

## RADIO COMMUNICATIONS BASICS

Walkie Talkie Radios (FRS or GMRS or FRS/GMRS radios)

- Very low power, 1/2 watt typically
- Very low cost
- No license required (during an emergency, all radios are allowed, no licenses required)
- Channels 1-7 are on both FRS and GMRS radios
- Channels 8-14 are FRS only
- Channels 15-22 are GMRS only
- No external antennas allowed
- Typical 0.5 - 1 mile range in urban environments

WARNING: THE GENERAL PUBLIC AND THE NEWS MEDIA CAN HEAR WHAT YOU ARE SAYING ON THESE FREQUENCIES.

- Think about your message before you transmit
- Wait until the previous conversation is over
- Get to the point when you transmit; use short sentences
- Use plain language as much as possible
- Hold the radio about 2-3 inches from your mouth while speaking
- Never yell into the radio; always stay calm and speak normally

Pro Words (to convey more information in a short word or phrase)

- Affirmative – “Yes” (in answer to a specific question)
- Break – “I have a priority message.”
- Break-Break – “I have an emergency message.”
- Clear – “I am finished with this communication.”
- Copy – “I acknowledge receipt of message.”
- Negative – “No”
- Out – same thing as Clear
- Over – end of current transmission, waiting for response
- Roger - "I have received and understand your transmission." It does not mean yes.
- Wilco – “I will comply”

Using Private Line (PL) codes:

- Each FRS Channel can be divided into Sub Channels by assigning a Private Line (PL) Code
- You may be able, depending upon the FRS radio, to use 38 or more PL Codes
- Since not all FRS radios are capable of all Codes, best to use PL “0” to receive all Channels
- CAUTION: If you assign a Channel with a PL Code, you will only be able to hear those stations transmitting on the exact same channel and PL Code.
- Only use PL Codes when specifically directed by Neighborhood Incident Commander.

Radio Communications web links:

- Berkeley CERT FRS Radio Communications  
[http://www.cityofberkeley.info/uploadedFiles/Fire/Level\\_3\\_-\\_General/Radio\\_communications\\_5.pdf](http://www.cityofberkeley.info/uploadedFiles/Fire/Level_3_-_General/Radio_communications_5.pdf)
- NALCO ARES Races <http://nalco-ares-races.org/>
- ARRL <http://www.arrl.org>
- Organizing CERT Communications <https://www.citizencorps.gov/cert/start-3-1f.shtm>