

FEDERAL COMMUNICATIONS COMMISSION

FCC 98-293

Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington, D. C. 20554

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FCC MAIL ROOM

In the Matter of)	WT Docket No. 95-102
)	RM-8499
Amendment of Part 95 of the)	
Commission's Rules to)	
Establish a Very Short Distance)	
Two-Way Voice Radio Service)	

MEMORANDUM OPINION AND ORDER

Adopted: October 30, 1998

Released: November 9, 1998

By the Commission:

I. INTRODUCTION & EXECUTIVE SUMMARY

1. By a *Report and Order* adopted on May 10, 1996, the Commission established the Family Radio Service ("FRS"), a very short distance, two-way voice personal radio service.¹ Two timely petitions for reconsideration of the *Report and Order* have been filed -- one by the Personal Radio Steering Group, Inc. ("PRSG") and the other by Michael C. Trahos ("Trahos").² In addition, PRSG filed a Petition for Stay ("Stay") requesting that implementation of the new FRS rules be stayed pending resolution of its reconsideration petition, and Motorola has filed a Request for Clarification requesting that we clarify that an antenna must be a non-detachable antenna to be an "integral antenna" within the meaning of the FRS rules.³

2. In its Petition, PRSG requests a series of additional rules and rule changes which it argues are primarily designed to provide greater assurance that the FRS is used for its intended purposes. It also expresses concern that some users of FRS units may not share spectrum responsibly with other users, and requests that we adopt rule changes to maintain the integrity of the FRS as a short distance, occasional use service for individuals. PRSG also requests that we relax interference standards when FRS units are

¹ See Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Radio Service, WT Docket No. 95-102, *Report and Order*, 11 FCC Rcd 12977 (1996) (*Report and Order*).

² See Michael C. Trahos Petition for Partial Reconsideration, filed July 3, 1996 (Trahos petition) and Personal Radio Steering Group, Inc., Petition for Reconsideration of a Report and Order filed July 5, 1996 (PRSG petition).

³ See Motorola Request for Clarification, filed April 10, 1998.

transmitting on channels shared with the General Mobile Radio Service ("GMRS").⁴ Trahos' Petition requests that we conform the GMRS rules to the FRS rules by amending the GMRS rules to permit GMRS stations to communicate with FRS units. PRSG and Trahos assert that the GMRS rules restrict GMRS stations to communications with other GMRS stations.⁵

3. We conclude that revision of the FRS rules as requested by PRSG is unnecessary. PRSG essentially seeks to impose on FRS a much more restrictive regulatory environment than is warranted, based in large part on its speculative prediction that individuals may misuse the FRS. We note that during the two years that FRS has been authorized, the Bureau has not received any complaints of misuse of FRS units or harmful interference to GMRS users sharing channels with FRS. We further conclude that PRSG's and Trahos' requests to amend the GMRS rules stems from a misreading of the GMRS rules. Accordingly, we deny both petitions for reconsideration. We also deny PRSG's Petition for Stay and grant, in part, Motorola's request that we clarify that an integral antenna is not a detachable antenna.

II. BACKGROUND

4. In the *Report and Order*, the Commission determined that the FRS will provide an affordable and convenient means of direct, short range, two-way voice communications among small groups of persons.⁶ Using FRS units, families, friends and associates are able to communicate among themselves within neighborhoods and while on group outings. To minimize regulatory burdens on users, the FRS is licensed by rule.⁷ To this end, there are four simple operating rules and transmitter technical standards, thus obviating the need for individual licensing.⁸ A principle goal of the transmitter technical standards is to facilitate spectrum sharing between the FRS and the GMRS. The *Report and Order* concluded that with appropriately fashioned technical standards, FRS could share two small frequency bands currently authorized for GMRS without interfering with GMRS stations. To prevent FRS from being used as a substitute for cellular telephone service, the FRS rules include an absolute prohibition

⁴ The GMRS is a land mobile radio service available to persons for two-way communications to facilitate the activities of licensees and their immediate family members. The rules for GMRS are in 47 C.F.R. Part 95, Subpart A. The Commission is re-evaluating this service in order to identify and eliminate regulations that have become unnecessary and to insure that the proposed streamlined licensing process collects the minimum information needed of GMRS licensees and applicants. See Biennial Regulatory Review -- Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, *Notice of Proposed Rulemaking*, WT Docket No. 98-20, 13 FCC Rcd. 9672 (1998).

