

Basic Information HAM Radio and WSPR

HAM radio is another name for amateur radio, which is a way for radio enthusiasts to communicate with one another through various means. Radio signals are sent through the air on different bands (frequencies). HAM radio uses different bands than the radios in your home or car just as do police and fire departments, taxicabs, etc. There are approximately 3 million HAM radio enthusiasts around the world with approximately 700,000 in the United States and it is the fastest growing hobby in the world. But, HAM radio is more than a hobby that allows people around the world to talk to one another. HAM radio operators are often called upon in emergency situations when other means of communications are not available such as during hurricane Katrina or the earthquake in Haiti. Many participate in “Field Days” where they practice setting up emergency radio stations to be ready in case of an emergency.

Radio signals are affected by atmospheric conditions including the activity of the sun, and before HAM radio operators can communicate with one another they must find a pathway that is open. This can be a time and energy consuming process, which is where WSPR comes in to play. WSPR uses the same bands as HAM radio, but they are different because you cannot hear them (inaudible) because they use very little power. This is important to HAM radio operators as it saves both time and energy when looking for people around the world to talk to using audible and more costly and power hungry signals. The WSPR project was developed by Joe Taylor a Nobel Prize winning astrophysicist from Princeton University and Bruce Walker with the Broad Institute in Cambridge, MA who are both avid HAM radio enthusiasts.