

LRON: TWO-WAY RADIO PROCEDURE GUIDE LINES

TWO-WAY RADIO ETIQUETTE QUICK GUIDE

The International radio language is English, except in cases where you are licensed to speak other languages.

When using a two-way radio you cannot speak and listen at the same time, as you can with a phone.

Don't interrupt if you hear other users talking. Wait until their conversation is finished unless it is an emergency. If it is an emergency, inform the other parties that you have an emergency message.

In an Emergency

If you have an emergency message and need to interrupt other's conversations:

- Wait and listen until you hear "Over"
- Press PTT (TX) and say BREAK, BREAK, BREAK, (*your call sign*), I have an emergency message for (*recipient's call sign*), Do you copy, Over'

Do not respond if you are not sure the call is for you. Wait until you hear your call sign to respond.

Never transmit sensitive or confidential information. Always assume that your conversations can be heard outside your waveband.

Perform radio checks to ensure your radio is in good working order.

- Ensure the battery is fully charged in the case of hand held radios and ensure the power is on.
- Keep the volume high enough to be able to hear calls.
- Regularly make radio checks to make sure everything is working and that you are still in range to receive signals.

Memorize call signs

- In radio communication you are not called by your name. Everybody has their own unique sign.

Think before you speak.

- Decide what you are going to say and for whom it is meant.
- Make your conversation as concise, precise and clear as possible.
- Avoid long complicated sentences. If your message is long, divide it into separate shorter messages.
- Do not use abbreviations unless they are well understood by your group.

4 Golden Rules of Radio Communication.

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 precise and to the point.

4. Security: Do not transmit confidential or rude messages.

SPEAKING THE LANGUAGE

<u>General Terms</u>	<u>Meaning</u>
Radio Check	What is my signal strength? Can you hear me?
Go Ahead	You are ready to receive transmission.
Stand-by	You acknowledge the other party, but are unable to respond immediately.
Roger or 10-4	Message received and understood.
Negative	Same as no.
Affirmative	Same as yes. Avoid “yup” or “nope” as they are difficult to hear.
Say Again or Repeat	Re-transmit your message.
Over	Your message is completed.
Out or Over and Out	All conversation is completed, the channel is clear for other users.
Come In	You are requesting called party to acknowledge that they hear you.
Copy	You understand what was said.
Wilco	Means “I will comply”
Repeat	Used before you repeat something. Ex “ I require five zero repeat five zero litres of diesel”

Making a Call

Follow these easy steps to make a call.

1. First listen to ensure the channel is clear for you to use.
2. Press PTT (TX) button.
3. After 2 seconds say: “*Recipients call sign*” twice followed by “*This is and your call sign*”
4. Once the person responds, convey your message.

Here is a typical radio conversation.

You: “*Papa November-One, Papa November-One, This is Papa November Nine, Come in, Over*” (PN1 is the person being called, call sign, PN9 is your call sign.)

Recipient: “*Papa November Nine, This is Papa November One, Go Ahead, Over*”

You: Say your message and then say, “*Over*”

Recipient: “*Roger, Wilco, Over*”

You: “*This is Papa November Nine, Over and Out*”

It is almost certain you will have to use the Phonetician Alphabet in your conversations. You will often be required to spell a certain word or name in your radio conversations to make sure you are understood. Using the phonetic equivalents instead of letters will make sure letters such as “F” are not misinterpreted as “S” and “T” as “C” or “M” as “N”

Following is a list showing the International Phonetics used for the alphabet:

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
O – OSCAR
P – PAPA
Q – QUEBEC
R – ROMEO
S – SIERRA
T – TANGO
U – UNIFORM
V – VICTOR
X – X-RAY
W – WHISKEY
Y – YANKEE
Z – ZULU

RADIO PROCEDURES DURING NORMAL OPERATING CONDITIONS CALLING AND COMMUNICATING TECHNIQUES

The secret to working quickly and efficiently in an emergency net is to use standard procedures. The techniques presented herein are the most common. It doesn't take much analysis to see that standards and guidelines must be established and then utilized.

