

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

In the Matter of)	
)	
Review of the Commission's Part 95 Personal Radio Services)	WT Docket No. 10-119
)	
1998 Biennial Regulatory Review - 47 C.F.R. 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
)	
To: The Commission		

COMMENTS ON THE PROPOSED RULE

Pursuant to Sections 1.415¹ and 1.419² of the Commission's Rules³, the undersigned Commenter hereby submits the Comments set forth below in the above-captioned matter.

In submitting the Comments set forth below, this Commenter submits discussion concerning legislation, United States Code provisions, the Commission's Rules⁴, the Commission's Proposed Rules⁵, regulatory actions, an Executive Order⁶, other federal government documents, and statistical, licensee, and equipment authorization data obtained from multiple databases of the Commission. Such discussion is based on information obtained in good faith primarily from federal government sources, which, upon information and belief, is presumed to be correct, but should not be relied upon without verification, as the accuracy of the federal government sources is beyond this

¹ 47 C.F.R. § 1.415

² 47 C.F.R. § 1.419

³ 47 C.F.R.

⁴ *Id.*

⁵ 75 Fed. Reg. 47142 *et seq.*

⁶ Exec. Order No. 13272 67 Fed. Reg. 53461 (Aug. 16, 2002)

Commenter's control, and this Commenter does not provide any guarantee or warranty as to information obtained therefrom. Also, this Commenter provides reasoned assessments of seemingly likely future outcomes based on available information but any forward-looking statements are necessarily speculative, so this Commenter does not provide any guarantee or warranty as to any particular future outcomes or the absence of any such future outcomes. Furthermore, while this Commenter attempts to propose less burdensome alternatives to the Proposed Rules, this Commenter does not guarantee or warranty any alternatives the Commission may choose to adopt. This Commenter expressly disclaims any warranty of merchantability and any warranty of fitness for a particular purpose with respect to such alternatives. This Commenter does not address any possible intellectual property issues or any federal, state, or local legal issues that may relate to such alternatives. This Commenter discourages anyone from relying on the following Comments without the assistance of competent counsel.

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SUMMARY

This Commenter holds an active, regular General Mobile Radio Service (GMRS)⁷ license, uses the GMRS to communicate two-way voice messages concerning the licensee's personal and business activities, pursuant to Section 95.181(a)⁸, uses the Family Radio Service (FRS)⁹ to conduct two-way voice communications with another person, pursuant to Section 95.193(a)¹⁰, and uses the Multi-Use Radio Service (MURS)¹¹ to transmit voice or data signals pursuant to Section 95.1307(a)¹². This Commenter submits the Proposed Rules¹³ would directly affect this Commenter. This Commenter owns a corporation that complies with the U. S. Small Business Administration Table of Small Business Size Standards¹⁴ and uses Personal Radio Services in furtherance of such corporation's business while so employed in accordance with Part 95¹⁵. This Commenter submits the Proposed Rules¹⁶ would directly affect said corporation.

This Commenter identifies what this Commenter submits appear to be significant procedural concerns regarding the Proposed Rules.¹⁷ This Commenter identifies procedural concerns under the Regulatory Flexibility Act of 1980, as amended¹⁸,

⁷ 47 C.F.R. Part 95, Subpart A

⁸ 47 C.F.R. § 95.181(a)

⁹ 47 C.F.R. Part 95, Subpart B

¹⁰ 47 C.F.R. § 95.193(a)

¹¹ 47 C.F.R. Part 95, Subpart J

¹² 47 C.F.R. § 95.1307(a)

¹³ 75 Fed. Reg. 47142 *et seq.*

¹⁴ 13 C.F.R. § 121.201 and

http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepdf.pdf

¹⁵ 47 C.F.R. Part 95

¹⁶ 75 Fed. Reg. 47142 *et seq.*

¹⁷ 75 Fed. Reg. 47142 *et seq.*

¹⁸ Pub. L. 96-354, Sept. 19, 1980, 94 Stat. 1165; amended Pub. L. 104-121, Mar. 29, 1996, 110 Stat. 864

Executive Order 13272¹⁹, the Paperwork Reduction Act of 1995²⁰, the Administrative Procedure Act (APA), as amended²¹, the National Environmental Policy Act (NEPA)²², and the Resource Conservation and Recovery Act (RCRA)²³. This Commenter identifies what this Commenter submits appear to be significant substantive concerns regarding the Proposed Rules. This Commenter addresses substantive concerns pertaining to the Commission's specific proposals, other issues for which the Commission has requested comments, issues which the Commission raised in the document FCC 10-106 on the Commission's website²⁴ but apparently omitted from the Proposed Rules publication in the Federal Register²⁵, and other issues identified by this Commenter, including several alternative rulemaking approaches believed to better serve the public interest generally as well as to avoid having a significant economic effect on a substantial number of small entities.

PROCEDURAL CONCERNS

The Regulatory Flexibility Act of 1980

This Commenter notes the Proposed Rules²⁶ are accompanied by a purported Initial Regulatory Flexibility Analysis (IRFA)²⁷ under the Regulatory Flexibility Act of 1980

¹⁹ Exec. Order No. 13272, 67 Fed. Reg. 53461 (Aug. 16, 2002)

²⁰ Pub. L. No. 104-13, May 22, 1995, 109 Stat. 63 (codified at 44 U.S.C. § 3501 *et seq.*)

²¹ Pub. L. No. 79-404, June 11, 1946, 60 Stat. 237 (codified at 5 U.S.C. §§ 551-559, 701-706)

²² Pub. L. No. 91-190, January 1, 1970, 83 Stat. 852 (codified at 42 U.S.C. § 4321 *et seq.*)

²³ Pub. L. No. 94-580, October 21, 1976, 90 Stat. 2795 (codified as amended at 42 U.S.C. § 6901 *et seq.*)

²⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1.pdf at para. 30.

²⁵ 75 Fed. Reg. 47142 *et seq.*

²⁶ 75 Fed. Reg. 47142 *et seq.*

²⁷ 75 Fed. Reg. 47142 at 47144-47145 (para. 10-15)

(RFA)²⁸. This Commenter submits the IRFA raises serious questions as to its accuracy and sufficiency.

A. Purpose of the RFA in Agency Decision-Making

This Commenter submits the Regulatory Flexibility Act of 1980²⁹, as amended, for example, by the Small Business Regulatory Enforcement Fairness Act of 1996³⁰, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete, innovate, or to comply with the regulation.³¹ This Commenter submits the Commission is required to prepare a regulatory flexibility analysis as a matter of law pursuant to the RFA when there is a "significant economic impact on a substantial number of small entities."³² This Commenter submits the major objectives of the RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business; (2) to require that agencies communicate and explain their findings to the public; and (3) to encourage agencies to use flexibility and provide regulatory relief to small entities where feasible and appropriate to its public policy objectives.³³

This Commenter submits, on March 29, 1996, the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)³⁴ was signed into law and, *inter alia*,

²⁸ Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. § 601 et seq.)

²⁹ Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. § 601 et seq.)

³⁰ Pub. L. No. 104-121, 110 Stat. 857 (1996) (codified at 5 U.S.C. § 612(a))

³¹ 5 U.S.C. § 601(4)-(5)

³² See 5 U.S.C. § 605

³³ See generally, Office of Advocacy, U. S. Small Business Administration, *The Regulatory Flexibility Act: An Implementation Guide for Federal Agencies*, 1998 ("Advocacy 1998 RFA Implementation Guide").

³⁴ Title II of the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, March 29, 1996, 110 Stat. 847 (codified in various sections of 5 U.S.C., 15 U.S.C., and as a note to 5 U.S.C. Section 601)

amended the RFA to allow judicial review of an agency's compliance with the RFA³⁵.

This Commenter submits, even prior to the SBREFA amendments adding judicial review of final regulatory flexibility analyses, courts have held that failure to undertake a proper regulatory flexibility analysis could result in arbitrary and capricious rulemaking in violation of the Administrative Procedure Act (APA).³⁶

This Commenter submits the RFA does not seek preferential treatment for small businesses, nor does it require agencies to adopt regulations that impose the least burden on small entities or mandate exemptions for small entities. Rather, this Commenter submits it establishes an analytical process for determining how public issues can best be resolved without erecting barriers to competition. This Commenter submits the law seeks a level playing field for small business, not an unfair advantage. To this end, this Commenter submits the RFA requires the FCC to analyze the economic impact of proposed regulations on different-sized entities, estimate each rule's effectiveness in addressing the agency's purpose for the rule, and consider alternatives that will achieve the rule's objectives while minimizing the burden on small entities.³⁷

This Commenter submits, under Section 603 of the RFA, whenever an agency is required to publish a general notice of proposed rulemaking, the agency is required to prepare and make available to the public an initial regulatory flexibility analysis ("IRFA").³⁸ This Commenter submits such analysis must describe the impact of the proposed rule on all

³⁵ See 5 U.S.C. § 611; The sections of the RFA that are subject to independent judicial review of final agency action are Sections 601, 604, 605(b), 608(b) and 610. 5 U.S.C. § 611. Sections 607 and 609(a) shall be reviewable in connection with the judicial review of section 604. *Id.*

³⁶ *Thompson v. Clark*, 741 F.2d 401, 405 (D.C. Cir. 1984); see also *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 538 (D.C. Cir. 1983)

³⁷ 5 U.S.C. § 604

³⁸ 5 U.S.C. § 603(a)

small entities. This Commenter submits, to provide agencies with guidance, Congress listed six specific subjects that must be addressed as part of the IRFA.³⁹ This Commenter submits each IRFA must include: (1) the reasons why the action is being considered; (2) the objectives and legal basis for the proposed rules; (3) a description and estimate (if feasible) of the number of effected small entities; (4) projected reporting, recordkeeping, and other compliance requirements (including professional skills necessary); (5) identification of any Federal rules which duplicate, overlap, or conflict with the proposed rules; and (6) any significant alternatives to the proposed rules which minimize any significant impact of the proposed rule.⁴⁰

B. Requirements of the Regulatory Flexibility Act

1. Identify and Analyze for All Classes of Small Entities

This Commenter submits the first step in undertaking a proper regulatory flexibility analysis is to identify all of the classes of small entities affected by the proceeding.⁴¹

This Commenter submits the Commission has, in its IRFA, concluded "that the proposals in the NPRM would not directly affect any small entities, and thus obviously by reason would not directly affect a substantial number of small entities."⁴² However, this Commenter submits the Commission appears to be deficient in its recognition and analysis of individuals regardless of date of licensing (§ 95.5(a)⁴³) who "communicate two-way voice messages concerning the licensee's...business activities" (§ 95.181(a)⁴⁴)

³⁹ 5 U.S.C. § 603(b)-(c)

⁴⁰ *Id.*

⁴¹ 5 U.S.C. §§ 603(b)(3), 603(b)(4)

⁴² 75 Fed. Reg. 47142 at 47145 (para. 14)

⁴³ 47 C.F.R. § 95.5(a)

⁴⁴ 47 C.F.R. § 95.181(a)

and non-individuals licensed before July 31, 1987, (§ 95.5(c)⁴⁵) who "communicate two-way voice messages concerning the licensee's business activities" (§ 95.181(c)⁴⁶ and § 95.179(b)⁴⁷). This Commenter submits the Commission's allegations that "operators of Personal Radio Services stations" "are individual persons" and that "individual persons" are not "considered to be small entities for purposes of the RFA by the FCC, the SBA or Congress" appears to be incorrect,⁴⁸ and thus apparently contrary to law. This Commenter submits the Commission does not appear to have attempted to justify its conclusion that "individual persons" are not "considered to be small entities for purposes of the RFA by the FCC, the SBA or Congress." This Commenter submits the Small Business Administration (SBA) is the exclusive arbiter of small business size standards, as authorized by Congress⁴⁹. Therefore, this Commenter submits the SBA's regulations are controlling when determining a definition of small business. This Commenter submits, on the SBA website⁵⁰, the SBA states as follows, expressly including "a sole proprietorship" in the definition of a "business concern:"

The SBA defines a business concern as one that is organized for profit; has a place of business in the U.S.; operates primarily within the U.S. or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor; is independently owned and operated; and is not dominant in its field on a national basis. The business may be a sole proprietorship, partnership, corporation, or any other legal form.

⁴⁵ 47 C.F.R. § 95.5(c)

⁴⁶ 47 C.F.R. § 95.181(c)

⁴⁷ 47 C.F.R. § 95.179(b)

⁴⁸ *NPRM*, para. 14

⁴⁹ See *Northwest Mining Assoc. v. Babbitt*, 5 F. Supp.2d 9, 15 (D.D.C. 1998) (citation omitted) ("The RFA requires agencies to use the Small Business Administration's definition of small entity.")

⁵⁰ <http://www.sba.gov/contractingopportunities/officials/size/index.html>

Also, this Commenter submits the SBA defines "the largest size that a business (including its subsidiaries and affiliates) may be to remain classified as a small business concern"⁵¹ but does not appear to define a smallest size that a business may be to remain classified as a small business concern⁵². Therefore, this Commenter submits the Commission has not shown how individuals allegedly fail to qualify as small entities under the Small Business Act and the RFA and are allegedly not subject to a complete regulatory flexibility analysis by the Commission. This Commenter notes the Personal Radio Service rules expressly allow individuals and station operators for entities other than individuals to use a Personal Radio Service to communicate messages concerning business activities⁵³.

Furthermore, this Commenter submits the Regulatory Flexibility Act, as amended, applies to small entities. Small entities⁵⁴ have the same meaning not only as small businesses⁵⁵, but also as small organizations⁵⁶ and small governmental jurisdictions⁵⁷. This Commenter submits the FCC has apparently failed to recognize those small organizations and small governmental jurisdictions upon a substantial number of which this Commenter submits the Proposed Rules would likely have a significant economic effect. A search of the Commission's Universal Licensing System (ULS)⁵⁸ for all active, regular, GMRS (i.e., service abbreviation ZA) licensees on August 31, 2010, returns 58,663 results. Among just the first 100 of those results, this Commenter notes the

⁵¹ <http://www.sba.gov/contractingopportunities/officials/size/index.html>

⁵² *Id.*

⁵³ See, e.g., 47 C.F.R. § 95.181(a) & (c)

⁵⁴ 5 U.S.C. § 601(6)

⁵⁵ 5 U.S.C. § 601(3)

⁵⁶ 5 U.S.C. § 601(4)

⁵⁷ 5 U.S.C. § 601(5)

⁵⁸ <http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

following 24 active, regular GMRS licensees whose names sound to this Commenter (who is unable to readily verify their organizational status) like they may quite possibly be small organizations or small governmental jurisdictions:

KAA0425	Jasper County Farm Bureau Co-Op Assoc. Inc.
KAA9096	University of Rochester
KAA9681	Ossining Volunteer Ambulance Corps Inc.
KAA9830	Manatee, County of
KAA9903	Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter Day Saints
KAA9926	George Mason University
KAB0223	Port of Seattle
KAB1120	Palos Community Hospital
KAB1761	Northern Rhode Island REACT
KAB1975	Allen Park, City of
KAB2141	Regents of the University of California
KAB2431	Swarthmore College
KAB2458	Simi Valley Unified School District
KAB3047	Williamson County Programs on Aging
KAB3573	Portage Action Radio Association
KAB3850	Durand Area Schools
KAB4084	Academy of Model Aeronautics Inc.
KAB4510	Coral Gables, City of
KAB4622	Dallas County REACT Inc.
KAB5368	New Milford Fire Co. 2
KAB6620	Tampa, City of
KAB6728	Sacramento, County of
KAB7231	The School Board of Broward County, Florida
KAB7828	Snellville, City of

However, this Commenter submits, with no consideration of, or even recognition of the mere existence of, any such apparent small organizations and small governmental jurisdictions whose information is readily to the Commission in the Commission's own ULS database, the Commission could not possibly have determined that "this *NPRM*, if adopted would not have a significant economic effect on a substantial number of small entities," as the Commission alleges in the *NPRM*⁵⁹.

This Commenter submits the Commission's IRFA appears to be cursory, summarily excluding Personal Radio Services device manufacturers, dealers, and all operators of

⁵⁹ 75 Fed. Reg. 47142 at 47145 (para. 14)

Personal Radio Services stations. To wit, this Commenter submits, in this *NPRM*, "small-entity retailers," some of whose products this Commenter submits the Proposed Rules⁶⁰ would effectively ban, are deemed by the Commission to not be directly affected by any of the Commission's proposals set forth in the *NPRM*. Also, this Commenter submits compliance burdens such as technical requirements that would necessitate redesign and replacement of existing GMRS⁶¹ systems can economically cripple small entities. This Commenter submits such burdens were not addressed in the analysis. Moreover, this Commenter submits small entities making use of the GMRS⁶² are not likely to be put at a competitive disadvantage in attempting to comply with the changes implemented by the Proposed Rules⁶³ relative to large entities would be ineligible to apply for GMRS⁶⁴ licenses. This Commenter submits regulatory flexibility was implemented by Congress to combat this sort of uneven regulatory burden and to encourage agencies to implement regulations that address only those entities that are the source of a problem, and this Commenter submits the Commission has not shown any of the small entities that would be affected by the Proposed Rules⁶⁵ to have created any sort of problem. As set forth below, this Commenter details apparent deficiencies in the Commission's IRFA for the Proposed Rules.⁶⁶

⁶⁰ 75 Fed. Reg. 47142 *et seq.*

⁶¹ 47 C.F.R. Part 95, Subpart A

⁶² 47 C.F.R. Part 95, Subpart A

⁶³ 75 Fed. Reg. 47142 *et seq.*

⁶⁴ 47 C.F.R. Part 95, Subpart A

⁶⁵ 75 Fed. Reg. 47142 *et seq.*

⁶⁶ 75 Fed. Reg. 47142 *et seq.*

2. Describing the Proposed Reporting, Recordkeeping, Compliance

This Commenter submits the Commission appears to have failed to comply with the requirements of the Regulatory Flexibility Act. The Commission states, in paragraph 10 of the Proposed Rule publication, "The Regulatory Flexibility Act (RFA) requires that an agency prepare a regulatory flexibility analysis for notice-and-comment rulemaking proceedings...."⁶⁷ In paragraph 14, the Commission states, "...Initially, the FCC notes that the substantive proposals in the NPRM would directly affect only operators of Personal Radio Services stations and entities who seek FCC certification of equipment for use in the Personal Radio Services" and claims, "The former are individual persons...."⁶⁸ However, this Commenter notes 47 C.F.R. § 95.179 does not limit station operators to individual persons.⁶⁹ Rather, 47 C.F.R. § 95.179(a) states, "An individual GMRS system licensee may permit immediate family members to be station operators in his or her GMRS system....,"⁷⁰ and 47 C.F.R. § 95.181(a) states, "A station operator for an individual who is licensed in the GMRS (other than an employee of that individual) may communicate two-way voice messages concerning the licensee's personal or business activities (see Sec. 95.179)."⁷¹ Also, 47 C.F.R. § 95.179(b) states, "Only the following persons may be permitted to operate under the authority of a GMRS system licensed to a non-individual:" and lists "A partnership," "A corporation," "An association," and "A governmental unit."⁷² As a search of the Commission's Universal

⁶⁷ *NPRM*, para. 10

⁶⁸ *NPRM*, para. 14

⁶⁹ 47 C.F.R. § 95.179

⁷⁰ 47 C.F.R. § 95.179(a)

⁷¹ 47 C.F.R. § 95.181(a)

⁷² 47 C.F.R. § 95.179(b)

Licensing System (ULS)⁷³ for all active, regular, GMRS (i.e., service abbreviation ZA) licensees on August 13, 2010, returns 59,414 results, and additional station operators are authorized as provided in 47 C.F.R. § 95.179⁷⁴, so potentially many more than 59,414 station operators may be affected.

Also, this Commenter submits the Commission's assertion that "operators of Personal Radio Services" are "individual persons"⁷⁵ does not logically imply that no business entities, particularly "small entities," would be affected by the Proposed Rules⁷⁶. For example, this Commenter submits, under Sections 95.191⁷⁷ and 95.193⁷⁸, anyone who is not "a representative of a foreign government" "may use an FRS unit to conduct two-way voice communications with another person," and such two-way voice communications between persons, for example, between employees of a "small entity," are common, widespread, and frequent. In paragraph 30 of the document FCC 10-106 on the Commission's website⁷⁹, the Commission states, "We note that businesses successfully use FRS radios," citing "See Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Voice Radio Service, *Order*, RM-10564, DA 04-1035, released April 21, 2004." As the FRS is licensed by rule, this Commenter submits FRS users are not represented in the Universal Licensing System (ULS) database, but the number of "small entity" users can be inferred from the huge number of FRS units sold since the inception of the FRS. Thus, this Commenter submits very large

⁷³ <http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

⁷⁴ 47 C.F.R. § 95.179

⁷⁵ *NPRM*, para. 14

⁷⁶ 75 Fed. Reg. 47142 *et seq.*

⁷⁷ 47 C.F.R. § 95.191

⁷⁸ 47 C.F.R. § 95.193

⁷⁹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1.pdf at para. 30.

numbers of "small entities" would be likely to be affected by the proposed amendments to the FRS.

Likewise, for example, this Commenter submits, under Sections 95.1301⁸⁰ and 95.1307⁸¹, "[a]n entity is authorized by rule to operate a MURS transmitter if it is not a foreign government or a representative of a foreign government and if it uses the transmitter in accordance with Sec. 95.1309⁸² and otherwise operates in accordance with the rules contained in this subpart" to "transmit voice or data signals as permitted in this subpart." This Commenter submits use of the term "[a]n entity" does not limit MURS operators to "individuals," contrary to the Commission's assertion that "operators of Personal Radio Services" are "individual persons." Moreover, this Commenter submits Section 95.1307(c)⁸³ provides "MURS frequencies may be used for remote control and telemetering functions." Thus, this Commenter submits there appears to be no requirement that MURS transmissions are initiated by an "individual person." Accordingly, this Commenter submits a "small entity," being an "entity," is "authorized by rule to operate a MURS transmitter" pursuant to the other cited provisions, yet the Commission appears not only to have failed to consider the effects the Proposed Rule would have on such "small entities," but also to have effectively denied their existence, expediently sidestepping the Commission's obligation to perform an Initial Regulatory Flexibility Analysis under the Regulatory Flexibility Act. As the MURS is licensed by rule, this Commenter submits MURS users (besides "Grandfathered MURS stations"

⁸⁰ 47 C.F.R. § 95.1301

⁸¹ 47 C.F.R. § 95.1307

⁸² 47 C.F.R. § 95.1309

⁸³ 47 C.F.R. § 95.1307(c)

under Section 95.1317⁸⁴, whose pre-MURS ULS entries may remain) are not represented in the ULS database⁸⁵, but the number of "small entity" users can be inferred from the huge number of MURS units and grandfathered units suitable for MURS use. Thus, this Commenter submits very large numbers of "small entities" would be likely to be affected by the proposed amendments to the MURS.

In paragraph 14 of the Proposed Rules publication⁸⁶, the Commission states, "The former [i.e., operators of Personal Radio Services stations] are individual persons, and that [*sic*] latter are typically large manufacturing organizations, neither of which is considered to be small entities for the purposes of RFA by the FCC, the SBA or Congress." However, this Commenter submits such characterization appears to be inconsistent with current SBA practice, Congressional intent, and existing FCC practice.

For example, on the SBA website⁸⁷, the SBA states as follows, expressly including "a sole proprietorship" in the definition of a "business concern:"

The SBA defines a business concern as one that is organized for profit; has a place of business in the U.S.; operates primarily within the U.S. or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor; is independently owned and operated; and is not dominant in its field on a national basis. The business may be a sole proprietorship, partnership, corporation, or any other legal form.

At the same web page⁸⁸, the SBA states its "size standards represent the largest size that a business...may be to remain classified as a small business concern," stating as follows:

⁸⁴ 47 C.F.R. § 95.1317

⁸⁵ <http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

⁸⁶ 75 Fed. Reg. 47142 at 47145.

