

Community Service Support Operating Essentials

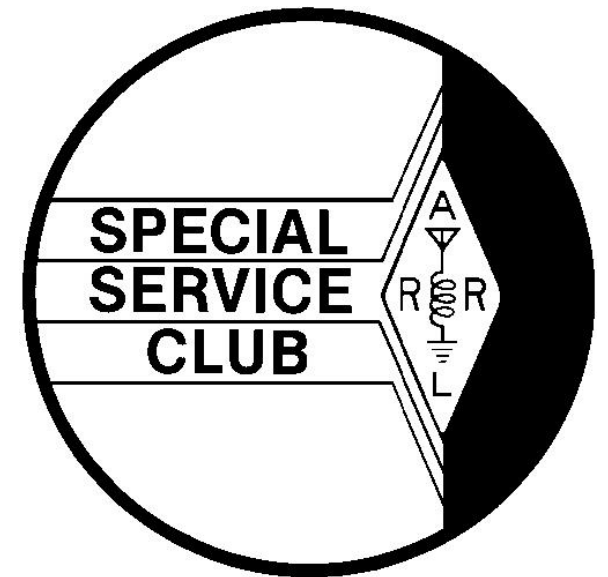
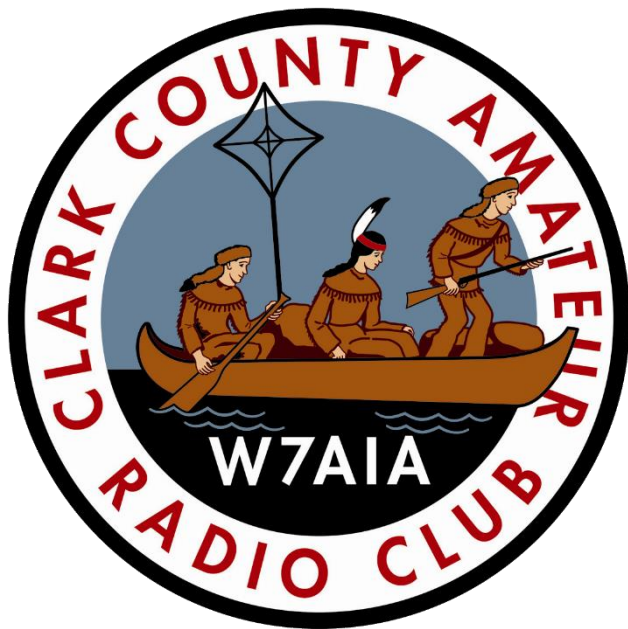
Barbara Yasson – AC7UH

Linda Ford – AA6MR

YL Forum

Seaside, Oregon

June 1, 2019

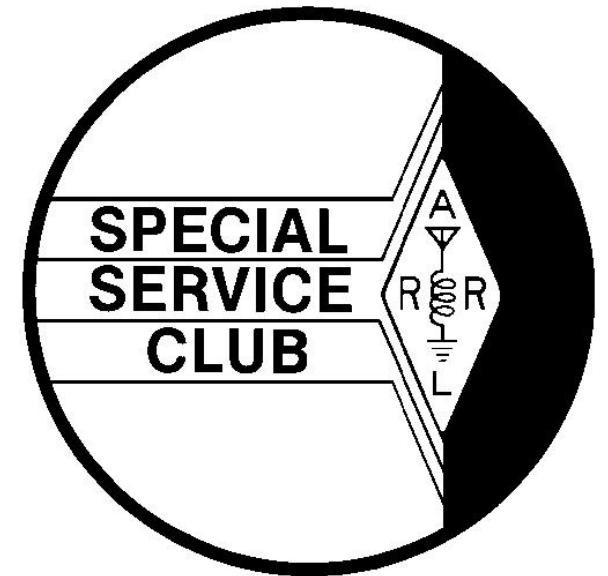
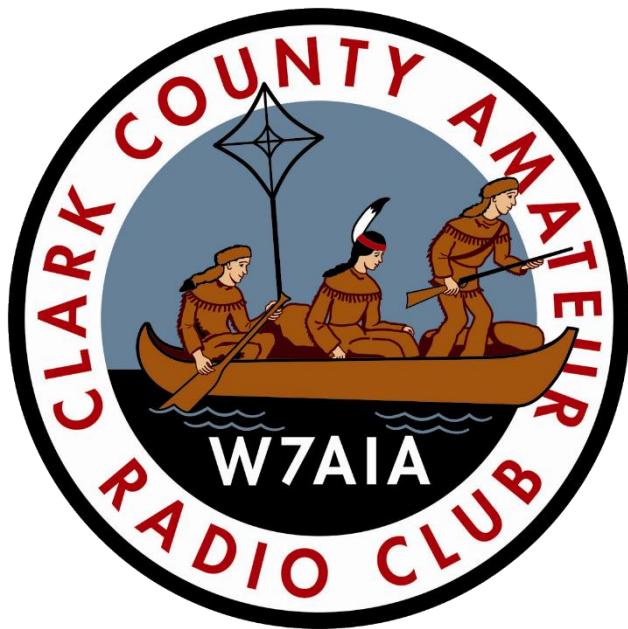


