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September 6, 2012

Representative Gus Bilirakis, Chairman
Representative Laura Richardson, Ranking Minority Member
Subcommittee on Emergency Preparedness, Response, and Communications
House Committee on Homeland Security
H2-176 Ford House Office Building
Washington, DC 20515

Dear Chairman Bilirakis and Ranking Minority Member Richardson

I am an individual citizen and amateur radio operator who is directly and personally impacted by home owner association prohibitions of amateur radio antennas in my residential community. These prohibitions effectively outlaw most of my amateur radio communication, including public service and emergency communications.

I respectfully request you to place this Written Testimony into the public record for the September 12, 2012 Emergency Preparedness Subcommittee Hearings on ‘Resilient Communications’

Sincerely,

Nickolaus E. Leggett, N3NL
Licensed Amateur Radio Extra Class Operator

**WRITTEN TESTIMONY OF
NICKOLAUS E. LEGGETT, N3NL**

**BEFORE THE HOUSE SUBCOMMITTEE
ON
ENERGY PREPAREDNESS,
RESPONSE, AND COMMUNICATIONS**

**HEARINGS ON
“RESILIENT COMMUNICATIONS”**

September 12, 2012

My name is Nickolaus E. Leggett (leggett3@gmail.com). I am an analyst, amateur radio operator, and an inventor resident in Reston, Virginia. I have been a federally licensed amateur radio operator since the 1960s. My amateur radio call sign is N3NL. I am a credentialed electronics technician (ISCET and iNARTE) and I am an inventor with three United States Patents.

EXECUTIVE SUMMARY

- A. Amateur radio offers public service and emergency communications that is completely independent of the commercial and governmental telecommunications networks. This communications is carried out using directly transmitted radio waves sent from a transmitter to a receiver.**
- B. Much of amateur radio communications is carried out from amateur radio stations installed in operators' homes. These stations use outdoor antennas that directly transmit and receive radio waves.**
- C. Almost all condominium residences, including the one that I live in, have rules that prohibit the installation of any outdoor antenna.**
- D. Indoor amateur radio antennas are particularly inefficient. This results in poor transmission of the radio waves and inadequate communications. My condominium building is concrete reinforced with metal bars. This structure tends to block radio waves.**
- E. Intense and long duration emergencies will require amateur radio operators to operate from their home stations. These emergencies include the following: electromagnetic pulse (EMP) attacks, solar geomagnetic storms, cyber warfare attacks, pandemic flu outbreaks, and nuclear-biological-chemical terror attacks.**

F. Homeowner association (HOA) or condominium rules prohibiting amateur radio antennas directly and negatively impact amateur radio emergency and public service communications.

AMATEUR RADIO PUBLIC SERVICE COMMUNICATIONS

Amateur radio provides a unique emergency communications capability.

This major capability is based on the fact that amateur radio communicates directly using radio waves. Amateur radio does not require a complex telecommunications infrastructure to operate. Amateur radio can continue to operate even if the Internet, public telephone network, and cellular telephones have been disabled.

Amateur radio provides local communications using the Very High Frequency (VHF) amateur radio frequency allocations. Amateur radio also provides long distance and interstate communications using the High Frequency (HF) amateur radio allocations. HF is also known as short wave radio waves.

An additional advantage of amateur radio is that it can operate when the electric power utilities are not operating. This is assisted by the fact that most amateur radio equipment is designed to operate from 12 Volt power sources such as car batteries. This same radio equipment can be powered by small gasoline generators or from solar panels.

Amateur radio can provide comprehensive communications when the Nation's telecommunications networks and electric power utilities are down.

AMATEUR RADIO HOME STATIONS

Most long-duration amateur radio communications are carried out from the operators' home radio stations. Each home station houses the radio transmission and reception equipment and has an outdoor antenna for transmitting and receiving radio waves. Home stations are very valuable during an emergency because they shield the operator and his radio equipment from the elements as well as from any special hazards present in the environment. In addition, the home stations generally have supplies of food and water available as well as sleeping quarters.

CONDOMINIUM AND HOME OWNER ASSOCIATION RULES

Virtually all condominiums (and rental apartments) prohibit the outdoor installation of amateur radio antennas. The same applies to homeowner associations (HOAs) as well. These rules inhibit amateur radio operation because amateur radio stations require the use of some type of antenna. Each antenna is a conducting metal structure or object that is used to transmit or receive radio waves.

INDOOR AMATEUR RADIO ANTENNAS

There is the alternative of installing an amateur radio antenna inside the building out of sight. However, such indoor antennas do not work well because they are very inefficient. In my case, the building is a reinforced concrete structure that tends to severely block radio waves. If you want to communicate from this building, you need an antenna that is outside of the building.

Unfortunately, the condominium prohibits any outdoor antennas. So I am effectively blocked from having a home amateur radio station.

INTENSE LONG DURATION EMERGENCIES

There are a variety of intense long-duration emergencies that threaten America. These include electromagnetic pulse (EMP) attacks, solar geomagnetic storms, cyber warfare attacks, pandemic flu outbreaks, and nuclear-biological-chemical attacks. These emergencies are of long duration and the amateur radio operators will be sheltering in place within their homes. During these extended emergencies we need amateur radio communications to coordinate recovery efforts and to help re-establish civil order and governmental activity.

RECOMMENDED CONGRESSIONAL ACTION

Since it is clear that condominium, homeowner association, and landlord rules prohibiting amateur radio antennas seriously inhibit amateur radio operation, Congress needs to act to modify such rules. Minimum antenna structures, which would always be allowed, should be specified by legislation. These antenna structures can be of a limited size and design so that they will not have a strong aesthetic impact on a given community.

Respectfully submitted,

Nickolaus E. Leggett

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