

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

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In the matter of )  
)  
An Allocation of Spectrum for the ) \_\_\_\_\_ RM-9267  
Private Mobile Radio Services )  
)  
TO: The Commission )

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Reply Comments  
\_\_\_\_\_

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Summary:

The Land Mobile Communications Council ("LMCC") has submitted a Petition for Rule Making seeking an allocation of spectrum for the Private Mobile Radio Services ("PMRS"). Their solution to crowding in spectrum presently assigned to the PMRS is the re-assignment of frequencies presently assigned to the Government for Radiolocation (RADAR) on a primary basis and the Amateur Radio Service on a secondary basis: 420 - 430 MHz and 440 - 450 MHz a total of 20 MHz. To offset this constriction the LMCC has suggested amateurs be assigned 1390 - 1395 and 1427 - 1432 MHz -- a total of 10 MHz. LMCC provides no solution as to the disposition of the 6,694<sup>1</sup> amateur repeaters using 440 - 450 MHz or the equipment (hand-held, mobile and fixed

<sup>1</sup> See The ARRL Repeater Directory, 1998-1998 edition, pages 409 - 566.

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station) owned by the repeater users. The examples used by LMCC as far as life safety concerns with present allocations call for point-to-point communications and not paired frequencies. The amateur service does have legitimate safety of life concerns if 420 - 430 and 440 - 450 MHz are abandoned. The conclusion is: that while the LMCC may have a case for additional spectrum it should not be at the expense of the amateur service. A solution would be to use the lightly or poorly used government spectrum between 225 and 400 MHz.

Reply comments follow.

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**Reply Comments  
Submitted by  
John H. Nelson**

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1. I hold an Amateur Extra Class license with the callsign, K0IO and was first licensed in 1961 as a Technician Class Licensee (with code requirement) which at that time gave privileges on amateur bands from 50 MHz and higher. During World War II my father designed the RDZ 200 - 400 MHz receiver and also did design work on the Autotune feature of the TDZ UHF transmitter while he was at the Naval Research Laboratory. So my father was a very willing consultant when I built a 50 MHz amateur station while in junior high school. My first serious use of the 420 - 450 MHz amateur band was in December, 1965 when OSCAR IV (Orbital Satellite Carrying Amateur Radio) was launched. I built a 435 MHz helical antenna and helped set up a station for a fellow amateur and we were all thrilled on the first acquisition of the satellite's beacon even though we did not make a contact with another radio amateur through the satellite transponder, though we heard other stations. After graduating from The University of South Dakota in 1970, I began a career of 24 years with The American Radio Relay League (the national association of amateur radio operators -- ARRL) in Newington,

Connecticut where I held positions as Assistant Circulation Manager, Circulation Manager, Deputy Publications Manager, and Manager of Planning and Financial Analysis, a position which was eliminated in early 1995. As Deputy Publications Manager, I spent several months as Acting Advertising Manager for the League's journal QST and this experience gives me serious insight as to the economic impact the LMCC petition (if accepted) would have on the amateur radio industry.

2. The LMCC proposes as a solution to their displacing 20 MHz used by radio amateurs in the 420 - 450 MHz band, by reallocating 10 MHz at 1390 - 1395 and 1427 - 1432 MHz. 20 MHz for 10 MHz is not a fair solution. As mentioned in the summary, there are 6,694 amateur repeaters making use of the band between 440 and 450 MHz. In the band between 420 and 430 MHz are Amateur Television Repeater outputs, control links and Amateur Television simplex frequencies. There are 203 Amateur Television Repeaters using the 420 - 440 MHz frequencies for inputs and outputs. There are even more control links for repeaters on different amateur bands as well as digital repeaters.

3. The LMCC petition uses examples of PMRS uses which are not applicable to the use of frequency pair operation and these examples do not support the use of 420 - 430 MHz and 440 - 450 MHz. Some examples:

a) Petition Page 8 paragraph 16: Dock workers killed unloading freight. A simple solution to such shared radio usage would be

for crane operators to have tone-access receivers which are activated only when the proper sub-carrier tone is detected from the hand-held radio used by the dock worker.

b) Petition Page 22 paragraph 56: The Conrail policeman who notified the engineer was no doubt using a simplex channel (given an Association of American Railroads channel number) Railroads have made good use of simplex channels for more than 50 years -- what is the need for duplex channels?