⁸⁷ <http://www.sba.gov/contractingopportunities/officials/size/index.html>

⁸⁸ *Id.*

SBA has established numerical definitions, or "size standards," for all for-profit industries. Size standards represent the largest size that a business (including its subsidiaries and affiliates) may be to remain classified as a small business concern. These size standards apply to SBA's financial assistance and to its other programs, as well as to Federal government procurement programs when there is a benefit available to qualifying as a small business concern. Also, the Small Business Act states that unless specifically authorized by statute, no Federal department or agency may prescribe a size standard for categorizing a business concern as a small business concern, unless such proposed size standard meets certain criteria and is approved by the Administrator of SBA.

Thus, this Commenter submits the SBA's size standards do not appear to specify a limit on the smallest size of a small business concern. Moreover, this Commenter submits the Commission does not appear to have shown itself to have prescribed a size standard for categorizing a business concern as a small business concern where such proposed size standard meets certain criteria and is approved by the Administrator of the SBA. Rather, this Commenter submits the Commission, in paragraph 10 of the Proposed Rule publication⁸⁹, expressly adopts the SBA's meaning, stating, "In addition, the term 'small business' has the same meaning as the term 'small business concern' under the Small Business Act."

Moreover, this Commenter submits Public Notice DA 09-1307⁹⁰, released June 24, 2009, cites section 95.183⁹¹ of Subpart A—General Mobile Radio Service (GMRS) of Part 95—Personal Radio Services as being a rule "which have, or might have, a significant economic impact on a substantial number of small entities." Yet now, when the Commission proposes to streamline, update, reorganize Part 95 in its entirety and make at least ten substantive amendments to the GMRS provisions of Part 95, this Commenter

⁸⁹ 75 Fed. Reg. 47142 at 47144 (para. 10)

⁹⁰ Public Notice DA 09-1307, June 24, 2009, "FCC Seeks Comment Regarding Possible Revision or Elimination of Rules Under The Regulatory Flexibility Act, 5 U.S.C. 610," CB Docket No. 09-102

⁹¹ 47 C.F.R. § 95.183

submits the Commission somehow concludes that "the proposals in the NPRM would not directly affect any small entities, and thus obviously by reason would not directly affect a substantial number of small entities."

Moreover, on July 26, 2010, this Commenter submits the Commission released a Memorandum Opinion and Order In the Matter of Investigation of the Spectrum Requirements for Advanced Medical Technologies -- Amendment of Parts 2 and 95 of the Commission's Rules to Establish the Medical Device Radiocommunication Service at 401-402 and 405-406 MHz (ET Docket No. 06-135) (RM-11271)⁹². In that Memorandum Opinion and Order, this Commenter submits the Commission performed a regulatory flexibility analysis under the Regulatory Flexibility Act of 1980 and, contrary to the regulatory flexibility analysis for the present Proposed Rule, where the Commission states "The Personal Radio Services equipment market is a large, nationwide market and most Personal Radio Services devices are mass-marketed directly to the general public as consumer goods" and "This necessitates a large-volume manufacturing capability that a small entity typically does not have," the Commission, in the Memorandum Opinion and Order concluded "...the majority of firms can be considered small," stating as follows:

Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile

⁹² Memorandum Opinion and Order, In the Matter of Investigation of the Spectrum Requirements for Advanced Medical Technologies -- Amendment of Parts 2 and 95 of the Commission's Rules to Establish the Medical Device Radiocommunication Service at 401-402 and 405-406 MHz (ET Docket No. 06-135) (RM-11271)

communications equipment, and radio and television studio and broadcasting equipment.”⁶⁹ The SBA has developed a small business size standard for firms in this category, which is: all such firms having 750 or fewer employees.⁷⁰ According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.⁷¹ Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.⁷² Thus, under this size standard, the majority of firms can be considered small.

As the Commission identified the majority of firms affected by the Memorandum Opinion and Order pertaining to MedRadio devices under Part 95 as being small businesses, this Commenter notes that the present Proposed Rule includes not only amendment of MedRadio portions of Part 95 but also all other portions of Part 95. Thus, this Commenter submits the number of small entities likely to be affected by the present Proposed Rule is vastly greater.

Furthermore, this Commenter submits the Commission's characterization of "individual persons" supposedly not being "considered to be small entities of the purposes of the RFA by the FCC, the SBA or Congress" appears to be contrary to Congressional intent. For example, in the Small Business Act⁹³, this Commenter submits Congress includes several provisions relating "a small business concern" to individual persons, such as § 2(f)(1)(A), which states as follows:

- (f) (1) With respect to the Administration's business development programs the Congress finds—
 - (A) that the opportunity for full participation in our free enterprise system by socially and economically disadvantaged persons is essential if we are to obtain social and economic equality for such persons and improve the functioning of our national economy;

This Commenter notes Congress also includes provisions in the Small Business Act relating "a small business concern" to women, handicapped persons, veterans, and service-disabled veterans, among others. This Commenter submits Congressional intent

⁹³ Pub. L. 85-536, July 18, 1958, 72 Stat. 384 (codified at 15 U.S.C. § 631 *et seq.*)

to promote the opportunity for full participation in our free enterprise system by such individual persons contradicts the Commission's disregard of individual persons for the purposes of the RFA. Thus, this Commenter submits the Commission's RFA analysis with respect to the Proposed Rule is defective and would result in harm to those individuals whom Congress intended to protect if the Proposed Rule were adopted.

While the Commission may view the proposal for licensing by rule as relieving any affected small entities of paperwork burdens and expense, this Commenter notes that substantive changes the Commission proposes for Personal Radio Services under Part 95 may detrimentally affect small entities. As one example, this Commenter submits limiting the power of portable (hand-held) GMRS transmitters to 2 Watts effective radiated power (ERP) may reduce the usable range of such transmitters in a manner that detrimentally affects small entities. As another example, this Commenter submits no longer certifying Personal Radio Services equipment that have transmitting capability in services licensed under 47 C.F.R. parts 80, 87, 90, and 97 may detrimentally affect "small entities" who use, for example, utilize both radio services under both Part 90 and Part 95 of the Commission's Rules. For example, this Commenter submits a "small entity" may elect to use service under Part 90 for communications that involve a telephone interconnection and services under Part 95 for communications that do not. This Commenter submits a prohibition on certification of radio equipment under both Part 95 and Part 90 would seem to impair such a "small entity."

This Commenter contends that the Commission appears not to have discharged its statutory duty to describe adequately the projected reporting, recordkeeping, and other

compliance requirements. This Commenter submits the Commission introduced at least sixteen new potential compliance requirements in the *NPRM*: (1) prohibiting voice obscuring or scrambling in the GMRS⁹⁴, FRS and CB Radio Services and no longer certifying equipment with such features⁹⁵; (2) limiting the power of portable (handheld) GMRS⁹⁶ transmitters to 2 Watts effective radiated power (ERP)⁹⁷; (3) requiring routine specific absorption rate (SAR) evaluation for portable GMRS⁹⁸ transmitters⁹⁹; (4) changing the power limit for GMRS¹⁰⁰ small base stations from 5 Watts ERP to 5 Watts transmitter power output (TPO)¹⁰¹; (5) implementing 12.5 kHz narrowbanding (reduction in authorized channel bandwidth) in the GMRS¹⁰²; and (6) no longer certifying Personal Radio Services (PRS) equipment that have transmitting (TX) capability in services licensed under 47 C.F.R. parts 80, 87, 90 and 97¹⁰³; (7) changing the power limit of MURS units from 2W TPO¹⁰⁴ to 2W ERP¹⁰⁵; (8) requiring the antenna of handheld portable GRMS [*sic*] units to be "an integral part of the transmitter"¹⁰⁶; (9) requiring the antenna of handheld portable GRMS [*sic*] unit to have no gain (as compared to a half-wave dipole)¹⁰⁷; (10) requiring the antenna of handheld portable GRMS [*sic*] unit to be vertically polarized¹⁰⁸; (11) reducing the authorized bandwidth for emission type F3E or

⁹⁴ 47 C.F.R. Part 95, Subpart A

⁹⁵ 75 Fed. Reg. 47142 at 47143 (para. 4f)

⁹⁶ 47 C.F.R. Part 95, Subpart A

⁹⁷ 75 Fed. Reg. 47142 at 47143 (para. 4j)

⁹⁸ 47 C.F.R. Part 95, Subpart A

⁹⁹ 75 Fed. Reg. 47142 at 47143 (para. 4k)

¹⁰⁰ 47 C.F.R. Part 95, Subpart A

¹⁰¹ 75 Fed. Reg. 47142 at 47143 (para. 4l)

¹⁰² 75 Fed. Reg. 47142 at 47143 (para. 4m)

¹⁰³ 75 Fed. Reg. 47142 at 47143 (para. 4p)

¹⁰⁴ 47 C.F.R. § 95.639(h)

¹⁰⁵ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(h))

¹⁰⁶ 75 Fed. Reg. 47142 at 47156 (proposed § 95.45(a)(4))

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

F2D transmitted by a FRS unit from 12.5 kHz¹⁰⁹ to 12.25 kHz¹¹⁰; (12) replacing existing separate equipment certification requirements¹¹¹ with an apparently substantially different general equipment certification requirement¹¹²; (13) limiting the maximum power permitted for GMRS¹¹³ small base stations (operating on even numbered GMRS¹¹⁴ channels) to 5 watts output power¹¹⁵; (14) limiting the maximum power permitted for GMRS¹¹⁶ fixed stations to 15 watts output power¹¹⁷; (15) limiting the maximum power permitted for any GMRS¹¹⁸ station located at a point north of Line A or east of Line C to no more than 5 watts ERP¹¹⁹; (16) requiring that any GMRS¹²⁰ station licensed after [effective date of rules] and located north of Line A or east of Line C must have an antenna no more than 20 feet above ground or above the building or tree on which it is mounted¹²¹. This Commenter submits only three of these proposed compliance requirements were mentioned in the IRFA: (1) no longer granting certification of certain types of personal radios (those combined with safety service radios)¹²²; (2) no longer granting certification of certain types of personal radios (those with voice scrambling capability)¹²³; and (3) requiring routine evaluation of certain GMRS radios for radio frequency exposure¹²⁴. For these, this Commenter submits the Commission stated without

¹⁰⁹ 47 C.F.R. § 95.633(c)

¹¹⁰ 75 Fed. Reg. 47142 at 47154 (proposed § 95.39(c))

¹¹¹ e.g., 47 C.F.R. §§ 95.129, 95.194, 95.603

¹¹² 75 Fed. Reg. 47142 at 47151-47153 (proposed § 95.33)

¹¹³ 47 C.F.R. Part 95, Subpart A

¹¹⁴ 47 C.F.R. Part 95, Subpart A

¹¹⁵ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(1)(ii))

¹¹⁶ 47 C.F.R. Part 95, Subpart A

¹¹⁷ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(1)(iii))

¹¹⁸ 47 C.F.R. Part 95, Subpart A

¹¹⁹ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(2))

¹²⁰ 47 C.F.R. Part 95, Subpart A

¹²¹ 75 Fed. Reg. 47142 at 47156 (proposed § 95.45(a)(3))

¹²² 75 Fed. Reg. 47142 at 47144 (para. 13)

¹²³ *Id.*

¹²⁴ *Id.*

foundation a belief "that the cost to manufacturers of implementing any of these proposals would be small in comparison to the costs of design, manufacturing, distribution and marketing of these products" and concluded "that adoption of the *NPRM* proposals would not have more than a *de minimus*, if any, economic effect on manufacturers."¹²⁵ Moreover, this Commenter submits the Commission denies the existence of any directly affected small entities.¹²⁶

In addition to the at least sixteen new compliance requirements set forth above, while the Commission states, in the IRFA, "Some of these rules would allow equipment manufacturers the flexibility to include certain new features in their future Personal Radio Services products, if they so desire" and "...such rules are permissive and not mandatory requirements...",¹²⁷ this Commenter notes, in the context of a finite allocation of spectrum, even "permissive" rules can burden those users of that finite allocation of spectrum. For example, this Commenter submits the Commission's proposal to allow GMRS units to "transmit digital data containing location information, or requesting location information from one or more other units within that service, or containing a brief text message to another specific unit"¹²⁸ would be expected to increase congestion within the finite allocation of spectrum for the GMRS, impairing the use of such finite allocation of spectrum for its traditional two-way voice messages¹²⁹, thereby imposing a burden on users. In the Commission's Proposed Rule¹³⁰, this Commenter identifies at least fifteen additional proposed new burdens beyond the at least sixteen new compliance

¹²⁵ *Id.*

¹²⁶ 75 Fed. Reg. 47142 at 47145 (para. 14)

¹²⁷ 75 Fed. Reg. 47142 at 47144 (para. 13)

¹²⁸ 75 Fed. Reg. 47142 at 47157 (proposed § 95.105(d))

¹²⁹ 47 C.F.R. 95.181(a)

¹³⁰ 75 Fed. Reg. 47142 *et seq.*

requirements set forth above. This Commenter submits these at least fifteen additional proposed new burdens include the following: (1) time and effort required to study and apply any intentional and unintentional changes arising from the proposed consolidation and streamlining of the Part 95 Rules¹³¹; (2) costs of privacy loss arising from proposed prohibition of voice scrambling or obscuring¹³²; (3) costs of mitigating interference from unidentified sources authorized by rule to operate in the GMRS¹³³; (4) costs of mitigating interference from juvenile sources in absence of a responsible adult licensee¹³⁴; (5) spectrum usage opportunity costs of allowing transmission of data in the GMRS¹³⁵; (6) opportunity costs in terms of lost communications capability incurred by limiting power of portable GMRS units¹³⁶; (7) replacement costs of GMRS units not capable of 12.5-KHz narrowband operation¹³⁷; (8) costs of obtaining separate radio equipment for Part 95 operation and operation under any or all of Parts 80, 97, 90, and 97 of the Rules¹³⁸; (9) costs of verifying compliance with changed power limit of MURS units¹³⁹; (10) costs of replacing portable GRMS [*sic*] units with ones having integral antennas¹⁴⁰; (11) costs of replacing FRS units with those having F3E and F2D emission bandwidths limited to 12.25 KHz¹⁴¹; (12) costs of replacing GMRS small base units with those complying with different power limit¹⁴²; (13) costs of replacing GMRS fixed units with those complying

¹³¹ 75 Fed. Reg. 47142 (para. 1)

¹³² 75 Fed. Reg. 47142 at 47143 (para. 4f)

¹³³ 47 C.F.R. Part 95, Subpart A

¹³⁴ 75 Fed. Reg. 47142 at 47143 (para. 4i)

¹³⁵ 75 Fed. Reg. 47142 at 47143 (para. 4o)

¹³⁶ 75 Fed. Reg. 47142 at 47143 (para. 4j)

¹³⁷ 75 Fed. Reg. 47142 at 47143 (para. 4m)

¹³⁸ 75 Fed. Reg. 47142 at 47143 (para. 4p)

¹³⁹ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(h))

¹⁴⁰ 75 Fed. Reg. 47142 at 47155 (proposed § 95.45(a)(4))

¹⁴¹ 75 Fed. Reg. 47142 at 47154 (proposed § 95.39(c))

¹⁴² 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(1)(ii))

with lower power limit¹⁴³; (14) costs of replacing GMRS units north of Line A or east of Line C with those complying with lower power limit¹⁴⁴; (15) costs of replacing GMRS antennas north of Line A or east of Line C with those complying with antenna restriction¹⁴⁵. While some of the above at least fifteen additional proposed new burdens may appear similar to some of the above at least sixteen compliance requirements, this Commenter notes that compliance requirements imposed on manufacturers of Personal Radio Services equipment may harm small entity Personal Radio Services users by imposing burdens upon them. Moreover, as the compliance requirements may prevent such newly manufactured equipment from meeting users' communication needs, this Commenter submits users may stop purchasing newly manufactured equipment, such that manufacturers, distributors, and dealers of Personal Radio Services equipment suffer lost sales from the compliance requirements, which the Commission has not analyzed in its IRFA. Furthermore, this Commenter submits the Commission has not analyzed, in its IRFA, the effects of any of the above at least sixteen compliance requirements and at least fifteen additional proposed new burdens on Personal Radio Services users, as it has attempted to categorically exclude them from being considered small entities in apparent contravention of SBA and Congressional intent.¹⁴⁶

This Commenter submits the purpose of the IRFA is to solicit public comment on the proposed rules and to give notice to small entities of projected requirements.¹⁴⁷ This Commenter submits the Commission cannot receive meaningful comments on the impact

¹⁴³ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(1)(iii))

¹⁴⁴ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35(b)(2))

¹⁴⁵ 75 Fed. Reg. 47142 at 47156 (proposed § 95.45(a)(3))

¹⁴⁶ 75 Fed. Reg. 47142 at 47145 (para. 14)

¹⁴⁷ 5 U.S.C. § 603

of the proposed rules if the Commission fails to mention projected compliance requirements and fails to acknowledge the existence of any directly affected small entities. This Commenter submits the apparent absence of public notice to small entities of such requirements not only appears to violate the RFA but also seems likely to weaken the quality of the responses the FCC will receive and seems likely to limit the possibility of receiving feasible alternatives to the proposed regulations.

This Commenter submits any proposed rule which would place a requirement on small entities, whether reporting, recordkeeping, or otherwise, must be listed in the IRFA. This Commenter submits small entities are subject to burdens of compliance when equipment must be purchased or upgraded as well as when other burdens are imposed. This Commenter discusses below some apparent deficiencies in the IRFA regarding the at least sixteen compliance requirements and at least fifteen additional proposed new burdens mentioned above.

Historically, the SBA's Office of Advocacy has held the Commission to "a statutory duty to address the economic impact of this proposal on all small entities."¹⁴⁸ As this Commenter has identified several apparent small entities for whom the Commission has not addressed the economic impact of the Proposed Rules, this Commenter submits the Commission does not appear to have satisfied the statutory duty described by the SBA's Office of Advocacy.

¹⁴⁸ <http://www.sba.gov/ADVO/laws/comments/fcctest.html>

3. Alternatives Minimizing Burdens on All Small Entities

In addition to the deficiencies in providing significant alternatives for the at least sixteen compliance requirements and at least fifteen additional proposed new burdens discussed above, this Commenter has a concern as to the Commission's apparent failure to address alternatives for small entities affected by the Proposed Rules¹⁴⁹. This Commenter asserts that the Commission appears to have failed to meet its statutory duty to describe significant alternatives to the Proposed Rule, which accomplish the stated objectives while minimizing any significant economic impact.¹⁵⁰ This Commenter submits the Commission appears to have failed to consider the four significant alternatives laid out by Congress in the RFA.¹⁵¹ This Commenter submits Congress specifically listed four different alternatives that agencies were to consider during the preparation of the IRFA: (1) differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) clarification, consolidation, or simplification of compliance or reporting requirements for small entities; (3) use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹⁵² This Commenter submits the Commission does not appear to have addressed any of these alternatives in the text of the IRFA. Instead, this Commenter submits the IRFA impermissibly placed the burden on small entities to recommend alternatives.

¹⁴⁹ 75 Fed. Reg. 47142 *et seq.*

¹⁵⁰ 5 U.S.C. § 603(c)

¹⁵¹ 5 U.S.C. § 603(c)(1)-(4)

¹⁵² *Id.*

C. IRFA Revision and Resubmission for Public Notice and Comment

As discussed above, this Commenter submits the Commission's IRFA is fatally flawed on several accounts. Therefore, this Commenter submits it is necessary that the Commission revise the IRFA and re-submit it for public notice and comment to meet the statutory requirements of the RFA and the APA. This Commenter submits a defective IRFA prevents the opportunity for public notice and comment which is required under the APA, which in turn, undermines the rulemaking record an agency needs to make factual conclusions.¹⁵³ This Commenter submits, even prior to the SBREFA amendments, courts have held that failure to undertake a proper regulatory flexibility analysis as part of the rulemaking could result in arbitrary and capricious rulemaking.¹⁵⁴ This Commenter submits SBREFA allows for judicial review of the Commission's Final Regulatory Flexibility Analysis (FRFA)¹⁵⁵, the foundation of which is a sufficient IRFA. For this reason, this Commenter submits the FRFA cannot be in compliance with the RFA unless the IFRA is cured by revision and re-submission for public comment¹⁵⁶. This Commenter submits it is incumbent on the FCC, as the expert agency authorized by Congress, to know what is required by both large and small entities to comply with its proposed regulations, and to undertake a threshold analysis of the impact of such compliance on small entities at the NPRM stage. This Commenter submits it is this analysis that provides small entities adequate notice of potential regulatory burdens that may be required of them.

¹⁵³ *McGregor Printing Corp. v. Kemp*, 20 F.3d 1188, 1194 (D.C. Cir. 1994); *see also MCI Telecommunications Corp. v. FCC*, 842 F.2d 1296 (D.C. Cir. 1988)

¹⁵⁴ *Thompson v. Clark*, 741 F.2d 401, 405 (D.C. Cir. 1984); *see also Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 538 (D.C. Cir. 1983).

¹⁵⁵ 5 U.S.C. § 611

¹⁵⁶ *See Southern Offshore Fishing Ass'n v. Daley*, 995 F. Supp. 1411 (M.D. Fla. 1998), *see also Northwest Mining Ass'n v. Babbitt*, 5 F. Supp.2d 9 (D.D.C. 1998).

This Commenter submits the ultimate benefit of a reasoned IRFA is to provide the public with rulemaking that serves the public interest. To achieve that, this Commenter submits a proper IRFA functions to elicit information for policymakers from those with hands-on experience using the Personal Radio Services in manifold ways that reflect the diversity of the various Personal Radio Services themselves. This Commenter submits the Commission needs this information known only to practitioners to avoid erecting unreasonable barriers to beneficial use of the Personal Radio Services.

Executive Order 13272

According to the Small Business Administration's Office of Advocacy, this Commenter submits the Executive Order 13272¹⁵⁷ requires that the federal agencies including the FCC, implement policies protecting small businesses. This Commenter submits the FCC is failing to acknowledge the existence of small businesses affected by the Proposed Rules¹⁵⁸ and is thereby failing to implement policies protecting small businesses in apparent violation of Executive Order 13272.

According to the Small Business Administration's Office of Advocacy, Executive Order 13272 requires federal regulatory agencies to notify the Office of Advocacy prior to publication of draft rules if the rules are expected to have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (RFA).¹⁵⁹ However, as the Commission has apparently failed to acknowledge the existence of a significant number of small entities upon whom the Proposed Rules can be expected to

¹⁵⁷ Exec. Order No. 13272, 67 Fed. Reg. 53461 (Aug. 16, 2002)

¹⁵⁸ 75 Fed. Reg. 47142 *et seq.*

¹⁵⁹ http://www.sba.gov/advo/laws/eo13272_03.pdf

have a significant economic effect, this Commenter submits the Commission has also apparently failed to notify the Office of Advocacy prior to publication of the Proposed Rules. Thus, this Commenter submits the Commission's Proposed Rules do not appear to comply with the requirements of Executive Order 13272.

The Paperwork Reduction Act of 1995

As to the Initial Paperwork Reduction Act of 1995 (PRA)¹⁶⁰ Analysis in paragraph 16 of the Proposed Rules publication¹⁶¹, this Commenter notes the Commission states, "This document proposes to eliminate an information collection." However, this Commenter submits the Commission does not appear to consider that § 95.33(d)(3) of the Proposed Rule¹⁶² would seem to increase paperwork, as it would seem to require separate paperwork (e.g., separate Part 15 measurements and certifications, separate photographs, separate block diagrams, separate schematics, separate descriptions) for the certification of separate radios for use in the Personal Radio Service and in a licensed or safety service, rather than allowing a single radio to be more efficiently certified under the Personal Radio Service and a licensed and/or safety service. Thus, this Commenter submits the Proposed Rule implicates an increased paperwork burden subject to the Paperwork Reduction Act of 1995. Moreover, this Commenter notes the Commission has not provided notice of such increased paperwork burden in its Proposed Rule publication in the Federal Register.¹⁶³

¹⁶⁰ Pub. L. No. 104-13, May 22, 1995, 109 Stat. 63 (codified at 44 U.S.C. § 3501 *et seq.*)

¹⁶¹ 75 Fed. Reg. 47142 at 47145

¹⁶² 75 Fed. Reg. 47142 at 47152

¹⁶³ 75 Fed. Reg. 47142 *et seq.*

On June 28, 2002, the Small Business Paperwork Relief Act (SBPRA)¹⁶⁴ was enacted as Public Law 107-198 and amends the PRA. To the extent the SBPRA addresses imposes obligations on agencies with respect to "small business concerns with fewer than 25 employees," this Commenter respectfully requests the Commission assure such obligations are fulfilled with respect to the Proposed Rules.

