EXHIBIT 1

FREQUENCY	MAXIMUM RF OUTPUT. POWER AT TRANSMITTER	MAXIMUM EFFECTIVE RADIATED POWER FROM THE ANTENNA	POWER: "MEAN" OR "PEAK"	EMISSION DESIGNATOR FOR EACH FREQUENCY	SIGNAL MODULATION	DETERMINATION OF BANDWIDTH
BASESTATION (Downlink)						
3400-3700 MHz	30 dBm 1 watt per carrier	Directional Sectored 50 dBm EIRP (or less)	Peak	6M00D7W	DS-CDMA Or TDMA QAM-16, QAM-4	6 MHz
SUBSCRIBER (Uplink)						
3400-3700 MHz	30 dBm 1 watt per subscriber	50 dBm EIRP	Peak	6M00D7W	DS-CDMA Or TDMA QAM-16, QAM-4	6 MHz

EXHIBIT 2

Is a directional antenna used? Yes __X__ No _____

If "Yes" give the following information:
Width of beam in degrees at the half-power point:

Basestation:	**Elevation:**	11 degrees
	Azimuth:	11 degrees
		Antennas can be vertically or horizontally polarized
	Orientation in horizontal plane:	per site requirements
	Orientation in vertical plane:	per site requirements
Subscriber Unit:	17 degrees in azimuth and elevation, with vertical and horizontal polarization	
	Orientation in horizontal plane:	per site requirements
	Orientation in vertical plane:	per site requirements

EXHIBIT 3

Spike Technologies, Inc. ("Spike") is hereby applying for authorization in the Experimental Radio Service for the purpose of developing two-way wireless communications systems and equipment for use in the 3.5 GHz band to facilitate the implementation of broadband bi-directional wireless local loop, high-speed Internet access, Wide Area Network ("WAN") connectivity and videoconferencing services. Spike's program of experimentation will feature the use of its new 3.5 GHz transceiver and associated integration equipment.

Spike's sectored PRIZM BDS 3500 system recently was determined to comply with European performance and German Homologation requirements. In addition, the BDS 3500 was determined to comply with the European Telecommunications Standardization Institute's Electromagnetic Compatibility specification ETS 300-385 and bears the CE marking. Obtaining FCC equipment authorization will be one goal of Spike's proposed experimental program.

Spike's program of experimentation is of particular relevance at this time, as the Commission is currently exploring uses of spectrum in the 3.5 GHz band that will best serve the public interest.[1] Spike's experimentation will also feature the exploration of TDD (Time Division Duplexing). This is a direct result of the FCC NPRM for the 3650-3700 band, which without adequate frequency separation for FDD operation demands a TDD based system. Presently, the PRIZM BDS 3500 system utilizes FDD (Frequency Division Duplexing), employing different channels for communications in upstream and downstream directions. Spike's TDD research in particular holds genuine promise of contributing significantly to the radio art because the technologies being investigated may ultimately allow system operators to utilize a single channel for communications in both up- and downstream directions. This capability will not only promote new, more efficient use of spectrum resources, but will facilitate the provision of advanced services in geographic areas where channel availability is limited. Consumers and competition will be the ultimate beneficiaries of Spike's research.

Under the proposed program of experimentation, Spike's PRIZM BDS 3500 base station would be deployed in the vicinity the company's Nashua, NH technical facility. Response station equipment will be similar to the PRIZM base station from an electronic component perspective, but off-the-shelf antennas will be utilized rather than a sectored antenna component. Further product descriptions are presented below. The data gleaned from experimental operations will assist Spike in establishing the suitability of the system's technical configuration and equipment, and direct Spike in making refinements to its equipment and to system designs.[2]

As the Commission is aware, Spike is licensee of Experimental radio station WA2XCV, also at Nashua, which Spike is utilizing to develop two-way wireless communications systems and equipment in the 2.5 GHz band. Unlike Spike's 2.5 GHz system which utilizes Time Division Multiple Access ("TDMA") technology, access in the BDS 3500 system currently utilizes code division ("CDMA"). It follows that one

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[1] *See Notice of Proposed Rulemaking and Order, In the Matter of Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band*, ET Docket No. 98-237, Released December 18, 1998.

