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

In the Matter of	)	
	)	
Review of the Commission's Part 95 Personal Radio Services Rules	)	WT Docket No. 10-119
	)	
1998 Biennial Regulatory Review - 47 CFR Part 90 - Private Land Mobile Radio Services	)	WT Docket No. 98-182 RM-9222
	)	
Petition for Rulemaking of Garmin International, Inc.	)	RM-10762
	)	
Petition for Rulemaking of Omnitronics, L.L.C.	)	RM-10844

REPLY COMMENTS OF GARMIN INTERNATIONAL, INC.

Garmin International, Inc. ("Garmin"), by its attorneys, hereby files its reply comments in the above-captioned proceeding.[1] The comments filed thus far show support for the Commission's streamlining and simplification of the personal radio service rules. The record also demonstrates that, as the Commission streamlines its rules, it should adopt only those substantive changes in the General Mobile Radio Service ("GMRS") and Family Radio Service ("FRS") rules that preserve and enhance the current use of the service. Guided by this standard, the record strongly supports (1) changing the rules to permit transmission of GPS and text message data on GMRS channels and (2) clarifying that popular FRS/GMRS combination radios

---

[1] Review of the Commission's Part 95 Personal Radio Services Rules; 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services; Petition for Rulemaking of Garmin International, Inc.; Petition for Rulemaking of Omnitronics, L.L.C., *Notice of Proposed Rule Making and Memorandum Opinion and Order on Reconsideration*, 25 FCC Rcd 7651 (2010) (the "*NPRM*"). *See also* Revision of Personal Radio Services Rules, 75 Fed. Reg. 47142 (Aug. 4, 2010).

may continue to be sold. The record is equally clear that the Commission should reject proposals to (1) limit portable handheld GMRS radios to two watts effective radiated power ("ERP") and (2) introduce narrowbanding to GMRS frequencies because both those changes would degrade service and impair the important life-saving and public safety functions GMRS radios are able to perform under the current rules.

I. THE RECORD AMPLY SUPPORTS PERMITTING GPS AND TEXT DATA TRANSMISSIONS ON GMRS CHANNELS.

As described in Garmin's initial comments in this proceeding, allowing GPS and user-generated text transmissions significantly enhances the functionality of portable handheld GMRS radios.[2] Indeed, in granting Garmin a waiver of the rules to manufacture radios with this capability in 2004 and extending that waiver in 2006 and 2008, the Commission recognized that GPS capability makes GMRS radios an extremely valuable asset to users, one that brings the potential to save lives and improves public safety.[3] The numerous testimonials in Garmin's comments show that its GPS-enabled devices deliver these benefits on a daily basis for search and rescue groups, individual users, and government agencies performing vital public safety functions.[4] Since grant of Garmin's waiver request, the company has sold more than a half million GPS-enabled FRS/GMRS combination radios.

The Commission's proposal to codify allowing GPS and text transmissions over GMRS channels drew few objections from entities and organizations filing comments. On the other

---

2 *See* Comments of Garmin International, Inc., WT Docket No. 10-119, *et al.*, filed Sept. 3, 2010, at 4-7 ("Garmin Comments").

3 Garmin International, *Order*, 23 FCC Rcd 18325, 18328-29 ¶¶ 8-9 (2008); Garmin International, *Order*, 21 FCC Rcd 15072, 15075-76 ¶¶ 6-7 (2006); Garmin International, *Order*, 20 FCC Rcd 982, 984, 986 ¶¶ 9, 13 (2004).

4 *See* Garmin Comments, Exhibits A-1 through A-13.

hand, it drew support from device manufacturers, including Uniden and Motorola;[5] the Seattle Office of Emergency Management, an emergency services provider;[6] and partial endorsements from two organizations representing GMRS users.[7] Those individual GMRS users and GMRS user groups that oppose allowing GPS transmissions on GMRS channels argue that allowing these transmissions will cause harmful interference.[8] In addition, none of their comments offers any technical or other evidence that interference actually will occur, and they ignore the fact that

---

5 *See* Further Comments of Uniden America Corporation on the Petition for Rulemaking To Revise the Personal Communications Service Rules, WT Docket No. 10-119, *et al.*, filed Aug. 27, 2010, at 9-10 ("Uniden Comments"); Comments of Motorola, Inc., WT Docket No. 10-119, *et al.*, filed Sept. 3, 2010, at 6-7 ("Motorola Comments"). *See also* Comments of Hampton Technologies, Inc., WT Docket No. 10-119, *et al.*, filed July 7, 2010, at 5, 11-12 ("HTI Comments").

6 *See* Comments of the City of Seattle Office of Emergency Management and the Seattle Auxiliary Communication Service, WT Docket No. 10-119, *et al.*, filed Sept. 3, 2010, at 5, 12-13 ("SACS Comments").