Given the Commission's apparently incomplete regulatory flexibility analysis and its apparent failure to look at all the compliance burdens on small entities, this Commenter has concerns regarding the accuracy of the Commission's submission for approval of its estimates on reporting and recordkeeping requirements to the Office of Management and Budget (OMB). As an example, this Commenter notes the changes to certification requirements embodied in the Proposed Rules and the potential need for Personal Radio Services users to submit previously certified equipment for new certification, where such users would not be able to amortize the extraordinary costs of certification over large numbers of devices produced, as is usually the case when equipment manufacturers obtain certification of the equipment they produce in large quantities. This Commenter submits the Commission does not appear to have generated and submitted estimates of paperwork burden for such a massive bureaucratic undertaking that would be borne by Personal Radio Services users, including small entities.

The Administrative Procedure Act

This Commenter submits the unique characteristics of the different Part 95 Services have been developed through numerous rulemaking proceedings over several decades. This

¹⁶⁴ Pub. L. No. 107-198, June 28, 2002 (codified at 44 U.S.C. § 3520)

Commenter submits the subtleties of the existing Part 95 rules reflect the results of those thoughtful rulemaking processes, wherein the Commission interacted with the public to obtain results most favorable to the public interest. This Commenter submits an attempt to streamline, update and reorganize Part 95 of the Commission's Rules would frustrate the high degree of refinement that has been achieved in Part 95 of the Commission's Rules over its extensive history. For example, this Commenter submits such a proposed streamlining, updating and reorganization runs a high risk of causing unintended consequences by making changes that are not expressly identified among the Commission's specific proposals. Indeed, this Commenter includes a section, *infra*, of this Commenter's Comments where this Commenter identifies and discusses unprecedented changes to Part 95 that are not identified or discussed by the Commission. Moreover, as changes to the Part 95 rules proposed by the Commission are so extensive as to constitute a complete rewriting of all of Part 95, and the Commission, in its publication of the Proposed Rules in the Federal Register focuses the attention of commenters on Specific Proposals and Request for Comment on Other Issues, this Commenter submits the Commission draws the attention of most commenters, whose comments generally tend to be less extensive than those of this Commenter, away from laboriously searching for unannounced changes likely to result in detrimental unintended consequences. Therefore, this Commenter submits many adversely affected parties may not have effective notice of the full extent of the changes that would occur from adoption of the Proposed Rules. Thus, this Commenter submits the proposed streamlining, updating and reorganization of the Part 95 rules, by itself, hampers the comment process

that this Commenter submits is the *sine qua non* of publishing a Notice of Proposed Rulemaking (NPRM) under the Administrative Procedure Act (APA), as amended¹⁶⁵.

Federal Environmental Laws

The National Environmental Policy Act

On the Environmental Protection Agency's (EPA's) website¹⁶⁶, the EPA states as follows:

The National Environmental Policy Act (NEPA)¹⁶⁷ was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment, and it provides a process for implementing these goals within the federal agencies. The Act also establishes the Council on Environmental Quality (CEQ).

NEPA Requirements

Title I of NEPA contains a Declaration of National Environmental Policy which requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony. Section 102 requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment. These statements are commonly referred to as environmental impact statements (EISs). Section 102 also requires federal agencies to lend appropriate support to initiatives and programs designed to anticipate and prevent a decline in the quality of mankind's world environment.

Title II of NEPA establishes the Council on Environmental Quality (CEQ).

Oversight of NEPA

The Council on Environmental Quality, which is headed by a fulltime Chair, oversees NEPA. A staff assists the Council. The duties and functions of the Council are listed in Title II, Section 204 of NEPA and include: gathering information on the conditions and trends in environmental quality; evaluating federal programs in light of the goals established in Title I of the Act; developing and promoting national policies to improve environmental quality; and conducting studies, surveys, research, and analyses relating to ecosystems and environmental quality.

Implementation

¹⁶⁵ Pub. L. No. 79-404, June 11, 1946, 60 Stat. 237 (codified at 5 U.S.C. §§ 551-559, 701-706)

¹⁶⁶ <http://www.epa.gov/oecaerth/basics/nepa.html>

¹⁶⁷ Pub. L. No. 91-190, January 1, 1970, 83 Stat. 852 (codified at 42 U.S.C. § 4321 *et seq.*)

In 1978, CEQ promulgated regulations¹⁶⁸ implementing NEPA which are binding on all federal agencies. The regulations address the procedural provisions of NEPA and the administration of the NEPA process, including preparation of EISs. To date, the only change in the NEPA regulations occurred on May 27, 1986, when CEQ amended Section 1502.22 of its regulations to clarify how agencies are to carry out their environmental evaluations in situations where information is incomplete or unavailable.

CEQ has also issued guidance on various aspects of the regulations including: an information document on "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act", Scoping Guidance, and Guidance Regarding NEPA Regulations. Additionally, most federal agencies have promulgated their own NEPA regulations and guidance which generally follow the CEQ procedures but are tailored for the specific mission and activities of the agency.

The NEPA Process

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking including its alternatives. There are three levels of analysis depending on whether or not an undertaking could significantly affect the environment. These three levels include: categorical exclusion determination; preparation of an environmental assessment/finding of no significant impact (EA/FONSI); and preparation of an environmental impact statement (EIS).

At the first level, an undertaking may be categorically excluded from a detailed environmental analysis if it meets certain criteria which a federal agency has previously determined as having no significant environmental impact. A number of agencies have developed lists of actions which are normally categorically excluded from environmental evaluation under their NEPA regulations.

At the second level of analysis, a federal agency prepares a written environmental assessment (EA) to determine whether or not a federal undertaking would significantly affect the environment. If the answer is no, the agency issues a finding of no significant impact (FONSI). The FONSI may address measures which an agency will take to reduce (mitigate) potentially significant impacts.

If the EA determines that the environmental consequences of a proposed federal undertaking may be significant, an EIS is prepared. An EIS is a more detailed evaluation of the proposed action and alternatives. The public, other federal agencies and outside parties may provide input into the preparation of an EIS and then comment on the draft EIS when it is completed.

If a federal agency anticipates that an undertaking may significantly impact the environment, or if a project is environmentally controversial, a federal agency may choose to prepare an EIS without having to first prepare an EA.

After a final EIS is prepared and at the time of its decision, a federal agency will prepare a public record of its decision addressing how the findings of the EIS, including consideration of alternatives, were incorporated into the agency's decision-making process.

¹⁶⁸ 40 C.F.R. Parts 1500-15081

EA and EIS Components

An EA is described in Section 1508.9 of the Council's NEPA regulations. Generally, an EA includes brief discussions of the following: the need for the proposal; alternatives (when there is an unresolved conflict concerning alternative uses of available resources); the environmental impacts of the proposed action and alternatives; and a listing of agencies and persons consulted.

An EIS, which is described in Part 1502 of the regulations, should include discussions of the purpose of and need for the action, alternatives, the affected environment, the environmental consequences of the proposed action, lists of preparers, agencies, organizations and persons to whom the statement is sent, an index, and an appendix (if any).

Federal Agency Roles

The role of a federal agency in the NEPA process depends on the agency's expertise and relationship to the proposed undertaking. The agency carrying out the federal action is responsible for complying with the requirements of NEPA. In some cases, there may be more than one federal agency involved in an undertaking. In this situation, a lead agency is designated to supervise preparation of the environmental analysis. Federal agencies, together with state, tribal or local agencies, may act as joint lead agencies.

A federal, state, tribal or local agency having special expertise with respect to an environmental issue or jurisdiction by law may be a cooperating agency in the NEPA process. A cooperating agency has the responsibility to assist the lead agency by participating in the NEPA process at the earliest possible time; by participating in the scoping process; in developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise; and in making available staff support at the lead agency's request to enhance the lead agency's interdisciplinary capabilities.

Under Section 1504 of CEQ's NEPA regulations, federal agencies may refer to CEQ interagency disagreements concerning proposed federal actions that might cause unsatisfactory environmental effects. CEQ's role, when it accepts a referral, is generally to develop findings and recommendations, consistent with the policy goals of Section 101 of NEPA. The referral process consists of certain steps and is carried out within a specified time frame.

EPA's Role

The Environmental Protection Agency, like other federal agencies, prepares and reviews NEPA documents. However, EPA has a unique responsibility in the NEPA review process. Under Section 309 of the Clean Air Act, EPA is required to review and publicly comment on the environmental impacts of major federal actions including actions which are the subject of EISs. If EPA determines that the action is environmentally unsatisfactory, it is required by Section 309 to refer the matter to CEQ.

Also, in accordance with a Memorandum of Agreement between EPA and CEQ, EPA carries out the operational duties associated with the administrative aspects of the EIS filing process. The Office of Federal

Activities in EPA has been designated the official recipient in EPA of all EISs prepared by federal agencies.

The Public's Role

The public has an important role in the NEPA process, particularly during scoping, in providing input on what issues should be addressed in an EIS and in commenting on the findings in an agency's NEPA documents. The public can participate in the NEPA process by attending NEPA-related hearings or public meetings and by submitting comments directly to the lead agency. The lead agency must take into consideration all comments received from the public and other parties on NEPA documents during the comment period.

While this Commenter submits the Commission has not identified any aspects of the Proposed Rules in relation to NEPA and has not discussed the applicability of NEPA to the Proposed Rules, this Commenter submits several aspects of the Proposed Rules appear to give rise to adverse environmental concerns. This Commenter discusses such concerns, *infra*.

Imposing Stricter Power Limits

This Commenter has identified several aspects, *infra*, of the Proposed Rules that relate to power limits, including some the Commission does not appear to have acknowledged as being changed by the Proposed Rules. This Commenter submits some changes to power limits would require existing Personal Radio Services manufacturers and/or licensees and/or users to reduce their equipment's power levels relative to their existing power levels. This Commenter submits, as the majority of users are unlikely to be able to properly reduce the power levels of their existing equipment, it seems likely that the imposition of stricter power limits would force users to remove existing equipment from service and replace it with new equipment. This Commenter submits the Commission does not appear to consider the environmental consequences of widespread disposal of existing equipment necessitated by the Commission's attempted rulemaking. This

Commenter submits the Commission also does not appear to consider the environmental consequences of design, manufacturing, distribution, and marketing of replacement equipment. Even under its IRFA for FRA purposes, this Commenter submits the Commission looks only to the cost to equipment manufacturers "to make adjustments to their future product plans (in regard to combination and voice-scrambling radios) or to alter product labeling (in regard to personal locator beacons),"¹⁶⁹ not to economic and environment costs of widespread replacement of perfectly functional existing equipment necessitated by the Proposed Rules.

Narrowbanding the GMRS

This Commenter submits existing GMRS radios have historically operated with non-narrowband bandwidths (e.g., 25 KHz) and generally continue to do so. This Commenter submits GMRS radios that do not support non-narrowband bandwidths are not engineered to interoperate with narrowband radios. Thus, this Commenter submits a Commission initiative to implement narrowbanding in the GMRS would necessarily force non-narrowband GMRS radios to be replaced by narrowband-capable radios. This Commenter notes the Commission does not appear to have reviewed the Proposed Rules¹⁷⁰ under NEPA as to what effect they might have on the environment, for example, by promoting the disposal of large quantities of non-narrowband-capable radios. Furthermore, the Commission's rules in relation to the NEPA at 47 C.F.R. §§ 1.1301-1.1319 do not appear to contemplate, and thus do not appear to categorically exclude, Commission actions with respect to rule changes promoting environmental pollution, as opposed to mere alleged electromagnetic environmental effects. Thus, this Commenter

¹⁶⁹ 75 Fed. Reg. 47142 at 47144 (para. 13)

¹⁷⁰ 75 Fed. Reg. 47142 *et seq.*

submits the Proposed Rules¹⁷¹ appear to give rise to implications under NEPA that the Commission has not addressed in the publication of the Proposed Rules¹⁷² in the Federal Register.

Ineligibility for Certification of Equipment with Parts 80, 87, 90 & 97 TX

As this Commenter discusses, *infra*, a search of the Commission's equipment authorization database¹⁷³ on August 19, 2010, revealed 1026 certifications for equipment certified to operate under both Part 90 and Part 95 of the Rules, the 987 of such certifications including an ability to operate in the frequency range of the GMRS. While many were granted recently, some date back as far as 1985. This Commenter is not aware of any alleged problems arising from equipment certified to operate under another Part of 47 C.F.R. in addition to Part 95. Moreover, this Commenter submits many GMRS licensees make beneficial use of equipment that was previously certified under multiple Parts of the Rules. This Commenter submits such reuse prevents equipment, such as equipment otherwise rendered useless by narrowbanding requirements in another Service, from having no further use and being subject to disposal to the detriment of the environment. Thus, this Commenter submits the Commission's refusal to certify equipment for operation under multiple Parts of the Rules can be expected to lead to less reuse of equipment, which can be expected to increase environmental harm from otherwise unnecessary manufacturing and disposal of otherwise useful equipment. This

¹⁷¹ 75 Fed. Reg. 47142 *et seq.*

¹⁷² 75 Fed. Reg. 47142 *et seq.*

¹⁷³ <http://www.fcc.gov/oet/ea/fccid/>

Commenter submits the Commission does not appear to have considered such environmental consequences under the NEPA.

Antenna Limits for Handheld Portable GRMS [sic] Units

In proposed Section 95.45(a)(4), the Commission proposes "The antenna of handheld portable GRMS [sic] units must be an integral part of the transmitter" and "The antenna must have no gain (as compared to a half-wave dipole) and must be vertically polarized." This Commenter submits such requirements do not ever appear to have been applied to GRMS [sic] units in the past. This Commenter submits vast numbers of units have been produced in the past that do not comply with such requirements (as the Commission can readily ascertain by reference to the Commission's equipment authorization database). This Commenter submits the Commission has not shown any harm to have been caused by those vast numbers of units not having the proposed prescribed features. This Commenter submits the Proposed Rule, if it would render those vast numbers of units unsuitable for use, would thereby necessitating their disposal at a corresponding detriment to the environment. This Commenter submits the Commission does not appear to have considered the environmental consequences of such proposal under the NEPA.

Proposed Change of FRS Bandwidth

In proposed Section 95.39, the Commission proposes to replace "The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.5 kHz" of Section 95.633(c) with "The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.25 kHz" in proposed Section 95.39(c). This Commenter

submits such proposal, if it would appear to render FRS units having a bandwidth greater than 12.25 kHz but less than or equal to 12.5 kHz unsuitable for further use, would cause the needless disposal of existing FRS units to the detriment of the environment, both from the disposal of the existing FRS units and the manufacturing of replacement FRS units. This Commenter submits the Commission does not appear to have considered the environmental consequences of such proposal under the NEPA.

Proposed General Equipment Certification Requirement

This Commenter submits the proposed general equipment certification requirement appears to impose some subtle changes affecting certification and use of previously certified equipment in the Personal Radio Services, which this Commenter discusses, *infra*. This Commenter submits such changes might render large quantities of equipment, for example, MURS units, unusable. This Commenter notes the Commission does not appear to have reviewed the Proposed Rules¹⁷⁴ under NEPA as to what effect they might have on the environment, for example, by promoting the disposal of large quantities of MURS units the Proposed Rules¹⁷⁵ would appear to exclude. Furthermore, the Commission's rules in relation to the NEPA at 47 C.F.R. §§ 1.1301-1.1319 do not appear to contemplate, and thus do not appear to categorically exclude, Commission actions with respect to rule changes promoting environmental pollution, as opposed to mere alleged electromagnetic environmental effects. Thus, the Proposed Rules¹⁷⁶ appear to give rise to

¹⁷⁴ 75 Fed. Reg. 47142 *et seq.*

¹⁷⁵ 75 Fed. Reg. 47142 *et seq.*

¹⁷⁶ 75 Fed. Reg. 47142 *et seq.*

implications under NEPA that the Commission has not addressed in the publication of the Proposed Rules in the Federal Register¹⁷⁷.

The Resource Conservation and Recovery Act

The EPA states as follows:

The Resource Conservation and Recovery Act (RCRA)¹⁷⁸ gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes.¹⁷⁹

While this Commenter has not had adequate time to consider, with respect to the RCRA, the issues raised above with respect to the NEPA, this Commenter reiterates the apparent likelihood that the Proposed Rules will increase the volume of solid wastes generated if it renders some existing Personal Radio Services equipment unsuitable for continued use, resulting in its disposal and replacement. This Commenter does not see any evidence that the Commission has given consideration to such effects. Moreover, this Commenter does not see any mention of the Commission in the EPA's "Meeting the Challenge: A Summary of Federal Agency Pollution Prevention Strategies."¹⁸⁰ Thus, this Commenter does not see any evidence that the Commission has considered the RCRA generally.

¹⁷⁷ 75 Fed. Reg. 47142 *et seq.*

¹⁷⁸ Pub. L. No. 94-580, October 21, 1976, 90 Stat. 2795 (codified as amended at 42 U.S.C. § 6901 *et seq.*)

¹⁷⁹ <http://www.epa.gov/lawsregs/laws/rcra.html>

¹⁸⁰ <http://www.epa.gov/compliance/resources/publications/incentives/pollution/federal/meetingthechallenge.pdf>

Disclosure of Technical Data or Studies Relied Upon for Proposed Rules

This Commenter expressly requests the Commission disclose, in time to allow for meaningful comment, any technical data or studies on which the Commission relied in formulating the Proposed Rules¹⁸¹. As examples, this Commenter requests the Commission disclose any technical data or studies on which the Commission relied in formulating the proposed authorization by rule¹⁸², the proposed general equipment certification requirement¹⁸³, the proposed ineligibility for certification for use in a Personal Radio Service if the radio has the capability to operate on frequencies in a licensed or safety service¹⁸⁴, the authorization for FRS and GMRS units to transmit digital data¹⁸⁵, the granting of certification of GMRS transmitters only for equipment with a 12.5 kHz bandwidth¹⁸⁶, the restrictions on GMRS transmitters that are designed with a maximum channel bandwidth greater than 12.5 kHz¹⁸⁷, the various changes to power requirements¹⁸⁸, the change to FRS bandwidth¹⁸⁹, the handheld portable GRMS [*sic*] antenna limit¹⁹⁰, the RF safety requirements¹⁹¹, and the authorization for GMRS units to transmit digital data.¹⁹²

¹⁸¹ See *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 392-93 (D.C. Cir. 1973); see also *Chamber of Commerce v. SEC*, 443 F.3d 890, 899 (D.C. Cir. 2006); *Connecticut Light & Power Co. v. Nuclear Regulatory Comm'n*, 673 F.2d 525, 530-31 & n. 6 (D.C. Cir. 1982); *American Radio Relay League, Inc. v. FCC*, 524 F.3d 227 (D.C. Cir. 2008)

¹⁸² 75 Fed. Reg. 47142 at 47150 (proposed § 95.5)

¹⁸³ 75 Fed. Reg. 47142 at 47151 (proposed § 95.33(a))

¹⁸⁴ 75 Fed. Reg. 47142 at 47152 (proposed § 95.33(d)(3))

¹⁸⁵ 75 Fed. Reg. 47142 at 47152 (proposed § 95.33(e)(2))

¹⁸⁶ 75 Fed. Reg. 47142 at 47152 (proposed § 95.33(e)(3))

¹⁸⁷ 75 Fed. Reg. 47142 at 47152 (proposed § 95.33(e)(4))

¹⁸⁸ 75 Fed. Reg. 47142 at 47153 (proposed § 95.35)

¹⁸⁹ 75 Fed. Reg. 47142 at 47154 (proposed § 95.39(c))

¹⁹⁰ 75 Fed. Reg. 47142 at 47156 (proposed § 95.45(a)(4))

¹⁹¹ 75 Fed. Reg. 47142 at 47156 (proposed § 95.49)

¹⁹² 75 Fed. Reg. 47142 at 47157 (proposed § 95.105(d))

SUBSTANTIVE CONCERNS

The Commission's Specific Proposals

General Reorganization/Streamlining of the Part 95 Personal Radio Services

In paragraph 2 of the document FCC 10-106 on the Commission's website¹⁹³, the

Commission states as follows:

2. Our goal in this proceeding is to simplify, streamline, and update the Part 95 rules to reflect technological advances and changes in the way the American public uses the various Personal Radio Services. Implementation of the rule changes proposed below should result in clearer, more consistent rules, benefiting Personal Radio Service users, equipment manufacturers, and the Commission.

This Commenter submits the Commission's characterization of "technological advances and changes in the way the American public uses the various Personal Radio Services" appears to cater to a segment of the American public that has operated equipment for Part 95 Personal Radio Services in contravention of the Commission's Rules, for example, by failing to obtain a license where one is required under the Rules. Moreover, this Commenter submits that the rule changes proposed by the Commission would harm the interests of existing Part 95 licensees who operate in accordance with the Rules. In a nation governed by the rule of law, this Commenter submits adoption of the Proposed Rules¹⁹⁴ rewarding rule violators and harming legitimate licensees would be against the public interest. Moreover, this Commenter submits adoption of the Proposed Rules¹⁹⁵ would not result in clearer, more consistent rules and would not benefit Personal Radio Service users or the Commission. Also, this Commenter proposes alternative approaches to rule changes that would be of immensely more benefit to users, equipment manufacturers, and the Commission, and would, therefore, be in the public interest.

¹⁹³ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 2

¹⁹⁴ 75 Fed. Reg. 47142 *et seq.*

¹⁹⁵ 75 Fed. Reg. 47142 *et seq.*

Furthermore, this Commenter submits the majority of legitimate Part 95 Personal Radio Services users appear to continue to use those Services consistent with the manner in which they were originally implemented, without regard to other "technological advances." This Commenter submits one of the beneficial attributes of the Personal Radio Services is found in the reliability it derives from avoiding the complexities introduced by "technological advances." This Commenter notes Section 1 of the Communications Act of 1934 includes, as a purpose, "for the purpose of promoting safety of life and property through the use of wire and radio communication."¹⁹⁶ This Commenter submits the simplicity and reliability of the Personal Radio Services serve to promote "safety of life and property through the use of...radio communication" independent of the extent to which infrastructure that supports "technological advances" may have been damaged or destroyed in situations such as natural and man-made disasters. Thus, this Commenter submits the Commission's alleged justification for the rule changes appears to be misplaced and largely unsupported in actual practices of legitimate Part 95 Personal Radio Services users.

Consolidation and Streamlining of General Requirements

In paragraph 10 of the document FCC 10-106 on the Commission's website¹⁹⁷, the Commission inquires as follows: "Should general requirements like those listed above be consolidated and streamlined to promote consistency across all Part 95 Services?" This Commenter has discussed, *supra*, the unique characteristics of the different Part 95

¹⁹⁶ 47 U.S.C. § 151

¹⁹⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 10

Services have been developed through numerous rulemaking proceedings over several decades. This Commenter submits the subtleties of the existing Part 95 rules reflect the results of those thoughtful rulemaking processes, wherein the Commission interacted with the public to obtain results most favorable to the public interest. This Commenter submits an attempt to consolidate and streamline the general requirements to which the Commission refers would frustrate the high degree of refinement that has been achieved in Part 95 of the Commission's Rules. This Commenter has discussed, *supra*, what this Commenter submits is a high risk of unintended consequences posed by the Proposed Rules. Thus, this Commenter submits the proposed consolidation and streamlining of general requirements, by itself, hampers the essential comment process required by the Administrative Procedure Act (APA), as amended¹⁹⁸.

