

## 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](mailto:info@scc-ares-races.org)

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

1

1



## 2022 Year End Updates



Santa Clara County ARES®/RACES  
Revised: Dec 4, 2022

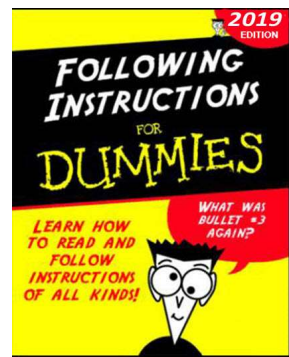
Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

2

2

## HOUSEKEEPING

- Introductions
- Pen/pencil & paper
- Cell phones
- Side Conversations
- Questions
- Breaks **Water only in this room**
- Restrooms
- In case of emergency
- Parking – move at first break



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

3

3

## Agenda

- Packet Network Update
- Weekly Packet Practice
- Monthly Packet Message Passing Practice
- Message Passing
- ARRL SET
- Credentialing Program
- 2023 Training



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

4

4

# Packet Network Update

## 2022 Year End Review, 2023 Plans

Jim Oberhofer, KN6PE  
Revised 3 December 2022

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

5

## Packet Training


Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

6

### 2022 Packet Classes

**By the numbers**

- 153 classroom hours spent (not counting homework)
- 51 class sign-ups (all 3 classes)
  - 19 in Packet IIIA
  - 19 in Packet IIIB
  - 13 in Packet II
- 25 unique participants
- 6 packet Ops attended only one class
- 12 packet Ops attended only two classes
- 7 packet Ops attended all three classes



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

7

### 2022 Packet Classes

Year over Year participation

	2017	2018	2019	2020	2021	2022
	ClassRm	ClassRm	ClassRm	Zoom	Zoom	ClassRm
classroom hours spent	360	318	288	315	342	153
class sign-ups (all 3 classes)	120	116	96	105	114	51
Packet IIIA	49	46	33	42	44	19
Packet IIIB	42	35	29	29	32	19
Packet II	29	25	24	34	38	13

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

8

## Packet Class Exercises

- Packet IIIA content workbook – Intro to Outpost and PackItForms
- Packet IIIB scripted exercise – check-ins, message passing, check-out
- Packet II scripted exercise – similar to IIIB but without Outpost!
  
- To get class credit, you had to do three things:
  - Show up for the class
  - Complete the class evaluation
  - Complete the homework
  
- While not part of the Packet II class, ~40% went on to do the November *Monthly Packet Message Passing Exercise* manually.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

9

9

## Highlights -- Outpost and PackItForms

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

10

10

## What's in the box?



- SCCo Integrated Packet Installer 161G
  - Outpost Packet Message Manager
    - GUI-based interface for managing packet communications
    - Makes using packet as simple as using e-mail
  - PackItForms
    - Next generation HTML-based forms for use with Outpost
    - Headless Chrome for auto-printing support

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

11

11

## SCCo Installer v161G September 2022



### PackItForm 3.9\*

- New Check-in/Check-out form
- Several forms now with initial field values set
- PackItForms align with the Recommended Form Routing Cheat-sheet
- Other enhancements, minor changes

### Outpost v3.6.0\*

- Rolls back Installer to support XP system and earlier installations
- Removes PacForms from the Forms menu (but is still installed)
- Other minor functionality changes to address SCC defects

\*See the release notes for details

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

12

12

### Top 6 packet “what’s new” items for 2022

1. New PackItForm defaults
2. New Check-in/out form
3. New city notice retrieve setting
4. Message ID Suffix characters
5. Manual Ops – a focus on putty
6. Packet USB Stick Suggestions for P2, P1 qualifications

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

13

13

### 1. PackItForms

The screenshot displays a stack of PackItForms. The top-most form is the 'Allied Health Status Report Short Form (dEOC-9)'. Below it are forms for 'Santa Clara OA Shelter Status', 'Santa Clara OA Jurisdiction Status', 'Santa Clara County EOC Resource Request Form 213RR', and 'Santa Clara County RACES – Mutual Aid Request'. Each form has a 'Message Number' and 'Date' field, and various input fields for location, contact information, and report details.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

14

14

### County Use of PackItForms

- Santa Clara County PackItForms contains these public forms
  1. [XSC Check-In/Out Message Form](#)
  2. [XSC ICS-213 Message Form](#) adapted for Santa Clara County to transmit messages.
  3. [XSC EOC-213RR Resource Request Form](#) – Requests specific resources needed to support an emergency.
  4. [XSC OA Jurisdiction Status Form](#) – Reports jurisdiction emergency situation status to county OEM.
  5. [XSC OA Shelter Status Form](#) – Reports information and status on shelters opened in the cities to county OEM.
  6. [XSC Allied Health Facility Status](#) – Reports information & status of private Skilled Nursing facilities to SCC Public Health Department.
  7. [XSC RACES Mutual Aid Request Form](#) – Used by a jurisdiction to request a RACES Mutual Aid.
- The SCC Installer program automatically installs these packet forms along with Outpost.
  - Additional forms may be provided by your EC

