

May 10, 2011

Hon. Peter King
Member of Congress
1003 Park Boulevard
Massapequa Park, NY 11762

Dear Rep. King:

CQ Communications, Inc. is a constituent business in your district. We are publishers of magazines, books and videos focusing primarily on personal radio communications (amateur and CB radio, shortwave listening, etc.), and have had our offices in Hicksville since 1979.

We are writing with reference to a bill that you are sponsoring, HR 607. By now, we are certain that you are familiar with the concerns expressed by amateur radio operators about the provision of that bill that would require the FCC to auction off 420-440 MHz and 450-470 MHz to attempt to provide substitute spectrum to wireless providers who would lose spectrum to a national interoperable emergency response network. While we fully share those concerns, we will not repeat them here. Rather, we would like to point out other reasons - *including two that are homeland-security related* - why we believe that reallocating 420-440 MHz and 450-470 MHz would be a very poor policy.

First of all, these two frequency bands are described in the legislation as being "paired" bands. This is incorrect. The two segments are allocated to entirely different groups of users. The entirety of the 420-450 MHz band is currently allocated to only two services -- government radiolocation (radar) [primary] and amateur [secondary]. The 450-470 MHz band is allocated to a mix of private land mobile (business), maritime, remote broadcast pickup, public safety, weather satellites and personal radio (Family Radio Service). While there are some paired frequencies within the 450-470 MHz band, there is no linkage between frequencies in the 420-440 band and the 450-470 band.

In the 420-440 band, the primary allocation is government radiolocation, or radar. This band is actively in use today for the Air Force's PAVE PAWS radar system, which is our shorelines' first line of defense against submarine-launched missiles. As Chairman of the House Homeland Security Committee, we seriously doubt that you would want to consciously impair this vital homeland defense system. Moving the PAVE PAWS system to different frequencies would not only reduce its effectiveness (it is currently operating on the ideal frequencies for its purposes) but would cost the taxpayers millions of dollars in retrofitting equipment and re-coordinating with other spectrum users in a new band of

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frequencies. At a time when we are trying to reduce our budget deficit and national debt, it does not seem prudent to mandate the unnecessary expenditure of millions of taxpayer dollars to move a vital national defense system that is functioning very well right where it is.

In addition, the FCC recently approved - over the objections of many radio amateurs - a petition by ReconRobotics for a waiver to operate remote-controlled, maneuverable, surveillance robots in the 420-450 MHz band. These robots, currently used by the military in combat settings, would be used domestically by law enforcement to go into areas deemed potentially too hazardous for sending in police officers. The manufacturer argued convincingly that the 420-450 MHz band is the range of frequencies in which these robots will function most effectively. Two of the three specific frequency ranges in which these robots operate, 430-436 MHz and 436-442 MHz, lie within the spectrum that your bill would require the FCC to auction off. Again, the use of these robots is essential for homeland security purposes (e.g., investigating possible terrorist bombs) and we cannot imagine that the Chairman of the House Homeland Security Committee would knowingly attempt to compromise their effectiveness by reallocating the frequencies on which they work best.

In the 450-470 MHz band, the legislation requires that all public safety users (in fact all public safety agencies using any frequency between 170 and 512 MHz) move to the 700-800 MHz range. Again, this would come at massive taxpayer expense, further straining municipal, county and state budgets that are already stretched to the limit. And there would be no technical reason for mandating this huge expenditure of taxpayer funds. In addition, there are thousands of mostly-small businesses, such as taxi companies, delivery companies, construction firms and others, that use the private land-mobile portions of the 450-470 MHz band for their day-to-day business communications. The legislation makes no mention of where they would be accommodated or of the significant financial burden that it would place on these businesses, many of which are already struggling to make ends meet. Furthermore, 450-470 MHz is the home of the Family Radio Service (FRS). There are currently millions of FRS transceivers in the public's hands and it will be virtually impossible to identify all of the users, let alone persuade them to spend their hard-earned money to replace radios that work perfectly well. (It is impossible to identify all users because individual licenses are not required; therefore, the FCC has no record of who owns or uses FRS transceivers.)

This band is also used for weather satellites. We all know how essential it is to have early warning of approaching storm systems in being prepared for hurricanes, tornadoes and other weather-related emergencies. Seeing as it is impossible to send technicians into orbit to change the operating frequencies of these satellites (and it would be impossibly expensive even if we hadn't just retired the shuttle fleet), reallocating these frequencies would effectively render useless the weather satellites operating on these frequencies. Again, this does not seem like an advisable course of action.

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Finally, while these frequencies are ideal for their current uses, including PAVE PAWS, military and law enforcement reconnaissance robots, amateur radio emergency communications and amateur satellite operations (including backup communications for the International Space Station), they are *not* ideal frequencies for wireless network use. Wireless networks are built around short-range signals on line-of-sight frequencies which permit the reuse of individual frequency pairs on a closely-spaced basis. Signals in the 420-470 MHz range propagate much farther than those in the microwave bands currently used for wireless network communications (e.g., 2 GHz and 5 GHz) and given the proper weather conditions, may travel hundreds of miles. Using these frequencies would require much greater distances before a frequency pair could be reused, and even then, given the proper conditions, massive interference may still result when "the band is open" for great distances.

In summary, in addition to the concerns expressed by amateur radio operators about the possible reallocation of 420-440 MHz, we believe that this reallocation would be harmful to homeland security by compromising the abilities of radar protecting our coastlines and of surveillance robots protecting our citizens from terrorists and terrorist bombs; that it would result in the unnecessary expenditure of millions of taxpayer dollars at a time when we are attempting to reduce government spending wherever possible, that it would impose unreasonable financial burdens on small businesses and families, that it would not be feasible to identify and relocate all the millions of users of the Family Radio Service, and that these frequencies would not be suitable for high-speed wireless networks even if there were no other services being displaced.

We urge you to amend HR 607 to remove the mandate that the FCC auction off 420-440 MHz and 450-470 MHz as part of establishing a national interoperable emergency radio system. Should you or a member of your staff wish to discuss this further, we can be available at your convenience to do so.

Sincerely,



Richard A. Ross, Publisher



Richard S. Moseson, Editorial Director

cc: Hon. Greg Walden, Chairman
Hon. Anne Eshoo, Ranking Member
Communication and Technology Subcommittee