Repetition of Requirements in Each Individual Subpart

In paragraph 10 of the document FCC 10-106 on the Commission's website¹⁹⁹, the Commission inquires as follows: "Should such requirements be repeated in each individual subpart to allow unique requirements for different Part 95 Services and "one-stop" rule reading; or is some other approach more desirable?" This Commenter submits the Commission has not shown anyone to have been confused or otherwise harmed by the format of the current rules. Therefore, this Commenter submits the current rules have not been shown to be deficient. Accordingly, this Commenter submits the current rules should be retained. This Commenter is supportive of maintaining the requirements of the different services largely within their individual subparts to allow unique requirements for different Part 95 Services. Moreover, this Commenter submits the Proposed Rule

¹⁹⁸ Pub. L. No. 79-404, June 11, 1946, 60 Stat. 237 (codified at 5 U.S.C. §§ 551-559, 701-706)

¹⁹⁹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 10

appears to introduce unintended changes, where both the substance of the changes themselves and the time, effort, and money needed by public and by the Commission to understand the changes would pose an undue burden, with that burden falling particularly heavily on "small entities."

Advisability of Consolidating and Streamlining Part 95

In paragraph 10 of the document FCC 10-106 on the Commission's website²⁰⁰, the Commission inquires as follows: "Should we consolidate and streamline our Part 95 rules to the extent possible?" This Commenter submits the Commission has not shown anyone to have been confused or otherwise harmed by the format of the current rules. Therefore, this Commenter submits the current rules have not been shown to be deficient. Accordingly, this Commenter submits the current rules should be retained. This Commenter opposes an attempt to consolidate and streamline the Commission's Part 95 rules to the extent possible. As the Proposed Rule appears to introduce unintended changes, where both the substance of the changes themselves and the time, effort, and money needed by public and by the Commission to understand the changes would pose an undue burden, with that burden falling particularly heavily on "small entities," this Commenter submits the supposed streamlining of the Part 95 rules could, in practice, serve to complicate the Part 95 rules and hinder compliance.

²⁰⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 10

General Regulatory Requirements vs. Subparts

In paragraph 10 of the document FCC 10-106 on the Commission's website²⁰¹, the Commission inquires as follows: "Which general regulatory requirements should be consolidated into Subpart A and which should be maintained in the individual service rule subparts?" This Commenter submits Subpart A of the Part 95 rules is currently directed to the GMRS. This Commenter submits only GMRS-related regulatory requirements should be promulgated in Subpart A. This Commenter submits the current Part 95 rule structure has not been shown to have resulted in any undue burden or harm. Therefore, this Commenter favors maintaining regulatory requirements for the various Part 95 Services in their respective individual service rule subparts.

Consumer Education Campaign as to Rule Changes

In paragraph 11 of the document FCC 10-106 on the Commission's website²⁰², the Commission inquires as follows: "Should we provide a consumer education campaign that highlights which rules are still in force, but have only been relocated or re-formatted?" This Commenter views the proposed consumer education campaign as evidence of the supposed streamlining and consolidation of the Part 95 rules would likely confuse and otherwise burden consumers and other members of the public and hinder enforcement efforts. This Commenter submits the costs to the Commission and to consumers of providing a consumer education campaign with respect to the Proposed Rules²⁰³ could be avoided by maintaining the current rules, the majority of which have been in place for one or more decades and have provided consumers plenty of time to

²⁰¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 10

²⁰² http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 11

²⁰³ 75 Fed. Reg. 47142 *et seq.*

learn about them. Thus, the Commenter disfavors both the Proposed Rules²⁰⁴ and an apparently wasteful consumer education campaign with respect to the Proposed Rules²⁰⁵.

Retention of Existing "Plain Language" Question and Answer Rule Format

In paragraph 11 of the document FCC 10-106 on the Commission's website²⁰⁶, the Commission states, "We seek comment on whether the question-and-answer format should be maintained" and inquires "Should we create "plain-language" question-and-answer format rules for all Part 95 Services and make them available on our website?" This Commenter opposes creation of a "plain-language" question-and-answer format for the rules of all Part 95 Services. This Commenter submits, too often, with a question-and-answer format, the scope of the question and the scope of the answer appear inconsistent. For example, this Commenter submits "§ 95.402 (CB Rule 2) How do I use these rules?" poses the rule as a question about how to use the rules but purports to answer that question by stating locations the rules cover and definitions that apply to the rules. This Commenter submits the former answer the question "Where do these rules apply?" and the later answer the question "How do I interpret the words that appear in these rules?" but neither answer "How do I use these rules?" Thus, this Commenter favors simple, clear phrases as headings for the rule sections and simple, clear declarative sentences to set forth the rules themselves.

²⁰⁴ 75 Fed. Reg. 47142 *et seq.*

²⁰⁵ 75 Fed. Reg. 47142 *et seq.*

²⁰⁶ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 11

Technical Requirements

Consolidation and Harmonization of Technical Requirements

In paragraph 12 of the document FCC 10-106 on the Commission's website²⁰⁷, the Commission states as follows:

We propose to consolidate and harmonize, to the maximum extent possible, all basic technical requirements in a new Subpart B. We do this with an understanding that most technical requirements for Part 95 Services are only reviewed by equipment manufacturers when designing devices and not by the users of the devices, because the user is not permitted to change certain technical parameters of the device. However, there are some technical requirements, such as antenna requirements, that permit users some flexibility in how they operate their systems.²

Nevertheless, we seek comment on whether all technical rules should be consolidated and/or streamlined into a new Subpart B. We note in particular, that the technical requirements for MedRadio devices and PLBs follow unique industry guidelines and protocols that are not easily integrated with other Part 95 Services, so the technical rules for these services might be more easily understood if they stayed in their individual subparts.

This Commenter submits the Commission appears to blur the distinction between various Personal Radio Services under Part 95. While, for example, FRS users may not be permitted to change certain technical parameters of the device, this Commenter submits licensees in another service, such as the GMRS, are permitted to construct systems that may comprise one or more mobile units, one or more land stations, paging receivers, and fixed stations. This Commenter submits GMRS licensees may employ repeaters, which are generally able to vastly increase the utility of their systems. Thus, this Commenter submits GMRS licensees necessarily require more information about the technical requirements that apply to the GMRS than FRS users require about the technical requirements that apply to FRS. However, in view of some of the changes in the

²⁰⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 12

Proposed Rules²⁰⁸, which could prohibit perhaps the majority of radios currently being used in the MURS and some existing FRS radios, as well as prohibiting the use of features that have been found on FRS radios almost since the inception of the FRS, this Commenter submits it may be the case that the Proposed Rules²⁰⁹ would force upon users a burdensome effort to educate or reeducate themselves about the technical requirements for Part 95 Services. Therefore, this Commenter submits the attempted consolidation and harmonization of Part 95 Rules appears unwarranted and counterproductive.

Tabular Designation of Ordinal Channel Numbers

In paragraph 12 of the document FCC 10-106 on the Commission's website²¹⁰, the Commission states as follows:

For example, we propose to place the frequencies for each service in a table and designate each frequency by channel number. This approach reflects our understanding that Personal Radio Service users generally prefer to reference communication channels by channel number rather than by frequency.

This Commenter submits the Commission appears to blur the distinction between various Personal Radio Services under Part 95. While, for example, CB Radio Service users might prefer to designate frequencies by channel number, this Commenter submits licensees in another service, such as the GMRS, generally seem to traditionally designate frequencies by frequency (or sometimes just the digits representative of hundreds of KHz, tens of KHz, KHz, and, if non-zero, hundreds of Hz. For example, this Commenter submits GMRS licensees may speak of a "675" repeater to refer to a repeater having an

²⁰⁸ 75 Fed. Reg. 47142 *et seq.*

²⁰⁹ 75 Fed. Reg. 47142 *et seq.*

²¹⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 12

input frequency of 467.675 MHz and an output of 462.675 MHz. As another example, this Commenter submits GMRS licensees who are individuals operating mobile stations or small base stations in a simplex mode may speak of "5625" to refer to a 462 MHz interstitial channel with a frequency of 462.5625 MHz. This Commenter submit such traditions are consistent with the manner in which channels available for the GMRS are recited by frequency without reference to ordinal channel number in Section 95.29.

However, as another example of the distinguishing features of the different Personal Radio Services under Part 95, this Commenter submits an FRS user would likely tend to refer to frequencies almost exclusively by an ordinal channel number, as reflected by the table correlating channel number to frequencies in Section 95.627 of the Rules for the FRS. Accordingly, this Commenter sees no basis for the proposed placing of frequencies in a table and designating each frequency by channel number for those Personal Radio Services for which the Rules are not already so recited and concludes that adoption of such a proposal would be against the public interest.

More generally, for the reasons set forth above and other distinguishing characteristics of the separate Personal Radio Services under Part 95, this Commenter submits the proposal that all technical rules should be consolidated and/or streamlined into a new Subpart B fails to appreciate the particular qualities of the different Personal Radio Services under Part 95. While the Commission notes that the technical requirements for MedRadio devices and PLBs follow unique industry guidelines and protocols that are not easily integrated with other Part 95 Services, so the technical rules for these services might be more easily understood if they stayed in their individual subparts, this Commenter

submits the technical requirements that apply to the one or more mobile stations, one or more land stations, paging receivers, and fixed stations of the GMRS, for example, also follow unique protocols among licensees who configure their own GMRS systems under Section 95.21²¹¹ that are not easily integrated with other Part 95 Services, such as the FRS, for example, where FRS users are constrained by the FRS unit limitations of Section 95.194(c)²¹², thereby largely relieving FRS users of the technical minutiae to which manufacturers of FRS units must pay attention in order to obtain certification of their FRS units. Thus, as GMRS licensees necessarily require more information about the technical requirements that apply to the GMRS than FRS users require about the technical requirements that apply to FRS, this Commenter submits the proposal to consolidate and/or streamline all technical rules into a new Subpart B is inconsistent with the distinctive practices and traditions under which the different Personal Radio Services of Part 95 are used and is therefore against the public interest and should not be adopted.

Frequency Tolerance: Part Per Million Instead of Percent

In paragraph 14 of the document FCC 10-106 on the Commission's website²¹³, the Commission states as follows:

14. We propose to amend our Part 95 rules to express frequency tolerance requirements in terms of parts per million, instead of percent, of the carrier or reference frequency. This approach will modernize our rules and ensure consistency in the units used to specify frequency tolerance. We seek comment on this proposal.

²¹¹ 47 C.F.R. § 95.21

²¹² 47 C.F.R. § 95.194(c)

²¹³ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 14

This Commenter is supportive of the Commission's proposal to express frequency tolerance requirements in terms of parts per million instead of percent (i.e., parts per hundred) in view of the several orders of magnitude of improvement in the frequency accuracy of transmitters used in the Personal Radio Services over the history of Part 95 as well as the Commission's stated objectives to modernize its Rules and ensure consistency in the units used to specify frequency tolerance.

Appropriateness of Frequency Tolerance Requirements

In paragraph 14 of the document FCC 10-106 on the Commission's website²¹⁴, the Commission states as follows:

We also welcome comment as to whether the current frequency tolerance requirements for the older services, such as CB, R/C and GMRS are still appropriate, given the capabilities of modern manufacturing processes. Finally, noting that the Commission's goal is to prevent interference caused by off-frequency operation, we invite comment on whether these requirements are the best method of meeting that objective. For example, instead of specifying frequency tolerance limits, should we adopt requirements similar to current section 95.1115(e), which requires manufacturers of wireless medical telemetry devices to ensure frequency stability such that an emission is maintained within the band of operation under all of the manufacturers' specified conditions?

This Commenter submits the Commission has presented no evidence of inadequacy of the current frequency tolerance requirements for CB, R/C, and GMRS, regardless of the capabilities of modern manufacturing processes. Moreover, if the Commission were to change the current frequency tolerance requirements, this Commenter strongly suggests the Commission expressly establish that such amended current frequency tolerance requirements would only apply to applications for new certifications and that previously

²¹⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 14

certified transmitters continue to be allowed to operate so not to impose undue economic burdens and to minimize concerns under the Takings Clause of the Fifth Amendment to the United States Constitution. This Commenter also strongly urges that the Commission not adopt requirements that manufacturers maintain frequency stability such that an emission is maintained within the band of operation under specified conditions instead of specifying frequency tolerance limits. Particularly in the cases of FRS and GMRS, where operation on discrete, narrowly spaced frequencies is prescribed (e.g., where interstitial channels of Section 95.29(f)²¹⁵ lie between channels of Section 95.29(a)²¹⁶), a mere requirement that emissions be maintained within the band of operation would do nothing to protect adjacent channels (or even non-adjacent channels) from harmful interference. Moreover, a mere requirement that emissions be maintained within the band of operation would open the possibility of completely different types of emissions, such as spread spectrum or a band-constrained version of ultrawideband (UWB). This Commenter notes that spread spectrum intentional radiators under Part 15 are marketed to provide a similar functionality to FRS units but those spread spectrum intentional radiators typically operate in the 902-928 MHz band, so a rule opening GMRS and/or FRS frequencies to spread spectrum or a band-constrained version of UWB would not promote any new technology but would instead substantially impair existing GMRS and/or FRS operation and, therefore, would be viewed by this Commenter as being against the public interest.

²¹⁵ 47 C.F.R. § 95.29(f)

²¹⁶ 47 C.F.R. § 95.29(a)

Applicability of Emission Masks and Attenuation Requirements

In paragraphs 17 and 18 of the document FCC 10-106 on the Commission's website²¹⁷, the Commission states as follows:

17. The Commission's limits on unwanted emissions are intended to reduce the probability of adjacent channel interference and interference to services in non-adjacent spectrum. There are two types of unwanted emissions: out-of-band emissions (OOBE) and spurious emissions. OOBE are unwanted emissions generated by the modulation process that are located outside of and immediately adjacent to the authorized bandwidth.³⁰ Spurious emissions are unwanted emissions that are unrelated to the modulation process and can be located anywhere in the spectrum outside of the authorized bandwidth.³¹ These unwanted by-products are reduced through proper transmitter design and the use of filters in order to prevent interference outside of the intended transmission band. However, the suppression of unwanted emissions has to be balanced with the desire for affordable equipment.

18. Part 95 contains both attenuation requirements and field strength limit rules to reduce unwanted emissions. These unwanted emissions rules were adopted over time, and vary considerably. Based on our review of these rules, we believe that the organization of this section could be improved. Accordingly, we propose to revise the emission limit rule section to reduce duplication, conform the way the requirements are presented and to increase clarity. The proposed rule (section 95.41 in appendix B) would not substantively change any current requirement, but rather would specify the existing requirements more clearly. In particular, the proposed rule separates the attenuation requirements (paragraphs (a) and (b)) from the field strength limits (paragraphs (c) and (d)). In addition, we would remove certain outdated spurious emission requirements that applied only to CB equipment manufactured before 1976 and R/C equipment marketed or imported before 1993. We assume that the transmitting equipment that was manufactured and operated under these old standards has long been retired from service. Also, we propose to remove the table entry for DSRCS-OBUs from this section because these Intelligent Transportation Service devices follow unique industry standards that are incorporated by reference in Section 95.1003. Although we have not proposed any substantive change in the emission limit rule section, we nevertheless welcome comment on whether any particular emission limit or limits should be changed given the evolution of filtering technology.

The Commission states "The proposed rule (section 95.41 in appendix B) would not substantively change any current requirement...."²¹⁸ This Commenter relies on the

²¹⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 17 and 18

Commission's statement as constraining the Commission to retain the existing substantive requirements for unwanted emissions throughout the rulemaking process under WT 10-119 (unless the Commission were to issue a new NPRM). Because of the highly technical nature of the existing Section 95.635²¹⁹ and the proposed Section 95.41²²⁰, this Commenter submits any perceived need for improvement of the organization of the section does not seem likely to impair the ability of anyone capable of understanding the highly technical aspects of the section from understanding the meaning of the section. Thus, based on the Commission's states that "The proposed rule (section 95.41 in appendix B) would not substantively change any current requirement...", this Commenter does not oppose the proposed Section 95.41 but does not see any particular benefit that would accrue from adopting the proposed Section 95.41.

Proposed Prohibition on Voice Obscuring or Scrambling in the GMRS, FRS, CB

In paragraph 19 of the document FCC 10-106 on the Commission's website²²¹, the Commission states as follows:

19. The FRS, GMRS, and CB Radio Service are shared channel services (*i.e.*, all channels are available to users and users must cooperate in sharing the channels to prevent conflicting communications). To allow users of these services to readily hear, understand, and communicate with each other, our rules generally prohibit "scrambling" of communications in these services. Specifically, the Part 95 emission rules prohibit non-voice emissions in the FRS, GMRS, and CB Radio Service, except to establish or continue voice communications or, for FRS, to transmit certain types of location data (*e.g.*, GPS).³² In addition, the rules prohibit digital modulation or emissions in the CB Radio Service and the GMRS.³³ Further, GMRS and FRS rules require that messages be in plain language, without

²¹⁸ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 18

²¹⁹ 47 C.F.R. § 95.635

²²⁰ 75 Fed. Reg. 47142 at 47154 (proposed 47 C.F.R. § 95.41)

²²¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 19

codes or hidden meanings.³⁴ Not only do these requirements facilitate channel sharing, but they also enable emergency communications if needed.

20. Recently, several GMRS and FRS radios have been certified with an optional voice “scrambling” feature that purports to add a level of privacy to communications within a particular group of users.³⁵ We believe that voice-obscuring techniques, which go beyond the ubiquitous, standardized tone squelch, are inappropriate for these services. Specifically, we believe that these voice-obscuring techniques could thwart the channel sharing protocols in these services and the ability to communicate during an emergency. To ensure there is no future confusion on this matter, we propose to clarify our rules to specifically prohibit voice obscuring or scrambling in the GMRS, FRS, and CB Radio Service, and to provide that any such equipment with those features will be prohibited from receiving a grant of equipment certification for operation under Part 95 of our rules. We seek comment on this proposal and whether other Part 95 Services should prohibit voice “scrambling.” We invite commenters to address whether there are alternatives that may allow voice altering features while still addressing the concerns identified above. We also seek comment on how to phase-out the marketing and sales of existing equipment. Should we impose a specific cut-off date or dates? Should the same date apply to the manufacture, import, and sales of devices? Should we allow existing inventory on shelves to be sold or should it be removed? What are the trade-offs of the various approaches?

The Commission states, "Recently, several GMRS and FRS radios have been certified with an optional voice 'scrambling' feature that purports to add a level of privacy to communications within a particular group of users." However, this Commenter notes the Kenwood UBZ-LH14 (FCC ID: ALH26532110) received a grant of certification²²² on April 26, 1999 – over 11 years ago – and it included a "security mode" offering inversion voice scrambling²²³. This Commenter notes that was less than three years after the Commission adopted its Report and Order establishing the FRS.²²⁴ Therefore, in view of the Commission's statement that "Recently, several GMRS and FRS radios have been certified with an optional voice 'scrambling' feature," this Commenter submits the record established by the Commission itself shows a long history (i.e., approximately 80 percent

²²² https://fjallfoss.fcc.gov/oetcf/eas/reports/Eas731GrantForm.cfm?mode=COPY&RequestTimeout=500&application_id=93506&fcc_id=ALH26532110

²²³ <http://www.popularwireless.com/gmrsweb/kenwood/gmrskenwood2.html>

²²⁴ Report and Order, In the Matter of Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Voice Radio Service, WT Docket No. 95-102, FCC 96-215

of the duration of the existence of the FRS) of allowing certification of FRS units with optional voice scrambling capability. Moreover, over that long history, vast numbers of FRS units with optional voice scrambling capability have been produced and are in use. If the Commission were to prohibit the use of optional voice scrambling capability in the FRS, the Commenter is concerned Takings Clause implications may be raised under the Fifth Amendment to the United States Constitution. Moreover, this Commenter submits the Commission might be viewed by the public as having taken away a tool the public could have otherwise used to protect privacy and reduce the risk of crimes, such as identity theft and fraud, occurring based on unprotected transmissions.

Furthermore, this Commenter notes the Commission has already considered such a proposal in issuing its Order²²⁵ denying a petition that sought to have the Commission prohibit "any digital vocoding, encryption, or speech scrambling technique" in the FRS. In footnote 31 of that Order, the Commission notes, "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;...." In paragraph 7, the Commission stated, "We disagree with the petitioners that additional FRS transmitter technical or operational rules are needed." In paragraph 8²²⁶, the Commission stated as follows:

²²⁵ Order, 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, released December 7, 2001 (DA 01-2840) (RM-10019) at <http://wireless.fcc.gov/releases/da012840.pdf>

²²⁶ *Id.* at para. 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.

In paragraph 11²²⁷, the Commission stated as follows:

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.

Also, with respect to the current Proposed Rule, this Commenter submits the Commission does not appear to have considered the benefits of voice obscuring or scrambling with respect to discouraging malicious interference (as those who would maliciously interfere with communications are denied the pleasure of gauging the effectiveness of their deviant efforts if the communications with which they are attempting to maliciously interfere are voice obscured or scrambled. Furthermore, with respect to the current Proposed Rule, this Commenter submits the Commission does not appear to have considered the benefits of voice obscuring or scrambling with respect to discouraging identity theft and other harmful acts based on the revelation of information. Commenter submits, insofar as such benefits may accrue to small entities, and the Proposed Rule may therefore directly affect small entities, the Commission has not evaluated the effects the Commission's proposal prohibiting voice obscuring or scrambling in the GMRS, FRS and CB Radio Services and no longer certifying equipment with such features would have on such small entities.

²²⁷ *Id.* at para. 11

Furthermore, this Commenter submits the FCC has allowed the certification of numerous FRS units incorporating a scrambling function and instruction manuals for such FRS units have instructed operators on the use of such scrambling for FRS transmissions. Thus, this Commenter submits a prohibition on voice obscuring or scrambling would contradict such instruction manual provisions. This Commenter submits the Commission does not appear to address the potential legal peril to which the Commission would seem to subject legitimate FRS users for operating properly certified FRS units in accordance with their instruction manuals by prohibiting voice obscuring or scrambling. Thus, this Commenter submits it would be inappropriate and contrary to the public interest for the Commission to prohibit voice obscuring or scrambling.

If the Commission is concerned about voice obscuring or scrambling affecting channel sharing, this Commenter proposes the Commission could adopt a less burdensome generally, and less burdensome on small entities, approach of requiring, as a condition of future certification, radios employing voice obscuring or scrambling to receive unobscured/unscrambled voice transmissions that include modulation of whatever subaudible tone or code the obscuring/scrambling radio may be using, if any, whenever the radio is configured for voice obscuring or scrambling. Under such a proposal, this Commenter submits anyone wishing to contact a user employing voice obscuring or scrambling for the purpose of discussing channel sharing could set their radio to a continuous tone-coded squelch signal (CTCSS) tone or digital-coded squelch (DCS) code

matching that, if any, used by the user employing voice obscuring or scrambling and be able to communicate with that user.

Proposed Elimination of Individual Licensing for the GMRS

In paragraphs 23-26 of the document FCC 10-106 on the Commission's website²²⁸, the Commission states as follows:

23. The GMRS (formerly Class A of the Citizens Radio Service) is a personal radio service available for the conduct of an individual's personal and family communications. GMRS was created more than 50 years ago for use by individuals and entities that were not eligible at the time for licenses in the Public Safety or the Industrial and Land Transportation Radio Services.³⁸ The GMRS rules define mobile, fixed, base and repeater station classes and include technical rules for each station class.³⁹ The GMRS rules also provide for "small base" and "small control" stations, which are restricted to five watts ERP and to an antenna height of no more than six meters (approximately 20 feet) above ground level.⁴⁰

Unlike most other Personal Radio Services, a license is required to transmit on GMRS channels.⁴¹ The most popular type of GMRS radios today is lightweight portable units, which offer good mobility and flexibility of use; however, these devices are not specifically addressed in the GMRS rules.

