

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Amendment of Part 95, Subpart B, Family
Radio Service Rules Establishment of Channel 1
(462.5625 MHz) as a National Calling Channel
Petition to Better Facilitate Communications
Involving Personal Safety, Traveler's Assistance,
and Emergency Communications, and to Enhance
the Functionality of the Family Radio Service
RM-10019

ORDER

Adopted: December 5, 2001

Released: December 7, 2001

By the Deputy Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. A petition requesting changes to the Family Radio Service (FRS) rules has been received from Alan Dixon and Robert K. Leef (Petitioners). The petitioners request that the Commission establish a single national calling channel in the FRS. Also, they request adoption of a requirement for manufacturers to include certain additional features in FRS units. For the reasons discussed below, we find that the petition does not warrant the issuance of a Notice of Proposed Rule Making. Therefore, we deny the petition.

II. DISCUSSION

2. Background. In 1996, the Commission established the FRS as a very short range, two-way voice personal radio service. The Report and Order established the FRS primarily on the basis that it would fill a market niche in very short-distance, personal communications needs. It was envisioned that the FRS would provide an affordable and convenient means of direct, very short-range two-way voice communications among small groups of persons, with minimal regulation. Because the FRS is intended 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, non-voice emission types, except tones transmitted to establish or continue voice communications, were not authorized. FRS units were authorized to transmit one-way communications to send an emergency message because the communication needs of families and other small groups could reasonably be expected to include safety- or emergency-type messages, especially when group members find themselves inadvertently out of speaking distance or sight of other group

1 See Petition for Rulemaking, RM-10019 (filed Oct. 24, 2000) (Petition).
2 See Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Radio Service, Report and Order, WT Docket No. 95-102, 11 FCC Rcd 12977, 12983 ¶ 17 (1996) (Report and Order).
3 Id. at 12977 ¶ 2, 12979 ¶ 5.
4 Id. at 12977 ¶ 2, 12983 ¶ 17.
5 See 47 C.F.R. §§ 95.193(a), 95.629(d).

members.⁶

3. The Commission noted that because the universe of potential users of the FRS is the American public, it believed administration of the FRS should be accomplished primarily through establishing transmitter technical standards rather than complex operating rules.⁷ It stated that its primary objectives in setting technical standards were to ensure (1) that FRS units do not cause interference to other services and (2) that large numbers of users can share the same channels in the same or adjoining neighborhoods or other areas.⁸ The Commission also considered whether, as a transmitter technical standard, it should require manufactures to include certain features in FRS units that are options on other consumer communication devices.⁹ Specifically, it decided that it would not require suppliers to incorporate selective calling capability in FRS units.¹⁰ It stated its belief that suppliers would incorporate features that FRS users demand as the market for FRS developed.¹¹ The final rules, therefore, allowed a manufacturer the option to provide a selective calling capability feature if and when it desired, and to use the technology the manufacturer decided was most appropriate.¹²

4. On reconsideration, the Commission again considered a request that it require FRS units to include certain features, including a time-out timer that disables the transmitter after a certain number of consecutive seconds of transmitting, circuitry so that an FRS unit cannot transmit when the receiver is muted, and circuitry that prevents FRS units from being powered from anything other than an integral battery.¹³ The Commission noted that manufacturers had flexibility under the then-current rules to incorporate a time-out timer in their products if they wished,¹⁴ and that a rule prohibiting manufacturers from designing FRS units that can be powered from external power sources such as automobile batteries or household battery eliminator devices is unenforceable and inconsistent with the Commission's desire to allow manufacturers to incorporate features FRS users demand.¹⁵

5. On October 24, 2000, the Petitioners filed their petition requesting that the Commission establish FRS Channel 1 (462.5625 MHz)¹⁶ as a universally recognized common calling or distress channel for all areas within the jurisdiction of the FCC.¹⁷ The Petition also requests amendment of the

⁶ See *Report and Order*, 11 FCC Rcd at 12979 ¶ 5.

⁷ *Id.* at 12983 ¶ 17.