Community Service Support Operating Essentials



- Equipment
- Preparation
- Operating

The Equipment

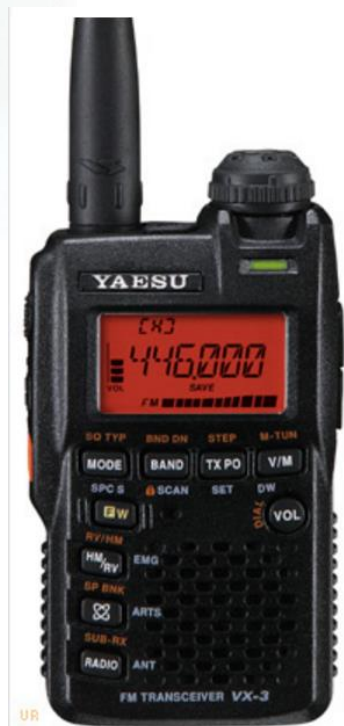


The Radio



- Use Mobile Radio if the event allows it: Walkathons, Marathons, Walk-n-knock, Rover, Sag wagon, ...
 - Higher power than a hand held
 - Better antenna and propagation
 - A larger battery and energy storage.
 - Shelter, heat, a comfortable chair and cup holder.

Handheld Radio for most in town small events



KENWOOD



- Dual Band Radio: 2m and 70cm
 - Cheap: Baofeng UV-5R \$30
 - Middle: Yaesu VX-3R \$150
 - Middle: ICOM IC-T70A \$190
 - High: Kenwood TH-D72A \$400
- Consider the following:
 - It could get dropped
 - It could get wet
 - It could fail, do I have a spare?
 - It could get lost

Inexpensive radios work as well as more expensive one...

...provided the ham understands the radio and knows how to operate it.

DO NOT EXPECT SOMEONE AT THE EVENT TO PROGRAM YOUR RADIO!

Expensive handheld radios can be water resistant or waterproof – useful in the Pacific Northwest.

Depending on the event, consider a backup radio, extra battery pack or batteries, a speaker mike or headset with boom mike and a noise reduction headset for noisy events.

Radio Augmentations



- Extend Battery Pack
 - For U5-VR \$15, 3800mAh
- Extra Battery Pack
 - VX-3R \$40.00
- Larger Antenna
- Speaker Microphone with audio jack
- Speaker Microphone with Antenna Mount

Talking And Listening



- Variety of products to help you hear better.
- Throat Mic or bone conduction headset.
- www.pryme.com

Talking and Listening



- For Noisy Events (Parades, Car Cruise) consider noise reductions head set – 25 dBnr
 - Traditional Over the head
 - Behind the head support
 - One Ear Covered
 - Dual Radio with Dual PTT
- www.ruggedradios.com

