vArc Systems, Inc.
Special Temporary Authority Application
March 8, 2004

Description of experiment

The purpose of the proposed experiment is to demonstrate the effectiveness of utilizing an experimental system vs. a part 90 certified system, both of which incorporate 2.4 Ghz transmission.

Two models will be demonstrated, using a transmitter and rechargeable battery to send a signal to a receiving antenna. The "off the shelf" experimental transmitter is a 1-watt, 4 channel device, utilizing frequencies 2413, 2432, 2451 and 2470MHz. For the purposes of this application, we will only be applying for 2470MHz. We will use a 5 db gain omni-directional transmit antenna. The part 90 transmitter is FCC ID #ROE1WTX-2470.

These models will use a "patch" receiving antenna mounted in a mobile carrying case. The distance between the transmitter and receiving antenna will be less than 0.4 km.

These systems will be used for short periods (transmitter battery will only last about an hour). These systems will be used only at 14 East Jackson Blvd, Chicago, IL 60604 and within 1 km of this address, at various times between 3/31/04 and 4/30/04.

This experiment will provide time and cost savings to potential users.