⁸ *Id.* at 12982 ¶ 13.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ See Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Radio Service, *Memorandum Opinion and Order*, WT Docket No. 95-102, 13 FCC Rcd 22709, 22715 ¶ 15 (1998) (*Memorandum Opinion and Order*).

¹⁴ *Id.* at 22714 ¶ 12.

¹⁵ *Id.* at 22715 ¶ 15.

¹⁶ See 47 C.F.R. § 95.627(a). The FRS is authorized fourteen channels between 462 MHz and 467 MHz. The Commission sought comment on the Petition on December 8, 2000. See Public Notice, Report No. 2456 (Dec. 8, 2000). We received one comment opposing the Petition. See Comments of Mr. Dale Reich (Reich). Reich opposes the Petition on the basis that the number of FRS units with tone squelch blocking that already are in the hands of consumers makes converting a present FRS channel to a calling channel unworkable.

¹⁷ Petition at 1, 4.

FRS rules to specify default carrier-operated squelch¹⁸ as the proper operating technique for those stations wishing to monitor FRS Channel 1 for calls from any other FRS station,¹⁹ and standard Frequency Modulated (FM) F3E voice modulation,²⁰ free of any digital vocoding,²¹ encryption, or speech scrambling technique, as the proper operating mode for those stations wishing to initiate contact on FRS Channel 1 to other FRS stations.²²

6. In support of this request, Petitioners state that their proposed rule changes would impose no measurable burden on any party concerned²³ and that the designation of a particular channel²⁴ to be used as an FRS calling channel does not preempt other heretofore permissible uses of the channel.²⁵ Petitioners also state that FRS has never had a universally recognized calling or distress channel,²⁶ and that a single national FRS calling channel will enable FRS stations not in distress to quickly establish communications with other nearby FRS stations for ordinary communications.²⁷ Petitioners believe that situations will occur in which an FRS user is in an emergency situation in which the user's only immediate means of communications is an FRS radio,²⁸ and that designating a common calling channel and standard emissions would enable rapid emergency contact for all FRS users with no retrofit or obsolescence of existing multi-channel FRS radios.²⁹ Petitioners also state that future design and manufacture of FRS radios with Channel 1 as a priority scan channel will open new equipment marketing opportunities.³⁰

7. *Decision.* The fundamental requests in this petition are that the Commission (1) establish by rule a calling channel in the FRS so that FRS units can quickly establish ordinary communications with other nearby FRS units, and (2) require manufactures to include specific features, standards, or operational capabilities³¹ in the design of FRS units so that FRS Channel 1 would become a *de facto*

¹⁸ The petition does not define default carrier-operated squelch.

¹⁹ Petition at 4.

²⁰ See 47 C.F.R. § 2.201. Emissions are designated according to their classification and their necessary bandwidth. The first symbol designates the type of modulation of the main character, the second symbol designates the nature of signal(s) modulating the main carrier, and the third symbol designates type of information to be transmitted. F3E, therefore, is an emission in which the main carrier is angle-modulated using frequency modulation in a single channel containing analogue telephony information.

²¹ The petition does not define digital vocoding.

²² Petition at 4.

²³ *Id.*

²⁴ *Id.* at 3. Petitioners request FRS Channel 1 be established as a calling channel because Channel 1 is an easily remembered channel number.

²⁵ *Id.*

²⁶ Petition at 1.

²⁷ *Id.* at 4.

²⁸ *Id.* at 1.

²⁹ *Id.* at 2.

³⁰ *Id.* at 3.

³¹ The specific features, standards or capabilities the petition requests the Commission to mandate for FRS units include (1) requiring standard, default carrier-operated squelch use; (2) requiring standard Frequency Modulated (FM) F3E emissions; (3) prohibiting any digital vocoding, encryption, or speech scrambling technique; (4) requiring that a FRS units that includes a scanning capability be designed so that FRS Channel 1 is the priority or default scan channel, and (5) requiring that these design and operating capabilities apply only to FRS Channel 1.

universally recognized calling channel as new FRS units are purchased. As noted above, the Commission previously considered whether, as a transmitter technical standard, to require manufactures to include certain specific features in FRS units. We disagree with the petitioners that additional FRS transmitter technical or operational rules are needed.

