Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
1998 Biennial Regulatory Review --	)	WT Docket No. 98-182
47 CFR Part 90 – Private Land Mobile	)	RM-9222
Radio Services	)	
	)	
Replacement of Part 90 by Part 88 to Revise	)	PR Docket No. 92-235
The Private Land Mobile Radio Services and	)	
Modify the Policies Governing Them	)	
and	)	
Examination of the Exclusivity and Frequency	)	
Assignment Policies of the Private Land	)	
Mobile Services	)	

COMMENT FOR CONSIDERATION

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I. Background of the Commenter

I, Raymond A. Klatt, Jr., now hold two licenses issued by The Commission. The first is a General Radio Telephone Operator License (PG-19-12922). The second is a station license (WPQR975) in the General Mobile Radio Service (GMRS). I have held two licenses in the Amateur Radio Service (K2DIN, K8RKK). The General Radiotelephone Operator License succeeded a series of Radio Telephone Operator Licenses-First Class, the first of which was issued October 7, 1952. My career included service in commercial radio and television and non-commercial radio. I operate a base and a mobile station in the Citizens Band Radio Service, a pair of hand-held transceivers in the Multi-User Radio Service (MURS) and a pair of hand-held transceivers in the Family Radio Service (FRS). I will begin operation of base and mobile stations in GMRS soon.

As a part of my interest in personal-use radio, for the past year, I have monitored the frequencies of the GMRS, the frequencies of the MURS and groups of frequencies in the Industrial/Business Radio Service (BRS) related to or proximal to GMRS and MURS frequencies. The purpose of this monitoring was to obtain data relating to usage, possibilities of interference and frequency availability periods with an eye toward choosing appropriate operating frequencies for my own use in my area (Washtenaw County, Michigan, and environs).

II. Discussion of Business/Individual/Personal Uses of MURS, GMRS and Adjacent Frequencies.

In monitoring Industrial/Business Radio Service frequencies from 151.6250 MHz to 151.9550 MHz at 15 KHz intervals, all the "color dot" frequencies including 154.5700 MHz, 154.6000 MHz and those in GMRS, and those frequencies just above GMRS, it is possible to form some conclusions about the use of those frequencies outside a major metropolitan area (Detroit, Michigan) in a semi-suburban, semi-rural area (Washtenaw County, Michigan, not within the city of Ann Arbor, Michigan). While those conclusions may not be precisely comparable to other similar areas of the United States, similar usage and availability patterns might be extrapolated from them. There is, of course, no comparison to urban or metropolitan areas nor to rural areas, to which The Commission gives special consideration and frequency assignments as required.

A. MURS Frequency, Power and Antenna Considerations.

The frequency range 151.6250 MHz through 151.9550 MHz includes three of the MURS frequencies. While stations presenting both full and partial quieting are heard in that frequency range, only half of the frequencies seem to be used during monitoring periods during the 14 hours between 10:00 a.m. and 12:00 a.m. Because there are several projects in the area that involve business services such as surveying, construction and supply-delivery, much "itinerant" traffic has been noted on 151.6250 MHz, 151.9400 MHz, 154.5700 MHz and 154.6000 MHz. It could not be determined whether this activity was licensed or unlicensed though nearly all had to do with business activity. No call-signs were heard.

Other frequencies in the monitored range included licensed assignment to a medical airlift helicopter service, business service companies, and a hotel paging service. A private buss/van school transportation organization operates on 151.9550 MHz, apparently from Brighton, Michigan. Many of those give identification by voice or Morse code. A close-by property management service is regularly heard on 151.8350 MHz, but it has not been determined whether that service is licensed since no call-sign has been heard.

During atmospheric activity periods, an ambulance service in London, Ontario, Canada, and an unidentified County Emergency Management Agency two or more counties away have been heard on 151.8800 MHz and 151.8200 MHz respectively. It is, however, doubtful that local transmitters of even 10-watts power output would interfere with those operations.

Because of the relatively high level of radio traffic on three of the five MURS frequencies, it can be concluded that five frequency allocations in MURS is an insufficient number to provide opportunity for personal, licensed or unlicensed use, without improper use or interference. There is the likely result of a "citizens band" reaction of illegal operation of higher power levels than permitted or switching to unauthorized frequencies, which, through operator inadvertence or intent, might cause serious interference to essential near-by services including local government and police or fire operations.

