



Part 95 Personal Radio Services Report & Order, FCC 17-57

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Personal Radio Services (PRS)

- PRS are services intended for personal use, that are mostly licensed-by-rule.
 - Licensed by rules services: Family Radio Service (FRS), Radio Control Radio Services (RCRS), CB Radio Services (CBRS), Low Power Radio Services (LPRS), MedRadio, Wireless Medical Telemetry Service (WMTS), Multi-Use Radio Service (MURS), Personal Locator Beacons (PLB), Maritime Survivor Locating Devices (MSLDs) and Dedicated Short Range Communications On-Board Units (DSRC-OBUs),
 - Individually licensed services: General Mobile Radio Services (GMRS) and 218-219 MHz Radio Service



R&O FCC 17-57

● General changes:

- Reorganized rules into common format.
 - Frequencies will be found at 95.xx63 in each subpart, power will be found at 95.xx67...
 - Subpart A has common requirements for all PRS services, individual subparts have service-specific rules, including technical rules.
- Frequency stability to be expressed as PPM.
- Crystal Control no longer required.
- Prohibited Voice-obscuring features.
 - Scrambling and voice obscuring not allowed on shared PRS channels.



Rule Organization

Subpart	Old Topic	Old Rules	New Topic	New Rules
A	General Mobile Radio Service (GMRS)	1-183	Personal Radio Services	300-399
B	Family Radio Service (FRS)	191-194	Family Radio Service (FRS)	500-599
C	Radio Control (R/C) Radio Service	201-225	Radio Control Radio Service (RCRS)	700-799
D	Citizens Band (CB) Radio Service	401-428	CB Radio Service (CBRS)	900-999
E	Technical Regulations	601-673	General Mobile Radio Service (GMRS)	1700-1799
F	218–219 MHz Service	801-861	218-219 MHz Service	1900-1999
G	Low Power Radio Service (LPRS)	1001-1019	Low Power Radio Service (LPRS)	2100-2199
H	Wireless Medical Telemetry Service (WMTS)	1101-1129	Wireless Medical Telemetry Service (WMTS)	2300-2399
I	Medical Device Radiocommunication Service (MedRadio)	1201-1225	Medical Device Radiocommunication Service (MedRadio)	2500-2599
J	Multi-Use Radio Service (MURS)	1301-1317	Multi-Use Radio Service (MURS)	2700-2799
K	Personal Locator Beacons (PLB)	1400-1402	Personal Locator Beacons (PLBs)	2900-2999
L	Dedicated Short Range Communications Service On-Board Units (DSRCS-OBUs)	1501-1511	DSRCS On-Board Units (OBUs)	3100-3199



Rule Organization

Administrative Rules	Operating Rules	Technical Rules	Marketing Rules
1 scope	31 permissible uses	61 equipment certification	91 marketing limitations
3 definitions	33 prohibited uses	63 frequencies, channels	93 labeling
5 authority to operate	35 use of certified equip.	65 frequency accuracy	95 disclosures
7 station locations	37 modified equipment	67 transmitting power limits	
9 coordination procedures	39 external equipment	69 field strength limits	
11 FCC correspondence	41 antenna height limit	71 emission types	
13 violations, penalties	43 operator responsibility	73 emission bandwidths	
15 <i>reserved</i>	45 remote control	75 modulation limits	
17 antenna registration	47 automatic control	77 tones and signals	
19 station maintenance	49 network connection	79 unwanted emissions	
21 <i>reserved</i>	51 station identification	81 voice obscuring features	
23 station inspection	53 false communications	83 <i>reserved</i>	
25 interference	55 <i>reserved</i>	85 RF exposure	
27 restricted operation	57 duration of transmissions	87 additional requirements	
29 how to contact FCC	59 channel sharing	89 industry technical standard	



FRS Changes

- Combo-Radio Prohibition.
 - No more equipment certification for FRS units with other services, except for Part 15.
 - GMRS/FRS combo units will be reclassified as either GMRS or FRS, but not both.
- Power and Channel changes.
 - 8 GMRS 462 MHz channels added to FRS.
 - 15 FRS 462 MHz channels increased to 2 W ERP.
 - 7 FRS 467 MHz channels stay at 0.5 W ERP.



GMRS Changes

- Technical changes.
 - Added 7 467 MHz interstitial channels at 0.5 W (shared with FRS).
 - Data and text permitted for handheld units on 462 MHz channels and 467 MHz interstitial channels.
 - Not on 467 MHz repeater input channels.
 - Data must be initiated by manual action of operator, except as part of an automatic response to another unit's inquiry.
 - Data transmission must not exceed 1 sec. and not exceed more than 1 transmission within a 30 second period, except for automatic responses.

