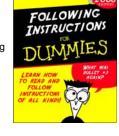


Housekeeping

- Pen/pencil & paper
- Cell phones & pagers
- Side conversations
- Avoid spurious transmissions, hidden transmitters, and jamming the instructor....

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

- Questions
- Breaks
- Restrooms
- In case of emergency



Agenda

- Review Field Ops
- Activation, process, forms, and arrival and departure process.
- Message Handling
- Logging
- Packet
 - Web pages, network structure, network features, client software features, weekly packet check-in process.
- MAC Program
 - Typical Assignments, entrance requirements, tracking and completing the process, earning a qualification, tracking your status, new assignment process, and more.

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

FIELD OPERATIONS

- Preparation
- Assignment and Activation
- Arriving on Scene
- Demobilization
- Message Handling Techniques

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

 Preparation

 • Do NOT self-activate!!!

 • Don't go anywhere, don't do anything except prepare

 • Net Control may or may not make an immediate assignment

 • It may take time for incident command to determine what resources are needed and where they need to be deployed

 • Be patient; pay attention; monitor closely; respond promptly

 • If you are unable to monitor; inform Net Control that you need to leave the net and provide an alternative contact method

 • If not immediately activated, use the time wisely to prepare

- Continue to monitor closely; don't make the whole net wait on you!
- Check your go-kit, including batteries, food, water, etc.
- Check your personal situation: home, family
- Get yourself ready to leave immediately
- Then, go about your normal business, but continue to monitor
 When called, answer promptly!

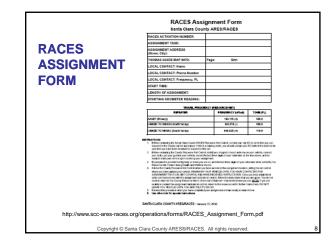
Copyright © Santa Clara County ARES®/RACES. All rights reserved

Assignment and Activation

- Net Control will call you at some point and offer an assignment
 Applies to both city and county nets
- If you accept the assignment, you will be activated You don't have to accept any assignment if you don't feel safe You shouldn't accept an assignment until you are immediately ready to leave
- Before leaving home, notify Net Control that you are ready to roll Report street location and last three digits of odometer
- You will be given travel and reporting information
- Write it down! Often includes important travel restrictions While en route, check-in every 15-20 min (or as directed by Net
 - Control)

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

- Control)
 Report your street location and last three digits of odometer
 e.g.*..location is Highway 101, odometer is 456, this is KE6AGJ*
 Don't wait for Net Control to call you
 Net control may be busy with tasks that you may not hear on the net
 Don't make Net Control ask you for the information
 You know what's needed (street and odometer) so don't slow down the whole net



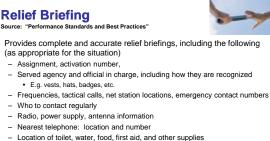
Arriving on Scene



Assignment

- When you arrive at your destination, STAY in your vehicle and do the following:
- Tell the Travel Net you have arrived and you are checking out. Make contact with the Event Net control, announce that you have arrived and are checking IN. They should give you instructions as to where to report next (maybe Staging, maybe another location, etc.)
- If you CANNOT make contact with Event Net Control, return to the travel Resource Net Control and ask for further instructions.
- Do all this FROM YOUR VEHICLE using the more powerful mobile radio. Do NOT leave your car and walk to the event they may not want you there and this violates the County's standards of operation.
- At the Event, check in where instructed
- ICS 211A Communications Check-In form (ICS 211A-SCCo)
- Follow the instructions of the local team
 Be <u>patient</u>; you may be asked to wait until others arrive
- Be courteous; you are there to help, not run the show Remain in constant contact with the local tactical net
- If you need to go off the air, inform Net control If we lose track of you, we must spend time and resources to find you; you have become part of the problem

Copyright © Santa Clara County ARES®/RACES. All right



- Summary of previous operational period
- Current status of people, resources, incident (as it relates to communications)
- Pending issues for next operational period (if any)
- Introduces replacement to the rest of the team