⁵ PRSG petition at 13; Trahos petition at 5.

⁶ *Report and Order*, 11 FCC Rcd at 12977.

⁷ *Report and Order*, 11 FCC Rcd at 12983.

⁸ *Report and Order*, 11 FCC Rcd at 12978.

against interconnection of FRS units with the public switched telephone network ("PSN").⁹ We believe that FRS already is filling a specific niche for short distance, personal communications.¹⁰

III. DISCUSSION

A. Conforming FRS, Citizens Band and GMRS Rules

5. The *Report and Order* established the FRS primarily on the basis that it would fill a market niche in short distance, personal communication needs.¹¹ The FRS is designed to meet the needs of families and other small groups to communicate with each other while they are out of speaking distance or sight, but still within close range, by combining in one new service the features of existing radio services that best met these needs. It was envisioned that the FRS would provide a good quality, affordable, and convenient means of direct, short range, two-way voice communications among small groups of persons, with minimum regulation.¹² In deciding to administer FRS within the Citizens Band ("CB") Radio Service, the Commission sought to fulfill its goal of common sense regulation by licensing this service by rule and adopting minimum technical standards.¹³

6. To meet these needs and goals, the Commission recognized that the nature of FRS would have to be sufficiently different from the CB Radio Service and GMRS that there would be no need to impose on FRS the CB Radio Service or GMRS regulatory structure.¹⁴ Considering that FRS' proposed use was primarily in a mobile or portable environment for very limited time periods, FRS was authorized very low power in the Ultra High Frequency (UHF) segment of the radio spectrum.¹⁵ FRS also was authorized a frequency modulation (FM) emission type which, due to the "capture effect" of FM,¹⁶ further limited the distance over which an FRS unit could communicate. Further, the Commission authorized units to have only small and relatively inefficient antennas that are integral to the unit as another means of assuring that FRS does not disrupt GMRS communications on the seven channels it shares with GMRS.

⁹ See 47 C.F.R. § 95.193(e).

¹⁰ We note that since FRS was authorized in 1996, 7 companies have received type-acceptance for 10 different FRS units and that manufacturers have applications pending for type-acceptance of additional equipment.

¹¹ *Report and Order*, 11 FCC Rcd at 12978.

¹² *Id.*

¹³ The comments we received strongly agreed with this approach. Motorola, for example, stated that it was imperative that operation in the FRS not require individual licenses. See *Report and Order*, 11 FCC Rcd at 12983.

¹⁴ *Report and Order*, 11 FCC Rcd at 12980.

¹⁵ *Report and Order*, 11 FCC Rcd at 12978.

¹⁶ "Capture effect" is the phenomenon whereby the strongest signal received on a frequency is the only signal that is demodulated by a FM receiver tuned to that frequency.

7. PRSG argues that our goal of administering the FRS primarily through transmitter technical standards, rather than complex operating rules, cannot be accomplished unless we adopt additional rules prohibiting specific operating practices.¹⁷ Specifically, PRSG proposes additional rules to conform the FRS rules to the GMRS and CB rules prohibiting certain types of communications. For example, PRSG requests that we prohibit FRS units from transmitting messages for hire, false or deceptive messages, messages that intentionally interfere with other users' communications, and messages that are obscene or indecent.¹⁸ PRSG also argues that additional rules are necessary to prohibit FRS stations from transmitting any material to amuse or entertain and advertisements.¹⁹ The Radio Shack Division of Tandy Corporation ("Tandy") opposes PRSG's Petition²⁰ and argues that PRSG's requests have either been considered and are already addressed by the rules, previously considered and rejected, or otherwise lack merit.²¹