24. GMRS portable and mobile stations can communicate over several miles, depending upon the terrain. GMRS base stations can communicate with mobile and portable units over a somewhat longer distance, depending upon the height of the base station antenna. GMRS repeater stations greatly extend the range of GMRS mobile and portable units, making communications between mobile units across a large area (*e.g.*, 25 miles) possible. Repeater stations, however, occupy two channels (a base channel and a mobile channel, which are referred to as a channel pair) throughout their coverage area, and only one station may transmit through the repeater at a time (*i.e.*, the communications are simplex). Thus, extended range is achieved at the expense of spectrum re-use.⁴² Only individuals may obtain a license for a GMRS repeater station. However, because establishing and maintaining a repeater station is often considered complicated and costly, this activity is often undertaken by an organized group or club. There are GMRS clubs that operate GMRS repeaters (licensed to an individual member) for the use of all members.⁴³

1. Station Licensing

25. The regulatory structure of GMRS was patterned after the traditional view of a land mobile radio system during the 1940s: a base-to-mobile dispatch operation transmitting on an assigned shared channel in a specific geographic location. Later, as repeater stations

²²⁸ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 23-26

were incorporated into Part 90 private land mobile systems, they were incorporated into the GMRS rules.⁴⁴ While both GMRS and Part 90 land mobile services require a license to operate, the Commission's rules no longer require GMRS applicants to file technical information relating to system configuration and equipment.⁴⁵ Therefore, while Part 90 licensees generally avoid interference through coordination on a license-by-license basis, GMRS licensees rely on operating rules and a listen before transmitting etiquette. We also note that there are reports that most purchasers of portable FRS/GMRS combination radios (as well as purchasers of portable GMRS-only radios) use the licensed GMRS channels, while only a small percentage obtain the required license.⁴⁶ Although the Commission has made several regulatory changes over the years to enhance the GMRS, the basic regulatory structure remains.⁴⁷ Consequently, given the evolution of how people communicate, the creation of other services and the passage of time, we believe it is appropriate to reevaluate the GMRS licensing rules. Section 307(e)(1) of the Communications Act of 1934, as amended (the Act), provides that upon a determination that it would serve the public interest, convenience, and necessity, "the Commission may, by rule, authorize the operation of radio stations without individual licenses" in the citizens band and certain other services.⁴⁸ Section 307(e)(3) provides these services "shall have the meaning given to them by the Commission."⁴⁹ The Commission eliminated individual licensing in the CB and R/C Radio Services in 1983, finding that individual licensing is unnecessary when services allow licensees to use any channel at any location and spectrum management is implemented by the operating rules rather than the licensing function.⁵⁰ In 1988, however, the Commission sought to discourage a surge in business radio use of the GMRS by adopting rules limiting eligibility for new GMRS systems, combined with an individual licensing requirement to control proliferation of GMRS systems.⁵¹ Currently, GMRS and the 218-219 MHz service are the only Personal Radio Services with individual licensing requirements.⁵² The rest of the Part 95 services are licensed by rule pursuant to Section 307(e), based on determinations that the administrative burdens associated with individual licensing outweighed any potential benefits from such licensing and that no regulatory purpose would be served by requiring station licenses.⁵³

26. We believe that current GMRS operations more closely resemble other Part 95 Personal Radio Services that are licensed by rule rather than Part 90 private land mobile systems that require an individual station license. For example, once authorized, a GMRS licensee may operate on any GMRS frequency;⁵⁴ there is no requirement for frequency coordination; and none of the GMRS frequencies are assigned on an exclusive-use basis. In addition, all licensees must cooperate in the selection and sharing of the available channels to make the most effective use of the channels and to reduce the possibility of interference.⁵⁵ Furthermore, we believe that licensing GMRS by rule would reduce administrative and other burdens on GMRS users, as well as on the Commission. For example, users would no longer be subject to application and regulatory fees,⁵⁶ and would not be at risk of losing their authorization to operate for failing to file a timely renewal application.

While current illegal (i.e., pirate) GMRS operations may closely resemble other Part 95 Personal Radio Services, this Commenter submits that current GMRS operations by legitimate GMRS licensees generally share many of the attributes of legitimate operations in the Part 90 Private Land Mobile Radio Service, many of which are not shared by other Part 95 Personal Radio Services. For example, this Commenter submits GMRS licensees can operate systems that may comprise one or more mobile units, one or more land stations, paging receivers, and fixed stations. This Commenter submits GMRS licensees use equipment similar to (and in some cases the same as) that used for similar types of stations under Part 90 but equipment used by GMRS licensees for one or more land stations, paging receivers, and fixed stations is generally different from other (i.e., non-GMRS) types of Personal Radio Services equipment under Part 95. Moreover, while there is no *de jure* requirement for frequency coordination in the GMRS, this Commenter submits a *de facto* requirement for frequency coordination still exists, which GMRS licensees can perform themselves as aided by the callsigns of other licensed GMRS licensees they may hear on the air and the license information in the ULS²²⁹ pertaining to those other licensed GMRS licensees. Thus, this Commenter submits the Commission's statement that "all [GMRS] licensees must cooperate in the selection and sharing of the available channels to make the most effective use of the channels and to reduce the possibility of interference" appears to be a recognition of a *de facto* requirement for frequency coordination in the GMRS. Moreover, this Commenter submits the Commission also issues licenses under Part 90 that do not require frequency coordination and where the frequencies are not assigned on an exclusive-use basis (e.g., for itinerant operations). Thus, much of the Commission's alleged rationale in support of the

²²⁹ <http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

proposed authorization by rule for operation in the GMRS appears to be based on an assessment of "evolution of how people communicate, the creation of other services and the passage of time" that this Commenter submits is not borne out by the reality of the actual practices of large numbers, if not the majority, of GMRS licensees.

While the Commission expresses a belief "that current GMRS operations more closely resemble other Part 95 Personal Radio Services," this Commenter notes the Commission broadly references "current GMRS operations," as opposed to "current operations of legitimate GMRS licensees." The Commission acknowledges, "We also note that there are reports that most purchasers of portable FRS/GMRS combination radios (as well as purchasers of portable GMRS-only radios) use the licensed GMRS channels, while only a small percentage obtain the required license."²³⁰ Thus, this Commenter submits most such purchasers appear to be operating illegally on frequencies reserved for the GMRS. This Commenter submits that advancing a rationale for a rule change to reward those engaged in illegal activity, where the rationale itself is based largely upon evidence of the illegal activity is contrary to public convenience, interest, or necessity in a nation based on the rule of law. Therefore, this Commenter opposes the Commission's proposal to authorize by rule, without the issuance of individual licenses, operation in the GMRS.

In paragraph 27 of the document FCC 10-106 on the Commission's website²³¹, the Commission states as follows:

²³⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 25

²³¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 27

27. In view of the foregoing, we propose to eliminate the requirement for individual station licenses in the GMRS. Instead, we would, by rule, authorize operation of these stations without individual licenses. In addition, if GMRS is licensed by rule, GMRS operators would no longer receive call signs for their radios and we would, therefore, eliminate the station identification requirements in current section 95.119. As of the day the revised rules became effective, all existing GMRS licenses would be void. In addition, all pending applications for such licenses, and all applications for such licenses subsequently received, would result in no official Commission action. We seek comment on the proposal to license GMRS by rule, including whether all classes of GMRS stations should be licensed by rule or only handheld portable units. Additionally, we seek comment on the pros and cons of licensing GMRS by rule versus maintaining the individual licensing requirement. Additionally, if we only license certain classes of GMRS by rule, should we maintain the station identification requirements for GMRS?

The Commission proposes eliminating the requirement for individual licensing for GMRS stations and authorizing the operation of GMRS stations by rule. This Commenter notes the Commission already established the FRS as a service licensed by rule within the same general frequency range as the GMRS, thereby providing similar propagation characteristics to the GMRS, using apparatus of similar size equipped with antennas of similar size. Therefore, this Commenter submits the distinguishing features of the GMRS and the FRS are derived more from the regulatory diversity of their distinct rules than from their physical differences. Insofar as the existing rules for the GMRS and the FRS define those distinguishing features, this Commenter submits some persons having communications needs that might be satisfied using one of the Personal Radio Services under Part 95 may find their needs better served by the GMRS, while others may find their needs better served by the FRS, while still others might find the CB Radio Service or the MURS to be a more suitable alternative. While individual licenses are not issued for the FRS, the MURS, or the CB Radio Service, this Commenter notes Section

95.3²³² specifically provides for the issuance of individual licenses in the GMRS. This Commenter submits the GMRS differs from other Part 95 Personal Radio Services in that it authorizes operation of a "system" pursuant to Section 95.21. Accordingly, this Commenter submits proper operation of such a "system" is facilitated by the use of Commission-issued call signs that are unnecessary in the other Part 95 Personal Radio Services. This Commenter submits it is the system-oriented architecture of the GMRS that affords the GMRS advantages over other Part 95 Personal Radio Services, such as increased range, increased reliability, decreased interference, and generally more effective communications. As licensing under the GMRS helps maintain the integrity of GMRS systems, including GMRS systems that include repeaters, this Commenter submits continued GMRS licensing is essential to preservation of the GMRS and the effective communications it provides. Thus, this Commenter submits the Commission's proposal to eliminate the requirement for individual licensing for GMRS stations and to authorize the operation of GMRS stations by rule would harm existing GMRS licensees and would be against the public interest.

Proposed Extension of Term of GMRS Licenses from 5 to 10 Years

In paragraph 28 of the document FCC 10-106 on the Commission's website²³³, the Commission states as follows:

28. Alternatively, if we were to maintain the individual licensing requirement for all or some types of GMRS operations, we propose to extend the GMRS license term from five⁵⁸ to ten years, to conform with most other wireless services, where the license terms have been extended from five to ten years.⁵⁹ Extending GMRS license terms to

²³² 47 C.F.R. § 95.3

²³³ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 28

ten years would decrease the administrative burden on both the general public and the Commission without, we believe, any adverse impact.⁶⁰ It also would promote standardization of general licensing rules and streamlining of administrative requirements. We seek comment on the proposal to extend the license term from five to ten years if the individual licensing requirement is maintained for GMRS.

The Commission proposes extending the term of GMRS licenses from 5 to 10 years, in the event that the FCC decides not to eliminate licenses as proposed. This Commenter is supportive of such a proposed change. The application fee under 47 C.F.R. § 1.1102 for a GMRS license currently appears to be \$60, which, averaged over the five-year term of a GMRS license, would be \$12 annually. The regulatory fee under 47 C.F.R. § 1.1152 for a GMRS license currently appears to be \$5 annually. Thus, the cost for filing an application for a new or renewal five-year license is understood to currently be \$85. If the license term were extended from five to ten years, if the application fee and regulatory fee amounts were to remain the same, this Commenter understands the cost for filing an application for a new or renewal ten-year license would be expected to be \$110, equal to the application fee of \$60 plus ten times the regulatory fee of \$5. Compared to the \$170 that a GMRS licensee would currently pay for two five-year licenses (assuming the fees remained the same over the times at which both applications were filed), this Commenter submits a GMRS licensee would save \$60 over that ten-year period, or an average of \$6 per year. Another way of looking at it is that, for only \$25 more than the current \$85 fee for a five-year license, this Commenter understands a GMRS license applicant could obtain twice the license term.

Nonetheless, this Commenter submits a \$110 fee to license radios that may cost only a small fraction of that amount could be an impediment to licensing compliance. In

paragraph 25 of the document FCC 10-106 on the Commission's website, the Commission states "We also note that there are reports that most purchasers of portable FRS/GMRS combination radios (as well as purchasers of portable GMRS-only radios) use the licensed GMRS channels, while only a small percentage obtain the required license."²³⁴ Therefore, noncompliance with the licensing requirement could be expected to be even worse if the license term were extended with greatly reducing or eliminating application and/or regulatory fees. As this Commenter proposes below, retention of the licensing requirement along with a waiver of all fees for the license may be an optimal solution to the licensing noncompliance problem.

Proposed Elimination of the Minimum Age Requirement for GMRS

In paragraph 29 of the document FCC 10-106 on the Commission's website²³⁵, the Commission states as follows:

29. Under the current GMRS rules, only individuals who are 18 or older are eligible to obtain a GMRS license.⁶¹ An individual's family members of all ages may operate GMRS stations and units within a licensed system.⁶² Given that there is no age restriction on using radios in the other Personal Radio Services, we see no reason why, if we maintain the GMRS licensing requirement, younger individuals should be prohibited from operating a GMRS device or obtaining their own GMRS license. Therefore, we see little benefit to maintaining a minimum age requirement for GMRS. We seek comment on this proposal.

The Commission proposes eliminating the minimum age requirement for GMRS. While the Commission states it sees "no reason why, if we maintain the GMRS licensing requirement, younger individuals should be prohibited from operating a GMRS

²³⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 25

²³⁵ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 29

device...." However, in the same paragraph, the Commission noted "An individual's family members of all ages may operate GMRS stations and units within a licensed system." Thus, this Commenter submits younger individuals are not prohibited from operating a GMRS device. However, Section 95.5(a)²³⁶ provides that only individuals who are 18 or older are eligible to obtain a GMRS license. Thus, this Commenter understands a responsible adult exists for each individual GMRS license issued, but family members of any age may operate station equipment licensed to that responsible adult. This Commenter submits the Commission's proposed elimination of the minimum age requirement for GMRS would eliminate the requirement for such a responsible adult and could lead to enforcement difficulties. For example, a minor license applicant might not fully understand his or her obligations under the rules. Moreover, a minor license applicant might attempt to avoid liability for rule violations based on his age or other attributes related to his age. In assessing the monetary forfeiture amounts, the Commission takes into account the statutory factors set forth in Section 503(b)(2)(E) of the Act, which include the nature, circumstances, extent, and gravity of the violations, and with respect to the violator, the degree of culpability, and history of prior offenses, ability to pay, and other such matters as justice may require. A minor might argue that, under such statutory factors, his or her alleged rule violation should be free of any consequences and attempt to escape any liability. Thus, this Commenter submits the current age requirement on GMRS licensees has not been shown to be burdensome to minor station operators operating under a GMRS license and has maintained a responsible adult for each GMRS license. Therefore, this Commenter submits the age requirement should be retained for GMRS licensing.

²³⁶ 47 C.F.R. § 95.5(a)

Proposed Limit on the Power of Portable GMRS Transmitters to 2 Watts ERP

The Commission proposes limiting the power of portable (handheld) GMRS transmitters to 2 Watts effective radiated power (ERP). This Commenter notes, in document FCC 10-106 on the Commission's website²³⁷, the Commission cites 47 C.F.R. § 90.267(b)(2)(i) and states "This is the same power limit that applies to portable units used in licensed low power industrial / business pool Part 90 land mobile operations in the 450-470 MHz range (the same frequency range as GMRS)." However, this Commenter notes the Commission's citation of 47 C.F.R. § 90.267(b)(2)(i) appears malapropos, as this Commenter notes the Commission allows transmitters up to 500 Watts ERP in the 450-470 MHz range (the same frequency range as GMRS) (see, e.g., Section 90.205, Table 2)²³⁸. Moreover, this Commenter notes the power limits under Section 90.267²³⁹ for operational fixed or base transmitters and mobile transmitters even under the "licensed low power industrial / business pool Part 90 land mobile operations in the 450-470 MHz range (the same frequency range as GMRS)" are incongruous to the power limits for types of transmitters used in the GMRS.

Also, this Commenter notes, in the Proposed Rule, as to GMRS, the Commission proposes changing the power limit for GMRS small base stations from 5 Watts ERP to 5 Watts transmitter power output, which, in document FCC 10-106 on the Commission's

²³⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 32

²³⁸ 47 C.F.R. § 90.205, Table 2

²³⁹ 47 C.F.R. § 90.267

website²⁴⁰, the Commission states "...would ease the accuracy of power measurement and would allow for the use of directional antennas to focus the signal's energy in the desired direction." Furthermore, this Commenter submits transmitter power output can easily be determined using a power meter, especially if the Commission does not require the antenna to "be an integral part of the transmitter" (by not adopting proposed Section 95.45(a)(4)), but ERP determination requires analysis of the transmission line and antenna systems and, as the Commission allows documents pertaining to certification of devices such as GMRS units to be submitted confidentially under 47 C.F.R. §§ 0.457 and 0.459, so access to information on the transmission line and antenna systems of a GMRS unit may be denied by the Commission to those to whom the Commission might attempt to hold liable for violation of proposed section 95.35(h)²⁴¹. Thus, this Commenter submits any GMRS unit power limits should be based on transmitter power output, not ERP.

Apparent Inadequacy of 2W ERP or 2W TPO Portable GMRS Power Limit

In paragraphs 31 and 32 of the document FCC 10-106 on the Commission's website²⁴², the Commission states as follows:

31. Currently, there are no power limits specifically addressing portable GMRS radios. Instead, such devices fall under the GMRS mobile station category and are subject only to the 50 watts ERP limit established for that category. This has allowed manufacture of handheld GMRS radios that operate between one and five watts ERP. Given the increasing popularity of portable GMRS radios and the ubiquitous marketing of such devices, we believe the public interest would be served by establishing specific power rules for portable GMRS devices. In addition, because GMRS portable devices are, for the most part, used by the general public, we believe the public interest

²⁴⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 35

²⁴¹ 75 Fed. Reg. 47142 at 47153

²⁴² http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 31 and 32

would be served by no longer categorically excluding portable GMRS devices from routine evaluation of human RF exposure.

32. We propose to prohibit GMRS portable devices from operating at more than two watts ERP. This is the same power limit that applies to portable units used in licensed low power industrial / business pool Part 90 land mobile operations in the 450-470 MHz range (the same frequency range as GMRS).⁶⁵ A review of equipment authorization applications for portable GMRS units reveals that many units already operate at less than two watts ERP.⁶⁶ This power limit should be adequate to ensure the devices meet the RF exposure limit for the general public. We also note that it will promote economies of scale, because Canada's license-exempt radios operating in this band are limited to two watts ERP.⁶⁷ We seek comment on all aspects of this proposal.

As RF semiconductor device technology has yielded (and continues to yield) higher performance RF semiconductor devices, such as devices that provide higher output power and higher efficiency, RF semiconductors devices suitable for modern GMRS units are typically capable of providing 5 Watts of transmitter power output. The Commission states, in document FCC 10-106 on the Commission's website²⁴³, "This has allowed manufacture of handheld GMRS radios that operate between one and five watts ERP." By proposing a limit of 2 Watts ERP on portable GMRS units, this Commenter questions whether the Commission may effectively be banning the use of certain existing handheld GMRS units, thereby limiting the range of GMRS units available for use. This Commenter opposes such a limitation, as applied to existing GMRS units, as it appears to raise implications under the Takings Clause of the Fifth Amendment of the United States Constitution. This Commenter submits the Commission does not appear to have addressed the economic harm such a ban would cause, including economic harm to "small entities." This Commenter submits power levels greater than 2 Watts TPO or ERP are sometimes necessary depending on terrain, foliage, building construction, etc.

²⁴³ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 31

Moreover, this Commenter submits the Commission does not appear to have articulated a rationale for banning GMRS units that are beneficially serving GMRS station operators, including "small entities." Also, the Commission does not appear to have identified any actual harm caused by the absence of any power limit on portable GMRS units, as has apparently been the case since the establishment of the GMRS decades ago. This Commenter notes the Commission does not prohibit portable radios with power output or ERP of more than 2 Watts in Part 90 Services, such as Police, Fire, and Industrial/Business Radio Services. Furthermore, this Commenter submits concerns about useful battery life, size, and weight of portable GMRS units have provided *de facto* limitation of the power output of portable GMRS units in absence of *de jure* limitation by the Commission. Thus, this Commenter submits the proposed limitation of the power of handheld GMRS units is not consistent with the public interest and should not be adopted.

Proposed Requirement of Routine SAR Evaluation for Portable GMRS TXs

In paragraph 33 of the document FCC 10-106 on the Commission's website²⁴⁴, the Commission states as follows:

33. All GMRS stations, including portable devices, are currently categorically excluded from routine evaluation of human RF exposure.⁶⁸ The Commission's decision to categorically exclude GMRS transmitters was based on certain assumptions concerning their operating configurations in mobile exposure conditions (*e.g.*, vehicular mobile installation where the antenna is away from the body, *see* § 2.1091) combined with a low transmit duty cycle (ratio of transmit time to receive time), particularly for "push-to-talk" type operations.⁶⁹ As noted above, our current rules have allowed the manufacture of handheld GMRS transceivers that typically operate at power levels

²⁴⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 33

between one and five watts ERP. Because these portable GMRS devices are intended for use by the general public, the Commission has been requiring specific absorption rate (SAR) evaluation, on a case-by-case basis, for the higher powered portable GMRS devices, particularly those with very thin body worn accessories.⁷⁰ In order to apply RF exposure standards that are appropriate for GMRS hand-held portable transmitters that are used by the public, we propose to require routine SAR evaluation for portable GMRS devices⁷¹ to meet the General Population/Uncontrolled exposure limits of section 2.1093(d)(2)⁷² of the Commission's rules within 60 days of the effective date of the Order that adopts such changes.⁷³ We seek comment on this proposal. We also seek comment on whether GMRS devices operating in mobile exposure conditions should continue to be categorically excluded from routine evaluation of human RF exposure for all power levels. In the same context, we seek comment from manufacturers regarding considerations to reduce SAR test requirements for portable GMRS devices that are designed to operate at lower power or using thicker body-worn accessories to reduce exposure potentials.

The Commission proposes requiring routine specific absorption rate (SAR) evaluation for portable GMRS transmitters. This Commenter submits the Commission's proposal to fundamentally alter the nature of the GMRS by licensing it by rule is what gives rise to various other issues the Commission addresses in the Proposed Rules²⁴⁵. If the Commission were to abandon its proposal to license GMRS by rule, this Commenter submits the apparent basis of the Commission's proposal to require SAR evaluation for portable GMRS transmitters would be obviated. This Commenter submits the Commission established the FRS as a service licensed by rule to the general public with transmitter power limits at such low levels as apparently not to implicate any SAR concerns. Thus, this Commenter submits maintenance of the status quo as to both GMRS and FRS would avoid the alleged need for routine SAR evaluation for portable GMRS transmitters.

²⁴⁵ 75 Fed. Reg. 47142 *et seq.*

This Commenter notes the Commission's Office of Engineering & Technology states, in "Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields," OET BULLETIN 56, Fourth Edition, August 1999²⁴⁶, as follows:

Hand-held "two-way" portable radios such as walkie-talkies are low-powered devices used to transmit and receive messages over relatively short distances. Because of the relatively low power levels used (usually no more than a few watts) and, especially, because of the intermittency of transmissions (low duty factor) these radios would normally not be considered to cause hazardous exposures to users. As with vehicle-mounted mobile units, time averaging of exposure can normally be considered when evaluating two-way radios for compliance with safety limits, since these units are "push to talk.". Laboratory measurements have been made using hand-held radios operating at various frequencies to determine the amount of RF energy that might be absorbed in the head of a user. In general, the only real possibility of a potential hazard would occur in the unlikely event that the tip of the transmitting antenna were to be placed directly at the surface of the eye, contrary to manufacturers' recommended precautions, or if for some reason continuous exposure were possible over a significant period of time, which is unlikely. If hand-held radios are used properly there is no evidence that they could cause hazardous exposure to RF energy (References 5²⁴⁷, 11²⁴⁸, 13²⁴⁹, and 27²⁵⁰).

While the Commission states "Because of the relatively low power levels used (usually no more than a few watts) and, especially, because of the intermittency of transmissions (low duty factor) these radios would normally not be considered to cause hazardous exposures to users,"²⁵¹ this Commenter submits technological innovation and competitive marketplace pressures have motivated the design, manufacturing, and sale of smaller,

²⁴⁶ http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

²⁴⁷ 5. Balzano Q., Garay O., and F.R. Steel, "Energy Deposition in Simulated Human Operators of 800-MHz Portable Transmitters." *IEEE Trans. Veh. Tech.*, VT-27(4):174 (1978).