Accessories

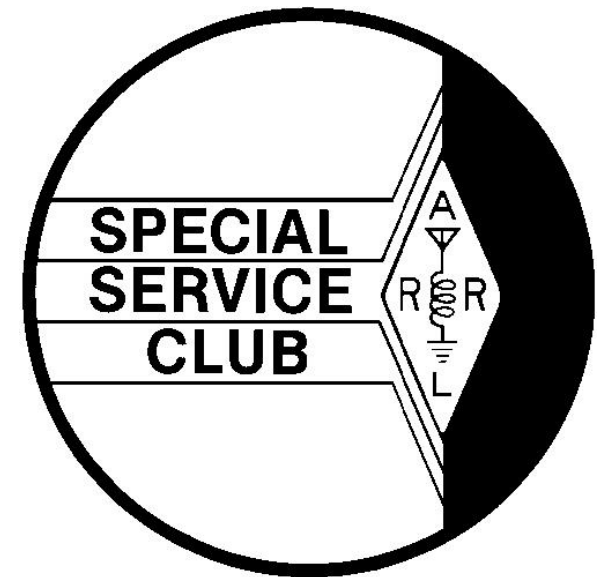
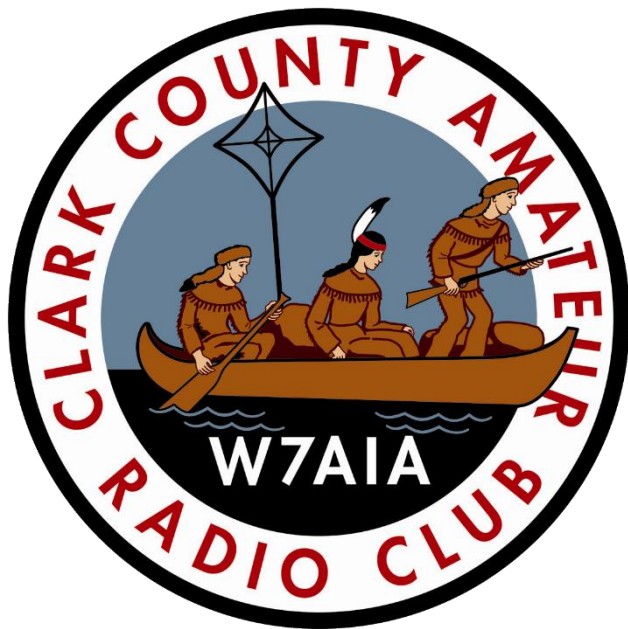


- Get the Radio off your hip
 - Better propagation
 - Easier to get to the controls
 - Less likely to have an open mic caused by clothing.
- Hold other items:
 - Operation Instructions
 - Map, pen, paper
 - Flashlight
 - Water Bottle
 - Extra battery or radio
 - Snack bar.....
- www.cheaperthandirt.net,
www.theemstor.com

Accessories again

- If wearing HT keep it close to body and away from head
- Be able to reach controls to make adjustments
- After programming set key lock to prevent unwarranted changes
- Always be in control of the radio

Preparation



Read and UNDERSTAND the Communication Plan

Walk and Knock Communications Plan for December 2 - 3, 2017

Amateur radio operators support the Walk and Knock food drive with radio communications at the 9:00 a.m. Roll Call and throughout the day to provide Walk and Knock headquarters at the Clark County Food Bank with information about the status of walkers, drivers, supplies, food pickups, and safety issues. Information for the 9:00 a.m. Roll Call originates with the Area Captain to which each radio operator is assigned. The list is available on the *Communications Roster* sent with this document. Those who attend the 6:30 a.m. breakfast at the Food Bank at 6502 NE 47th Ave. will have an opportunity to meet their Area Captain before they go to their location. If you arrive at your Meeting Location and are unable to find the Area Captain, contact Barbara AC7UH through the net control station (NCS). After Roll Call most Area Captains move to the food collection drop site location for their sector. Radio operators should follow their Area Captain and provide communications as long as they are needed. At the Drop Sites radio operators must continue communications with NCS until the Drop Sites secure. Not all Food Collection Drop Sites have an Area Captain and a radio operator assigned for Roll Call. The operators who converge on those locations should work out what they need to do to set up communications at the Drop Site and provide communications until the Drop Site secures. If a radio operator can do hands-free communications he or she is free to help in any capacity they are able to at a Drop site. Follow the Drop Site's procedures. Remember to check in with NCS before changing location or securing a location.

The noise level at most of the locations is high, so be prepared to hear radio traffic with a headset or earphones that reduce environmental noise. If you are unable to communicate with NCS on a hand-held radio, but have a mobile radio in your vehicle, be sure to let the local Walk and Knock Area Captain or Sector Coordinator at your location know where you will be so they can find you. Check in with them regularly so they know you are available to pass radio traffic.