8. We disagree with PRSG's contention that because FRS is administered within the CB Radio Service and shares GMRS channels, rigid consistency with the CB Radio Service and GMRS rules is required or that CB-type problems will develop.²² We have reviewed the changes PRSG has requested and find that the requested changes either duplicate the FRS rules or are unnecessary. For example, PRSG requests rules explicitly prohibiting messages for hire, messages that are false, deceptive, obscene or indecent, or messages that intentionally interfere with other users' communications needs. Section 95.193 of the Commission's Rules prohibits an individual from using a FRS unit in connection with any activity which is against federal, state or local law.²³ Because fraudulent messages, messages that intentionally interfere with other users' communications, and messages that are obscene or indecent violate federal law,²⁴ they are prohibited under our current FRS rules. Accordingly, we find that an additional rule to specifically address these uses of FRS is unnecessary.

9. Moreover, we do not believe that a specific rule prohibiting FRS units from transmitting messages for hire is necessary because it is very unlikely that FRS would be used as a substitute for a

¹⁷ PRSG Petition at 1, 4.

¹⁸ *Id.* at 15-16.

¹⁹ *Id.*

²⁰ See Radio Shack Division of Tandy Corporation Opposition to Petitions for Reconsideration (Tandy Opposition) filed July 15, 1996, at 1.

²¹ *Id.* at 5.

²² Commission experience over the past 40 years has been that the problems in the CB Radio Service are due, in large part, to two reasons. The first reason is that frequency agile, extremely high power transmitting equipment from other radio services that can be used on CB channels without major modification is ready available. The second reason is that the long distance or "skip" propagation characteristics of the High Frequency segment of the radio spectrum encourage CB stations to attempt communications over great distances. Extremely high power transmitting equipment is the exception in UHF operations, and propagation in the UHF spectrum is generally line of sight.

²³ See 47 C.F.R. § 95.193.

²⁴ See 18 U.S.C. §§ 1343, 1464; 47 U.S.C. § 333.

commercial service given (1) its very low authorized power and limited range; (2) its lack of exclusive channel assignments for any user; and (3) the lack of privacy of plain language FM voice communications. We also see no reason to impose a rule on FRS prohibiting stations from transmitting any material to amuse, entertain, or advertise because PRSG has not provided any evidence that individuals are likely to use FRS to transmit these kinds of messages.²⁵

B. Spectrum Sharing with GMRS

10. The *Report and Order* determined that GMRS channels were ideally suited for sharing between the FRS and GMRS for three reasons.²⁶ First, it noted that the GMRS channels are not heavily used.²⁷ Second, FRS and GMRS are similar in that both are intended to operate in a shared environment and provide for the personal communications needs of the general public.²⁸ Finally, the FRS is a low power service such that the range of any particular transmitter is small as compared to the more wide area range of GMRS.²⁹

11. PRSG does not dispute that FRS and GMRS can share spectrum now assigned exclusively to GMRS.³⁰ Rather, PRSG is concerned that some users of FRS units may not share spectrum responsibly with other FRS users and GMRS stations.³¹ PRSG proposes a set of rule changes it believes is necessary to ensure responsible use of the shared spectrum.³² Motorola opposes PRSG's Petition.³³ Motorola states that the additional operating rules would have little effect on users who desire to engage in activities that PRSG would like to prevent.³⁴ Instead, Motorola argues that the rules, as adopted will serve the public interest by allowing manufacturers greater freedom to develop new FRS applications as the market

²⁵ We note that FRS has been authorized for over two years and we have not received any complaints that it has been used in this way.

²⁶ See *Report and Order*, 11 FCC Rcd at 12980.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ PRSG Petition at 4.

³¹ *Id.* at 7-9.

³² *Id.* at 6-12.

³³ Opposition of Motorola to Petition for Reconsideration (Opposition of Motorola) filed August 8, 1996, at 1.