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

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

Demobilization

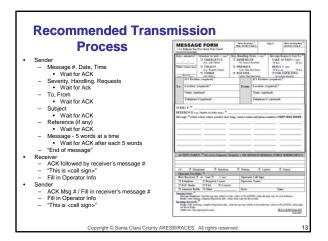


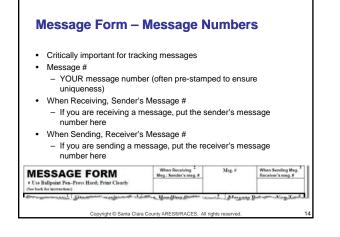
- At the Event, upon relief or at end of assignment, sign OUT where instructed
- ICS 211A Communications Check-In form (ICS 211A-SCCo)
- Go to your vehicle and do the following from your vehicle using the more powerful mobile radio.
 - First check OUT with the Event Net control.
 - Then check IN on travel Resource Net (be it City or County). Inform
- them you are proceeding to home
- · Give street location and last three digits of odometer
- Check-in every 15-20 minutes on the way home Give street location ("Highway 101") and last three digits of odometer
- Check-out when you arrive home
- Give location ("arrived at home") and state you are checking out
- You are responsible for maintaining contact with net control at all times

ta Clara County ARES®/RACES. All r

MESSAGE HANDLING

- Recommended Process
- Exercise





Message Handling Prowords

- WORD AFTER "Say again word after..."
- WORD BEFORE "Say again word before ... "
- BETWEEN "Say again between... and ... "
- ALL AFTER
 - "Say again all after ... "
- ALL BEFORE "Say again all before ... " "Alfa, Bravo..."
- I SPELL
- FIGURES "Figures Wun, ZEE-row, NINE-er" (= 109)

ta Clara County ARES®/RACES. All right

Pronouncing Numerals

- 0 zero (ZEE-row) 5 - five (FY-ive)
 - 1 one (WUN)
- 6 six (Sicks) 7 - seven (SEV-vin)
- 2 two (TOOO)
- 3 three (THUH-ree) 8 eight (Ate)
- 4 four (FOH-wer)
- 9 nine (NINE-er)
- Zero is always "zero"; never "oh"
- · Decimal point is "decimal" or "point": never "dot"
- Larger numbers are spoken as a string of single digits:600 = "six zero zero'
- Often preceded by the word "figures"
 - "Please copy 109" → "Please copy figures one zero niner"
 - "Requesting 16 blankets" → "Requesting figures one six blankets"

right © Santa Clara County ARES®/RACES. All rights re

Sending to More Than One Station

- Announce message
- "All Stations, All Stations, Stand by to copy one routine message"
- Pick a pacing station
- "Mountain View, will you be my pacing station?" "Mountain View acknowledges"
- Send message as normal
- Pacing station provides acknowledgements during message transfer
- Ask for acknowledgements from other stations
 - "I will now poll all stations for acknowledgements. When I call you,
 - respond with your message number or request a fill."
 - "Los Altos" .
 - Gives stations an opportunity to ask for "fills" or repeats
 - Confirms which stations received the message

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

Example Message

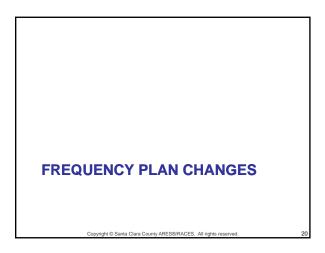
- · Everyone will need a 213 Message Form
- · I will send a message to all stations using a pacing station
- · Everyone will copy the message
- After the pacing station acknowledges, you can ask for fills

