuration
- Tactical Call conversation
- Noise!

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 43

Hospital Net – Directed Net

- Message Handling Order
- Message Passing
- Dealing with interference
- Radio configuration

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 44

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Key Points

- Net control operators:
  - Define expected response format
  - Pre-announce upcoming information gathering, when possible
  - Give instructions that avoid doubles
- Net participants
  - Listen up and answer promptly when called
  - Answer in requested format -- no more, no less
  - When using tactical calls, call and answer using tactical call
- All
  - Attend training! Best performers had more training.
  - Know how to configure your radio; check configuration before using
  - Minimize the number of words (on-air time) used
  - Observe proper handling order at all times
  - Use proper prowords at all times
  - Be prepared for the environment: noise, heat, cold, rain, …
  - The last thing you say should be your FCC call sign

Copyright 2015 Santa Clara County ARES®/RACES. All rights reserved. 45

Forms Review

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 05-Dec-2015

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 46

ICS 214 – Unit Activity Log

- Our version: ICS 214-SCCo
- A record of all major activities and events
- EVERYONE fills out a 214
  - Individuals: a unit of one
  - Teams: Team leader
  - Start when you get assignment (home)
- Occasional message traffic?
  - Just log it right on the 214
- Use multiple pages if necessary
- Turn in to supervisor at end of shift
- Instructions on back
- Neatness counts

http://www.scc-ares-races.org/operations.html

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 47

Exercise: ICS-214 Unit Log

- Create an ICS-214 log for the following scenario in City of Xanadu (XND)
  - Incident is “Tree Lighting”, activation number: XND-15-TLE
  - You are assigned a Tactical Call of “Rover 1”
  - The Event IC is Herman Munster W6XRL4
  - The event is scheduled for 1600 to 2100 hours today
  - You leave home at 1515 hours, mileage 123
  - You arrive at the staging location at 1545 hours, mileage 133
  - The event starts at 1600
  - Lots of activities take place during your 5 hour shift such as: H&W, shift change, breaks, messages, etc. (we won’t log these for this exercise to save time)
  - You are released at 2105 and check out of staging

Your ICS-214 should be completed as you would submit it when checking out

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 48

Exercise: ICS-214 Unit Log

UNIT LOG ICS 214-SCCo ARES/RACES	1. Incident Name and Activation Number	2. Operational Period (Date/Time)
	Xandu Tree Lighting XND-15-TLE	12/12/2015 From: 1600 To: 12/12/2015 2100
3. Unit Name / Tactical Call / Designators	4. Unit Leader (Name, Call Sign, ICS Position)	
Rover 1	Your Name, Your FCC Call Sign	

5. Personnel Roster Assigned			
Name	Call Sign	ICS Position	Home Base/City

UNIT LOG ICS 214-SCCo ARES/RACES	1. Incident Name and Activat…	2. Operational Period (Date/Time)
	Xandu Tree …ting XND-15-T…	12/12/2015 1600 To: 12/12/2015 2100
3. Unit Name / Tactical Call / Designators	4. Unit Leader (Name, Call Sign, ICS Position)	
Rover 1	…an A…ster W6XRL4	

5. Per…oster Ass…d			
Name	Call Sign	ICS …tion	Home Base/City
Your Name	Yo… Sign		

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 49

Exercise: ICS-214 Unit Log

Instructions for completing the form:

Field #	Field Title	Instructions
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.