³⁴ Opposition of Motorola at 2.

dictates.³⁵ Tandy also opposes PRSG's proposals, stating that they would raise the cost of designing and manufacturing FRS units.³⁶

12. We find PRSG's proposals unconvincing. PRSG requests that we promulgate a rule limiting an FRS unit to transmitting no more than 120 consecutive seconds before a time-out timer built into the FRS unit disables the transmitter.³⁷ PRSG has provided no evidence, however, that "key down" events occur with any degree of frequency, or that if they occur, they are intentional.³⁸ Further, if such an event was to occur on a channel FRS shares with GMRS, we believe the overall impact would be negligible. Only other users within the capture range of the malfunctioning transmitter would be affected, and those FRS users have up to thirteen other channels available to them within the area captured by the malfunctioning transmitter. Moreover, affected GMRS users have nine other channels available to them. We also note that manufacturers have flexibility under the current rules to incorporate a time-out timer in their products if they wish.³⁹

13. PRSG also requests that we require FRS users to monitor a channel before transmitting.⁴⁰ To facilitate such monitoring, PRSG suggests we require that FRS units be portable and convenient to carry and be designed so that they cannot transmit when the receiver is muted.⁴¹ PRSG claims that this is necessary to eliminate intentional interference.⁴² However, as we have already indicated, intentional interference is already prohibited.⁴³ Therefore, the rule PRSG suggests would be redundant. Thus, we decline to promulgate such a rule.

³⁵ *Id.* at 3.

³⁶ Opposition of Tandy at 7.

³⁷ *Id.* at 7.

³⁸ A "key down" event occurs when the operator of a unit allows the microphone switch or other device that enables the transmitter to become engaged for an extended period of time. These events are usually inadvertent.

³⁹ Opposition of Motorola at 3. We note that, to conserve battery life, one manufacturer intends to incorporate a time-out timer in its products. *Id.*

⁴⁰ PRSG Petition at 8-9.

⁴¹ *Id.* at 9.

⁴² *Id.* at 15.

⁴³ See 47 U.S.C. § 333, 47 C.F.R. § 95.193(c), and para. 8 *supra*.

14. PRSG further requests that we expand the prohibition against telephone interconnection⁴⁴ to prohibit FRS units from transmitting any signal carried or intended to be carried over the public switched network (PSN),⁴⁵ require manufacturers to include a copy of the rules with each FRS station,⁴⁶ and prohibit manufacturers from designing FRS units that can be powered from anything other than a battery integral to the unit.⁴⁷ Section 95.193(e) of the rules is an absolute prohibition against FRS units being interconnected with PSN telephone lines.⁴⁸ We believe that the expanded prohibition requested by PRSG could effectively prohibit users from relaying emergency communications. For example, prohibiting an individual from using an FRS unit to transmit a message to another FRS unit requesting that the operator of the second unit summon help via telephone would effectively prohibit FRS stations from being used in emergency situations. This result is inconsistent with Section 95.193(a) of the Commission's Rules which authorizes use of an FRS unit to send emergency messages and provide traveler assistance.⁴⁹

15. We also conclude that imposing a requirement that manufacturers include a copy of the rules with each FRS unit is unnecessary. PRSG has not shown that manufacturers are not already supplying sufficient information to users for them to operate their units in compliance with the applicable rules or share spectrum responsibly with other users. To the contrary, our experience is that manufacturers routinely provide an operating manual when a consumer purchases an FRS unit.⁵⁰ We also will not prohibit manufacturers from designing FRS units that can be powered from external power sources such as automobile batteries or household battery eliminator devices because PRSG has not provided sufficient evidence demonstrating that such a prohibition is warranted. Such a rule, we believe, would make FRS units unattractive to potential purchasers, is unenforceable, and is inconsistent with our desire to allow manufacturers to incorporate features FRS users demand.⁵¹

⁴⁴ See 47 C.F.R. § 95.193(e).

⁴⁵ PRSG Petition at 7.

⁴⁶ *Id.* at 12.

⁴⁷ *Id.* at 11-12.