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

15

15

### XSC ICS 213 Message Form

The screenshot shows the 'XSC ICS 213 Message Form' with various input fields. Key fields include 'Date' (07/24/2022), 'Time (HH:MM)' (09:00), 'Handling' (Immediate), 'ICS Position' (County EOC), 'Location' (County EOC), 'Name' (County EOC), and 'Telephone #'. There are also checkboxes for 'Take Action' and 'Reply'.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

16

16

- SCC IS 213 Message Form
- **Updated Form fields!**
  - Message Number Fields
  - Removes **Situation Severity** Field

## XSC EOC Resource Request 213RR

- For material, equipment, and staff requests, not for RACES Mutual Aid
- *New form defaults!*
  - To ICS Position: **Planning Section**
  - To Location: **County EOC**
- Note!** Fields can be changed at message create time

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

17

17

## 1. New PackItForm Defaults

PackItForms	Handling Order	TO ICS Position	To Location
ICS 213 Message Form	--	--	--
EOC Resource Request 213RR	--	Planning Section	County EOC
OA Jurisdiction Status	Immediate	Situation analysis Unit	County EOC
OA Shelter Status	Priority	Mass Care and Shelter Unit	--
Allied Health Status	Routine	EMS Unit	MHJOC
RACES Mutual Aid Request	Routine	RACES Chief Radio Officer	County EOC

- Aligns with the *RACES Recommended Form Routing Cheat Sheet*
- Similar default settings for the Hospital PackItForms
- Fields can be changed at message create time
- Always double-check the *RACES Recommended Form Routing Cheat Sheet* for your specific situation

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

18

18

## 2. Check-In/Out: PackItForms

- PackItForms now includes a Check-In/Out message form
  - Option for both check-in and check-out messages
  - Handles FCC call signs and Tactical Calls
  - Correctly formats the subject line and message body

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

19

## 2. Check-In/Out Messages

- General rules during field assignments
  - Check in and out using your assigned Tactical Call, not your FCC call
  - Check-in as soon as the station is ready
  - Check-out before shutting down the station using your *Tactical Call*
  - Always send as plain text messages
  - Always use [HandlingOrder] = “\_R\_”
    - Handling Order = R (Routine)
  - Always follow the standard subject line format
    - With specific check-in/out details for subject and message body

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

20

20

### 3. Outpost is Pre-Configured for SCCo Notices

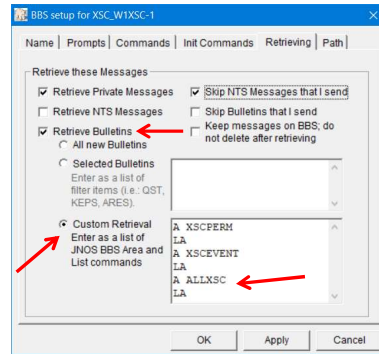
- The SCCo Packet Installer pre-configures Outpost to download SCCo notices

- XSCPERM
- XSCEVENT
- ALLXSC

- In Outpost:

- Setup > BBS, Retrieving Tab
- Check "Retrieve Bulletins"
- Check "Custom Retrieval"
- Custom Retrieval:

- A XSCPERM (Area)
- LA (List All)
- A XSCEVENT (Area)
- LA (List All)
- A ALLXSC (Area)
- LA (List All)



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

21

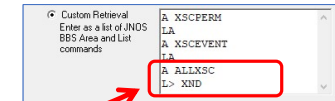
21

### 3. Using City Bulletins

#### Setup

- Setup > BBS > Retrieving
- Change the LA command to L>
- Add your city's three char prefix (ex: "XND", "SJC", "MTV", etc.)

**NOTE:** only one City entry is allowed.

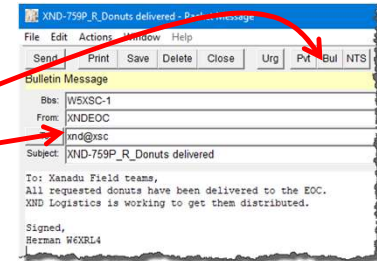


#### Create, send a city bulletin

- Start a new message
- Click the "Bul" button
- Address it to "xnd@xsc"
- Enter your message and click Send
- Addressing it to @xsc distributes to all XSC (Santa Clara County) BBSs.

See the details here...

