

COMMUNICATIONS PROCEDURES

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 mic, gather your thoughts about what you are going to say. Many Amateur Radio Operators 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. Strive to be understood and not misunderstood. Think about what you are going to say. Be conscious of double meaning statements. If it can have a double meaning don't say it.

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

FIRST, on the initial call, and on subsequent calls if confusion will result, you **MUST** give the call sign, or tactical 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.

SECOND, say "THIS IS". The called station knows your call sign or tactical call follows. This is extremely important in cases where there are a lot of transmissions on the net and confusion could result.

THIRD, give your call sign or tactical call sign. Note tactical call, if assigned, and not Amateur Radio call signs. In drills and actual emergency situations, Tactical call signs are important and FCC issued call signs are not, egos notwithstanding. New hams have a tendency to over identify and give their call signs far too frequently. The FCC requires your call sign every ten minutes and at the end of an exchange.

FOURTH, transmit 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 another connotation in formal message handling. Instead of saying "Break", merely un-key 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.

FIFTH, end your message with "OVER" or "OUT". Avoid using phrases like, "come now" and other non-communications phrases. "Q" signals should be used for CW communications and kept to an absolute minimum for voice communications.

EXCEPTIONS and VARIATIONS

1. It is often permissible to omit the call designator of the station you are calling **BUT** only after communications have been established and no confusion will occur. Don't waste time by using superfluous call signs.
2. The term "THIS IS" is used to separate the FROM and TO call signs. If, and only if, confusion will not result, omitting the "THIS IS" phrase is permissible.
3. If you are the calling station and you omit your own tactical call sign, you may create confusion. In certain situations, such as quick replies between operators, dropping the use of call signs can be accomplished without confusion. Knowing when this will work will come with experience. When addressing the NCS don't key your mic and say "NET CONTROL" and then un-key. This procedure, although sometimes used is an incorrect procedure, wastes time and is at best

confusing. When you want to be recognized by the NCS operator it is only necessary to transmit your call sign, or tactical call sign is assigned.

4. Elimination of the words "OVER" and "OUT" is possible where it doesn't introduce problems. Unkeying after your message implies "OVER". To comply with FCC regulations, you must give your FCC assigned Amateur Radio call sign every ten minutes and at the end the exchange, whichever comes first. Giving your call sign implies "OUT" ending the transmission. Should only giving your call sign cause any confusion, do not hesitate to add the word "OUT". In HF single-sideband radio, it is necessary to use the pro-words "OVER" and "OUT" in most instances.

RADIO PROCEDURES DURING EMERGENCIES

5. Identify yourself at the beginning of each transmission especially where confusion may result if identification is omitted.
6. Identification is a requirement of the FCC. Stations must give complete station identification using the assigned FCC Amateur Radio call sign at least once in a 10 minute operating period, particularly when tactical calls are being used. Your FCC call sign must also be used at the end of every communications exchange, but not at the end of each transmission.
7. Listen before transmitting. Be sure you are not transmitting and causing a "double transmission" with someone else. Don't quick key. Allow sufficient time for another station to drop in their call sign.
8. Know what you are going to say before you push the mic button; in other words, engage your brain before you key the mic and before you put your mouth in gear.
9. Hold the transmit button down for at least a second before beginning your message to ensure that the first part of your message is not cut off.
10. TALK ACROSS THE FACE OF YOUR MICROPHONE. This technique makes the communications more understandable. In other words, hold the face of the microphone at about a 45-degree angle to your face. On most VHF and UHF nets it is not necessary to use phonetics when transmitting your call sign. FM is usually very clear, and most transmissions are easily understood. If the NCS is having trouble and asks for a repeat then use standard phonetics, otherwise DROP the phonetics.
11. Speak slowly, distinctly, clearly, and do not let your voice trail off at the end of words or sentences. Give each and every word equal force. For some this takes a lot of practice and conscious effort, but do it. THINK BEFORE YOU TRANSMIT!
12. Never acknowledge calls or instructions unless you understand the call or instructions perfectly. If you do not understand, ask for a repeat.
13. When you have understood the message, acknowledge receipt with the words "Roger copied", "Roger received", "Roger acknowledged" The words "Roger copied" are preferred and **NEVER the QSL signal "QSL"**.
14. The word "break" is seldom used UNLESS there is an emergency or, in the case where the NCS is in contact with a station and immediately goes to another. For example: "This is TACTICAL CALL SIGN FOR NET CONTROL BREAK WITH W5XYZ" and then the net control station goes on with another call. The "BREAK" in this context was used to avoid confusion between the net control stations first and second calls. When you require access to Net Control transmit your call sign or your tactical call sign, as appropriate. **DO NOT SAY, "NET CONTROL"** without identifying yourself. Use your call sign, or tactical call sign as appropriate. Remember that the word "Break" spoken twice, as in "Break, Break this is W5XYZ, means that W5XYZ has an emergency, or emergency precedence traffic.

Always acknowledge calls and instructions. Nothing is more disruptive to the smooth flow of communications than dead silence in response to a message. If you cannot copy or respond to

the call immediately, then tell the caller to “say again” or “stand by”. Otherwise, acknowledge each call immediately.

