

To: FCC Office of Engineering and Technology

June 21, 2005

Regarding: STA Confirmation Number EL506589

Here is my response to the supplementary information you requested in your e-mail to me of June 21. *(Please submit an exhibit with your application that provides a description of your system. Also identify the FCC rules your system is intended to comply with and explain the need for a 50 km radius of operation.)*

Confirmation Number: EL506589
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EXHIBIT for STA Application

1. Please see the photo below which shows the key parts of the system (transmitters and receiver).



2. **Description:** The system consists of a number of transmitters and a receiver. A transmitter is mounted near a door, and contains a magnetic sensor switch that is actuated by a magnet on the door. When the door-switch state changes, the transmitters send a brief coded message (less than 1-second long) that identifies the transmitter (relates the door number) and the state of the door (open or closed). The modulation is OOK. A number of transmitters can be used on various doors/windows around a building. The receiver is a separate portable unit that a user can carry in the pocket. It receives the transmissions from the door transmitters and provides alarms and other display information concerning the state of the doors for security personnel.

3. **Rules:** The system is designed to comply with Part 15.231 rules at 315 MHz. The modulation is OOK. This is a low power system, basically intended for use within a residence or similar size building. The outdoor line-of-sight range is less than 150 meters for the system.
4. **The 50 Km radius** was the only practical way to define a possible operating area. I asked for the STA in order to do demonstrations of the equipment at various locations, some of which are not yet determined. For example, the system might be placed into a demo/test scenario in a typical residential application, or could be demonstrated at a trade show at such facilities near the area where I live. I chose my home as the center of the radius, with the intention of being allowed to temporarily install, demonstrate and test this system within that 50 Km radius for the purpose of limited market studies, tests, etc. in various environs. It does not imply that the RF power of the system could broadcast over a 50 Km. radius. The purpose of testing is to expose flaws and make needed design changes, before investment is made in design finalization and subsequent FCC compliance testing.

I hope this helps clarify my STA application. Please advise me if you need more information, or if I need to make corrections.

Respectfully,

/Robert L. Ashlock/