<https://www.scc-ares-races.org/data/packet/packet-addressing.html#bull-city>



22

22

### 3. SCCo Notice Areas

- SCCo ARES/RACES has four special notice categories:

- xscperm
  - Used for notices that do not expire
  - examples: standard county procedures
- xscevent
  - Notices posted here automatically expire after 8 days
  - examples: Drills, public service events, incidents, other activations
- xscstest
- allxsc
  - Where you can write city and jurisdiction notes
  - Notices posted here automatically expire after 8 days

- Advantages

- Limits on-air time required to check bulletins
- Focuses readership so important information is not missed
- Outpost only downloads a notice once

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

23

23

### 4. More message suffix characters

- For this message... "XND-200P\_R\_Event Instructions", the standard Message ID is:
  - 3-character message prefix for the originator, a hyphen, followed by a message number, followed by...
  - Outpost adds a **P** suffix if it generates the message number
- You might also see:
  - XND-200R\_R\_Event Instructions – **Resend** message; same message number and content, different suffix character.
  - XND-200M\_R\_Event Instructions – **Manually** created message (Outpost was unavailable).

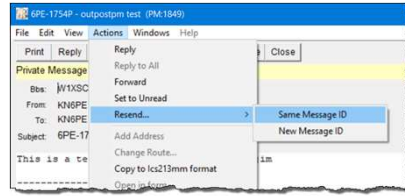
Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

24

24

### 4. Outpost's Resend option

- Resending both Plain Text and PackItForm Messages
- NOTE!** If you select **Resend, Same Msg ID**, then manually change the Message ID -###P to -###R for Resend. This ensures no duplicate message confusion.

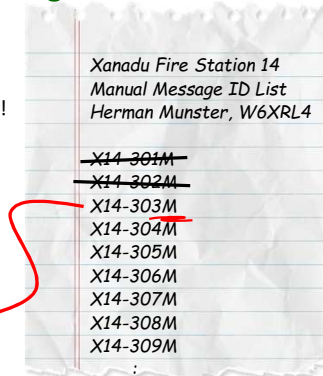


Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 25

25

### 4. Manually track your Message ID's

- Outpost usually manages message numbers for you.
- But without Outpost, you have to do it!
- Any piece of paper will do.
- Create a list of message IDs to use.
  - Use the 'M' suffix to indicate this is a Manual message and not conflict with Outpost's "P" (for packet) suffix.
- When you use one, cross it out.
- Example: given this list, your next Message ID is **X14-303M**.
- For packet messages sent or received, enter the Message ID in the next message and your ICS 309 Comm Log for packet messages.



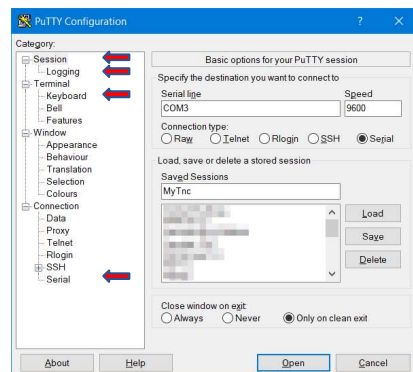
**NOTE:** There are other ways to keep track of your manual message IDs; the above is one method.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 26

26

### 5. Manual Operations – PuTTY

- Why PuTTY?
  - Good terminal emulator for manual packet work.
  - Includes a stand-alone (portable) program that is not dependent on any IT or Admin permissions to run it.
  - Good feature set that aligns with how we do manual packet.
  - Straight forward configuration.

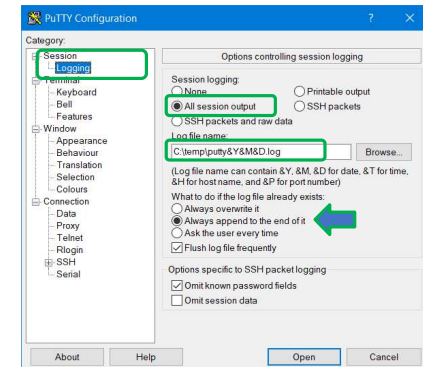


Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 27

27

### 5. Set up PuTTY Session Logging

- Next, click on the **Session > Logging** tab
- Set Session Logging to **All session output**
- Set up a **log file name**
- ... if the file exists: **Always append to the end**



#### Why do logging at all?

- During manual operations, it is easy to loose track of what is going on.
- Logging creates a history of your manual interactions and a reference if you ever need to go back and check if you got it all right.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 28