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

· We'll compare at the end

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

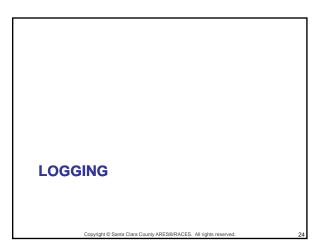


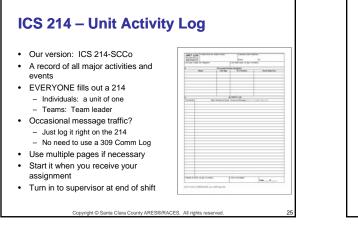


			G	ILROY									
Operational Are	a Chann	el Name	Resour	ce Name	R/S	Freq	uency	OS	PL	Note	s Revi	ewed	
Gilroy	Tactica	il-1	Simplex		S	14	47.480				Nov	-2010	
Gilroy	Tactica	1-2	Simplex		s	14	46.445				Nov	-2010	
Gilroy	Tactica	-CERT	Simplex		R	14	46.595				Jan	-2010	
Gilroy	Packet	-2M	Simplex		S	14	14.910				Jan	-2010	
Gilroy	Packet	-440	Simplex		S	43	33.530				Jan	-2010	
				MORGAN	HIL	L							
Operational	Area Ch	annel Name	Re	source N	ame	R/S	Frequ	ency	OS	PL	Notes	Revi	ewed
Morgan Hill	Ta	ctical-1	Sin	nplex		S	14	6.490				Nov	-2010
Morgan Hill	Ta	ctical-2	Sin	nplex		S	14	7.540				Nov	2010
Morgan Hill	Ta	ctical-CERT	Sin	nplex		S	14	6.550				Nov	2010
Morgan Hill	Pa	cket 2M	Sin	nplex		S	14	4.910				J	an-10
				SAN	TA C	LAR	A						
Operati	onal Area	a Channel Na	me	Resou	rce I	lame	R/S F	requ	iency	OS	PL	Notes	Reviewed
Santa C	ara	Tactical		Simple	ĸ		S	14	7.510				Jul-08
Santa C	ara	Tactical Alt 1		Simple	ĸ		S	14	7.465				Nov-2010
Santa C	ara	Tactical Alt 2		Simple	ĸ		S	14	5.555				Jul-08
Santa C	ara	ATV Broadca	ast	ATV			S	43	4.000				Jul-08
Santa C	ara	Packet 220		Simple	ĸ		S	22	3.660				Jul-08

<u> </u>		01			ASA-AMES	D IO	-	0.0			D .	
	tional Area				urce Name			-	PL	Notes	Revie	
	741100	Tactica		Simpl		S		7.420				2010
NASA		Tactica		Simpl		S		6.445				2010
	-Ames	Tactica		Simpl		S		7.585		J		2008
NASA		Event '		Simpl	ex	S		6.505				2010
NASA	-Ames	Event 2	2	Simpl	ex	S	14	6.490			Nov-	2010
NASA	-Ames	Comm	and	NA6N	٨F	R	14	5.250 -	123.0		Jul-	2008
NASA	Ames	Packet	220, Primary	Simpl	ex	S	22	3.660			Jul-	2008
NASA	-Ames	Packet	2M, Secondary	Simpl	ex	S	14	4.910			Jul-	2008
					SARA	TOG/	\					
	Operationa	al Area	Channel Name		Resource	Nam	R/S	Frequenc	y OS	PL	Notes	Reviewed
	Saratoga	_	Command		K6SA		R	146.65	5 -	114.8		Jul-08
	Saratoga		Tactical Alt		Simplex		S	146.50	5			Jul-08
	Saratoga		Tactical Alt 2		Simplex		S	146.59	5			Nov-2010
	Saratoga		Tactical HF		USB		s	28.40	0			Jul-08
	Saratoga		Packet 220		Simplex		S	223.66	0	-		Jul-08

	1	STANFORD U			_			
Operational Area		Resource Name					Notes	Reviewed
Stanford U	Primary	N6BDE	R	440.200	+	123.0		Jul-08
Stanford U	Tactical-1	Simplex	S	146.490		123.0		Jul-08
Stanford U	Tactical-2	Simplex	S	146.550		123.0		Nov-2010
Stanford U	Tactical	W6YX	R	1282.500	-	88.5	0	Jul-08
Stanford U	Tactical	WA6ITV	R	1292.550	-	88.5	Ρ	Jul-08
Stanford U	Packet tcp/ip 1200	W6YX-9	s	145.750				Jul-08
Stanford U	Packet tcp/ip 9600	W6YX-10		433.430				Jul-08
Stanford U	Packet 220	Simplex	S	223.660				Jul-08
	Packet tcp/ip 9600	W6YX-10	s	433.430				J

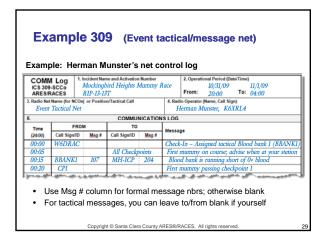


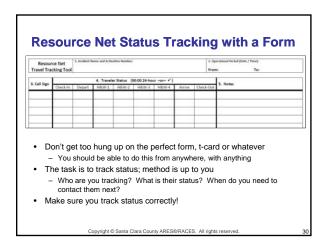


UNIT LC ICS 214-SC ARES/RAC	Co Mockingbird Heights Mummy ES RIP-13-13T	From: 20:00	1/09 10/31/09 0 To: 24:00
Unit Name / Tac Checkpoi		Herman Munster,	
k.	Personnel Ros		
	Name Call Sign	ICS Position	Home Base/City
-			
i S	A	CTIVITY LOG	
Time (24:00)	Major Activities & Events /	Occasional Messages (From / 1	Direct get / Neg Text)
20:00	Received assignment; leaving ho		
20:30	Arrive at Incident Command Po.	st - Gateman, Goodbu	ry & Graves funeral home
20:30	Assigned to Checkpoint 1		
20:35	Arrived at Checkpoint 1		and annual and an all and

