

**Statement of Christopher D. Imlay, General Counsel
On behalf of
ARRL, the national association for Amateur Radio**

Hearing on “Creating an Interoperable Public Safety Network”

Before the Subcommittee on Communications and Technology

Committee on Energy and Commerce

U.S. House of Representatives

May 25, 2011

I. Summary of Testimony

1. In emergencies, and during disasters and their immediate aftermath, when other communications systems have failed, volunteer Amateur Radio operators are ready, willing, able and prepared to provide restoration communications; interoperable communications for first responders which lack that capability; and operations and support communications for disaster relief organizations and served agencies.

2. Radio Amateurs quickly re-establish communications during that critical window of time between a disaster's occurrence and the re-establishment of normal communications.

3. ARRL is fully supportive of the creation of a nationwide interoperable broadband network for Public Safety, and of the developing standards for interoperable narrowband communications for public safety in the 700 MHz band. However, new public safety interoperable networks will be subject to disruptions, overload, or failure under certain circumstances. It will continue to be necessary in the future for Amateur Radio operators to provide temporary communications and facilities for first responders and disaster recovery agencies at the outset of local and regional disasters and it will be necessary to provide temporary interoperability between and among first responders and disaster relief agencies.

4. Before the Committee on Energy and Commerce is the "*Broadband for First Responders' Act of 2011*" H.R. 607. This Bill proposes to allocate the "D-Block" of frequencies in the 700 MHz band to the Public Safety Radio Service, and the creation of an interoperable Public Safety wireless network. These goals are admirable, but this Bill uniquely includes a provision for the reallocation and commercial auction of the frequency bands 420-440 MHz and 450-470 MHz. These are not public safety bands and their reallocation would displace an extremely large number of critical, non-Public Safety uses of these frequency bands (services which would derive no benefit at all from the allocation to Public Safety of the D-Block or the creation of a Public Safety broadband network) including the Amateur Radio Service.

5. ARRL urges the deletion of Section 207(d) of H.R. 607 should the Committee decide to use this version of the legislation in any future markup.

II. Statement of Christopher D. Imlay General Counsel; ARRL, the national association for Amateur Radio

Thank you, Chairman Walden and other members of the Subcommittee for this opportunity to testify on the topic of creating an interoperable public safety network.

I have had the privilege of serving for the past 30 years as General Counsel for ARRL, the national association for Amateur Radio (formally known as the American Radio Relay League, Incorporated). ARRL is a Connecticut non-profit association which has for the past 97 years represented and advocated the interests of the nation's 700,000 Amateur Radio operators, all of whom are licensed by the Federal Communications Commission to serve the public, especially in times of natural and other disasters. Amateur Radio exists for a number of reasons, principal among which (as the FCC regulations put it) is its value "to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications." The FCC has at times described the Amateur Service as a "model of volunteerism" and a "priceless public benefit."

Amateur Radio operators are not first responders. But in emergencies, and during disasters and their immediate aftermath, when other

communications systems have failed, volunteer amateur radio operators are ready, willing, able and prepared to provide restoration communications; interoperable communications for first responders which lack that capability; and operations and support communications for disaster relief organizations and served agencies such as the American National Red Cross and the Salvation Army. Amateur Radio is durable and is not susceptible to the same disruptions caused by disasters as are broadband networks; cellular networks; and even public safety dispatch systems. This is because Amateur Radio does not rely on centralized or decentralized infrastructure. Because of Amateur Radio operators' technical self-training and flexibility, they can and do provide emergency communications with no infrastructure at all. Amateur Radio mobile and portable facilities can be established on site and at strategic locations off-site to provide reliable, immediate disaster relief communications instantly, within or outside the disaster area, over any path distance and to any location whatsoever. This flexibility makes it possible to provide communications for first responders and served agencies, as well as temporary interoperability facilities for first responders. A good recent example of this ability was demonstrated in the aftermath of Hurricane Katrina, during which radio Amateurs provided communications (as but one example) from helicopters to first responders on the ground to facilitate

rescue operations. Amateurs are best known for their immediate responses to hurricanes, tornadoes, earthquakes, snow and ice storms, floods and other natural disasters, and their preparedness for immediate, organized deployment in large numbers. They are immediately available during and in the aftermath of such events, and they provide communications in support of public safety and disaster relief agencies and state emergency response agencies without any advance request to do so. The level of organization and preparedness comes from regular drills, exercises and emergency simulations and they are integrated into emergency planning. ARRL conducts emergency communications certification courses that provide the educational background necessary for such serious work.

Radio Amateurs have proved over and over again that because of their training and their willingness to bring personal radio gear into disaster areas that they can quickly re-establish communications during that critical window of time between a disaster's occurrence and the re-establishment of normal communications. These are the times of great threat to life and property: the "hottest" phase of the disaster's aftermath. Radio Amateurs are also trained and prepared to provide supplementary communications after normal communications have been restored. We have always been interoperable. For us it is not a goal, it is a fact. Although we are not first

responders, we have a long history of cooperating with first responders when needed to help them perform their essential tasks for the public.