7 *See* Comments by the Personal Radio Steering Group, Inc., WT Docket No. 10-119, *et al.*, filed Sept. 2, 2010, at 14 ("PRSG Comments"). While noting the group's past opposition to GPS transmissions on GMRS frequencies, the PRSG Comments indicate that it could accept GPS transmissions between handheld portable devices operating on the 462 MHz interstitial GMRS channels. *See id.* Similarly, the Northern California GMRS Users Group ("NCGUG") suggests the FCC's proposed rule permitting GPS transmissions be modified to make clear that they would be limited to non-repeater channels, and it offers qualified support for the Commission's proposal, stating that it "would support Garmin's proposal "but only if the GMRS remains an individually licensed service." Comments on Notice of Proposed Rulemaking, Northern California GMRS Users Group, WT Docket No. 10-119, *et al.*, filed Sept. 3, 2010, at 12 ("NCGUG Comments"). In Garmin's initial comments, it took no position on the issue of whether GMRS users should continue to be licensed individually or by rule. All Garmin devices using GMRS frequencies are sold with materials that explain the GMRS licensing process and provide information on obtaining a license.

8 *See* Comments on Proposed Rulemaking, Bay Area Repeater Net, WT Docket No. 10-119, *et al.*, filed Aug. 16, 2010, at 4 ("BARN Comments"); Response to Notice of Proposed Rulemaking and Memorandum Opinion and Order on Reconsideration, North Georgia GMRS Group, WT Docket No. 10-119, *et al.*, filed June 28, 2010, at 7 ("NGGG Comments"); Response to Notice of Proposed Rulemaking and Memorandum Opinion and Order on Reconsideration, Georgia Forestry Commission, WT Docket No. 10-119, *et al.*, filed June 30, 2010, at 7 ("GFC Comments"); Response to Notice of Proposed Rulemaking and Memorandum Opinion and Order on Reconsideration, Tampa Bay REACT Team #6127, WT Docket No. 10-119, *et al.*, filed June 14, 2010, at 1 ("TBRT Comments"). BARN, NGGG, and GFC state that they agree with the position of NCGUG and PRSG in opposing GPS transmissions on GMRS channels; none of these groups, however, mentions the qualified support offered by NCGUG and PRSG.

over 500,000 GPS-capable GMRS radios have been in use around the country during a nearly six-year period without creating any reported interference problems. (The lack of documented interference is not surprising since GPS functionality results in a data burst of less than one second's duration when the GPS data is sent.) Under these circumstances, GMRS users' unfounded fears of interference provide no basis for prohibiting GPS or text transmissions on GMRS channels. Time and experience have clearly shown the benefits of codifying the waiver Garmin received.

Some opposing parties suggest that if GMRS users want to obtain location based information, they should be required to buy both a GMRS radio and a separate GPS device.[9] This approach would be extremely expensive and inconvenient for users who have become accustomed to getting both radio and GPS functionality in the same device; it would be particularly cumbersome for users engaged in public safety and search and rescue operations. Equally important, this approach would lead to more, not less, congestion on GMRS channels. Instead of sending a less than one-second data burst, GMRS users trying to locate another party would be forced to spend much more time transmitting voice descriptions of their location. Even if each user were equipped with a separate GPS device, the time to provide coordinates or otherwise describe a location would significantly exceed the one second that a GPS data burst takes at most. In other words, not allowing GPS transmissions will greatly inconvenience users and also simultaneously increase the traffic burden on GMRS channels.

Given the substantial demonstrated benefits of GPS functionality; the lack of any evidence of harm to other users; and the expense, inconvenience, and risk to public safety communications that would ensue if the Commission disallowed GPS transmissions on GMRS

---

9 *See, e.g.*, NGGG Comments at 7; GFC Comments at 7.

channels, the Commission plainly should codify its proposal to permit GPS data and text transmissions on GMRS channels in its Part 95 rules and continue the advantages already demonstrated by Garmin's waiver.[10]

II. THE COMMISSION SHOULD MAINTAIN ITS CURRENT POLICY OF PERMITTING FRS/GMRS COMBINATION RADIOS.

As the Commission noted in the *NPRM* and as confirmed in the comments, FRS/GMRS combination radios are popular with and convenient for consumers.[11] The Commission has not proposed banning these combination radios and should confirm that they remain permitted.

The comments provide no basis to prohibit FRS/GMRS combination radios. The commenting parties that oppose such combinations denigrate them as "toys" and "trash,"[12] but they provide no evidence that FRS/GMRS combination radios cause harmful interference to the users of GMRS or other licensed frequencies. Moreover, FRS/GMRS radios do not present the potential eligibility violations that the Commission has identified for other service combination radios since all adult consumers are generally eligible for GMRS licenses. Without evidence of interference or other harm to existing spectrum uses, no basis exists to outlaw the very popular, efficient, and extremely useful FRS/GMRS combination radios.