[2] Although the above-described system is currently designed to operate in the 3400-3600 MHz band, Spike seeks authority to conduct experiments in the entire 3400-3700 MHz band on a non-interfering basis. This will allow operation of the existing system as well as evaluation of the 3650-3700 band.

aspect of Spike program of experimentation will be comparing CDMA and TDMA system access protocols from a system performance perspective. Spike hopes to gain insight into the conditions and demands which might favor one access protocol over another. The experimental program will also test various signal modulation techniques to determine which methods are most efficient and reliable under various circumstances and conditions.

Product Description

Spike's flagship product, the PRIZM Broadband Delivery System (BDS), was developed for the 2.5 GHz band. Spike is further developing the product line to include 3.5 GHz systems. Using Spike's proprietary sectored antenna technology, all PRIZM BDS systems deliver point-to-multipoint two-way high-speed data communications at a rate of 10 megabits per second (Mbps) to individual subscribers. PRIZM BDS supports voice, videoconferencing and all forms of data services; its high capacity allows networks miles apart to operate as if they were in the same building. PRIZM BDS has already earned numerous accolades. Most notably, in June 1998, two of the twelve **SuperQuest awards** given at the 1998 SuperComm communications trade show in Atlanta were for networks based on Spike's PRIZM BDS. The PRIZM BDS is comprised of the PRIZM Base Station and PRIZM Subscriber Units. The Base Station includes the PRIZM Sectored Antenna, Hub Transceivers and RF Modems. Each Subscriber Unit comprises a Subscriber Antenna, a Subscriber Transceiver, and a RF Modem.

The PRIZM BDS Base Station

At the core of PRIZM BDS is Spike's proprietary sectored Base Station. Using Spike's unique sectored antenna technology, the Base Station provides unrivaled spectral efficiency and frequency reuse by simultaneously creating up to 22 independent, full duplex, Ethernet sectors. Alternating sectors employ like pairs of 6 MHz channels, one channel in the upstream and one channel in the downstream.

The Hub Transceiver

Spike's Hub Transceiver design provides upstream/downstream frequency translation between IF and microwave RF frequencies. The PRIZM Hub Transceiver currently supports air interfaces including: MMDS, MDS, ITFS, and WCS. PRIZM BDS can also be configured to support other frequencies between 1 and 10 GHz. Other transceiver characteristics include:

- Compatibility with multiple modem vendor platforms
- Supports multiple modulation schemes (QAM4, QAM16, QAM64; CDMA, TDMA)
- Low phase noise
- High frequency stability
- Remote tunability and performance monitoring
- Tx test port for signal level monitoring without data interruption

The Subscriber Antenna

PRIZM BDS subscriber antennas are mated to an outdoor microwave transceiver that is connected via coax to an indoor RF modem. One subscriber antenna can provide service to an entire multiple dwelling unit.

Spike currently offers three types of subscriber antenna, each of which provides extremely low sidelobe, backlobe, and cross-polarization performance for excellent multi-path and unwanted signal rejection. Spike's antenna offerings include a standard Mesh Parabolic, a Flat Panel, and a Yagi.

Subscriber Transceiver

Spike's Subscriber Transceiver design provides upstream/downstream frequency translation between IF and RF frequencies. The PRIZM Subscriber Transceiver currently supports air interfaces including: MMDS, MDS, ITFS, and WCS. PRIZM BDS can also be configured to support other frequencies between 1 and 10 GHz. Other transceiver characteristics include:

- Compatibility with multiple modem vendor platforms
- Supports multiple modulation schemes (QAM4, QAM16, QAM64; CDMA, TDMA)
- LED status indicators allow visual monitoring of transceiver status
- Low phase noise
- High frequency stability
- Remote tuneability and performance monitoring
- Tx test port for signal level monitoring without data interruption