Most forms have the instructions on the back

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 50

Exercise: ICS-214 Unit Log

UNIT LOG ICS 214-SCCo ARES/RACES	1. Incident Name and Activation Number	2. Operational Period (Date/Time)
	Xandu Tree Lighting XND-15-TLE	12/12/2015 From: 1600 To: 12/12/2015 2100
3. Unit Name / Tactical Call / Designators	4. Unit Leader (Name, Call Sign, ICS Position)	
Rover 1	Your Name, Your FCC Call Sign	

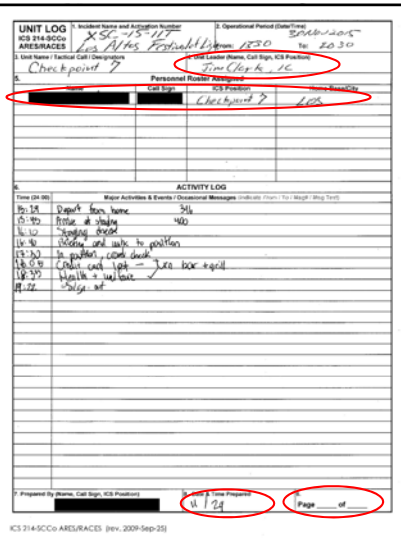
5. Personnel Roster Assigned			
Name	Call Sign	ICS Position	Home Base/City

6. ACTIVITY LOG	
Time (24:00)	Major Activities & Events / Occasional Messages (Indicate From / To / Msg# / Msg Text)
1515	Left Home, OD 123
1545	Arrived at staging, OD 133
1600	Event starts
2105	Released, checked out of Staging

Activity Detail Here

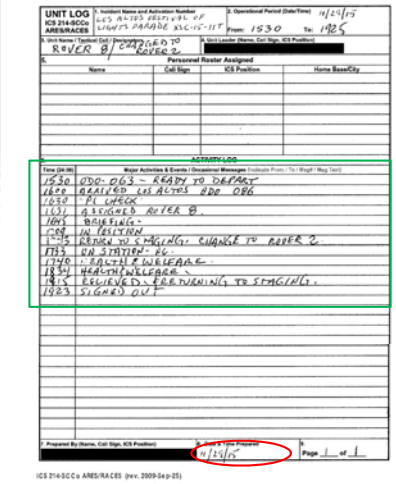
7. Prepared By (Name, Call Sign, ICS Position)	8. Date & Time Prepared	9.
Your Name, Your FCC Call Sign	12/12/2015 - 2105	Page 1 of 1

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 51



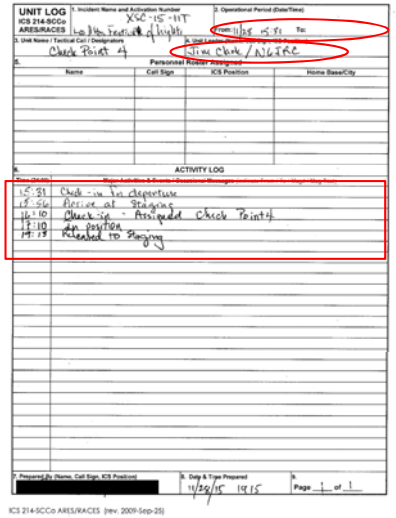
ICS 214-SCCo ARES/RACES (rev. 2009-Sep-25)