28



## 6. Packet USB Stick Suggestions or, could Manual Packet Ops really happen to me?

- Better to be safe than sorry... Build your USB packet memory stick now!
- Directories (suggested)
  - x:\Programs
    - Putty installer (<https://www.putty.org/>)
    - Putty standalone executables (<https://www.putty.org/> > Alternate Bin Files)
    - SCCo PackItForm Directory (C:\PackItForms\Outpost\SCCo)
    - SCCo Packet Installer (<https://www.scc-ares-races.org/data/packet/client-software.html>)
    - Office Libre Portable version (<https://www.libreoffice.org/download/portable-versions/>)
  - x:\SCC Notices
    - downloaded text version (SCCo Packet Check-In~Out v220324.txt, etc.)
    - Archive of the Outpost SCC Notices directory to reload if necessary
  - x:\TNC Init files
 

• Kantronics_KPC3.txt	• Kenwood_TM-D710A.txt
• Kantronics_KPC3-Plus.txt	• MFJ_1270C-1274C.txt
• Kenwood_TH-D72A.txt	• TAPR_TNC2.txt
  - x:\Docs
    - JNOS commands (<https://www.scc-ares-races.org/data/packet/jnos.html>)
    - TNC Manual
    - (Unofficial) Amateur Packet Radio Field Reference
  - x:\Messages & Logs



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 29

29

## What's the plan for 2023?

- Maintenance release planned
  - more Outpost and PackItForm enhancements; reported bug fixes
- Pop-up Packet Exercise
  - March 2023 (tentative)
- Packet class schedule
  - Packet Type IIIA 5-Aug-2023
  - Packet Type IIIB 7-Oct-2023
  - Packet Type II 4-Nov-2023

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved. 30

30

## Weekly Packet Practice

Steve Roth, KC6RSC  
Revised 3-Dec-2022

Copyright © 2022 Santa Clara County ARES®/RACES. All rights reserved. 31

31

## New Weekly Packet Practice Mechanism

- Introduced in August 2022
- Gives feedback within one hour, via return packet message
  - Also available at [scc-ares-races.org/pacpractice](https://www.scc-ares-races.org/pacpractice)
- Checks for more problems
  - Messages sent to wrong BBS
  - Messages not following Recommended Routing Cheat Sheet
  - Messages with incorrect "Practice CallSign, Name, City, Net Date"
- Form rotation includes new forms
  - OA Shelter Status
  - Allied Health Facility Status
  - RACES Mutual Aid Request
- Full history and details at [scc-ares-races.org/pacpractice](https://www.scc-ares-races.org/pacpractice)

Copyright © 2022 Santa Clara County ARES®/RACES. All rights reserved. 32

32



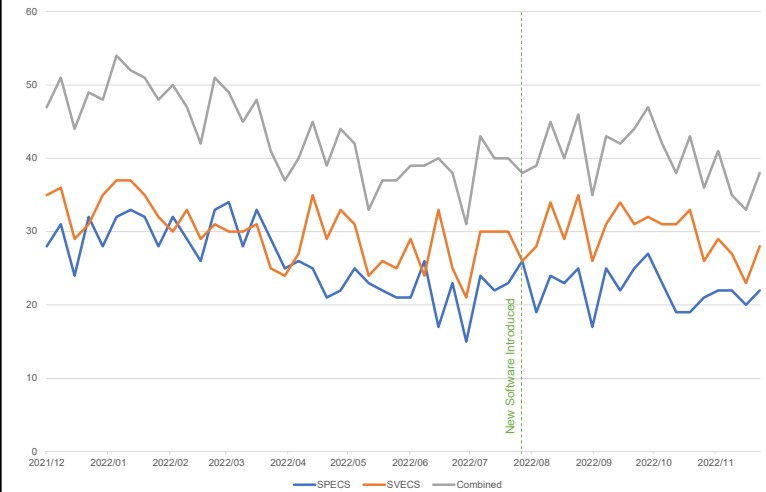
### Implementation

- Entirely new software
  - Source code at [github.com/rothskeller/packet](https://github.com/rothskeller/packet)
- Written in Go with minimal dependencies
  - Does not use Outpost or PackItForms
- Runs 24x7 on a hosted Linux server
  - Web site [scc-ares-races.org/pacpractice](https://scc-ares-races.org/pacpractice) always available
- Checks for new messages every hour
  - PKTMON and PKTTUE on all four BBSes
  - Checks more often during the hour before the end of the session
- Communicates with BBSes via TCP/IP with secure login
- Web site authentication delegated to [scc-ares-races.org](https://scc-ares-races.org)

Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved. 33

33

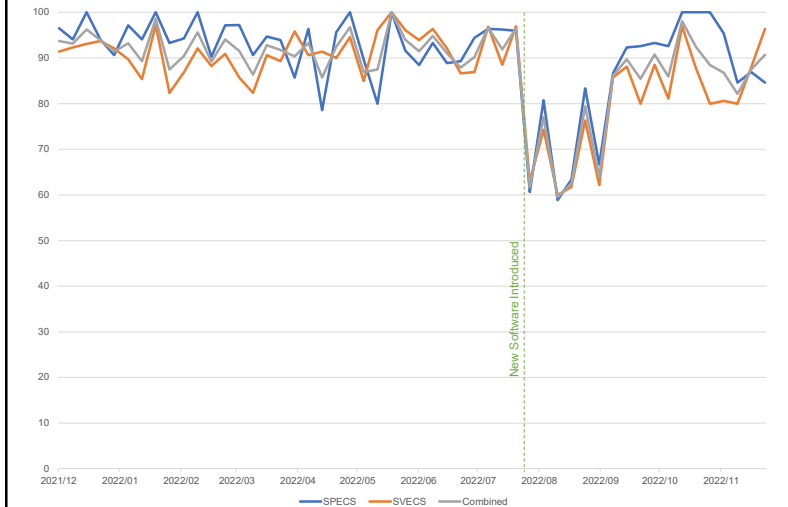
Weekly Packet Check-Ins  
(Unique Call Signs)



Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved. 34

34

Percentage of Correct Messages



Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved. 35

35

### Multi-Year Comparison

	2018	2019	2020	2021	2022
Total Messages	2116	2844	3138	3226	3200
% Correct	93.2%	93.7%	95.5%	96.6%	88.4%
Unique Calls	25.5	29	31	30	27.4

Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved. 36

36

### Packet NCOs and Voice Net Reporting

Starting this week, packet check-in counts are being looked up and reported by the SPECS and SVECS voice NCOs. We no longer have separate packet NCOs.

Thank you for longstanding, diligent service as packet NCOs:

- Dave Koberstein N9DK
- Max Lanfranconi W6BG
- Thomas Leibold KK6FPP
- Steve Roth KC6RSC
- Brian Tanner AG6GX

Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved.

37

37



### Monthly Packet Message Passing Year End Review



Santa Clara County ARES®/RACES/CRU

Last Updated: 01 Dec 2022

Author: Mark Laubach K6FJC

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

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

38

38

### Overview

- Starts 3<sup>rd</sup> Wednesday of each month at 09:00 until the 4<sup>th</sup> Wednesday at 17:00
  - Participants can proceed at their own pace
- Participants are assigned a tactical call number
  - XX is a range from "01" to "99"
  - Tactical callsign is XND042, message prefix is X42-nnn(P|M|R)
- Scenario varies: check point, post, shelter, clinic, etc.
- Specific assignments of participants to tactical call is private
  - Anonymous participation and recording
- URL download used for simulating being handed a message by your manager
- XSC notices and XND@XSC city notices exercised every month
- Exercise starts for each participant with a successful Check-In
- Exercise ends with sending the ICS-309 via email
- Xanadu EOC Outpost script is picky about subject lines

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

39

39

### 2022 Global numbers (approximate) as seen from Xanadu EOC Outpost ICS-309 for each event

Month	Packet Stations	Total Messages	Total Message minus Delivered	Avg Message per Station
January	38	1146	575	15.1
February	28	980	520	18.6
March	27	764	394	14.6
April	23	698	369	16.0
May	25	717	387	15.5
June	19	469	247	13.0
August	19	467	251	13.2
September	23	497	258	11.2
October	22	464	236	10.7
November	21	580	322	15.3
	24.5 average	6782 total	3559 total	

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

40

40

### Forms transmitted + received (approximate)

Month	ICS 213	EOC 213R R	RAC ES-MAR	Shelt Stat	csv	Plain text <sup>(1)</sup>	Allied Health Facilities Status
January	83	42	40			94	
February	116	35			30	72	
March	62	38			30	46	
April	23	56			50	24	
May	45	11			27	46	
June	43	18			17	16	
August	18		19	21		15	
September	20	40	19				20
October	41				20	29	
November	67	41	19		19	21	

<sup>1</sup> not including check-in, check-out, courtesy, etc.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

41

41

### Summary

- We are exercising the county BBSs each month
- We are rotating forms used
  - Note: short this year on Jurisdiction Status, Shelter Status, Allied Health
- Participants can sign up stating mode of operation
  - Primary: using their normal packet station
  - Alternate: field set-up different from Primary location
    - Could be kitchen table
  - Manual: run entire practice without using Outpost
    - Required demonstration for the P2 credential
- Monthly Packet Message Practice will continue in 2023
- Monthly practice [training page](#)
  - General event information and how-to's
  - Summary of past months: summary presentation and scorecard
- Credential update will require participation (after 6 months)

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

42

42

## Message Passing Updates

Tim Howard, KE6TIM  
Revised 02-December-2022

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

43

43

## New ICS-213 Message Form

- Updated in Jan. 2022
- Form header section now looks like other forms
- Only two Message Number fields
  - Origin
  - Destination
- Removed Severity Field
- Reformatted layout

