

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

In the Matter of)	
)	
1998 Biennial Regulatory Review --)	WT Docket No. 98-182
47 C.F.R Part 90 -)	RM-9222
Private Land Mobile Radio Services)	

**COMMENTS IN OPPOSITION
TO PETITIONS FOR RECONSIDERATION**

Submitted by:

**Dr. Michael C. Trahos, D.O., NCE, CET
4600 King Street, Suite 6K
Alexandria, Virginia 22302-1249**

Date: January 2, 2001

I.

INTRODUCTION

1. Before the Federal Communications Commission (Commission) are Petitions for Reconsideration, filed by Motorola, Inc. (**MOTOROLA PETITION**)¹ and the Personal Radio Steering Group, Inc. (**PRSG PETITION**)², in response to the Report & Order (**MURS ORDER**)³ in WT Docket No. 98-182 which created the new Multi-Use Radio Service (**MURS**).

II.

COMMENTER QUALIFICATIONS

2. Commenter is an unlimited licensed, board certified and actively practicing General Medicine/Family Practice Physician and Surgeon. Commenter holds the academic faculty appointment of Assistant Clinical Professor, Department of Family Medicine, Georgetown University School of Medicine. Commenter holds the current position of Virginia [State] Osteopathic Medical Association Delegate to the American Osteopathic [Medical] Association House of Delegates. Commenter holds the previous positions of President (CY '94) - Alexandria [Virginia] Medical Society and Vice-Councilor - Medical Society of Virginia 8th U.S. Congressional District.

3. Commenter was selected/elected and currently serves as the Special Emergency Radio Service Representative - RPRC and Medical Profession Representative - Technical Committee of the National Public Safety Planning Advisory Committee's (NPSPAC) Region-20 [State of Maryland, Washington, DC, Northern Virginia] 821 MHz Public Safety Regional Plan Review Committee (RPRC), for the development and implementation of a Public Safety National/Regional Plan (GN Docket No. 90-7) for the use of the 821-824/866-869 MHz bands by the Public Safety Services pursuant to the Report and Order in GN Docket No. 87-112.

4. Commenter is also a First Class Telecommunications Engineer, certified by the National Association of Radio and Telecommunications Engineers (NARTE), possessor of a First Class Certificate of Competency, issued by the Association of Public Safety Communications

Officials, Inc. - International (APCO), and Fellow of The Radio Club of America. Commenter has over 25 years experience in the telecommunications field with many of these years spent actively participating in Commission proceedings.

5. Commenter is Commission licensed in the Amateur Radio (ARS), Business Radio (BRS), General Mobile Radio (GMRS) and Special Emergency Radio (SERS) services. Commenter has taken examination for and has been issued the Commission's commercial GMDSS Radio Maintainer, GMDSS Radio Operator, and General Radiotelephone Operator Licenses. It is with having the above extensive expertise in dealing with personal, business, medical and emergency/public assistance communications matters that this Commenter is qualified to submit the following timely filed⁴ **COMMENTS** in response to these Petitions for Reconsideration.

III.

COMMENTS

A. **MOTOROLA PETITION**

6. Motorola asserts that it "does not support the (**MURS**) rule as it currently stands" because the Commission "failed to address any of Motorola's concerns or recommendations that the frequencies continue to be available for business and industrial use."⁵ This assertion is unfounded.

7. The **MURS**, as adopted, permits existing commercial users, of the **MURS** frequencies, to continue their existing operations without interruption and indefinitely. As a currently valid Part 90 licensee on the frequency 154.600 MHz, call sign KNHU-750, the new **MURS** has not prohibited this user from the continued unrestricted use of this frequency.

8. Motorola further requests that: "In the absence of appropriate protections for business and industrial users, the Commission should return the (**MURS**) frequencies to Part 90 use and reinstate the licensing requirements."⁶ This request should be denied.

9. This commenter was originally Part 90 licensed on the frequency 154.600 MHz in 1979, call sign KA6-2757. Over the past 21 years, this licensee has experienced the exponential proliferation of unlicensed operations on this frequency. This has occurred as the result of the sale of disposable "color dot" radios, unscrupulous vendors selling these radios and advising their buyers that the supposed required acquisition of an FCC license was unnecessary, and the widely known extreme lack of Commission enforcement and prosecution of hundreds, if not thousands, of unlicensed users nationwide.

10. Since Motorola failed to concomitantly file a "Motion for Stay", the **MURS ORDER** became effective November 13, 2000. One can only surmise how many hundreds of "color dot" radios on **MURS** frequencies have been sold nationwide since November 13, 2000 and are now being used by non-commercial individuals for personal communications. This fact, coupled with the hundreds of unlicensed operations in existence today, makes it therefore unrealistic for Motorola to believe that the **MURS** frequencies can be restricted for business/industrial use *only* or returned to the 47 CFR Part 90 radio services with reinstatement of licensing.

B. **PRSG PETITION**

11. The PRSG requests that no repeater operations be permitted on the **MURS** frequencies.⁷ This request should be denied.

12. Low-power **MURS** repeaters should definitely be permitted. These repeaters could provide a unique capability, particularly in-building penetration, that cannot be adequately met by any other unlicensed 47 CFR Part 95 radio service. The following example demonstrates this uniqueness.

