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

In the Matter of) WT D	ocket No. 97-12
Amendment of Amateur Service) RM-8	3737
Rules to Provide For)	
Greater Use of Spread)	
Spectrum Communication)	
Technologies)	

To: The Commission

OPPOSITION TO THE PETITION FOR RECONSIDERATION OF CLEARWIRE TECHNOLOGIES, INC.

The Tucson Amateur Packet Radio Corporation ("TAPR") submits these comments in opposition to the petition for reconsideration (the "Petition") filed by Clearwire Technologies, Inc. ("CT") in the above captioned proceeding.

BACKGROUND AND STATEMENT OF INTEREST

TAPR is a non-profit (501(c)(3)) scientific and educational organization with more than 2,500 members worldwide. It is chartered to engage in three principal activities: scientific testing and research into the development and improvement of technological systems for use in the amateur radio service including, but not limited to, digital packet radio communications; research and testing of systems, hardware, and software for packet radio local area networks and computer network systems; and disseminating to the public the information obtained as a result of such research and testing.

TAPR was founded in 1982 as a national organization with interests in the areas of packet and digital communications. It grew out of a 1981 effort to design a packet radio Terminal Node Controller, or "TNC," that would be available to amateurs at a modest cost. From these initial designs emerged what is now the *de facto* standard in amateur and many commercial packet radio operations.

Today, TAPR continues as an international, membership-supported research and development organization for the amateur radio community. TAPR continues to

develop new communications technology, provide kits for the amateur community, and promote the advancement of the amateur art through publications, meetings, and communications standards. TAPR also maintains a web site (http://www.tapr.org), which includes a page specifically addressing current amateur spread spectrum issues (http://www.tapr.org).

DISCUSSION

TAPR stands in opposition to the proposed changes to Part 97 set forth in the Petition filed by CT. Spread Spectrum ("SS") technology has not made great advances in the amateur radio service since it was first permitted in 1985, in part due to the fact that, by today's standards, the Part 97 regulations on amateur SS were extremely restrictive. In particular, the small number of fixed spreading codes permitted under Section 97.311(d)(1) inhibited the use and development of SS by amateur radio stations. The R&O issued by the Commission last year went a long way to correcting the problems with the earlier rules and providing a flexible framework for the development and deployment of SS technology. TAPR believes that it is in the public interest, and in the interest of the amateur radio service , to maintain the new rules as stated in the R&O in order to accelerate the adoption of SS by the general amateur radio community.

First, TAPR sees no need for special rules for amateur radio SS devices as proposed by CT. Such devices are no different in their ability to cause problems to Part 15.247 devices than other devices used in the amateur radio service in those bands that operate with other emission modes at higher power levels than one watt such as SSB, AM or ATV. In fact, TAPR believes that the growing popularity of ATV operations in the 2.4 GHz band, with power levels on the order of 200 watts would pose more of a threat to the operation of Part 15.247 devices and their use as outlined in the Petition, than SS devices using a form of automatic power control when operating at power levels of over one watt in those bands. TAPR finds it curious that CT is not asking the Commission to also limit the operation of such higher power devices using other emission modes in a similar fashion.

Second, TAPR sees no need for a special rule that dictates how amateur radio SS devices can be identified. The amateur radio service has a strong tradition of being self-policing and the Commission very wisely understood this with the new rules that adopted for SS in its R&O. As new SS devices are developed and deployed under these

rules, members of the service will address the identification issue as required in order to maintain a viable methodology for the continuation of the self-policing tradition of the service. Since Part 15.247 devices must accept any interference to their operation, TAPR does not believe that any special considerations should be made for amateur radio SS devices that operate in the same bands.

Finally, TAPR sees no need for a special rule which sets a limit on the number of devices an amateur radio licensee can construct in a specific time period without having to conform to an arbitrary set of guidelines. Such a rule would run counter to the established tradition of experimentation in the service. The adoption of such a rule would be unwarranted and arbitrary as it would establish an exception for devices using a particular emission mode.

CONCLUSION

SS technology can provide many useful benefits to the amateur radio community if its use becomes more widespread and mainstream. In order to accomplish this however, the updates made to the Commission's rules last year governing the use of SS in the amateur radio service in its R&O must be maintained as issued. By preserving these changes, the Commission will create a regulatory environment that will give members of the amateur radio service enough flexibility to develop innovative equipment and hardware employing SS technology. For these reasons, TAPR urges the Commission to dismiss the Petition as soon as possible in order to facilitate the development and deployment of SS communications in the amateur radio service, with the rules as adopted in the R&O.

Respectfully submitted,

THE TUCSON AMATEUR PACKET RADIO CORPORATION

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