

# The DOs and DON'Ts of Hand held Radios

*Time and time again I see people making the same mistakes when using hand held radios. Usually the individual has had the radio literally thrust into their hands, and have had zero training with how to use a transceiver.*

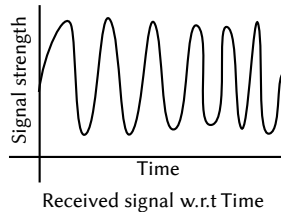
*Back around 2008 when I got my foundation amateur radio license, I began my on-air time with a handheld radio. The following are some tips that I had to learn the hard way...*

-- STUART LONGLAND (VK4MSL)

## 1 DON'T walk aimlessly about when transmitting. (This applies to mobile/cordless phones too)

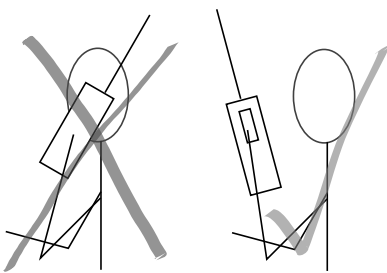
You don't always know what path the radio signal will take between you and the receiver. Wandering about can cause your signal to fade in and out as you move. (On amateur radio we call this "QSB" or fading.)

If you must keep moving, do so, but don't just pace in a circle out of habit.



## 3 Hand-held radios are NOT mobile phones!

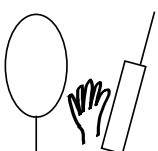
Talk INTO the set when transmitting. You will find the microphone is usually at the front of the set in the centre, not at the end of the set as they are in a telephone handset. This is also true of hand-held microphones (connected to base or mobile radios).



## 4 DON'T eat the microphone!

If you are hungry, try some fruit, plastic will not do your digestive system any good! Speaking too close to the microphone will cause distortion in the signal, making it hard for the other end to hear what you are saying.

The span of your hand is usually a good start for working out how far to position the microphone.

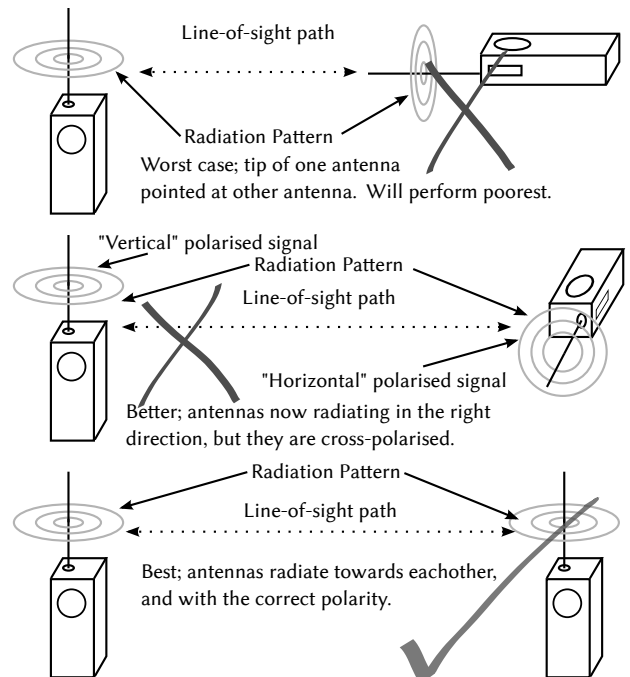


## 2 DO hold the antenna as vertical and as high as you can.

"Rubber ducky" antennas radiate most of their signal in a direction perpendicular to the antenna. At the tip is typically a "null" or absence of significant radiation.

Antennas work best when they are oriented the same way, and when placed within each other's radiation patterns. Unless the station you're trying to reach is directly above or below you, you will do better if both of you keep your antennas approximately vertical (a slight tilt is okay).

And of course, all antennas perform better at height, so if you can get it higher, do so.



## 5 Press the PUSH-to-TALK BEFORE you start talking, release the PUSH-to-TALK AFTER you finish talking.

No one will hear you speaking until the transmitter is active, and they won't hear you when it shuts down. If you're late pressing the PTT, the transceiver will cut off the start of your transmission. If you're early releasing the PTT, the transceiver will cut off the end of your transmission.

With some transceivers and repeater systems, there can be a delay of up to a second before transmitting actually begins. It doesn't hurt to wait a moment before you start.

VOX (voice activated transmission) is a notable exception; you will need to adjust it so that the threshold triggers just as you start speaking (but not too low that it falsely triggers on background noise), and set the delay so that it doesn't cut off your speech. VOX is therefore best used in a quiet environment where the transmitter has minimal latency.