

## APPENDIX A

### Operating on a Tactical Radio Net

**Tactical Radio Net:** A radio net consists of several stations on one radio channel, following organized procedures, and directed by a Net Control Station (NCS).

- **Types of Nets:**
  - **Directed net:** Stations must get permission before using the net. Address all calls to the NCS.
  - **Open net:** NCS permits net stations to call one another. NCS intervenes only to straighten out confusions. NCS may allow casual calls and conversations on the channel, speaking up only when there is net traffic to pass.
- Get to your assignment ahead of time.
  - Arrive at your assigned operating point 10 to 30 minutes before your shift starts to get set up and get a briefing before the start of your shift.
- Don't help the NCS.
  - Resist the urge to help the NCS.
  - Act as a relay station only if the NCS, or another radio station, asks for a relay and you can fulfill the requirement.
  - If you call the NCS or dispatcher and do not get a reply, be patient and call again in a minute or two.
  - If you have an emergency, say "Emergency Traffic" after you identify yourself when you call the NCS.
- Use tactical and FCC call signs efficiently.
  - By using Tactical Call Signs, the net can be conducted without regard to which operator is at the radio.
  - Use the tactical call sign to identify your transmissions and address another station by its tactical call sign.
  - No call sign is necessary in a two-way conversation once communication has been established.
  - To comply with FCC rules, add your FCC call sign to your last transmission in a series.
  - It is not necessary to add the receiving party's call sign, just your own.

- Never leave a net without checking out.
  - If you know you will be unable to participate for an interval, tell that to the NCS before you leave.
  - Check in with the NCS when you return.
  - Never depart at the end of your shift without making certain that the NCS knows that you are leaving.
  - Brief the operator who relieves you.
    - ◆ Tell the operator who takes your place everything they need to know to do the job.
    - ◆ Try to write down most of the information during activity lulls:
      - Radio, power, or antenna details.
      - All the tactical call signs and where the stations are located - possibly also names and FCC call signs.
      - The location of the nearest telephone, if any.
      - The name and titles of the officials you are serving; how to find and recognize them.
      - The specific purpose and responsibilities of your station.
      - The overall situation and expected changes.
      - Pending activity: messages you have sent and replies you expect (Who gets the reply?).
      - Location of the toilet, water, food, etc.
      - Sign out on the Activity Log. Complete all paperwork before you leave.
- Keep transmissions short in order to...
  - Allow other stations to interrupt if they get more urgent traffic.
  - Let the NCS exercise control promptly.
  - Lose less time if the transmission was partly or completely unreadable, due to radio problems, simultaneous transmissions (doubles), noise nearby, etc.
- Stop transmitting if you stop talking.
  - Always release the push-to-talk (PTT) button if you need to pause for some reason: to think of a street name, to remember everything you wanted to report, to listen to something urgent that is happening nearby, etc.
  - Don't use VOX, or a locking PTT switch. PTT (push-to-talk transmission) is better than VOX (voice-activated transmission) on a tactical net. PTT allows you to control exactly when to transmit. Avoid locking PTT switches.

- Listen before transmitting.
  - If you haven' t been monitoring all along, listen a while (15 seconds minimum) before transmitting.
  - Be sure the transmitting station is finished, not just pausing. Avoid unnecessary transmissions. Stay off the air unless you are sure you can be of assistance.
- How to Interrupt the Net.
  - It is proper to interrupt the net, that is, to transmit when Net Control has not invited you to. That is the purpose of leaving gaps between transmissions: it gives other stations a chance to break in.
  - If you interrupt, key very briefly, only enough to ID or state something about the nature of the interruption. For example: "N6ABC", "emergency traffic", or "info".
- General guidelines.
  - Use short simple phrases and common courtesy.
  - Don' t chew gum or eat while transmitting.
  - Sound alert.
  - If you are tired, get a relief operator.
  - Avoid angry comments on the air at all costs.
  - Obscene statements are not necessary and are out of place at all times.
  - Acknowledge transmissions to you. Acknowledge transmissions promptly, even when it is obvious from the context that you were asked to do something that you cannot do instantly.
  - Answer questions as directly as possible; do not explain. If asked a question, just answer it; do not volunteer additional detail or an explanation of why something is so, but use good judgment. You may believe that the simple answer is misleading. The question may indicate that the person asking it does not understand the actual situation. If you think it necessary, volunteer some more information. Be brief; let the questioner ask for more detail if they choose to.
  - Ask who the message is for, if you don' t know. As you copy a message, consider what you are going to do with it. If you cannot tell, then ask the station that is sending it; notice that the message shouldn' t be sent to your station after all, notify the sending station and cancel the message.
  - Let third parties speak over your radios. Allowing an agency official to use your radio is often better and faster than passing messages back and forth. It is just as legal as passing third-party messages. Make sure the third party understands how to talk through a repeater, i.e., wait for the courtesy tone, etc.

- Minimize misunderstandings.
  - Only transmit facts.
  - If your message is a question, deduction, educated guess, or hearsay, identify it as such.
  - Be sure you are clear what the other party means if you hear one of these terms.
  - Never pass victim or patient names over the radio.
- Wait after keying before speaking.
  - Wait a fraction of a second after pressing the mike button before speaking, to make sure you don' t clip the first syllable.
  - Your radio may take a moment to change over to transmit; and the repeater may introduce its own delay.
  - If the station you are calling has a hand-held transceiver (HT) in battery-saver mode, and the channel has been quiet, the first second or two of your transmission might go unheard.
- Environmental issues.
  - Don' t talk louder in a noisy environment. It' s natural to talk louder if it gets noisy around you, but don' t do that on the radio. Talking too loudly into a microphone makes your signal less understandable, not more.
  - Shield your microphone from the wind. Wind blowing across the microphone can make it impossible to understand you. Close the car windows, pull up your collar, or stand by a shield.
  - Your HT may not work on your belt. You may have to hold your HT in your hand to transmit reliably, or even to hear well.
  - Keep your body still while transmitting. When on the fringes of coverage, look for a receiving "hot spot" site and use it. Don' t walk around talking while in a communications fringe ~~area~~. Even if you have a good signal from a repeater, you may not have a good signal in to the repeater.
- Operating while mobile.
  - Always know your location, whether mobile or portable and moving around.
  - Keep a sharp lookout for landmarks. You must be able, if called upon, to accurately describe your location at any time. This is particularly important if you are with a search team or other mobile units.