---

10 As noted in Garmin's comments, codifying this change in an effective manner requires a few minor changes to the text of the Commission's proposed rules. *See* Garmin Comments Section VI.4-VI.6.

11 *NPRM* at ¶ 45; *see also* Motorola Comments at 8-9; Garmin Comments at 15-16.

12 *See* Comments on the Docket Pending on the Review of Part 95 Personal Radio Service, Volunteer Disaster Communications Chairman of the Arcadia Chapter of the American Red Cross, WT Docket No. 10-119, *et al.*, filed July 6, 2010, at 5 ("Arcadia Red Cross Comments"); GFC Comments at 7, 9; NGGG Comments at 7, 9; SACS Comments at 13-14; TRBT Comments at 1; PRSG Comments at 15.

III. THE COMMISION SHOULD REJECT PROPOSALS TO LIMIT HANDHELD AND PORTABLE GMRS RECEIVERS TO TWO WATTS ERP AND TO NARROWBAND GMRS CHANNELS.

A. Limiting Portable GMRS Radios to Two Watts ERP Would Greatly Impair the Devices' Life-Saving and Public Safety Capabilities.

The record does not support limiting handheld portable GMRS radios to two watts ERP. Indeed, the only relevant evidence in the record shows that restricting portable devices to such a low power level would degrade service and erase the great benefits GMRS radios provide in life-saving and public safety operations.

In its comments, Garmin explained that maintaining a strong signal over a reasonable range is essential for its devices to provide the reliable service that is critical to users' safety and personal security.[13] Garmin provided substantial testimonial evidence from individual users, rescue service providers, and public safety officials attesting that limiting the power of GMRS portable/handheld radios to two watts ERP would significantly reduce range and signal quality in a manner that would impair their utility for essential life-saving and public safety operations.[14]

Most of the entities that offered comments on the appropriate power level for portable and handheld GMRS radios agree that the proposed two-watt limit is unacceptably low.[15] For example, the West Marin Disaster Council, a civilian disaster relief organization in the

---

13 Garmin Comments at 9.

14 *See id.* at 9-11 & Exhibits A-1, A-9, A-10, and A-11 through A-13.

15 *See* TBRT Comments at 1 ("Decreasing of [sic] GMRS handheld radio output power from 5 to 2 watts will in most cases cause licensees to be ineffective in their ability to communicate with their family members."); Arcadia Red Cross Comments at 7 ("[L]imiting GMRS portable equipment to 2 watts . . . completely destroys the value of GMRS to the average family who needs wide area coverage"); GFC Comments at 5; NGGG Comments at 5; Response to Notice of Proposed Rulemaking and Memorandum and Order on Reconsideration, Lakes Area GMRS Repeater Group, WT Docket No. 10-119, *et al.*, filed June 22, 2010, at 3 ("LARG Comments"). *See also* Comments of myGMRS.com on the Petition for Rulemaking To Revise the Personal Communication Service Rules, WT Docket No. 10-119, *et al.*, filed Sept. 2, 2010, at 4 ("MGC Comments") (noting expense to users of existing equipment that operates at power levels above 2 watts ERP).

San Francisco Bay Area, noted that it has conducted tests of its emergency preparedness system that demonstrate that when GMRS radios are set to two watts ERP, they are ineffective over critical areas, whereas those same radios function properly when set at five watts.[16] Its comments carried endorsements from fifteen public safety officials in the area. These comments echo the testimonials from search and rescue and public safety organizations that Garmin filed with its initial comments; those statements documented that a lower power level would endanger the essential life saving and public safety functions of portable GMRS devices. Moreover, other parties joined Garmin in noting that the Commission's proposed justification for limiting output power to two watts – a reference to RF exposure concerns – is baseless and not supported by any documented need in the record.[17]

Thus, the record clearly supports rejection of the proposed two-watt power limit for portable and handheld GMRS radios. The current five-watt limit permits greatly enhanced range and signal quality, both deemed essential and critical to the functioning of these devices by individual consumers and public safety organizations. No evidence in the record demonstrates that the two-watt limit is necessary to serve any public interest need. On this record, the two-watt limit must be rejected.

Motorola and the Lakes Area GMRS Repeater Group ("LARG") propose limiting portable GMRS radios operating without repeaters to two watts ERP and authorizing those devices not through licenses but by rule.[18] Motorola contends that this change "fits how these

---

16 *See* Comments of the West Marin Disaster Council, WT Docket No. 10-119, *et al.*, filed June 24, 2010, at 3; Comments of KWMR, West Marin Community Radio, WT Docket No. 10-119, *et al.*, filed June 28, 2010, at 2-3.