²⁴⁸ 11. Cleveland, Jr. R.F., and T.W. Athey, "Specific Absorption Rate (SAR) in Models of the Human Head Exposed to Hand-Held UHF Portable Radios." *Bioelectromagnetics* 10:173 (1989).

²⁴⁹ 13. Dimbylow, P.J. and S.M. Mann, "SAR Calculations in an Anatomically Realistic Model of the Head for Mobile Communication Transceivers at 900 MHz and 1.8 GHz," *Phys. Med. Biol.* 39(12): 1537-1553 (1994).

²⁵⁰ 27. Kuster, N., Q. Balzano and J. Lin, Eds., *Mobile Communications Safety*, Chapman and Hall, London, (1997).

²⁵¹ http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

lighter handheld GMRS units that use smaller batteries with less capacity. Accordingly, this Commenter submits such GMRS units tend to provide lower output power so as to conserve battery life. This Commenter submits such lower output power, especially in the context of the low duty factors typical of their use, likely yields reduced RF exposure even as compared with the Commission's analysis of OET Bulletin 56, where the Commission concludes, "If hand-held radios are used properly there is no evidence that they could cause hazardous exposure to RF energy."²⁵² Thus, this Commenter submits the Commission's proposal for requiring routine specific absorption rate (SAR) evaluation for portable GMRS transmitters is unwarranted and would only serve to drive up costs of portable GMRS transmitters, imposing an unnecessary economic burden on GMRS licensees and station operators, including "small entities" without any apparent offsetting benefit. Moreover, in view of the Commission's findings to the contrary (e.g., in OET Bulletin 56²⁵³), this Commenter submits the Commission's proposal for requiring routine SAR evaluation for portable GMRS transmitters appears to have failed to articulate a "rational connection between the facts found and the choice made,"²⁵⁴ and "the Commission [appears to have] failed to consider relevant factors or made a manifest error in judgment."²⁵⁵ This Commenter is unsatisfied that the Commission has provided at least "a modicum of reasoned analysis" in proposing the requirement.²⁵⁶

²⁵² http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

²⁵³ http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

²⁵⁴ *Motor Vehicle Mfrs. Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983) (citation omitted)

²⁵⁵ *Consumer Elecs. Ass'n v. FCC*, 347 F.3d 291, 300 (D.C. Cir. 2003)

²⁵⁶ *Hispanic Info. & Telecomms. Network, Inc. v. FCC*, 865 F.2d 1289, 1297-98 (D.C.Cir.1989)

Proposed Change of Power Limit for GMRS Small Base Stations to 5W TPO

In paragraph 35 of the document FCC 10-106 on the Commission's website²⁵⁷, the

Commission states as follows:

35. Furthermore, in order to account for the way a base station's power is measured, we propose to change the power limit for GMRS small base stations to five watts transmitter output power, instead of five watts ERP. This approach would ease the accuracy of power measurement and would allow for the use of directional antennas to focus the signal's energy in the desired direction. We seek comment on the proposal to change the power limit for GMRS small base stations to five watts transmitter power and on whether we should also adopt antenna limitations for such stations.

The Commission proposes changing the power limit for GMRS small base stations from 5 Watts ERP to 5 Watts transmitter power output (TPO). This Commenter believes such a change would be beneficial. Examples of reasons in support of such a change include the Commission's statement, in document FCC 10-106, on the Commission's website²⁵⁸, that "This approach would ease the accuracy of power measurement and would allow for the use of directional antennas to focus the signal's energy in the desired direction." This Commenter submits that directional antennas are useful for avoiding interference by minimizing radiation in directions other than intended directions, so the use of directional antennas should be encouraged, not subjected to additional limitations.

²⁵⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 35

²⁵⁸ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 35

Proposed Implementation of 12.5 kHz Narrowbanding in the GMRS

In paragraphs 36 and 37 of the document FCC 10-106 on the Commission's website²⁵⁹, the Commission states as follows:

36. GMRS “primary” channels are currently spaced 25 kHz apart and are subject to the technical parameters generally associated with 25 kHz operation (*e.g.*, an authorized bandwidth of 20 kHz). To facilitate more efficient use of the private land mobile radio (PLMR) spectrum below 800 MHz, the Commission adopted a schedule to migrate Part 90 PLMR systems from 25 kHz technology to narrowband (12.5 kHz) technology.⁷⁶ A similar narrowbanding of GMRS channels could foster more efficient spectrum use and reduce the interference potential between GMRS and FRS. Moreover, we note that GMRS radio equipment (base/mobile) is essentially the same as PLMR equipment operating in the 450-470 MHz band and FRS equipment, both of which already employ 12.5 kHz technology. Thus, it does not appear that narrowbanding GMRS would impose an undue burden on GMRS manufacturers, and could even reduce manufacturing costs.

37. Accordingly, we propose to implement 12.5 kHz narrowbanding in the GMRS. In implementing this proposal, we note that the manufacture and importation of Part 90 PLMR 25 kHz bandwidth equipment would be prohibited beginning January 1, 2011.⁷⁷ However, we question whether sufficient time remains to accomplish all of the necessary regulatory and technical prerequisites to implementing GMRS narrowbanding before the January 2011 date. Therefore, we seek comment on the time that would be needed for GMRS manufacturers to transition to narrowband equipment if we adopt narrowbanding rules for GMRS. We would prohibit the marketing of 25 kHz GMRS equipment after that date. We request comment on whether this proposal would be overly burdensome on GMRS licensees, in particular repeater operators. At this time, we do not propose to implement a date after which 25 kHz operation is no longer permitted in the GMRS. However, we do seek comment on possible requirements that would assist in the transition to narrowband technology.

The Commission proposes implementing 12.5 kHz narrowbanding (reduction in authorized channel bandwidth) in the GMRS. This Commenter notes that much professional-quality and public-safety-grade radio equipment has been certified under Parts 90 and 95 and produced in large quantities. Given the Commission's upcoming deadline for narrowbanding under Part 90, this Commenter submits large quantities of

²⁵⁹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 36 and 37

those high-quality radios incapable of narrowband operation have become available at very affordable prices on the surplus market. This Commenter submits public-service-oriented volunteer organizations, such as the American Red Cross, REACT, and various CERT organizations (as represented by others who have submitted comments with respect to the Proposed Rules²⁶⁰) are able to benefit greatly from the inexpensive availability of those high-quality surplus radios. This Commenter submits, if the Commission were to limit authorized channel bandwidth in the GMRS to 12.5 kHz, such benefits to the public would be lost and non-narrowband-capable radios would likely end up in landfills, contributing to potential environmental harm. This Commenter submits the Commission does not appear to have considered such potential adverse environmental impact of its proposed narrowbanding of the GMRS.

Moreover, this Commenter notes the Commission does not appear to have reviewed the Proposed Rules²⁶¹ under NEPA as to what effect they might have on the environment, for example, by promoting the disposal of large quantities of non-narrowband-capable radios. Furthermore, the Commission's rules in relation to the NEPA at 47 C.F.R. §§ 1.1301-1.1319 do not appear to contemplate, and thus do not appear to categorically exclude, Commission actions with respect to rule changes promoting environmental pollution, as opposed to mere alleged electromagnetic environmental effects. Thus, the Proposed Rules²⁶² appear to give rise to implications under NEPA that the Commission has not addressed in the publication of the Proposed Rules²⁶³ in the Federal Register.

²⁶⁰ 75 Fed. Reg. 47142 *et seq.*

²⁶¹ 75 Fed. Reg. 47142 *et seq.*

²⁶² 75 Fed. Reg. 47142 *et seq.*

²⁶³ 75 Fed. Reg. 47142 *et seq.*

Besides lack of review of likely environmental effects of the Proposed Rules²⁶⁴ with respect to NEPA, this Commenter also sees no review of likely environmental effects of the Proposed Rules²⁶⁵ with respect to, for example, the Resource Conservation and Recovery Act.

Aside from potential environmental harm that may result if narrowbanding were adopted, this Commenter submits economic harm to GMRS licensees/users would be particularly burdensome and, in many instances, would likely cause loss of communications in a manner contrary to the public interest. As noted, this Commenter submits GMRS licensees/users include individuals, who may be serving their communities as volunteers in organizations such as the American Red Cross and REACT, or who may be acting as station operators to conduct a licensee's business activities pursuant to Section 95.179, as well as public service organizations. This Commenter notes such individuals, "small entities," and public service organizations typically use very economical GMRS equipment, much of which is very durable and could likely continue to provide useful operation many years, if not many decades, into the future. As such equipment is generally not capable of narrowbanding, and newer equipment capable of narrowbanding would likely command a premium price as its demand increases as the deadline for Part 90 narrowbanding approaches, this Commenter submits, if users were unable to afford expensive, new narrowband GMRS equipment, they might discontinue their use of the GMRS, thereby causing loss of communications for public service and volunteer organizations in a manner contrary to the public interest. Thus, a requirement for

²⁶⁴ 75 Fed. Reg. 47142 *et seq.*

²⁶⁵ 75 Fed. Reg. 47142 *et seq.*

narrowbanding GMRS would be expected to impose substantial economic burdens on individuals, "small entities," and groups and harm the public interest.

Proposed End of Grandfathered GMRS Stations From Before March 18, 1968

In paragraph 38 of the document FCC 10-106 on the Commission's website²⁶⁶, the Commission states as follows:

38. Section 95.29(g) provides that GMRS fixed stations "authorized before March 18, 1968, located 160 kilometers (100 miles) or more from the geographic center of urbanized areas of 200,000 or more," as defined by the 1960 U.S. Census, may transmit on channels other than those specified in Section 95.29, provided the Commission assigned such channels and the licensee causes no interference with Part 90 private land mobile radio services.⁷⁸ The Commission's licensing records do not reflect whether there are any such legacy operations. We believe that given the passage of over 40 years, any such operations have been discontinued and we therefore propose to delete this rule. Nevertheless, we seek comment on whether the rule should be retained and, if so, why.

The Commission proposes removing 47 C.F.R. § 95.29(g) that allows grandfathered operation for certain fixed GMRS stations authorized before March 18, 1968. This Commenter notes the Commission has not identified how many stations operating under 47 C.F.R. § 95.29(g) may be harmed by the proposed elimination of the rule and has not identified "small entities" that may be harmed by the proposed elimination of the rule, where this Commenter notes "small organizations" and "small government jurisdictions" are also included within "small entities."

²⁶⁶ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 38

Proposed Permission of Transmission of GPS Data in the GMRS

In paragraphs 39-42 of the document FCC 10-106 on the Commission's website²⁶⁷, the

Commission states as follows:

39. In 2003, the Commission, at the request of Garmin International, Inc. (Garmin), a designer and manufacturer of electronic devices, amended Part 95 to permit the transmission of Global Positioning System (GPS)⁷⁹ location information and user-generated text messages on certain FRS channels.⁸⁰ On July 22, 2003, Garmin filed a petition for rulemaking requesting that the Commission amend Part 95 to permit such transmissions on the 462 MHz GMRS channels.⁸¹ Garmin requests that we amend sections 95.29(f)(1),⁸² 95.119(a)(1),⁸³ 95.181,⁸⁴ 95.183(a)(4),⁸⁵ 95.631(a), (e), and (f),⁸⁶ and 95.633(a)⁸⁷ to authorize the transmission of GPS location information and text messaging using emission type F2D88 in a digital data burst of not more than one second. The digital transmissions (data or text) would have basically the same limitations as those applicable to the transmission of GPS data and text messaging in the FRS.⁸⁹

40. Garmin notes that the Commission has already acknowledged the benefits (*e.g.*, the ability to locate lost or injured persons) of allowing such transmissions on FRS spectrum, and argues that these benefits will be even greater in the GMRS because the higher power permitted in this service allows coverage over a larger area.⁹⁰ Garmin contends that the safety of life and property benefits associated with allowing the transmission of GPS and text information can be obtained while still maintaining the integrity of GMRS and without causing interference.⁹¹

41. Several commenters oppose the Garmin petition in whole or in part.⁹² For example, the Personal Radio Steering Group (PRSG) acknowledges a role for the transmission of GPS information, but only on the GMRS spectrum that is shared with FRS.⁹³ It contends that the transmission of GPS data and text messages on the frequencies proposed by Garmin will interfere with GMRS operations, especially if operation is not subject to pre-transmission monitoring.⁹⁴ The Northern California GMRS Users Group (NCGUG) states that while allowing location transmissions on GMRS channels would benefit the public, Garmin's approach "could open up potential loopholes" that could result in abuse and interference.⁹⁵

Popular Wireless Magazines argues that allowing such operations will lead to more interference in the GMRS and generally agrees with NCGUG's comments.⁹⁶ Garmin responds that the interference concerns raised by commenters largely relate to interference potential that is already present under the existing GMRS rules.⁹⁷

42. As explained above, GMRS is similar to FRS. Both are voice services used by families and other small groups for personal communications, and they share certain spectrum. Further, FRS/GMRS combination radios are currently being used by the general public,

²⁶⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 39-42

including models that incorporate GPS capability.⁹⁸ The public interest is served by the ability to automatically locate individuals in distress, especially when they are injured or in an unfamiliar environment.⁹⁹ The Commission recognized these benefits when it adopted rules allowing the transmission of location information and text messages on FRS channels.¹⁰⁰ We see similar benefits in allowing such transmissions on GMRS spectrum and propose to amend the GMRS rules to permit the transmission of GPS location information and user-generated text messages under the same limitations that apply to FRS.¹⁰¹ We seek comment on this proposal and on the public interest and personal safety benefits of allowing such transmissions in the GMRS. Interested parties should address any concerns regarding increased interference potential to voice communications as well as ways to minimize such interference, including channel restrictions and duty cycle requirements. Finally, commenters should address whether all or only some GMRS channels should be permitted to transmit location information.

The Commission proposes permitting transmission of Global Positioning System (GPS) data in the GMRS. This Commenter notes proposed Section 47 C.F.R. § 95.105 states in part, "Digital data transmissions must be initiated by a manual action or command of a user, except that a GMRS unit receiving an interrogation request may automatically respond with its location." This Commenter notes "[d]igital data transmissions" is expressed in plural form, apparently providing no limit as to how many "[d]igital data transmissions" may be initiated by a single manual action or a single command of a user. The Commenter proposes the recited portion instead be stated as follows: "Each digital data transmission must be initiated by a manual action or command of a user, except that a GMRS unit receiving an interrogation request may automatically respond with its location."

Proposed Certification Ineligibility of Equipment with Parts 80, 87, 90 & 97 TX

In paragraphs 45-47 of the document FCC 10-106 on the Commission's website²⁶⁸, the

Commission states as follows:

45. With the increasing popularity of FRS radios, some manufacturers have begun to market radios that can be used by consumers to access FRS frequencies as well as frequencies in other services (*i.e.*, the frequencies are accessible using front panel controls). For example, several manufacturers market radios that operate on both FRS and GMRS frequencies.¹⁰⁶ While we recognize the convenience of these combination radios, we are concerned that manufacturers are starting to include FRS frequencies in radios that include VHF marine frequencies.¹⁰⁷ FRS combination radios that include VHF marine channels could raise an eligibility issue.¹⁰⁸ Moreover, depending on the VHF marine frequencies available in the radio, a possible interference problem to marine distress, safety or navigation communications on Channels 16 and 70 could arise.¹⁰⁹ Allowing VHF marine frequencies to be front panel accessible on radios manufactured and mass marketed to the American public for personal communications could result in disruptions to the United States Coast Guard during distress calls or confusion between communications by the general public and actual maritime distress calls. Additionally, widespread capability to transmit on these distress frequencies could result in increased hoax mayday calls.

46. Against this backdrop, we question whether certain or all Personal Radio Service combination radios should be prohibited or otherwise restricted. In this regard, we note that the Commission's Part 95 rules already prohibit certain types of combination radios.¹¹⁰ We are concerned that the type of risks outlined above may outweigh the benefits of flexible use afforded by combination radios. In licensed services, the Commission can limit inappropriate or improper use by permissible communication rules and the associated range of sanctions for violation of such rules. For services licensed by rule, experience has shown that permissible communication restrictions are difficult to enforce, and such limitations tend to be more effective if they are imposed at the equipment certification stage rather than if they require user compliance.¹¹¹

47. We are particularly concerned with services that may be used for communications related to safety of life and property or communications during distress, and therefore propose to prohibit the certification of radios that combine Personal Radio Service channels with the capability to transmit on frequencies in the licensed services of Parts 80, 87, 90, and 97 of the Commission's rules. Prohibiting such combination radios with these licensed services would prevent unauthorized use of maritime, aviation, public safety, and amateur frequencies to the benefit of those licensees and the public more generally. We seek comment on this conclusion and whether we should

²⁶⁸ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 45-47

prohibit any other services from being combined with Personal Radio Services. Additionally, we seek comment on whether our proposal should be more narrowly focused on certain Personal Radio Services. Commenters should address what sort of grandfathering, if any, would be appropriate for currently certified FRS combination radios and any other radios that combine Personal Radio Services with licensed services.

The Commission proposes no longer certifying Personal Radio Services (PRS) equipment that have transmitting (TX) capability in services licensed under 47 C.F.R. Parts 80, 87, 90 and 97. This Commenter notes, in document FCC 10-106 on the Commission's website, the Commission cites, with respect to imposing a limit on portable GMRS units, 47 C.F.R. § 90.267(b)(2)(i) and states "This is the same power limit that applies to portable units used in licensed low power industrial / business pool Part 90 land mobile operations in the 450-470 MHz range (the same frequency range as GMRS)."²⁶⁹ This Commenter submits the Commission appears to attempt to analogize portable units for certain Part 90 land mobile operations with portable GMRS units but now seems to do the opposite in proposing to no longer certify Personal Radio Services equipment capable of transmitting in services under 47 C.F.R. Parts 80, 87, 90, and 97. This Commenter submits there exists no technical impediment to the manufacturing of equipment perfectly capable of meeting or exceeding all technical requirement for certification under 47 C.F.R. Part 95 and one or more of 47 C.F.R. Parts 80, 87, 90, and 97.

A search of the Commission's equipment authorization database on August 19, 2010, revealed 1026 certifications for equipment certified to operate under both Part 90 and Part 95 of the Rules, the 987 of such certifications including an ability to operate in the frequency range of the GMRS. While many were granted recently, some date back as far

²⁶⁹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 32

as 1985. This Commenter is not aware of any alleged problems arising from equipment certified to operate under another Part of 47 C.F.R. in addition to Part 95.

The United States Coast Guard Navigation Center states on their website²⁷⁰ the following Radio Watchkeeping Regulations: "In general, any vessel equipped with a VHF marine radiotelephone (whether voluntarily or required to) must maintain a watch on channel 16 (156.800 MHz) whenever the radiotelephone is not being used to communicate."²⁷¹

Accordingly, this Commenter contends it is seen by this as being in the public interest that large numbers of radio users maintain watch on VHF marine channel 16 to monitor for any distress calls. Of course, this Commenter submits implicit with monitoring channel 16 for distress calls comes the need for the ability to respond to the mariner in distress to ascertain the nature of the emergency, the location of the mariner, the manner of assistance the mariner is requesting, and, if communications with emergency personnel may be obtained via other means, to facilitate communication between the distressed mariner and the emergency personnel. Moreover, this Commenter submits the Communications Act of 1934²⁷² and its predecessors, the Radio Act of 1912 and the Radio Act of 1927, were motivated by a Congressional response to the sinking of the *Titanic* and a concern for using radio for the protection of vessels at sea. This Commenter notes Section 1 of the Communications Act of 1934 includes, as a purpose, "for the purpose of promoting safety of life and property through the use of wire and radio communication."²⁷³ Thus, this Commenter submits the refusal to certify Personal

²⁷⁰ <http://www.navcen.uscg.gov/?pageName=mtWatch>

²⁷¹ 47 C.F.R. §§ 80.148, 80.310, NTIA Manual 8.2.29.6.c(2)(e), ITU RR 31.17, 33.18, AP13 §25.2

²⁷² Pub. L. No. 416, June 19, 1934, 48 Stat. 1064 (codified as 47 U.S.C. § 151 *et seq.*)

²⁷³ 47 U.S.C. § 151

Radio Services transmitters that have the capability to operate in a licensed or safety service appears to contradict the Congressional intent of radio regulation in the United States of promoting safety of life and property through the use of radio communications. Accordingly, this Commenter submits the proposed refusal to certify Personal Radio Services equipment that has transmitting capability in services licensed under 47 C.F.R. part 80 would seem to frustrate such public interest.

As this Commenter noted above, this Commenter submits no longer certifying Personal Radio Services equipment that have transmitting capability in services licensed under 47 C.F.R. parts 80, 87, 90, and 97 may detrimentally affect "small entities" who use, for example, utilize both radio services under both Part 90 and Part 95 of the Commission's Rules. For example, this Commenter submits a "small entity" may elect to use service under Part 90 for communications that involve a telephone interconnection and services under Part 95 for communications that do not. This Commenter submits a prohibition on certification of radio equipment under both Part 95 and Part 90 would seem to impair such a "small entity."

The Commission's Request for Comment on Other Issues

Provision of User-Friendly Fact Sheets on the FCC Website?

In paragraph 10 of the document FCC 10-106 on the Commission's website²⁷⁴, the Commission inquires as follows: "For example, should we consolidate and streamline our Part 95 rules to the extent possible and provide "user friendly" service rule fact sheets

²⁷⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 10

on our website?" This Commenter submits either the rules can be streamlined, updated, and reorganized to the point where a "user friendly" service rule fact sheet on the Commission's website would be unnecessary or else this Commenter sees no point in attempting to streamline, update, and reorganize the rules, risking introduction of unintended changes, and forcing those who do read and understand the existing rules to unnecessarily invest time and effort to read and understand streamlined, updated, and reorganized rules. This Commenter notes that even the slightest changes made during the streamlining, updating, and reorganizing are likely to diminish whatever level of certainty the Commission and the public have come to place in the rules based on the Commission's and the public's (and, to whatever extent, the judiciary's) application of the rules to the variety of fact patterns to which the rules have been applied over the preceding several decades. Moreover, this Commenter submits any discrepancies between user-friendly fact sheets and the rules could lead to compliance and enforcement difficulties. Therefore, this Commenter sees no need for the Commission to provide user-friendly fact sheets on the Commission's website. If the Commission wishes to provide useful features on the Commission's website, this Commenter proposes a greatly simplified interactive license application and renewal web tool to increase GMRS licensing compliance, as set forth *infra*.

Expression of Transmitting Power Limits in the Rules

In paragraphs 15 and 16 of the document FCC 10-106 on the Commission's website²⁷⁵, the Commission states as follows:

²⁷⁵ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 15 and 16

15. The Part 95 technical rules also specify power limits and equipment certification requirements²⁶ for transmitters²⁷ used in the Personal Radio Services. We note, however, that the power limits for different Part 95 devices were adopted at different times and are expressed variously as limits on a device's transmitter output power, effective radiated power (ERP), equivalent isotropically radiated power (EIRP), field strength at a certain distance, maximum carrier power, and peak envelope power.²⁸

Compliance is measured using different techniques as well.²⁹ The Commission adopted these power limits to account for how various devices are used. For example, devices with integrated antennas are required to meet an ERP limit, while devices that use external antennas would have to meet a maximum transmitter output power limit.

16. We are mindful that one approach would not be appropriate for all Part 95 services due to the use of integrated and non-integrated antennas, and we recognize the need to measure field strength for medical implant devices to simulate their implantation into a body. Nevertheless, we think that a review and possible consolidation and simplification of our power limits are appropriate. Below we make a specific proposal for GMRS devices, but here we generally invite comment regarding power limits and measurement techniques for each Part 95 service. We seek comment on whether the current power limits for each Part 95 service continue to be appropriate, and if not, on how they should be changed. If commenting parties support higher powers for certain applications, they should explain the technical basis for the higher power and provide an analysis for the associated impact on interference potential.