⁴⁸ Section 95.193(e) states; "No FRS unit may be interconnected to the public switched network." Interconnection to the PSN refers to electrical attachment of devices, such as modems, FAX machines and telephone equipment, to telephone circuits that are accessible to other users of the PSN. The Commission's interconnection rules, which are contained in 47 C.F.R. Part 68, do not address the type or content of message that may be carried over the PSN.

⁴⁹ See 47 C.F.R. § 95.193(a).

⁵⁰ See Motorola Request for Clarification, filed April 10, 1998, at 8.

⁵¹ See *Report and Order*, 11 FCC Rcd at 12982.

C. Use of FRS

16. The FRS was envisioned as a service that would facilitate activities around the home, throughout the neighborhood, at group outings, and at activities where group members become separated, either planned or inadvertently.⁵² The FRS can be useful to hunters, campers, hikers, bicyclists, and other outdoor activity enthusiasts who need to communicate with other members of their party who are out of speaking range or sight but still in the same general area.⁵³ It enables families, friends, and associates to communicate among themselves within neighborhoods and while on group outings.⁵⁴

17. In the *Report and Order*, the Commission addressed the issue of whether manufacturers should be required to, or prohibited from, including specific features in FRS units. The *Report and Order*, stated:

We will not require suppliers to incorporate selective calling capability (a specific feature) in FRS units. We believe suppliers will incorporate features that FRS users demand as the market for this service develops. The final rules, therefore, allow a manufacturer the option to provide selective calling capability if and when it desires, and to use the technology the manufacturer decides is most appropriate.⁵⁵

18. PRSG asks that we adopt rule changes to maintain the integrity of the FRS as a short distance, occasional use service for individuals⁵⁶ by prohibiting users from remotely controlling FRS units, and prohibiting FRS units from using voice-actuated transmitters.⁵⁷ PRSG also requests that we prohibit manufacturers from including a voice activation capability in FRS units and that we prohibit FRS units from transmitting the audio signal from any other FRS unit or audio device.⁵⁸ PRSG argues that if the Commission does not prohibit a FRS unit from being voice actuated, an individual may locate an FRS unit near another audio source (such as another FRS unit or broadcast radio receiver) and allow the FRS unit to be voice actuated, thereby creating a "time domain repeater."⁵⁹ PRSG is concerned that through this process, the FRS "repeater" could have transmitter coverage of an entire metropolitan area and that this is inconsistent with the intended use of the service.⁶⁰

⁵² See *Report and Order*, 11 FCC Rcd at 12978.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ See *Report and Order*, 11 FCC Rcd at 12982.

⁵⁶ PRSG Petition at 5-6, 9-11.

⁵⁷ *Id.* at 5, 9-10.

⁵⁸ *Id.* at 6.

⁵⁹ *Id.* 5-6.

⁶⁰ *Id.* at 5.

19. PRSG's petition raises three general issues. First, PRSG's hypothetical example raises the issue of whether we should adopt a rule prohibiting manufacturers of FRS units from including circuitry that allows voice activation of the transmitter. As an initial matter, we note that voice activation, or "hands free" operation, is a feature routinely included in the transmitters that individuals use in the CB Radio Service, GMRS and land mobile handheld transceivers, Part 15 devices, and cellular telephones. We believe that FRS will be used in environments and for communications similar to these services. PRSG provides no evidence that voice activation of transmitters in these short distance radio services has been used by individuals to extend the distance they can communicate. We believe that not only is voice activation a feature that consumers routinely find useful, especially in recreational activities, but that it also enhances safety of the user and the public when the user is engaged in activities, such as driving, hunting or rock climbing, that require use of both hands. We also note that hands free or voice activation features allows individuals who, because of a disability, are not able to manipulate transmitter controls to use communication products. Voice activation is simply another feature that manufacturers may or may not choose to offer on equipment for the FRS market. We see no reason to treat a voice activation feature any differently than a selective calling capability, and therefore, we will allow manufacturers the option of offering this capability.

