

August 8, 2000

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburgh, PA 15251-5320

Re: Request for Special Temporary Authority for New Experimental Radio Station
Commencing September 1, 2000

To Whom It May Concern:

Pursuant to Section 5.61 of the Commission's rules, 47 C.F.R. § 5.61, VitalCom Inc. requests Special Temporary Authority to operate an in-building Wireless Medical Telemetry System in a hospital. The site is The Methodist Hospital in Houston, TX. Authority is requested for six months commencing September 1, 2000.

In support of this request, the following is shown:

1. Name, address, and phone numbers:

VitalCom Inc.
15222 del Amo Ave.
Tustin, CA 92780
Attn: Gus Testa
Phone: (714) 247-4081
Fax: (714) 571-3945
email: Gus_Testa@VitalCom.com.

2. Description of why STA is needed:

VitalCom seeks to utilize experimental transmitters in connection with the testing of wireless medical telemetry networks. Furthermore, the period of time necessary to conduct the testing is six months. Accordingly, VitalCom seeks experimental STA to conduct the testing described herein.

3. Description of the operation to be conducted and its purpose:

VitalCom develops and manufactures real-time wireless patient information networks and software, which are compatible with a variety of medical devices. Such medical telemetry equipment is used in hospitals and health care facilities to transmit patient measurement data to a nearby receiver, which permits greater patient mobility and increased comfort. Examples of

medical telemetry equipment include heart, blood pressure and respiration monitors. The use of these devices can allow patients to move around early in their recovery while still being monitored for adverse symptoms. With such devices, one health care worker can monitor several patients remotely, which can reduce health care costs.

The proposed operation will consist of the evaluation of system performance inside a hospital for biomedical information distribution. The test will be used to determine environment characteristics, appropriate spacing between Network Access Points, antenna distribution, and data transmission reliability.

Furthermore, the activities proposed are part of the Market Acceptance Test for VitalCom's wireless telemetry system. The Market Acceptance Test involves the installation of a product at one or more sites to obtain market feedback prior to release. Such feedback may include the following:

- Issues encountered and their resolution,
- User suggested improvements,
- Observations on how the customers use the system and how the system could be changed to improve performance and safety, and
- Assessment of system performance during normal and heavy use periods.

The tests will be conducted using fixed Network Access Points equipped with omnidirectional and/or directional antennas and mobile and temporary fixed transceivers equipped with only omnidirectional antennas. All omnidirectional antennas are unity gain. The system will use a frequency-hopping scheme in the 608-614 MHz band. The test will start with a system composed of 3 Network Access Points and 24 transceivers, and will be expanded to a total of approximately 12 Network Access Points and 76 transceivers.

The spectrum will be monitored for active users in the band of interest before the system deployment. The location of the test site is not within a radio astronomy quiet zone.

4. Time and date of proposed operation:

Testing would commence on September 1, 2000 and will be operated 24 hours a day.

5. Classes of stations:

The proposed operations would consist of fixed base stations ("Network Access Points") and mobile and temporary fixed transceivers.

6. Description of location of the proposed operations:

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Testing would occur at The Methodist Hospital, 6565 Fannin Street, Houston, Texas. The system will be initially deployed in Dunn Tower on the tenth floor and will extend to the fourth, seventh, and ninth floors.

7. Equipment to be used, including name of manufacturer, model and number of stations:

Base stations ("Network Access Points"):

Manufacturer: VitalCom Inc.
Model No.: (Experimental)
Number of Units: 12

Mobile transceivers:

Manufacturer: VitalCom Inc.
Model No.: (Experimental)
Number of Units: 76

8. Frequency desired:

608-614 MHz

9. Maximum effective radiated power (ERP):

Network Access Points and mobile transceivers will have a maximum ERP of 200 mV/m at 3 meters.

10. Emission:

Frequency hopping, GFSK modulation with a modulation index of 0.5. The total bandwidth of the transmitted signal will be 250 kHz.

11. Overall height of antenna structure above ground:

All antennas will be located within the hospital building. Thus, no FAA issues are involved.

Applicant certifies that neither the applicant nor any party to the application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

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This STA request is accompanied by an FCC Form 159 and a check made payable to the Federal Communications Commission for \$45.00 (Fee Code EAE) for the prescribed filing fee.

Should you have any questions regarding this matter, please contact Jeffrey S. Cohen, Wilkinson Barker Knauer, LLP, 2300 N Street, N.W., Suite 700, Washington, D.C. 20037-1128, (202) 783-4141.

Respectfully,

A handwritten signature in black ink, appearing to read 'S. Hannah', is written over a horizontal line.

Stephen Hannah
Vice President of R&D

Enclosures