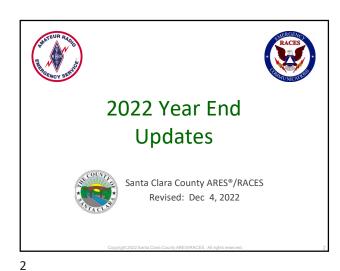
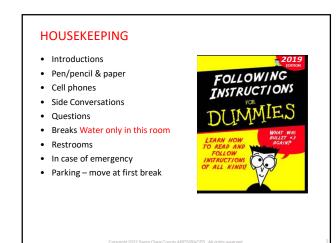
USE AND DISTRIBUTION NOTICE

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- 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





Agenda

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

4

Packet Network Update 2022 Year End Review, 2023 Plans

> Jim Oberhofer, KN6PE Revised 3 December 2022

5

Packet Training

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

7

2022 Packet Classes

Year over Year participation

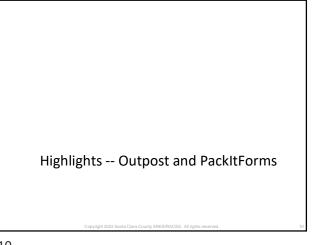
.7 Z Rm Cla	2018 2658m	2019	2020	2021	2022
Rm Cla	accRm	Class	-	-	
	0331/111	ClassRm	Zoom	Zoom	ClassRm
C	318	288	315	342	153
C	116	96	105	114	51
	46	33	42	44	19
	35	29	29	32	19
	25	24	34	38	13
)	0 116 46 35	116 96 46 33 35 29	116 96 105 46 33 42 35 29 29	0 116 96 105 114 46 33 42 44 35 29 29 32

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.





What's in the box?



- SCCo Integrated Packet Installer <u>161G</u>
 - 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

11

SCCo Installer v161G September 2022

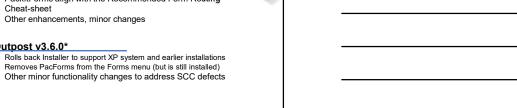
PackItForm 3.9*

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

Outpost v3.6.0*

*See the release notes for details



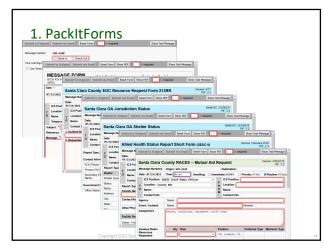


2

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

13

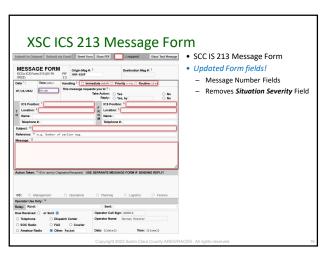


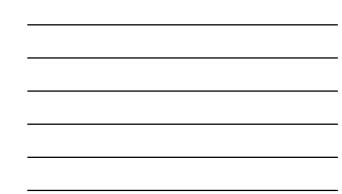
14

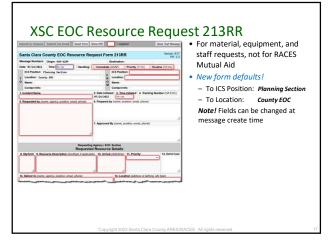
County Use of PackItForms

- Santa Clara County PackItForms contains these public forms
 - XSC Check-In/Out Message Form
 XSC ICS-213 Message Form adapted for Santa Clara County to
 - XSC FOC 213 Message Form adapted for Santa Clara County to transmit messages.
 XSC FOC 213RR Resource Request Form – Requests specific res
 - XSC EOC-213RR Resource Request Form Requests specific resources needed to support an emergency.
 XSC OA Jurisdiction Status Form – Reports jurisdiction emergency
 - situation status to county OEM.
 - XSC OA Shelter Status Form Reports information and status on shelters opened in the cities to county OEM.
 - XSC Allied Health Facility Status Reports information & status of private Skilled Nursing facilities to SCC Public Health Department.
 - XSCRACES 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





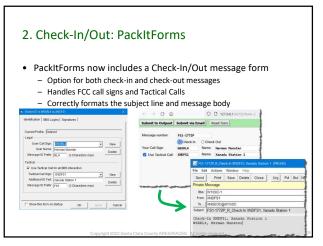


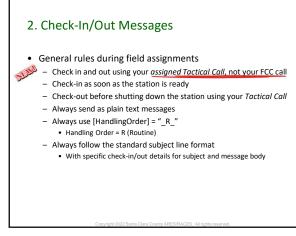


17

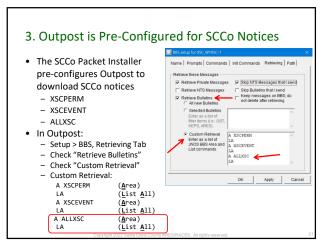
S Position	To Location
ing Section	County EOC
ion analysis Unit	County EOC
Care and Shelter	Unit
Unit	MHJOC
S Chief Radio Of	fficer County EOC
n Routing Chea ckItForms ime ended Form Rou	t Sheet Iting Cheat Sheet