Primary operating frequencies for 12/2 & 12/3 will be three linked W7AIA repeaters: 147.24+ (Livingston 2M) & 443.125+ (Yacolt 440) & 443.925+ (Livingston 440). All W7AIA repeaters have the CTCSS 94.8 Hz tone. Remember that using the linked repeaters means you will transmit to one repeater and all of the repeaters will re-transmit your signal; be aware that it will take longer for three repeaters to drop their transmissions than when listening to a single repeater. For those of you with dual band radios, remember to turn down the volume of the band you are not using to prevent multi-path distortion, which causes your transmission to feedback into the other band of your radio. If operating from North Clark County and other areas in which the Livingston 2M repeater coverage is sketchy, test your radio using both of the UHF repeaters (440 MHz) to discover which one works best for your location. It is good to test your radio using each of the frequencies to determine which performs best from your location.

NCS will start the net using the Primary operating frequencies. Program all three of the Primary frequencies in your radio. For backup, program and be prepared to use both of the **Secondary operating frequencies**: the W7AIA 443.900+ (Larch) with a 94.8 Hz tone & K7BPR147.080+ (Hockinson) with a 107.2 Hz tone. In the event Net Control decides to change from the Primary operating frequencies, the two Secondary operating frequencies will be referred to by location, i.e. Larch and Hockinson rather than by frequency. Make sure all primary and secondary frequencies with tones are set in your radio for Saturday morning. Use one of the Primary operating frequencies unless directed by NCS to one of the Secondary operating frequencies.

The net control station (NCS) will run a directed net using Area numbers as tactical call signs. Find your area number on the location assignment document you received. Area numbers are also found on the *Communications Roster* in the far left-hand column. Please respond to NCS with your Area number and end your transmission with your licensed call sign. Some areas in Clark County are not amateur radio friendly. Remember to use the resources available to you as you operate your radio. Better antennas and more power can be useful. Be aware of your location and what might block your path to the repeater you have chosen to use. Bring enough charged batteries with you for the duration. Bring your owner's manual and cheat sheets in case you have to make setting changes to your radio.

- Disable the VOX function on your radio. Running a radio in VOX mode disrupts the net operations and makes unnecessary noise on the air.
- Cross-band repeating is a benefit when done properly. We hope the three linked Primary frequencies will eliminate that need. If you feel it is necessary to set up a cross-band repeater, contact Net Control before you do anything. We need to know what signals we are creating throughout the day, so we can communicate as effectively as possible.

- The communication coordinator will email out a communications plan
 - Where we will meet.
 - Your assignment
 - Tactical Call Signs
 - Radio Repeater Frequencies
 - Simplex Frequencies
 - Time of Morning Briefing
 - Time we start operations
 - Know when to be where

Radio Programming

- You must have your radio programmed with the radio repeater frequencies before you arrive.
- Recommend programming the simplex frequencies from the Communication Plan
- Don't wait to ask for help to program your radio.



TH-D72 Programmer - TH-D72 Untitled2 *

File Edit Communications Settings Window Help

TH-D72 Untitled2 * x

	Receive Frequency	Transmit Frequency	Offset Frequency	Offset Direction	Operating Mode	Name	Tone Mode	CTCSS	Rx CTCSS	DCS	Skip	Step	Tx Step
0	144.05000	144.00000		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	5 kHz	5 kHz
1	144.02000	144.02000		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	5 kHz	5 kHz
2	145.50000	144.90000	600 kHz	Minus	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	5 kHz	5 kHz
3	147.24000	147.84000	600 kHz	Plus	FM		None				<input type="checkbox"/>		
4	146.94000	146.34000	600 kHz	Minus	FM		None				<input type="checkbox"/>		
5													
6	350.02500	350.02500		Simplex	FM Narrow		None				<input type="checkbox"/>		
7	350.92000	350.92000		Simplex	FM Narrow		None				<input type="checkbox"/>		
8	380.00000	380.00000		Simplex	FM Narrow		None				<input type="checkbox"/>		
9	387.22500	387.22500		Simplex	FM Narrow		None				<input type="checkbox"/>		
10													
11	440.03500	445.03500	5.00 MHz	Plus	FM		None				<input type="checkbox"/>		
12	440.00000	445.00000	5.00 MHz	Plus	FM		None				<input type="checkbox"/>		
13	445.52000	440.52000	5.00 MHz	Minus	FM		None				<input type="checkbox"/>		
14	445.84000	440.84000	5.00 MHz	Minus	FM		None				<input type="checkbox"/>		
15	443.00000	448.00000	5.00 MHz	Plus	FM		None				<input type="checkbox"/>		
16	446.25000	441.25000	5.00 MHz	Minus	FM		None				<input type="checkbox"/>		
17													
18	118.00000	118.00000		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	12.5 kHz	12.5 kHz
19	118.53500	118.53500		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	25 kHz	12.5 kHz
20	118.55500	118.55500		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	25 kHz	12.5 kHz
21	119.00000	119.00000		Simplex	FM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	25 kHz	12.5 kHz
22	119.34000	119.34000		Simplex	AM		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	25 kHz	12.5 kHz
23													
24	345.00000	345.00000		Simplex	FM Narrow		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	12.5 kHz	12.5 kHz
25	345.00000	345.00000		Simplex	FM Narrow		None	88.5 Hz	88.5 Hz	023	<input type="checkbox"/>	12.5 kHz	12.5 kHz