The screenshot shows a 'MESSAGE FORM' with the following sections:

- Header:** Origin Msg #, Destination Msg #, Date, Time, Handling (Voice, Data, etc.), This Message Requests Your Exp., TAKE ACTION (Yes/No), REPLY (Yes/No).
- Location/Contact Info:** ICS Position (required), Location (required), Name (optional), Telephone # (optional).
- Message Content:** SUBJECT, REFERENCES, MESSAGE.
- Action:** ACTION TAKEN, USE SEPARATE MESSAGE FORM IF SENDING REPLY.
- Operator Use Only:** C.C., Management, Questions, RPTVMS, Logistics, Private, Operator Use Only, Reply, Send, Message, Operator Call Sign, Telephone, Dispatch Center, Operator Name, EOC Radio, FAX, Course, Date, Time, Other.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

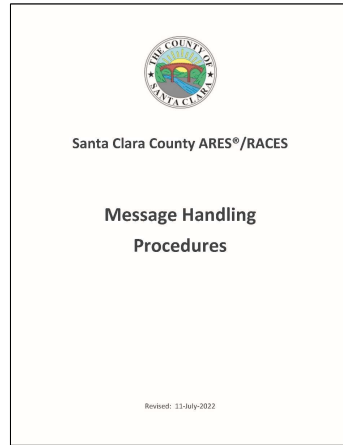
44

44

## Message Handling Procedures

Revised July 2022

- Unknown Symbol
- Newline
- Superscript/Subscript
- Figures (clarification)
- Long Addresses  
Internet, Packet, Email
- Signature Fields



Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

45

45

## Unknown character or symbol

- You are given this to send.

*Send 50 z today*

- If you can, get the message author to provide clarification. If you can't, then send the message.
- Inform the receiver that the message has some unknown characters or symbols before starting to send the message.
- When the unknown character/symbol is encountered simply say "unknown symbol" or "unknown character" as appropriate.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

46

46

## Unknown character or symbol

Example:

- **Written:** *Send 50 z today*
- **Spoken:** "send FIGURES fife zero <pause> UNKNOWN SYMBOL <pause> today"

The receiver draws an empty box on their message form where the unknown symbol would appear.

Send 50 □ today

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

47

47

## Unknown character or symbol

Example:

- **Written:** We can use AB§δ instead
- **Spoken:** "We can use MIXED GROUP alpha bravo UNKNOWN SYMBOL UNKNOWN SYMBOL <pause> instead"

The Receiver writes: We can use AB□□ instead

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

48

48

## Newline

Example:

- **Written:**  
Red wheels  
Blue bucket
- **Spoken:** “red wheels NEWLINE blue bucket”

The receiver writes:  
Red wheels  
Blue bucket

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

49

49

## SUBSCRIPT and SUPERScript

- Used to indicate the following character should be written a half-line lower (SUBSCRIPT) or higher (SUPERScript) than the rest of the text, such as subscripts and mathematical exponents
- Used with one character at a time.
- Does NOT remain in effect until the end of the group (not sticky).

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

50

50

## SUBSCRIPT and SUPERScript

Example:

- **Written:** White blood cell count is  $10^5$
- **Spoken:** “white blood cell count is FIGURES one zero SUPERScript five”

Example:

- **Written:** Model XS4<sub>63</sub>
- **Spoken:** “model MIXED GROUP x-ray sierra four SUBSCRIPT six SUBSCRIPT tree”

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

51

51

## Figures

- If anything, other than a numeral is present, it becomes a MIXED GROUP, MIXED GROUP FIGURE(S), or MIXED GROUP SYMBOL(S).
- These are figures: 5 123 34564321
- There are NOT figures:
  - 147.525 **Mixed Group Figures**
  - -26 **Mixed Group Symbol**
  - 5,357 **Mixed Group Figure**
  - \$61 **Mixed Group Symbol**
  - 408 555 1234 **Telephone Figures**

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

52

52

## Long Internet, Packet or Email Address

Ref: Page 27 of "Message Handling Procedures"

- Some long address may be sent in smaller parts
  - Allows for receiver to ask for fills sooner
  - Allows repeater to reset before it times outs
- Announce to the receiver that the address will be sent in multiple parts. Use the appropriate Proword followed by "in multiple parts". I.E.: "Internet Address in multiple parts".
- The message sender should determine when to break the long address (See page 27 for suggestions)

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

53

53

## Long Internet, Packet or Email Address

- The UPPERCASE/LOWERCASE prowords are sticky and apply for the entire address (group) including through the multiple parts.
- When sending the end of each part, say "END OF PART" and wait for the receiver's acknowledgement or request for fills.
- At the end of the last part, say "END OF GROUP" and wait for the receiver's acknowledgement or request for fills.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

54

54

Example:

