

HARRIS CORPORATION
EXPERIMENTAL LICENSE APPLICATION
FILE NO. 0275-EX-CN-2018

EXHIBIT I - DESCRIPTION OF EXPERIMENT

Harris Corporation ("Harris") hereby requests an FCC experimental license to research the propagation effects of LORAN signal and methods to improve receiver performance at its facility located in Palm Bay, Florida.

Harris, who has an ongoing CRADA with the US Government to investigate new LORAN technologies, will be conducting on air testing to advance the state of the art of the LORAN navigation system to enhance the Nation's Position, Navigation and Timing infrastructure in the event of a disruption of GPS. To accomplish this testing, Harris will require a low power signal on the air at 100 kHz¹ from its Palm Bay, FL location in order to test the effects of propagation over various terrains, study the effects of re-radiation and other interference phenomenon, measure and catalog the effects both natural and manmade noise, and test new receiver technologies. It is anticipated that this signal will be activated periodically on an as-needed basis without prior notification; however, this does not preclude maintaining this signal on the air for extended durations lasting several weeks or more.

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.

The "stop buzzer" contact for this testing is Gary Mason, Systems Engineer at Harris, tel: (321)729-1994, e-mail: gmason01@harris.com. Alternative contact is Bruce Murphy of Harris, cell: (585)281-9609, e-mail: bmurph05@harris.com

Harris submits that a grant of this application is necessary and in the public interest because it will facilitate advancements in LORAN technology.

¹ The frequencies requested in the application are 90 kHz and 110 kHz. Harris will operate on a center frequency of 100 kHz.