Before you key your mike, gather your thoughts about what you are going to say. Many people with radios have a tendency to talk and/or repeat too much. Say what you need to say without unnecessary repeats. Keep in mind that you must strive to get your message through the first time.

In general there are five parts to Calling/Communications. The more serious or complex the situation, the more important these procedures become. The information contained herein **MUST** be practised until it is second nature.

Practising proper day-to-day radio procedures will make emergency radio procedures automatic and reduces confusion. Another way of saying this is that the secret to working quickly and

efficiently in an emergency is to use common approved radio communication procedures and guidelines and practice, practice, practice.

1st, you **MUST** give the radio call sign of the station you are calling. This alerts that station that they are being called and that they should listen to determine who is calling.

2nd, say **THIS IS**. The called station knows your tactical call follows. This is extremely important in cases where there is a lot of confusion or poor signal conditions.

3rd, give your radio call sign, Don't give your first name. Radio call signs are important and first names are not, egos notwithstanding. Remember, we are licensed for radio to radio **NOT** person to person communications.

You **WILL** create confusion if you reverse the first three steps, especially during emergencies and when you are communicating with a dispatcher or people who do not know you. If your practice is the reverse of the "norm" you will not be able to "change on the fly" especially during the added stress brought on by an emergency situation.

4th, give your message. Speak clearly. Don't speak too fast especially if the message needs to be written down. Pause after logical phrases. Do not use the word "break" when you pause. It is confusing, wastes time and has other connotations. Merely unkey and pause. If the other station has questions, they should key up and make their request known. This also permits other stations to break in if they have emergency traffic.

5th, you can end your conversation with "CLEAR" however the accepted word is "Out"

TIPS FOR TWO WAY RADIO USERS

- Identify yourself at the beginning of each transmission
- Listen before transmitting. Make sure you are communicating with the correct station.
- Know what you are going to say before you push the PTT (TX) button. **ENGAGE YOUR BRAIN BEFORE YOU PUT YOUR MOUTH IN GEAR.**
- Hold the PTT (TX) button down for at least one second before beginning your message to ensure that the first part of your message is not cut off.
- **TALK ACROSS THE FACE OF THE MICROPHONE.** This technique makes the communication more understandable. In other words, hold the face of the microphone almost at a right angle to your mouth.
- Speak slowly, distinctly, clearly and do not let your voice trail off at the end of words or sentences. Give each word equal force.
- Never acknowledge calls or instructions unless you understand the call or instruction perfectly. If you are in doubt about what you heard ask for the communication to be repeated.
- If you understand the communication acknowledge the comms by saying "copy"
- Always acknowledge communications. Silence in response to a message is confusing and frustrating.
- **ACCURACY FIRST, SPEED LAST.** Under stress operators tend to talk too fast.

- At times radio conditions are poor and words must be overly exaggerated to be understood by the receiver. Speak slowly and distinctly to carry through static and weak signals.
- If you are relaying a message, be sure to repeat the message exactly, word for word as it is received by you. Do not guess what is being said. Refer the communication back to the originator for clarification before relaying it to the receiver.
- When transmitting numbers always transmit number sequences as a series of individual numbers. Never say numbers in combinations.
- If a name needs to be transmitted, spell it out using the phonetic alphabet.
- ONLY TRANSMIT FACTS. Do not clutter the communication with non-essential information. Facts could be taken out of context if not carefully identified.
- Do not chew gum or eat while transmitting as this will influence what the receiver hears negatively.
- Never be rude.
- Be alert.
- Always know your location. Mobile transmission takes precedence over fixed radio transmitting stations. You should always be able to accurately describe your location at any time.

10 – CODE COMMUNICATION GUIDE

Ten-codes, also called ten-signals, are abbreviations used to shorten common phrases in radio communications. Thus allowing for brevity and standardization of messages. They have been widely used by law enforcement and Citizen Band (CB) radio transmissions.

