

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Commission Seeks Comment on Emergency) **GN Docket No. 12-91**
Communications by Amateur Radio and)
Impediments to Amateur Radio)
Communications)
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)
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To the Commission:

Fifth Set of Comments from Nickolaus E. Leggett, N3NL

The following is my fifth set of comments in this docket. These are additional responses to specific questions from the Commission. Cyber war and handicapped amateurs are discussed.

Response on Amateur Radio Advantages in Disasters

Response to the Commission’s question (on Page 2): “Under what circumstances does the Amateur Radio Service provide advantages over other communications systems in supporting emergency response or disaster relief activities?”

Amateur radio will be very useful during and after a major cyber war attack. In a cyber-war, the opponent uses computer software transmitted over the Internet to sabotage the computerized infrastructure of the Nation. This highly integrated infrastructure includes commercial communications services and the Internet itself.

Amateur radio is manually controlled and operated. This means that amateur radio can operate during a cyber-war and amateur radio can survive a crash of the Nation’s communications infrastructure including a complete crash of the Internet. Amateur radio operators will continue providing emergency communications while many other communications

services and the Internet are disabled. Amateur radio can provide ongoing emergency communications while many of the computerized networks are locked up by the cyber-attack

If the cyber-attack disables the electric power grid, amateur radio can continue communicating using power from automobile batteries. This is assisted by the fact that numerous amateur radio stations are designed to operate from a 12-Volt direct current (DC) source such as a car's lead acid battery

The Federal government has pointed out the threat of modern cyber war, and the Commission should support amateur radio communications by encouraging the operation of amateur radio residential stations using amateur radio antennas

Response on the Effects of Restrictions

Response to the Commission's question (on Page 3): "What are the effects of unreasonable and unnecessary restrictions on the amateur radio community's ability to use the Amateur Radio Service?"

The prohibitions on amateur radio antennas have a very serious impact on handicapped amateur radio operators. Hams who are blind, confined to a wheelchair, or even confined to bed can still provide important and useful public service communications by means of amateur radio. The activities of these handicapped amateurs are greatly inhibited by condominium and home owner association prohibitions of amateur radio antennas. I can relate strongly to this situation because I was confined to a wheelchair for some time, and I would have been quite frustrated to be blocked from participating in amateur radio and public service communications (I was not an amateur radio operator at that time.)

In theory, these handicapped amateurs could communicate through some type of remote ham transmitter using an Internet connection. However, this work-around would isolate the

operator from the technical side of amateur radio including building and experimenting with radio equipment. This is a heavy blow against technically-minded amateur radio operators who want to experiment with technology, invent new things, and obtain U.S. patents on what they invent. I am such a technically-minded operator and I currently hold three U.S. patents. Everyone, including handicapped amateur radio operators, should have the right to participate in technology development, inventing, and advancing themselves in the American economy.

I am requesting that the Commission's attorneys examine the subject of handicapped amateur radio operators and antenna prohibitions. This work should include the relevance of the Americans with Disabilities Act (ADA). Some sort of compromise solution must be worked up for handicapped amateur radio operators as well as for able-bodied operators.

A General Note on Amateur Antennas

The technical side of amateur radio is done at home where the ham operator builds and maintains his or her own equipment and learns more about electronics technology. Prohibitions of amateur radio antennas greatly inhibit this self-training activity. If the prohibitions continue, the technical side of amateur radio will fade as ambitious technical people move on to other technical activities that are less inhibited. At some point, the Federal government will have to decide if technical ham radio is worth keeping or if it should be allowed to fade away.

I note the rather high level of hostility expressed by condominium boards and home owner associations towards amateur radio. This does not bode well for the future. Some of this same hostility is expressed towards other technical activities, but the greatest hostility seems to be directed against amateur radio. We are at a decision point, do we defend residential amateur radio, or do we allow amateur radio to devolve into hand-talkie operation remote from home?

Respectfully submitted,

Nickolaus E. Leggett, N3NL

Amateur Radio Extra Class Operator

General Radio Telephone Operator Licensee with Ship Radar Endorsement

ISCET and iNARTE certified electronics technician

Inventor: U.S. Patents 3,280,929 3,280,930 6,771,935

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