13. This commenter has used his KHNU-750 authorization in the commercial

maintenance of family owned property. One property is a former four-level hotel building. Each year, the structure is de-winterized and the water lines pressurized. Extreme care and monitoring of the entire structure is needed when pressurizing the system so as to detect winter deep-freeze breaks in any of the water lines. The water main to this structure is substantially larger than that in any home. The on/off valve to this water main is located approximately 15+ feet below ground level, in what communication engineers call a "RF Hole". Events of water damage have occurred in the past because of the failure of the low-power VHF 154.600 MHz radios being able to penetrate into this "RF Hole", to notify the individual at the water main to turn the valve off, when water line breaks have been detected at the distant areas of the building.

14. This commenter has experimented with the other unlicensed 47 CFR Part 95 radios services and, for one reason or another, have been found to be unusable. CB 27 MHz radios are too large with long telescoping antenna, making their use in confined areas impossible. FRS UHF 0.5 watt ERP radios lack the output power to penetrate the "RF Hole". GMRS UHF 5.0 watt radios using a repeater on the building do work, but are not permitted by Commission rule to be use by anyone other than the licensee or their immediate family members. This commenter's commercial plumbers do not qualify as "next-of-kin". "Store & Forward" single frequency VHF repeaters are also unacceptable due to the inherent time-delay in the re-transmission of urgent/emergency information.

15. Pursuant to the **MURS ORDER**, as adopted, operations on the **MURS** channels are to be in accordance to 47 CFR Part 90⁸. Pursuant to 47 CFR 90.35(c)(14), the 151 MHz frequencies are permissively operated as base or fixed "land" stations. A repeater, which is simply a *simultaneous* re-transmit two frequency mobile-relay base station, is nothing more than a natural extension of the existing permitted "land" station uses of these 151 MHz frequencies.

16. Low-power **MURS** repeaters should be properly regulated. Output power and

antenna heights should be restricted pursuant the Commission's low-power use rules under 47 CFR 90.267(a)(3) & 90.267(a)(7) respectively. Modulation emission should be restricted to only type F3E, frequency analog voice modulation.

17. In addition to Commission adopted permissive simplex operations on all **MURS** frequencies⁹, **MURS** repeaters should be configured and restricted such that the 154 MHz frequencies would only be permitted as input repeater frequencies and the 151 MHz frequencies would only be permitted as output repeater frequencies. This would significantly decrease any possible interference to existing simplex operations on the 154 MHz frequencies. **MURS** repeater operators would have to bare the burden of undesired input interference to their repeaters. Selection of which 154 MHz input frequency is paired with which 151 MHz output frequency should be left to the discretion of the **MURS** repeater operator.

IV.

CONCLUSION

18. Motorola is unrealistic in their desire to see the **MURS** frequencies reserved for business use *only* or returned to the 47 CFR Part 90 radio services with reinstatement of licensing. The **MURS** should remain as an unlicensed 47 CFR Part 95 radio service for both business and personal use.

19. PRSG's request that no repeaters be permitted in the **MURS** should be denied. Properly regulated, as discussed supra, **MURS** repeater can co-exist with simplex operations, without harmful interference to existing operations, and provide a capability unmet by any other 47 CFR Part 95 radio service.

20. For the reasons set forth supra, retention of, and the permitted use of repeaters in,

the new **MURS** is in the public interest.

Respectfully submitted,

|s| *Michael C. Trahos, D.O., NCE, CET*

Dr. Michael C. Trahos, D.O., NCE, CET

MCT/mct

V. CERTIFICATE OF SERVICE

I, Michael C. Trahos, do hereby certify that a copy of these **COMMENTS** were sent by first class, United States mail, to the parties listed below on the day and date first above written.

1. Motorola, Inc.
Richard C. Barth, Ph.D. - Vice President and Director, Telecommunications Strategy
Steve Sharkey - Director, Telecommunications Regulation
1350 I Street, NW
Washington, DC 20005
2. Personal Radio Steering Group, Inc.
Corwin D. Moore, Jr. - Administrative Coordinator
P.O. Box 2851
Ann Arbor, MI 48106

Respectfully,

|s| *Michael C. Trahos, D.O., NCE, CET*

Dr. Michael C. Trahos, D.O., NCE, CET

VI. FOOTNOTES

¹ **PETITION FOR RECONSIDERATION**, WT Docket No. 98-182, RM-9222, & PR Docket No. 92-235, Motorola, Inc., November 13, 2000.

² **PETITION FOR RECONSIDERATION**, WT Docket No. 98-182, RM-9222, & PR Docket No. 92-235, Personal Radio Steering Group, Inc., November 13, 2000.

³ **REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULE MAKING**, WT Docket No. 98-182, RM-9222, & PR Docket No. 92-235, FCC 00-235, June 28, 2000.

⁴ See **PUBLIC NOTICE**, FCC Report No. 2457, 65 FR 79365, December 19, 2000.

⁵ **Ibid.**, Footnote 1, at page 4.

⁶ **Ibid.**, at page 2.

⁷ **Ibid.**, Footnote 2, at Paragraph 24.

⁸ **Ibid.**, Footnote 3, at Appendix B, Part 95 - Personal Radio Services

⁹ **Ibid.**, at Paragraph 31.