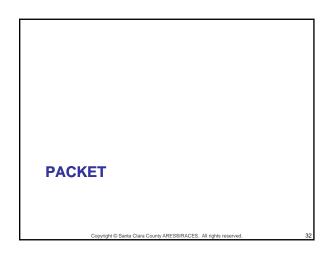
oopyngn @ ound oland o	Convright @ Santa	Clara County ARES®/RACES.	All rights reserved
	Copyright @ Santa	Ciara County ARESS/RACES.	All lights reserved.

COMM ICS 305	-SCCo Ma	dent Name and Activation ockingbird Heights J 'P-13-13T		Race	2. Operational Period (Date/Time) 10/31/09 11/1/09 From: 20:00 To: 04:00
3. Radio Net		r Position/Tactical Call			o Operator (Name, Call Sign) folf Man, W6WOOF
5.		COMMU	NICATION	IS LOG	
Time	FROM	то		Messac	
(24:00)	Call Sign/ID	Msg # Call Sign/ID	Msg #	messaw	
23:00	W6XRL4				ng home – 1313 Mockingbird Lane ODO 123
23:15		W6XRL4		H&W	7 - Highway 13 – ODO 141
23:30	W6XRL4			Arrive	d ICP ODO 150; Check-Out





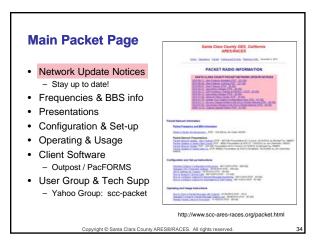
Travel Trac	e Net king Tool		om Exerci	rion Namber: SC	XSC-10-	-01A			erational Period (Date / Time) 3/5/10 06:00 Te: 3/5/10 07:00
L Call Sign			4. Travele	er Status (0	0:00 24-hoi	e -or- 1)			5. Notes
	Check-In	Depart	HSW-1	H&W-2	H&W-3	HSW-4	Arrive	Check Out	a. monter
N6JRC K6ESH	06:01	06:05	06:20	06:35	06:50	_	0674	-	
K6FSH KF6ZSO		4	06:21				06:14	06:36	Requested to leave early
KF0ZSQ K6FIC	06:07	06:32	06:21					00:30	Requested to leave early
KD6SOI	06:15	1	06:30	06:45			06:49	1	-
• \	Who	has a is sti	s nov arrive II on	ed at the n	the c	lestir	natio	n?	

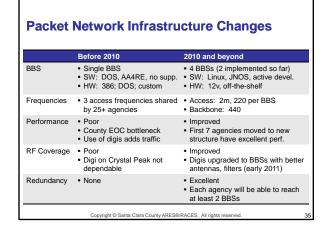


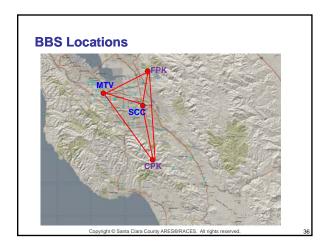
Disclaimer

- Just about everything we do with packet in the county has changed during 2010
- Functionality and reliability have been improved
- That means there is much more to learn
- Even more improvements are coming
- This section can only make you aware of the changes; it cannot replace 6+ hours of training plus practice
- Packet users are strongly advised to keep up with the regularly scheduled packet classes

ht © Santa Clara County ARES®/RACES. All rights reserve







BBS Assignments

- Each city/agency is assigned a primary BBS

 City/agency EOC and all other users within that
 - city/agency should use that BBS
 - Example:
 - MTV is primary for: Los Altos, Los Altos Hills, Mountain View, NASA/Ames, Palo Alto, Palo Alto Red Cross, Stanford
 - Any sites (EOCs, fire stations, parks, shelters, etc.) or individuals in those cities use the MTV BBS as their primary
- · Assignments based on RF propagation study