Memory Channel Functions
(left to right)

Receive Frequency CTCSS Tx Step
 Transmit Frequency Rx CTCSS Tx Step
 Offset Frequency DCS Tx Step
 Offset Direction Skip Tx Step
 Operating Mode Step Tx Step
 Name Tx Step Tx Step
 Tone Mode Comments Tx Step

Memory Types
(left to right)

Memories
 Limit Memories
 VFO
 Home

Ready

Plan for the Weather

- Drizzle
- Light Rain
- Heavy Rain
- “I may need an ark” Rain
- Snow
- Ice

- A yellow vest



Arrive On Time



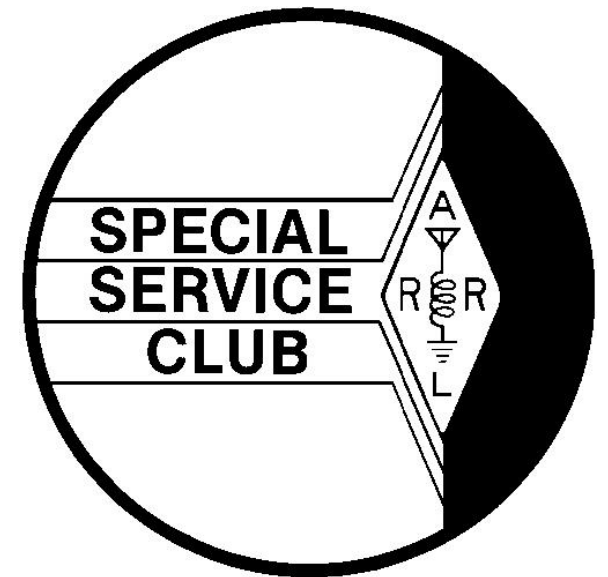
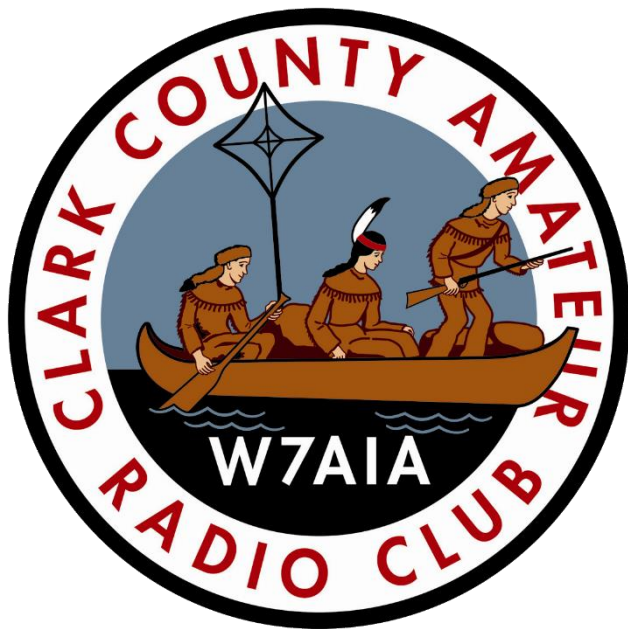
- Arrive to the Briefing on time. There is only one briefing.
- The event will start without you if you are late.
- We may be amateurs by name but want to be taken serious in knowing our craft as radio operators.

