



## Spread Spectrum

<b>Introduction to Spread Spectrum</b>
<b>TAPR Statement on Spread Spectrum</b>
<b>Current FCC Spread Spectrum Rules</b>
<b>Presentations</b>
<b>Links and Resources</b>
<b>Information</b>
<b>Voice Link Over Spread Spectrum Radio</b>
<b>Tim Shepard MIT Thesis</b>
<b>VK2TDS Thesis</b>
<b>TAPR SS Update</b>
<b>Transmission Line Attenuation Chart</b>
<b>Archives</b>
<b>1990's SS Rule Changes</b>
<b>TAPR SS STA</b>
<b>Buaas SS STA</b>
<b>TAPR FHSS Radio Project</b>

What was once a communications mode shrouded in secrecy has entered the consumer market in the form of wireless ethernet links, cordless telephones, global position service (GPS), Personal Communications System (PCS), and digital cellular telephony (CDMA). And what are radio amateurs doing with spread spectrum today? In 1980, the FCC expressed a desire to extend spread spectrum communications outside of the military-only realm and allow radio amateurs to experiment with spread spectrum communications. The FCC in following Title 47, Section 303 of the Code of Federal Regulations (CFR) shall... [Read more](#)



### TAPR Statement on Spread Spectrum

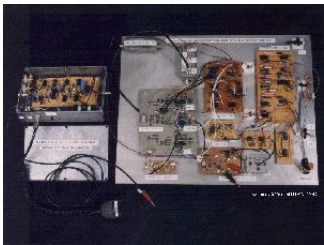
"TAPR believes that the technical facts support our conviction that conventional and spread spectrum systems can coexist without detriment to conventional systems on all frequencies from MF to EHF. To this end, TAPR will begin to research spread spectrum systems that will develop technology for future deployment." ... [Read more](#)

### Current FCC Rules

**Report Order WT 97-12**  
Modified the Rules for Amateur Radio Spread Spectrum Amendment of the Amateur Service Rules to Provide For Greater Use of Spread Spectrum

**Past Rules on Spread Spectrum Operations under Part 97**  
The Rules and Regulations that govern the Amateur Radio Service come from Title 47 Part 97 ... [Read more](#)

### Voice Link Over SS Radio



... [Read more](#)

### Tim Shepard MIT Thesis

This thesis addresses the problems of managing the transmissions of stations in a spread-spectrum packet radio network so that the system can remain active when scaled to millions of nodes concentrated in a metropolitan area. The principal difficulty in scaling a system of packet radio stations is interference from other stations in the system. Interference comes both from nearby stations and from distant stations. Each nearby interfering station is a particular problem, because a signal received from it may be as strong as or stronger than the desired signal from some other station. Far interfering stations are not individually a problem, since each of their signals will be weaker... [Read more](#)



### VK2TDS SS Thesis

This thesis report looks at the interaction between spread spectrum technologies and the equally as new packet radio technologies. It has only been in the last 15 years with increased computerisation that either of these technologies have seen significant work. This thesis also looks at some of the hardware required to implement a spread spectrum packet transmission system. During the design process I incorrectly assumed that PSK modems could be operated successfully at the chip-rate. Due to factors outside my control this assumption was not discovered until after the circuit boards had been produced. ... [Read more](#)

