

HARRIS CORPORATION
EXPERIMENTAL SPECIAL TEMPORARY
AUTHORITY APPLICATION
FILE NO. 0604-EX-ST-2007
DECEMBER 2007

EXHIBIT I
DESCRIPTION OF EXPERIMENT

EXPEDITED PROCESSING REQUESTED.

Harris Corporation ("Harris") hereby requests Special Temporary Authority ("STA") to conduct experimental testing using the equipment identified herein operating in the 4.94-4.99 GHz band.

The experimental STA being requested by Harris is necessary for testing in connection with development efforts with the United States Army for the Warfighter Information Network – Tactical ("WIN-T") and Future Combat Systems ("FCS") programs. Harris and Northrop Grumman have been collaborating their efforts to deliver enhanced capabilities to the Federal Government and the U.S. Armed Forces to address requirements under the WIN-T program.

This testing is necessary to deliver a mobile ad-hoc network to the U.S. Armed Forces. This mobile ad-hoc networking capability will greatly increase the functionality of the military by providing true Networked Communications On The Move to facilitate the timely availability of sophisticated Situational Awareness to the commanders as well as individual ground troops.

The experiment consists of 5 Highband Network Radio ("HNR") nodes, operating at the Cisco Headquarter facilities in Research Triangle Park, NC. One HNR node will be a fixed/base antenna at the Cisco facility at 7025 Kit Creek Rd. Four nodes will be antennas mounted on mobile vehicles driving in the Cisco parking lot and on the local roads up to 8 km away.

Equipment used in this experiment will consist of the HNRv2 Highband Network Radio, manufactured by Harris. The HNRv2 is comprised of four elements: 1) the Baseband Processing Unit; 2) the Highband RF Unit ("HRFU") (consisting of an upconverter, a High-Powered Amplifier ("HPA"), a Switched Beam Antenna ("SBA"), a Low-Noise Amplifier ("LNA"), and a downconverter); 3) an Inertial Navigation Unit ("INU"); and 4) a GPS device.

Harris acknowledges that its operations will be on a non-interference basis.

Because the equipment is technically incapable of providing station identification, Harris respectfully requests a waiver of the station identification provisions of Section 5.115 of the Commission's rules, 47 C.F.R. § 5.115.

All network traffic will be simulated traffic only, solely for evaluation purposes and not for the purpose of providing network data communications services to user stations.

Harris submits that a grant of an experimental STA is necessary and in the public interest because it will advance national security efforts, and that expedited processing is justified due to the pressing needs of the military in wartime.