4. Using words from the LMCC petition, "An allocation of spectrum located too far from bands where existing equipment operates would require lengthy and more costly equipment development process to be completed before such spectrum could be put to use. (LMCC petition pages 29-30, paragraph 68.) So wouldn't this be a problem for the displaced amateurs going from 420 - 430 MHz and 440 - 450 MHz up 970 MHz to 1390 - 1395 MHz and 1427 -1432 MHz? Use of equipment designed for the 1240 - 1300 MHz amateur band would also be impractical. There are 17 protected sites in the 1390 - 1400 MHz band and 1427 - 1432 MHz has 14 protected sites for 14 and 9 years respectively. "Many of these protected sites are in key urban areas," according to the LMCC petition pages 32 -33, paragraph 77. These protected sites make a move to these bands undesirable for the amateur service as well and these "urban sites" are where the highest amateur radio service activity is to be found.

5. I will defer to comments made by The American Radio Relay League, Inc. regarding the purported secondary status of the amateur service to the PMRS in the 420 - 450 MHz portion of the spectrum as described in the LMCC petition.

6. Amateur service use of the 420 - 450 MHz band played a key role in recent weather emergencies<sup>1</sup>. A tornado ripped a ten-mile swath through the Gainesville area of northeastern Georgia on March 20. The Lanierland Amateur Radio Club went to work immediately setting up a VHF net as well as using the clubs UHF (420 - 450 MHz) repeater autopatch to make emergency telephone calls since power had been knocked out and cellular systems became overloaded and unusable. In Minnesota, the town of St. Peter was hit by a serious tornado on March 29 and the town of Comfrey was all but destroyed. Radio amateurs put up a dipole to get the local broadcast station on the air since its towers were downed and coordinated the acquisition of a generator for use at the water tower to reactivate the St. Peter VHF/UHF amateur and public safety repeaters and to power the water tower itself. Police and public works antennas had blown off the water tower so these transmitters were switched over to the ham antennas which had survived the over 200 mph winds. The amateur VHF and UHF repeaters were put over to mag mount antennas temporarily. And so it went in Alabama and Tennessee where both VHF and UHF amateur equipment was pressed into use after severe tornadoes. There are almost as many UHF (420 - 450 MHz) repeaters in use now as there are in the 144 - 148

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<sup>1</sup> QST, June, 1998 The American Radio Relay League, Inc. pages 63 - 65.

MHz band which saw the first serious amateur repeater activity. Counting digipeaters and the use of links plus amateur television use of the UHF band there is probably more activity than on VHF frequencies.

7. The following is from the ARRL Letter Online, Volume 17, Number 21 (May 22, 1998):

#### HALLER TO PMRS: LOOK ELSEWHERE FOR SPECTRUM

Former FCC Private Radio Bureau chief turned communications consultant Ralph Haller says he supports the goals of the petition--now designated RM-9267--recently filed by the Land Mobile Communications Council. But Haller, who's N4RH, also believes that the Private Mobile Radio Service ought to look somewhere other than the 70 cm band to satisfy its immediate spectrum needs. "If I had my druthers, I would not go after amateur spectrum, I would go after federal spectrum," he said, adding that he recently bought a dual-band mobile transceiver.

The LMCC has requested that the FCC immediately reallocate 420 to 430 MHz and 440 to 450 MHz segments from the federal government to the PMRS. Amateur Radio enjoys secondary status on the band. Haller said there's plenty of spectrum between 225 and 400 MHz that--to his way of thinking at least--is "not being used efficiently by the federal government." Haller--whose clients include two LMCC members--said his quoted remarks

in a recent issue of Wireless Week had "nothing to do with ham radio" and failed to reflect his full views on the issue. He said he raised some of his concerns about the direction of the LMCC petition before it was filed but was not in a position to do anything about it. But he emphasized that he supports its general aims.

"I certainly support the goals of the LMCC petition, but I would recommend that they look to other spectrum to satisfy that need," he said.

Haller said the LMCC petition represents "a serious issue for the amateur community." While he was at the FCC, Haller got a chance to see similar circumstances firsthand during the fight for 220 MHz. "The toughest decisions for the FCC are spectrum decisions," he said. The ham community needs to convince the FCC that Amateur Radio is making "the highest and best use of this band."

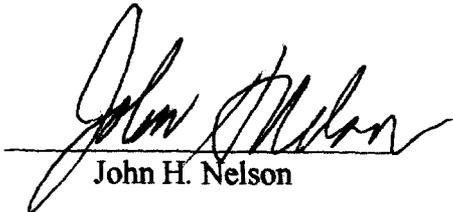
Haller said that from the FCC's perspective, the 220 MHz fight "was not a pretty sight." He said hams take challenges to their bands personally. "It's quite a different sort of fight," he said. "It's like taking away part of their lives." While hams lost the 220 MHz fight, Haller said the Amateur Radio community demonstrated a real ability to muster support

for its side. (End of Mr. Haller's comments.)

8. While the LMCC petition makes a point that more frequencies are needed for the PMRS, this should not be done at the expense of the amateur service in the 420 - 450 MHz band and other alternatives such as those put forth by Mr. Haller should be investigated.

Respectfully submitted,

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May 28, 1998