17 *See* PRSG Comments at 12; Comments of LARG Comments at 3.

18 Motorola Comments at 4; LARG Comments at 3.

devices are marketed and used today."[19] Motorola and LARG, however, do not appear to object to permitting continued individual licensing for users of portable FRS/GMRS combination radios that permit GMRS operation at power levels above two watts ERP, like Garmin's RINO® 500 series radios. Garmin does not strongly oppose Motorola's and LARG's proposal, although it notes that this approach is needlessly complicated and unlikely to be understood by consumers. Two clearer alternatives would be to (1) license by rule all portable devices that have GMRS functionality and permit those devices to operate at up to five watts ERP or (2) maintain the current individual licensing scheme and permitted power levels.

Despite the clear opposition in the record to limiting portable GMRS radios to two watts, Uniden supports the proposed limit as part of an ambitious (but unnecessary and unsupported) plan that it suggests for reconfiguring the FRS service to include both existing use of authorized FRS channels and low-power secondary use of GMRS channels.[20] Under Uniden's proposal, both types of operations would be licensed by the FRS rules.[21] Uniden argues that this approach would allow GMRS radios to continue to be individually licensed while permitting consumers who purchase portable devices to avoid that licensing requirement.[22] Garmin opposes Uniden's proposal because it would rob portable device users of the ability to communicate at higher powers than permitted in the FRS, which is among the chief benefits of access to GMRS channels.[23] As noted in Garmin's comments, many users of FRS/GMRS radios report that limiting them to operation at no more than two watts would significantly impair the functionality

---

19 Motorola Comments at 4.

20 Uniden Comments at 8-9. Hampton Technologies, Inc. similarly argues that FRS-capable radios should be limited to two watts. *See* HTI Comments at 4.

21 *See* Uniden Comments at 8-9.

22 *See id.*

23 *See* Garmin Comments at 8-11; TBRT Comments at 1; Arcadia Red Cross Comments at 7.

of their devices in the life-saving and public safety activities they perform. The substantial public interest harms that Uniden's proposal would cause and the lack of any showing that its proposal creates public benefits should lead the Commission to reject it.

B. Narrowbanding the GMRS Channels Also Would Significantly Degrade Service and Should Be Rejected.

The record also fails to support adoption of the proposal to narrowband the GMRS channels. In its initial comments, Garmin pointed out that the *NPRM* did not identify any problem that narrowbanding was needed to correct and that narrowbanding channels would significantly degrade service quality.[24] The comments filed in this docket by other entities and organizations also fail to identify any problem that narrowbanding might solve, and several parties point out additional difficulties that this proposal would cause. Several parties note the significant costs of replacing equipment and the consumer confusion that would result from the change.[25] Furthermore, the Commission's conjecture that narrowbanding might reduce interference potential is unsupported in the comments, none of which complained of any interference that narrowbanding supposedly would remedy. Due to the significant costs and likely confusion, most of those parties that do support the narrowbanding proposal ask for a very lengthy transition period of fifteen years or more.[26]

The record in this proceeding simply provides no basis for narrowbanding and the reduced service quality and significant financial challenges that it would impose on GMRS users.

---

[24] *See* Garmin Comments at 11-14.

[25] *See* Motorola Comments at 6-7; BARN Comments at 3; LARG Comments at 3; TBRT Comments at 1; MGC Comments at 6; SACS Comments at 3.

[26] PRSG Comments at 14 (suggesting that it will take "another couple of decades" before GMRS can be transitioned to narrowband technology); Arcadia Red Cross Comments at 7 (suggesting 15-year transition period); NCGUG Comments at 11 (requesting 10-year transition period); *see also* GFC Comments at 3 (requesting three-year transition period); NGGG Comments at 3 (same).

For these reasons, Garmin continues to oppose narrowbanding. In the event the Commission insists on moving forward with a narrowbanding plan, Garmin reiterates its requests that the Commission (1) defer any narrowbanding requirement until at least one year following finality of any new rules, and (2) grandfather use of existing equipment despite the new requirements.[27]

IV. CONCLUSION

For the reasons set forth in Garmin's initial comments in this proceeding and these reply comments, Garmin requests that the Commission codify the GPS and data transmissions allowed by its existing waiver; refrain from limiting the GMRS power level, narrowbanding GMRS channels, and prohibiting FRS/GMRS combination radios; and adopt the other rule amendments set forth in Garmin's initial comments.

Respectfully submitted,

GARMIN INTERNATIONAL, INC.

By _____

M. Anne Swanson
Jason E. Rademacher
of
DOW LOHNES PLLC
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, D.C. 20036
(202) 776-2534

Its Attorneys

September 20, 2010

[27] *See* Garmin Comments at 14-15.