



## Two-Way Radio Communication Protocols

### General Radio Communication Guidelines (“Golden Rules”)

1. Clarity: Your voice should be clear. Speak a little slower than normal. Speak in a normal tone, do not shout.
2. Simplicity: Keep your message simple enough for intended listeners to understand.
3. Brevity: Be concise and to the point.
4. Security: Do not transmit sensitive or confidential information on a radio. Remember, channels/frequencies are shared and anyone may be listening to your transmission!

### Think Before Speaking

- ⇒ Determine in advance what you are going say and who it is meant for.
- ⇒ Avoid long and complicated sentences. If your message is long, divide it into separate, shorter messages. Note that long messages may be cut-off by the repeater timing-out. Pause between transmissions to give others a chance to join the conversation.

### Initiating a Call on the Radio

1. First, listen to ensure the channel is clear for you to transmit.
2. Press the PTT (Push-To-Talk) button and wait a moment.\*
3. Say recipient's call sign or tactical ID followed by "*this is*" and your call sign or tactical ID.
4. Once the recipient replies, convey your message.
5. When finished speaking, wait a moment before releasing the PTT button.\*

\* Steps 2. and 5. are important for **every** transmission because if you start speaking too quickly after pressing the PTT button, or release the PTT button too quickly at the end of the message, the message can be cut off and have to be repeated. This occurs due to the natural delay of the radio signal being sent and received.

### Example Radio Conversation

- You: "Whiskey Foxtrot Oscar Golf 1 2 3, *this is* Whiskey Oscar Alpha Kilo 9 8 7"  
(WFOG123 is their call sign, WOAK987 is your call sign) \*
- Other: "WOAK987, *this is* WFOG123, go ahead" (or you can abbreviate the call sign as in "987, *this is* 123, go ahead")
- You: Say your message
- Other: Respond to the message
- You: "Whiskey Oscar Alpha Kilo 9 8 7, out (or clear)"
- Other: "Whiskey Foxtrot Oscar Golf 1 2 3, out (or clear)"

\* Announce your call sign when first transmitting, about every 15 minutes thereafter, and when you leave the conversation. You aren't required to use phonetics (Whiskey, Foxtrot...), but it is good radio protocol so that others can better understand the letters. <https://bit.ly/31OAUeD>

## Emergency Messages

If you have an emergency message and need to interrupt a conversation taking place:

- ⇒ Listen for a pause in the conversation.
- ⇒ Press the PTT button, wait a moment and say “*Break*” or “*Emergency*” followed by your call sign.
- ⇒ Wait to be acknowledged and then transmit your emergency message.

## Radio Terminology

While it is advisable not to use abbreviations or codes (e.g. “10-4”) when using the radio, there are some common radio terms that are generally used and understood, including:

Term	Meaning
Affirmative	Yes (avoid "Yup" or "Yeah" as they can be difficult to understand)
Negative	No (avoid “Nope” or “Nah” as they can be difficult to understand)
Come In	Please acknowledge that you hear me
Copy	I understand (avoid “Roger” or “10-4”)
Traffic	Transmissions (communications) sent over the radio, i.e. “ <i>I have traffic</i> ”
Go Ahead/Come Now	I am ready to receive your message
Stand-by/Wait	Hold on, I acknowledge you but I am unable to respond immediately
Say Again/Come Again	Re-transmit (repeat) your message
Over	My transmission is finished, over to you *
Monitoring/Listening	My conversation is finished and I will be monitoring the channel
Out/Clear	My conversation is finished and I am leaving the channel **
Break/Emergency	I am interrupting communications for an emergency message
Repeat	To repeat something, i.e. “ <i>I need 3, repeat 3, people to help me</i> ”
Radio Check	Can you hear me and what is my signal strength?
Loud and Clear/S1 – S9	Response to "Radio Check", S1 (weak/unclear) to S9 (strong/clear)

\* many radios and repeaters provide an audible click or beep tone when the PTT button is released after a transmission, and therefore “Over” may not need to be said each time.

\*\* While “Over and Out” is sometimes said, it can be confusing. That phrase means “Over to you” for more conversation, but at the same time “My conversation is finished and I am leaving.” It’s best to use “Over” (if necessary) and then “Out” or “Clear” separately when leaving the channel or turning off the radio.