15. Under stress, many operators have a tendency to talk too fast. **SPEED IS IMPORTANT ACCURACY IS PARAMOUNT.** Talking too fast does not increase efficiency.
16. At times, radio conditions are poor and words must be emphasized or exaggerated to be understood. In general, speak slowly and distinctly to carry through static and weak signals. In very difficult communications situations it is necessary to say words twice when making a transmission. If you are having difficulty understanding a transmitting station use the phrase, “Please Say Words Twice”, if you believe that is necessary.
17. If you are relaying a message for another person, be sure you repeat the message exactly, word for word as it is given to you. Read it first before the originator leaves. If it makes no sense to you, get an explanation before you put it on the air. If necessary, refer the message back to the originator for clarifications. **Accuracy is paramount. Never change a message without the written consent of the originator.**
18. Know the difference between *accuracy* and *precision*. All transmissions, whether written formal traffic or simply short questions or instructions, require accuracy. Precision is required for long lists with numbers or detailed instructions. High group count formal messages should not be sent over tactical nets. Digital modes are best suited for this type of traffic, unless that traffic has high precedence.
19. There is no place for “Q” signals during official and emergency voice communications. They are too easily misunderstood, rarely save time, and often result in errors. Q signals work great for CW, and some other digital modes, but not for phone communications.
20. Do not act as a relay station unless Net Control, or another radio station, asks for a relay—and then only if you are certain you can fulfill the requirements with your station.
21. When transmitting numbers (house numbers, street and telephone numbers, etc.), always transmit number sequences as a series of individual numbers. Never say numbers in combinations. For example the number 1959 should be transmitted as one nine five nine and not nineteen fifty-nine.
22. If a proper name needs to be transmitted, always spell it out using the ICAO phonetic alphabet. Do not use cute or self-invented phonetics. There is no place for them in official and emergency communications, or on training nets. Do not use the phrase “common spelling”. There is no common spelling as far as communications procedures are concerned.
23. **ONLY TRANSMIT FACTS.** If your message is a question, deduction, educated guess, or hearsay, identify it as such. Do not clutter up the air with nonessential information. Be careful what you say on the air. There are many ears listening. Many facts will be taken out of context, even when carefully identified. Leave your commentaries and other musings at home. Be positive, and never critical.
24. If you do not understand the entire message given to you, or if you missed a word out of the transmission reply with “Say again”, or “say again the words after” or “say again the words between”. Do not say, “Please repeat,” because it sounds too much like the word “received” when conditions are poor.
25. Chewing gum, eating, and other activities with items in your mouth tend to clutter up the clarity of your speech. Don’t do it.
26. Avoid angry comments, on the air at all costs. Do not editorialize or offer opinions. Obscene statements are not necessary and are out of place in all communications. Nobody wants to hear about the slow driver in front of you. Be a professional in Amateur Radio.

Sound alert. Nothing destroys confidence as much as a bored or weary sounding radio operator. If you are tired, get a relief operator.

27. During an incident, communication suffers enough confusion without wisecracks and jokes. Amateur radio may be a hobby to enjoy, but when providing emergency communications, participating in training nets, or training drills you must remember that it is serious business and should be treated as such at all times. The reality is that someone's property or welfare may depend on you.
28. Stay off the air unless you are sure you can be of assistance. It does no good to offer advice, assistance, comments, or other input to a net unless you can truly provide clarification. Abe Lincoln said it well, "It is better to remain silent and be thought a fool than to open your mouth and remove all doubt."
29. Always know your location. If you are mobile or portable and moving around, always keep a sharp lookout for landmarks. You must be able, if called upon, to describe accurately your location at any time. This is particularly important if you are with a search team or other mobile units.
30. On VHF and UHF frequencies, particularly when on the fringes of communications, look for a receiving "hot spot" site and use it. Don't walk around talking while in a communications fringe area. Repeaters have much more power than your handheld. Even if you have a good signal from a repeater, it does not mean you are as strong going into the repeater. Consider a gain antenna for your HT and a Tiger Tail. You will be amazed how much better your hand held transceiver performs.
31. If you check into an emergency net, you must monitor on the net frequency. If you must leave the frequency, ask permission from the NCS. Report to the NCS when you return to the net. It is vital that the NCS knows the availability of each station on the net and it is up to YOU to keep the NCS advised. However, if the NCS is very busy and you must leave the net, do so without interrupting the net.
32. Net Control Stations frequently are very busy with work that is not on the air. If you call the NCS and do not get an immediate reply, be patient and call again in a minute or two. If you have an emergency, say you have "Emergency traffic" after you identify yourself when you call the NCS. Be patient with the NCS and other stations. Be courteous and professional.
33. A mobile radio (that is one that is mobile, portable, or airborne) has priority over any other type of radio station and other forms of telecommunications. This is true in all radio services. Fixed station operators must recognize that a call from a mobile station takes precedence over telephone calls, personal conversations, and other activities. Respond promptly to any call from a mobile station—even if it is to advise the caller to standby.

In conclusion, these few rules, and suggestions, are intended to help you become a better Amateur Radio operator. Analyze your present operating methods and try to polish each element so your participation in radio communications is professional and worthwhile. Your Net Control Station operator may have the final authority, but good, clean operating methods and procedures almost make net run almost without an NCS.