Unlicensed operation on these frequencies is, in part, due to readily available equipment from retail chain stores, which should be discouraged. I would urge The Commission to consider requiring sale of such equipment, in that (or any) manner, be contingent upon proof of a license issued by The Commission to the purchaser, or that the purchaser is in fact an agent or employee of a licensee. The warnings, provided in equipment operations manuals or store

advertising, are most easily ignored by unlicensed purchasers. Since it is unlikely that The Commission would be able to police all unlicensed operation, due mostly to economic considerations, enlistment of the support of equipment distributors and retailers might prove effective in reducing expanded unlicensed operation. A better solution involves an appropriate budget increase to allow for more field office personnel to monitor and enforce the Rules and Regulations. This latter solution is, in my view, the best, and would suggest licensing stations in MURS; this coupled with less easily available equipment should allow for Personal Use operators to obtain licenses and operate legally in a shared frequency band with licensed Business Radio users.

Because licensed or unlicensed operators are likely to seek an operating frequency that is not prone to interference to themselves, the more channels that are available to chose from, the less likely interference will occur to licensed operations such as the medical helicopter service in my area operating on 151.6850 MHz.

The technical specifications of the Part 95 MURS Rules currently available should limit antenna height to 30 feet above ground for base stations, but allow a transmitter power output of 5 watts for base and mobile stations and 2 watts for hand-held portable stations. An ERP of two watts will provide no more effective and reliable communication than can now be achieved in the Citizens Band Radio Service due to its frequencies and conditions, or in the Family Radio Service due to its power output and antenna limitations. Both those services are effective for what they are being used for, but are less than effective where reliable communication within a traveling area in a ten-mile radius from a base station is required. In semi-suburban and semi-rural areas, such a range of reliable communication can be expected as a need of many personal users in a base-to-mobile configuration. While GMRS be may viewed as providing stations with higher operating power, MURS frequencies will "bend" some, and provide reliable communication at power level, antenna and distance specifications described above. GMRS frequencies, while having certain penetration characteristics, are more firmly line-of-sight, so that even the higher power available may not achieve a range of communication beyond the one-to-three mile range of FRS or CB equipment without extremes of antenna height, or use of repeaters, not normally available to the base-to-mobile users needing a ten-mile range.

Given the above observations, I would urge The Commission to consider expanding the number of frequencies available to potential users of MURS to include those 12 frequencies from 151.6400 MHz to 151.9700 MHz inclusive at 30 kHz spacing, but excluding 154.5700 MHz and 154.6000 MHz. In this area, and conceivably in comparable areas, the assignment of more frequencies to MURS would seem to reduce interference possibilities for current licensees for the term of their licenses. There is little or no activity on those "interstitial" frequencies, whereas the frequencies 151.6250 MHz through 151.9550 MHZ, at 30 kHz spacing, are in use fully, in this area.

B. GMRS/FRS Frequency Considerations.

My monitoring of the UHF frequencies from 462.5500 MHz through 462.9250 MHz and from 467.5500 MHz through 467.9250 MHz would seem to indicate that no more conflicts or interference possibilities would exist than might be encountered currently on present MURS frequencies. Because GMRS is a licensed service and because equipment for the service is three- to five-times as expensive as some available VHF equipment, and because FRS equipment

is inexpensive, there appears to be no illegal operation in both GMRS and FRS. In this area, there is a licensed base-mobile-repeater operation by an appliance repair company on 462.5500/467.5500 MHz. My GMRS station will be located north of Line A, so my license prohibits operation on 462.6500/467.6500 and 462.7000/467.7000 MHz. Effectively, only five of eight full power channels are available to me, as are six of seven 5-watt interstitial frequencies. 462.5625 MHz is unusable due to adjacent channel interference from the 462.5500/467.550 MHz licensed operation. Interestingly, some 10 of the 14 FRS channels are in relatively constant use within the circle of one-mile radius from my home. And, just yesterday, a pipe-laying operation began construction activity 500 yards down my street, operating on 462.6375 MHz with voice-activated portables.