**Written:** [www.scc-ares-races.org/operations/forms/SCCo-ARES-RACES\\_MM\\_Summary\\_v180705.pdf](http://www.scc-ares-races.org/operations/forms/SCCo-ARES-RACES_MM_Summary_v180705.pdf)

**Spoken:** "INTERNET ADDRESS IN MULTIPLE PARTS <pause> whiskey whiskey whiskey DOT sierra charlie charlie dash alpha romeo echo sierra DASH romeo alpha charlie echo sierra DOT oscar romeo golf SLASH LOWERCASE oscar papa echo romeo alpha tango india oscar november sierra SLASH foxtrot oscar romeo mike sierra SLASH <pause> END OF PART <wait for acknowledgement> UPPERCASE sierra charlie charlie LOWERCASE oscar DASH UPPERCASE alpha romeo echo sierra DASH romeo alpha charlie echo sierra UNDERSCORE mike mike UNDERSCORE sierra LOWERCASE uniform mike mike alpha romeo yankee UNDERSCORE victor FIGURES one eight zero seven zero fife DOT papa delta foxtrot <pause> END OF GROUP"

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

55

55

## Forms Containing Signature Fields

- On forms with signatures fields (213RR and RACES Mutual Aid Request) simply voice 'with signature' if a signature is present.
- The sender is not expected to determine what the signature reads. If someone wants to see who signed the form later, the original form will be part of the records that are turned in after the event.
- The message receiver will write "with signature" on the form in the signature field.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

56

56

## Recommended Form Routing Sheet

- Have several copies with you.
- Help message authors with Handling Order, To Location, and To ICS Position if they do not know it.

Form Type	Handling	To Location **	To ICS Position **
General EOC			
ICS-213 Message Form	Author defined	Author defined	Author defined
EOC-213RR Resource Request	If "Priority" (Field 11) is:	Then "Handling" is:	County EOC
	Now	Immediate (ASAP)	
	High (0-4 hrs)	Immediate (ASAP)	
	Medium (5-12 hrs)	Priority (<1 hr)	
	Low (12+ hrs)	Routine (<2 hrs)	Planning Section
OA Jurisdiction Status	Immediate (ASAP)	County EOC	Situation Analysis Unit Else: Planning Section
OA Shelter Status	Priority (<1 hr)	For city-managed: City EOC For county-managed: County EOC	Mass Care and Shelter Unit Else: Care and Shelter Branch Else: Operations Section

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

57

57

## Message Passing Is What We Do

- Get it right every time
- It takes experience and knowledge
- Experience come at drills and practice sessions
  - Watch the activity calendar and monthly actively announcement for opportunities
- Knowledge comes from training
  - Next Message Passing Class - January 28, 2023

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

58

58

## Any Questions?

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

59

59

## ARRL SET 2022 Countywide Drill 09/17/2022

Andreas Ott, K6OTT  
Revised 04-Dec-2022

Copyright © 2022 Santa Clara County ARES®/RACES. All rights reserved.

60

60



## ARRL SET points

- Total: 527 (similar to previous years)
- 1 agency (county) and 9 communities (participant's cities)
- All 38 stations on emergency power
- 38 participants, of these 8 "new" licensed since 2018
- 206 formal messages (36+24 on voice nets, 106 on packet)

Copyright © 2022 Santa Clara County ARES/RACES. All rights reserved.

61

61

## Credentialing Program Updates

Tim Howard, KE6TIM  
Revised 02-December-2022

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

62

62

## Program Updates

- *The "Credentialing Program Handbook"* was updated 11-November-2022.
- Changes based on clarifications and issues noted since the last update in January 2020.
- Observations at drills and public service events that were inconsistent with good communication practices.
- Effective for all future credential activities with some exceptions we will discuss.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

63

63

## Program Updates

- MAC and F3 require participation in an approved drill/exercise not conducted by their own agency/city (6-month temporary exception)
- P3 and P2 require participating in 2 Monthly Packet Practice sessions (6-month temporary exception)
- Type 1 added new knowledge requirements (DSW, SUVs, staffing, inter-county and inter-section traffic flow)

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

64

64

## Program Updates

- P2 and P1 requires a USB Flash Drive for archiving messages/logs
- S2 and S1 requires a 2<sup>nd</sup> HT to monitor a second frequency
- Credential approved activities must use standard county ICS forms (including 205, 211, 213, 214, and 309)

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

65

65

## Program Updates

- Equipment checks and Knowledge checks are only good for one year. This has always been the case, but it was never clear in the public documentation.
- Radio familiarity now requires:
  - Non-standard offset and CTCSS tone
  - Repeater output frequency only on simplex with CTCSS tone

