

EXHIBIT 1

Introduction

Pursuant to Section 5.3 of the Commission's rules, SkyTel Corp. ("SkyTel") hereby requests grant of an Experimental Authorization to permit SkyTel to operate nationwide on Narrowband PCS channel 940.975 MHz in order to permit further testing and improvement of its Narrowband PCS service.¹ Specifically, SkyTel's request falls under either of the following types of operation permitted by the FCC for Experimental Authorizations, as set forth in Section 5.3 of the Commissions rules: (1) to engage in technical demonstrations of equipment or techniques. 47 C.F.R. 5.3(d); or (2) Development of radio technique, equipment, operational data, or engineering data related to an existing or proposed radio service. 47 C.F.R. 5.3(j). The operations conducted by SkyTel will be experimental in the truest sense in that the service will not be for hire and the goal of the tests will be to ensure that the base stations will be operating per desired specifications without interrupting the current service being provided to SkyTel's subscribers.

SkyTel's Existing Operations

As the Commission is aware, there are very few carriers presently utilizing Narrowband PCS spectrum. Rather, SkyTel is one of the few Narrowband PCS success stories. Specifically, SkyTel is the only Narrowband PCS licensee that provides advanced one-way and two-way messaging services on its network in any significant manner at this time. Indeed, SkyTel currently has over 1,000,000 customers on its advanced nationwide messaging network. SkyTel currently operates on the following nationwide Narrowband PCS spectrum:

Call Sign	Channel ID	Channel Bandwidth	Paired Channel Bandwidth
KNKV205	N-5	50 kHz (940.20-940.25 MHz)	50 kHz (901.20-901.25 MHz)
KNKV208 ²	N-8	50 kHz (940.75-940.80 MHz)	12.5 kHz (901.7750-901.7875 MHz)

¹ In the alternative, SkyTel seeks experimental authority to operate on 940.975 MHz on a regional basis (the Northeast region), or, at best, in the New York City area.

² SkyTel's original license contained the following paired spectrum: 901.7750-901.7875 MHz and 930.50-930.55 MHz. On May 28, 1999, the Commission granted SkyTel's request to exchange the 930.50-930.55 MHz in channel 8 and replace this spectrum with the 940.75-940.80 MHz band that is allocated as channel nine in section 24.129(a) of the Commission's rules. See SkyTel Communications, Inc.: For Modification of Authorization and Waiver of Section 24.129 of the Commission's Rules, *Order*, 14 FCC Red 10944 (1999).