The Commission discusses "transmitter output power, effective radiated power (ERP), equivalent isotropically radiated power (EIRP), field strength at a certain distance, maximum carrier power, and peak envelope power" and states "We are mindful that one approach would not be appropriate for all Part 95 services...."²⁷⁶ Rather than potentially subjecting Personal Radio Services manufacturers and users to potential liability for replacing a broken antenna with one that might have slightly higher gain and holding a manufacturer or user to a single metric, this Commenter submits the Commission should adopt a variety of alternative metrics that yield approximately the same far-field field strength values. The rules could be written, for example, as "the transmitter shall not exceed the greater of X watts TPO, Y watts ERP, or Z volts/meter at D meters, regardless

²⁷⁶ *Id.*

of antenna orientation." One of this Commenter's concerns, expressed *supra*, is the apparent lack of evidence of the Commission making any effort to promote regulatory flexibility. While barely scratching the surface of this Commenter's regulatory flexibility concerns, this Commenter submits alternative power/field metrics would be a simple way to introduce the slightest glimmer of regulatory flexibility into proposed Part 95 rules. As for what absolute power levels would be appropriate, this Commenter addresses those issues elsewhere herein, *supra* and *infra*, but generally favors increases of approximately 4dB for MURS units and the proposed handheld portable GMRS power limits, increases of approximately 3dB for GMRS stations, including fixed stations and other stations, but no increase for FRS units. This Commenter reminds that Commission that FRS units operate on interstitial frequencies where increased power would increase the risk of adjacent-channel interference with previously allocated GMRS channels. This Commenter submits that the Commission's certification of transmitters of approximately the power levels this Commenter proposes for use in other services, such as Parts 80, 87, 90, and 97, and the widespread use of such transmitters in those services generally without harmful effects or interference are evidence of the appropriateness of such relatively modest power increases. This Commenter notes that the existing rules and the proposed rules contain provisions limiting unwanted emissions. With increasing frequency accuracy and improved filters that modern electronics provide, this Commenter submits that higher power operation without harmful effects or interference is increasingly possible. Moreover, while the Commission had mentioned the availability of commercial alternatives as supposedly diminishing the need for longer-range Personal Radio Services in paragraph 34 of the document FCC 10-106 on the Commission's

website²⁷⁷, this Commenter submits that Personal Radio Services, especially higher-power, longer-range Personal Radio Services, are perhaps most useful in areas where coverage is not provided by commercial alternatives. In such areas, this Commenter submits even a difference of only 3 or 4 dB in power may mean the difference between effective communication and no communication, yet such modest increases in power are generally not likely to increase interference. Moreover, as users would benefit from prolonged battery life if a lower-power setting were available, this Commenter submits that allowing a somewhat higher maximum power, which would tend to shorten battery life, would seem likely to encourage manufacturers and users to provide and utilize an optional lower-power setting to extend battery life when the maximum power is not needed. Thus, for example, instead of setting maximum power to, say, 2 watts TPO or ERP, which would likely encourage manufacturers to produce radios that always operate at those power levels, this Commenter notes setting maximum power to, say 5 watts TPO or ERP might encourage manufacturers and users to provide and utilize a lower-power setting of, say, 1 watt TPO or ERP for normal operation and switch to the full 5 watts TPO or ERP only when the need for such power outweighs the substantially higher battery drain such power requires. Thus, this Commenter submits allowing, say, 3 to 4 dB higher power might actually result in generally lower-power operation and decreased interference overall. This Commenter submits that seems more likely to be especially true now that people are used to using very small, lightweight cellular telephones for communication and less tolerant of large, heavy radios, which have led to smaller and lighter Personal Radio Service equipment with smaller and lighter batteries, as the

²⁷⁷ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 34

Commission can readily appreciate if it reviews its recent certifications for Personal Radio Services equipment.

Inquiry as to Necessity of Crystal Control of Transmitter Frequency

In paragraph 21 of the document FCC 10-106 on the Commission's website²⁷⁸, the Commission states as follows:

21. Section 95.651 provides that transmitters in the Personal Radio Services, with certain exceptions, must be crystal controlled.³⁶ The Commission adopted this requirement to ensure that personal radio transmitters utilize a stable and accurate transmit frequency-determining method. In the early years of CB Radio Service, some operators used radios with coil and capacitor based variable frequency oscillators (VFOs)—electronic circuits that generate an alternating current or voltage—as the frequency-determining method. VFOs of this type are susceptible to greater frequency inaccuracy and variation with time and temperature, relative to crystal oscillators.

22. Today's personal radio transmitters utilize a digital frequency synthesizer to generate the transmitted signals.³⁷ These synthesizers have at their heart a crystal time base which ensures that frequencies of the transmitted signals are stable and accurate, and such synthesizer-based radios satisfy the crystal control requirement. Synthesizer technology is also less expensive to manufacture than the older VFO technology and has largely, if not entirely, supplanted it. In view of the evolution in technology, we seek comment on whether section 95.651 is necessary, or whether frequency tolerance and stability requirements discussed *supra* alone are sufficient. If section 95.651 is retained, we seek comment on whether the rule should be revised to clarify that crystal-based frequency synthesizers satisfy the rule.

The Commission inquires whether the rule requiring crystal control of the transmitter frequency is still necessary. While Section 95.651²⁷⁹ requires crystal control for some types of transmitters used in the Personal Radio Services, this Commenter concurs with the Commission's assertion that modern radios are typically synthesized, and, while the time base for the synthesizer may indeed be a crystal, the sorts of concerns that seem

²⁷⁸ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 21

²⁷⁹ 47 C.F.R. § 95.651

likely to have motivated a perceived need for Section 95.651²⁸⁰ in the past have been rendered largely moot by advances in technology. This Commenter submits modern synthesized radios typically provide very accurate frequency control over a wide range of operating conditions. Therefore, this Commenter submits a rule requiring crystal control of the transmitter frequency may no longer be necessary. Moreover, as technology advances and even more accurate frequency control techniques emerge, such as operating a synthesizer using a GPS-disciplined oscillator (GPSDO) as a frequency reference, this Commenter submits it may be possible to operate Part 95 radios based on even more precise time bases, such as atomic clocks, which may even be located remotely from the radio itself. Thus, this Commenter contends maintaining a rule requiring crystal control of the transmitter frequency may not only be unnecessary but may also hinder application of such technological advances to Part 95 radios.

Inquiry as to Whether to Apply CB Channel Sharing to the GMRS and FRS

In paragraph 55 of the document FCC 10-106 on the Commission's website²⁸¹, the Commission states as follows:

55. We note that section 95.416 (CB Rule 16) provides that CB communications must be limited to the minimum practical time, that each CB station must limit its conversations to no more than five continuous minutes, and that after each conversation, CB stations must not transmit again for at least one minute.¹³² These restrictions were adopted long before the introduction, and now pervasive use, of wireless telephony, which has effectively relieved the CB service of congestion. Similarly, the GMRS prohibits continuous or uninterrupted transmissions¹³³ and are generally required to share channels to reduce interference.¹³⁴ The FRS rules state that the user must share each channel with other users and no channel is available for private or exclusive use.¹³⁵ Given that these three services are basically used for the same purpose, should we apply the same general channel sharing

²⁸⁰ *Id.*

²⁸¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 55

requirements across all the services or does CB continue to need specific limits on the length of communications and a required pause before initiating a new conversation? Does there continue to be congestion in the CB band or is the rule needed due to interference concerns with uses outside the CB band? We seek comment on whether to limit the duration of any single continuous transmission to prevent the use of CB radios as broadcast stations, transmitting continuously for long periods and thereby preventing others from using a channel. If they do favor such a limit, commenters should address how long a continuous transmission the rule should allow. We also seek comment on whether the Commission should amend or eliminate section 95.413(a)(6), which prohibits the transmission of music, whistling, sound effects or any material to amuse or entertain, and section 95.413(a)(7), which prohibits the transmission of any sound effect solely to attract attention.¹³⁶ Obviously, some of these types of transmissions could be detrimental if not kept in check, but would some allowances be reasonable and consistent with how we treat other Part 95 Services? If the Commission amends or eliminates such restrictions, should it retain a time limit on continuous transmissions?

The Commission inquires whether channel sharing requirements developed for the CB Radio Service should also apply to the GMRS and FRS. While Section 95.407²⁸² currently provides channel sharing requirements for the CB Radio Service, this Commenter submits Section 95.7²⁸³ currently provides for channel sharing in GMRS and Section 95.191²⁸⁴ currently provides for channel sharing in FRS. Thus, this Commenter submits it would seem unnecessary and duplicative to apply "channel sharing requirements developed for the CB Radio Service" to the GMRS and FRS.

Inquiry as to Changes Needed to the Rules for the...MURS...

In paragraph 70 of the document FCC 10-106 on the Commission's website²⁸⁵, the Commission states as follows:

²⁸² 47 C.F.R. § 95.407

²⁸³ 47 C.F.R. § 95.7

²⁸⁴ 47 C.F.R. § 95.191

²⁸⁵ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 70

70. In addition to the specific Part 95 services discussed in this *NPRM*, we invite comment on the rules governing the other Part 95 services, which are: (1) Low Power Radio Service (LPRS); (2) Wireless Medical Telemetry Service (WMTS);¹⁶⁸ (3) Medical Device Radiocommunications Service (MedRadio)¹⁶⁹; (4) Multi-Use Radio Service (MURS); and (5) Dedicated Short Range Communications Service On-Board Units (DSRCS-OBUs). In addressing these services, interested parties are urged to provide specific recommendations, including any technical requirements that the Commission should consider in adopting any additional rules and policies.

The Commission inquires as to what changes may be needed to the rules governing the Low Power Radio Service (LPRS), Wireless Medical Telemetry Service (WMTS), Medical Device Radiocommunication Service (MedRadio), Multi-Use Radio Service (MURS) and Dedicated Short-Range Communications Service (On-Board Units). This Commenter addresses a change to the MURS which the Commission apparently fails to identify or discuss as a Specific Proposal in the Commission's Review of Personal Radio Services Rules that precedes the Proposed Rules as published in the Federal Register²⁸⁶.

Proposed Change to Power Limit of MURS Units from 2W TPO to 2W ERP

Current Section 95.639(h)²⁸⁷ limits MURS units to 2 Watts transmitter power output. Proposed Section 95.35(h)²⁸⁸ would change that limit to 2 Watts effective radiated power (ERP). This Commenter submits the Commission does not appear to have articulated any rationale for such a change. Moreover, this Commenter notes, in the Proposed Rule, as to GMRS, the Commission proposes changing the power limit for GMRS small base stations from 5 Watts ERP to 5 Watts transmitter power output, which, in document FCC 10-106 on the Commission's website, the Commission states "...would ease the accuracy of power measurement and would allow for the use of directional antennas to focus the

²⁸⁶ 75 Fed. Reg. 47142 *et seq.*

²⁸⁷ 47 C.F.R. § 95.639(h)

²⁸⁸ 75 Fed. Reg. 47142 at 47153

signal's energy in the desired direction." Furthermore, this Commenter submits transmitter power output can be determined using a power meter (provided the apparently incorrect proposed Section 95.45(a)(4)²⁸⁹ is not adopted, as this Commenter discusses, *infra*), but ERP determination requires analysis of the transmission line and antenna systems and, as the Commission allows documents pertaining to certification of devices such as MURS units to be submitted confidentially under 47 C.F.R. §§ 0.457 and 0.459, so access to information on the transmission line and antenna systems of a MURS unit may be denied by the Commission to those to whom the Commission might attempt to hold liable for violation of proposed section 95.35(h). Thus, this Commenter submits MURS unit power limits should be based on transmitter power output, not ERP.

Commenter's Proposal to Increase Power Limit of MURS Units to 5W TPO

As RF semiconductor device technology has yielded (and continues to yield) higher performance RF semiconductor devices, such as devices that provide higher output power and higher efficiency, this Commenter submits RF semiconductor devices suitable for modern MURS devices are typically capable of providing 5 Watts of transmitter power output. As the approximately 4 dB of additional power that 5 Watts of transmitter power output would provide, as compared to 2 Watts of transmitter power output, would be useful to obtain effective MURS communications under difficult circumstances where 2 Watts may be inadequate, and the approximately 4 dB of additional power would seem unlikely to greatly increase any risk of interference, this Commenter proposes the Commission increase the MURS power limit to 5 Watts of transmitter power output. If the Commission were to oppose such an increase, this Commenter proposes, in the

²⁸⁹ 75 Fed. Reg. 47142 at 47154

alternative, the Commission limit MURS power to 2 Watts of transmitter power output when such power level is sufficient but allow 5 Watts of transmitter power output when necessary (i.e., when 2 Watts of transmitter power output is insufficient for effective communications).

Issues Not Identified in Commission's Review of Rules in Federal Register

GMRS Eligibility Only for Individuals or Also for Businesses

In paragraph 30 of the document FCC 10-106 on the Commission's website²⁹⁰, the Commission states as follows:

30. Furthermore, while individual licensees are permitted to use GMRS to communicate business activities, the rules have not permitted businesses to obtain GMRS licenses since July 31, 1987.⁶³ If we license GMRS by rule, should we maintain the eligibility requirement that only individuals are permitted to operate GMRS or should we remove the prohibition on business use of GMRS devices? We note that businesses successfully use FRS radios,⁶⁴ but that FRS operates at significantly lower power than GMRS, so frequency reuse is still achieved and significant spectrum congestion does not appear to be a problem. If we remove the individual licensing requirement for GMRS, are any eligibility requirement changes needed to ensure that a shared spectrum approach remains viable?

In paragraph 30 of document FCC 10-106 on the Commission's website²⁹¹, the Commission states, "Furthermore, while individual licensees are permitted to use GMRS to communicate business activities, the rules have not permitted businesses to obtain GMRS licenses since July 31, 1987."²⁹² The Commission then asks, "If we license GMRS by rule, should we maintain the eligibility requirement that only individuals are

²⁹⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 30

²⁹¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 30

²⁹² *Id.*

permitted to operate GMRS or should we remove the prohibition on business use of GMRS devices?"²⁹³ This Commenter submits the Commission's proposal to license GMRS by rule would appear to create enforcement obstacles, as no application for license would need to be made. Thus, this Commenter submits the Commission would be left to try to prove the capacity in which someone might be using the GMRS from the use itself. If the Commission were to attempt to ban businesses from using the GMRS when licensed by rule, how could the Commission prove that an employee of a business wasn't an individual using GMRS to communicate business activities, as the Commission states is currently permitted? If the Commission's solution to that predicament would be to prohibit individuals from using GMRS to communicate business activities, this Commenter would oppose that, as it would be detrimental to existing GMRS licensees who have been lawfully using GMRS to communicate for years, if not decades. Moreover, allowing businesses, who are generally eligible for licensing under Part 90 of the Commission's rules, to circumvent the costs of Part 90 frequency coordination and licenses so that they may congest the relatively very limited GMRS frequencies would seem to be particularly spectrally inefficient. Thus, while this Commenter supports maintaining the eligibility requirement that only individuals are permitted to operate in the GMRS and specifically prohibiting larger businesses from allowing non-family employees to communicate using the GMRS, in view of the practical difficulties of implementing such a paradigm, this Commenter submits the Commission's current GMRS licensing requirements should be retained.

²⁹³ *Id.*

Other Power Levels for GMRS Operations

In paragraph 34 of the document FCC 10-106 on the Commission's website²⁹⁴, the

Commission states as follows:

34. We also seek comment on power limits for other classes of GMRS operations. Most GMRS station classes currently may transmit with up to 50 watts output power.⁷⁴ This is a relatively high power for stations that are not coordinated, and with the use of gain antennas, the actual radiated power could be much higher. Given that GMRS licenses are not issued on a coordinated or exclusive use basis, should we continue to permit 50-watt operations? Should the existing station classes and power limits be maintained? In this regard, we request comment on whether we should reduce power limits or establish antenna height limits to increase frequency reuse for, and minimize interference to, GMRS communications. We recognize that the authorized level of station power and antenna height may impact spectrum efficiency.

This Commenter is aware of no evidence that would tend to show that 50-watt operations are excessive. As noted *supra*, this Commenter submits Personal Radio Services, especially higher-power Personal Radio Services, such as GMRS, tend to be most useful in areas, such as remote areas and areas of rough terrain, where commercial alternatives are unavailable or limited. Thus, the higher power of GMRS, in conjunction with high-gain antennas, can be used to provide communications where communications might not otherwise be possible. This Commenter submits these same considerations tend to obviate the need for issuing GMRS licenses on a coordinated or exclusive-use basis, as fewer high-power GMRS stations tend to be used where alternative communications are available, while high-power GMRS stations tend to be most useful in remote areas where they are separated from each other by that remoteness. Thus, if anything, the availability of commercial alternatives noted by the Commission should be a reason for modestly increasing the power allowed for GMRS stations. As this Commenter stated *supra*, this

²⁹⁴ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 34

Commenter proposes a 3 to 4 dB increase in the power limits for GMRS stations. This Commenter also opposes antenna height limits, as wider coverage is particularly beneficial in situations, such as natural disasters, where, for example, a GMRS repeater could provide communications from, say, a hurricane-ravaged coastal area to an inland area where shelter could be provided to evacuees and staging operations for disaster relief could be conducted. As for frequency reuse and spectrum efficiency, this Commenter does not propose increase power limits for FRS units and submits that the low-power FRS units provide the sort of frequency reuse and spectrum efficiency the Commission seeks, while the higher-power GMRS stations still provide frequency reuse and spectrum efficiency when employed at higher power levels in remote areas and lower power levels to conserve battery power in more hospitable areas. Thus, this Commenter submits existing or modestly increased GMRS power levels and no antenna height limits continue to be or would be appropriate for the GMRS.

Continuing Need for Repeater and Base Station Operations in the GMRS

In paragraph 34 of the document FCC 10-106 on the Commission's website²⁹⁵, the Commission states as follows:

Furthermore, we note that the personal communications environment has evolved substantially since the Commission adopted the rules allowing repeater operation for GMRS. For example, most wide-area personal communication needs are now met by commercial communication providers.⁷⁵ We seek comment on whether repeater and base station operations are still needed in the GMRS given the availability of commercial alternatives that allow for more efficient use of the spectrum.

²⁹⁵ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 34

The Commission seeks comment on whether repeater and base station operations are still needed in the GMRS given the availability of commercial alternatives that allow for more efficient use of the spectrum. This Commenter submits repeaters and base stations continue to serve vital needs in the GMRS. Moreover, this Commenter submits the availability of repeaters in the GMRS is unique among the Part 95 Personal Radio Services. This Commenter submits repeaters are indispensable, especially in dense urban environments and hilly or mountainous terrain, where mere simplex communications directly between mobile units are generally ineffective. This Commenter submits spectrum efficiency arguments are rendered moot when other means of communication are ineffective, and a repeater's requirement for input channel bandwidth and output channel bandwidth is not inefficient when it is the minimum bandwidth needed for effective communications.

This Commenter notes public service entities make use of GMRS repeaters for performing public service, such as assistance with public events, which this Commenter submits is in the public interest. For example, this Commenter notes, during such public events, it can be helpful to coordinate a team of volunteers, where many volunteers can hear the same communications at the same time, as is provided through the use of GMRS repeaters, but is not generally provided with alternative modern technology, such as cellular telephones. Moreover, this Commenter notes, while cellular telephone coverage is common throughout much of the United States, there still exist many areas where cellular telephone coverage is not economically feasible and is, therefore, not provided. Even in such remote locations, this Commenter submits a GMRS repeater can be

employed to provide communications coverage optimized for whatever geographic/topographic area where such communications coverage is needed. Thus, this Commenter submits the continued provision in the GMRS for repeaters and base stations is in the public interest, as it has been for decades.

Other Issues Identified by this Commenter

Proposed Section 95.45(a)(4) as to "GRMS" [*sic*] Units & "Vertically Polarized"

In proposed Section 95.45(a)(4), the Commission proposes "The antenna of handheld portable GRMS [*sic*] units must be an integral part of the transmitter" and "The antenna must have no gain (as compared to a half-wave dipole) and must be vertically polarized."²⁹⁶ This Commenter notes such a rule does not appear to have ever applied to GMRS radios. Thus, this Commenter submits a very large number of radios duly certified for GMRS have antennas that are not an integral part of the transmitter, and such radios apparently continue to be beneficially used by vast numbers of GMRS station operators, including those who would appear to qualify as "small entities." Moreover, this Commenter submits the ability to attach various external antennas to a handheld portable radio can be useful, for example, to use the radio inside a well-shielded structure (where an antenna can be mounted outside the structure). This Commenter perceives no benefit from such a proposed rule as applied to handheld portable GMRS units.

As the Commission did not disclose the existence of the proposed change in the Synopsis, Specific Proposals, or Request for Comment on Other Issues sections of the

²⁹⁶ 75 Fed. Reg. 47142 at 47156

Review of Personal Radio Service Rules published at 75 Fed. Reg. 47142 *et seq.*, this Commenter submits concern is raised as to the sufficiency of the notice, where "[n]otice is sufficient 'if it affords interested parties a reasonable opportunity to participate in the rulemaking process,' and if the parties have not been 'deprived of the opportunity to present relevant information by lack of notice that the issue was there.'"²⁹⁷

Rather, this Commenter submits Section 95.647²⁹⁸ currently applies a similar rule to FRS units and R/C stations. Perhaps the "GRMS units" in proposed Section 95.45(a)(4)²⁹⁹ was intended to read "FRS units" or "FRS units and R/C stations transmitting in the 72-76 MHz band" to maintain consistency with current Section 95.647³⁰⁰. However, as the proposed Section 95.45(a)(4)³⁰¹ does not so state, this Commenter submits the same notice concerns as discussed above are raised as to the apparent deletion of the provision of the subject matter of Section 95.647³⁰² without any disclosure or discussion of such a proposed change. Even so, this Commenter questions the practical benefit of the provision "...and must be vertically polarized" in the context of a typically handheld FRS unit or R/C station, as the polarization of the electromagnetic radiation will be a function of the orientation of the FRS unit or R/C station as it is held in the user's hand and will only be "vertically polarized" if the FRS unit or R/C station is held in a particular orientation. For example, this Commenter submits, if a FRS unit is held sideways, the

²⁹⁷ *WJG Tel. Co., Inc. v. FCC*, 675 F.2d 386, 389 (D.C. Cir. 1982) (citations omitted); see *Fla. Power & Light Co. v. Nuclear Regulatory Comm'n*, 846 F.2d 765, 771 (D.C. Cir. 1988)

²⁹⁸ 47 C.F.R. § 95.647

²⁹⁹ 75 Fed. Reg. 47142 at 47156

³⁰⁰ 47 C.F.R. § 95.647

³⁰¹ 75 Fed. Reg. 47142 at 47156

³⁰² 47 C.F.R. § 95.647

electromagnetic radiation from its "vertically polarized" antenna will be horizontally polarized, thus rendering the "vertically polarized" provision pointless.

Proposed Change in FRS Bandwidth Limitation from 12.5 kHz to 12.25 kHz

In proposed Section 95.39³⁰³, the Commission proposes to replace "The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.5 kHz" of Section 95.633(c) with "The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.25 kHz" in proposed Section 95.39(c). While the proposed authorized bandwidth is narrower than the current authorized bandwidth, this Commenter notes the Commission does not assess how many existing FRS units, duly certified for FRS use, but having a emission bandwidth greater than 12.25 kHz but less than 12.5 kHz would be adversely affected by proposed Section 95.39³⁰⁴ (where users of such existing FRS units likely include vast numbers of "small entities," as Section 95.191³⁰⁵ broadly authorizes "you," "Unless you are a representative of a foreign government," to operate an FCC certified FRS unit and Section 95.193³⁰⁶ broadly authorizes "You" to "use an FRS unit to conduct two-way voice communications with another person," so FRS units are ideal for many "small entities" to conduct business).