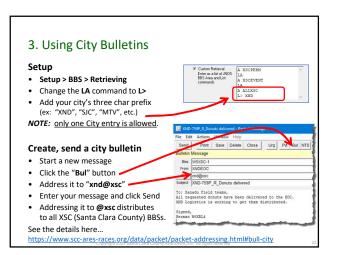


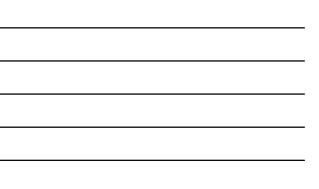


20









3. SCCo Notice Areas

- SCCo ARES/RACES has four special notice categories:
 - xscperm
 - Used for notices that do not expireexamples: standard county procedures
 - xscevent
 - Notices posted here automatically expire after <u>8 days</u>
 - examples: Drills, public service events, incidents, other activations
 - xsctest
 - 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

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4. More message suffix characters

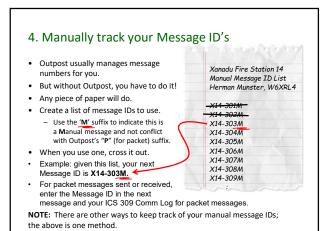
- For this message... "XND-200P_R_Event Instructions", the standard Message ID is:
 - 3-character message prefix for the originator, a hyphen, followed by a message number, followed by...
 - Outpost adds a P suffix if it generates the message number
- You might also see:
 - XND-200R_R_Event Instructions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



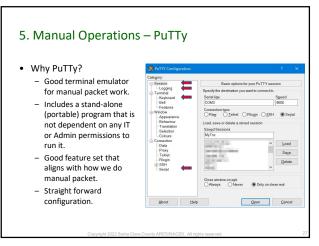


- Resending both Plain Text and PackItForm Messages
- NOTE! If you select Resend, Same Msg ID, then manually change the Message ID -###<u>P</u> to -###<u>R</u> for <u>Resend</u>. This ensures no duplicate message confusion.

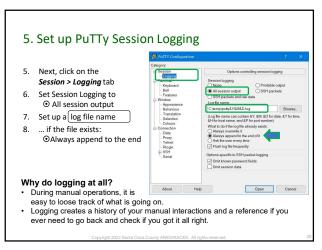
Print Reply	Reply	Close
Private Message Bbs: W1XSC Fram: KN6PE	Reply to All Forward Set to Unread	
To: KN6PE	Resend	Same Message ID
Subject 6PE-17	Add Address	New Message ID
This is a te	Change Route Copy to Ics213mm format	18
	Open in former	

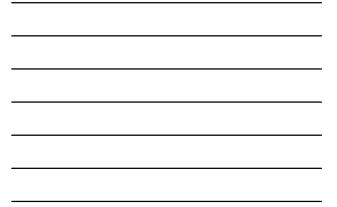


26



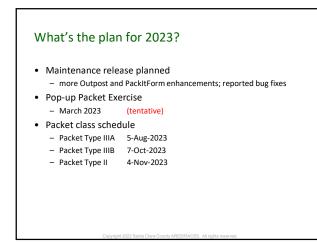








29



Weekly Packet Practice

Steve Roth, KC6RSC Revised 3-Dec-2022

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New Weekly Packet Practice Mechanism

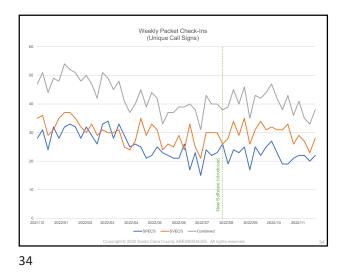
- Introduced in August 2022
- Gives feedback within one hour, via return packet message
 Also available at <u>scc-ares-races.org/pacpractice</u>
- Checks for more problems
 - Messages sent to wrong BBS
 - Messages not following Recommended Routing Cheat Sheet
 - Messages with incorrect "Practice CallSign, 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

32

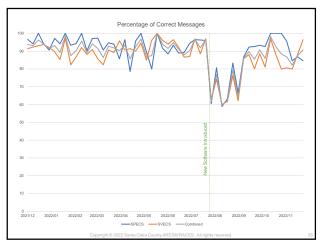
Implementation

- Entirely new software
 Source code at github co
- Source code at <u>github.com/rothskeller/packet</u>
 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 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









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	Total Messages 2116 2844 3138 3226 3200 % Correct 93.2% 93.7% 95.5% 96.6% 88.4%	Mu	lti-Yea	ar Cor	npari	son	
% Correct 93.2% 93.7% 95.5% 96.6% 88.4%	% Correct 93.2% 93.7% 95.5% 96.6% 88.4%		2018	2019	2020	2021	2022
		Total Messages	2116	2844	3138	3226	3200
Unique Calls 25.5 29 31 30 27.4	Unique Calls 25.5 29 31 30 27.4	% Correct	93.2%	93.7%	95.5%	96.6%	88.4%
		Unique Calls	25.5	29	31	30	27.4