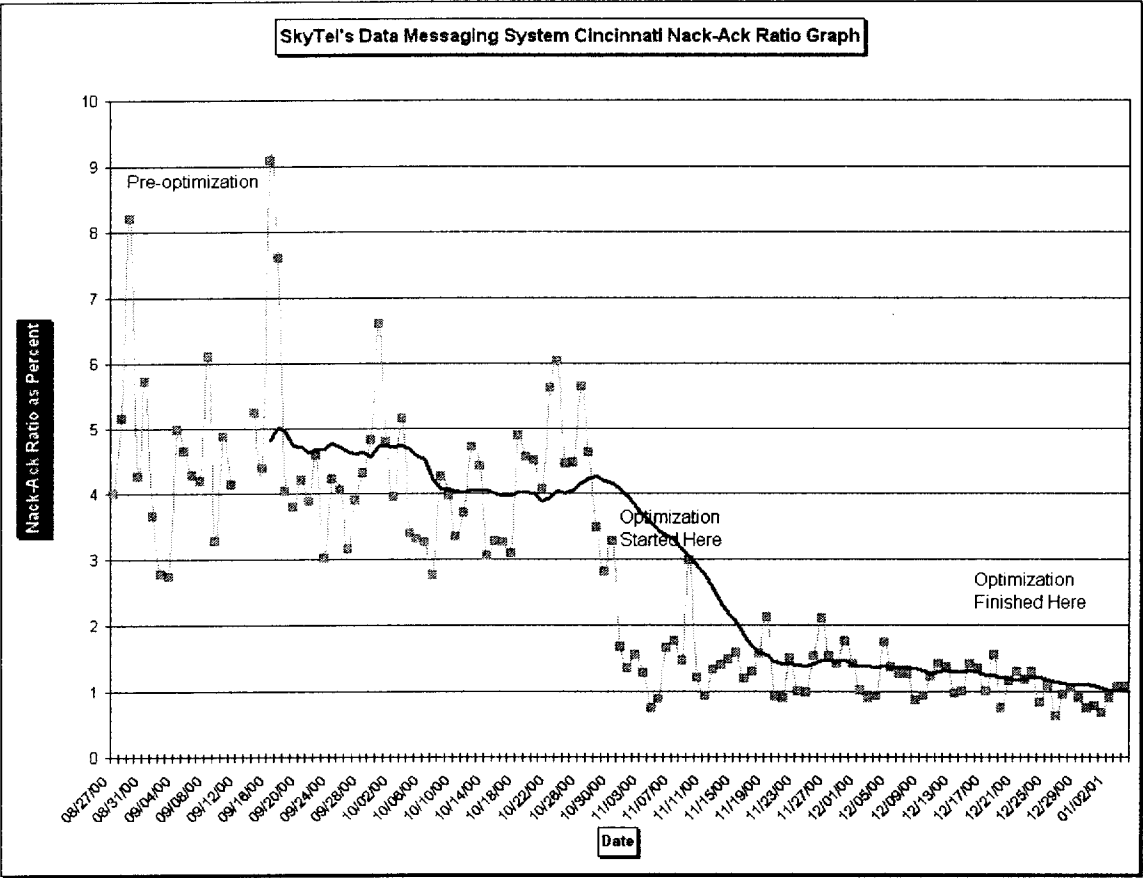
SkyTel's Proposed Testing

As SkyTel is currently experiencing very heavy usage in its existing system, SkyTel seeks to use channel 940.775 MHz on an experimental basis. SkyTel requests an experimental nationwide narrow-band PCS frequency assignment to use in proving optimization parameters for the existing data messaging network. SkyTel cannot disable the simulcast system to conduct single site optimization tests in most markets because of heavy customer usage. Furthermore, when the network is restored after any planned or unexpected outage, all subscriber devices must re-register with the system; this requires all available bandwidth for extensive periods of time.

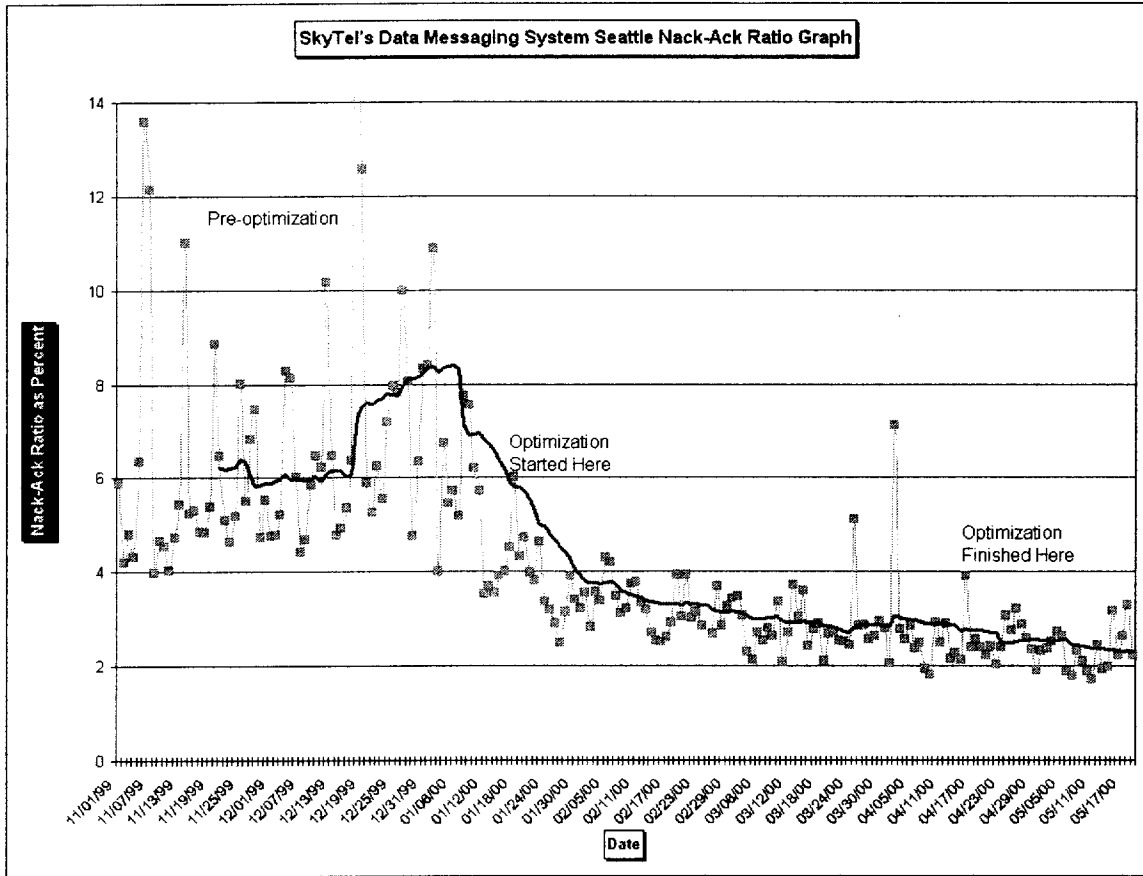
It is noted that SkyTel's network successfully handles 100,000 customers per 50,000 Hz of spectrum in the New York City area during normal workdays; this is equivalent to two customers per Hertz of bandwidth. Although few existing technologies exceed this efficient spectrum use, it is believed using an experimental license will further improve optimization, and thus efficiency.

