Radio Protocol & Etiquette

Before radio operators get up and running, all radio operators and supervisors should review these operational guidelines, and it is recommended to practice with radio operators on a regular basis.

Introduction

In any two-way radio system, it is essential that each person using the system recognizes that many people must also use the same frequencies (or channels). Radio transmissions are not private conversations. Everything that is transmitted on the base and portable radios might be heard by other persons monitoring the channel. Therefore, it is recommended all radio operators use discretion in transmitting any message.

The same is true with texting over two-way radios, where available. These signals may be monitored, logged, or available to others with access to the radio system.

Communications prohibited by the FCC:

- Profane, indecent or obscene language.
- Malicious interference with any other radio transmission.
- Unnecessary or unidentified transmission.
- Direct communication of personal messages.

Radio Performance and Protocol
Here are general tips and requirements to get all radio operators started.

- Two-way radio antennas will give best performance if placed in a vertical position.
- **"Listen Before You Talk."** Two-way radios are not "full-duplex" like a telephone, only one person can talk at a time. For this reason, no transmission should begin without listening for clear air. (This is a requirement of the FCC.)
- All radios idle in the receive mode. Be aware of the transmission mode of your organization's radio equipment. Some may chirp, others may have a visual LED/light indicator, some may have no indicator. Do not speak immediately when pressing the Push To Talk (PTT**)** button, but wait a beat until the radio is transmitting. If the radio operator speaks as soon as they "key up" the radio, it "clips," or cuts off, the first syllable of the first word, making it harder to understand the message.
- Remember that a simple message such "Go" might be heard as "No," so try to use unambiguous phrases that will reproduce without ambiguity, especially in an emergency. (See end of this document for a list of accepted radio terminology.)

Microphone Usage: The most important factor in outgoing transmission quality is the operator's use of the radio's microphone.

- Know where the microphone is located (note: it's not always in the most obvious place).

- Speak directly into the microphone with your lips about two inches away.

- Speak at a moderate pace, neither too slow nor too fast, and avoid slurring words.

- Never shout, increasing the voice level will only cause distortion of the speaker's voice by the microphone.

- The volume control affects only the volume of the speaker and not the sensitivity of the mic.

- If the receiver is still having difficulty hearing the message, it may be due to noise or wind. Point the microphone away from the source of noise or shield it from the wind. Move to a quiet location if available.

Radio Etiquette

Basic radio etiquette is to establish contact first and make sure the radio operator has the other person's attention before continuing.

- **Getting started:** It's always best to speak in short, simple phrases on the radio and toss the conversation back and forth like a tennis ball with the word **"OVER."**

- **Operator Identification:** Transmissions begin with the Unit identification number. The Unit transmitting will direct the radio transmission to the receiving unit by calling out the receiver's Unit Identification number. (Example: Unit three to unit ten. Over.)

- **Acknowledgement:** If a radio operator hears someone calling their Unit ID, acknowledge by saying, **"GO AHEAD, OVER."** This lets the caller know their message was heard and the radio operator is ready to listen. (Example: Unit ten. Go ahead, Unit three. Over.)

- **General:** Limit conversation to specific business details. Avoid personal comments. Remain neutral in tone. Anyone with a radio or, more likely, a scanner can listen in. Similarly, exercise caution with text over radio, where available. Prudence suggests keeping things decorous and avoiding sensitive items.

- **Conclusion:** The initial transmitting unit will state when the communication is complete. (Example: Unit ten Out.)

Additional Tips

- Indicate transmission location if safe to do so; it is generally helpful for other radio operators to know where you are.
- Acknowledge the receipt of all messages directed to the Unit regardless of how trivial.

- Always release the push-to-talk (PTT) button whenever the radio operator is finished talking.

- Don't turn up the volume to the max. This will drain the battery and cause distortion.

- Only speak when absolutely necessary. Safety information must take priority.

- Never Use "Over and Out" simultaneously.

Radio Terminology

Because some words sound like other words, a list of terminology that is more clear has been established among radio operators over time. Consider using these words or phrases instead of what you might normally say to be more easily understood.

CORRECT RADIO PHRASE	Substitute for:
NEGATIVE	Nope, no
THAT IS CORRECT	Yup, yes
AFFIRMATIVE	Yup, confirm
ROGER	Yup, yes
ACKNOWLEDGE	Eh? Did you understand?
SAY AGAIN	Huh? Repeat?
GO AHEAD	Yeah, what? I'm listening.
CORRECTION	Oops… Wait, no.
DO YOU READ?	Are you there? Please reply
STAND BY	Wait a sec...Busy
WILCO	Okey dokey, understood
OUT	Goodbye, ok done
OVER	Ok? Sound good?
CHECK	Got it, understood
CONFIRM	Is that right?

Phonetic Alphabet list:

Here is a list of traditional phonetic alphabetic used by military and law enforcement.

A | Alpha	B | Bravo	C | Charlie	D |Delta
E | Echo	F | Foxtrot	G | Golf	H | Hotel
I | India	J | Juliet	K |Kilo	L | Lima
M |Mike	N | November	Q | Quebec	R | Romeo
S | Sierra	T | Tango	U | Uniform	V | Victor
W | Whiskey	X | X-Ray	Y | Yankee	Z | Zulu

Resources

[Two-way Radio Pre-Deployment Best Practices](#)

[Two-way Radio Pre-Deployment Checklist](#)

[Two-way Radio Best Practices: Training](#)

[Two-way Radio Post-Deployment: Key Takeaways](#)