52



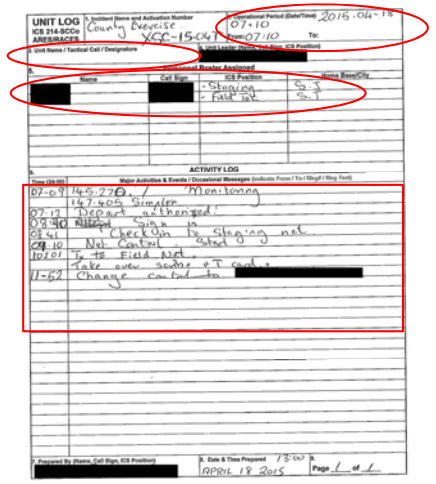
Good Detail

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 53



Detail Lacking

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 54



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 55

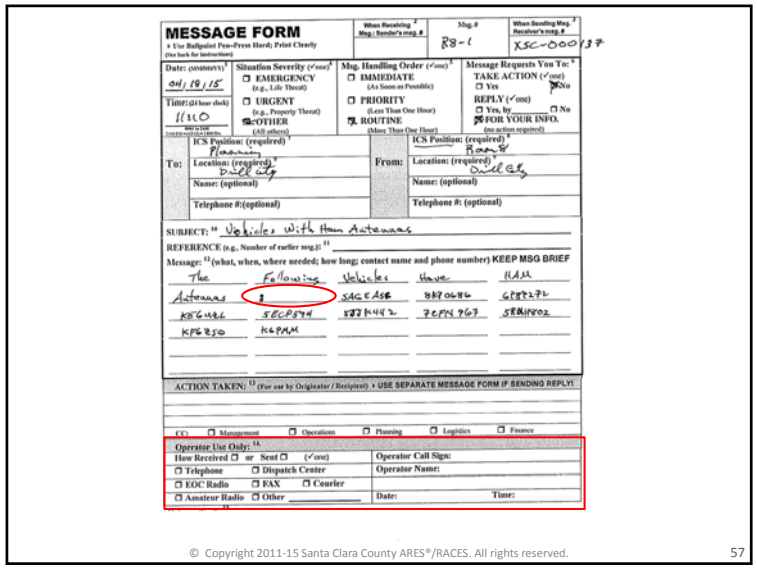
ICS 213 Message Form

- Message Numbers
- Header
- Address Info
- Message Body
- Action Taken
- Operator Use

http://www.scc-ares-races.org/operations.html

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 56

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.


MESSAGE FORM

Mtg.# R8-1

When Sending Msg. Receiver's msg. # XSC-000137

Date: 04/18/15

Situation Severity: ☐ EMERGENCY (e.g., Life Threat) ☐ URGENT (e.g., Property Threat) ☐ OTHER (All others)

Mtg. Handling Order: ☐ IMMEDIATE (As Soon as Possible) ☐ PRIORITY (Less Than One Hour) ☒ ROUTINE (More Than One Hour)

Message Requests You To: TAKE ACTION ☐ Yes ☒ No; REPLY ☐ Yes, by ____ ☐ No; ☒ FOR YOUR INFO. (no action required)

Time: 1130

To: ICS Position: Planning; Location: Drill City; Name:; Telephone #:

From: ICS Position: Room 8; Location: Drill City; Name:; Telephone #:

SUBJECT: Vehicles With Ham Antennas

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

Message: (what, when, where needed; how long; contact name and phone number) KEEP MSG BRIEF

The	Following	Vehicles	Have	HAM
Antennas	#	SAGE ASE	8R7 0686	6P8827L
K86486	5ECP87H	5R7K442	7EPM967	5R8KR02
KP6850	K6PMM			

ACTION TAKEN: (For use by Originator / Recipient) › USE SEPARATE MESSAGE FORM IF SENDING REPLY!

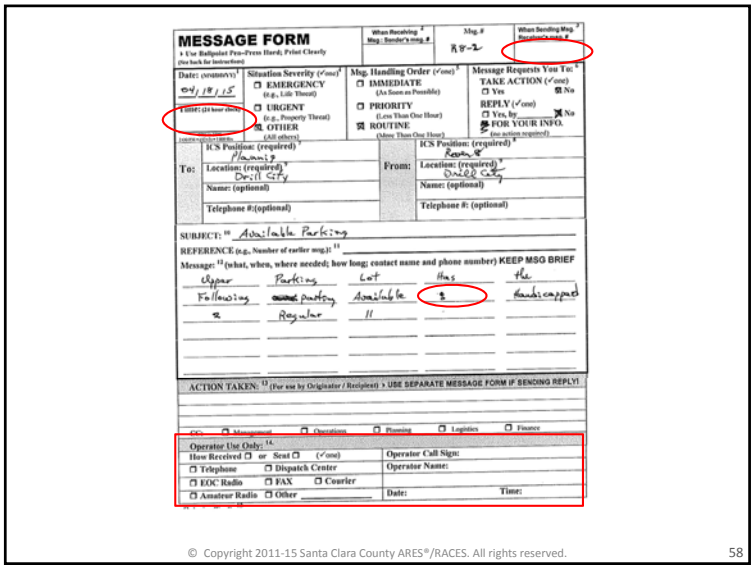
CC: ☐ Management ☐ Operations ☐ Planning ☐ Logistics ☐ Finance

