

Effective Radio Communication

Major principles

Identity

Begin every transmission with your identity, and who you wish to talk to.

Your identity is the team name or position, like “DA1” for damage assessment team 1 or “Command” for command post. A transmission might begin with something like “Command, this is DA1”. More simply you could say “Command, DA1” Once communication is established you don’t need to give your name every time, as long as it is clear who is speaking.

Clarity

Stop. Think through what you need to say

Decide what you are going to say before you begin speaking. Rehearse what you will say if that helps.

Eschew obfuscation

Use short simple words. A voice over the radio can be hard to understand, using simple, common words makes your transmission easier to follow.

Stay calm.

If you are excited you can speak too quickly, or forget words.

Don’t rush.

Speak slowly enough to be easily understood. Try for a normal conversational speed .It is better to take a little longer and say things only once.

Get (or give) a “readback”

The only way to be sure your message was understood is to get the other party to repeat your message. This is not a verbatim repetition of the message, but, a restatement of the gist of the message. For example, DA1 reporting a gas leak might go something like: “Command, DA1” “DA1 go ahead” “Command, the house at 2411 Emmons has a gas leak from the meter”. Command should now give a readback of the information (hopefully while recording it in the communications log). “DA1, 2411 Emmons has a gas leak at the meter” “Command, that is correct. DA1 out”.

Brevity

State the essential facts only

Skip unnecessary details. Give only the information needed to get the result intended. For example, if you are reporting damage to a house state the address of the house and the nature of the damage. Don't tell Command what color the house is, unless that is the only way to identify which house you are talking about. Also, avoid "filler words". The Umm's, ahhh's and like, you know, other stuff, adds nothing to clarity.

Communicate only one message at a time

If you have multiple things to report, transmit only one item at a time. Be sure that one concept was received and understood before moving on to the next.

If you must transmit long messages give it a "break"

If you transmit a long message other teams can't get through to Command. Potentially you could block an emergency message. The way to give the other teams a chance to get a word in edgewise is to pick a stopping point and say "break". Then unkey the push-to-talk button and wait a couple seconds. If another team has traffic that they feel has priority over yours that team should identify themselves and wait to be acknowledged by Command. An example: DA1 might be sending "...so I sent them all over to the school. Break" "Command, DA3" "DA3 Command, go ahead". DA3 cuts in to the conversation and Command requests that they give their message.

How does it work in the real world

First, stop and listen.

Make sure the frequency is clear before you start speaking. If two radios transmit at the same time all you hear is squeal.

Start by getting acknowledged "Is this the party to whom I am speaking?"

Don't just start speaking. Team members will be searching for damage, or coordinating the response. It may take them a second to switch gears to deal with your radio message. Start by simply stating who you wish to talk to, and who you are. Then wait for a response. For example, if you are Command trying to talk to First Aid team 3, you would say: "FirstAid 3, Command" and wait. First Aid 3 should come back with "Command, First Aid 3, go ahead". The "go ahead" means "go ahead with your message, I'm ready to receive it". Of course it is possible First Aid 3 is busy. If possible they should respond with "Command, First Aid 3, stand by", which means "I heard you call, we'll get back to you as soon as possible". It is possible that even that much of an interruption is not possible, and First Aid 3 will not answer. Command should simply try again in a few seconds. Remember, answering the radio is secondary. Don't use the radio if doing so will endanger yourself or someone else.

Keep transmissions time to a minimum

Only one person can talk at a time, and there may be a lot of people who have something to say. Transmit as much as necessary, but no more. Also, pause in your conversation to allow a break in case another team needs to break in with emergency traffic.

If it is a priority, say so.

When a situation is an immediate threat to life or property your transmission should take priority over normal traffic. To report an emergency, listen to your radio. If someone else is transmitting wait till there is a break before transmitting, then identify the person you are calling, yourself and state that you have “priority traffic”. Then wait to be acknowledged. Repeat as needed to get their attention. For example, DA1 comes across a medical emergency. “Command, DA1 with priority traffic” “DA1, go ahead” “Command we need first aid response to ...”. Command should then come back with a readback of the request (first aid) and the location (address).

Radio Jargon

Don’t say “over”

All our radios will send a chirp to let your listener know you have released the push-to-talk button.

Some jargon you may hear:

“out” to end a transmission. This means “I’m going to quit talking now, don’t expect to hear from me again till something new happens”.

“monitoring” – “I’ll be listening, but won’t say anything till something comes up”.

“key the mic” – press the push-to-talk button

“break” – used to say “I’m going to pause a moment in case some one else needs to say something” Can also be used by the person trying to get in to the conversation. Transmit the word “break” in a pause between transmissions to get the attention of the other parties. They should stop and acknowledge the “breaker”.

The 2-meter radios

When and how to use them

Setting up the 2-meter radio is a medium priority. The incident commander will decide when to begin setting up the radios. When there are adequate personnel to assign one to the ham radio, put in the batteries and turn it on. It should already be tuned to 145.270. Listen. This will be the local ARES/RACES repeater. If they decide there is a real emergency they will “Activate”. If the station is activated, switch frequency to 146.535 (this is already programmed in, just change channels). This is the MTV Net control. At this point you should check in (you will hear others doing the same thing). Call in and identify yourself as KW6C Monta Loma CERT (licensed hams use your own call sign). This is our link to the city Office of Emergency Services. If we need police or fire we can request it through the MTV Net.

What if I want a ham license?

There are many ways to get your license. The good news today is that you no longer need to learn morse code. You do have to pass an FCC test. There is plenty of help to teach the material you need for the test. For information on classes or self-teaching materials you can:

Visit the HRO store in Sunnyvale

Go to www.hello-radio.org and click on “become a ham”

Ask one of the licensed Amateur Radio Operators in ML Cert (Buff, Mike, Tim)