

Basic Communication Skills aired by KI5MA

Objective: This lesson introduces communication skills that are specific to emcomm operations, and helps you understand differences from normal Amateur Radio operations.

Information:

An emergency communicator must do his part to get every message to its intended recipient, quickly, accurately, and with a minimum of fuss. Several factors can affect your ability to do this, including your own operating skills, the communication method used, a variety of noise problems, the skills of the receiving party, the cooperation of others, and adequate resources. In this unit, we will discuss basic personal operating skills. Many of the other factors will be covered in later units.

Why Are Emergency Communication Techniques Different?

Life and death communications are not part of our daily experience. Most of what we say and do each day does not have the potential to severely impact the lives and property of hundreds or thousands of people. In an emergency, any given message can have huge and often unintended consequences. An unclear message, one that is delayed or mis-delivered, or never delivered at all can have disastrous results.

Listening

Listening is at least 50% of communication. Discipline yourself to focus on your job and "tune out" distractions. If your attention drifts at the wrong time, you could miss a critical message. Listening also means avoiding unnecessary transmissions. A wise ham once said, "A ham has two ears and one mouth. Therefore, he should listen twice as much as he talks." While you are asking, "when will the cots arrive?" for the fourth time that hour, someone else with a life and death emergency might be prevented from calling for help. Sometimes the job of listening is complicated by noise. You might be operating from a noisy location, the signal might be weak, or other stations may be causing interference. In each of these cases, it helps to have headphones to minimize local noise and help you concentrate on the radio signal. Digital Signal Processing (DSP)

and other technologies may also help to reduce radio noise and interference.

Microphone Techniques

Even something as simple as using your microphone correctly can make a big difference in intelligibility. For optimum performance, hold the mic close to your cheek, and just off to the side of your mouth. Talk across, rather than into, the microphone. This will reduce breath noises and "popping" sounds that can mask your speech.

Speak in a normal, clear, calm voice. Raising your voice or shouting can result in over-modulation and distortion and will not increase volume at the receiving end. Speak at a normal pace _ rushing your words can result in slurred and unintelligible speech. Pronounce words carefully, making sure to enunciate each syllable and sound. Radios should be adjusted so that a normal voice within 2 inches of the mic element will produce full modulation. If your microphone gain is set so high that you can achieve full modulation with the mic in your lap, it will also pick up extraneous background noise that can mask or garble your voice. A noise-canceling microphone is a good choice since it blocks out nearly all unwanted background noise and is available in handheld and headset boom mics. Headset boom microphones are becoming less expensive and more popular, but care should be taken to choose one with a cardioid or other noise canceling type element. Many low-cost headset boom mics have omni-directional elements, and will pick up extraneous noise.

"Voice operated transmission" (VOX) is not recommended for emergency communication. It is too easy for background noise and off-air operator comments to be accidentally transmitted, resulting in embarrassment or a disrupted net. Use a hand or foot switch instead.

When using a repeater, be sure to leave a little extra time between pressing the push-to-talk switch and speaking. A variety of delays can occur within a system, including CTCSS decode time, and transmitter rise time. Some repeaters also have a short "kerchunk" timer to prevent brief key-ups and noise from keying the transmitter. It also gives time for some handhelds to come out of the "power-saver" mode. Leaving extra time is also necessary on any system of linked repeaters, to allow time for all the

links to begin transmitting. These techniques will ensure that your entire message is transmitted, avoiding time-wasting repeats for lost first words. Lastly, pause a little longer than usual between transmissions any time there is a possibility that other stations may have emergency traffic to pass from time to time. A count of "one, one thousand" is usually sufficient.

Brevity & Clarity

Each communication should consist of only the information necessary to get the message across clearly and accurately. Extraneous information can distract the recipient and lead to misinterpretation and confusion. If you are the message's author and can leave a word out without changing the meaning of a message, leave it out. If the description of an item will not add to the understanding of the subject of the message, leave it out. Avoid using contractions within your messages. Words like "don't" and "isn't" are easily confused. If someone else has drafted the message, work with the author to make it more concise.

Make your transmissions sound crisp and professional, like the police and fire radio dispatchers and the air traffic controllers. Do not editorialize or engage in chitchat. An emergency net is no place for "Hi Larry, long time no hear," "Hey, you know that rig you were telling me about last month&." or any other non-essential conversation.

Be sure to say exactly what you mean. Use specific words to ensure that your precise meaning is conveyed. Do not say, "that place we were talking about," when "Richards School" is what you mean. Using non-specific language can lead to misunderstandings and confusion.

Communicate one complete subject at a time. Mixing different subjects into one message can cause misunderstandings and confusion. If you are sending a list of additional food supplies needed, keep it separate from a message asking for more sand bags. Chances are that the two requests will have to be forwarded to different locations, and if combined one request will be lost.

Plain Language

As hams, we use a great deal of "jargon" (technical slang) and specialized terminology in our daily conversations. Most of us understand each other

when we do, and if we do not on occasion it usually makes little difference. In an emergency, however, the results can be much different. A misunderstood message could cost someone's life.

Not everyone involved in an emergency communication situation will understand our slang and technical jargon. Even terms used by hams vary from one region to another, and non-hams will have no knowledge of most of our terminology. Hams assisting from another region might understand certain jargon very differently from local hams.

For these reasons, all messages and communications during an emergency should be in plain language. "Q" signals (except in CW communication), 10 codes, and similar jargon should be avoided. The one exception to this is the list of standard "pro-words" (often called "pro-signs") used in Amateur traffic nets, such as "clear," "say again all after" and so on. We will discuss some of these pro-words in detail below, and others later in this course.

Avoid words or phrases that carry strong emotions. Most emergency situations are emotionally charged already, and you do not need to add to the problem. For instance, instead of saying, "horrific damage and people torn to bits," you might say "significant physical damage and personal injuries."

Phonetics

Certain words in a message may not be immediately understood. This might be the case with an unusual place name, such as "Franconia" or an unusual last name, like "Smythe." The best way to be sure it is understood correctly is to spell it. The trouble is, if you just spell the word using letters, it might still be misunderstood, since many letters sound alike at the other end of a radio circuit. "Z" and "C" are two good examples. For that reason, radio communicators often use "phonetics." These are specific words that begin with the letter being sent. For instance, "ARRL" might be spoken as "alpha romeo romeo lima."

To reduce requests to repeat words, use phonetics anytime a word has an unusual or difficult spelling, or may be easily misunderstood. Do not spell common words unless the receiving station asks you to. In some cases, they may ask for the phonetic spelling of a common word to clear up

confusion over what has been received. Standard practice is to first say the word, say "I spell," then spell the word phonetically. This lets the receiving station know you are about to spell the word he just heard.

Several different phonetic alphabets are in common use, but most hams and public safety agencies use the ITU Phonetic alphabet.