20. The second issue the petition raises is whether we should impose an elevation or height above average terrain ("HAAT") limitation on the use of FRS units. We see no reason to impose an elevation or HAAT limitation on FRS units based on speculation that an individual may configure equipment to create a FRS "repeater." None of the equipment that has been approved for FRS use is capable of receiving messages on one FRS channel and simultaneously retransmitting these messages on another. Additionally, PRSG does not present any evidence that users of other short distance radio services routinely configure their equipment to act as "repeaters", or that channels in other radio services, including repeater-based radio services, are intentionally occupied by stations retransmitting audio communications from other audio devices.

21. Lastly, the third issue raised is whether we should prohibit unattended operation of FRS units. We believe a rule prohibiting unattended operation of FRS units is unnecessary because it is unlikely, based on the use that individuals make of other consumer radio services, that an individual will intentionally allow an FRS unit to transmit without interruption for extended periods of time. Even if this situation were to inadvertently occur, the FRS rules authorize other FRS users within the capture area of the unattended FRS unit thirteen other channels they may use.⁶¹ Thus, we decline to promulgate such a rule.

D. Interference Standards

22. In the *Report and Order*, the Commission adopted interference standards designed to increase the FRS-GMRS spectrum sharing capability without a significant increase in costs.⁶² PRSG requests that we relax these interference standards.⁶³ It suggests that, for the seven channels FRS shares

⁶¹ See 47 C.F.R. § 95.627(a).

⁶² See *Report and Order*, 11 FCC Rcd at 12982.

⁶³ PRSG Petition at 13-14.

with GMRS, we use the less restrictive interference standards that apply to GMRS mobile transmitters.⁶⁴ Motorola opposes PRSG's request because the standard we adopted does not exceed the current state-of-the-art standard and will allow manufacturers to achieve economies of scale in building FRS and GMRS transmitters utilizing technologies developed for Part 90 transmitters.⁶⁵

23. We agree with Motorola that the FRS rules should not be revised to permit FRS units to meet less stringent GMRS mobile station interference standards when FRS units transmit on channels shared with GMRS stations. The standards adopted were supported by the record and are consistent with current design standards for land mobile radio service equipment.⁶⁶ We see no reason to use lower interference standards based on speculation that manufacturers may want to market an FRS unit that transmits only on the seven FRS-GMRS shared channels. Manufacturers that only can meet the GMRS interference standards can have this equipment type-accepted for the GMRS and market GMRS-interstitial-channel-only equipment.

E. Miscellaneous Issues

24. GMRS/FRS Communication. Trahos and PRSG request that we amend the GMRS rules to clarify that GMRS mobile and small base stations⁶⁷ are permitted to communicate with FRS units on their mutually authorized channels.⁶⁸ Trahos is concerned that while FRS units and GMRS radio stations are authorized to operate on mutually permitted frequencies,⁶⁹ Sections 95.59(c) and 95.61(b) of the rules appear to prohibit communications between these types of stations.⁷⁰ Accordingly, Trahos requests that we eliminate the ambiguity between these rules by amending Section 95.53(e)⁷¹ of the rules to indicate

⁶⁴ *Id.* at 13.

⁶⁵ Opposition of Motorola at 3-4. Motorola states these standards are consistent with the standards developed for UHF private land mobile systems under the Part 90 rules. *Id.* at 3.

⁶⁶ *See Report and Order*, 11 FCC Rcd at 12981-12982.

⁶⁷ A small base station is any base station that transmits with no more than 5 watts effective radiated power and has an antenna no more than 6.1 meters (20 feet) above the ground or above the building or tree on which it is mounted. *See* 47 C.F.R. § 95.25(e).

⁶⁸ Trahos Petition at 5; PRSG Petition at 13-14. Tandy agrees that communication between FRS and GMRS stations should be allowed. Tandy Opposition at 8.

⁶⁹ *See* 47 C.F.R. § 95.627(a).

