

HARRIS CORPORATION
EXPERIMENTAL SPECIAL TEMPORARY
AUTHORITY REQUEST
1767-1839 MHz BAND
CHICAGO, ILLINOIS
APRIL 2006

DESCRIPTION OF EXPERIMENT

Harris Corporation (“Applicant”) is requesting an experimental STA to permit operation of the transmitting equipment specified in this application, using federal government frequencies from 1767-1839 MHz. The experiment will consist of a fixed antenna atop the Sears Tower in Chicago communicating with a receive-only antenna approximately 40 kilometers from the transmitting site. At the conclusion of the experimental tests contemplated herein, the equipment is intended to be used by the United States government.

The purpose of the proposed experimental operations is to evaluate the applicability and feasibility of the Harris SecNet 11 secure wireless local area network (LAN) products as the basis for a governmental, national security and/or Department of Defense secure Internet Protocol datalink in a high multipath urban environment. A high multipath environment is needed in order to test “worst case scenarios” to ensure that the secure wireless LAN will work in such environments. The height of the fixed transmitting antenna is necessary in order to secure a clear line of sight with the receive-only antenna. A theoretical link budget will be generated to predict the practicality and feasibility of the communication system under test.

As shown in the separate attachment, the Commission’s database indicates that there are no frequency interference issues presented by Harris’ proposed experimental operations. The attachment shows that there are no existing licensees operating on the 1767-1839 MHz band within a 50 kilometer radius of the proposed site of the fixed antenna. Harris acknowledges that any experimental use of the frequency band is on a non-interference basis.

Harris submits that a grant of this experimental STA request will serve the public interest because the proposed operations will forward national security interests by improving the communications capabilities of the United States Government.