PUBLIC INTEREST STATEMENT
NIITEK INC.
APPLICATION FOR SPECIAL TEMPORARY AUTHORITY
1060-EX-ST-2014

NIITEK requests expeditious grant of its STA application for a period of six months to perform in-air calibrations of its ultra-wideband (UWB) ground penetrating radar (GPR) device, known as 3d-Radar, which it recently acquired from Curtiss-Wright Controls, Inc. (CWCI). The 3d-Radar device, when directed toward the ground in accordance with normal operating procedures, operates in conformance with the technical requirements for ultra wideband operation of ground penetrating radars, set forth in 47 C.F.R § 15.509. The 3d-Radar device is Part 15-accepted for use by end users who will not perform the calibration. *See Grant of Equipment Authorization to Curtiss-Wright Controls Inc. (3d-Radar), Ultra Wideband Transmitter*, FCC Identifier 2AAH5GSMK4 (May 26, 2014). The requested STA is to allow operation outside of Part 15 during factory calibration only, for a period of time under 90 seconds. Specifically, NIITEK seeks an STA to calibrate the overall response of the 3d-Radar system at its Charlotte, North Carolina facility by making measurements of the system response in air, i.e., by directing the radiating apertures toward the sky. Such sky shot calibrations are necessary to enable the 3d-Radar device to provide higher quality subsurface images.

Expeditious grant of the STA application is in the public interest because development of this technology will be very helpful in enabling entities' abilities to recognize, detect and precisely locate subsurface objects and/or structures, and to create detailed images of such objects and/or structures. 3-d Radar's unique sensor technology delivers major advances in the ease of use, speed, accuracy and resolution for 3D imaging of underground structures. 3d-Radar's patented GPR technology has already been successfully evaluated and deployed in a broad range of applications in a number of end markets, including sub-surface imaging in road and railway maintenance and airport runway inspection. NIITEK will use the 3d-Radar device to create three dimensional images of buried objects and natural interface layers. NIITEK plans to develop the device for eventual use for soil layer detection purposes on a commercial basis. Such an application of this technology will be very helpful in enabling commercial entities and their customers to excavate, till, or dig more effectively in soil by allowing them to determine the density of the soil and if there are large objects present where excavating, tilling, or digging will take place.

Accordingly, expeditious grant of NIITEK's STA application is in the public interest.