Operator Use Only:

How Received ☐ or Sent ☐ (✓one): ☐ Telephone ☐ Dispatch Center ☐ EOC Radio ☐ FAX ☐ Courier ☐ Amateur Radio ☐ Other

Operator Call Sign: Operator Name: Date: Time:

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 57


MESSAGE FORM

Mtg.# R8-2

When Sending Msg. Receiver's msg. #

Date: 04/18/15

Situation Severity: ☐ EMERGENCY (e.g., Life Threat) ☐ URGENT (e.g., Property Threat) ☒ OTHER (All others)

Mtg. Handling Order: ☐ IMMEDIATE (As Soon as Possible) ☐ PRIORITY (Less Than One Hour) ☒ ROUTINE (More Than One Hour)

Message Requests You To: TAKE ACTION ☐ Yes ☒ No; REPLY ☐ Yes, by ____ ☐ No; ☒ FOR YOUR INFO. (no action required)

Time: (24 hour clock)

To: ICS Position: Planning; Location: Drill City; Name:; Telephone #:

From: ICS Position: Room 8; Location: Drill City; Name:; Telephone #:

SUBJECT: Available Parking

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

Message: (what, when, where needed; how long; contact name and phone number) KEEP MSG BRIEF

Upper	Parking	Lot		
Following	Parking	Available	Has	the
#	Regular	#		Handicapped

ACTION TAKEN: (For use by Originator / Recipient) › USE SEPARATE MESSAGE FORM IF SENDING REPLY!

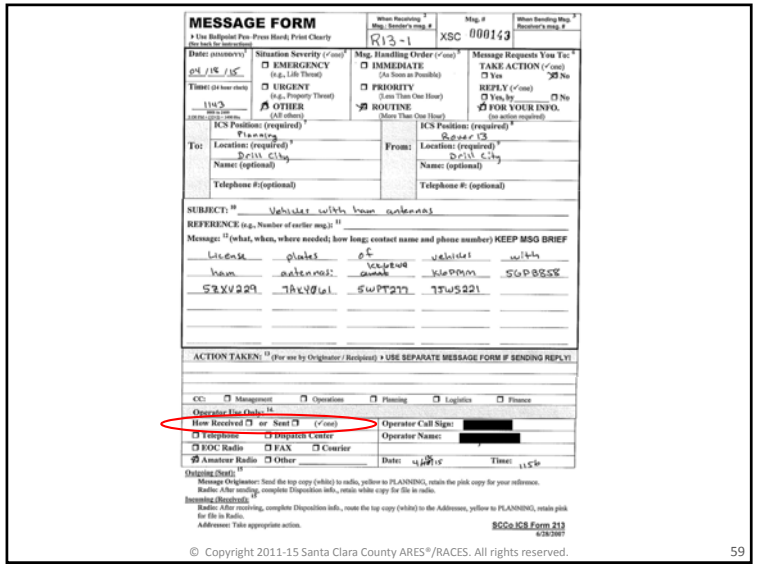
CC: ☐ Management ☐ Operations ☐ Planning ☐ Logistics ☐ Finance

Operator Use Only:

How Received ☐ or Sent ☐ (✓one): ☐ Telephone ☐ Dispatch Center ☐ EOC Radio ☐ FAX ☐ Courier ☐ Amateur Radio ☐ Other

Operator Call Sign: Operator Name: Date: Time:

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 58


MESSAGE FORM

Mtg.# XSC 000143

When Receiving Msg.: Sender's msg. # R13-1

When Sending Msg. Receiver's msg. #

Date: 04/15/15

Situation Severity: ☐ EMERGENCY (e.g., Life Threat) ☐ URGENT (e.g., Property Threat) ☒ OTHER (All others)