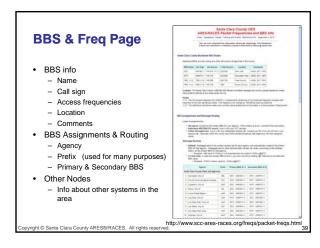
Copyright © Santa Clara County ARES®/RACES. All rights reser

Backup Connectivity

- · Each agency also has a backup BBS
- Normal operations:
 - Each agency connects to their primary BBS
- If a particular BBS fails:
 - Agencies on failed BBS connect to their backup BBS
 - Agencies are evenly distributed across backup BBSs
 Ex: if MTV fails, there will be three other BBSs. So, approximately 1/3 would connect to each of the other BBSs.

Note: Until Crystal Peak and/or Frazier Peak is deployed, some agencies can only reach the primary.

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



Addressing a Message To Send to: Format Example Note Self <call sign> -or- <call-sign>@<bbs-name> N6MEF User on same BBS <call sign> -or- <call-sign>@<bbs-name> N6JRC KA3L@SCC User on different BBS <call-sign>@<bbs-name> 1 Agency on Pri BBS <tactical-call> XSCEOC 2 Agency on BkUp BBS <tactical-call>@<backup-bbs-name> XSCEOC@MTV N6JRC;KA3L@SCC 3 Multiple addresses <address>;<address> Notes: 1) BBS names are listed on the packet frequency page. Individuals are requested to use the same BBS that is assigned to their city/agency 2) City/county tactical calls are auto-routed to their primary BBS ...@<bbs-name> is o.k. but not required) 3) Outpost uses the BBS command "SC" to "cc" the additional addressees oyright © Santa Clara County ARES®/RACES. All rights re

Agency-specific Tactical Calls

- · Agencies can request tactical calls for packet
 - As many as you need; must start with agency tactical prefix
 Example usage: packet operators deployed to shelter, school, ...
 - Instructions: http://www.scc-ares-races.org/packet.html
 - "How to Request Tactical Calls"
- Tactical calls also added for Coastal Region and all surrounding counties
- · Updates occur approximately once per quarter
- Once added to BBSs:
 - Packet users can log in with city tactical call signs
 - Messages automatically routed to agency's primary BBS
 - Example: Messages to LOSxxx routed to LOSxxx@MTV
 Auto-routing can be overridden by specifying desired BBS (@bbsname)

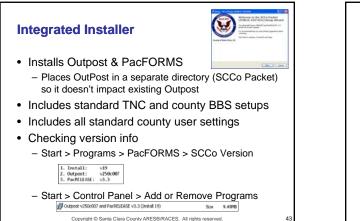
Copyright © Santa Clara County ARES®/RACES. All rights reserved.

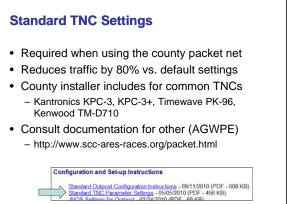
Packet Comms Outside the County

- · Tactical calls created for:
 - OES Coastal Region (located in Oakland)
 - Surrounding counties: Alameda, Contra Costa, Marin, Monterey, San Benito, San Francisco, San Mateo, Santa Cruz
- Many can reach MTV or SCC
- Crystal Peak enhancements should fill in the remaining gaps

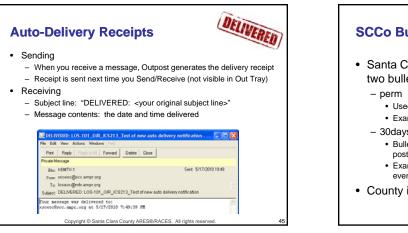
Copyright © Santa Clara County ARES®/RACES. All rights reserved

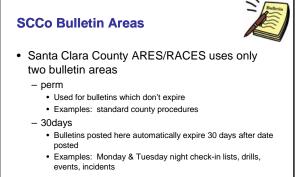
Copyright © Santa Clara County ARES®/RACES. All rights reserved.