⁷⁰ Trahos Reply Comments at 6. Trahos cites to Sections 95.59(c) and 95.61(b) as rules that prohibit communications between GMRS stations and FRS units. Section 95.59(c) states: "A control station must not transmit communications to any other station." 47 C.F.R. § 95.59(c). Section 95.61(b) states: "A fixed station must not transmit communications to any other station." 47 C.F.R. § 95.61(b).

⁷¹ Section 95.53(e) states: "A mobile station unit must not transmit communications to: (1) Any fixed station; (2) Any control station, directly; (3) Any station in the Amateur Radio Service; (4) Any unauthorized station; or (5) Any foreign station." 47 C.F.R. § 95.53(e).

that such communications are permitted.⁷² PRSG suggests that we amend two rule sections⁷³ to clarify that FRS stations are not unauthorized stations for purposes of those rules.⁷⁴ PRSG is concerned that, if a GMRS station were to communicate with a FRS unit that has been illegally modified, the GMRS station would be communicating with an unauthorized station.⁷⁵

25. We agree it is very likely that GMRS stations and FRS units, when they hear each other, will communicate with each other. We also believe that allowing GMRS stations and FRS units to exchange messages on the seven channels they share, particularly in emergency situations, furthers our goals of maximizing efficient use of the radio spectrum and promoting public safety. However, we find it unnecessary to amend the rules as Trahos suggests. The rules to which Trahos cites as prohibiting GMRS stations from communicating with FRS units do not apply to the classes of GMRS land stations that are authorized to transmit on channels that are shared with FRS units.⁷⁶ GMRS stations, which are authorized by rule to share the 462 MHz interstitial channels⁷⁷ with FRS units, are mobile stations⁷⁸ and small base stations transmitting voice type emissions with relatively low power. Typically, these stations are transmitting the same type of communications as FRS units. The rules already permit GMRS station operators to transmit the same messages⁷⁹ as FRS units and GMRS stations are not prohibited from communicating with FRS units.⁸⁰ Nevertheless, we clarify, that GMRS and FRS units operating on the same frequencies may communicate with each other if the individual operators so choose.

26. We also do not believe it is necessary to amend Sections 95.53(e), 95.55(b), or 95.181(i) of the rules as PRSG suggests. If an FRS station is modified in violation of the rules, the responsible party is the individual operating the FRS unit, not the operator or licensee of a GMRS station receiving

⁷² Trahos Petition at 5-6, Reply Comments at 6.

⁷³ Section 95.55(b) states; "A base station must not transmit communications to: (1) Any mobile relay station; (2) Any base station; (3) Any paging receiver not in the same GMRS system; (4) Any fixed station; (5) Any control station; (6) Any station in the Amateur Radio Service; (7) Any unauthorized station; or (8) Any foreign station." 47 C.F.R. § 95.55(b). Section 95.181(i)(14) states; "A station operator must not communicate messages (except emergency messages) to any station in the Amateur Radio Service, to any unauthorized station, or to any foreign station." 47 C.F.R. § 95.181(i)(14).

⁷⁴ PRSG Petition at 13, 17.

⁷⁵ *Id.* at 17.

⁷⁶ See 47 C.F.R. § 95.29(a)(1) and (2) (fixed and control station channel frequencies). FRS units are not authorized to transmit on any of these channel frequencies.

⁷⁷ See 47 C.F.R. § 95.29(f) (GMRS interstitial channels).

⁷⁸ In GMRS' lexicon, the definition of a mobile station includes a portable station. Portable stations typically consist of a handheld or other small radio that is battery powered and designed to be easily transported by an individual.

⁷⁹ See 47 C.F.R. § 95.181(a) and (d).

⁸⁰ See 47 C.F.R. § 95.53(e).

a radio signal from the modified FRS unit.⁸¹ The prohibition against communicating with an unauthorized station applies only to situations involving communications between a GMRS station and a station the GMRS operator knows to be unlicensed, not to communications between a GMRS station and a FRS unit the GMRS operator does not know has been modified.