8. The petition has not established that the current technical rules are inadequate in some way or that the purpose of transmitter technical standards is not being met. In short, we do not believe that the petitioners have shown that FRS units have been causing interference to other services or that large numbers of users can not share the FRS channels. Likewise, the petition provides no evidence that users of FRS units have experienced any difficulty establishing communications with other FRS units with which the user desires to communicate. In this regard, it appears to us that consumers have readily accepted FRS, bought a significant number of FRS units, and found that FRS meets their very short-distance communication needs. We note that the sole basis for requesting a universally recognized calling channel is that FRS has never had such a channel. While this statement is true, we believe that such a channel in the FRS is unnecessary given that FRS is intended to be used by small groups of persons and that the transmissions from FRS units would be receivable only over a very small area. For these reasons, we do not believe that establishing FRS Channel 1 as a universally recognized common calling channel is necessary or consistent with the purpose of the FRS.

9. With regard to specifying the use of default carrier-operated squelch as the proper operating technique for stations monitoring FRS Channel 1 for calls from any other FRS station, we decline to recognize any particular operating technique as the proper operating technique in the FRS. We believe that such a rule would be inconsistent with the Commission's previous decision that administration of the FRS should be accomplished primarily through establishing transmitter technical standards rather than complex operating rules. Rather, we believe that the decision not to specify detailed or complex operating rules given the type of communications for which FRS typically is used, *i.e.*, very short-range two-way voice personal communications among small groups of persons in reasonably close proximity to each other,³² is consistent with the public interest. With regard to the petitioner's claim that designating FRS Channel 1 as a calling channel would enable General Mobile Radio Service (GMRS) stations to monitor for and respond to FRS distress calls,³³ we note that there is nothing in the petition or the record that indicates that lack of a designated FRS calling channel has hampered in any way communications between GMRS stations and FRS units.³⁴ Moreover, as we understand it, one of the primary reasons an individual obtains a GMRS system license is that this license authorizes transmissions on GMRS channels³⁵ that are input channels to repeater stations.³⁶ We note that these GMRS channels are unavailable to the FRS and therefore, we do not believe that GMRS stations are likely to be monitoring FRS channels for distress calls.

10. Petitioners request that the Commission adopt channelization rules in the FRS for calling

³² FRS units appear to be used by individuals primarily for communications over distances of one-half mile or less. *See Report and Order*, 11 FCC Rcd at 12984 ¶ 18. Communications over longer distances are possible, depending on terrain characteristics and obstructions.

³³ Petition at 3.

³⁴ Seven of the 14 channels authorized FRS units also are authorized for GMRS stations, and both FRS units and GMRS stations are authorized to transmit FM voice emissions. *See* 47 C.F.R. §§ 95.29(f), 97.627(a), 97.631(a), (d). Because FRS and GMRS share common channels and an emission type, the Commission in the *Memorandum Opinion and Order* agreed it was very likely that GMRS stations and FRS units, when they hear each other, will communicate with each other. *See Memorandum Opinion and Order*, 13 FCC Rcd at 22719 ¶ 25.

³⁵ *See* 47 C.F.R. § 95.29(f).

³⁶ Repeater station antennas generally are located at very high elevations above the average terrain, thereby allowing GMRS system operators to reliably communicate over much greater areas than are possible using FRS units.

and distress communications that appear similar to the channelization rules and procedures in place for the Maritime Services³⁷ and the Citizens Band (CB) Radio Service.³⁸ Such a system is appropriate for the Maritime Services because the “core purpose” of the Maritime Services is to promote the safety of life and property at sea.³⁹ Likewise, such a system is appropriate for the CB Radio Service because CB Radio Service Channel 9 routinely is monitored by police and other public safety agencies to provide assistance to motorists.⁴⁰ As noted earlier, however, the purpose of the FRS is much narrower. It is intended only to fill a market niche in very short-distance, personal communications needs, *i.e.*, 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. Because the purposes and use of these other services are so different from the FRS, we see no reason, and Petitioners have offered none, why the FRS should have channelization rules and procedures similar to the Maritime or CB Radio Services.

