

**HARRIS CORPORATION
EXPERIMENTAL SPECIAL TEMPORARY
AUTHORITY APPLICATION
FILE NO. 0476-EX-ST-2010
SEPTEMBER 2010**

**EXHIBIT I
DESCRIPTION OF EXPERIMENT**

Consolidated Response to Questions 4 and 5.

Harris Corporation ("Harris") hereby requests Special Temporary Authority ("STA") to conduct the experimental testing identified herein to perform operational testing of the WIN-T Inc 3 mobile ad hoc radio system. The testing required will be done in connection with further required development efforts for the Warfighter Information Network – Tactical ("WIN-T") program currently in place. WIN-T is the US Army's on-the-move, high-speed, high-capacity backbone communications network, linking Warfighters on the battlefield with the Global Information Grid. The WIN-T program is currently administered by General Dynamics in conjunction with Lockheed Martin.

Harris has been contracted to perform Test Level 3 transmission subsystem testing for the WIN-T terrestrial Line of Sight radio system (known as the JC4ISR Dual Channel System). Testing will involve JC4ISR systems configured with a HRFU-MT (highband RF unit) antenna capable of dual band operation while on the move. The testing objectives are to validate that the system meets the transmission subsystem requirements of the WIN-T Inc 3 mobile ad hoc radio system architecture. Due to the critical nature of the proposed testing, Harris hereby respectfully requests Commission action on this STA by November 1, 2010 in order to facilitate and comply with operational and contractual timelines.

The testing as requested within this application will consist of 12 HRFU-MT nodes, operating at various facilities located on the Harris Palm Bay campus. Ten HRFU-MT nodes will utilize fixed temporary mounted masts at the following Harris Palm Bay campus locations: Building 5- located at 1000 Perimeter Drive, Palm Bay, FL; Building 15- located at 1369 Troutman Blvd, NE, Palm Bay, FL; Building 19- located at 1335 Troutman Blvd, NE, Palm Bay, FL; Cafeteria- located at 2426 Palm Bay Road, NE, Palm Bay, FL; and a fixed office trailer located at 1400 Robert J Conlan Blvd NE, Palm Bay, FL. The proposed temporary masts will not extend the overall height of the structures to which they will be mounted by more than 6 meters. The mobile nodes will be affixed to a High Mobility Multipurpose Wheeled Vehicle ("HMMWV"). These nodes will be operating while in motion and will operate at the same power and have the same emission characteristics as the base stations.

Harris acknowledges that all experimental operations conducted in the requested bands will be on a non-interference basis. However, to the extent necessary, Harris will utilize its best efforts to avoid and minimize interference. 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.

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.

Harris submits that a grant of this STA request is necessary and in the public interest because it will advance national security efforts by contributing and assisting in the further development of a backbone

communications network utilized by the U.S. Armed Forces that will increase warfighter mobility, extend connectivity and enable reach on the battlefield, leverage Network Operations software to keep mobile network infrastructure connected and simplify the ability to configure the network, as well as increase network capacity.

The **stop buzzer contact** for this project is Jim Roesch, Test Lead Engineer at Harris, tel: 321-727-5605, mobile: (321) 506-9930, e-mail: jroesc01@harris.com.