Portola/Alpine GMRS Radio Net and Operations Guide

Geographic Area of Operation: Portola State Park Road and Alpine Road.

By: Nathaniel Cooper

Licensing Requirements

Using a GMRS radio requires a license from the FCC. No test is required. The fee is \$70 for a 10-year period. The license is good for all members of your family. For instructions on how to get your license, view UTUBE: <u>"How to Get Your GMRS License in Less Than 10 Minutes"</u>. Once you get your license, you will receive a GMRS "CALL SIGN". Notification of your call sign will be sent to you via e-mail. Make sure you have the FCC address in your contacts, or it will go to your spam folder. Proper radio protocol is to use your call sign on the air to identify yourself. See below "Radio Protocol".

How to input a frequency using the Bofeng BF-F8HP

1. Turn on the radio using the knob adjacent to the antenna. The further clockwise the greater the volume. If you want to test the volume, press and hold the black "MONI" button on the left side and you will hear a nasty static at the volume you have selected. Note, a short press of MONI turns the tiny flash light on and off.



2. You can change between frequency mode and channel mode by pushing the red VFO/MR button on the face of the radio. Use frequency mode to input a desired frequency (see details in step 4). You can store favorite frequencies as channels, and access them in channel mode. Note, the channel number will not necessarily correspond to the numbers on other GRMS radios and our frequency chart unless you input them as such.



- 3. You can have two different frequencies keyed up on the display at one time. You can select which one is active (i.e. the one you are transmitting/receiving on) by using the blue A/B button on the face of the radio. A little for the carrot symbol appears next to the active frequency on the display and indicate which frequency is selected as active. Note: DO NOT use the arrow keys on the key pad—these are used to change the frequency incrementally (up arrow to increase, down arrow decrease).
 - An up arrow ______ indicates the frequency in the upper portion of the display selected.
 - A down arrow indicates the frequency in the lower part of the display is selected (note, in the picture the lower frequency is selected as active).



4. To enter a frequency to monitor/transmit on, make sure you are in frequency mode (toggle back and forth using the red VFO/MR button). After selecting the desired frequency on the display using the blue A/B button, you can edit it using the key pad. In order to input the GMRS channel 16 frequency of 462.5750 MHz (our priority frequency), you would use the key pad to enter "4" "6" "2" "5" "7" "5" "0". This will immediately become the active frequency, and you are now ready to transmit/ receive.



5. In order to talk press and hold the PPT button (PPT stands for "press to talk") while talking, and your on the air. While you are holding the PTT button you are transmitting. Hold the radio vertical, close to your mouth (1"), and at a slight angle to your face so you are not speaking directly into the radio. Press the PTT button around 1 second before speaking and for 1 second after. If possible, outdoors is much better. Note: the red call button toggles between FM radio and GMRS radio.



Network Operations Procedure

- 1. Your neighborhood emergency coordinator (Nathaniel Cooper or Don Born) will initiate a check in net on our main GMRS, for us that's 462.5750 MHz, or GMRS channel 16. Then monitor the frequency to keep the channel open for communications.
- 2. If communication is not possible on our main frequencies, then switch to the Long Ridge Repeater frequencies and check in on that net.
- 3. If you need to get a message out, contact you net control (i.e. Nathaniel or Don) and pass along the information. Note priority will be given to emergency traffic
- 4. If you want to chat, then switch to a different frequency (i.e PA3 or PA4) with the person(s) you want to talk to and continue the conversation on that frequency. Note: we

share channel PA 2 with Middleton Tracts GMRS net, so this frequency should not be used for chitchat

Alpine/Redwood Frequency Table			
Net channel	Frequency in MHz	Corresponding	Notes
designation		GMRS Channel	
PA1 (formally AR 1)	462.5750	16	Main GMRS
			channel
PA 2 (formally AR 2)	462.5500	15	Alternate Channel
			(shard with Middleton
			GMRS net)
PA 3 (formally AR 3)	462.7000	21	Alternate Channel
PA 4 (formally AR 4)	462.7250	22	Alternate Channel

Alpine/Redwood Frequency Table

Note: The above frequencies will not interfere with Portola Heights net

Long Ridge GMRS repeater

Receive: 462.600MHz DCS +506N

Transmit: 467.600MHz DCS +031N

- Use the repeater channel to monitor for alerts about a potential emergency, to obtain information about a situation across neighborhoods and to report on the welfare of your neighborhood. It is also suggested that if you are out hiking by yourself or working with equipment, you have your radio with you tuned to the LRRPT channel. That way, if you get in trouble, you have the greatest capability of reaching someone who can help. When using the repeater frequency, be sure to hold your PTT button for a full 2 seconds before speaking and 2 seconds before ending your transmission.
- The Longridge Repeater is programmed with the following:
 - Tone in tail: After transmitting, there is a two second tone which will blank out any communication. This forces the user to wait and listen before transmitting to avoid talking over each other. You will hear a beep at the end of a transmission.
 - Time out: The repeater will time out after 3 minutes, thus kicking the talker off the air. This encourages short, clear messages and discourages rambling.

Other Usefully Frequencies

NOAA weather Radio -----162.550MHz

CALFIRE dispatch-----151.370MHz

La Honda repeater (CMD31) (monitor only unless you're a HAM)-----146.730MHz

County repeater (CLT95) (monitor only unless you're a HAM)-----146.805MHz