Optimization allows radio frequencies (RF) to be placed only where it needs to be exactly when it needs to be. Equal signal strength simulcast and delay spread simulcast parameters are adjusted to enhance system performance while minimizing its destructive characteristics. Also, directional and electrical downtilt antennas are extensively employed along with minimal transmit antenna heights to control the overlapping RF footprints.

The following graphs shown below depicting how subscriber device Not-acknowledgements, or NACKs, to Acknowledgements, or ACKs, are reduced after market optimization. Graphs 1 and 2 show the Cincinnati and Seattle markets respectively before, during, and after optimization. This process allows the maximum number of subscribers to use minimum amounts of bandwidth.



GRAPH 1 - The Cincinnati market before, during, and after optimization.



GRAPH 2 - The Seattle market before, during, and after optimization.

Public Interest Considerations

SkyTel's request for an experimental license serves the public interest for several reasons. Most importantly, it will allow the necessary flexibility to conduct experiments for the continued efficient growth of its Narrowband PCS services. Specifically, the experimental tests at issue will permit SkyTel to most efficiently increase network capacity, where needed, and without the need to expend considerable monies expanding where such is not necessary. Thus, the ultimate beneficiary of the increased efficiency is the consumer.

Because the requested frequencies is licensed, SkyTel will be the only entity operating on the frequency, thus assuring that the provision of service with the proposed operating parameters at these facilities will not cause interference or otherwise negatively affect the provision of any other telecommunications service. SkyTel will make any required filing with the Federal Aviation Administration under the experimental authorization and ensure that any transmitters deployed under the experimental

authorization will not constitute environmental actions necessitating an environmental impact statement under Section 1.1307 of the Commission's rules.³

Finally, SkyTel recognizes that the Narrowband spectrum, including the frequency requested herein, is subject to competitive bidding. However, at this time, an auction of the remaining Narrowband spectrum has not even been scheduled.

In view of the showing contained in this application, it is submitted that grant of this application would serve the public interest, convenience, and necessity.

³ SkyTel has well over 1000 transmitters for both narrowband PCS frequencies. It intends on using these transmitter locations, on an as-needed basis, for its testing. In its notification of satisfying the five-year construction requirement for narrowband PCS, SkyTel provides a comprehensive list of its transmitter locations and associated technical parameters. See File Nos. 0000030213 & 0000029743.