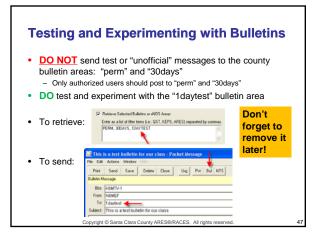
Copyright © Santa Clara County ARES®/RACES. All rights reserve

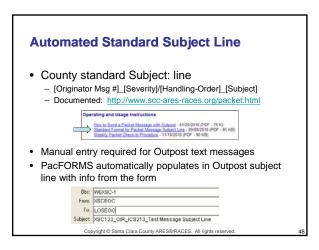




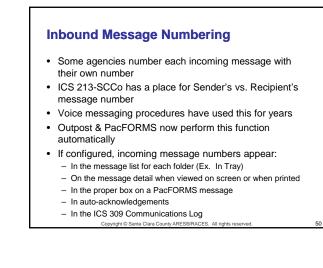
• County installer enables both bulletin areas

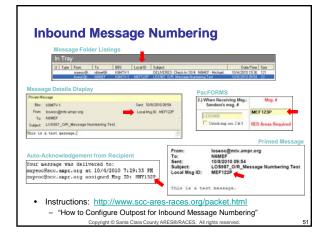
Copyright © Santa Clara County ARES®/RACES. All rights reserved.

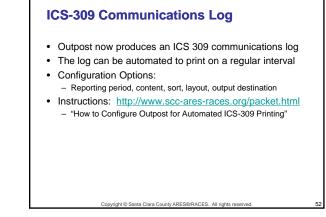


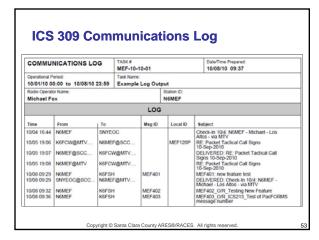


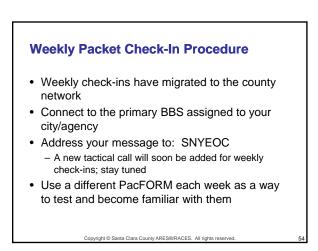
EOC I	MESSAGE FORM	21 Ultan Receiving Mag. Senders's mag. 8	No. P	3.) When Sanding Hag.: Receiving imag. 4
(The form works or	A SCALLE Fund 312 (Ver. 2.2.3) - PecRELEASE 3.2 By Rel Neuroscience, KR2232 RE Duband/TalDread for Automatic ASCI test serve) underscaleg testine. Oak Preve.	1	NET Acres Required	
te dae bill 2010 (12/64/2010 34/15ec (2rh dee) 5427 3001 is 2400 2000 Fol + (2+12+1400 M	Participation of Like Transf C State (Transf) Ang. Property Transf) Distances	Ing Reading Inter Salar Sec C Salarian C	Killinge Agent Tari Tari afflitt Onton F Va. F. N. BERT Character F Va.N. Frankt Frankt Status agent	C 14
tics Requ	est			
TO LOGISTICS		- term in ACD are record -	n Janaling Mag.	
	Sampara's Wag No.	C Union real real for \$1.5	saturing Mag. No.	-
B	Situation Security (Select One) 2.) Situation Security (Select One) 7.) Situation (Security Chevel) 7. Property Threat) 7. P	C Unice reg via 4(4.5)		
ican – Fla) Neuenias Senerity (Select Ose) E.) ME EMERGENCY (e.g., Lith Threat) C E URGENT (e.g., Property Threat) C P OTHER (AL Others) C B	Dentering van 6,010 Blanding Order (Select One) DEDIATE (As Soon as Peneltic RORITY (Less Than One Beat)	T.) Menage Requests RIPLY (Cleck on	e)
) Neuenias Senerity (Select Ose) E.) ME EMERGENCY (e.g., Lith Threat) C E URGENT (e.g., Property Threat) C P OTHER (AL Others) C B	Dentering van 6,010 Blanding Order (Select One) DEDIATE (As Soon as Peneltic RORITY (Less Than One Beat)	T.) Message Requests REPLY (Check on	e)

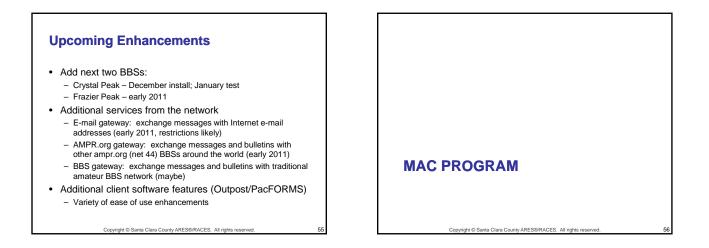












What is a Mutual Aid Communicator?