27. PRSG Petition for Stay. PRSG filed a Petition for Stay requesting that the Commission stay implementation of the FRS rules until we ruled on its petition for reconsideration.⁸² Tandy opposed PRSG's request on the basis that PRSG had not made the showing necessary for us to grant a Stay.⁸³ We agree with Tandy that a stay of the *Report and Order* is not warranted because PRSG had not shown it would suffer irreparable injury if we let the *Report and Order* become effective. We note that seven of the channels we authorized FRS are not shared with any other service and the other seven channels, which are shared with GMRS, were lightly used.⁸⁴ Granting a stay would have denied the public the benefit of a new, innovative service. Moreover, we note that the FRS rules have been in effect for over two years and PRSG has suffered no harm. Therefore, we deny PRSG's Petition for Stay.

28. Motorola Request for Clarification. In its Request for Clarification, Motorola states that the rule requiring that FRS units have an "integral" antenna has been liberally interpreted, resulting in some FRS units having detachable antennas.⁸⁵ Motorola states that a unit with a detachable antenna can easily be altered by the consumer to strengthen the FRS signal, thereby causing interference with GMRS communications, and that a removable antenna is a tacit invitation for abuse of the rules.⁸⁶ It requests, therefore, that we clarify that an integral antenna, for purposes of the FRS rules, means a permanently attached antenna.⁸⁷

29. We agree with Motorola that as originally envisioned, FRS units would use relatively inefficient antennas that were integral, *i.e.* either permanently attached or designed into, the unit. We intended the term "integral" in this context to have its common meaning (*i.e.* essential for completion; whole; entire; intact).⁸⁸ We also agree with Motorola that the plain language of Section 95.194(c) of the rules is clear and that approving units that are easily modified to allow other antennas or devices to be

⁸¹ See 47 C.F.R. § 95.194(b).

⁸² PRSG Petition for Stay, dated July 5, 1996.

⁸³ Tandy Opposition to Petition to Stay, dated July 9, 1996 at 2-3.

⁸⁴ *Report and Order*, 11 FCC Rcd at 12980.

⁸⁵ Motorola Request at 2.

⁸⁶ *Id.* at 2, 4.

⁸⁷ *Id.* at 2.

⁸⁸ See *The American Heritage Dictionary of the English Language*, New College Edition, 1976.

attached to the unit violates the rule and allows users of FRS units to defeat its purpose.⁸⁹ Additionally, FRS units that include antennas that can be detached by unscrewing or unplugging the antenna from the unit allow the consumer to easily interconnect the FRS unit to an external antenna, power amplifier of other readily available apparatus. We note that consumer attached devices such as these are not type accepted with the FRS unit, and, therefore, can not be used with it.

VI. ORDERING CLAUSES

30. This action is taken pursuant to the authority found in Sections 4(i), 303, and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303, and 405, and Sections 1.106 and 1.429 of our rules, 47 C.F.R. §§ 1.106 and 1.429.

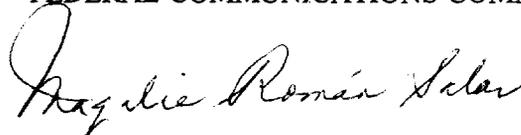
31. ACCORDINGLY, IT IS ORDERED that the Petition for Reconsideration submitted by the Personal Radio Steering Group, Inc. and the Petition for Partial Reconsideration submitted by Michael C. Trahos ARE HEREBY DENIED.

32. IT IS FURTHER ORDERED that the Request for Clarification filed by Motorola IS HEREBY GRANTED to the extent indicated herein.

33. IT IS FURTHER ORDERED that the Petition for Stay filed by the Personal Radio Steering Group, Inc. IS HEREBY DENIED.

34. IT IS FURTHER ORDERED that this proceeding IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

⁸⁹ 47 C.F.R. § 95.194(c) states: You may not attach any antenna, power amplifier, or other apparatus to an FRS unit that has not been FCC certified as part of that FRS unit. There are no exceptions to this rule and attaching any such apparatus to a FRS unit cancels the FCC certification and voids everyone's authority to operate the unit in the FRS.