

GENERAL MOBILE RADIO SERVICE (GMRS)

How to use your GMRS radio

REASONS TO CONSIDER A GMRS RADIO

- Potentially many more users than amateur radio operators, especially in an emergency
- Way to keep in touch with family members or friends who would never get their ham license
- Licensing process is simple
- One license covers your family
- GMRS is easy to operate, radios are pre-programmed and easy to use right out of the box
- May lead users to consider a ham radio license

GMRS BRIEF OVERVIEW

- Operates in the UHF band, 462 to 467 MHz, same as the FRS (Family Radio Service)
- Handheld units up to 5 watts, Fixed base stations and repeaters up to 50 watts
- FCC license required, \$35 for 10 years, available online. Must be 18 years or older
- Very popular with outdoor activities

FCC LICENSE

- Must have an FCC Registration Number (FRN)
- Log into:
wireless2.fcc.gov/UlsEntry/licManager/login.jsp
- Click “Apply for a new license” follow instructions.
- Pay fees, currently \$35 for 10 years
- Receive email notice in one to two days
- My GMRS call sign is: WSBU970

WHO ARE FAMILY MEMBERS?

- The license can be used by the licensee and immediate family members which include **the licensee's spouse, children, grandchildren, stepchildren, parents, grandparents, stepparents, brothers, sisters, aunts, uncles, nieces, nephews, and in-laws.**
- They do not have to be domiciled in the same household.
- May be under 18 years of age to use license.

FCC RULES FOR GMRS

- Use FCC assigned call sign at end of transmission and at periodic intervals (15 min)
- Up to \$10,000 and jail time for violations
- FCC 47 C.F.R., Part 95, Subpart E for rules
- Radio must be certified for GMRS

SOME POPULAR GMRS RADIOS

- Baofeng UV-5G PLUS - \$65.54 for 2 radios
 - USB-C port, NOAA Weather, FM radio
 - Choice of 8" or 15.5" antennas
 - 2 wall chargers
- BTECH GMRS-PRO - \$153 for 1 radio
 - USB-C port, Bluetooth, GPS, Compass, FM radio
 - Waterproof design
 - APP for phone

- TIDRADIO TD-H3 - \$31.39 on Amazon
- TIDRADIO TD-H8 (larger than H3) - \$40 on Amazon
- BAOFENG GMRS GM21 – Bluetooth - \$27 on Amazon
- BAOFENG UV-9G – No Bluetooth but good radio - \$33 on Amazon

