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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

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In the Matter of	)	
	)	
Proposed Reallocation of	)	
420 to 430 MHZ and 440 to	)	RM 9267
450 MHZ from the Federal	)	
Government to the Private	)	
Mobile Radio Service	)	

TO : The Commission

FORMAL COMMENTS ON

PROPOSED RULE MAKING RM-9267

SUBMITTED BY

JOHN W. BOHLING, KE6IVV

May 20, 1998

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Executive Summary

The Land Mobile Communications Council (LMCC) has submitted a proposed rule change dated April 22, 1998. The FCC has accepted the request, identifying it as RM-9267, with comments due by June 1, 1998.

As a licensed Amateur Radio operator, I find the proposal to reallocate significant portions of the 420 to 450 MHZ band to be devastating to the Amateur Radio usage of the affected portions.

Specifically, the reallocation of the 420 to 430 MHZ and the 440 to 450 MHZ sub-bands to LMCC usage would essentially cause Amateur Radio operations to cease in those band portions. I believe it would be virtually impossible for both services to operate concurrently in the same frequency band. This is a very highly utilized Amateur band, especially the 440 to 450 MHZ portion, with hundreds of thousands of Amateur operators currently using this band on a frequent basis.

The reallocation would not only affect the operators themselves, but also severely impact the emergency services Amateurs provide the nation and their local communities during disasters such as floods, earthquakes, hurricanes, ice storms, etc, as has been repeatedly demonstrated over the last several years. The 440 to 450 MHZ sub-band is a critical portion of our emergency response in most served areas.

With the crowding of the Amateur 2 meter band, more and more operations are moving to the 440 to 450 MHZ sub-band. There are currently over 8000 Amateur repeaters on the 440 to 450 MHZ band in the U.S., many on high ground with wide area coverage. This would inevitably cover areas that the LMCC would want to set up operations in, probably in almost every case. Thus, if the LMCC becomes the new primary user of this band, Amateur Radio operations on this band would be essentially ended, and the critical emergency service supported on this band would be severely impacted.

For these reasons and others, I strongly urge the Commission to not approve RM-9267.

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FORMAL COMMENTS ON
PROPOSED RULE MAKING RM-9267
SUBMITTED BY

JOHN W. BOHLING, KE6IVV
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209-575-1141

1. I am submitting the following as a formal comment on RM-9267.

2. I have just become aware of RM-9267, and its **VERY HIGHLY NEGATIVE** implications to Amateur Radio operation in the 420 to 450 MHZ band. I strongly believe that approval of this portion of the RM would destroy virtually all Amateur use of the affected portions of the band, especially in the very highly utilized 440 to 450 MHZ segment.

3. I am an Advanced class Amateur Radio operator, and have been licensed for just over four years. Although I can use almost all of the bands allocated for Amateur Radio usage, I find that most of my operating time is spent in the 2 meter and 440 MHZ bands. I own four "dual-

band" radios that operate in both of those bands, and one dedicated 440 to 450 MHZ radio. Although I believe the proposed RM would affect both the 420 to 430 MHZ and the 440 to 450 MHZ segments, I am personally especially concerned about the 440 to 450 MHZ portion. My comments should not be interpreted to imply that I am not also concerned about the 420 to 430 MHZ segment.

4. **Specific Comments:**

a. **Although Amateur Radio operators use all segments of the 420 to 450 MHZ band, much of the use is concentrated in the 440 to 450 MHZ segment.** This band is currently shared with government Radio Location Service usage, with Amateur usage being secondary. However, with the relatively limited government use of the band, **Amateur Radio has been able to operate virtually as a primary user.**

b. **There are currently over 8000 repeaters that operate in the 440 to 450 MHZ band.** These repeaters are both privately and club owned stations, including stations intended primarily for emergency service use. Each of these stations cost several thousand dollars to set up, and more to maintain. They are placed in many locations, from the top of high mountains to the roofs of buildings to locations at personal residences. They cover areas varying from ranges of several miles to a hundred miles or more. At my location, I can monitor and use over 20 repeaters in this band, some of them 70 to 80 miles away.

c. **If the Land Mobile Communications Council's (LMCC) proposed RM-9267 is adopted, virtually every current Amateur Radio repeater in this band, as well as most simplex operations, would have to go off the air.** Whereas the government's "primary" usage was very limited and permitted the virtual full Amateur Radio utilization of this band, the LMCC

usage would be very widespread and, with LMCC as the new "primary" user, Amateurs would be relegated to virtually non-existent users of the band. I believe that, based upon the LMCC RM, their users would within a few years be located in most significant population centers, and all Amateur Radio usage of the band in those areas would have to cease at that time. Virtually all of the above repeaters, as well as most simplex operation, would have to cease.

d. The loss of this band to Amateur Radio would affect not only the Amateurs themselves, but also the community at large. Time and again, the value of Amateur Radio during emergency situations has been demonstrated. Here in California, the recent Northridge and Loma Prieta earthquakes both utilized Amateur Radio for many days in critical lifesaving, government agency coordination, and health and welfare communications. Other disasters across the country, from floods in California, North Dakota and Missouri, to ice storms in Maine, to Hurricane Andrew and others have repeatedly shown the critical need for Amateur Radio emergency assistance. A local hospital official, recently transferred here from Florida, told me that during Hurricane Andrew, "Amateur Radio saved our _____," and for days was virtually the only reliable means of communications they had. The record is replete with other such examples. **There is little doubt of the nationally significant value of Amateur Radio during times of disaster.**

e. The 440 to 450 MHZ band, and especially the repeaters mentioned above, play a critical role in Amateur Radio disaster assistance. The primary means of communicating during emergency assistance is on the 2 meter and the 440 to 450 MHZ bands. Our local Amateur Radio Emergency Services (ARES) group utilizes both bands extensively during both disaster assistance and drills. The local ARES was utilized extensively during the