11. We also disagree with the Petitioners’ claim that the proposed rule changes would impose no measurable burden on any party concerned. To the contrary, the proposed rule changes would impose a burden on manufacturers of FRS units because a manufacturer would have to design its FRS unit to include specific new features and capabilities that are not mandated by Commission rule today. Further, the proposed rule changes may impose a burden on FRS users because, if adopted, the rules would require that a user’s unit to default to FRS Channel 1, a channel the user may not desire to monitor and a feature that the user may not be able to disable or override, depending on the design of the unit. We also note that a rule that requires a unit default to a particular channel is likely to result in more congestion and interference on the default channel, rather than facilitating users’ communications. We see no beneficial purpose being served by such a rule.

12. We also believe that the Petitioners’ claim that designating Channel 1 as a priority scan channel will open new equipment marketing opportunities is not correct. In this regard, we note that the purpose of the rules is to authorize use of the radio spectrum and to minimize interference between different radio services.⁴¹ We disagree that more complex technical standards and operating rules in a service such as the FRS will open new equipment marketing opportunities, and we note that no manufacturer filed comments supporting this petition. To the contrary, we believe that complex operating rules and requiring that features that consumers may not want or need be build into FRS units is more likely to reduce the usefulness of FRS to consumers, thereby decreasing marketing opportunities for manufacturers. We also note that there is nothing in the FRS rules that prohibits manufacturers of FRS units from including the specific features the petitioners request if manufacturers determined that FRS users found utility in these features. In this regard, we note that manufacturers have incorporated features in FRS units marketed today, such as scanning capability and tone-operated squelch, as the market for FRS units has developed and without any Commission-imposed requirement. For this reason, we see no reason to change the policy of not requiring manufacturers to incorporate specific operational features in FRS units, but rather allowing manufacturers to include features they believe are desired in the market.

13. We also believe that a rule to dedicate a channel for establishing emergency communications

³⁷ See 47 C.F.R. § 80.311-80.326 (specifying frequencies and procedures for maritime distress calls).

³⁸ See 47 C.F.R. § 95.407(b) (permitting only emergency communications or traveler assistance on CB Channel 9).

³⁹ Amendment of the Commission’s Rules Concerning the Maritime Communications, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, PR Docket No. 92-257, 12 FCC Rcd 16949, 16952 ¶ 1 (1997).

⁴⁰ See Amendment of Section 95.41(d) of the Commission’s Rules to Reserve a Citizens Radio Frequency for Emergency Communications, *Report and Order*, 22 FCC 2d 635, 636 ¶ 5 (1970). Also, dedicating one of 40 CB Radio Service channels to emergency communications or traveler assistance has proved workable in this service because it was supported by local and State public safety agencies, and there are 39 other channels available for other permissible communications. See 47 C.F.R. § 95.407(a).

⁴¹ See 47 U.S.C. § 301.

is unnecessary. In this regard, we note that FRS Rule 3 requires that an FRS user must, at all times and on all channels, give priority to emergency communication messages concerning the immediate safety of life or the immediate protection of property.⁴² These messages can be transmitted on any of the fourteen channels FRS units are authorized. The current rules, therefore, already provide that emergency communications have priority over ordinary communications.

III. CONCLUSION

14. On the basis of the above, we conclude that the requests in the above-captioned petition for rulemaking have been previously considered by the Commission or are unnecessary in light of the existing rules, and do not warrant further consideration at this time.

15. Alternative formats of this *Order* (computer diskette, large print, audiocassette, and Braille) are available from Brian Millin at (202) 418-7426, TTY (202) 418-7365, or at <bmillin@fcc.gov>. This *Order* can also be downloaded at <http://www.fcc.gov>.

IV. ORDERING CLAUSES

16. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and (j) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), (j), 303(r), and Section 1.401(e) of the Commission's Rules, 47 C.F.R. § 1.401(e), that the petition for rulemaking filed by Alan Dixon and Robert K. Leef, RM-10019, on October 24, 2000, IS HEREBY DENIED.

17. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Kathleen O'Brien Ham
Deputy Chief, Wireless Telecommunications Bureau

⁴² 47 C.F.R. § 95.193(d).