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

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Overview

- Starts 3rd Wednesday of each month at 09:00 until the 4th 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 recordingURL 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
- Exercise erios with sending the ICS-S09 via erial
- Xanadu EOC Outpost script is picky about subject lines

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	

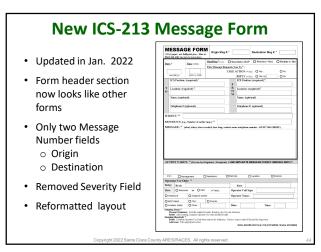
	ICS 213	EOC 213R R	RAC ES- MAR	Shelt Stat	csv	Plain text ^[1]	Allied Health Facilities Status
January	83	42	40			94	
February	116	35			30	72	
March	62	38			30	46	
April	23	56			50	24	
May	45	11			27	46	
June	43	18			17	16	
August	18		19	21		15	
September	20	40	19				20
October	41				20	29	
November	67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

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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)





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Unknown character or symbol

• You are given this to send.

Send 50 <u>z</u> 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.

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Unknown character or symbol

Example:

- Written: Send 50 g 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

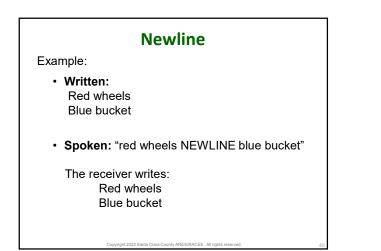
47

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 $AB \square \square$ instead



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).

50

SUBSCRIPT and SUPERSCRIPT

Example:

- Written: White blood cell count is 10⁵
- **Spoken:** "white blood cell count is FIGURES one zero SUPERSCRIPT fife"

Example:

- Written: Model XS4₆₃
- **Spoken**: "model MIXED GROUP x-ray sierra four SUBSCRIPT six SUBSCRIPT tree"



	Figures
	han a numeral is present, it GROUP, MIXED GROUP FIGURE(S), SYMBOL(S).
• These are figures:	5 123 34564321
• There are NOT figu	ires:
 147.525 -26 5,357 \$61 408 555 1234 	Mixed Group Figures Mixed Group Symbol Mixed Group Figure Mixed Group Symbol Telephone Figures
Copyright 2022 S	anta Clara County ARES/RACES. All rights reserved. 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
- \circ $\,$ 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)

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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.

Example:

Written: www.scc-ares-races.org/operations/forms/SCCo-ARES-RACES_MM_Summary_v180705.pdf

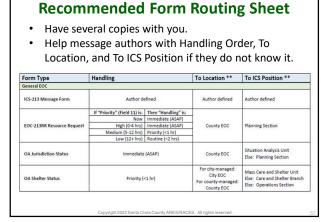
Spoken: "INTERNET ADDRESS IN MULTIPLE PARTS <pause> whiskey whiskey DOT sierra charlie charlie dash alpha romeo echo sierra DASH romeo alpha charlie echo sierra DOT oscar romeo golf SLASH LOWERCASE oscar papa echo romeo alpha tango india oscar november sierra SLASH foxtrot oscar romeo mike sierra SLASH <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"

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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 with write "with signature" on the form in the signature field.

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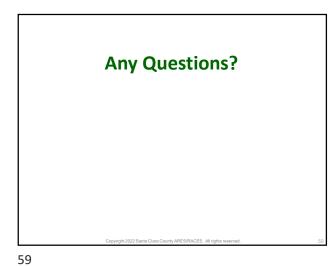
Message Passing Is What We Do

- 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

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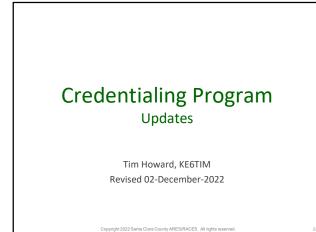
ARRL SET 2022 Countywide Drill 09/17/2022 Andreas Ott, K60TT Revised 04-Dec-2022

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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)

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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.

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)

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Program Updates

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

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





Credential	Field Operator	Net Control	Packet Operato	Shado
Type I	4	6	0	5
Type II	15	11	12	8
Type III	39	28	30	16
	55	20		
Type IV	orsements E	58	8	
Type IV		58 arned	Earned	
Type IV	lorsements E	58 arned		
Type IV er of Enc	lorsements E Endorseme	arned	Earned 37	
Type IV er of Enc Muti County Fir	lorsements E Endorseme ual Aid Communi	arned ent Deperator (Pen	Earned 37	

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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.

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^{rds} of those signed up for today's class have at least one Credential.

70

Moving Forward

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

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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.



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?

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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

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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!



Judy Halchin, KK6EWQ Revised 30-Nov-2022

Training

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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

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

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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

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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. <u>https://scc-ares-races.groups.io/g/training</u> This is a moderated group.

See you at a training class or exercise next year!