Mtg. Handling Order: ☐ IMMEDIATE (As Soon as Possible) ☐ PRIORITY (Less Than One Hour) ☒ ROUTINE (More Than One Hour)

Message Requests You To: TAKE ACTION ☐ Yes ☒ No; REPLY ☐ Yes, by ____ ☐ No; ☒ FOR YOUR INFO. (no action required)

Time: 1143

To: ICS Position: Planning; Location: Drill City; Name:; Telephone #:

From: ICS Position: Room 13; Location: Drill City; Name:; Telephone #:

SUBJECT: Vehicles with ham antennas

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

Message: (what, when, where needed; how long; contact name and phone number) KEEP MSG BRIEF

License	plates	of	vehicles	with
ham	antennas:	[redacted]	K6PMM	5GPB858
57XV229	7AK4161	5WPT277	7EW5221	

ACTION TAKEN: (For use by Originator / Recipient) › USE SEPARATE MESSAGE FORM IF SENDING REPLY!

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

Operator Use Only:

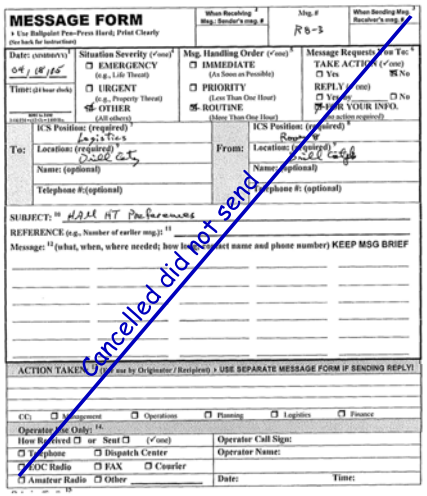
How Received ☐ or Sent ☐ (✓one): ☐ Telephone ☐ Dispatch Center ☐ EOC Radio ☐ FAX ☐ Courier ☒ Amateur Radio ☐ Other

Operator Call Sign: [redacted] Operator Name: [redacted] Date: 4/18/15 Time: 1156

Outgoing (Sent):
Message Originator: Send the top copy (white) to radio, yellow to PLANNING, retain the pink copy for your reference.
Radio: After sending, complete Disposition info., retain white copy for file in radio.
Incoming (Received):
Radio: After receiving, complete Disposition info., route the top copy (white) to the Addressee, yellow to PLANNING, retain pink for file in Radio.
Addressee: Take appropriate action.

SCCo ICS Form 213 6/28/2007

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 59


MESSAGE FORM

Mtg.# R8-3

When Receiving Msg.: Sender's msg. #

When Sending Msg. Receiver's msg. #

Date: 04/18/15

Situation Severity: ☐ EMERGENCY (e.g., Life Threat) ☐ URGENT (e.g., Property Threat) ☒ OTHER (All others)

Mtg. Handling Order: ☐ IMMEDIATE (As Soon as Possible) ☐ PRIORITY (Less Than One Hour) ☒ ROUTINE (More Than One Hour)

Message Requests You To: TAKE ACTION ☐ Yes ☒ No; REPLY ☐ Yes, by ____ ☐ No; ☒ FOR YOUR INFO. (no action required)

Time: (24 hour clock)

To: ICS Position: Logistics; Location: Drill City; Name:; Telephone #:

From: ICS Position: Room 8; Location: Drill City; Name:; Telephone #:

SUBJECT: HAM Preferences

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

Message: (what, when, where needed; how long; contact name and phone number) KEEP MSG BRIEF

Cancelled did not send

ACTION TAKEN: (For use by Originator / Recipient) › USE SEPARATE MESSAGE FORM IF SENDING REPLY!