The codes were developed in 1937 and expanded in 1974 by the Association of Public Safety Communications Officials International (APCO). Ten-codes remain in common use, but have been phased out in some areas in favour of plain language.

10 – 1	Receiving poorly
10 – 2	Receiving well
10 – 3	Stop Transmitting
10 – 4	Message received
10 – 5	Relay message
10 – 6	Busy, Stand by
10 – 7	Out of service. Leaving air
10 – 8	In service, subject to call
10 – 9	Repeat message
10 – 10	Transmission completed. Standing by
10 – 11	Talking too rapidly
10 – 12	Visitors present
10 – 13	Advise weather and road conditions
10 – 16	Make pick up at....
10 – 17	Urgent business
10 – 18	Anything for us
10 – 19	Nothing for you return to base
10 – 20	My location is.....or What is your location
10 – 21	Call by telephone

- 10 – 22 Report in person too....
- 10 – 23 Stand by
- 10 – 24 Completed last assignment
- 10 – 25 Can you contact
- 10 – 26 Disregard last information / Cancel last message
- 10 – 27 I am moving to channel....
- 10 – 28 Identify your station
- 10 – 29 Time is up for contact
- 10 – 30 Does not conform to FCC rules
- 10 – 32 I will give you a Radio Check
- 10 – 33 Emergency traffic at this station
- 10 – 34 Trouble at this station, help is needed
- 10 – 35 Confidential information
- 10 – 36 Need correct time
- 10 – 37 Breakdown needed at
- 10 – 38 Ambulance needed at.....
- 10 - 39 Your message delivered
- 10 – 41 Please tune to channel.....
- 10 – 42 Traffic accident at.....
- 10 – 43 Traffic jam at.....
- 10 – 44 I have a message for you
- 10 – 45 All members within range please report
- 10 – 50 Break channel
- 10 – CODE COMMUNICATION GUIDE continued

- 10 – 60 What is next message number
- 10 – 62 Unable to copy. Use phone
- 10 – 65 Awaiting your next message
- 10 – 67 All units comply
- 10 – 70 Fire at.....
- 10 – 71 Proceed with transmission in sequence
- 10 – 73 Speed trap at.....
- 10 – 75 You are causing interference
- 10 – 77 Negative contact
- 10 – 84 My telephone number is.....
- 10 – 85 My address is.....
- 10 – 91 Talk closer to the mike
- 10 – 92 Your transmitter is out of adjustment
- 10 – 93 Check my frequency on this channel
- 10 – 94 Please give me a long count
- 10 – 95 Transmit dead carrier for 5 seconds
- 10 – 99 Mission complete, all units secure

Q Codes

The “Q” code is a standardized collection of three-letter message encodings, also known as a brevity code all of which start with the letter “Q”. Q codes are commonly used in voice communications as shorthand nouns, verbs and adjectives making up phrases. Q codes can be used to confer information or when followed by a ? used to ask a question.

Initially developed for commercial radio-telegraph communication, these codes were later adopted by other radio services such as marine, aviation and amateur radio.

Q Codes QRA – QUZ used in all Radio Services

QRA – Name call signal
QRJ – Is my transmission poor
QRK – Can you understand me
QRL - Frequency is busy
QRQ – Speed up transmission
QRS – Slow down transmission
QRT – Stop transmission
QRV – Ready
QRX – Call again
QRZ – Called by.....
QSD – Keying is defective
QSK – Break in
QSL – Acknowledge receipt
QSM – Repeat last messages
QSN – I heard you
QSP – Relay message
QST – General call to all stations
QTA – Disregard message
QTH – Location
QTN – Departure time
QTO – Departure confirmation
QTR – Exact time
QTX – Keep station open
QUB – Information regarding visibility, clouds, wind
QUD – Confirmation of Emergency signal
QUF – Confirmation of Distress signal