1997 floods in Modesto, California, and again briefly during the 1998 local flooding. We found a critical need for the 440 to 450 MHZ band. This usage included both the use of repeaters, and also the technique of "cross-band repeating" wherein a person in a poor operating location could transmit on a 440 MHZ frequency to a "cross-band repeater" he had located in his personal vehicle, and the "cross-band repeater" would then retransmit on the 2 meter repeater frequency being currently used by ARES. It is not possible to use this technique with both links within the same band. **The 440 to 450 MHZ band is of critical importance in Amateur Radio's response to disasters.**

f. The loss of use of the 440 to 450 MHZ band would adversely affect a very large majority of Amateur Radio operators. The entry level radio for the vast majority of newly licensed Amateur Radio operators is the 2 meter band, followed soon by a combination 2 meter and 440 - 450 MHZ radio. This is the so called "dual-band" radio, by far the most popular selling Amateur radio (in both handheld and "mobile" formats). Of the 700,000 or so Amateur Radio operators in the U.S., I would estimate well over half have dual-banders and many more have dedicated 440 to 450 MHZ radios. Although we also have access to the 222 to 225 MHZ band, it is not as useful for this purpose as are the 2 meter and 440 bands, and most of the dual-banders are for the 2 meter/440 bands.

5. <u>Other Comments on the proposed RM:</u>

a. Para 69 notes that PMRS already uses 420-430 MHZ in three 'Canadian border cities,' (Detroit, Cleveland and Buffalo) with a substantial number of PMRS systems implemented there, and with no interference problems with either Canadian systems across the border, or with Federal Government systems in the U.S. This *could be interpreted* to imply that Amateur Radio

can co-exist with PMRS without interference. Unstated is that Amateur Radio is already prohibited from any operations in this band at those locations (and for many miles beyond those locations) because of proximity to the Canadian border. **Thus, this situation in no way suggests that Amateur Radio and PMRS can successfully co-exist.**

b. The proposal acknowledges Amateur Radio's use of the 420 to 430 and 440 to 450 MHZ band segments, and suggests that ham radio applications can "*remain* secondary to Private Mobile Radio Service (PMRS)" in those segments, but offers no explanation of how sharing could be accomplished. I have detailed above how I believe that **sharing *cannot* be accomplished** without the virtual destruction of all Amateur Radio usage of those band segments. Additionally, the suggestion that Amateur Radio ***"remain secondary to PMRS"*** implies that it ***already is secondary to PMRS***, whereas in fact they are requesting that ***PMRS be moved from non-existent to primary***, skipping over Amateur Radio in the process. **This is a misleading *spin* to the facts.**

c. The LMCC says it believes the 430 to 440 MHZ segment "is more important to the amateurs for use in emerging technologies such as links with spacecraft and amateur television applications." ***This again is spin.*** For those specific uses, the 430 to 440 segment may be more important. However, the implied assumption (*spin*) that this is the major use of the entire band, and that other uses (as I have described above) are non-existent or unimportant, is misleading at best. In the 430 to 440 MHZ segment, "emerging technologies such as links with spacecraft and amateur television" may be a significant use. **But in the 440 to 450 MHZ segment which they want to become primary users of, the loss of Amateur Radio usage for voice communications would be critical (as discussed above).**

d. The LMCC suggests that their usage of these bands would lead to advanced technology which would benefit hams "pursuing such applications as compressed video television in the 430-440 MHZ band." However, they note that their "most urgent need" for PMRS is voice and low-speed data applications, not advanced technologies which might come later on. If I were to accept that advanced technologies such as compressed video TV may be of benefit to me, or that this was one of my primary interests in this band, it still appears that it will be many years before the "advanced technology" would be developed or available. However, I still claim this is of little use or interest to many hams; and that the voice communications through simplex and repeaters, as is currently highly utilized in the 440 to 450 MHZ segment, is by far the most highly needed and desired usage.

6. <u>Summary</u>:

It seems interesting that the LMCC has identified, essentially out of the blue, a need for so much additional spectrum. I accept that they need help in a few large metropolitan areas, but the proposals to usurp critical portions of the highly utilized 70cm Amateur Radio band, nationwide, is unreasonable. That seems like a simple solution for them, as they can easily modify their existing equipment for such usage. This is not the case for Amateur Radio operators, who currently own a lot of existing equipment that has fixed frequency range in the 420 to 450 MHZ band, and cannot be readily modified. The impact to all phases of Amateur activity, from emergency service to assisting public events to experimentation to increasing technical expertise to influencing young leaders of the future to just personal communication would be great. The 420 to 450 MHZ Amateur band has been developed and is fully utilized nationwide. Amateur Radio was the primary user until the cold war caused the government to utilize the band for radio

position finding (RADAR) on a primary (but limited impact) basis. The LMCC apparently suggests that this usage is no longer important enough for primary positioning, but that Amateur Radio interests should still remain secondary. To become secondary to what would be a new widespread primary user (as opposed to the relatively limited current primary user) would for all intents and purposes end Amateur usage of those portions of the band, which include the most highly utilized 440 to 450 MHz portion. The seizure of long established Amateur Radio spectrum must be allowed only in the most critical of national interest needs, not for the mere convenience of a new user who has numerous other options.

7. **Conclusion and Recommendation:**

Based upon the above facts, I respectfully request that the Commission *NOT APPROVE* RM-9267.

Respectfully submitted,

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Date: May 20, 1998