

## **FCC Application for Experimental License**

File Number: 0219-EX-ML-2011

SRC respectfully requests the Federal Communications Commission to grant us an Experimental License for an L1/L2 GPS re-radiating antenna system at two of our facilities in Syracuse N.Y. We wish to add these locations at our SRC Syracuse campus to our existing license grant for Call Sign: WF2XIH.

These systems will permit design and development to occur with devices that have GPS antennas on them where outdoor testing is impractical. The GPS signal is not sufficiently strong enough to penetrate the windows and walls to reach the interior spaces of our laboratory facilities. Since work with laboratory test equipment is required, their use in an outdoor environment is not supportable for our programs. A GPS re-radiating system would permit design and development to occur with the minimum disruption of work and in all weather conditions.

SRC has two facilities on our campus that will require the use of a GPS re-radiating system. For each facility our plan is to install the outdoor antenna on the roof of the building, amplify, split the signal, and attenuate signals to service three labs. Each split signal path will be routed via a coaxial cable to supply the GPS signal to re-radiating antennas located in locations that are optimal for providing coverage and minimizing the possibility of harmful interference. The final output of the system will be attenuated to provide GPS coverage only over the required distance to comply with FCC and NTIA regulations.