The absence of disaster-susceptible communications infrastructure inherent in Amateur Radio insures a unique level of resilience in times of disaster and afterward. The same cannot, unfortunately, be said for other telecommunications systems. ARRL is fully supportive of the creation of a nationwide interoperable broadband network for Public Safety, and it is supportive of the developing standards for interoperable narrowband communications for public safety in the 700 MHz band. Improvements in public safety interoperability will permit more immediate responses and a better level of organization among disparate public safety agencies and at different levels of government.

That said, however, no one should believe that new public safety interoperable networks, be they broadband or narrowband, and regardless of the way these networks are designed, will be substantially more durable than are current public safety communications systems. Because of their system architecture, all are subject to disruptions, overload, or failure under certain circumstances. It will continue to be necessary in the future for Amateur Radio operators to provide temporary communications and facilities for first responders and disaster recovery agencies at the outset of local and regional

disasters and it will be necessary to provide temporary interoperability between and among first responders and disaster relief agencies. Federal Emergency Management Agency (FEMA) Director Craig Fugate, at an FCC earthquake forum concerning emergency communications planning earlier this month, stated that:

“Finally, I have got to get back to Amateur Radio... They are the first ones in the first days getting the word out as the other systems come back up. I think that there is a tendency (to believe) that we have done so much to build infrastructure and resiliency in all of our other systems, we have tended to dismiss that role -when everything else fails, Amateur Radio often times is our last line of defense. And I think at times we get so sophisticated, and we have gotten so used to the reliability and resilience in our wireless and wired and our broadcast industry, and in all our public safety communications, that we can never fathom that they will fail. They do. They have. They will. When you need Amateur Radio (operators), you really need them.”

Amateur Radio is available, ready, willing and able to do provide these services at no cost to anyone. As FEMA Director Fugate noted, Amateur Radio operators are always there, using their own radios, on their own frequencies, and “nobody pays them.” Indeed, we will be there “when all else fails.”

Among the frequency bands principally used and relied upon for Amateur Radio emergency communications work is the band 420-450 MHz. This band is shared very cooperatively and successfully between Federal

radiolocation (military radar) and the Amateur Radio Service. There is a small portion of this band that is available now for narrowband public safety operation, but it is only in the 420-430 MHz segment and it is limited to the areas around Buffalo, Cleveland and Detroit (near the Canadian border). There is no public safety allocation at all in the 430-440 MHz segment, and such would be contrary to the International Table of Frequency Allocations.

There is pending before the Committee on Energy and Commerce the “*Broadband for First Responders’ Act of 2011*,” H.R. 607. This Bill proposes to allocate the "D-Block" of frequencies in the 700 MHz band to the Public Safety Radio Service, and for the creation of an interoperable Public Safety wireless network. The goals of this legislation are not unique, but this Bill is unique among legislation providing for allocation of the so-called “D-Block” of frequencies to Public Safety, in that it provides for the reallocation and commercial auction within ten years of passage of the Bill of the “paired” (sic) bands 420-440 MHz and 450-470 MHz. Specifically, in the context of encouraging the migration of Public Safety from incumbent spectrum to the 700 and 800 MHz bands used by Public Safety, Section 207(d) of the Bill provides as follows:

- (1) Auction. – Not later than 10 years after the date of enactment of this Act, the paired electromagnetic spectrum bands of 420 – 440 megahertz and 450 – 470 megahertz recovered as a result of

the report and order required under subsection (c) shall be auctioned off by the Federal Communications Commission through a system of competitive bidding meeting the requirements of section 309 of the Communications Act of 1934.

ARRL is supportive of (1) the construction and maintenance of a national Public Safety interactive broadband network in the 700 MHz Public Safety bands; and (2) the allocation to Public Safety of the “D-Block” of spectrum. However, Section 207(d) of H.R. 607 is conceptually flawed and stands to seriously disrupt Amateur Radio emergency communications. First, neither the 420-440 MHz band nor the 450-470 MHz band is Public Safety spectrum. As we understand the matter, the drafters of the Bill envisioned in effect a “spectrum swap” of old Public Safety spectrum for new. Section 207(d) does not do that, however. Instead, the auction of the segments 420-440 MHz and 450-470 MHz would displace an extremely large number of critical, non-Public Safety uses of these frequency bands (which would derive no benefit at all from the allocation to Public Safety of the D-Block or the creation of a Public Safety broadband network). The victims of this reallocation include the Amateur Radio Service; the Government Radiolocation Service; the Private Land Mobile Radio Service (including the thousands of business and industrial radio service facilities throughout the United States which provide, in the 450-470 MHz band, operational radio

communications for large and small businesses); the Broadcast Auxiliary Service (which enables radio broadcasting stations to conduct newsgathering and conduct remote broadcasts from breaking news events in the 450-451 and 455-456 MHz segments); the security and alarm industry; and the General Mobile Radio Service and the Family Radio Service, which are used by millions of citizens for private family communications using channels in the 450-470 MHz band).