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

Operator Use Only:

How Received ☐ or Sent ☐ (✓one): ☐ Telephone ☐ Dispatch Center ☐ EOC Radio ☐ FAX ☐ Courier ☐ Amateur Radio ☐ Other

Operator Call Sign: Operator Name: Date: Time:

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 60

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

ICS 309 – Communications Log

- Our version: ICS 309-SCCo
- Net Control Operators and stations with high message traffic
- Columns help organize key message tracking info
- Does not replace 214
  - EVERYONE fills out a 214
- Turn in to supervisor at end of shift
- Instructions on back

http://www.scc-ares-races.org/operations.html

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 61

Exercise: ICS-309 Communications Log

COMM Log ICS 309-SCCo ARES/RACES

1. Incident Name and Activation Number: *Training Class Exercise XND-14-TCE*

2. Operational Period (Date/Time): *12/13/2014* From: *1100* *12/13/2014* To: *1400*

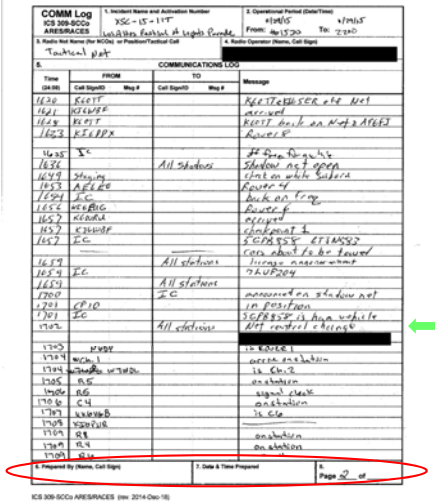
3. Radio Net Name (for NCOs) or Position/Tactical Call: *Xanadu Tactical Net*

4. Radio Operator (Name, Call Sign): *Your name, your FCC call sign*

5. COMMUNICATIONS LOG

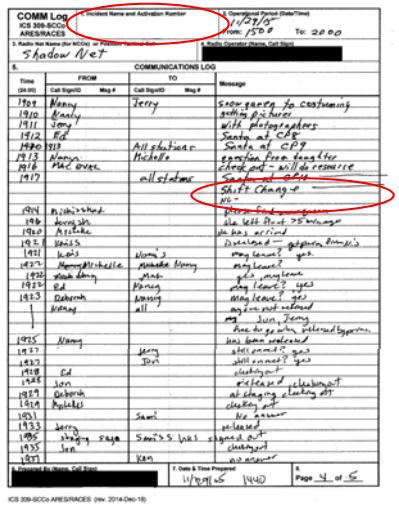
Time (24:00)	FROM Call Sign/ID	FROM Msg #	TO Call Sign/ID	TO Msg #	Message
1145	----	---	----	---	Start Net
	----	---	----	---	Net Control = Your Name, <your call sign>
	----	---	----	---	Scribe = Herman Munster, W6XLR4
1155	Shelter 2	S2-013	EOC	XND-106	Bed count
1210	KJ6HAM				check-in – assigned tactical = Shelter 1
1220	KB6HAM				check-in – assigned tactical = Shelter 3
1250	EOC	XND-107	Shelter 3	S3-1004	Inventory checklist
1305	Shelter 1	S1-021	EOC	XND-108	Supply status
1310		XND-109	All Shelters		Exercise complete --- Confirmation #s follow
1311		"	Shelter 1	S1-022	
1312		"	Shelter 2	S2-014	
1313		"	Shelter 3	S3-1005	
1330	----	---	----	---	Net closed

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 62



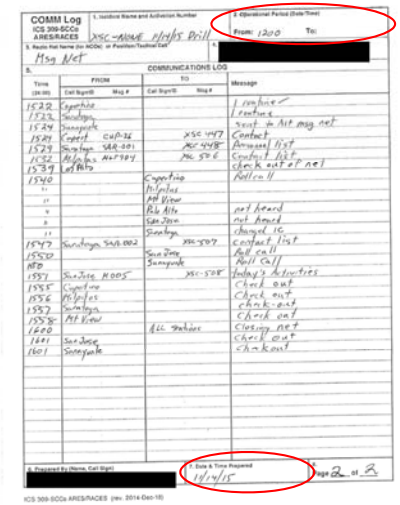
NC Change Logged

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 63



© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 64

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.



