

Time Domain Corporation
Experimental STA Request
February 9, 2006
STA File No. 0079-EX-ST-2006
STA Confirmation No. EL755976

Exhibit 1

Modulating Signal Description

This request seeks authority to demonstrate prototype equipment that uses the “time modulated” ultra wideband (UWB) technology developed by Time Domain Corporation (“Time Domain”). The device to be demonstrated is an Angle of Arrival (AOA) transmitter and receiving system. The transmitter is a UWB device that uses pseudo randomly coded pulse position modulation at an average PRF of 9.6 MHz. The AOA system is used to determine the bearing between a small handheld transmitter and a receiver with two separate antennas. The nominal center frequency of the radiated signal is 5.0 GHz. The radiated power spectral density is +12 dB above CFR 47 part 15 paragraph 15.517. The total radiated average power is 450 microwatts EIRP. The instantaneous peak power is 41 mill watts. The emission designator is M1D. The transmit antenna is an UWB dipole antenna with a maximum UWB gain (on boresight) of 2.36 dBi.