It is unclear why the 420-440 MHz band was included in this Bill, inasmuch as the segment is *not* a public safety allocation. There is no justification to be found anywhere in H.R. 607 for the reallocation of the 420-440 MHz band, and therefore the specification of that band in the Bill as a *quid pro quo* for the allocation to Public Safety of the D-Block, or to pay for the creation of a nationwide public safety interoperable network, is ill-conceived and unnecessary.

While ARRL is opposed to the inclusion of Section 207(d) in this Bill, this is unrelated to our support for the allocation of the D-Block to Public Safety and/or the creation of the nationwide, interoperable broadband public safety network pursuant to other legislation that does not have the serious defect inherent in H.R. 607.

ARRL is a member of the Governing Board of the National Public Safety Telecommunications Council (NPSTC), a federation of more than a dozen public safety telecommunications organizations. NPSTC has noted that it is very concerned about Section 207(d) of H.R. 607 and believes that the Bill needs to be amended to address the concerns of public safety and the amateur radio users.” A copy of NPSTC’s letter to ARRL on this subject is attached to this testimony.

ARRL is grateful for the opportunity to make our concerns known to the Subcommittee. We are well-aware of the increasing difficulties of providing adequate support for public safety telecommunications. We urge the Subcommittee to make adequate provision for a nationwide, interoperable public safety network in the 700 MHz band and to provide adequate means for funding the construction and operation of this network. It is not necessary in the process of doing that, however, to disrupt or preclude the ability of a huge cadre of qualified, self-trained volunteers to provide the restoration communications and temporary interoperability facilities in support of public safety that is necessary now and will be necessary for the foreseeable future.

Respectfully submitted,
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NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

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Re: The Broadband for First Responders' Act of 2011, H.R. 607

Greetings:

NPSTC is in receipt of your letter dated February 24, 2011 stating ARRL's position on H.R. 607, the *Broadband for First Responders' Act of 2011*. The NPSTC Governing Board, of which ARRL is a member, had an opportunity to discuss this legislation at its Governing Board meeting held February 28 through March 1. We want to let you know that NPSTC's Governing Board understands your serious concerns about Section 207 of this Act, and we share those concerns.

As you know, the allocation of the "D-Block" spectrum to public safety is critical to deploying a nationwide interoperable broadband network. Public safety is united in its support for H.R. 607 because the Act would allocate the D-Block spectrum to public safety to build a 20 MHz nationwide broadband network. The Act also would provide sufficient funding for the construction and maintenance of a nationwide Public Safety broadband network.

The Act, however, requires public safety to "give back" spectrum above 400 MHz and below 512 MHz to "off set" the cost of allocating the D-Block. The Act also requires the Federal Communications Commission to auction spectrum in the 420-440 MHz and 450-470 MHz after public safety has migrated their systems above the 700 MHz spectrum band. NPSTC is very concerned about the impact the migration requirement will have on public safety entities that are currently licensed to operate Land Mobile Radio (LMR) systems in the spectrum band.

We are aware that the Amateur Radio Service shares the 420-440 MHz band on a secondary basis with the Government Radiolocation Service and Amateur Radio operators can

American Association of State Highway and Transportation Officials | American Radio Relay League | Association of Fish and Wildlife Agencies | Association of Public Safety Communications Officials | Forestry Conservation Communications Association | International Association of Chiefs of Police | International Association of Emergency Managers | International Association of Fire Chiefs | International Municipal Signal Association | National Association of State Chief Information Officers | National Association of State Emergency Medical Services Officials | National Association of State Foresters | National Association of State Technology Directors | National Emergency Number Association | National Sheriffs' Association

use that band for critical emergency and public service communications. We are also aware that the extensive Amateur Radio repeater systems, which are very important in supporting public safety operations, require control and interconnect links located in the 420-440 MHz band. Finally, we are aware of the narrowband experimentation and satellite and terrestrial infrastructure in this band which cannot be moved.

For the above reasons, NPSTC is very concerned about Section 207(d) of the Act and believes that the section needs to be amended to address the concerns of public safety and the amateur radio users.

While NPSTC believes ARRL's opposition to Section 207(d) is appropriate, this is unrelated to our support for the provisions in the remainder of the Act. We are pleased to have ARRL's active participation in NPSTC. Please let your members know of NPSTC's appreciation of their efforts in support of Public Safety.

Yours sincerely,

National Public Safety Telecommunications Council



Ralph Haller, NPSTC Chair

cc: Mike Corey, ARRL
Christopher D Imlay, ARRL