FRS COMPARED TO GMRS

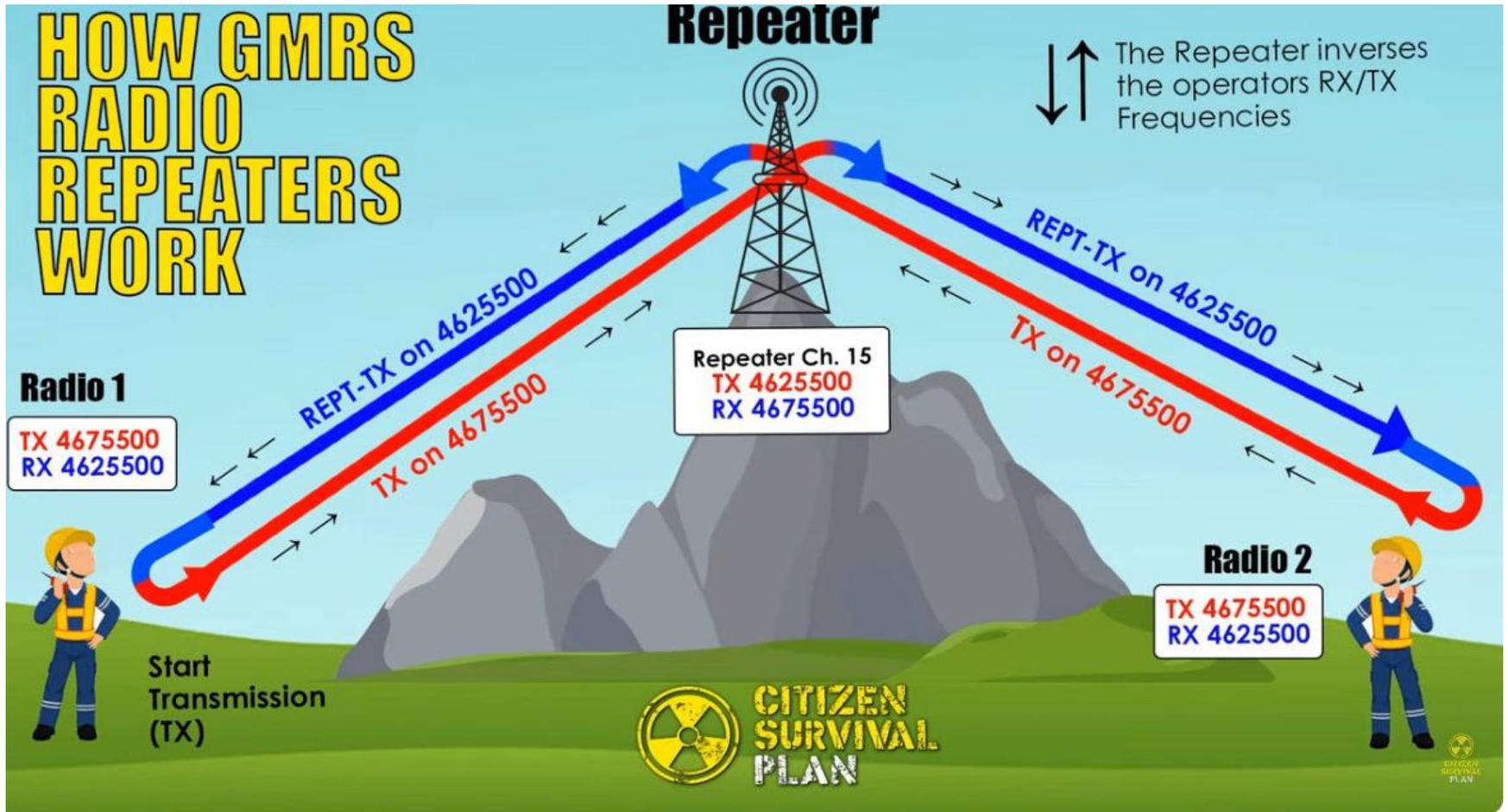
| List of FRS channels compared to GMRS | | | |
|---------------------------------------|-----------------|----------------------|---|
| Channel | Frequency (MHz) | FRS EIRP Restriction | GMRS EIRP Restriction |
| 1 | 462.5625 | Up to 2 watt | Up to 5 watts |
| 2 | 462.5875 | Up to 2 watt | Up to 5 watts |
| 3 | 462.6125 | Up to 2 watt | Up to 5 watts |
| 4 | 462.6375 | Up to 2 watt | Up to 5 watts |
| 5 | 462.6625 | Up to 2 watt | Up to 5 watts |
| 6 | 462.6875 | Up to 2 watt | Up to 5 watts |
| 7 | 462.7125 | Up to 2 watt | Up to 5 watts |
| 8 | 467.5625 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 9 | 467.5875 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 10 | 467.6125 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 11 | 467.6375 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 12 | 467.6625 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 13 | 467.6875 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 14 | 467.7125 | Up to 0.5 watt | Up to 0.5 watt [Note 1] |
| 15 | 462.5500 | Up to 2 watt | Up to 50 watts |
| 16 | 462.5750 | Up to 2 watt | Up to 50 watts |
| 17 | 462.6000 | Up to 2 watt | Up to 50 watts |
| 18 | 462.6250 | Up to 2 watt | Up to 50 watts |
| 19 | 462.6500 | Up to 2 watt | Up to 50 watts |
| 20 | 462.6750 | Up to 2 watt | Up to 50 watts |
| 21 | 462.7000 | Up to 2 watt | Up to 50 watts |
| 22 | 462.7250 | Up to 2 watt | Up to 50 watts |

GMRS Repeater Channels

GMRS repeaters operate on **paired frequencies**:

| Channel | Repeater Output | Repeater Input |
|---------|-----------------|----------------|
| RP1 | 462.550 | 476.550 |
| RP2 | 462.575 | 467.575 |
| RP3 | 462.600 | 467.600 |
| RP4 | 462.625 | 467.625 |
| RP5 | 462.650 | 467.650 |
| RP6 | 462.675 | 467.675 |
| RP7 | 462.700 | 467.700 |
| RP8 | 462.725 | 467.725 |

How GMRS Repeaters Work



Our GMRS Repeater

- 10 Watt Midland Repeater MXR10
- Located at Gate 14
- Antenna on Roof of Building
- Channel 18 - 462.625/467.625
- Tone of 69.3
- Battery Back Up – 1500VA Lead Acid

Some Call Signs of Club Members

- WRPJ912- Stan Ames
- WRUV813 – Bruce Bonbright
- WSIQ228- Earl Hungness
- WSIQ228 – Kathryn Hungness
- WRKP628 – Phil Kowal
- WSCK568 – Bob Matoni
- WRHV580 – Steve Nagielski
- WSBU970 – Tom Stockey
- WRUR693 – Jon Yuriar