If I would choose to avoid the travelers' aid frequency of 462.6750 MHz during routine operations, the full power channel options are reduced to four. This led me to monitor usage and traffic on the frequencies, just above GMRS, of 462.7375 through 462.9250 MHz and 467.7375 through 467.9250 MHz. These ranges include the 462 MHz paging assignments and 467 MHz low power "color dot" frequencies. There are three paging services operating in this vicinity (one is St. Joseph Mercy Hospital about 10 miles east, the second is a telephone message service, the third appears to be a data service) and there is "itinerant" use on the "blue star" 467.9250 MHz channel.

If The Commission were to extend the GMRS and FRS frequencies available through 462.9250 MHz and 467.9250 MHz, eight additional GMRS full power frequencies would become available, five usable in my area. FRS channels would double to 28. Further, no more GMRS frequency conflicts would be encountered than would be found presently in MURS. Extending the number of frequencies available in GMRS and FRS might tend to attract increased use of both services and reduce operation of unlicensed stations on the Business Radio Service frequencies about 151 MHz and 154 MHz. Paging services operating in the 467.7500-462.9250 MHz band might wish to modernize to wireless telephone or other paging systems operating at much higher frequencies as their license terms expire. GMRS rules should remain as they are, as should FRS rules.

III. Summary of Comments for Consideration.

A. Increase the number of frequency assignments in MURS to include: 151.640, 151.670, 151.700, 151.730, 151.760, 151.790, 151.820, 151.850, 151.880, 151.910, 151.940 and 151.970 MHz. Exclude 154.570 and 154.600 MHz. This should actually reduce interference to BRS licensees during the terms of their licenses. If MURS users increase in number during the next five years, equipment manufacturers should find this attractive in two ways. First, there is the increased market for 151 MHz equipment; second, business licensees may wish to replace older 151 MHz equipment with equipment capable of operating in other service bands.

B. Increase the maximum transmitter power output in MURS to 5 watts for base and mobile stations and 2 watts for hand-held portable transceivers, and limit antenna height to 30 feet. This would provide for a needed communication capability that is not easily or readily available in other Personal Radio Services.

C. Increase channels available to FRS users and GMRS licensees to include for GMRS: 462.7500, 462.7750, 462.8000, 462.8250, 462.8500, 462.8750, 462.9000, 462.9250 MHz, with the appropriate paired frequencies 5 MHz higher (467.7500 through 467.9250 MHz). The interstitial frequencies of 462.7625 MHz through 462.9125 MHz become the 5-watt GMRS and 0.5-watt FRS extension, and the 467.7625 through 467.9125 MHz interstitials become the additional 0.5-watt FRS extension. This would serve both services by allowing more participation and could reduce further unlicensed operation in other services, notably in the 151 MHz Business Radio Service. Otherwise, GMRS and FRS Rules should remain as they are.

IV. Conclusion.

This Comment for Consideration is submitted to The Commission to suggest additional action by The Commission that would allow greater and more effective citizen participation in inter-related services: the General Mobile Radio Service, the Family Radio Service and the Multi-User Radio Service. While inter-related, each of those services provides different capabilities for the individual user.

To allow unlicensed use on certain 151 MHz frequencies simply because they are being used in that way would seem to defeat the intent of The Rules and Regulations and weaken them and the effectiveness of The Commission in these and other matters in the eyes of the public. The word will spread that reliable communication is now available on 151 MHz and equipment is available for general use. I have already heard truckers discussing (on CB Ch. 19) which frequencies they would use and on which to "put the four-wheelers".

The better approach would be to assign the 12 frequencies, mentioned in III.A. above, to a licensed Personal/Industrial/Business Radio Service with technical specifications including those described in III.B. above for Personal Users, all with appropriate supervision and enforcement by The Commission. This would serve many individual users by providing reliable communication of a sort that cannot be found in the Citizens Band, or in FRS, or in an extended GMRS without extreme or expensive station installations

The intent in these considerations is that the current careless and casual users would remain in the Citizens Band, and that careful and considerate users, who do have specific needs for reliable communication, might take advantage of the special and reliable communications features currently offered and as proposed here in MURS, or in an expanded GMRS and FRS.

Respectfully Submitted,

/s/ Raymond A. Klatt, Jr.

Since this COMMENT is general in nature and no direct argument is made herein to any specific Petition for Reconsideration under Docket 98-182, no Service has been made and no Certificate of Service is included.