

Trex Enterprises Corporation
Application for Special Temporary Authority
Exhibit 1

In this Request for Special Temporary Authority, Trex Enterprises Corporation (“Trex”) seeks Commission consent for the testing and experimentation of a multiple link data communications system using millimeter wave spectrum. In this experiment, Trex seeks to test transmissions in the 71-73 GHz and 74-76 GHz bands. In order to meet its benchmarks, Trex respectfully requests that it be permitted to begin testing using the specific links identified in the application that are located in the lower Manhattan, New York – Jersey City, New Jersey metropolitan area by August 7, 2002.

Trex is developing a multiple link communications system that can be used as a redundant system in the event of failure of primary wireline communications systems. The objective of this experiment is to verify the ability to utilize millimeter wave frequencies for data communications utilizing various link configurations under all weather conditions in an urban environment. This experiment also will provide essential information regarding distances at which communications links using millimeter wave frequencies may be reliably maintained.

The proposed experiment is important to the public interest. First, the experiment will enable Trex to demonstrate the viability of establishing a physically separate communications network. While the existing wireline communications networks have a built-in redundancy that was created by constructing distinct and separate cables, they rely almost exclusively on the use of common shared conduit and routing center facilities. These common conduits and routing centers are particularly vulnerable to single points of failure that strike the underlying facilities. By contrast, Trex’s use of a physically separate wireless network creates a truly redundant system not subject to similar points of failure. Second, this experiment has a reasonable promise of contribution to the development, extension, or expansion, or utilization of the radio art because, heretofore these ultra high band frequencies have not been used by the private sector and the use of these frequencies in the proposed manner has not yet been investigated. If successful, the public may find significant and important uses of spectrum above 70 GHz.

This experiment will be conducted in conjunction with a building owner who may reimburse Trex for certain direct costs that Trex incurs in conducting the experiment, including the cost of acquiring equipment and costs associated with installing, maintaining and operating the equipment. However, Trex will own all transmitting and receiving equipment used in the experiment. Trex does not intend to make a profit from the experiment. Trex believes that that it may be useful to expand the experiment to include additional links for a longer duration. If and when such determination is made, Trex will submit a separate application for an experimental license.