

EXHIBIT 1**4. Particulars of Operation**

Frequency (MHz) (A)	POWER			EMISSION (E)	MODULATING SIGNAL (F)	NECESSARY BANDWIDTH (kHz) (G)
	(B)	(C)	(D)			
2150-2156	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2156-2162	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2500-2506	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2506-2512	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2512-2518	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2518-2524	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2656-2662	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2662-2668	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2668-2674	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2674-2680	+22dBm	37dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz



1950-1970	+10dBm	+23dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz
2440-2460	+10dBm	+23dBm	Mean	Undesired $\leq$ -40DBC from fundamental frequency	Subject to research and experimentation	6,000 kHz

200 mW

Pt 15, 24, 94
 1950-65 "B"
 1965-70 "E"
 1970-75 "F"
 OK

2390-2450 { G: Pakistan
 Ng: 1297
 2450-2483.5 ISM, FR, no

EXHIBIT 2
Area of Operation

By this application, Spike Technologies, Inc. ("Spike") requests authorization to use the frequencies listed in Item 4 for experimental purposes in the vicinity of its Nashua, NH laboratory (42/45/34 N. Lat. and 71/28/13.5 W. Long.). Spike also hereby requests mobile, nationwide authorization for the same frequencies, enabling the equipment being tested in Nashua, NH to be demonstrated to potential purchasers in their local markets.

EXHIBIT 3

Narrative Statement

Spike Technologies, Inc. ("Spike") is a manufacturer of communications equipment currently developing hardware to be used in a variety of two-way wireless communications applications.

The "base station" prototype under development has the ability to both transmit and receive, while the "subscriber units" under development are both receive and transmit capable.

A novel aspect of Spike's research and development is a highly directional antenna system, which is capable of creating multiple separate and distinct focused beams that can be aimed with great precision. The technology that makes this possible is licensed exclusively to Spike.

It is envisioned that a centrally-located elevated base station will be surrounded by a number of subscriber units having line of site to the base. The base station will contain the transceivers, one for each "beam" of spectrum. Using a unique spherical lens which will be tested pursuant to the experimental authorization, these "beams" can be "focused" or aimed as desired to serve the subscriber units. Due to the focused, directional character of the radio emissions, it is believed that interference to other FCC licensees and permittees can be obviated.

The subscriber units, which will also be tested under the instant experimental application and authorization, will contain transceivers similar to those in the base station. The subscriber antennas themselves, however, will be of a simple directional variety aimed at the base station.

The specific objectives sought to be accomplished under the experimental authorization are threefold: Spike desires to refine its equipment as a prelude to type-acceptance and marketing; Spike also wishes to test the feasibility of a wireless operating system in which multiple two-way communications links operate simultaneously between base station and subscriber units on multiple frequencies. Furthermore, Spike hopes to test the limits of its equipment's ability to promote spectrum re-use and efficiency by dividing the coverage area into dozens or even hundreds of sectors.

Spike's unique program of experimentation holds a reasonable promise of contribution to the development of the radio art. Spike's technology and equipment will make it possible for the wireless system operator to provide a variety of digital services to its customers simultaneously - telephony, video programming, IVDS, internet access, among others. This will result not only in better, more efficient use for the wireless cable spectrum, but will also serve to enhance the competitive position of wireless cable in the marketplace. Grant of an experimental license to Spike Technologies is therefore clearly in the public interest.