Attend the Morning Briefing



- It is a review of the plan and last minute changes.
- Our only time to get organized as a group before the event.
- If you are new to the event or new to community service operating, you have to attend!
- If you have worked the event before, you have to attend!

Operating



The Directed Net

- 1 or 2 Net Control Operators
- They control message traffic flow.
- All net traffic must go through the NCS,
- They have only the very basics of information of the event. They are not the Event Coordinator.
- When Net Control says “Standby”, Stop Transmitting. Do not contact Net Control.



Listen



- Listen to net-control
- Listen for your Tactical Call Sign
- Listen to the other operators
- If you hear nothing, check to make sure you don't have an open mic. NCS usually announces every 15 minutes.

Transmitting

- Keep it short and to the point.
- Net control needs to know when the parade starts and when it ends. Do Not provide a play by play as the parade passes.
- Give only information requested by NCS.



Transmitting and Tactical Call Signs

Operator Assignments Walk and Knock

Area	Area Captain	Radio operator	Meeting Location
Sector A			
16	Cindy Swanson	Randy Walter K7LNR	Hazel Dell Mobile Estates
17	Robert Lewis	Lonnie Steinagel KE7JJK	Jason Lee Middle School
18	Tom Griffith	John Allen N9YQ	HD FD
Sector B			
1	Janet Elliott	Bill Hill KE7FHI	Lincoln Elementary School
11	Wendy Wolfswinkle	No operator requested	CC Adventist Comm. Svc
12	Stephen/Shelly Staudinger	Don Young N7DY	Truman Elementary
Sector C			
2	Dean Landers	Robin Mackay W7ABC	WA State School for Deaf
3	Duane Lansverk	Lisa Bloomquist KE7HPW	Mac Middle School
4	J.D. Nellor	Rob Sisson KE7IYU Maurice Mines KD0IKO	VECC Lieser Elementary
9	Tina Ramos	Ken Jones KF7WKR	Living Hope Church (KMart)
10	Doug Hall	Don Peter ND7P	Ft. Vancouver HS
Sector D			
5	David Camp	Stephen Davis KD7PCE	Wy'east Middle School
6	John Neuman	Randy Heim KE7EKU	Safeway
7	Charlie Graff	Mike Mackenroth KA6UIT Tanya Mackenroth KE7ZVX	Evergreen High School
27	Adam Hegewald	Mike Fogarty AC7RU	Fisher's Landing Fred Meyer
32	Kaci Caldwell	Tim McLaren AF7TM	Fisher's Landing New Seasons

- We will use Tactical Call signs for stations
 - Area 1, Area 2, ...
 - Rover
 - Horses
 - Staging A, B, C,...
- FCC requires your call sign every 10 minutes while you are in a dialog or at the end of your TX.
- For short dialogs: “Net Control. This is Area 15 on location, KD7RUS.”

Net Etiquette

1. Listen to the net, listen for your tactical call
Pay attention & understand what is happening so when action is near your location you can respond.

2. Standby

When NCS asks stations to stand by

- a. Do not transmit, do not contact NCS or another station on the net.
- b. Wait until NCS asks for more traffic to transmit.

3. Transmitting

a. Keep message short, clear, and to the point.

b. Give only information requested by NCS

Emergencies and Alerts

- Know your location and write it down when you get on station.
- Call 911 for an Emergency
- Contact Net Control after calling 911
- Do not approach a left behind package, bag or backpack.
- Contact Net Control using the agreed to phrase.



Emergencies again

- Each event has protocol for emergencies
- Read communications plan and know what to do in case of injury or other emergency
- Some events call 911
 - After 911 call notify NCS of emergency and 911 call
 - Give location of incident
- Some events ask NCS to call 911
 - Be prepared to relay information to NCS
- Others have local medical support
 - Comm Plan will have protocol and what to do

Open Mics and Problems



Vanessa with the correct setup to avoid an open mic.

- Open mics are the #1 problem with every event.
 - Check your equipment
 - Listen
 - Pay Attention
 - Do not TX “open mic”.
- Bad Reception #2
 - Move your location.
 - Always use High Power with a Portable Radio
- Radio Interference #3
 - All stations on net be sure it is not from the net

Questions