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

66

66

## Credentials and Endorsements Earned

The screenshot shows the ARES/RACES website interface. On the left is a 'Training & Events Calendar' with a list of events from December to January. The main content area has several sections: 'QUICK LINKS', 'ALERTS' (with Frequency Lists), 'SERVICES' (with Overview, Emergency Management, and Agencies and Community), 'OPERATIONS' (with Activation Info, Contact Info, DSW, Forms & Signs, Frequency Lists, Go Kit, Mutual Aid, Nets, Programs, Credentialing Program, Hospital Net), 'DATA NETWORKING' (with Overview, Services, and Access), and 'CREDENTIALS' (with Earned Credentials, Details, and Training & Events). A red arrow points to the 'Earned Credentials' link under the Credentials section.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

67

67

## Credentials and Endorsements Earned in Santa Clara County As of 12/04/2022

### Number of Credentials Earned by Type

Credential	Field Operator	Net Control	Packet Operator	Shadow
Type I	4	6	0	5
Type II	15	11	12	8
Type III	39	28	30	16
Type IV	58			

### Number of Endorsements Earned

Endorsement	Earned
Mutual Aid Communicator (MAC)	37
County Fire Station Radio Operator (Pending)	0
County EOC Radio Operator	4
County EOC RACES Unit Leader (Pending)	0

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

68

68

## Moving Forward

- In January of 2020 the old MAC program was changed to the Credential Program and open to all.
- Then COVID hit and things ground to a halt.
- Things are moving again.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

69

69

## Moving Forward

### Credentials/Endorsements Earned by Year

2014 to 2019 – Average of 14 per year  
 2020 – 16 (8 – C4, 4 – MAC)  
 2021 – 45  
 2022 – 35

Over 2/3<sup>rd</sup>s of those signed up for today's class have at least one Credential.

Copyright © 2022 Santa Clara County ARES@RACES. All rights reserved.

70

70

## Moving Forward

- EOC Radio Room Endorsement
  - Pilot orientation class conducted in February 2022 with 7 people as a dry run
  - Scheduled for December 17 – next week
  - SCCo EOC Orientation class schedule
- EOC RACES Unit Leader Endorsement
  - Pilot class at end of 1<sup>st</sup> quarter 2023
  - Will be open to small group of those holding or nearing completion of EOC Radio Room Operator Endorsement

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

71

71

## Moving Forward

- County Fire Station Radio Operator Endorsement
  - Requires “*Auxiliary Communications Emergency Service (ACES) Fire Station Operations*” class.
  - County Fire put this class on hold during COVID until visitors are allowed back into the fire stations.
  - Discussions with County Fire now underway.

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

72

72

## Dispatching Resources

We have these communication jobs to fill

- Packet Operator at a small shelter
- Communicator for a Hospital
- Net Control Operator and scribe for a busy net

The person in charge has these 7 resources:

Bob Johnson, Sally Wren, Patrick Sommers, Betty Rothberg, Teng Wang, Aadeep Singh, Sal Cruz

Who do they select for each assignment?

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

73

73

## Become a Credentialed Operator

### 1. Resource Typing

- Available communications capabilities are defined by role and capability levels
- Requests for amateur radio resources can be clearly made using the resource types

### 2. Qualified Operators

- Served agencies know that the resource they receive has the needed capabilities
- Amateur radio operators know what capabilities are expected from them

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

74

74

## Become a Credentialed Operator

- The credentialing process identifies which operators have the necessary training, equipment, knowledge, experience and operational ability to perform the duties of a particular resource type.

**Make it your new years goal  
To earn a new Credential in 2023!**

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

75

75

## Any Questions?

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

76

76

## Training

Judy Halchin, KK6EWQ  
Revised 30-Nov-2022

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

77

77

## 2020-2022

- 2020 – some classes cancelled, Zoom, Hellyer Park
- 2021 – Zoom, SNY Public Safety, Sheriff’s Auditorium
- 2022 – Sheriff’s Auditorium, SNY Fire Station 5, Zoom, SNY Public Safety, CUP City Hall

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

78

78

## 2023

- Sunnyvale Public Safety – new classroom (no ID required)
- Sheriff’s Auditorium

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

79

79

## 2023 Activities

- Annual Drill – September 23
- Monthly Message Passing Practice is now the Monthly Training Session
  - Practice taking mike-mike reports
  - Prowords practice
  - Message Passing (January)
  - Let us know what you’d like to see

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

80

80

## Q&A

All Training Staff

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

81

81

## Thank You!

Please check your email and follow the instructions to complete and return the Course Evaluation.

If you have questions or feedback about this or other training activities, you can join our Training discussion group.

<https://scc-ares-races.groups.io/g/training>

This is a moderated group.

**See you at a training class or exercise next year!**

Copyright 2022 Santa Clara County ARES/RACES. All rights reserved.

82

82