³⁰³ 75 Fed. Reg. 47142 at 47154

³⁰⁴ 75 Fed. Reg. 47142 at 47154

³⁰⁵ 47 C.F.R. § 95.191

³⁰⁶ 47 C.F.R. § 95.193

Proposed Change to a General Equipment Certification Requirement

In proposed Section 95.33(a)³⁰⁷, the Commission proposes a general equipment certification requirement that appears to substantially alter the existing separate certification requirements set forth in Section 95.603³⁰⁸. For example, Section 95.603(g)³⁰⁹ provides "that those radio units certificated as of November 12, 2002 need not be recertificated," while proposed Section 95.33(a)³¹⁰ does not. A search of the Commission's equipment authorization database³¹¹ on August 19, 2010, revealed 456 certifications for devices understood to be MURS units under the current Part 95 that the Proposed Rules³¹² could affect. Moreover, MURS units relying on those 456 certifications are currently believed to be used by a majority of MURS users, as a search of the Commission's equipment authorization database on August 19, 2010, revealed only about 33 certifications for MURS units that would not appear to be affected by the apparent shortcomings of proposed Section 95.33(a)³¹³. Moreover, this Commenter submits the Proposed Rules³¹⁴ also appear to create problems as to the possibility of recertification of those 456 certifications discussed above, leading to the likely result of the majority of existing MURS units ending up in landfills if the Proposed Rules³¹⁵ were adopted, thereby contributing to potential environmental harm. This Commenter submits the Commission does not appear to have considered such potential adverse environmental

³⁰⁷ 75 Fed. Reg. 47142 at 47151, 47152

³⁰⁸ 47 C.F.R. § 95.603

³⁰⁹ 47 C.F.R. § 95.603(g)

³¹⁰ 75 Fed. Reg. 47142 at 47151, 47152

³¹¹ <http://www.fcc.gov/oet/ea/fccid/>

³¹² 75 Fed. Reg. 47142 *et seq.*

³¹³ 75 Fed. Reg. 47142 at 47151, 47152

³¹⁴ 75 Fed. Reg. 47142 *et seq.*

³¹⁵ 75 Fed. Reg. 47142 *et seq.*

impact of its proposed general equipment certification requirement vis-à-vis the current separate certification requirements.

Moreover, this Commenter notes the Commission does not appear to have reviewed the Proposed Rules³¹⁶ under NEPA as to what effect they might have on the environment, for example, by promoting the disposal of large quantities of MURS units the Proposed Rules³¹⁷ would appear to adversely affect. Furthermore, this Commenter submits the Commission's rules in relation to the NEPA at 47 C.F.R. §§ 1.1301-1.1319 do not appear to contemplate, and thus do not appear to categorically exclude, Commission actions with respect to rule changes promoting environmental pollution, as opposed to mere alleged electromagnetic environmental effects. Thus, this Commenter submits the Proposed Rules³¹⁸ appear to give rise to implications under NEPA that the Commission has not addressed in the publication of the Proposed Rules in the Federal Register³¹⁹. Besides lack of review of likely environmental effects of the Proposed Rules³²⁰ with respect to NEPA, this Commenter also sees no review of likely environmental effects of the Proposed Rules³²¹ with respect to, for example, the Resource Conservation and Recovery Act.

Even if the Proposed Rules³²² were redrafted so as to facilitate recertification of those 456 certifications discussed above, this Commenter suggests such a provision would

³¹⁶ 75 Fed. Reg. 47142 *et seq.*

³¹⁷ 75 Fed. Reg. 47142 *et seq.*

³¹⁸ 75 Fed. Reg. 47142 *et seq.*

³¹⁹ 75 Fed. Reg. 47142 *et seq.*

³²⁰ 75 Fed. Reg. 47142 *et seq.*

³²¹ 75 Fed. Reg. 47142 *et seq.*

³²² 75 Fed. Reg. 47142 *et seq.*

epitomize government inefficiency and waste, as it would result in a pointless bureaucratic boondoggle of the expenditure of vast sums of time, money, and effort to recertify what appears to be the majority of MURS units currently in use without deriving any benefit from such exercise. Accordingly, both the Proposed Rules³²³ and a possible redrafted version of the Proposed Rules³²⁴ as discussed above would seem contrary to the purpose of making available, "so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nationwide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communication" as set forth in Section 1 of the Communications Act of 1934.³²⁵ Moreover, this Commenter submits imposition of such burdens on the use of existing MURS units would appear to contradict Section 303(g) of the Communications Act of 1934³²⁶, which states, "Except as otherwise provided in this Act, the Commission from time to time, as public convenience, interest, or necessity requires shall-- (g) Study new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest."

GMRS Operation North of Line A or East of Line C

This Commenter notes the Proposed Rules³²⁷ include the following:

³²³ 75 Fed. Reg. 47142 *et seq.*

³²⁴ 75 Fed. Reg. 47142 *et seq.*

³²⁵ 47 U.S.C. § 151

³²⁶ 47 U.S.C. § 303(g)

³²⁷ 75 Fed. Reg. 47142 *et seq.*

§ 95.35 Power.

...

(b) GMRS. (1) Except as provided for in paragraph (2), the maximum power permitted is as follows:

(i) GMRS base stations – 50 watts output power;

(ii) GMRS small base stations (operating on even numbered GMRS channels) – 5 watts output power;

(iii) GMRS fixed stations – 15 watts output power;

(iv) GMRS mobile stations (except portable/handheld units) – 50 watts output power; and

(v) GMRS portable/handheld units – 2 watts ERP.

(2) Any GMRS station located at a point north of Line A or east of Line C must transmit with no more than 5 watts ERP.

...

§ 95.45 Antenna limits.

(a) GMRS

(1) Certain antenna structures used in a GMRS system and that are more than 60.96 m (200 ft) in height, or are located near or at a public-use airport, must be notified to the FAA and registered with the Commission as required by part 17 of this chapter.

(2) The antenna for a small base or control station must not be more than 6.1 meters (20 feet) above the ground or above the building or tree on which it is mounted. Each base station and each control station with an antenna height greater than 6.1 meters (20 feet) must be separately identified on Form 605.

(3) Any GMRS station licensed after [effective date of rules] and located north of Line A or east of Line C must have an antenna no more than 20 feet above ground or above the building or tree on which it is mounted.

...

This Commenter submits the Commission provides no justification for the following

provision: "(ii) GMRS small base stations (operating on even numbered GMRS

channels) – 5 watts output power." This Commenter submits the Commission appears to

propose to add the "(operating on even numbered GMRS channels)" provision without

justification. This Commenter submits the current Rules, which have been in effect for

decades without evidence of any harm, do not appear to include such a limitation. This

Commenter submits the Commission appears to propose to add the "5 watts output

power" limitation for all GMRS small base stations without justification. This

Commenter submits the current Rules, which have been in effect for decades without evidence of any harm, do not appear to include such a limitation.

This Commenter submits the Commission provides no justification for the following provision: "(iii) GMRS fixed stations – 15 watts output power." This Commenter submits the current Rules, which have been in effect for decades without evidence of any harm, do not appear to include such a limitation.

This Commenter submits the Commission provides no justification for the following provision: "(2) Any GMRS station located at a point north of Line A or east of Line C must transmit with no more than 5 watts ERP." This Commenter submits the current Rules, which have been in effect for decades without evidence of any harm, do not appear to include such a limitation.

This Commenter submits the Commission provides no justification for the following provision: "(3) Any GMRS station licensed after [effective date of rules] and located north of Line A or east of Line C must have an antenna no more than 20 feet above ground or above the building or tree on which it is mounted." This Commenter submits the current Rules, which have been in effect for decades without evidence of any harm, do not appear to include such a limitation.

Reduction of GMRS Application Fee and License Fee

According to article by Bernard Bates in the November 2007 issue of Popular Communications magazine³²⁸, "Industry analysts have estimated that 50 to 80 million FRS/GMRS radios have been sold in the United States." A search of the Commission's Universal Licensing System (ULS)³²⁹ on August 25, 2010, shows a total of 58,924 active, regular GMRS licensees. In paragraph 25 of the document FCC 10-106 on the Commission's website³³⁰, the Commission states as follows:, the Commission states "We also note that there are reports that most purchasers of portable FRS/GMRS combination radios (as well as purchasers of portable GMRS-only radios) use the licensed GMRS channels, while only a small percentage obtain the required license." Thus, this Commenter submits widespread violation of Commission rules requiring licenses to operate in the GMRS is clearly occurring. In paragraph 26 of the same document³³¹, the Commission states as follows:

Furthermore, we believe that licensing GMRS by rule would reduce administrative and other burdens on GMRS users, as well as on the Commission. For example, users would no longer be subject to application and regulatory fees, and would not be at risk of losing their authorization to operate for failing to file a timely renewal application.

This Commenter submits licensing GMRS by rule would eliminate the application fee and license fee for a GMRS license, thereby depriving the Commission of licensing revenue. However, because of the widespread noncompliance with the GMRS licensing requirement, this Commenter submits that loss of licensing revenue would be relatively small. The application fee under 47 C.F.R. § 1.1102 for a GMRS license currently appears to be \$60, which, averaged over the five-year term of a GMRS license, would be

³²⁸ <http://www.trisquare.us/images/media/press/10-FeatureDigitalTwo-Way.pdf>

³²⁹ <http://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

³³⁰ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 25

³³¹ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 26

\$12 annually. The regulatory fee under 47 C.F.R. § 1.1152 for a GMRS license currently appears to be \$5 annually. Thus, the Commission's average annual revenue from a GMRS license appears to be \$17. Therefore, the average annual revenue from 58,924 GMRS licensees would appear to be around one million dollars. This Commenter submits the Commission's proposal to license the GMRS by rule indicates the Commission's intention to forego such revenue. If the FCC were to eliminate GMRS application and/or regulatory fees but still require licensing, this Commenter submits more GMRS radio purchasers could be expected to comply with the license requirement, thereby helping solve the license noncompliance problem. As the ULS already exists for other radio services and is able to efficiently process electronically submitted GMRS license applications at little marginal to the Commission, even with increased numbers of GMRS license applicants, this Commenter submits the Commission's costs for GMRS licensing could be expected to be low. Therefore, this Commenter proposes the Commission continue to require GMRS licensing but waive all application and regulatory fees associated with an application for a GMRS license.

Continued Availability of a Wide Range of Equipment

This Commenter notes that many of the highest quality radios used in the Personal Radio Services, differ substantially from the majority of consumer-grade radios now available. This Commenter submits most of the higher-grade radios offer reliability and technical performance that greatly exceed more typical consumer-grade radios. Moreover, this Commenter submits some of the features utilized by GMRS licensees, such as higher-power mobile stations, land-stations (including higher-power land stations and repeaters),

paging receivers, and fixed stations are simply unavailable in modern consumer-grade GMRS radios. Therefore, to ensure the ability to maintain the continued integrity of "GMRS systems" under Section 95.21³³² and to allow GMRS licensees access to the largest selection of GMRS equipment, this Commenter submits the Commission should expressly provide for continued use of all equipment certified under Part 95.

Furthermore, this Commenter notes that many of the highest quality radios used in the Personal Radio Services, such as the GMRS, were originally purchased by Part 90 licensees and used under Part 90 of the Commission's Rules. This Commenter submits most such radios offer extraordinary reliability and technical performance. While many such radios are certified under Parts 90 and 95, this Commenter submits even those certified under only the stringent Part 90 standards are almost guaranteed to provide technical performance that meets or exceeds that required under Part 95. Therefore, to allow Part 95 operators access to the largest selection of equipment for their systems, this Commenter proposes the Commission should expressly provide for equipment certified under Part 90 to be used for Part 95 Personal Radio Services when such equipment complies with all regulatory requirements under Part 95 of the Rules. Alternatively, this Commenter proposes the Commission should provide an abbreviated, expedited, low-cost procedure for obtaining Part 95 certification for a Part 90 certified radio based on the existing Part 90 certification and any documentation the Commission may have concerning its Part 90 certification. This Commenter proposes removing unnecessary obstacles to the availability of the highest quality equipment capable of meeting or surpassing all applicable technical requirements to Part 95 users is in the public interest.

³³² 47 C.F.R. § 95.21

Moreover, this Commenter submits such a proposal would maximize the opportunity for the reuse of existing radio equipment, avoiding harm to the environment by avoiding excellent radio equipment being sent to landfills purely because of bureaucratic obstacles. This Commenter submits such benefit to the environment is also in the public interest and would provide a statutorily favorable outcome under the NEPA and under the RFA.

A Simple, Easy GMRS License Application/Renewal Website

As the Commission has acknowledged the low compliance rate for GMRS licensing, this Commenter proposes the Commission provide an extremely simplified "front-end" for filing GMRS license applications and renewals on the Commission's website. For example, the Commission could set up a separate website, perhaps called "gotgmrs.fcc.gov" with a catchy "Got GMRS?" logo. The Commission could require GMRS radio manufacturers to include packaging material promoting the website, with the emphasis on simplicity. The "Got GMRS?" website would not require a license applicant to know that the Commission uses the seemingly arbitrary code "ZA" to denote the GMRS, the payment/fee type code is a seemingly arbitrary code "PAZR," or what a Form 605 is. Rather, the "Got GMRS?" website would ask them if they have a GMRS callsign, and, if not, provide a way to help applicants rapidly determine if they likely have or have not previously been issued a FRN. The website would ask a couple of eligibility questions, take the applicant's payment information (e.g., debit/credit card information) and ideally would provisionally grant a license or renewal immediately and perform whatever validation might be necessary offline so that a e-mail message confirming or invalidating the provisional grant could be sent shortly thereafter. This Commenter

submits the website should be made to support mobile web browsers so an applicant could obtain a GMRS license from the convenience of a cellular telephone. This Commenter submits the Commission could integrate such a "Got GMRS?" campaign with its larger reboot.fcc.gov campaign, providing a sense of progress, simplification, and efficiency to the public's interaction with the Commission.

Providing Technological Enablement of Operation in Other Radio Services

While the Commission proposes denying applications for certification of Personal Radio Services equipment having transmitting capability in services licensed under 47 C.F.R. Parts 80, 87, 90, and 97, this Commenter notes the economic, environmental, and convenience benefits of having a single transmitter capable of operating in numerous radio services. This Commenter submits users who need to operate in multiple radio services can buy fewer radios, which consumes fewer resources, results in fewer radios eventually ending up in landfills, results in fewer replacement battery packs eventually ending up in landfills, results in fewer chargers, microphones, earphones, and other accessories eventually ending up in landfills, and fewer radios for the user to have to keep charged and carry around with the user. If the Commission's concern is increased unauthorized use of various radio services, as happened when the Commission allowed combined FRS/GMRS radios to be certified, this Commenter submits a better solution would be to provide for technological enablement of operation in other radio services. First, this Commenter submits the continuous channel numbering scheme of combined FRS/GMRS radios, where channels 1-8 are GMRS/FRS channels, channels 8-14 are FRS channels, channels 15-22 are GMRS channels provides no readily apparent distinction

between operation in different Personal Radio Services. However, this Commenter submits the decreasing costs of displays of higher resolution should facilitate requirements that a radio provide an indication to the user of the Personal Radio Service in which it is operating. As a further possibility, this Commenter submits it wouldn't be difficult to require as a condition to be eligible for a grant of certification for multi-service radios that a user be required to input an access code not provided with the radios at the time of sale or a key-press combination not disclosed at the time of sale to enable operation in other radio services. This Commenter proposes any combination radios including Personal Radio Service operation, even just combination FRS/GMRS radios, as a condition for grant of certification, be required to operate by default only in the FRS, with any additional functionality in other radio services requiring an access code or keypress-combination not provided with the radio. Thus, people who simply want to use their new radios without bothering with licensing or understanding the rules could operate in the FRS with relatively little risk of interference, but those who have enough interest in their radios to go through a process of obtaining the access code or key-press combination for their radios could be directed to training materials explaining their obligations for proper use of their radios. This Commenter does not advocate the imposition of equipment restrictions that would adversely affect existing equipment.

Given the proliferation of radio equipment featuring embedded-control processors and frequency synthesizers, this Commenter proposes the Commission could require, as a condition to certification of future equipment, a securely authenticated technological approach to enablement of operation of radios as to specific radio services or even

specific frequencies within those radio services. For example, a multi-service-capable radio could, by default, be enabled to operate in the FRS. However, if the Commission were to establish a website with access to the ULS database and the equipment authorization database, this Commenter proposes a web application that would receive from an equipment user information such as the user's identification (e.g., name, FRN, and/or callsign), the user's authentication information (e.g., the user's password associated with the user's FRN), the FCC ID of the equipment the user wishes to enable, and/or the serial number of the equipment the user wishes to enable. The web application would authenticate the user, check the user's license or licenses in the ULS, check the Parts of the Rules for which the equipment is certified, and provide the user with an activation code the user could enter into the equipment to activate radio services and/or frequencies for which the user is licensed. The web application could calculate a unique activation code based on the FCC ID and serial number of the equipment, allowing only that particular piece of equipment to be activated. Alternatively, the web application could calculate a generic activation code generic to all pieces of equipment having the same FCC ID to facilitate easy activation of a large number of pieces of equipment having the same FCC ID being activated by the user. The process of calculating the generic activation code or the unique activation code could utilize cryptographic techniques to deter spoofing of valid activation codes. To calculate a unique activation code based on the FCC ID and serial number of the equipment, a cryptographic technique could be based on the serial number itself or a key pertaining to the piece of equipment bearing that serial number. In the latter case, the Commission would accept confidential submission of such a key, along with the corresponding serial number, from the

manufacturer of the equipment, the web application would base the generation of the unique activation code on the key corresponding to the submitted serial number, the user would enter the unique activation code into the equipment, the equipment would access a corresponding key (based on symmetric and/or asymmetric cryptographic techniques) stored in a user-inaccessible portion of the equipment, the equipment would cryptographically validate the unique activation code using the corresponding key, and the equipment would activate the desired services and/or frequencies for which the user is authorized. The equipment would provide the user with an ability to deactivate the equipment so the user could transfer the equipment to another not covered by the user's license or licenses without conveying activation of services and/or frequencies that were activated based on the user's license or licenses. If the equipment includes a geolocation determining capability, such as a Global Positioning System (GPS) satellite receiver, the equipment could condition operation and/or power output over geographic areas prescribed by the Commission's Rules, such as "areas where radio services are regulated by the FCC except where additional considerations apply," any area where radio services are regulated by the FCC except where additional restrictions apply," "on or over international waters," "north of Line A," "east of Line C," etc. Optionally, the equipment would be equipped with an override capability to allow emergency operation and/or operation if geolocation determining capability is unavailable.

If the user is licensed for several radio services and/or frequencies, either the web application or the equipment would solicit input from the user to determine which services and/or frequencies of which the equipment is capable the user wishes to activate

in the equipment. If the selection is performed using the equipment, the equipment could retain the scope of allowable activations within the equipment to facilitate the user's later revision of the services and/or frequencies the user desires to be active in the equipment. The equipment could allow the user to set a password to prevent others from performing later revision based on the user's activation authority. Even if the equipment has relatively few buttons, knobs, etc. for inputting information and/or lacks an elaborate display for displaying information to the user, the equipment could accept data using repetitive key presses, multiple simultaneous key presses, incremental/decremental key presses, rotary encoder knob rotations, etc., and/or data output could be provided by alphanumeric display, indicator lamp flashing indications, audible tones, synthesized speech, etc. Based on the expiration date or dates of the user's license or licenses, the equipment could limit the duration over which it remains activated for particular services and/or frequencies. Moreover, the equipment could prompt the user to renew the user's license or licenses, promoting continued licensing compliance.

This Commenter submits such a system for activation of equipment could provide motivation for increased GMRS licensing compliance, as GMRS capability could be disabled unless an authenticated GMRS licensee obtained and entered an activation code to enable GMRS capability. Moreover, this Commenter submits equipment certified for use under, e.g., Parts 22, 74, 80, 87, 90, 95, and/or 97 of the Commission's Rules could be freely sold, with its actual operation under those Parts limited to users licensed under those Parts. Thus, this Commenter submits such a system for activation of equipment could recover for the benefit of the United States funds currently being lost through

licensing non-compliance. By automating the authentication and activation code generation and processing tasks, this Commenter submits such a system could minimize paperwork burdens and economic burdens, including paperwork burdens and economic burdens on small entities and small business concerns.

While such a system has been described above with respect to services and/or frequencies, this Commenter submits such services need not constrain operations to specific frequencies but may authorize equipment to either interactively or autonomously select its operating parameters. As one example, "white space" devices are proposed to utilize an interactive procedure for allocating adequate bandwidth for themselves within a designated range of the electromagnetic spectrum. As another example, cognitive radios are proposed to autonomously select their operating parameters, for example, the frequencies at or over which they operate. Accordingly, the issuance of an activation code may be accompanied by communication of parameters and/or criteria upon which operation of "intelligent" interactively coordinated equipment and/or cognitive radio/RF/microwave equipment can base their operation under the authority conveyed by the activation code.

Even if the Commission were not inclined to adopt a technological approach to enablement of operation of radios in other radio services, this Commenter submits the Commission could simply allow the unrestricted sale of FRS-only radios but impose a license verification requirement on the sale of radios that operate in the FRS and some other radio service under any of Parts 80, 97, 90, 95, and 97. Thus, if a purchaser could

produce an appropriate, valid license for a radio service, along with, say, government-issued photographic identification, at the point of sale, the purchaser could buy a combination radio. Otherwise, the purchaser could still purchase an FRS-only radio.

Opening Part 90 Licensing to Individuals

This Commenter notes that the GMRS under Part 95 of the Commission's Rules has served the needs of individuals. Nonetheless, by failing to enforce the GMRS licensing requirements against unlicensed GMRS users, many of which are businesses, as well as by proposing to allow businesses to use GMRS if licensed by rule, as the Commission states in paragraph 30 of the document FCC 10-106 on the Commission's website³³³, this Commenter submits the Commission has subverted the purpose of the GMRS. This Commenter submits the formalization of such subversion through the implementation of the Proposed Rules³³⁴ would encourage further harm to GMRS licensees' interests and, ultimately, the public interest.

This Commenter submits businesses have traditionally been eligible for operation of radios under Part 90 of the Commission's Rules. The Commission states, "We note that businesses successfully use FRS radios...."³³⁵ Now, the Commission considers allowing businesses to use GMRS radios, as they have been doing without license since the advent of inexpensive combined FRS/GMRS radios. This Commenter submits the use of the FRS and the GMRS by businesses, as well as the use of cellular telephone and SMRS

³³³ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 30

³³⁴ 75 Fed. Reg. 47142 *et seq.*

³³⁵ http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0607/FCC-10-106A1 at para. 30

services, such as those that provide a "push to talk" capability have removed much of the incentive for businesses to use radios under Part 90 of the Commission's Rules.

Furthermore, this Commenter submits the amount of spectrum available for Part 90 operations is vastly larger than that available for GMRS and FRS operations combined.

Thus, this Commenter proposes the Commission open Part 90 eligibility to include individuals currently eligible for GMRS licensing and provide at least the same range of privileges current allowed under the GMRS to any individuals who would become licensed under Part 90. Furthermore, this Commenter proposes the Commission allow individuals to operate under Part 90 with the lower regulatory fees of 47 C.F.R. § 1.1152 for the GMRS (e.g., \$5/year) rather than the higher regulatory fees for Part 90 operation below 470 MHz (e.g., \$20/year). This Commenter submits such lower regulatory fees for individuals, where those individuals would be allowed to use their radios for business use, would seem to be viewed favorably under the Regulatory Flexibility Act, as it would be beneficial to "small entities."

CONCLUSION

WHEREFORE, for the foregoing reasons, this Commenter respectfully requests the Commission to act in accordance with this Commenter's recommendations above.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ross Snyder", is written over a horizontal line.

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Dated: September 3, 2010

cc: Chief Counsel for Advocacy of the SBA