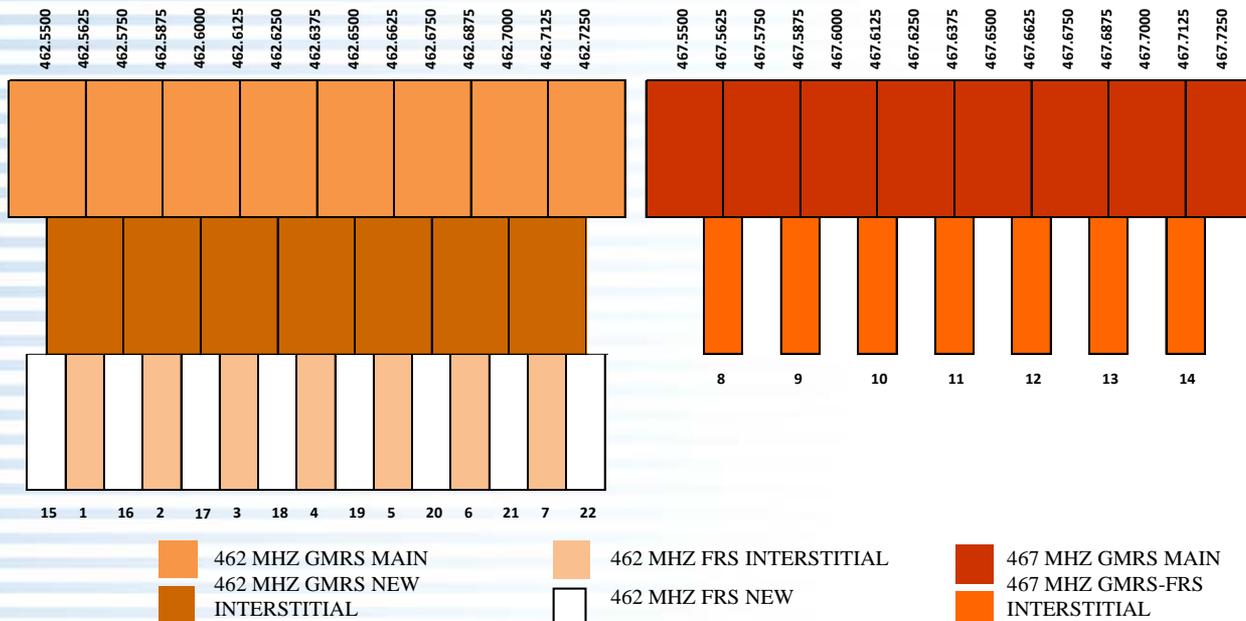


GMRS cont.

- Data transmitting units must use non-removable antennas.
- GMRS radios not to be certified if they contain frequencies for a service that is not subject to equipment certification.
- License term from 5 to 10 years.
- Removed small station classes.



GMRS/FRS Channels



	DESIGNATION	CHANNEL BW	POWER	GMRS STATION TYPES
	462 MHz GMRS MAIN	25 KHZ [95.1773(A)]	50 W (MOBILE, REPEATER, BASE) [95.1767(A)(1)]; 15 W (FIXED) [95.1767(A)(2)]	MOBILE, HAND-HELD PORTABLE, REPEATER, BASE, FIXED [95.1763(A)]
	462 MHz GMRS INTERSTITIAL	25 KHZ [95.1773(B)]	5 W ERP (MOBILE, HAND-HELD PORTABLE, BASE) [95.1767(B)]	MOBILE, HAND-HELD PORTABLE, BASE [95.1763(B)]
	462 MHz FRS INTERSTITIAL	12.5 KHZ (95.573)	2 W ERP (95.567)	
	462 MHz FRS NEW	12.5 KHZ (95.573)	2 W ERP (95.567)	
	467 MHz GMRS MAIN	25 KHZ [95.1773(A)]	50 W (MOBILE, REPEATER, BASE) [95.1767(A)(1)]; 15 W (FIXED) [95.1767(A)(2)]	MOBILE, HAND-HELD PORTABLE, CONTROL, FIXED [95.1763(C)]
	467 MHz GMRS-FRS INTERSTITIAL (NEW IN GMRS)	12.5 KHZ [(95.573), 95.1773(B)]	0.5 W ERP [95.567, 95.1767(C)]	HAND-HELD PORTABLE [95.1763(D)]



CBRS Changes

- Hands-free headsets are permitted under Part 15 rules.
 - Bluetooth Headsets are not remote control.
- Serial number engraving no longer required.
- Copy of operating rules with each radio no longer required.
- Prohibition on long range communications lifted.



Other updates.

- RCRS updates.
 - Removed specific transmission duration limit (3 minute rule).
 - Clarified replacement parts rule: antennas/batteries can be replaced and plug-in modules can be switched if part of equipment certification.
- PLB - beacons marketed as PLBs must meet Part 95, Subpart K for 406 MHz PLBs



Reconsideration Issues

- GMRS automatic data transmissions.
- Medradio correction:
 - Authorized bandwidth. For other than the 401-406 MHz MedRadio frequency band, the maximum permissible occupied bandwidth of an emission. For the 401-406 MHz MedRadio frequency band, the maximum permissible bandwidth of an emission.



Conclusion

Thank you!

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