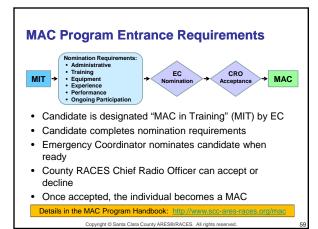
- Amateur radio operator (any license class)
- Willing to be deployed outside their own city
 - Typical shift is 8 hrs; be prepared for 12 hrs
- Meets basic/minimum requirements
 - Administrative
 - Training
 - Equipment
 - Experience
 - PerformanceOngoing Participation
- Nominated by EC and approved by CRO
 - Copyright © Santa Clara County ARES®/RACES. All rights

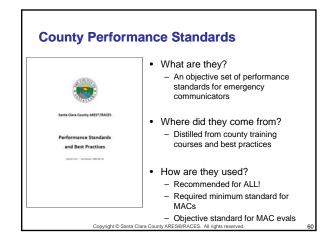
Typical MAC Assignments

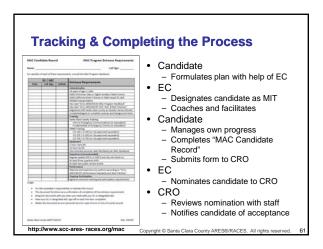
- Field Communicator
 - Field checkpoints, CERT team communicator, damage surveys, crowd observation and information assistance, shelters, ...
- Net Control Operator

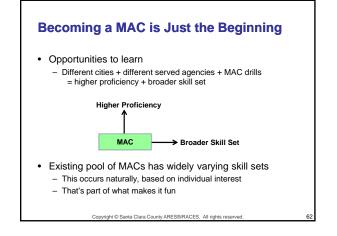
 County EOC, city EOC, tactical nets, staging area nets, ...
- Packet Operator
- County EOC, city EOC, shelter, staging area, ...
- Shadow Communicator
 - Public event staff, city or county staff, hospital staff, ...
- HF Operator (TBD)
 - Pass traffic out of the county, remote locations, ...

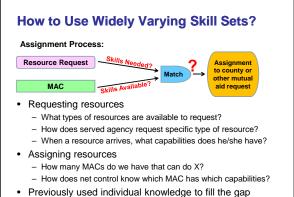
Copyright © Santa Clara County ARES®/RACES. All rights reserved.

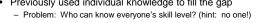


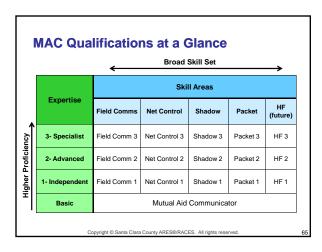


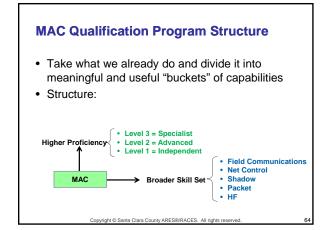


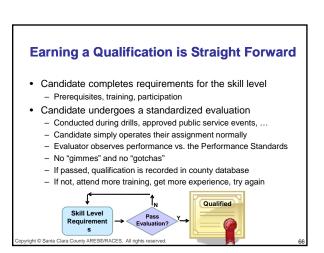


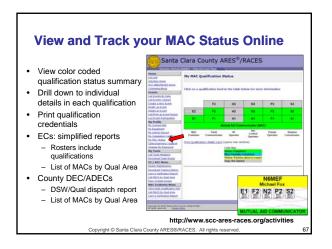


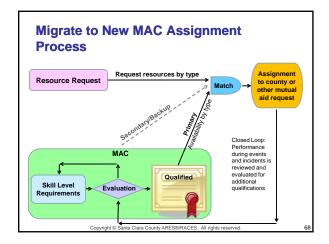












More Info in the MAC Program Handbook

- Table of Contents:
- Performance Standards
- How to Become a MACRoles and Responsibilities
- Resource Assignment & Typing
- Advanced Qualifications
- Evaluations
- Recognition
- Advanced Qualification Definitions
- MAC Response Teams
- ICS and NIMS
- Records Management
- Program Management

yright © Santa Clara County ARES®/RACES. All rights



http://www.scc-ares-races.org/mac