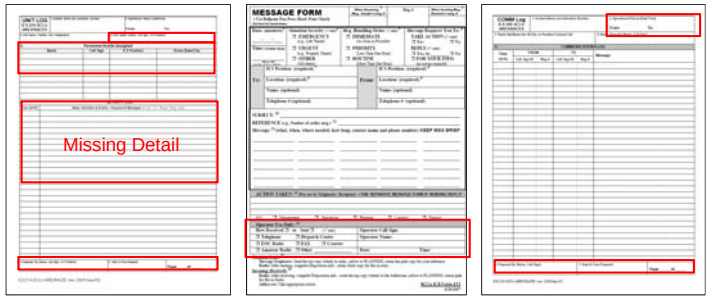
© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 65

Most Common Errors on Forms

ICS-214 Unit Log

ICS-213 Message Form

ICS-309 Communications Log



Legible hand writing

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 66

END FORMS REVIEW

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 67

Mesh / Wi-Fi

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 07-Dec-2015

ARES and Amateur Radio Emergency Service are registered servicemarks of the American Radio Relay League Incorporated and are used by permission.

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 68

Mesh / Wi-Fi Review

- March 2015 – Mesh / Wi-Fi Workshop with 33 participants
- Discussed
  - IP Networking basics
  - Discussed hardware available to use
  - VOIP phones
  - Power over Ethernet (POE)
  - Frequencies
  - Part 15 vs Part 97 considerations
  - Hands-on exercises

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 69

Mesh / Wi-Fi Review

- County Wide Drill - April
  - One aspect of the exercise provided hands-on use of a Mesh Network
- Milpitas BBQ Festival - May
  - 3 Ticket Booths with Mesh nodes, VOIP phones, and cameras
  - Command post with Asterisk PBX, VOIP Phones, video display
- Sunnyvale
  - Workshop: May and July - 8 plus nodes, VOIP phones, Asterisk PBX
  - Field Day: June - 4 nodes with cameras and VOIP phones
  - SNAP Graduation: October - 2 nodes with phones, voicemail, 1 camera
  - Joint workshop with Cupertino: August

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 70

Mesh / Wi-Fi Review

- Cupertino SCC Sheriff's Heroes 5K Run - November
  - 6 locations
  - Mesh nodes, VOIP phones, cameras, Asterisk PBX
- A Mesh / Wi-Fi workshop is scheduled for June 2016

Additional information: www.scc-ares-races.org/mesh/

SCC Mesh User Group: groups.yahoo.com/group/scc-mesh

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 71

END MESH/WI-FI REVIEW

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 72

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.

Training Plans 2016

2015 Year End Summary

Santa Clara County ARES®/RACES

Revised: 06-Dec-2015

ARES and Amateur Radio Emergency Service are registered servicemarks of the American Radio Relay League Incorporated and are used by permission.

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 73

Training Plans For 2016

- Intro and Fundamentals Class offered 3 times each year
  - Maintain reasonable class size
  - Location – 2 in Mtn. View and 1 in Sunnyvale
- Field Ops reduced to one class rather than two
  - Fundamentals Class is now a prerequisite
  - Much of the material from Fundamentals was duplicated in this class
- Planning class to be rewritten
  - More realistic examples and exercises
- Discussion about a Leadership Course/Workshop for ECs/AECs
  - Your ideas welcome

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 74

END TRAINING UPDATES

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 75

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 76

Thank You!

We look forward to seeing you again next year:

Classes, drills, events, …

© Copyright 2011-15 Santa Clara County ARES®/RACES. All rights reserved. 77

Copyright © 2015 Santa Clara County ARES®/RACES. All rights reserved.